METALFORM

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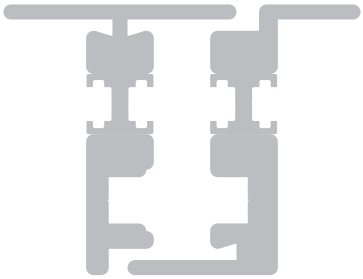
Mogs® 2 mm

M65 TB



Mogs® 2 mm
M65 TB

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System description | Descrizione del sistema | Descripción del sistema

1.1

System description

M65 TB is a series created to meet the requirements of contemporary architecture, aiming at producing minimalistic yet solid and performing windows and doors, which represent the state of the art.
M65 TB profiles are the only roll formed thermally broken tubular (welded) profiles made from 2 mm steel sheet, guaranteeing maximum strength, while the visual impact is extremely minimal (up to 40 mm).
The depth of the profile, from 65 to 72 mm, is designed to achieve high moments of inertia (Ix/Wx) and to accommodate the latest generation of insulating glazing units.
The 6.6 polyamide insulating core guarantees excellent performance in terms of thermal transmission and energy saving.
M65 TB is available in a wide range of materials: galvanised steel, AISI 316 L stainless steel, Cor-Ten steel and bright steel, in all their fascinating finishes. Finally, the option of coating steel extends the possibilities of customising windows and doors.
The system allows the creation of all openings, and is completed by a wide range of accessories.

Descrizione del sistema

M65 TB è una serie nata per soddisfare la richiesta dell'architettura contemporanea di poter realizzare dei serramenti contenuti a prospetto ma nel contempo robusti, a taglio termico, compatibili con vetri molto spessi, e che permettessero dei grandi campi dimensionali.
I profili M65 TB sono gli unici profili tubolari in acciaio a taglio termico con uno spessore della lamiera di 2 mm, a garanzia della massima robustezza, mentre l'ingombro visivo rimane estremamente ridotto (fino a 40 mm). La profondità del profilo, da 65 a 72 mm, è studiata per raggiungere alti momenti di inerzia (Ix/Wx) e poter alloggiare vetri isolanti di ultima generazione.
L'anima isolante in poliammide PA 6.6 garantisce ottime prestazioni in termini di trasmittanza termica e risparmio energetico.
M65 TB è disponibile in una vasta gamma di materiali: acciaio zincato, acciaio inox AISI 316 L, acciaio Cor-Ten e acciaio decapato, in tutte le loro affascinanti finiture. La verniciatura, infine, amplia all'infinito le possibilità di personalizzazione dell'infisso.
Il sistema M65 TB permette la realizzazione di qualsiasi tipologia di apertura, ed è completato da una vasta gamma di ferramenta e accessori.

Descripción del sistema

M65 TB es una serie creada para satisfacer los requisitos de la arquitectura contemporánea, con el objetivo de producir ventanas y puertas minimalistas pero sólidas y de alto rendimiento, que sean compatibles con doble o triple acristalamiento y permitan dimensiones de gran tamaño.
Los perfiles M65 TB son los únicos perfiles tubulares con rotura térmica conformados en frío con espesor de acero de 2 mm, lo que garantiza la máxima resistencia, mientras que el impacto visual es mínimo (hasta 40 mm).
La profundidad del perfil, de 65 a 72 mm, está diseñada para conseguir altos momentos de inercia (Ix/Wx) y para adaptarse a la última generación de acristalamientos aislantes.
El núcleo aislante de poliamida 6.6 garantiza un excelente rendimiento en términos de ahorro energético.
M65 TB está disponible en una amplia gama de materiales: acero galvanizado, acero inoxidable AISI 316 L, acero Cor-Ten y acero bruto, en todos sus fascinantes acabados. Igualmente, el lacado de acero amplía las posibilidades de personalizar ventanas y puertas.
El sistema permite la creación de todo tipo de aberturas y se completa con una amplia gama de accesorios.

System description

Fixed glazing, side hung single and double leaf windows, opening inwards and outwards. Tilt&Turn, Bottom hung and top-hung/ projecting windows. Single and double leaf doors open inward and outward.

Wet and dry glazing;

Glass thickness from 15 to 46 mm;

System fittings weld-on hinges;

Classic and modern fittings.

Descrizione del sistema

Vetrature fisse, finestre a una o due ante battenti, a vasistas e a sporgere, con apertura interna o esterna. Porte a una o due ante battenti, con apertura interna o esterna.

Vetrocamera sigillato con silicone o con guarnizioni a secco;

Spessore del vetrocamera da 15 a 46 mm;

Ferramenta con cerniere a saldare;

Ferramenta classica e moderna.

Descripción del sistema

Acristalamientos fijos, ventanas de una y dos hojas, batientes, con apertura hacia adentro y hacia afuera, así como ventanas oscilo-batientes y proyectantes que se abren hacia adentro, puertas de una y dos hojas apertura interna o externa.

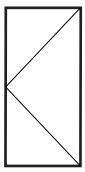
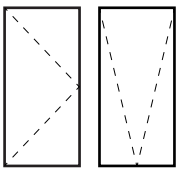
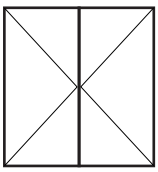
Acristalamiento húmedo en seco;

Espesor de vidrio de 15 a 46 mm;

Herrajes del sistema con bisagras para soldar;

Herrajes clásicos y modernos.

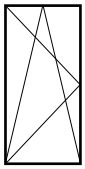
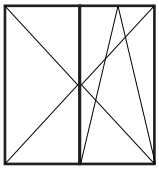
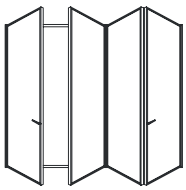
Performances Performance Características de prestación 1.2

Standard Norme Normas	Test Controlli Ensayos			
		Open in window Finestra apertura interna Apertura hacia dentro	Open out window Finestra apertura esterna Apertura hacia fuera	Open in window Finestra apertura interna Apertura hacia dentro
EN**12207**	Air permeability Permeabilità all'aria Permeabilidad al aire	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa
EN**12208**	Water tightness Tenuta all'acqua Estanquidad al agua	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa
EN**12210**	Resistance to wind load Resistenza al carico del vento Resistencia a la presión del viento	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa
EN ISO**10077-1**	Heat transfer coefficient Coefficiente di trasmittanza termica Coeficiente de transmisión térmica	from > 1.10 W/m²K (*) da > 1.10 W/m²K (*) desde > 1.10 W/m²K (*)	from > 1.10 W/m²K (*) da > 1.10 W/m²K (*) desde > 1.10 W/m²K (*)	from > 1.10 W/m²K (*) da > 1.10 W/m²K (*) desde > 1.10 W/m²K (*)
EN ISO**10140**	Sound insulation Isolamento acustico Absorción acústica	up to R_w+C_{tr}= 44 dB (-1; -5) fino a R_w+C_{tr} = 44 dB (-1; -5) hasta R_w+C_{tr} = 44 dB (-1; -5)	up to R_w+C_{tr}= 44 dB (-1; -5) fino a R_w+C_{tr} = 44 dB (-1; -5) hasta R_w+C_{tr} = 44 dB (-1; -5)	
EN**14024**	Metal profile with thermal barrier Profili metallici a taglio termico Perfiles metálicos rotura térmica	CW / TC2	CW / TC2	CW / TC2
EN**1627**	Burglary resistance Antieffrazione Antirrobo			RC2

(*) value calculated with maximum performance, on sample standardized window frame dimension 1230x1480 mm according to the UNI EN 14351-1

(*) valore calcolato con le massime prestazioni, su serramento campione 1230x1480 mm secondo UNI EN 14351-1

(*) valor calculado con prestaciones máximas, sobre muestra estandarizada dimensión marco de ventana 1230x1480 mm según UNI EN 14351-1

Standard Norme Normas	Test Controlli Ensayos			
		Tilt&Turn window Finestra apertura anta ribalta Ventana hacia arriba	Tilt&Turn window Finestra apertura anta ribalta Ventana hacia arriba	Bi-folding door - open in Sistema di porte a libro - apertura interna Sistema de puerta plegable - apertura hacia dentro
EN**12207**	Air permeability Permeabilità all'aria Permeabilidad al aire	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa	up to class 4 - 600 Pa fino alla classe 4 - 600 Pa hasta clase 4 - 600 Pa
EN**12208**	Water tightness Tenuta all'acqua Estanquidad al agua	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa	up to class 7A - 300 Pa fino alla classe 7A - 300 Pa hasta clase 7A - 300 Pa
EN**12210**	Resistance to wind load Resistenza al carico del vento Resistencia a la presión del viento	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa	up to class C4 - 1600 Pa fino alla classe C4 - 1600 Pa hasta clase C4 - 1600 Pa
EN ISO**10077-1**	Heat transfer coefficient Coefficiente di trasmittanza termica Coeficiente de transmisión térmica	from > 1.10 W/m²K (*) da > 1.10 W/m²K (*) desde > 1.10 W/m²K (*)	from > 1.10 W/m²K (*) da > 1.10 W/m²K (*) desde > 1.10 W/m²K (*)	
EN ISO**10140**	Sound insulation Isolamento acustico Absorción acústica	up to R_w+C_{tr}= 44 dB (-1; -5) fino a R_w+C_{tr} = 44 dB (-1; -5) hasta R_w+C_{tr} = 44 dB (-1; -5)		
EN**14024**	Metal profile with thermal barrier Profili metallici a taglio termico Perfiles metálicos rotura térmica	CW / TC2	CW / TC2	
EN**1627**	Burglary resistance Antieffrazione Antirrobo		RC2	RC2

(*) value calculated with maximum performance, on sample standardized window frame dimension 1230x1480 mm according to the UNI EN 14351-1

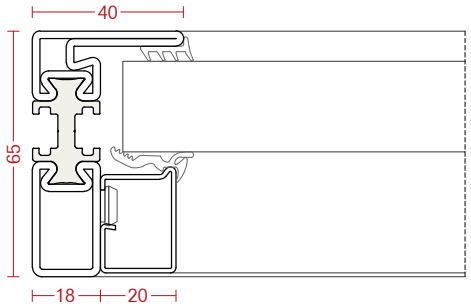
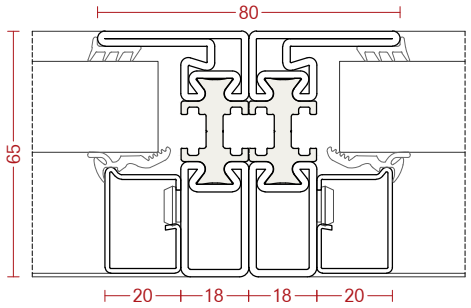
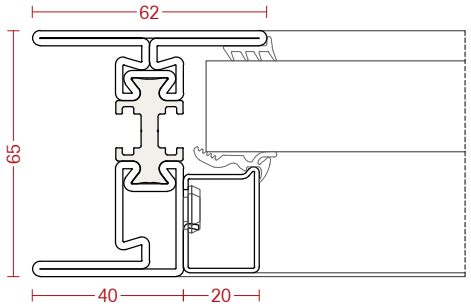
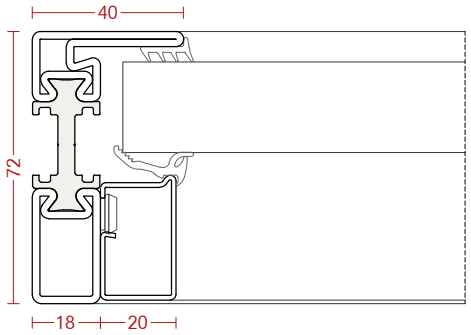
(*) valore calcolato con le massime prestazioni, su serramento campione 1230x1480 mm secondo UNI EN 14351-1

(*) valor calculado con prestaciones máximas, sobre muestra estandarizada dimensión marco de ventana 1230x1480 mm según UNI EN 14351-1

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 6518L-02	2.9	2.8	
MT 6518L-05	2.9	2.8	
MT 6518L-07	3.0	2.9	
MT 6518L-12	2.9	2.8	
MT 6518L-02 MT 6518L-02	3.1	2.9	
MT 6518L-05 MT 6518L-05	3.0	2.8	
MT 6518L-07 MT 6518L-07	3.1	3.0	
MT 6518L-12 MT 6518L-12	3.1	2.9	
MT 6518H-02	2.4	2.3	
MT 6518H-05	2.3	2.2	
MT 6518H-07	2.4	2.4	
MT 6518H-12	2.4	2.3	
MT 7218LF-02	2.6	2.5	
MT 7218LF-05	2.6	2.5	
MT 7218LF-07	2.8	2.5	
MT 7218LF-12	2.6	2.5	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

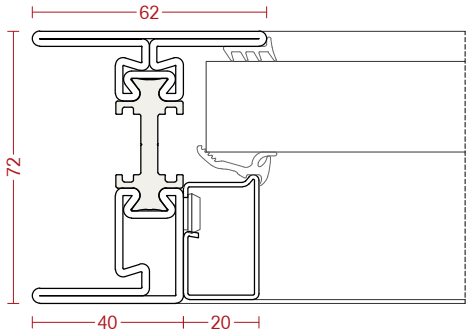
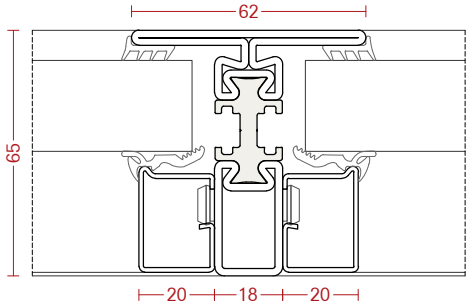
T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 7218HF-02	2.1	2.0	
MT 7218HF-05	2.0	1.9	
MT 7218HF-07	2.2	2.0	
MT 7218HF-12	2.1	2.0	
MT 6518T-02	2.7	2.5	
MT 6518T-05	2.6	2.6	
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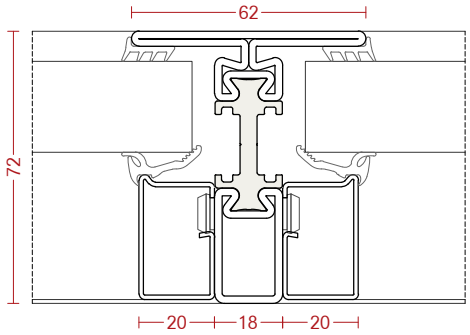
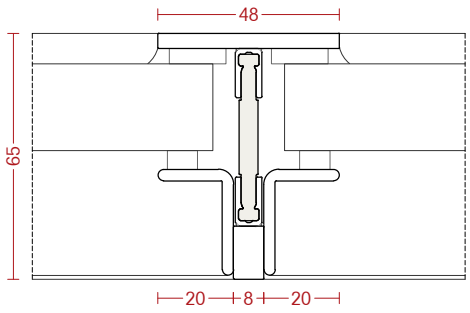
MT 6518T-12	2.7	2.5	
MT 7218TF-02	2.4	2.3	
MT 7218TF-05	2.4	2.3	
MT 7218TF-07	2.7	2.4	
MT 7218TF-12	2.4	2.3	
MT 6507TN-14	2.3	2.0	
MT 6507TN-34	2.3	2.0	
MT 6507TN-32	2.4	2.1	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

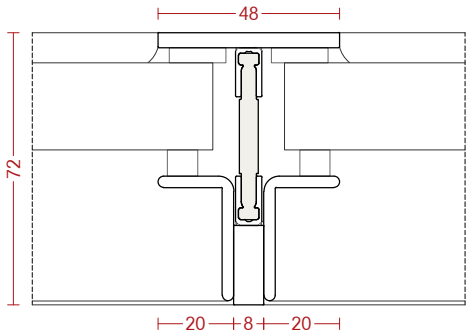
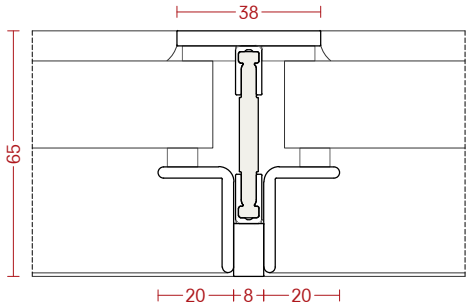
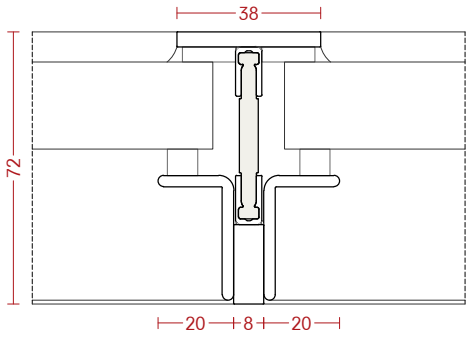
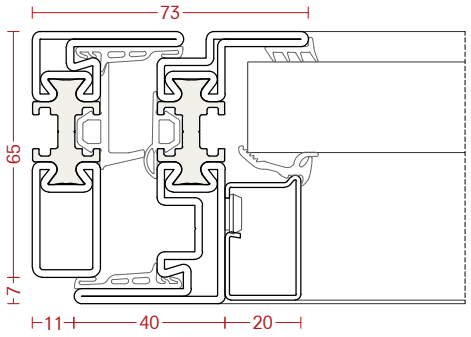
T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 7207TN-14	2.5	2.2	
MT 7207TN-34	2.4	2.2	
MT 7207TN-32	2.5	2.2	
MT 6507TR-14	2.8	2.6	
MT 6507TR-34	2.7	2.5	
MT 6507TR-32	2.8	2.6	
MT 7207TR-14	2.7	2.6	
MT 7207TR-34	2.7	2.6	
MT 7207TR-32	2.8	2.6	
MT 6518L-02 MT 7218ZR-02	3.2	3.2	
MT 6518L-05 MT 7218ZR-05	3.1	3.0	
MT 6518L-07 MT 7218ZR-07	3.3	3.2	
MT 6518L-12 MT 7218ZR-12	3.2	3.2	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

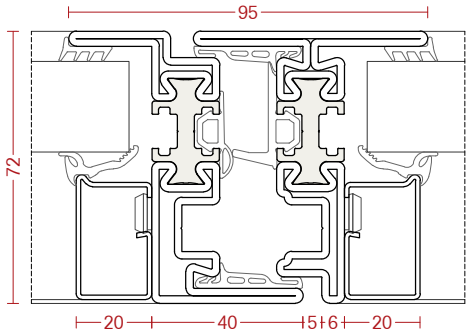
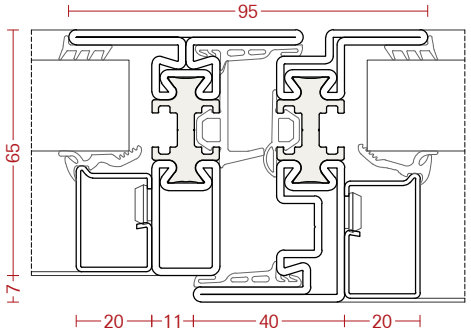
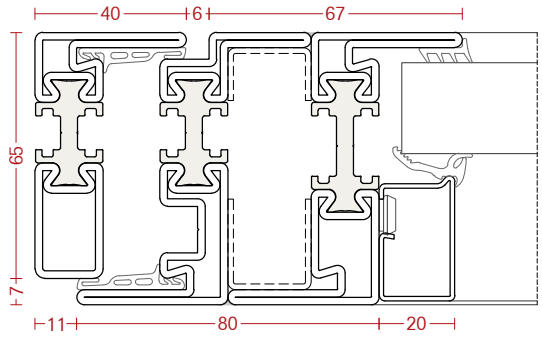
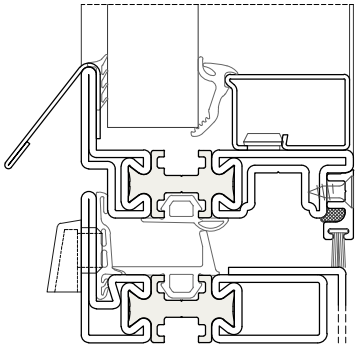
T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 7218TZ-02 MT 7218ZR-02	3.1	3.0	
MT 7218TZ-05 MT 7218ZR-05	3.0	2.9	
MT 7218TZ-07 MT 7218ZR-07	3.2	3.1	
MT 7218TZ-12 MT 7218ZR-12	3.1	3.0	
MT 6518T-02 MT 7218ZR-02	3.1	3.0	
MT 6518T-05 MT 7218ZR-05	3.0	2.9	
MT 6518T-07 MT 7218ZR-07	3.2	3.1	
MT 6518T-12 MT 7218ZR-12	3.1	3.0	
MT 6518L-02 MT 7218ZR-02 MT 7218ZF-02	3.2	3.2	
MT 6518L-05 MT 7218ZR-05 MT 7218ZF-05	3.1	3.0	
MT 6518L-07 MT 7218ZR-07 MT 7218ZF-07	3.4	3.3	
MT 6518L-12 MT 7218ZR-12 MT 7218ZF-12	3.2	3.2	
MT 6518L-02 MT 7218LR-02	3.5	3.5	
MT 6518L-05 MT 7218LR-05	3.4	3.3	
MT 6518L-07 MT 7218LR-07	3.6	3.5	
MT 6518L-12 MT 7218LR-12	3.5	3.5	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

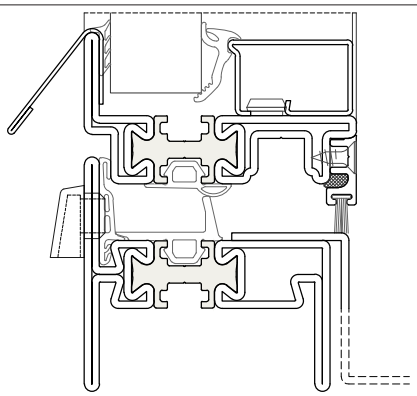
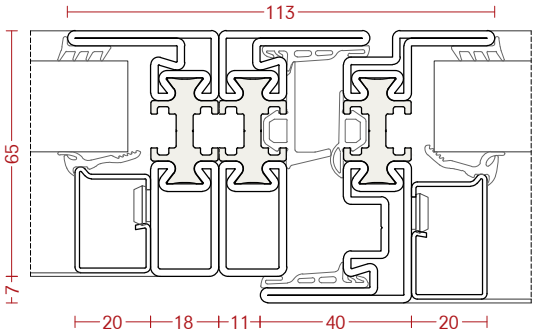
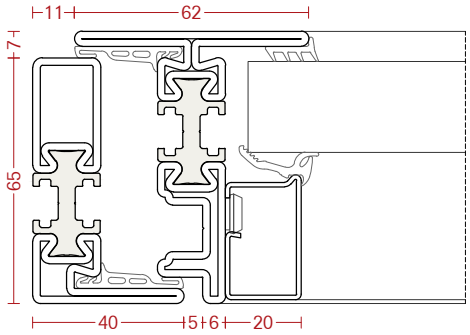
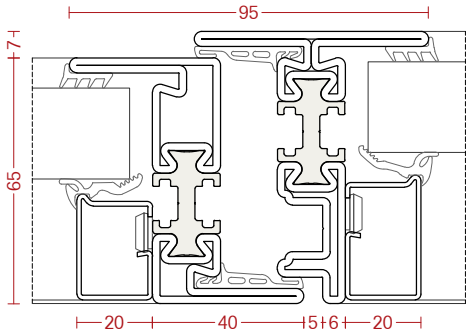
T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 6518H-02 MT 7218LR-02	2.8	2.8	
MT 6518H-05 MT 7218LR-05	2.7	2.7	
MT 6518H-07 MT 7218LR-07	3.0	2.8	
MT 6518H-12 MT 7218LR-12	2.8	2.8	
MT 6518L-02 MT 6518L-02 MT 7218ZR-02	3.2	3.1	
MT 6518L-05 MT 6518L-05 MT 7218ZR-05	3.1	2.9	
MT 6518L-07 MT 6518L-07 MT 7218ZR-07	3.3	3.2	
MT 6518L-12 MT 6518L-12 MT 7218ZR-12	3.2	3.1	
MT 6518L-02 MT 7218TZ-02	3.5	3.3	
MT 6518L-05 MT 7218TZ-05	3.3	3.2	
MT 6518L-07 MT 7218TZ-07	3.6	3.3	
MT 6518L-12 MT 7218TZ-12	3.5	3.3	
MT 6518Z-02 MT 7218TZ-02	3.2	3.2	
MT 6518Z-05 MT 7218TZ-05	3.1	3.0	
MT 6518Z-07 MT 7218TZ-07	3.3	3.2	
MT 6518Z-12 MT 7218TZ-12	3.2	3.2	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

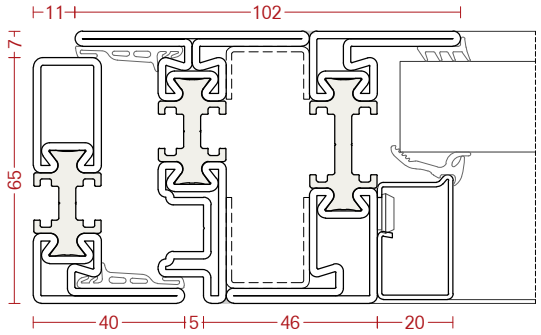
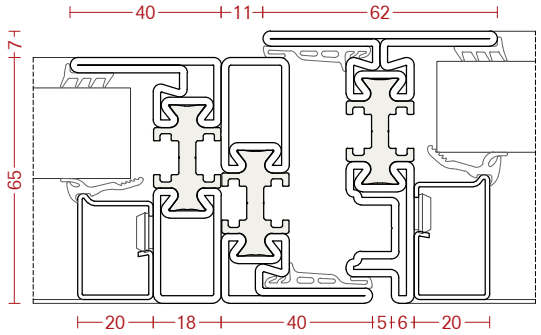
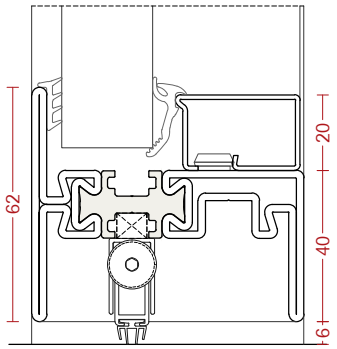
T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

U_f value
Performances according to EN 10077-2

Valore U_f
Prestazioni secondo EN 10077-2

Valor U_f
Características de prestación conforme EN 10077-2

	T = 24 mm	T = 36 mm	
MT 6518L-02 MT 7218TZ-02 MT 7218ZF-02	3.3	3.3	
MT 6518L-05 MT 7218TZ-05 MT 7218ZF-05	3.2	3.1	
MT 6518L-07 MT 7218TZ-07 MT 7218ZF-07	3.5	3.4	
MT 6518L-12 MT 7218TZ-12 MT 7218ZF-12	3.3	3.3	
MT 6518L-02 MT 6518L-02 MT 7218TZ-02	3.6	3.5	
MT 6518L-05 MT 6518L-05 MT 7218TZ-05	3.4	3.4	
MT 6518L-07 MT 6518L-07 MT 7218TZ-07	3.7	3.6	
MT 6518L-12 MT 6518L-12 MT 7218TZ-12	3.6	3.5	
MT 7218HZ-02	3.4	3.4	
MT 7218HZ-05	3.3	3.2	
MT 7218HZ-07	3.8	3.6	
MT 7218HZ-12	3.4	3.4	

T = Glazing thickness
According to EN 10077-2:
U_f = U_f value in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Spessore vetro
Secondo EN 10077-2:
U_f = valore U_f in [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

T = Espesores de vidrio
Conforme EN 10077-2:
U_f = valor U_f en [W/m²K]
T = 24 mm, λ=0.035 [W/(mK)]
T = 36 mm, λ=0.035 [W/(mK)]

Type overview and dimensional limits

Tipologie e limiti dimensionali

Resumen de modelos y dimensiones

Legend

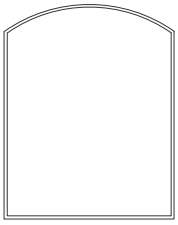
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm

Leyenda

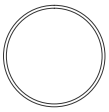
+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm



Fixed glazing

Vetrature fisse

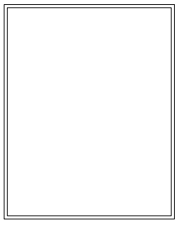
Acristalamientos fijos



Fixed glazing

Vetrature fisse

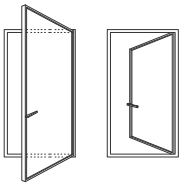
Acristalamientos fijos



Fixed glazing

Vetrature fisse

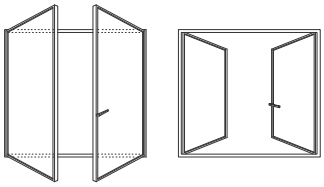
Acristalamientos fijos



Single leaf open in or open out side hung window

Finestra a un battente apertura interna o esterna

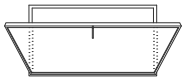
Ventana batiente de una hoja que se abre hacia dentro o fuera



Double leaf open in or open out side hung window

Finestra a due battenti apertura interna o esterna

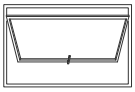
Ventana batiente de dos hojas que se abre hacia dentro o fuera



Open in bottom hung window

Finestra vasistas apertura interna

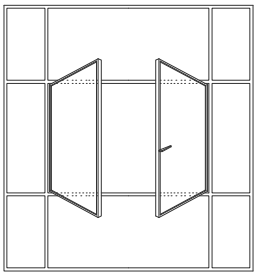
Ventana oscilante que se abre hacia dentro



Open out top hung projecting window

Finestra a sporgere apertura esterna

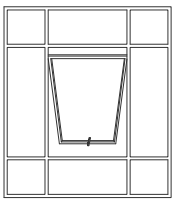
Ventana proyectante que se abre hacia fuera



Double leaf open in side hung window in fixed glazing

Finestra a due battenti apertura interna in vetratura fissa

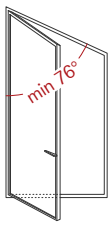
Ventana doble batiente que se abre hacia dentro en acristalamiento



Open out top hung projecting window

Finestra a sporgere apertura esterna

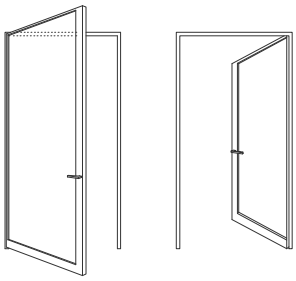
Ventana proyectante que se abre hacia fuera



For trapezoidal windows, the minimum angle on the hinges side is 76°

Per finestre trapezoidali, l'angolo minimo lato cerniere è di 76°

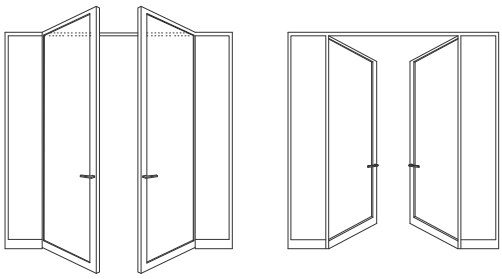
Para ventanas trapezoidales, el ángulo mínimo en el lado de la bisagras es de 76°



Single leaf door
open in or open out

Porta a un battente
apertura interna o esterna

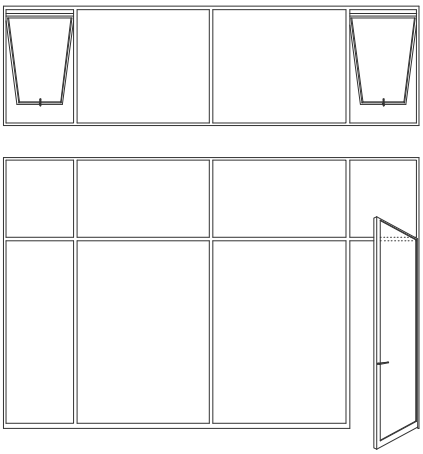
Puerta batiente de una hoja
que se abre hacia dentro o fuera



Double leaf door open in or open out
with side lights

Porta a due battenti apertura interna o esterna
con fissi laterali

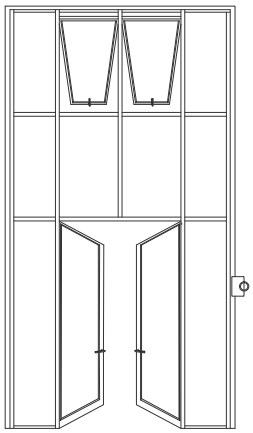
Puerta doble batiente que se abre hacia dentro o fuera
con fijos laterales



Fixed glazing with single leaf door open in
and top hung windows

Vetratura fissa con porta battente apertura
interna e finestre a sporgere

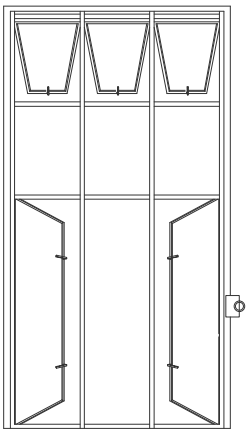
Acristalamiento con puerta batiente que se
abre hacia dentro y ventana proyectante



Curtain wall with double leaf door
and top hung windows

Facciata con porta a due battenti
e finestre a sporgere

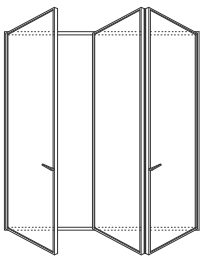
Fachadas con puerta batiente
y ventana proyectante



Industrial sidewall windows
and historical curtain walls

Facciate e vetrature fisse
stile industrial

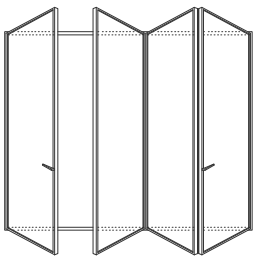
Fachadas y acristalamientos
de diseño industrial



Bi-folding door system
3 leaves (1+2 leaves)

Sistema di porte a libro
3 ante (1+2 ante)

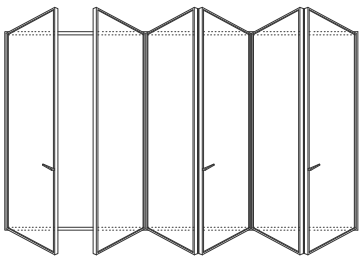
Sistema de puerta plegable
3 hojas (1+2 hojas)



Bi-folding door system
4 leaves (1+3 leaves)

Sistema di porte a libro
4 ante (1+3 ante)

Sistema de puerta plegable
4 hojas (1+3 hojas)



Bi-folding door system
6 leaves (1+5 leaves)

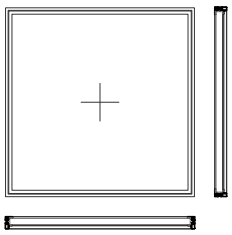
Sistema di porte a libro
6 ante (1+5 ante)

Sistema de puerta plegable
6 hojas (1+5 hojas)

Dimensions
M65 TB - Windows

Dimensioni
M65 TB - Finestre

Dimensiones
M65 TB - Ventanas



Fixed window (windows and doors)

Finestra fissa (serramenti esterni)

Ventana fija (ventanas y puertas)

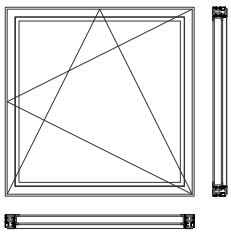
min. dimensions	**400 x 400**
max. dimensions	**3000 x 3000**

Dimensions
M65 TB - Windows

Dimensioni
M65 TB - Finestre

Dimensiones
M65 TB - Ventanas

Tilt&Turn window - hardware with concealed hinges
Finestra apertura anta ribalta - ferramenta con cerniere a scomparsa
Ventana que se abre hacia arriba - herrajes con bisagras ocultas

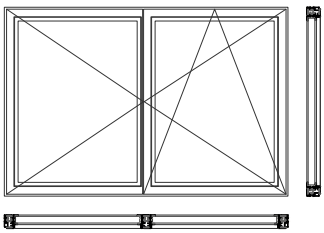


Single leaf Tilt&Turn window

Finestra a un battente apertura anta ribalta

Ventana de una hoja que se abre hacia arriba

See dimensions at page 5.9.79



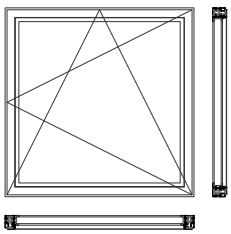
Double leaf Tilt&Turn window

Finestra a due battenti apertura anta ribalta

Ventana de dos hojas que se abre hacia arriba

See dimensions at page 5.9.79

Tilt&Turn window - hardware with visible hinges
Finestra apertura anta ribalta - ferramenta con cerniere a vista
Ventana que se abre hacia arriba - herrajes con bisagras visibles

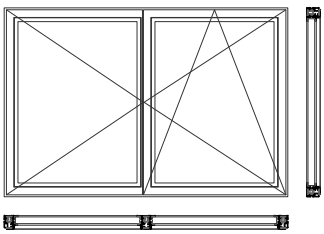


Single leaf Tilt&Turn window

Finestra a un battente apertura anta ribalta

Ventana de una hoja que se abre hacia arriba

See dimensions at page 5.9.35



Double leaf Tilt&Turn window

Finestra a due battenti apertura anta ribalta

Ventana de dos hojas que se abre hacia arriba

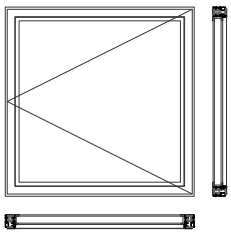
See dimensions at page 5.9.35

Dimensions
M65 TB - Windows

Dimensioni
M65 TB - Finestre

Dimensiones
M65 TB - Ventanas

Side hung window - hardware with concealed hinges
Finestra battente - ferramenta con cerniere a scomparsa
Ventana batiente - herrajes con bisagras ocultas

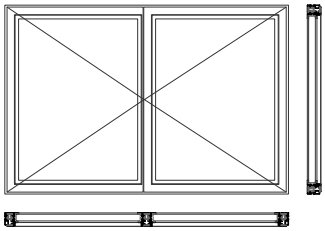


Single leaf window open in

Finestra a un battente apertura interna

Ventana de una hoja que se abre hacia dentro

See dimensions at page 5.9.145

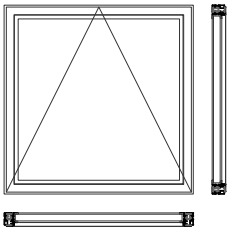


Double leaf window open in

Finestra a due battenti apertura interna

Ventana de dos hojas que se abre hacia dentro

See dimensions at page 5.9.145



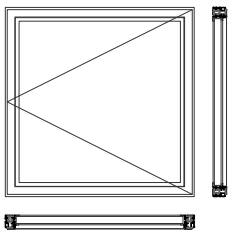
Bottom hung window open in

Finestra vasistas apertura interna

Ventana oscilante que se abre hacia dentro

See dimensions at page 5.9.174

Side hung window - hardware with visible hinges
Finestra battente - ferramenta con cerniere a vista
Ventana batiente - herrajes con bisagras visibles

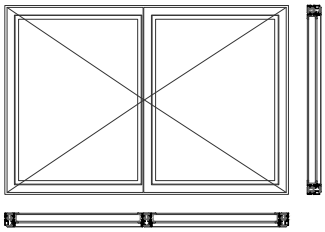


Single leaf window open in

Finestra a un battente apertura interna

Ventana de una hoja que se abre hacia dentro

See dimensions at page 5.9.111

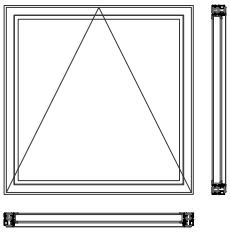


Double leaf window open in

Finestra a due battenti apertura interna

Ventana de dos hojas que se abre hacia dentro

See dimensions at page 5.9.111



Bottom hung window open in

Finestra vasistas apertura interna

Ventana oscilante que se abre hacia dentro

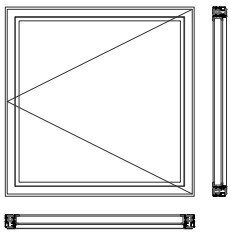
See dimensions at page 5.9.161

Dimensions
M65 TB - Windows

Dimensioni
M65 TB - Finestre

Dimensiones
M65 TB - Ventanas

Side hung window - with weld-on hinges
Finestra battente - con cerniere a saldare
Ventana batiente - con bisagras de soldadura



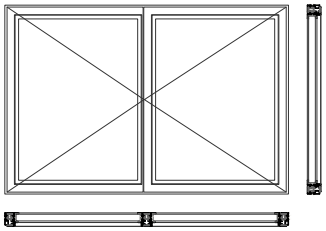
Single leaf window open in

Finestra a un battente apertura interna

Ventana de una hoja que se abre hacia dentro

min. dimensions 500 x 500
max. dimensions 1200 x 3000

max. leaf weight: 230 kg



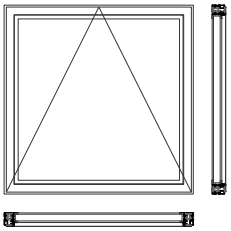
Double leaf window open in

Finestra a due battenti apertura interna

Ventana de dos hojas que se abre hacia dentro

min. dimensions 1000 x 500
max. dimensions 2400 x 3000

max. leaf weight: 230 kg



Bottom hung window open in

Finestra vasistas apertura interna

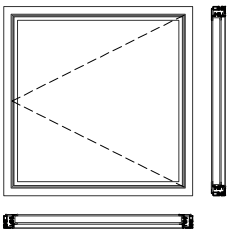
Ventana oscilante que se abre hacia dentro

min. dimensions 500 x 450
max. dimensions 1800 x 1800

max. leaf weight: 110 kg (*)

(*) related accessory E99205-05

Side hung window - with weld-on hinges
Finestra battente - con cerniere a saldare
Ventana batiente - con bisagras de soldadura



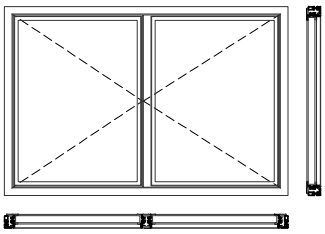
Single leaf window open out

Finestra a un battente apertura esterna

Ventana de una hoja que se abre hacia fuera

min. dimensions 500 x 500
max. dimensions 1200 x 3000

max. leaf weight: 230 kg



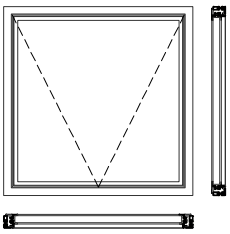
Double leaf window open out

Finestra a due battenti apertura esterna

Ventana de dos hojas que se abre hacia fuera

min. dimensions 1000 x 500
max. dimensions 2400 x 3000

max. leaf weight: 230 kg



Top hung projecting window open out

Finestra a sporgere apertura esterna

Ventana proyectante que se abre hacia fuera

min. dimensions 500 x 450
max. dimensions 1800 x 1800

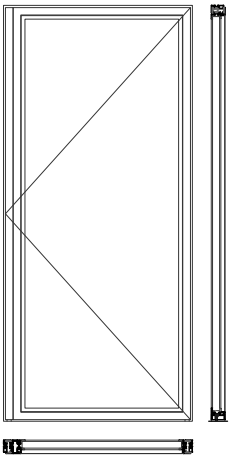
max. leaf weight: 110 kg (**)

(**) related accessory E99203-05

Dimensions
M65 TB - Doors

Dimensioni
M65 TB - Porte

Dimensiones
M65 TB - Puertas



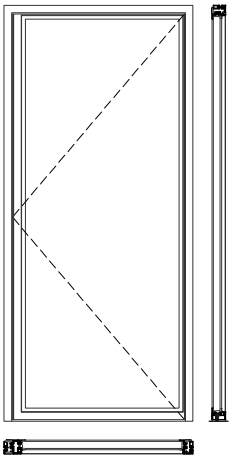
Single leaf door open in
with full height additional profile

Porta a un battente con riporto serratura a tutt'altezza
apertura interna

Puerta de una hoja con perfil adicional de altura completa
que se abre hacia dentro

min. dimensions **600 x 2000**
max. dimensions **1200 x 3000**

max. leaf weight: 230 kg



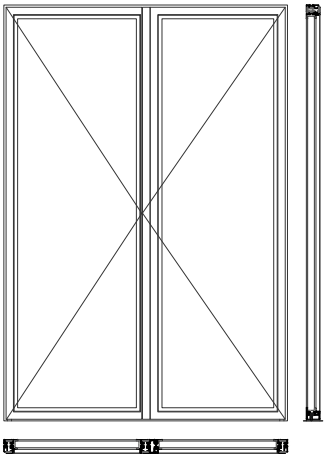
Single leaf door open out
with full height additional profile

Porta a un battente con riporto serratura a tutt'altezza
apertura esterna

Puerta de una hoja con perfil adicional de altura completa
que se abre hacia fuera

min. dimensions **600 x 2000**
max. dimensions **1200 x 3000**

max. leaf weight: 230 kg



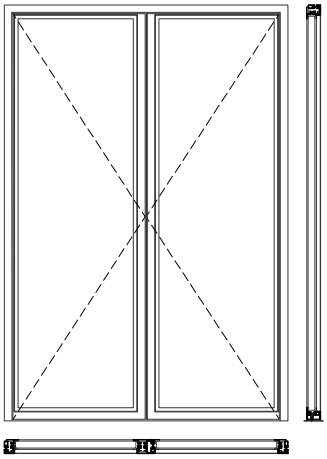
Double leaf door open in
with full height additional profile

Porta a due battenti con riporto serratura a tutt'altezza
apertura interna

Puerta de dos hoja con perfil adicional de altura completa
que se abre hacia dentro

min. dimensions **1200 x 2000**
max. dimensions **2400 x 3000**

max. leaf weight: 230 kg



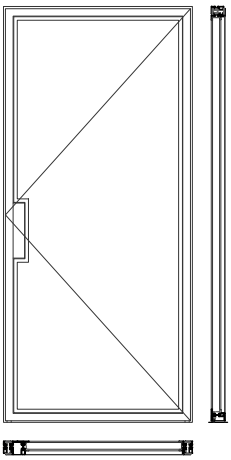
Double leaf door open out
with full height additional profile

Porta a due battenti con riporto serratura a tutt'altezza
apertura esterna

Puerta de dos hoja con perfil adicional de altura completa
que se abre hacia fuera

min. dimensions **1200 x 2000**
max. dimensions **2400 x 3000**

max. leaf weight: 230 kg



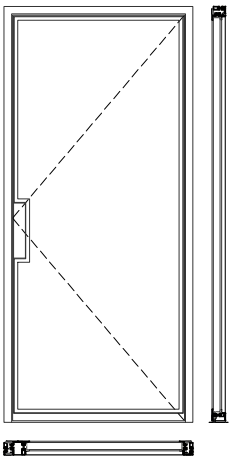
Single leaf door open in with locking box

Porta a un battente apertura interna con scatola serratura

Puerta abatible de una hoja que se abre hacia dentro con caja de cerradura

min. dimensions 600 x 2000
max. dimensions 1200 x 3000

max. leaf weight: 230 kg



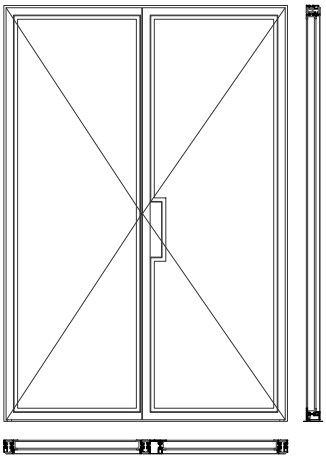
Single leaf door open out with locking box

Porta a un battente apertura esterna con scatola serratura

Puerta abatible de una hoja que se abre hacia fuera con caja de cerradura

min. dimensions 600 x 2000
max. dimensions 1200 x 3000

max. leaf weight: 230 kg



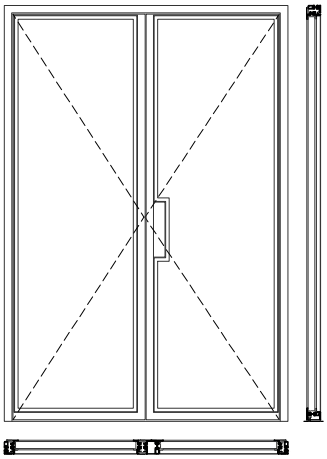
Double leaf door open in with locking box

Porta a due battenti apertura interna con scatola serratura

Puerta abatible de dos hojas que se abre hacia dentro con caja de cerradura

min. dimensions 1200 x 2000
max. dimensions 2400 x 3000

max. leaf weight: 230 kg



Double leaf door open out with locking box

Porta a due battenti apertura esterna con scatola serratura

Puerta abatible de dos hojas que se abre hacia fuera con caja de cerradura

min. dimensions 1200 x 2000
max. dimensions 2400 x 3000

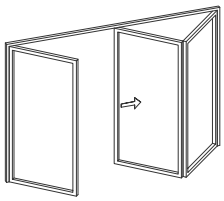
max. leaf weight: 230 kg

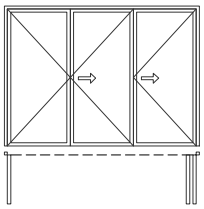
Dimensions
Bi-folding door system

Dimensioni
Sistema di porte a libro

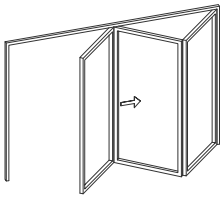
Dimensiones
Sistema de puerta plegable

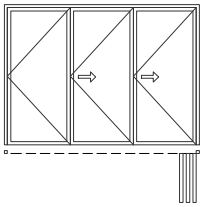
System 3 leaves (1+2 leaves)
Sistema 3 ante (1+2 ante)
Sistema 3 hojas (1+2 hojas)



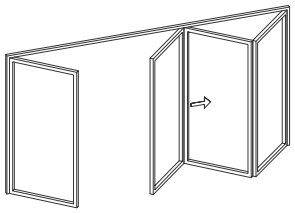


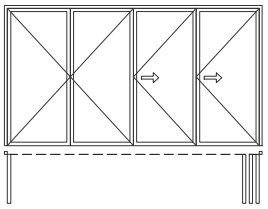
System 3 leaves (3 leaves)
Sistema 3 ante (3 ante)
Sistema 3 hojas (3 hojas)



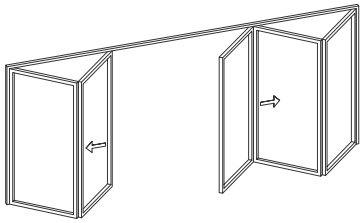


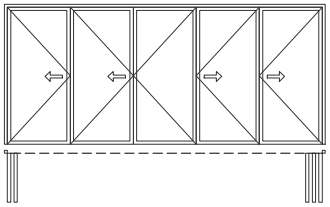
System 4 leaves (1+3 leaves)
Sistema 4 ante (1+3 ante)
Sistema 4 hojas (1+3 hojas)



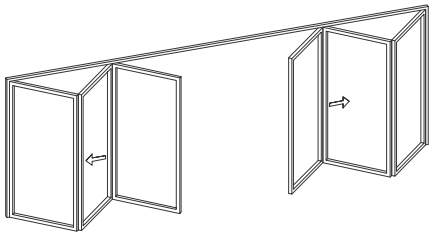


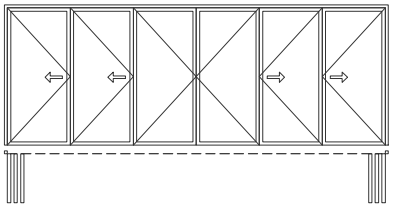
System 5 leaves (2+3 leaves)
Sistema 5 ante (2+3 ante)
Sistema 5 hojas (2+3 hojas)





System 6 leaves (3+3 leaves)
Sistema 6 ante (3+3 ante)
Sistema 6 hojas (3+3 hojas)

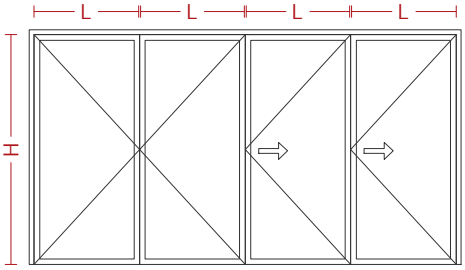




Leaf dimensions using the example of a 4-part bi-folding door system.

Dimensioni anta utilizzando l'esempio di un sistema di porte a doppia piegatura in 4 parti.

Dimensiones de la hoja utilizando el ejemplo de un sistema de puerta plegable de 4 partes.



min. L x H **600 x 800**
max. L x H **1100 x 3000**

Number of leaves can be extended

L = Leaf rebate width
H = Leaf rebate height

Il numero di ante può essere esteso

L = Larghezza battuta anta
H = Altezza battuta anta

El número de puertas se puede ampliar

L = Ancho de tope de hoja
H = Alto de tope de hoja

Profile range

Gamma profili

Gama de perfiles

2.0

Profiles 2.1
Glazing beads 2.2
Glazing table 2.3

Profili 2.1
Profili fermavetro 2.2
Tabella vetrazioni 2.3

Perfiles 2.1
Junquillos 2.2
Tabla de acristalamiento 2.3

Profiles

Profili

Perfiles

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
G = Weight
U = Coated surface

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
G = Peso
U = Superficie in vista

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
G = Peso
U = Superficie recubierta

Profiles

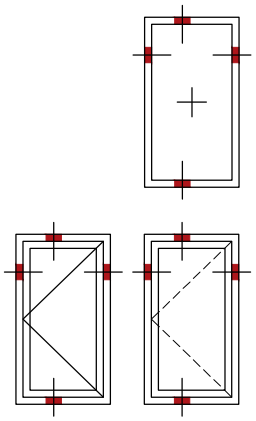
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

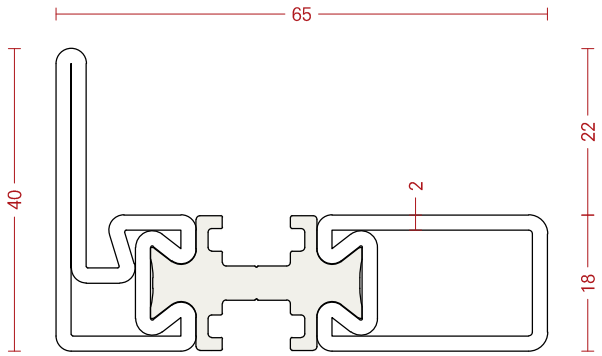
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

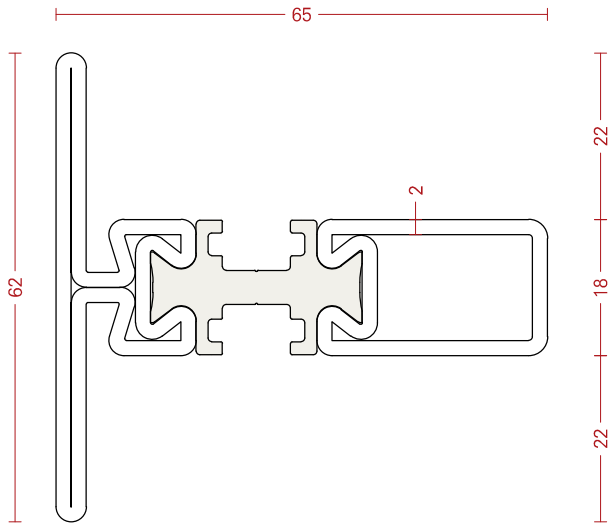
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 6518L-nn

-02	G = 4.01	U = 0.192
-05	G = 4.08	U = 0.192
-07	G = 4.01	U = 0.192
-12	G = 4.01	U = 0.192
	kg/m	m²/m



MT 6518T-nn

-02	G = 4.91	U = 0.250
-05	G = 5.00	U = 0.250
-07	G = 4.91	U = 0.250
-12	G = 4.91	U = 0.250
	kg/m	m²/m

Profiles

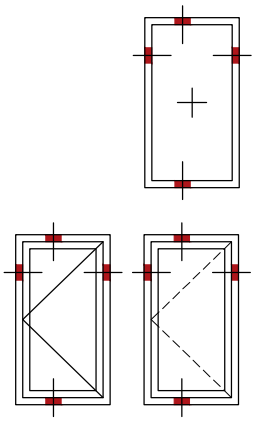
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

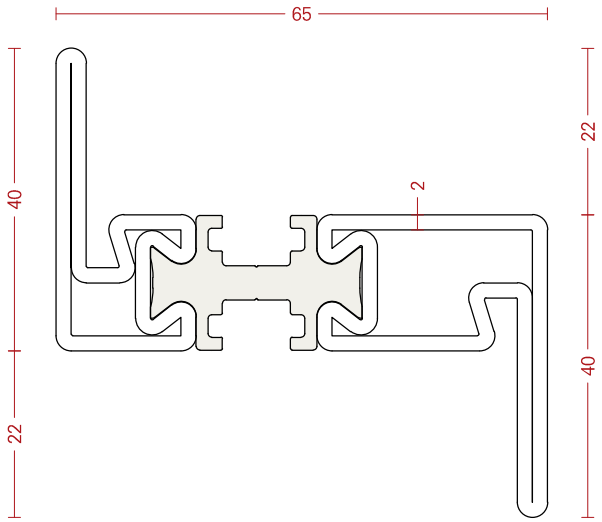
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

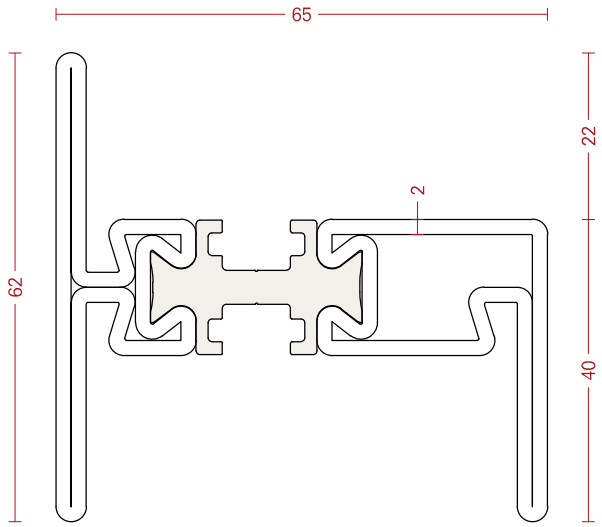
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 6518Z-nn

-02	G = 4.91	U = 0.250
-05	G = 4.99	U = 0.250
-07	G = 4.91	U = 0.250
-12	G = 4.91	U = 0.250
	kg/m	m²/m



MT 6518H-nn

-02	5.81	0.308
-05	5.92	0.308
-07	5.81	0.308
-12	5.81	0.308
	kg/m	m²/m

Profiles

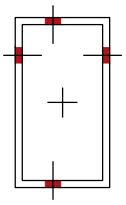
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

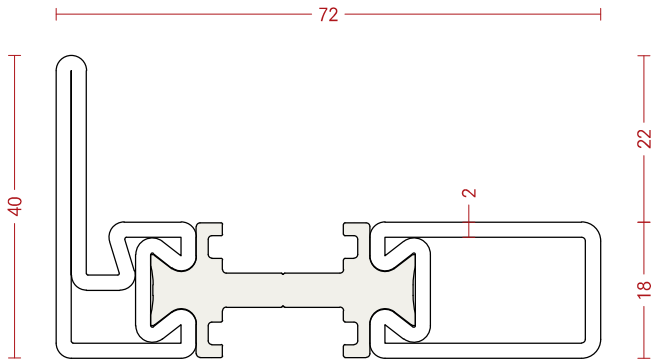
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

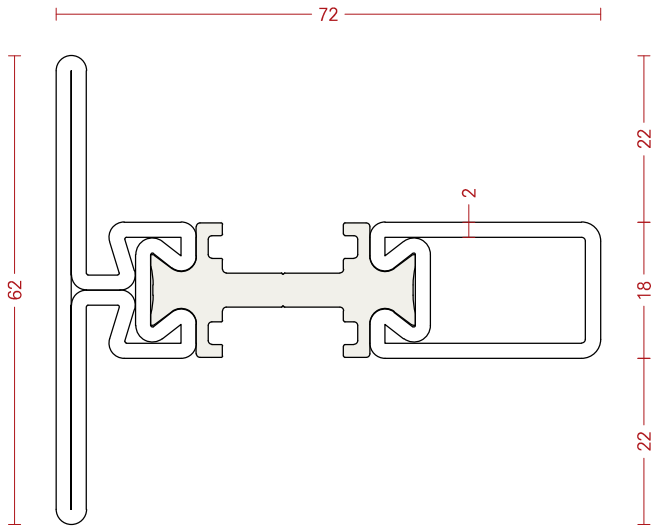
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 7218LF-nn

-02	G = 4.05	U = 0.192
-05	G = 4.12	U = 0.192
-07	G = 4.05	U = 0.192
-12	G = 4.05	U = 0.192
	kg/m	m²/m



MT 7218TF-nn

-02	G = 4.96	U = 0.250
-05	G = 5.04	U = 0.250
-07	G = 4.96	U = 0.250
-12	G = 4.96	U = 0.250
	kg/m	m²/m

Profiles

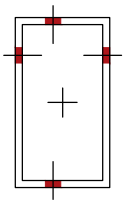
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

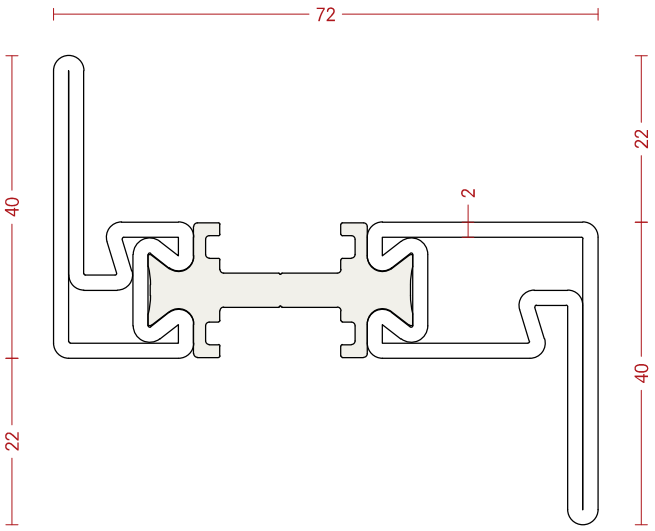
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

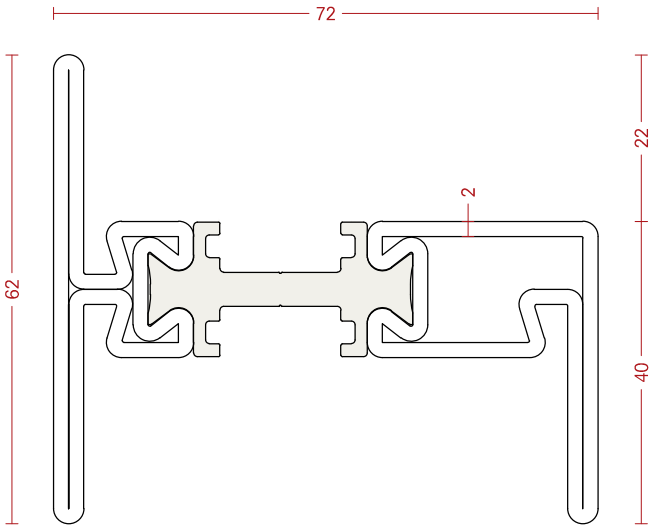
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 7218ZF-nn

-02	G = 4.95	U = 0.250
-05	G = 5.04	U = 0.250
-07	G = 4.95	U = 0.250
-12	G = 4.95	U = 0.250
	kg/m	m²/m



MT 7218HF-nn

-02	G = 5.85	U = 0.308
-05	G = 5.96	U = 0.308
-07	G = 5.85	U = 0.308
-12	G = 5.85	U = 0.308
	kg/m	m²/m

Profiles

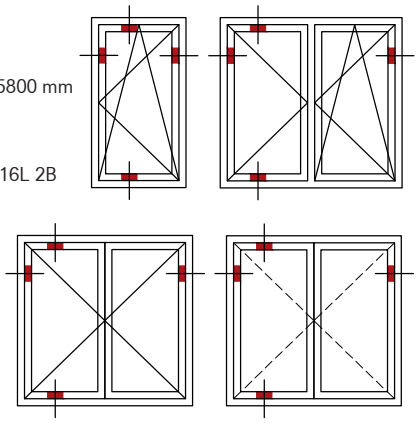
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

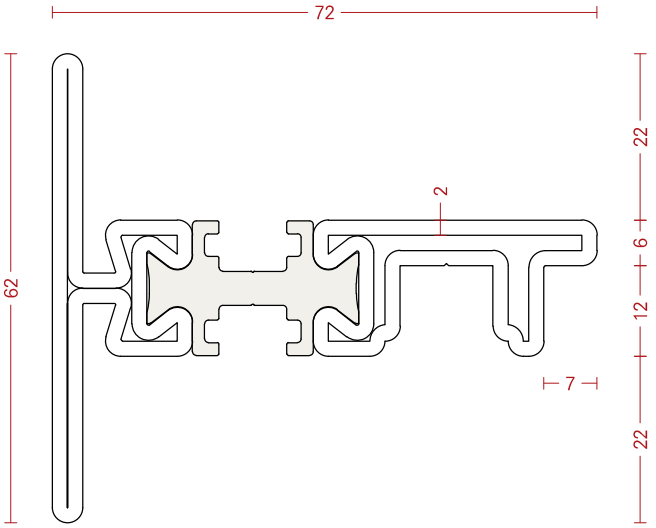
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

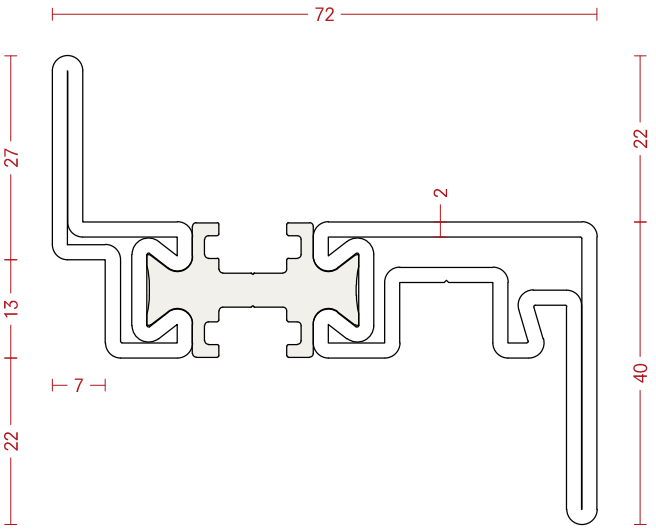
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 7218TZ-nn

-02	G = 5.41	U = 0.284
-05	G = 5.50	U = 0.284
-07	G = 5.41	U = 0.284
-12	G = 5.41	U = 0.284
	kg/m	m²/m



MT 7218ZR-nn

-02	G = 5.16	U = 0.268
-05	G = 5.26	U = 0.268
-07	G = 5.16	U = 0.268
-12	G = 5.16	U = 0.268
	kg/m	m²/m

Profiles

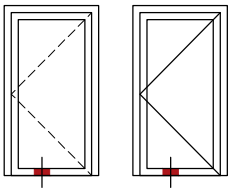
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

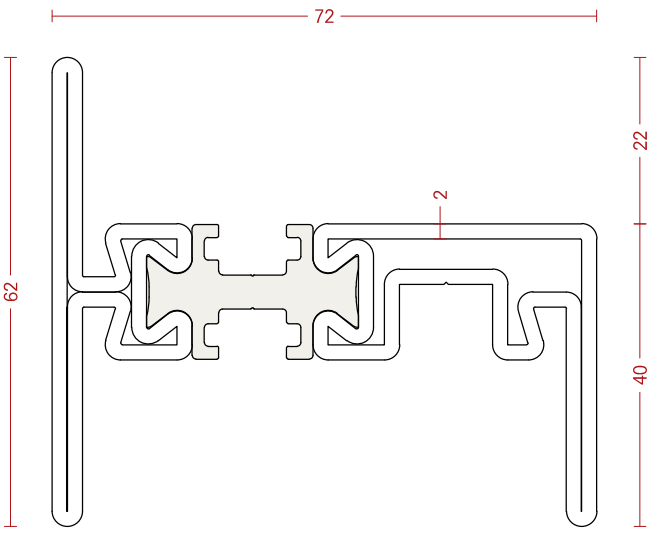
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 7218HZ-nn

-02	G = 6.30	U = 0.341
-05	G = 6.42	U = 0.341
-07	G = 6.30	U = 0.341
-12	G = 6.30	U = 0.341
	kg/m	m^2/m

Profiles

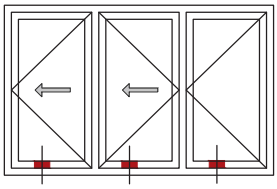
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

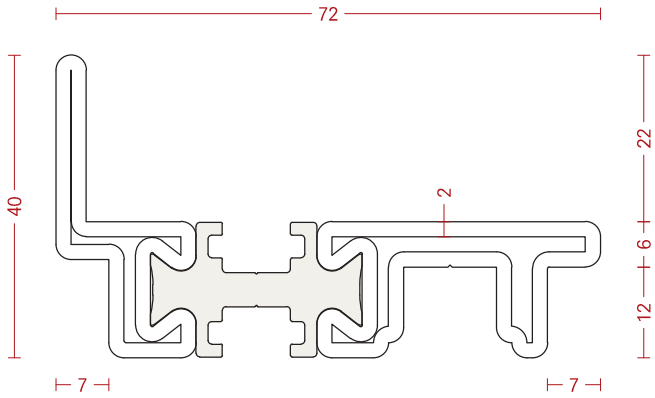
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 7218LR-nn

-02	G = 4.27	U = 0.211
-05	G = 4.34	U = 0.211
-07	G = 4.27	U = 0.211
-12	G = 4.27	U = 0.211
	kg/m	m^2/m

Profiles

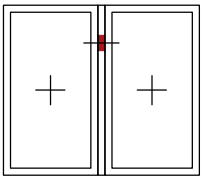
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
05 - Stainless steel AISI 316L 2B
07 - Cor-ten steel
12 - Bright steel

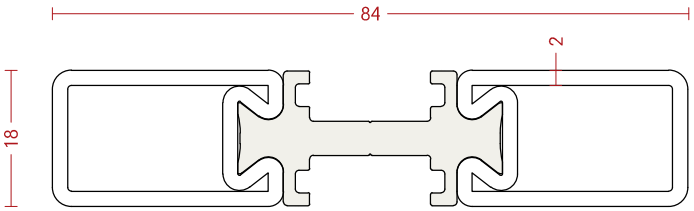
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
05 - Acciaio inox AISI 316L 2B
07 - Acciaio Cor-ten
12 - Acciaio decapato

Perfiles

LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
05 - Acero inoxidable AISI 316L 2B
07 - Acero Cor-ten
12 - Acero bruto





MT 8418SU-nn

-02	G = 3.53	U = 0.158
-05	G = 3.59	U = 0.158
-07	G = 3.53	U = 0.158
-12	G = 3.53	U = 0.158
	kg/m	m^2/m

Profiles

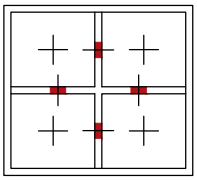
BAR LENGTH: 5800 mm
MATERIALS:
14 - Bead-blasted laser welded steel
32 - Bead-blasted laser welded Cor-Ten steel
34 - Bead-blasted laser welded stainless steel

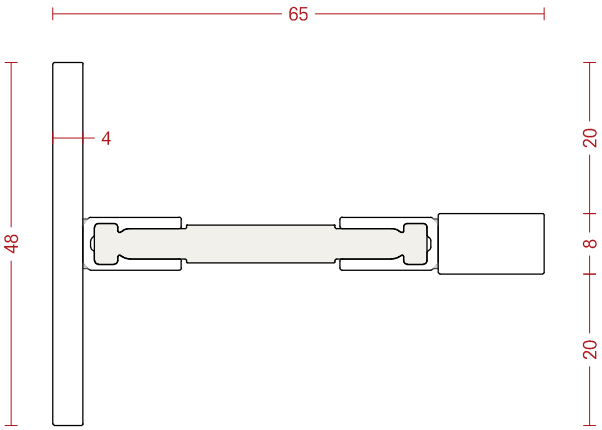
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
14 - Acciaio saldato laser, micropallinato
32 - Acciaio Cor-Ten saldato laser, micropallinato
34 - Acciaio inox saldato laser, micropallinato

Perfiles

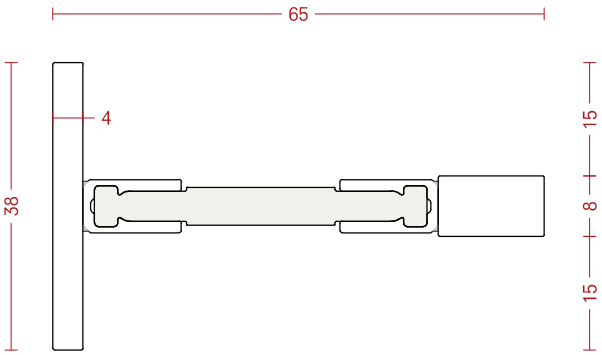
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
14 - Acero soldado con láser, micro-arenado
32 - Acero Cor-Ten soldado con láser, micro-arenado
34 - Acero inox soldado con láser, micro-arenado





MT 6507TN-nn

-14	G = 3.292	U = 0.23
-32	G = 3.292	U = 0.23
-34	G = 3.338	U = 0.23
	kg/m	m^2/m



MT 6507TR-nn

-14	G = 2.978	U = 0.21
-32	G = 2.978	U = 0.21
-34	G = 3.018	U = 0.21
	kg/m	m^2/m

Note:

Only L-shaped glazing beads can be used with these crosspieces (see page 2.3.14).

Nota:

Con questi traversi sono utilizzabili solo fermavetri a L (vedi pag. 2.3.14).

Nota:

Con estos travesaños solo se pueden utilizar junquillos en forma de L (consulte la página 2.3.14).

Profiles

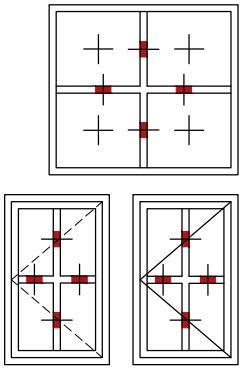
BAR LENGTH: 5800 mm
MATERIALS:
14 - Bead-blasted laser welded steel
32 - Bead-blasted laser welded Cor-Ten steel
34 - Bead-blasted laser welded stainless steel

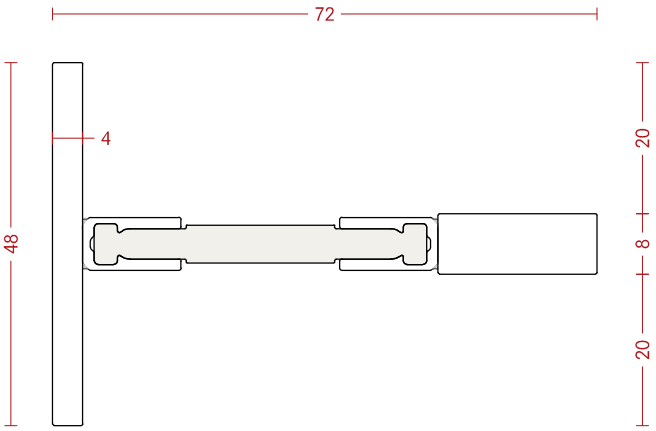
Profili

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
14 - Acciaio saldato laser, micropallinato
32 - Acciaio Cor-Ten saldato laser, micropallinato
34 - Acciaio inox saldato laser, micropallinato

Perfiles

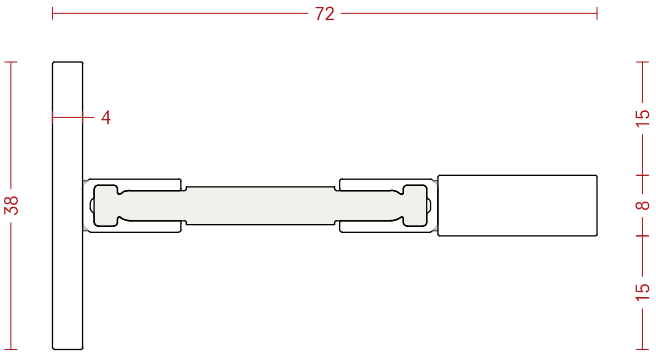
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
14 - Acero soldado con láser, micro-arenado
32 - Acero Cor-Ten soldado con láser, micro-arenado
34 - Acero inox soldado con láser, micro-arenado





MT 7207TN-nn

-14	G = 3.732	U = 0.25
-32	G = 3.732	U = 0.25
-34	G = 3.786	U = 0.25
	kg/m	m²/m



MT 7207TR-nn

-14	G = 3.418	U = 0.23
-32	G = 3.418	U = 0.23
-34	G = 3.466	U = 0.23
	kg/m	m²/m

Note:

Only L-shaped glazing beads can be used with these crosspieces (see page 2.3.21).

Nota:

Con questi traversi sono utilizzabili solo fermavetri a L (vedi pag. 2.3.21).

Nota:

Con estos travesaños solo se pueden utilizar junquillos en forma de L (consulte la página 2.3.21).

Inertia values
according to EN14024

Valori di inerzia
conforme a norma EN14024

Valores de inercia
conforme a EN14024

	Iy (cm^4)	Wy (cm^3)	Ix (cm^4) SPAN L1	Ix (cm^4) SPAN L2	Ix (cm^4) SPAN L3	Wx (cm^3) SPAN L1	Wx (cm^3) SPAN L2	Wx (cm^3) SPAN L3
MT 6518L-nn	4.612	1.687	14.68	18.82	20.95	3.64	4.67	5.20
MT 6518T-nn	8.973	2.895	16.44	21.65	24.45	3.69	4.87	5.49
MT 6518Z-nn	8.980	2.897	20.97	27.96	31.83	6.35	8.47	9.65
MT 6518H-nn	12.259	3.663	22.83	32.50	37.82	6.77	9.64	11.22
MT 7218LF-nn	4.612	1.687	18.93	24.58	27.48	4.27	5.55	6.20
MT 7218TF-nn	8.973	2.895	21.14	28.19	31.97	6.64	9.93	11.61
MT 7218ZF-nn	8.980	2.897	26.32	35.56	40.68	7.25	9.80	11.21
MT 7218HF-nn	12.259	3.663	27.61	41.30	48.29	6.64	9.93	11.61

Legend

G = Weight
U = Coated surface
Wx / Wy = Flexural strength module about one axis
Ix / Iy = Moment of inertia about one axis
SPAN = profile length between two fixtures

For any additional information please contact our technical office.

Legenda

G = Peso
U = Superficie in vista
Wx / Wy = Modulo di resistenza alla flessione lungo un asse
Ix / Iy = Momento d'inerzia lungo un asse
SPAN = lunghezza del profilo fra due fissaggi

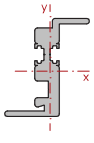
Per ulteriori informazioni contattare l'ufficio tecnico.

Leyenda

G = Peso
U = Superficie recubierta
Wx / Wy = Módulo de resistencia a la flexión sobre un eje
Ix / Iy = Momento de inercia sobre un eje
SPAN = longitud del perfil entre dos fijaciones

Para más información contactar la nuestra oficina técnica.

SPAN L1	2500 mm
SPAN L2	4000 mm
SPAN L3	5800 mm



	Iy (cm^4)	Wy (cm^3)	Ix (cm^4) SPAN L1	Ix (cm^4) SPAN L2	Ix (cm^4) SPAN L3	Wx (cm^3) SPAN L1	Wx (cm^3) SPAN L2	Wx (cm^3) SPAN L3
MT 7218TZ-nn	8.953	2.827	20.81	28.14	32.33	4.37	5.91	6.79
MT 7218ZR-nn	8.968	2.850	22.28	33.61	38.01	6.53	9.86	11.15
MT 7218HZ-nn	12.440	3.765	22.11	41.86	48.96	5.42	10.26	12.00
MT 7218LR-nn	4.158	1.568	17.46	22.54	25.23	4.23	5.46	6.11
MT 8418SU-nn	1.845	2.050	20.36	25.51	28.06	4.84	6.06	6.67
MT 6507TN-nn	3.801	1.584	12.12	17.55	20.79	2.93	4.25	5.03
MT 6507TR-nn	1.945	1.024	11.58	16.47	19.31	2.98	4.24	4.98
MT 7207TN-nn	3.831	1.596	14.16	23.30	28.16	3.32	5.47	6.61
MT 7207TR-nn	1.975	1.039	14.16	21.80	26.00	3.55	5.46	6.52

Legend

G = Weight
U = Coated surface
Wx / Wy = Flexural strength module about one axis
Ix / Iy = Moment of inertia about one axis
SPAN = profile length between two fixtures

For any additional information please contact our technical office.

Legenda

G = Peso
U = Superficie in vista
Wx / Wy = Modulo di resistenza alla flessione lungo un asse
Ix / Iy = Momento d'inerzia lungo un asse
SPAN = lunghezza del profilo fra due fissaggi

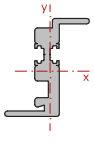
Per ulteriori informazioni contattare l'ufficio tecnico.

Leyenda

G = Peso
U = Superficie recubierta
Wx / Wy = Módulo de resistencia a la flexión sobre un eje
Ix / Iy = Momento de inercia sobre un eje
SPAN = longitud del perfil entre dos fijaciones

Para más información contactar la nuestra oficina técnica.

SPAN L1	2500 mm
SPAN L2	4000 mm
SPAN L3	5800 mm



Glazing beads and complementary

Profili fermavetro e complementari

Junquillos y complementarios

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
G = Weight
U = Coated surface

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
G = Peso
U = Superficie in vista

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
G = Peso
U = Superficie recubierta

Glazing beads

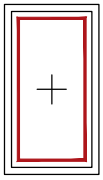
BAR LENGTH: 5800 mm
MATERIALS:
02 - Galvanized steel
07 - Cor-ten steel
12 - Bright steel

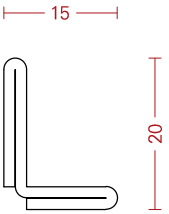
Fermavetri

LUNGHEZZA BARRA: 5800 mm
MATERIALI:
02 - Acciaio zincato
07 - Acciaio Cor-ten
12 - Acciaio decapato

Junquillos

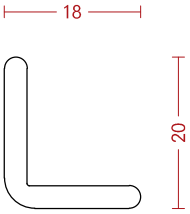
LONGITUD DE LA BARRA: 5800 mm
MATERIALES:
02 - Acero galvanizado
07 - Acero Cor-ten
12 - Acero bruto





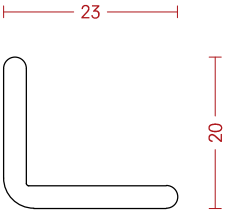
FV 2015A-nn
L 3000 mm

-02	G = 0.68	U = 0.067
-07	G = 0.68	U = 0.067
	kg/m	m²/m



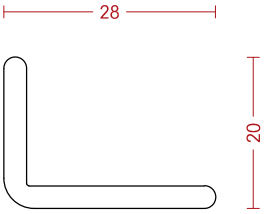
FV 2018L-nn

-02	G = 0.78	U = 0.072
-07	G = 0.78	U = 0.072
-12	G = 0.78	U = 0.072
	kg/m	m²/m



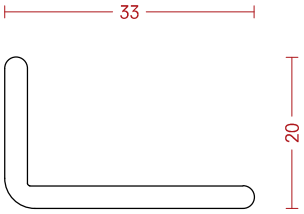
FV 2023L-nn

-02	G = 0.90	U = 0.082
-07	G = 0.90	U = 0.082
-12	G = 0.90	U = 0.082
	kg/m	m²/m



FV 2028L-nn

-02	G = 1.02	U = 0.092
-07	G = 1.02	U = 0.092
-12	G = 1.02	U = 0.092
	kg/m	m²/m

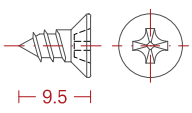


FV 2033L-nn

-02	G = 1.14	U = 0.102
-07	G = 1.14	U = 0.102
-12	G = 1.14	U = 0.102
	kg/m	m²/m

Fixing screw

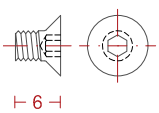
PU: 100 pc
MATERIAL: Stainless steel A2



D99815-03
Ø4.2 x 9.5 mm
only for profiles -02
solo per profili -02
solo para perfiles -02

Vite di fissaggio

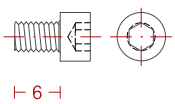
UV: 100 pezzi
MATERIALE: Acciaio inox A2



D99867-03
M4 x 6 mm

Tornillo de fijación

CANTIDAD: 100 uds.
MATERIAL: Acero inoxidable A2



D99866-03
M4 x 6 mm

Glazing beads

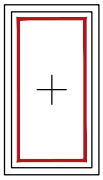
BAR LENGTH: 3000 mm
MATERIALS:
06 = Satin stainless steel AISI 316L

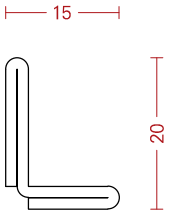
Fermavetri

LUNGHEZZA BARRA: 3000 mm
MATERIALI:
06 = Acciaio inox AISI 316L satinato

Junquillos

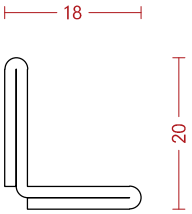
LONGITUD DE LA BARRA: 3000 mm
MATERIALES:
06 = Acero inoxidable AISI 316L satinado





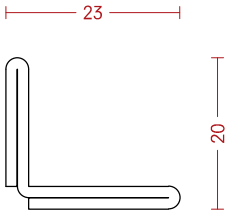
FV 2015A-06

-06	G = 0.69 kg/m	U = 0.067 m²/m



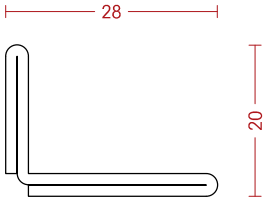
FV 2018A-06

-06	G = 0.76 kg/m	U = 0.073 m²/m



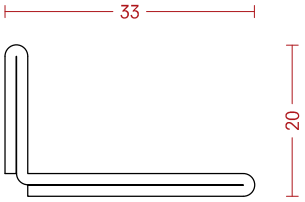
FV 2023A-06

-06	G = 0.89 kg/m	U = 0.083 m²/m



FV 2028A-06

-06	G = 1.01 kg/m	U = 0.093 m²/m

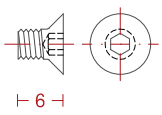


FV 2033A-06

-06	G = 1.12 kg/m	U = 0.103 m²/m

Fixing screw

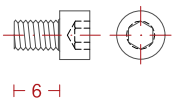
PU: 100 pc
MATERIAL: Stainless steel A2



D99867-03
M4 x 6 mm

Vite di fissaggio

UV: 100 pezzi
MATERIALE: Acciaio inox A2



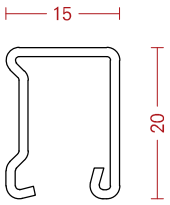
D99866-03
M4 x 6 mm

Tornillo de fijación

CANTIDAD: 100 uds.
MATERIAL: Acero inoxidable A2

Glazing beads

BAR LENGTH: 6000 mm
MATERIALS:
02 - Galvanized steel

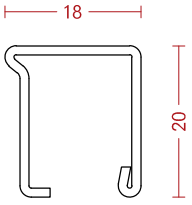


FV 2015R-02

-02	G = 0.56 kg/m	U = 0.068 m²/m

Fermavetri

LUNGHEZZA BARRA: 6000 mm
MATERIALI:
02 - Acciaio zincato

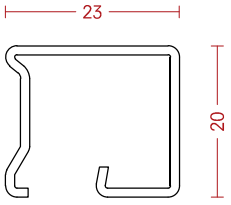


FV 2018R-02

-02	G = 0.59 kg/m	U = 0.072 m²/m

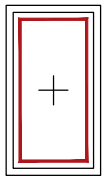
Junquillos

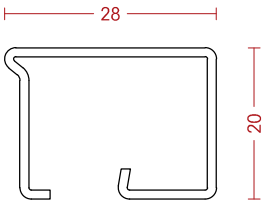
LONGITUD DE LA BARRA: 6000 mm
MATERIALES:
02 - Acero galvanizado



FV 2023R-02
L 5800 mm

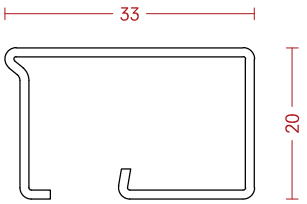
-02	G = 0.70 kg/m	U = 0.083 m²/m





FV 2028R-02

-02	G = 0.77 kg/m	U = 0.092 m²/m

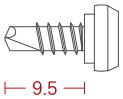


FV 2033R-02

-02	G = 0.87 kg/m	U = 0.102 m²/m

Fixing screw

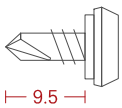
PU: 100 pc
MATERIALS:
02 - Galvanized steel



F99054-02
Ø4.2 x 9.5 mm
for FV 2015R-02
per FV 2015R-02
para FV 2015R-02

Vite di fissaggio

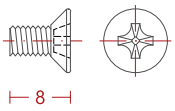
UV: 100 pezzi
MATERIALI:
02 - Acciaio zincato



F99051-02
Ø4.8 x 9.5 mm

Tornillo de fijación

CANTIDAD: 100 uds.
MATERIALES:
02 - Acero galvanizado



D99980-02
M4 x 8 mm
for F99061-03
per F99061-03
para F99061-03

Fixing bushings

PU: 50 pc
MATERIAL:
Stainless steel A2

F99061-03

Boccole di fissaggio

UV: 50 pezzi
MATERIALE:
Acciaio inox A2

Bujes de fijación

CANTIDAD: 50 uds.
MATERIAL:
Acero inoxidable A2

Glazing beads

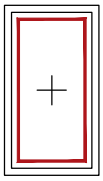
BAR LENGTH: 6000 mm
MATERIALS:
06 = Satin stainless steel AISI 316L

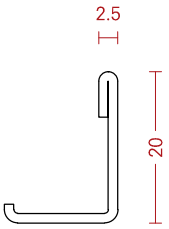
Fermavetri

LUNGHEZZA BARRA: 6000 mm
MATERIALI:
06 = Acciaio inox AISI 316L satinato

Junquillos

LONGITUD DE LA BARRA: 6000 mm
MATERIALES:
06 = Acero inoxidable AISI 316L satinado





FV 2003R-06

-06	G = 0.39	U = 0.072
	kg/m	m^2/m

Glazing bead - clips

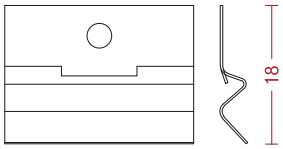
PU: 100 pc
MATERIAL:
Stainless steel AISI 304 2B

Fermavetri - clips

UV: 100 pezzi
MATERIALE:
Acciaio inox AISI 304 2B

Clips para junquillos

CANTIDAD: 100 uds.
MATERIAL:
Acero inoxidable AISI 304 2B



F99008-03

Fixture - clips

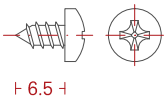
PU: 100 pc
MATERIAL:
Stainless steel A2

Fissaggio clips

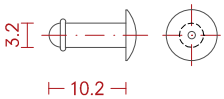
UV: 100 pezzi
MATERIALE:
Acciaio inox A2

Fijacion - clips

CANTIDAD: 100 uds.
MATERIAL:
Acero inoxidable A2



D99801-03
Ø3.5 x 6.5 mm



D99950-03
Ø3.2 x 8 mm

Glazing beads

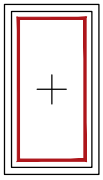
BAR LENGTH: 6000 mm
MATERIALS:
06 = Satin stainless steel AISI 316L

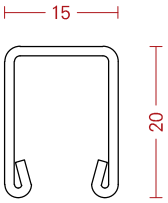
Fermavetri

LUNGHEZZA BARRA: 6000 mm
MATERIALI:
06 = Acciaio inox AISI 316L satinato

Junquillos

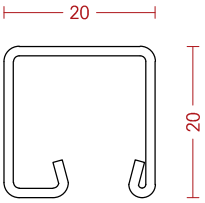
LONGITUD DE LA BARRA: 6000 mm
MATERIALES:
06 = Acero inoxidable AISI 316L satinado





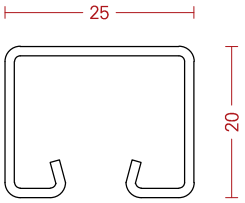
FV 2015R-06

-06	G = 0.61 kg/m	U = 0.067 m²/m



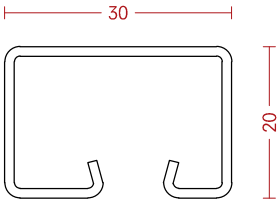
FV 2020R-06

-06	G = 0.71 kg/m	U = 0.077 m²/m



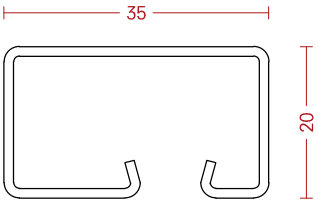
FV 2025R-06

-06	G = 0.81 kg/m	U = 0.087 m²/m



FV 2030R-06

-06	G = 0.91 kg/m	U = 0.097 m²/m



FV 2035R-06

-06	G = 1.01 kg/m	U = 0.107 m²/m

Fixing screw

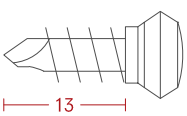
PU: 100 pc
MATERIALS:
05 - Stainless steel AISI 316L 2B

Vite di fissaggio

UV: 100 pezzi
MATERIALI:
05 - Acciaio inox AISI 316L 2B

Tornillo de fijación

CANTIDAD: 100 uds.
MATERIALES:
05 - Acero inoxidable AISI 316L 2B



F99055-05
Ø4.8 x 13 mm

Glazing table

Tabella vetrazioni

Tabla de acristalamiento

Important notes:

This system requires the use of glasses with edge covered.

The glazing tables and sealing guidelines are based on the nominal sizes of the profiles and glazing. Due to the production tolerances (profiles, glazing beads, panes) we advise double checking your selection.

Note importanti:

Per questo sistema è necessario l'utilizzo di vetri con canaline ribassate.

Le tabelle vetrazioni si riferiscono alle misure nominali dei profili e delle vetrature. A causa delle tolleranze di produzione (profili, profili fermavetro, spessori) è preferibile effettuare una seconda verifica della selezione.

Notas importantes:

Este sistema requiere el uso de gafas con canales rebajados.

Las tablas de acristalamiento hacen referencia a las medidas nominales de los perfiles y los acristalamientos. Debido a las tolerancias de fabricación (perfiles, junquillos y espesores de vidrio), debe comprobarse la gama en caso necesario.

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1
A = External gaskets
B = Internal gaskets
C = Glazing bead
D = Screw connection
E = Offset

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1
A = Guarnizioni esterne
B = Guarnizioni interne
C = Fermavetro
D = Vite di fissaggio
E = Scarto

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1
A = Juntas exteriores
B = Juntas interiores
C = Junquillo
D = Tornillo de fijación
E = Residuos

Glazing table

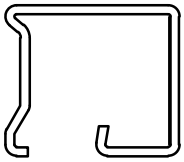
02 - Galvanized steel
Dry glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro a secco

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo seco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22	G99108-60	5	G99219-60	5	FV 2028R-02	28	F99051-02	19	1
23	G99107-60	3	G99219-60	6	FV 2028R-02	28	F99051-02	19	1
24	G99107-60	3	G99219-60	5	FV 2028R-02	28	F99051-02	19	1
25	G99107-60	3	G99209-60	4	FV 2028R-02	28	F99051-02	19	1
26	G99107-60	3	G99209-60	3	FV 2028R-02	28	F99051-02	19	1
27	G99108-60	5	G99219-60	5	FV 2023R-02	23	F99051-02	17	1
28	G99107-60	3	G99219-60	6	FV 2023R-02	23	F99051-02	17	1
29	G99107-60	3	G99219-60	5	FV 2023R-02	23	F99051-02	17	1
30	G99107-60	3	G99209-60	4	FV 2023R-02	23	F99051-02	17	1
31	G99107-60	3	G99209-60	3	FV 2023R-02	23	F99051-02	17	1
32	G99108-60	5	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
33	G99107-60	3	G99219-60	6	FV 2018R-02	18	F99051-02	9	1
34	G99107-60	3	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
35	G99107-60	3	G99209-60	4	FV 2018R-02	18	F99051-02	9	1
36	G99107-60	3	G99209-60	3	FV 2018R-02	18	F99051-02	9	1
37	G99107-60	3	G99219-60	5	FV 2015R-02	15	F99054-02	9	1
38	G99107-60	3	G99209-60	4	FV 2015R-02	15	F99054-02	9	1
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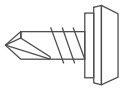

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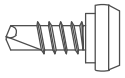
Ø4.8 x 9.5 mm



F99054-02
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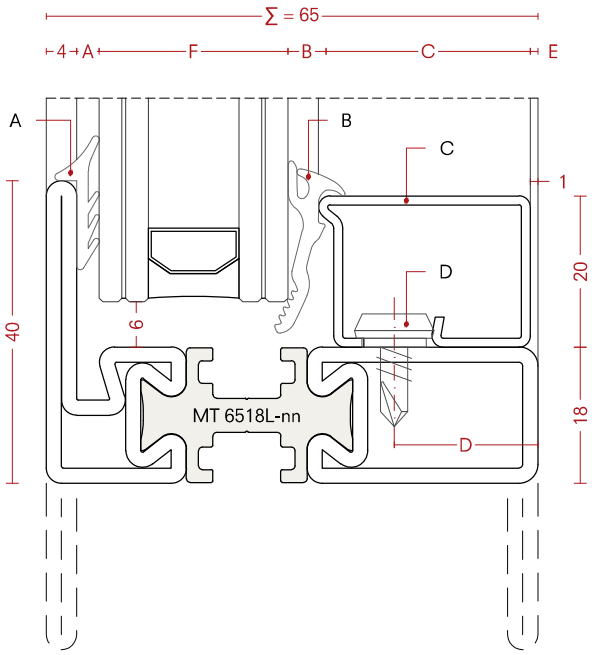
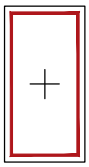
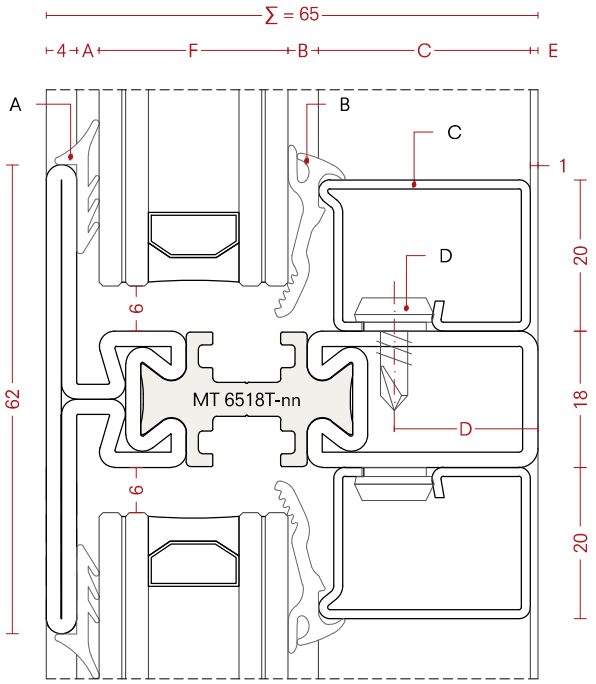
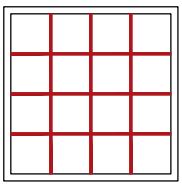








Note:

Please refer to page 5.5.6: Assembly sequence.

Nota:

Fare riferimento a pagina 5.5.6: Sequenza di montaggio.

Nota:

Consulte la página 5.5.6: Secuencia de montaje.

Glazing table

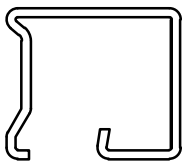
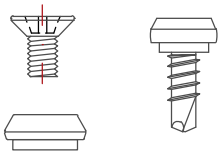
02 - Galvanized steel
Dry glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro a secco

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo seco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24	G99108-60 5	G99219-60 5	FV 2033R-02 33	F99061-03 + D99980-02 24	1
25	G99107-60 3	G99219-60 6	FV 2033R-02 33	F99061-03 + D99980-02 24	1
26	G99107-60 3	G99219-60 5	FV 2033R-02 33	F99061-03 + D99980-02 24	1
27	G99107-60 3	G99209-60 4	FV 2033R-02 33	F99061-03 + D99980-02 24	1
28	G99107-60 3	G99209-60 3	FV 2033R-02 33	F99061-03 + D99980-02 24	1
29	G99108-60 5	G99219-60 5	FV 2028R-02 28	F99061-03 + D99980-02 19	1
30	G99107-60 3	G99219-60 6	FV 2028R-02 28	F99061-03 + D99980-02 19	1
31	G99107-60 3	G99219-60 5	FV 2028R-02 28	F99061-03 + D99980-02 19	1
32	G99107-60 3	G99209-60 4	FV 2028R-02 28	F99061-03 + D99980-02 19	1
33	G99107-60 3	G99209-60 3	FV 2028R-02 28	F99061-03 + D99980-02 19	1
34	G99108-60 5	G99219-60 5	FV 2023R-02 23	F99061-03 + D99980-02 17	1
35	G99107-60 3	G99219-60 6	FV 2023R-02 23	F99061-03 + D99980-02 17	1
36	G99107-60 3	G99219-60 5	FV 2023R-02 23	F99061-03 + D99980-02 17	1
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38	G99107-60 3	G99209-60 3	FV 2023R-02 23	F99061-03 + D99980-02 17	1
39	G99108-60 5	G99219-60 5	FV 2018R-02 18	F99061-03 + D99980-02 9	1
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42	G99107-60 3	G99209-60 4	FV 2018R-02 18	F99061-03 + D99980-02 9	1
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45	G99107-60 3	G99209-60 4	FV 2015R-02 15	F99054-02 9	1
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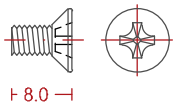
F99061-03



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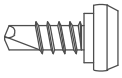
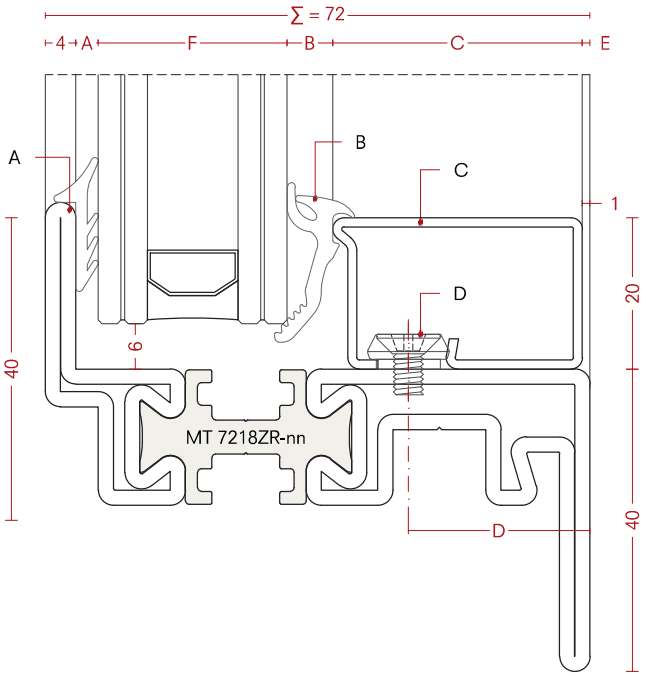


F99054-02
Ø4.2 x 9.5 mm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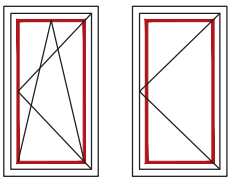

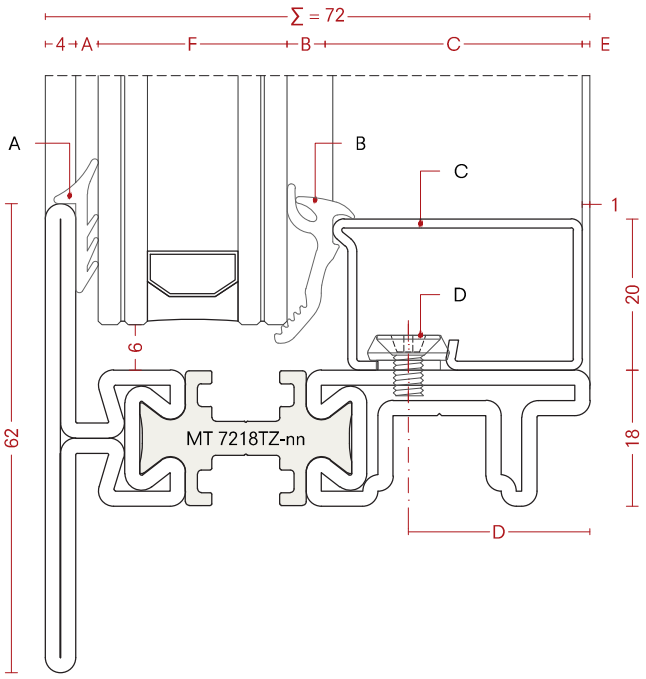
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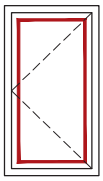

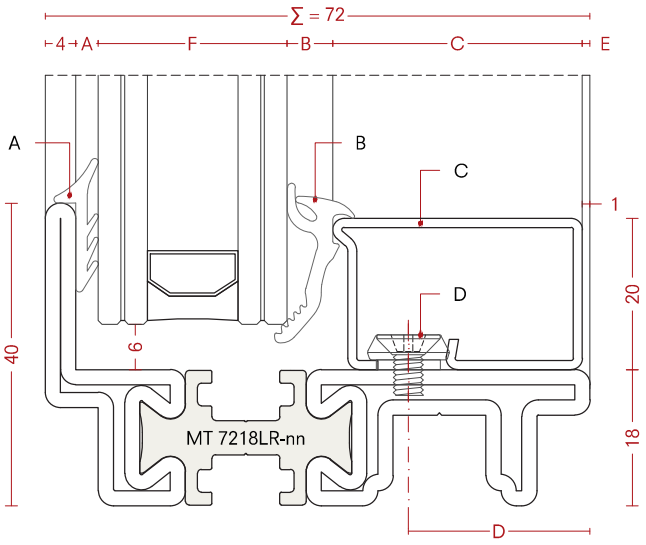
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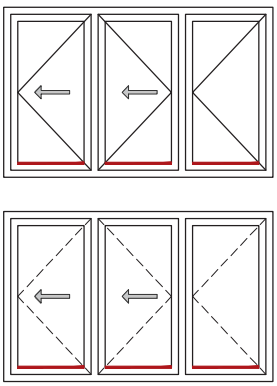


Glazing table

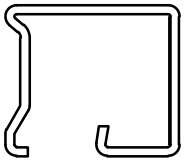
02 - Galvanized steel
Dry glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro a secco

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo seco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30	G99107-60	3	G99219-60	6	FV 2028R-02	28	F99051-02	19	1
31	G99107-60	3	G99219-60	5	FV 2028R-02	28	F99051-02	19	1
32	G99107-60	3	G99209-60	4	FV 2028R-02	28	F99051-02	19	1
33	G99107-60	3	G99209-60	3	FV 2028R-02	28	F99051-02	19	1
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37	G99107-60	3	G99209-60	4	FV 2023R-02	23	F99051-02	17	1
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44	G99107-60	3	G99219-60	5	FV 2015R-02	15	F99054-02	9	1
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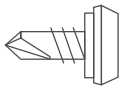
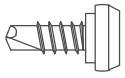
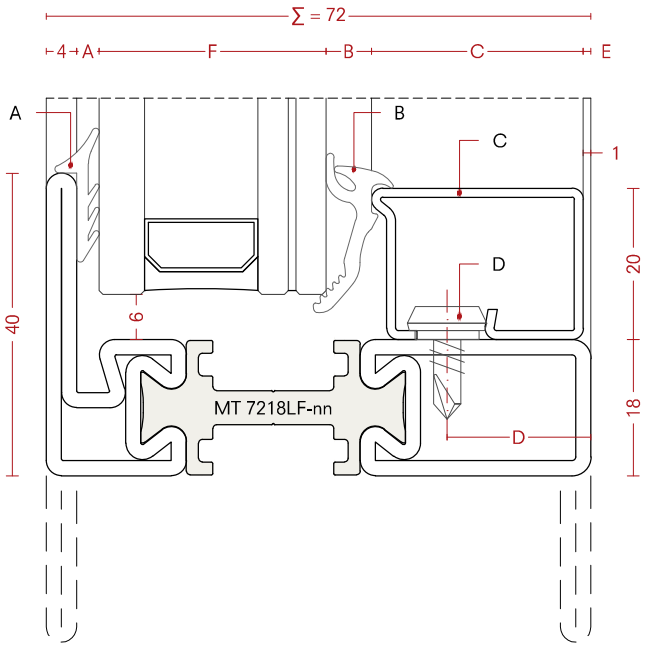


F99051-02
Ø4.8 x 9.5 mm



F99054-02
Ø4.2 x 9.5 mm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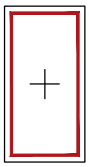
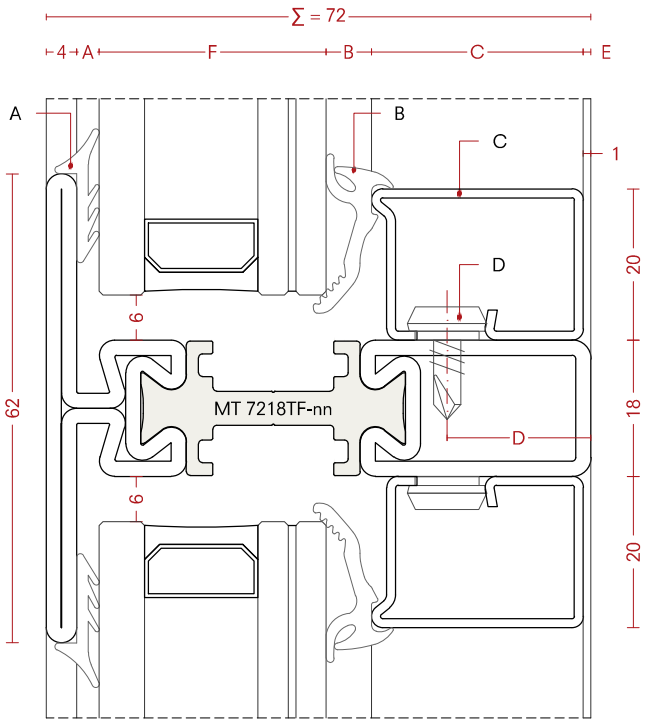
MT 7218LF-nn
18
D

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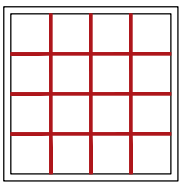


Glazing table

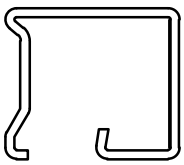
02 - Galvanized steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo de silicone



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25	G99105-61	3	G99209-60	4	FV 2028R-02	28	F99051-02	19	1
26	G99105-61	3	G99209-60	3	FV 2028R-02	28	F99051-02	19	1
27	G99104-61	5	G99219-60	5	FV 2023R-02	23	F99051-02	17	1
28	G99105-61	3	G99219-60	6	FV 2023R-02	23	F99051-02	17	1
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31	G99105-61	3	G99209-60	3	FV 2023R-02	23	F99051-02	17	1
32	G99104-61	5	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
33	G99105-61	3	G99219-60	6	FV 2018R-02	18	F99051-02	9	1
34	G99105-61	3	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
35	G99105-61	3	G99209-60	4	FV 2018R-02	18	F99051-02	9	1
36	G99105-61	3	G99209-60	3	FV 2018R-02	18	F99051-02	9	1
37	G99105-61	3	G99219-60	5	FV 2015R-02	15	F99054-02	9	1
38	G99105-61	3	G99209-60	4	FV 2015R-02	15	F99054-02	9	1
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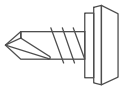

F99051-02
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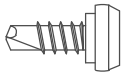
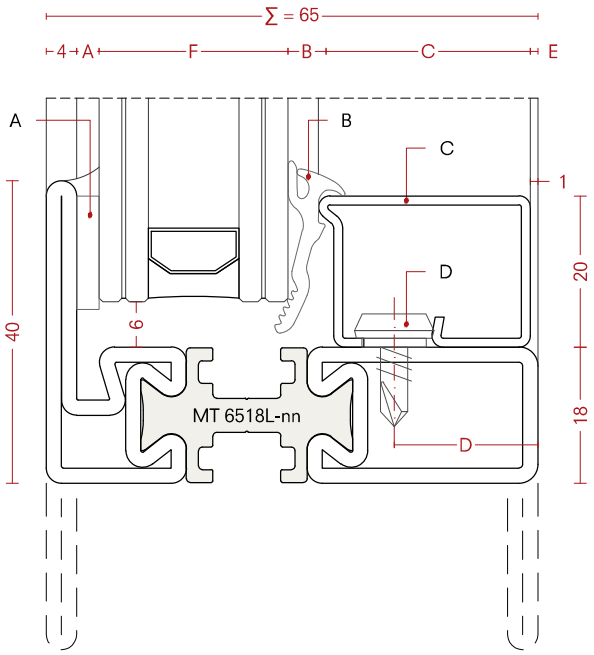


F99054-02
Ø4.2 x 9.5 mm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B
C
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B
C
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D
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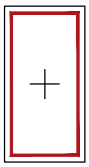
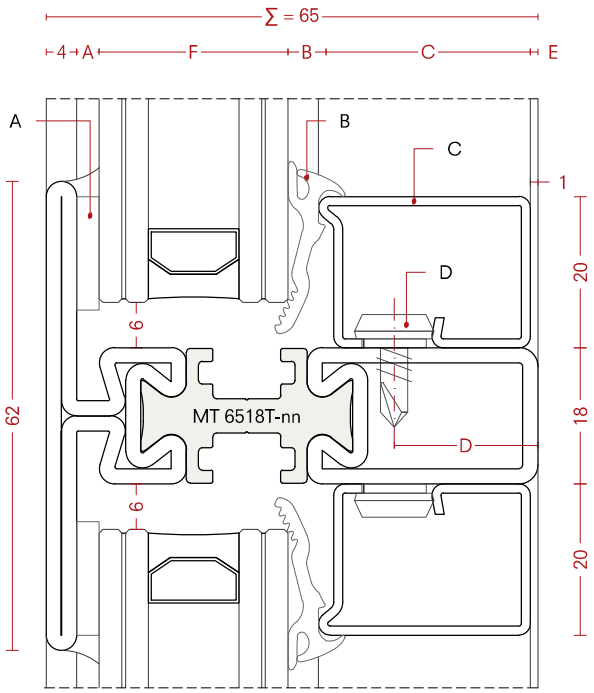
MT 6518L-nn
18
D

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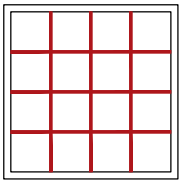
20



Glazing table

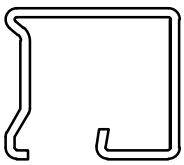
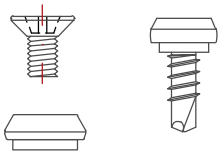
02 - Galvanized steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo de silicone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24	G99104-61 5	G99219-60 5	FV 2033R-02 33	F99061-03 + D99980-02 24	1
25	G99105-61 3	G99219-60 6	FV 2033R-02 33	F99061-03 + D99980-02 24	1
26	G99105-61 3	G99219-60 5	FV 2033R-02 33	F99061-03 + D99980-02 24	1
27	G99105-61 3	G99209-60 4	FV 2033R-02 33	F99061-03 + D99980-02 24	1
28	G99105-61 3	G99209-60 3	FV 2033R-02 33	F99061-03 + D99980-02 24	1
29	G99104-61 5	G99219-60 5	FV 2028R-02 28	F99061-03 + D99980-02 19	1
30	G99105-61 3	G99219-60 6	FV 2028R-02 28	F99061-03 + D99980-02 19	1
31	G99105-61 3	G99219-60 5	FV 2028R-02 28	F99061-03 + D99980-02 19	1
32	G99105-61 3	G99209-60 4	FV 2028R-02 28	F99061-03 + D99980-02 19	1
33	G99105-61 3	G99209-60 3	FV 2028R-02 28	F99061-03 + D99980-02 19	1
34	G99104-61 5	G99219-60 5	FV 2023R-02 23	F99061-03 + D99980-02 17	1
35	G99105-61 3	G99219-60 6	FV 2023R-02 23	F99061-03 + D99980-02 17	1
36	G99105-61 3	G99219-60 5	FV 2023R-02 23	F99061-03 + D99980-02 17	1
37	G99105-61 3	G99209-60 4	FV 2023R-02 23	F99061-03 + D99980-02 17	1
38	G99105-61 3	G99209-60 3	FV 2023R-02 23	F99061-03 + D99980-02 17	1
39	G99104-61 5	G99219-60 5	FV 2018R-02 18	F99061-03 + D99980-02 9	1
40	G99105-61 3	G99219-60 6	FV 2018R-02 18	F99061-03 + D99980-02 9	1
41	G99105-61 3	G99219-60 5	FV 2018R-02 18	F99061-03 + D99980-02 9	1
42	G99105-61 3	G99209-60 4	FV 2018R-02 18	F99061-03 + D99980-02 9	1
43	G99105-61 3	G99209-60 3	FV 2018R-02 18	F99061-03 + D99980-02 9	1
44	G99105-61 3	G99219-60 5	FV 2015R-02 15	F99054-02 9	1
45	G99105-61 3	G99209-60 4	FV 2015R-02 15	F99054-02 9	1
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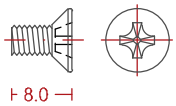
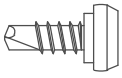
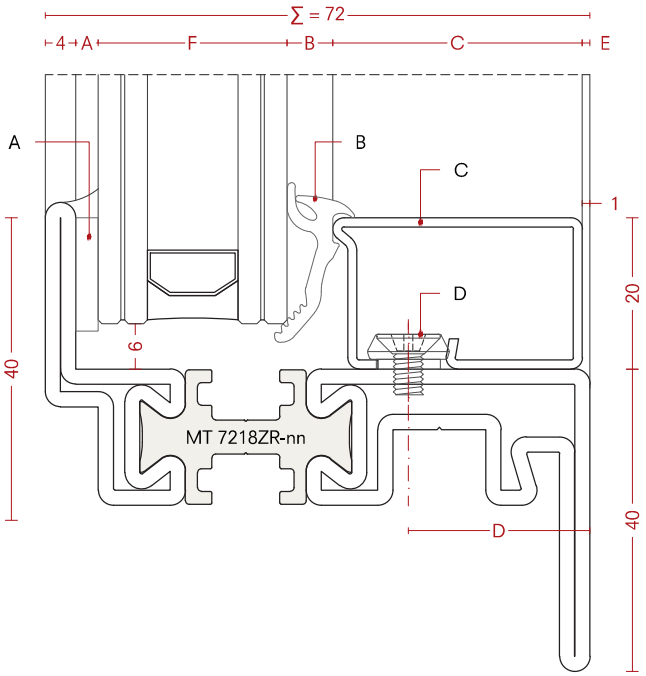
F99061-03



D99980-02
M4 x 8 mm



F99054-02
Ø4.2 x 9.5 mm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B
C
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6
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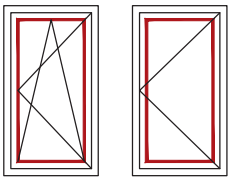
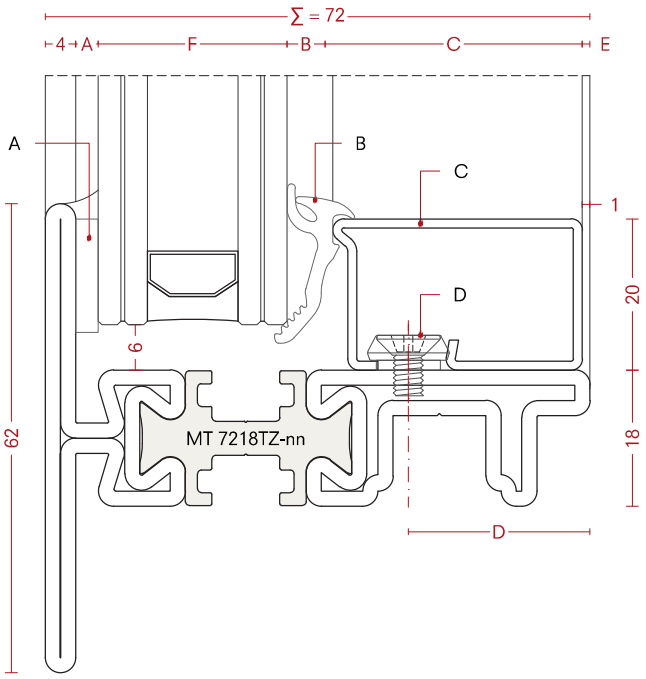
MT 7218ZR-nn
D

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B
C
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B
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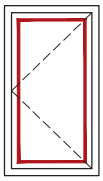
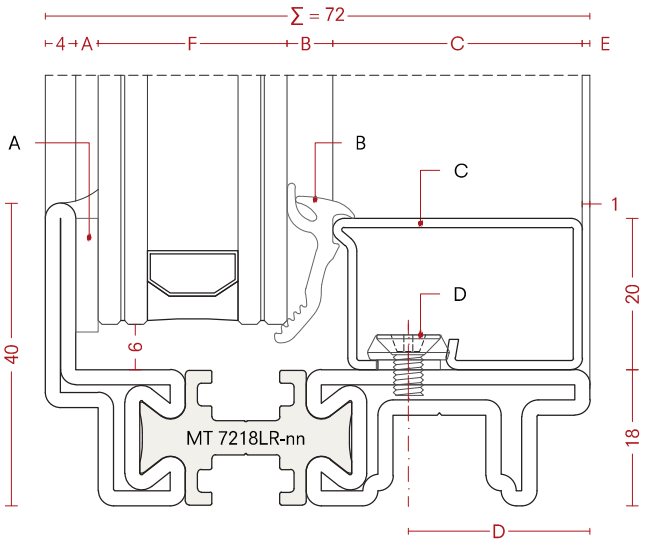
6
62
MT 7218TZ-nn
D

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C
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C
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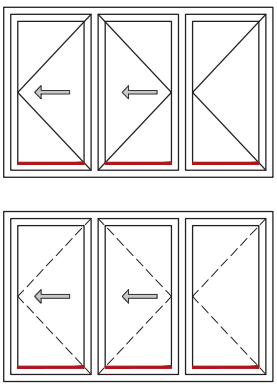
6
40
MT 7218LR-nn
D



Glazing table

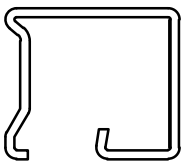
02 - Galvanized steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
Junquillo de silicone



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mm	code	mm	code	mm	code	mm	code	mm	mm
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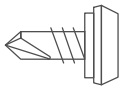
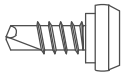
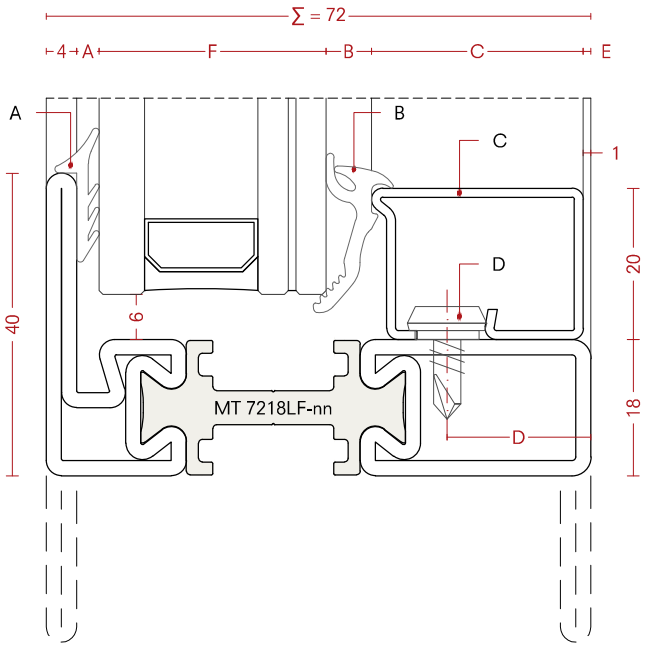
29	G99104-61	5	G99219-60	5	FV 2028R-02	28	F99051-02	19	1
30	G99105-61	3	G99219-60	6	FV 2028R-02	28	F99051-02	19	1
31	G99105-61	3	G99219-60	5	FV 2028R-02	28	F99051-02	19	1
32	G99105-61	3	G99209-60	4	FV 2028R-02	28	F99051-02	19	1
33	G99105-61	3	G99209-60	3	FV 2028R-02	28	F99051-02	19	1
34	G99104-61	5	G99219-60	5	FV 2023R-02	23	F99051-02	17	1
35	G99105-61	3	G99219-60	6	FV 2023R-02	23	F99051-02	17	1
36	G99105-61	3	G99219-60	5	FV 2023R-02	23	F99051-02	17	1
37	G99105-61	3	G99209-60	4	FV 2023R-02	23	F99051-02	17	1
38	G99105-61	3	G99209-60	3	FV 2023R-02	23	F99051-02	17	1
39	G99104-61	5	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
40	G99105-61	3	G99219-60	6	FV 2018R-02	18	F99051-02	9	1
41	G99105-61	3	G99219-60	5	FV 2018R-02	18	F99051-02	9	1
42	G99105-61	3	G99209-60	4	FV 2018R-02	18	F99051-02	9	1
43	G99105-61	3	G99209-60	3	FV 2018R-02	18	F99051-02	9	1
44	G99105-61	3	G99219-60	5	FV 2015R-02	15	F99054-02	9	1
45	G99105-61	3	G99209-60	4	FV 2015R-02	15	F99054-02	9	1
46	G99105-61	3	G99209-60	3	FV 2015R-02	15	F99054-02	9	1



F99051-02
Ø4.8 x 9.5 mm



F99054-02
Ø4.2 x 9.5 mm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B
C
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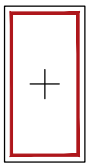
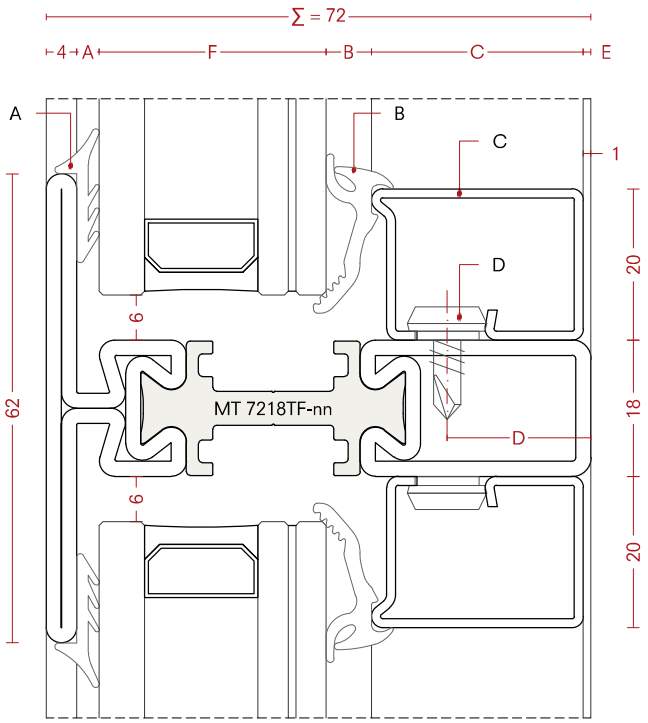
18
D

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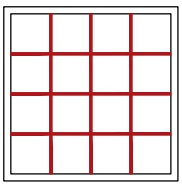
D
6
20



Glazing table

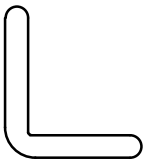
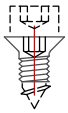
02 - Galvanized steel
06 = Satin stainless steel AISI 316L
07 - Cor-ten steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
06 = Acciaio inox AISI 316L satinato
07 - Acciaio Cor-ten
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
06 = Acero inoxidable AISI 316L satinado
07 - Acero Cor-ten
Junquillo de silicone

F	A		B		C		D	E
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17	G99104-61	5	G99203-61	4.5	FV 2033L-nn	33	16	1
18	G99104-61	5	G99202-61	3.5	FV 2033L-nn	33	16	1
19	G99104-61	5	G99201-61	2.5	FV 2033L-nn	33	16	1
20	G99105-61	3	G99202-61	3.5	FV 2033L-nn	33	16	1
21	G99105-61	3	G99201-61	2.5	FV 2033L-nn	33	16	1
22	G99104-61	5	G99203-61	4.5	FV 2028L-nn	28	13.5	1
23	G99104-61	5	G99202-61	3.5	FV 2028L-nn	28	13.5	1
24	G99104-61	5	G99201-61	2.5	FV 2028L-nn	28	13.5	1
25	G99105-61	3	G99202-61	3.5	FV 2028L-nn	28	13.5	1
26	G99105-61	3	G99201-61	2.5	FV 2028L-nn	28	13.5	1
27	G99104-61	5	G99203-61	4.5	FV 2023L-nn	23	11	1
28	G99104-61	5	G99202-61	3.5	FV 2023L-nn	23	11	1
29	G99104-61	5	G99201-61	2.5	FV 2023L-nn	23	11	1
30	G99105-61	3	G99202-61	3.5	FV 2023L-nn	23	11	1
31	G99105-61	3	G99201-61	2.5	FV 2023L-nn	23	11	1
32	G99104-61	5	G99203-61	4.5	FV 2018L-nn	18	8.5	1
33	G99104-61	5	G99202-61	3.5	FV 2018L-nn	18	8.5	1
34	G99104-61	5	G99201-61	2.5	FV 2018L-nn	18	8.5	1
35	G99105-61	3	G99202-61	3.5	FV 2018L-nn	18	8.5	1
36	G99105-61	3	G99201-61	2.5	FV 2018L-nn	18	8.5	1
37	G99104-61	5	G99201-61	2.5	FV 2015A-nn	15	8.5	1
38	G99105-61	3	G99202-61	3.5	FV 2015A-nn	15	8.5	1
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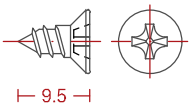
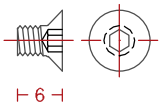
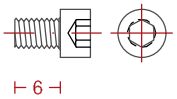


D99815-03
Ø4.2 x 9.5 mm



D99867-03
M4 x 6 mm

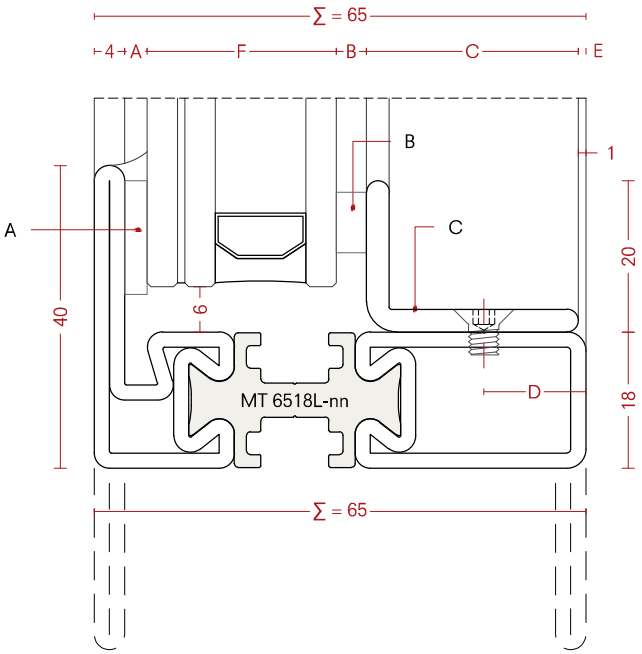


D99866-03
M4 x 6 mm

(1) With the 38 mm narrow T-profile, we recommend reducing the height of the spacer of the Insulated Glass Unit (IGU).

(1) Con il profilo a T stretto da 38 mm, si consiglia di adottare canaline vetrocamera con altezza ridotta.

(1) Con el perfil en T estrecho de 38 mm, recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.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D
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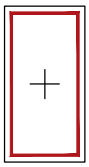

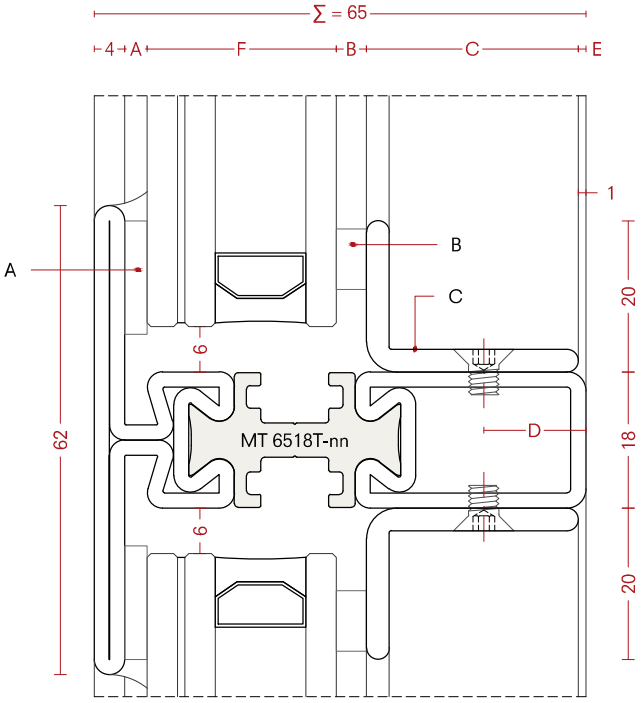
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C
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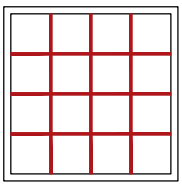
62
MT 6518T-nn
D
18
6
20



Glazing table

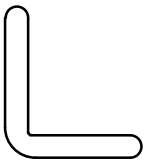
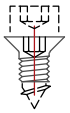
02 - Galvanized steel
06 = Satin stainless steel AISI 316L
07 - Cor-ten steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
06 = Acciaio inox AISI 316L satinato
07 - Acciaio Cor-ten
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
06 = Acero inoxidable AISI 316L satinado
07 - Acero Cor-ten
Junquillo de silicone

								
F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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17	G99104-61	5	G99203-61	4.5	FV 2033L-nn	33	7.5	1
18	G99104-61	5	G99202-61	3.5	FV 2033L-nn	33	7.5	1
19	G99104-61	5	G99201-61	2.5	FV 2033L-nn	33	7.5	1
20	G99105-61	3	G99202-61	3.5	FV 2033L-nn	33	7.5	1
21	G99105-61	3	G99201-61	2.5	FV 2033L-nn	33	7.5	1
22	G99104-61	5	G99203-61	4.5	FV 2028L-nn	28	7.5	1
23	G99104-61	5	G99202-61	3.5	FV 2028L-nn	28	7.5	1
24	G99104-61	5	G99201-61	2.5	FV 2028L-nn	28	7.5	1
25	G99105-61	3	G99202-61	3.5	FV 2028L-nn	28	7.5	1
26	G99105-61	3	G99201-61	2.5	FV 2028L-nn	28	7.5	1
27	G99104-61	5	G99203-61	4.5	FV 2023L-nn	23	7.5	1
28	G99104-61	5	G99202-61	3.5	FV 2023L-nn	23	7.5	1
29	G99104-61	5	G99201-61	2.5	FV 2023L-nn	23	7.5	1
30	G99105-61	3	G99202-61	3.5	FV 2023L-nn	23	7.5	1
31	G99105-61	3	G99201-61	2.5	FV 2023L-nn	23	7.5	1
32	G99104-61	5	G99203-61	4.5	FV 2018L-nn	18	7.5	1
33	G99104-61	5	G99202-61	3.5	FV 2018L-nn	18	7.5	1
34	G99104-61	5	G99201-61	2.5	FV 2018L-nn	18	7.5	1
35	G99105-61	3	G99202-61	3.5	FV 2018L-nn	18	7.5	1
36	G99105-61	3	G99201-61	2.5	FV 2018L-nn	18	7.5	1
37	G99104-61	5	G99201-61	2.5	FV 2015A-nn	15	7.5	1
38	G99105-61	3	G99202-61	3.5	FV 2015A-nn	15	7.5	1
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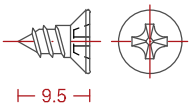
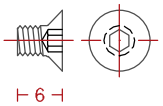
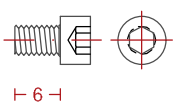


D99815-03
Ø4.2 x 9.5 mm



D99867-03
M4 x 6 mm

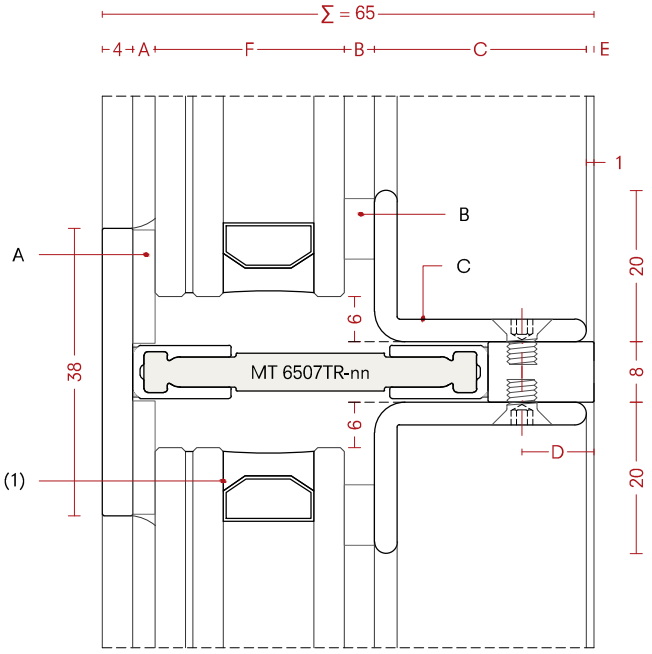


D99866-03
M4 x 6 mm

(1) With the 38 mm narrow T-profile, we recommend reducing the height of the spacer of the Insulated Glass Unit (IGU).

(1) Con il profilo a T stretto da 38 mm, si consiglia di adottare canaline vetrocamera con altezza ridotta.

(1) Con el perfil en T estrecho de 38 mm, recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.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E
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B
C
A
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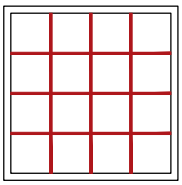
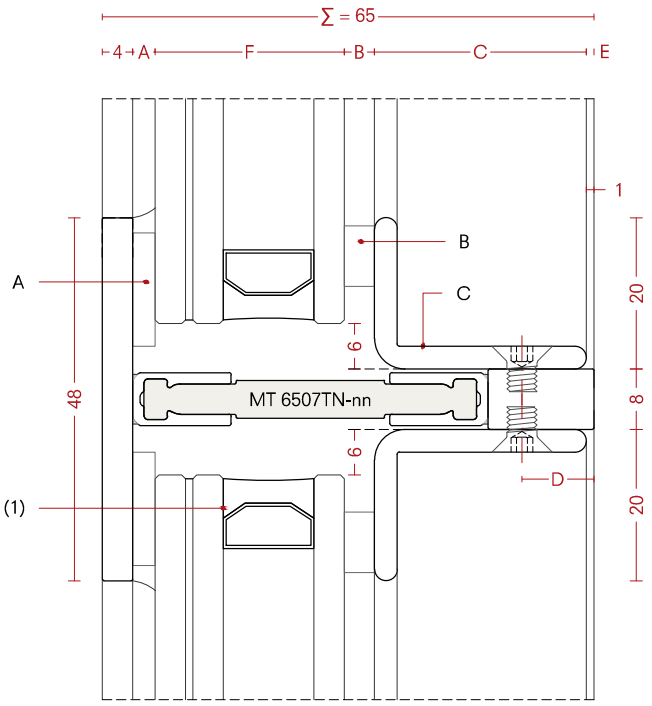
38
MT 6507TR-nn
8
6
D
(1)
20

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A
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B
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E
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B
C
A
20
6
48
MT 6507TN-nn
8
6
D
(1)
20

Glazing table

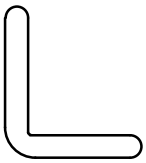
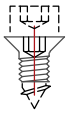
02 - Galvanized steel
06 = Satin stainless steel AISI 316L
07 - Cor-ten steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
06 = Acciaio inox AISI 316L satinato
07 - Acciaio Cor-ten
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
06 = Acero inoxidable AISI 316L satinado
07 - Acero Cor-ten
Junquillo de silicone

								
F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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24	G99104-61	5	G99203-61	4.5	FV 2033L-nn	33	16	1
25	G99104-61	5	G99202-61	3.5	FV 2033L-nn	33	16	1
26	G99104-61	5	G99201-61	2.5	FV 2033L-nn	33	16	1
27	G99105-61	3	G99202-61	3.5	FV 2033L-nn	33	16	1
28	G99105-61	3	G99201-61	2.5	FV 2033L-nn	33	16	1
29	G99104-61	5	G99203-61	4.5	FV 2028L-nn	28	13.5	1
30	G99104-61	5	G99202-61	3.5	FV 2028L-nn	28	13.5	1
31	G99104-61	5	G99201-61	2.5	FV 2028L-nn	28	13.5	1
32	G99105-61	3	G99202-61	3.5	FV 2028L-nn	28	13.5	1
33	G99105-61	3	G99201-61	2.5	FV 2028L-nn	28	13.5	1
34	G99104-61	5	G99203-61	4.5	FV 2023L-nn	23	11	1
35	G99104-61	5	G99202-61	3.5	FV 2023L-nn	23	11	1
36	G99104-61	5	G99201-61	2.5	FV 2023L-nn	23	11	1
37	G99105-61	3	G99202-61	3.5	FV 2023L-nn	23	11	1
38	G99105-61	3	G99201-61	2.5	FV 2023L-nn	23	11	1
39	G99104-61	5	G99203-61	4.5	FV 2018L-nn	18	8.5	1
40	G99104-61	5	G99202-61	3.5	FV 2018L-nn	18	8.5	1
41	G99104-61	5	G99201-61	2.5	FV 2018L-nn	18	8.5	1
42	G99105-61	3	G99202-61	3.5	FV 2018L-nn	18	8.5	1
43	G99105-61	3	G99201-61	2.5	FV 2018L-nn	18	8.5	1
44	G99104-61	5	G99201-61	2.5	FV 2015A-nn	15	8.5	1
45	G99105-61	3	G99202-61	3.5	FV 2015A-nn	15	8.5	1
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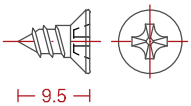
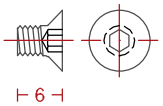
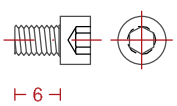


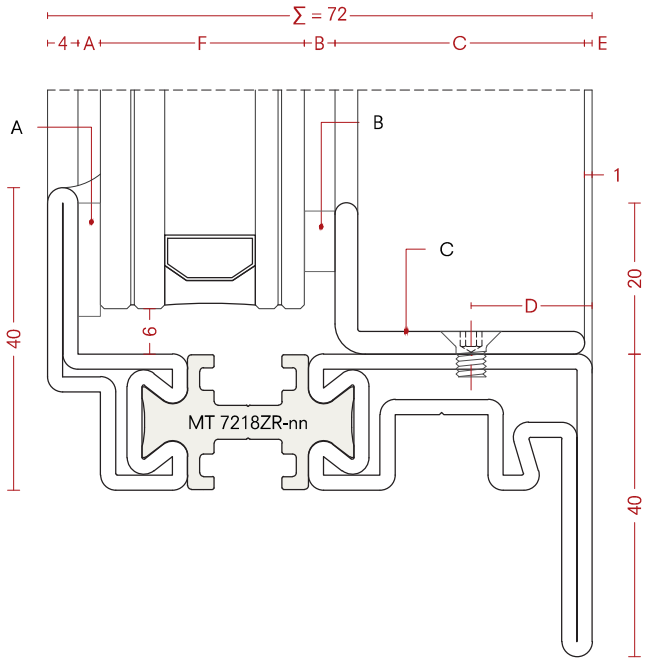
D99815-03
Ø4.2 x 9.5 mm



D99867-03
M4 x 6 mm



D99866-03
M4 x 6 mm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C
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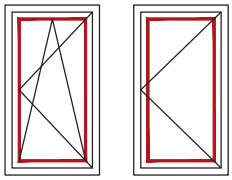

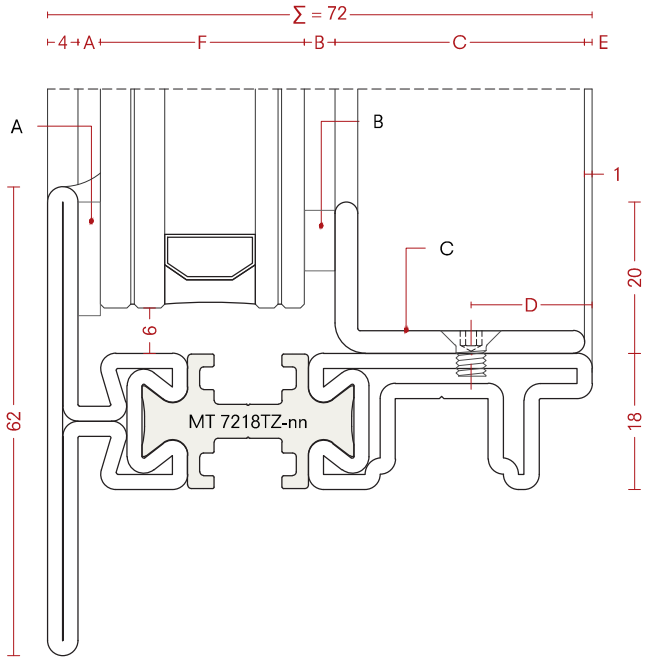
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62
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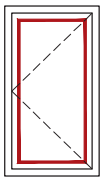

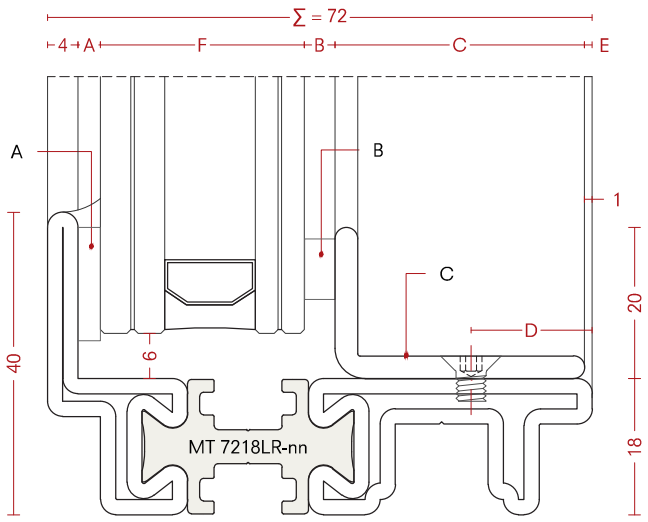
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C
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D
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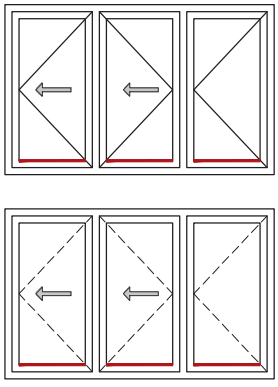
18
6
40
MT 7218LR-nn



Glazing table

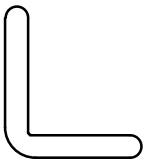
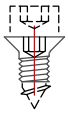
02 - Galvanized steel
06 = Satin stainless steel AISI 316L
07 - Cor-ten steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
06 = Acciaio inox AISI 316L satinato
07 - Acciaio Cor-ten
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
06 = Acero inoxidable AISI 316L satinado
07 - Acero Cor-ten
Junquillo de silicone

F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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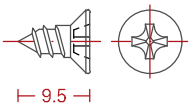
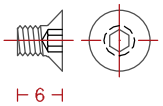
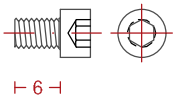
24	G99104-61	5	G99203-61	4.5	FV 2033L-nn	33	16	1
25	G99104-61	5	G99202-61	3.5	FV 2033L-nn	33	16	1
26	G99104-61	5	G99201-61	2.5	FV 2033L-nn	33	16	1
27	G99105-61	3	G99202-61	3.5	FV 2033L-nn	33	16	1
28	G99105-61	3	G99201-61	2.5	FV 2033L-nn	33	16	1
29	G99104-61	5	G99203-61	4.5	FV 2028L-nn	28	13.5	1
30	G99104-61	5	G99202-61	3.5	FV 2028L-nn	28	13.5	1
31	G99104-61	5	G99201-61	2.5	FV 2028L-nn	28	13.5	1
32	G99105-61	3	G99202-61	3.5	FV 2028L-nn	28	13.5	1
33	G99105-61	3	G99201-61	2.5	FV 2028L-nn	28	13.5	1
34	G99104-61	5	G99203-61	4.5	FV 2023L-nn	23	11	1
35	G99104-61	5	G99202-61	3.5	FV 2023L-nn	23	11	1
36	G99104-61	5	G99201-61	2.5	FV 2023L-nn	23	11	1
37	G99105-61	3	G99202-61	3.5	FV 2023L-nn	23	11	1
38	G99105-61	3	G99201-61	2.5	FV 2023L-nn	23	11	1
39	G99104-61	5	G99203-61	4.5	FV 2018L-nn	18	8.5	1
40	G99104-61	5	G99202-61	3.5	FV 2018L-nn	18	8.5	1
41	G99104-61	5	G99201-61	2.5	FV 2018L-nn	18	8.5	1
42	G99105-61	3	G99202-61	3.5	FV 2018L-nn	18	8.5	1
43	G99105-61	3	G99201-61	2.5	FV 2018L-nn	18	8.5	1
44	G99104-61	5	G99201-61	2.5	FV 2015A-nn	15	8.5	1
45	G99105-61	3	G99202-61	3.5	FV 2015A-nn	15	8.5	1
46	G99105-61	3	G99201-61	2.5	FV 2015A-nn	15	8.5	1



D99815-03
Ø4.2 x 9.5 mm



D99867-03
M4 x 6 mm

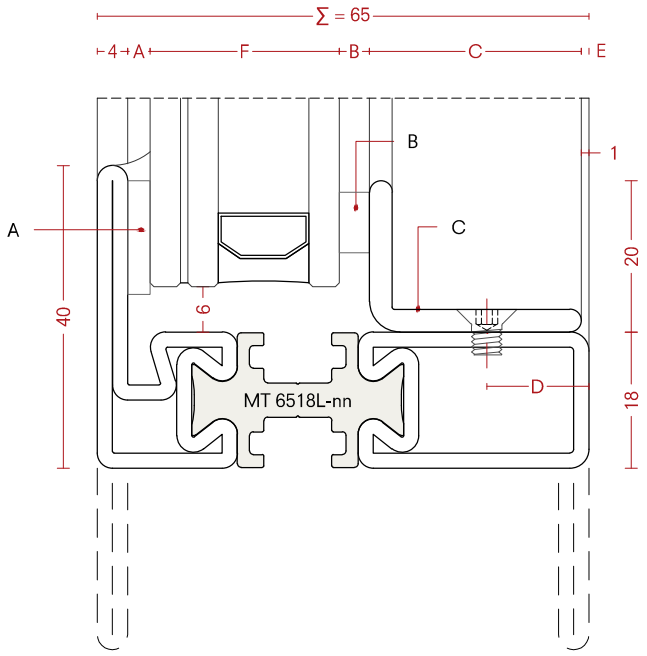


D99866-03
M4 x 6 mm

(1) With the 38 mm narrow T-profile, we recommend reducing the height of the spacer of the Insulated Glass Unit (IGU).

(1) Con il profilo a T stretto da 38 mm, si consiglia di adottare canaline vetrocamera con altezza ridotta.

(1) Con el perfil en T estrecho de 38 mm, recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.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B
C
E
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1
A
C
20
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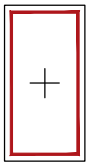
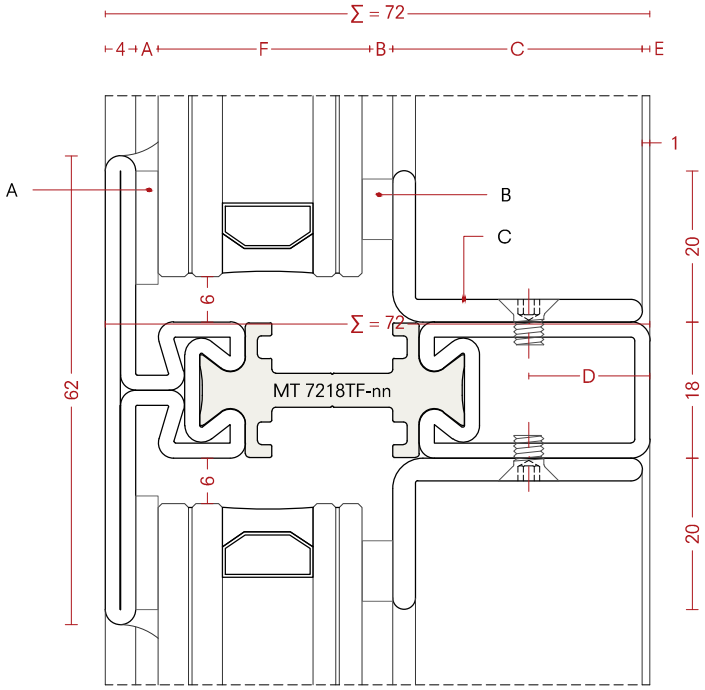
6
D
18
MT 6518L-nn

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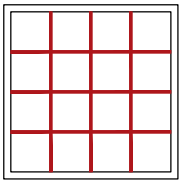

Glazing table

02 - Galvanized steel
06 = Satin stainless steel AISI 316L
07 - Cor-ten steel
Wet glazing

Tabella vetrazioni

02 - Acciaio zincato
06 = Acciaio inox AISI 316L satinato
07 - Acciaio Cor-ten
Fermavetro al silicone

Tabla de acristalamiento

02 - Acero galvanizado
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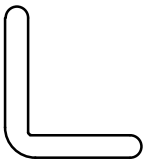
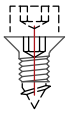
Junquillo de silicone

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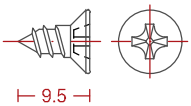
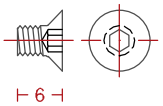
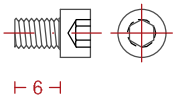
24	G99104-61	5	G99203-61	4.5	FV 2033L-nn	33	16	1
25	G99104-61	5	G99202-61	3.5	FV 2033L-nn	33	16	1
26	G99104-61	5	G99201-61	2.5	FV 2033L-nn	33	16	1
27	G99105-61	3	G99202-61	3.5	FV 2033L-nn	33	16	1
28	G99105-61	3	G99201-61	2.5	FV 2033L-nn	33	16	1
29	G99104-61	5	G99203-61	4.5	FV 2028L-nn	28	13.5	1
30	G99104-61	5	G99202-61	3.5	FV 2028L-nn	28	13.5	1
31	G99104-61	5	G99201-61	2.5	FV 2028L-nn	28	13.5	1
32	G99105-61	3	G99202-61	3.5	FV 2028L-nn	28	13.5	1
33	G99105-61	3	G99201-61	2.5	FV 2028L-nn	28	13.5	1
34	G99104-61	5	G99203-61	4.5	FV 2023L-nn	23	11	1
35	G99104-61	5	G99202-61	3.5	FV 2023L-nn	23	11	1
36	G99104-61	5	G99201-61	2.5	FV 2023L-nn	23	11	1
37	G99105-61	3	G99202-61	3.5	FV 2023L-nn	23	11	1
38	G99105-61	3	G99201-61	2.5	FV 2023L-nn	23	11	1
39	G99104-61	5	G99203-61	4.5	FV 2018L-nn	18	8.5	1
40	G99104-61	5	G99202-61	3.5	FV 2018L-nn	18	8.5	1
41	G99104-61	5	G99201-61	2.5	FV 2018L-nn	18	8.5	1
42	G99105-61	3	G99202-61	3.5	FV 2018L-nn	18	8.5	1
43	G99105-61	3	G99201-61	2.5	FV 2018L-nn	18	8.5	1
44	G99104-61	5	G99201-61	2.5	FV 2015A-nn	15	8.5	1
45	G99105-61	3	G99202-61	3.5	FV 2015A-nn	15	8.5	1
46	G99105-61	3	G99201-61	2.5	FV 2015A-nn	15	8.5	1



D99815-03
Ø4.2 x 9.5 mm



D99867-03
M4 x 6 mm

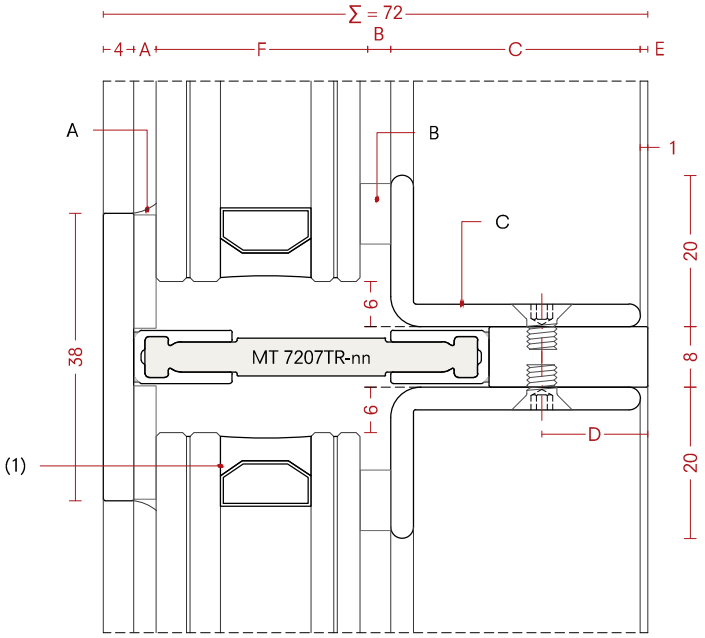


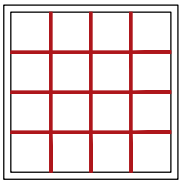
D99866-03
M4 x 6 mm

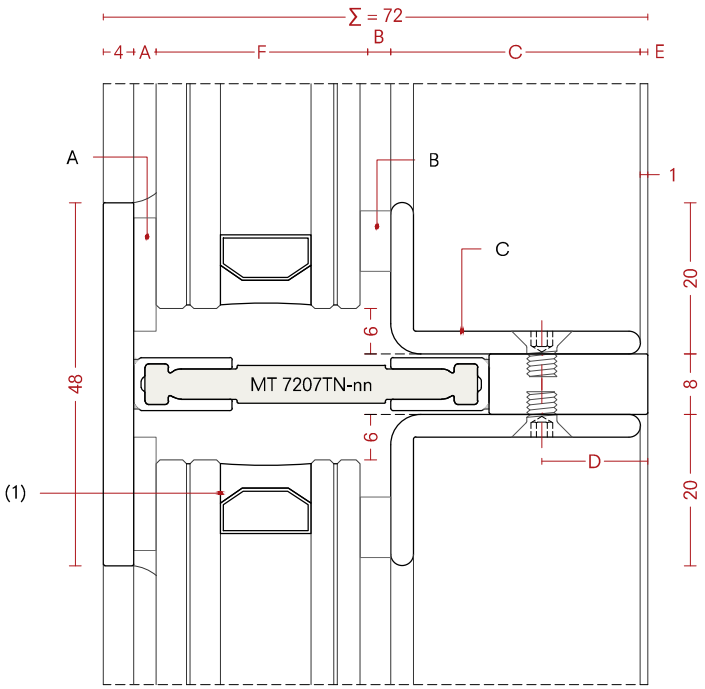
(1) With the 38 mm narrow T-profile, we recommend reducing the height of the spacer of the Insulated Glass Unit (IGU).

(1) Con il profilo a T stretto da 38 mm, si consiglia di adottare canaline vetrocamera con altezza ridotta.

(1) Con el perfil en T estrecho de 38 mm, recomendamos reducir la altura del espaciador de la unidad de vidrio aislante.


Σ = 72
B
4
A
F
C
E
A
B
1
C
20
6
38
MT 7207TR-nn
8
6
D
(1)
20




Σ = 72
B
4
A
F
C
E
A
B
1
C
20
6
48
MT 7207TN-nn
8
6
D
(1)
20

Glazing table

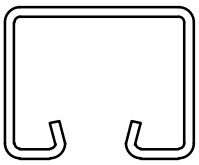
06 = Satin stainless steel AISI 316L
Wet glazing

Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone



F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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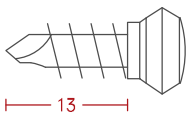
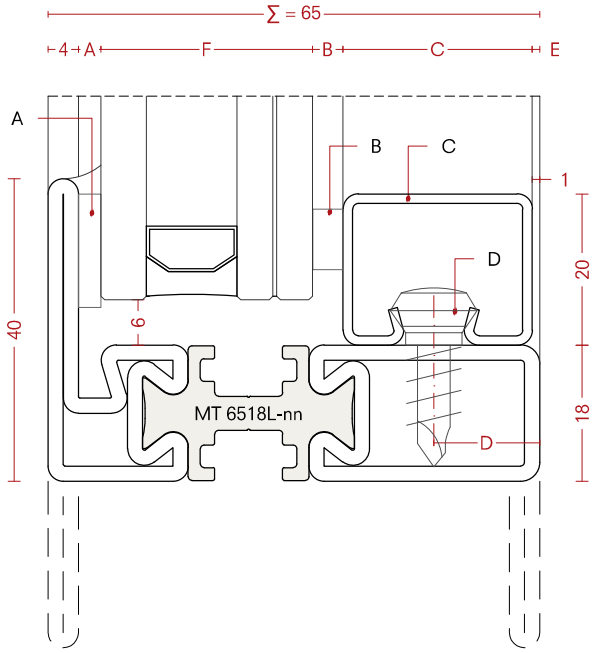
15	G99104-61	5	G99203-61	4.5	FV 2035R-06	35	14	1
16	G99104-61	5	G99202-61	3.5	FV 2035R-06	35	14	1
17	G99104-61	5	G99201-61	2.5	FV 2035R-06	35	14	1
18	G99105-61	3	G99202-61	3.5	FV 2035R-06	35	14	1
19	G99105-61	3	G99201-61	2.5	FV 2035R-06	35	14	1
20	G99104-61	5	G99203-61	4.5	FV 2030R-06	30	14	1
21	G99104-61	5	G99202-61	3.5	FV 2030R-06	30	14	1
22	G99104-61	5	G99201-61	2.5	FV 2030R-06	30	14	1
23	G99105-61	3	G99202-61	3.5	FV 2030R-06	30	14	1
24	G99105-61	3	G99201-61	2.5	FV 2030R-06	30	14	1
25	G99104-61	5	G99203-61	4.5	FV 2025R-06	25	14	1
26	G99104-61	5	G99202-61	3.5	FV 2025R-06	25	14	1
27	G99104-61	5	G99201-61	2.5	FV 2025R-06	25	14	1
28	G99105-61	3	G99202-61	3.5	FV 2025R-06	25	14	1
29	G99105-61	3	G99201-61	2.5	FV 2025R-06	25	14	1
30	G99104-61	5	G99203-61	4.5	FV 2020R-06	20	8.5	1
31	G99104-61	5	G99202-61	3.5	FV 2020R-06	20	8.5	1
32	G99104-61	5	G99201-61	2.5	FV 2020R-06	20	8.5	1
33	G99105-61	3	G99202-61	3.5	FV 2020R-06	20	8.5	1
34	G99105-61	3	G99201-61	2.5	FV 2020R-06	20	8.5	1
35	G99104-61	5	G99203-61	4.5	FV 2015R-06	15	8.5	1
36	G99104-61	5	G99202-61	3.5	FV 2015R-06	15	8.5	1
37	G99104-61	5	G99201-61	2.5	FV 2015R-06	15	8.5	1
38	G99105-61	3	G99202-61	3.5	FV 2015R-06	15	8.5	1
39	G99105-61	3	G99201-61	2.5	FV 2015R-06	15	8.5	1



F99055-05
Ø4.8 x 13 mm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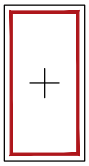
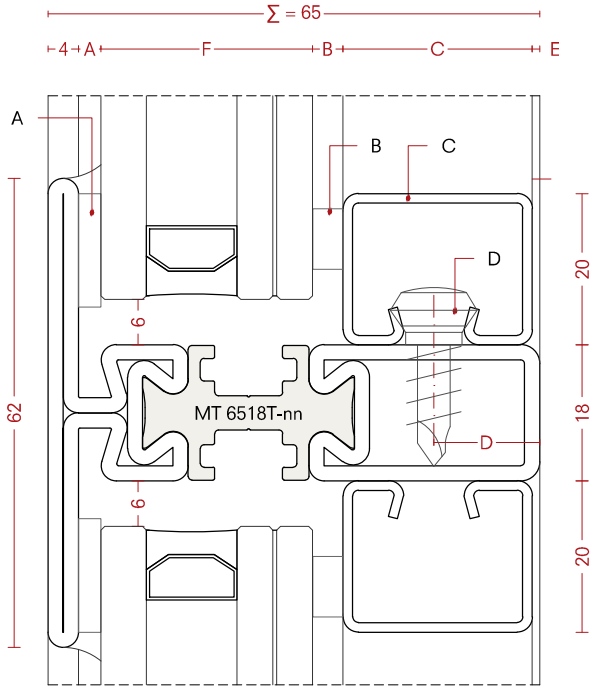
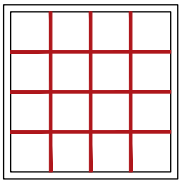
A
F
B
C
E
A
B
C
1
D
20
40
6
MT 6518L-nn
D
18




∑ = 65
4
A
F
B
C
E
A
B
C
D
20
6
62
MT 6518T-nn
D
18
6
20



Glazing table

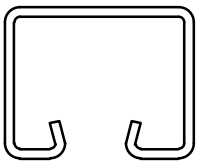
06 = Satin stainless steel AISI 316L
Wet glazing

Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone

								
F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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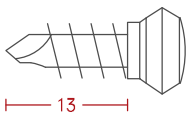
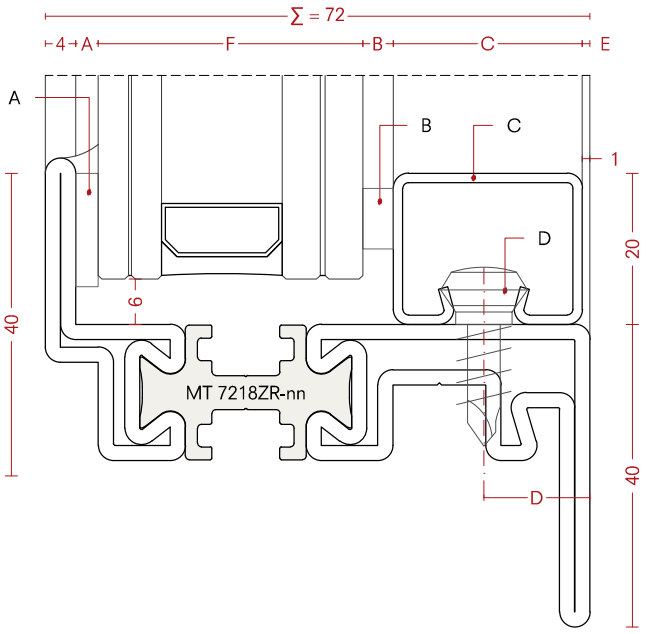
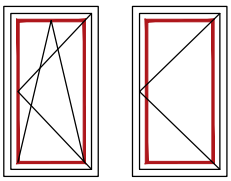
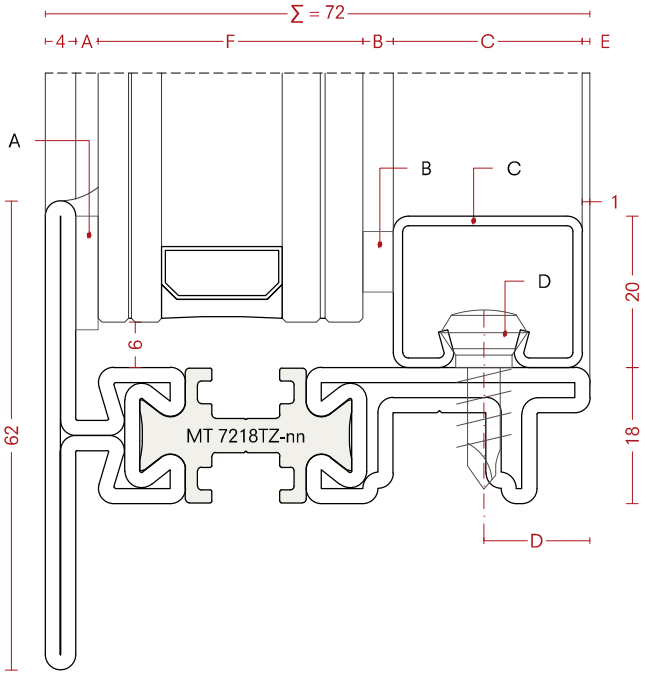
22	G99104-61	5	G99203-61	4.5	FV 2035R-06	35	14	1
23	G99104-61	5	G99202-61	3.5	FV 2035R-06	35	14	1
24	G99104-61	5	G99201-61	2.5	FV 2035R-06	35	14	1
25	G99105-61	3	G99202-61	3.5	FV 2035R-06	35	14	1
26	G99105-61	3	G99201-61	2.5	FV 2035R-06	35	14	1
27	G99104-61	5	G99203-61	4.5	FV 2030R-06	30	14	1
28	G99104-61	5	G99202-61	3.5	FV 2030R-06	30	14	1
29	G99104-61	5	G99201-61	2.5	FV 2030R-06	30	14	1
30	G99105-61	3	G99202-61	3.5	FV 2030R-06	30	14	1
31	G99105-61	3	G99201-61	2.5	FV 2030R-06	30	14	1
32	G99104-61	5	G99203-61	4.5	FV 2025R-06	25	14	1
33	G99104-61	5	G99202-61	3.5	FV 2025R-06	25	14	1
34	G99104-61	5	G99201-61	2.5	FV 2025R-06	25	14	1
35	G99105-61	3	G99202-61	3.5	FV 2025R-06	25	14	1
36	G99105-61	3	G99201-61	2.5	FV 2025R-06	25	14	1
37	G99104-61	5	G99203-61	4.5	FV 2020R-06	20	8.5	1
38	G99104-61	5	G99202-61	3.5	FV 2020R-06	20	8.5	1
39	G99104-61	5	G99201-61	2.5	FV 2020R-06	20	8.5	1
40	G99105-61	3	G99202-61	3.5	FV 2020R-06	20	8.5	1
41	G99105-61	3	G99201-61	2.5	FV 2020R-06	20	8.5	1
42	G99104-61	5	G99203-61	4.5	FV 2015R-06	15	8.5	1
43	G99104-61	5	G99202-61	3.5	FV 2015R-06	15	8.5	1
44	G99104-61	5	G99201-61	2.5	FV 2015R-06	15	8.5	1
45	G99105-61	3	G99202-61	3.5	FV 2015R-06	15	8.5	1
46	G99105-61	3	G99201-61	2.5	FV 2015R-06	15	8.5	1

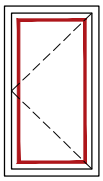


F99055-05
Ø4.8 x 13 mm


∑ = 72
4
A
F
B
C
E
A
B
C
1
D
20
40
6
MT 7218ZR-nn
D
40




∑ = 72
4
A
F
B
C
E
A
B
C
1
D
20
6
62
MT 7218TZ-nn
18
D



Glazing table

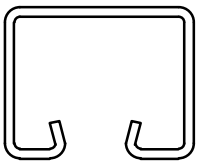
06 = Satin stainless steel AISI 316L
Wet glazing

Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone

								
F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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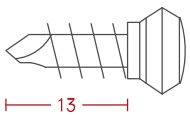
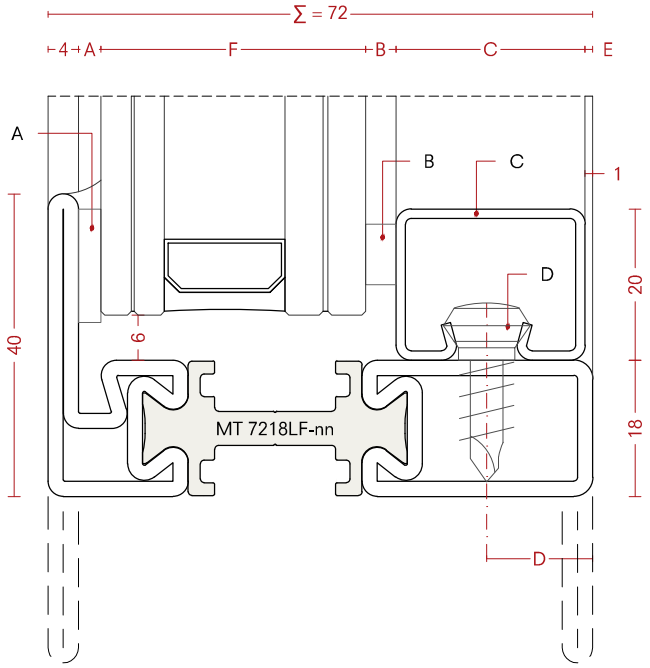
22	G99104-61	5	G99203-61	4.5	FV 2035R-06	35	14	1
23	G99104-61	5	G99202-61	3.5	FV 2035R-06	35	14	1
24	G99104-61	5	G99201-61	2.5	FV 2035R-06	35	14	1
25	G99105-61	3	G99202-61	3.5	FV 2035R-06	35	14	1
26	G99105-61	3	G99201-61	2.5	FV 2035R-06	35	14	1
27	G99104-61	5	G99203-61	4.5	FV 2030R-06	30	14	1
28	G99104-61	5	G99202-61	3.5	FV 2030R-06	30	14	1
29	G99104-61	5	G99201-61	2.5	FV 2030R-06	30	14	1
30	G99105-61	3	G99202-61	3.5	FV 2030R-06	30	14	1
31	G99105-61	3	G99201-61	2.5	FV 2030R-06	30	14	1
32	G99104-61	5	G99203-61	4.5	FV 2025R-06	25	14	1
33	G99104-61	5	G99202-61	3.5	FV 2025R-06	25	14	1
34	G99104-61	5	G99201-61	2.5	FV 2025R-06	25	14	1
35	G99105-61	3	G99202-61	3.5	FV 2025R-06	25	14	1
36	G99105-61	3	G99201-61	2.5	FV 2025R-06	25	14	1
37	G99104-61	5	G99203-61	4.5	FV 2020R-06	20	8.5	1
38	G99104-61	5	G99202-61	3.5	FV 2020R-06	20	8.5	1
39	G99104-61	5	G99201-61	2.5	FV 2020R-06	20	8.5	1
40	G99105-61	3	G99202-61	3.5	FV 2020R-06	20	8.5	1
41	G99105-61	3	G99201-61	2.5	FV 2020R-06	20	8.5	1
42	G99104-61	5	G99203-61	4.5	FV 2015R-06	15	8.5	1
43	G99104-61	5	G99202-61	3.5	FV 2015R-06	15	8.5	1
44	G99104-61	5	G99201-61	2.5	FV 2015R-06	15	8.5	1
45	G99105-61	3	G99202-61	3.5	FV 2015R-06	15	8.5	1
46	G99105-61	3	G99201-61	2.5	FV 2015R-06	15	8.5	1



F99055-05
Ø4.8 x 13 mm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B
C
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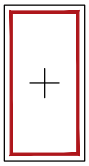
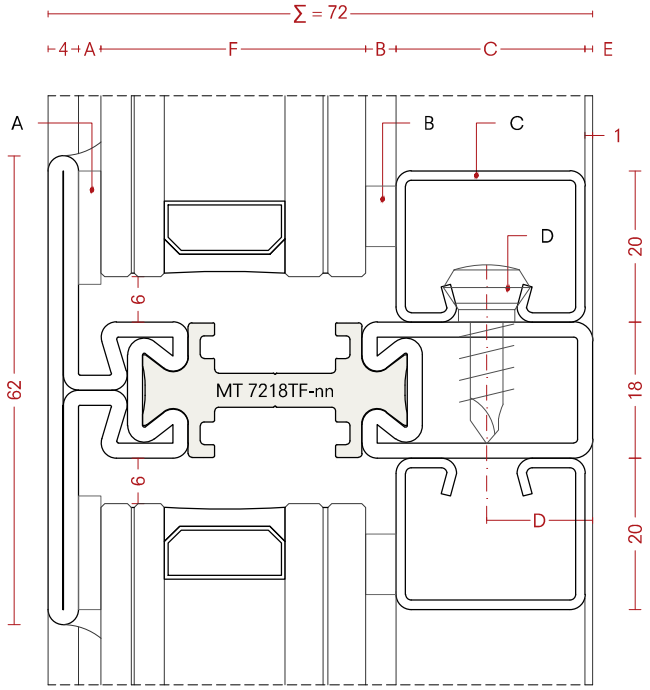
B
C
1
D
20
40
6
MT 7218LF-nn
18
D




∑ = 72
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C
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A
B
C
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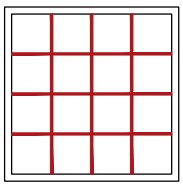
D
20
6
62
MT 7218TF-nn
18
6
D
20



Glazing table

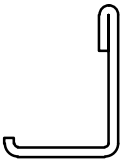
06 = Satin stainless steel AISI 316L
Wet glazing

Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone



F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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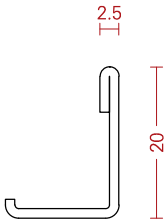
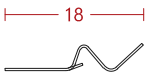
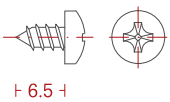
47	G99104-61	5	G99203-61	4.5	FV 2003R-06	2.5	22	1
48	G99104-61	5	G99202-61	3.5	FV 2003R-06	2.5	22	1
49	G99104-61	5	G99201-61	2.5	FV 2003R-06	2.5	22	1
50	G99105-61	3	G99202-61	3.5	FV 2003R-06	2.5	22	1
51	G99105-61	3	G99201-61	2.5	FV 2003R-06	2.5	22	1



FV 2003R-06



F99008-03



D99801-03
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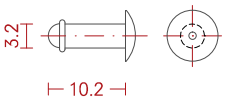
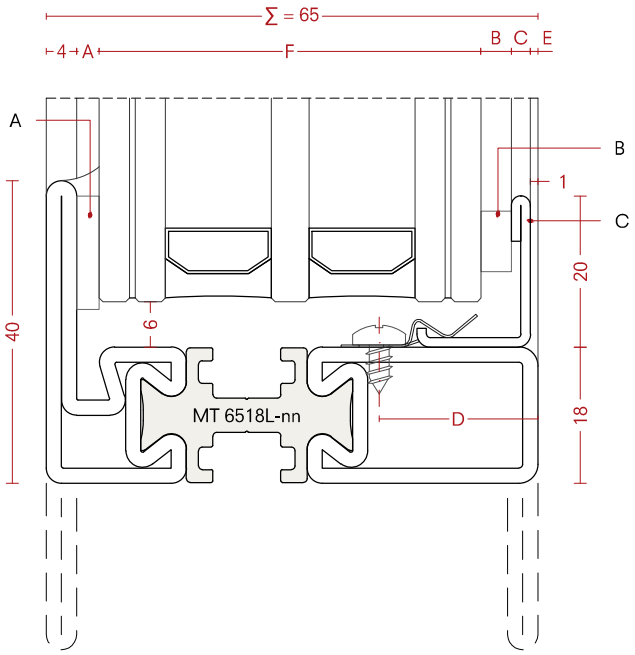


D99950-03
Ø3.2 x 8 mm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B C E
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B
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C
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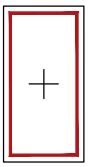
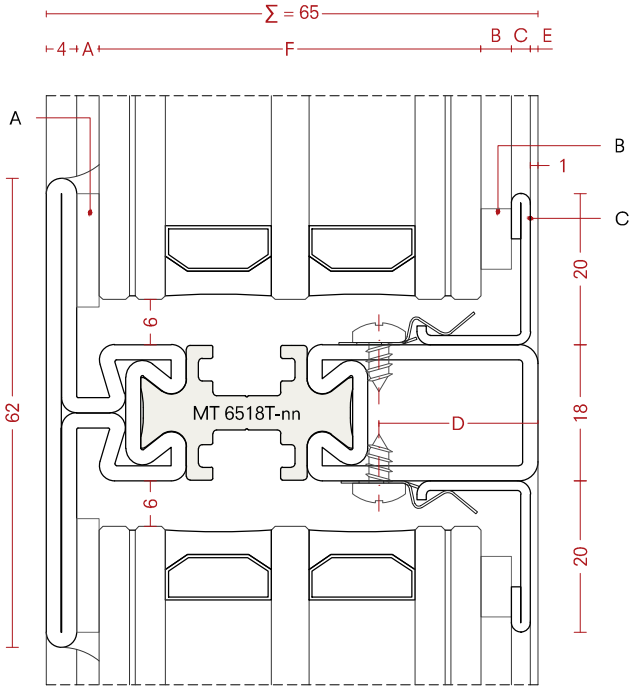
6
20
18
D
MT 6518L-nn

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C
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D
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6
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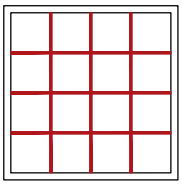


Glazing table

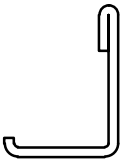
06 = Satin stainless steel AISI 316L
Wet glazing

Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone



F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
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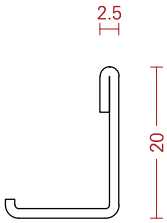
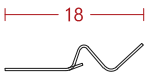
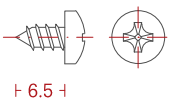
54	G99104-61	5	G99203-61	4.5	FV 2003R-06	2.5	22	1
55	G99104-61	5	G99202-61	3.5	FV 2003R-06	2.5	22	1
56	G99104-61	5	G99201-61	2.5	FV 2003R-06	2.5	22	1
57	G99105-61	3	G99202-61	3.5	FV 2003R-06	2.5	22	1
58	G99105-61	3	G99201-61	2.5	FV 2003R-06	2.5	22	1



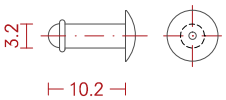
FV 2003R-06



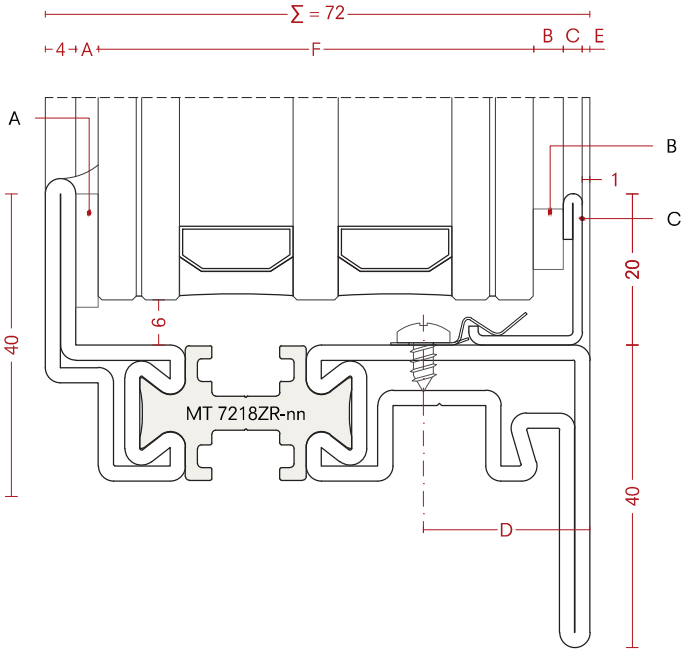
F99008-03



D99801-03
Ø3.5 x 6.5 mm



D99950-03
Ø3.2 x 8 mm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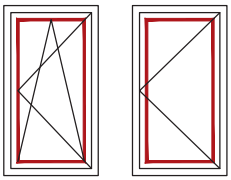
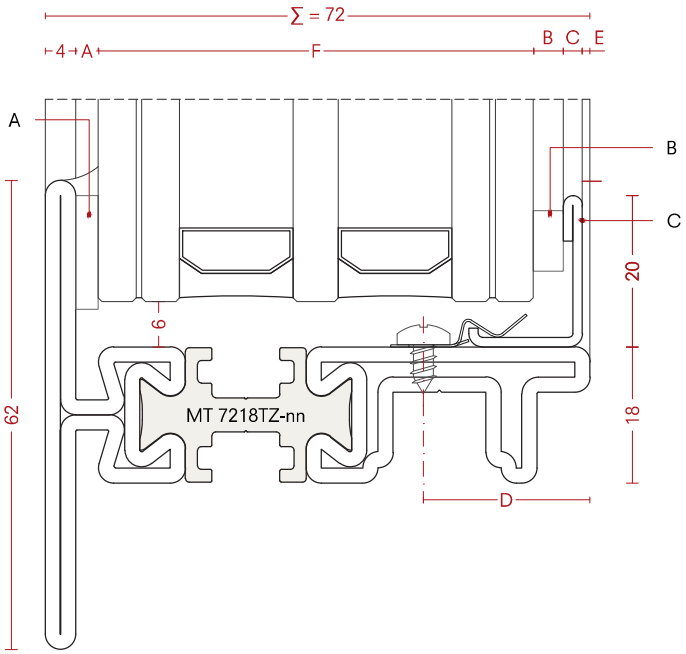
D
40

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62
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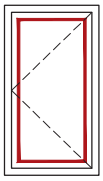

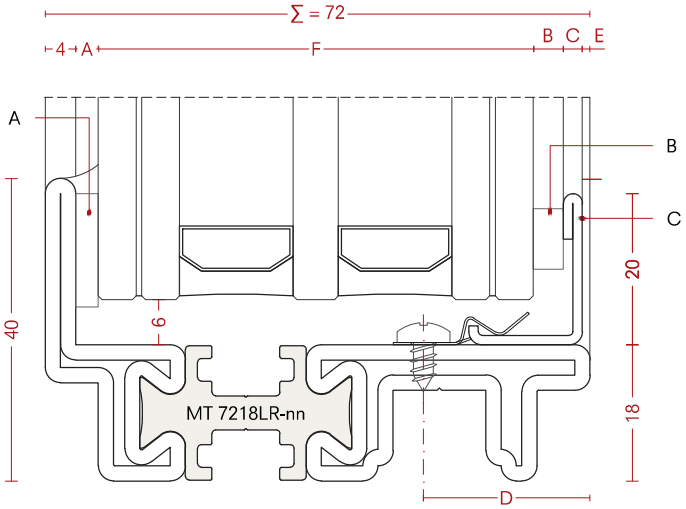
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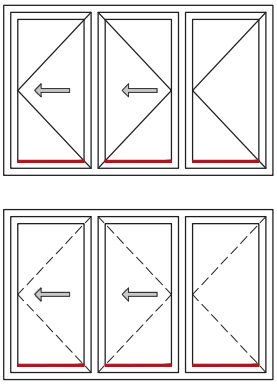


Glazing table

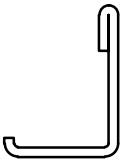
06 = Satin stainless steel AISI 316L
Wet glazing

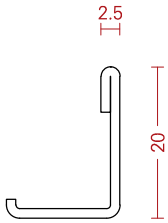
Tabella vetrazioni

06 = Acciaio inox AISI 316L satinato
Fermavetro al silicone

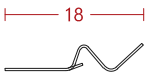
Tabla de acristalamiento

06 = Acero inoxidable AISI 316L satinado
Junquillo de silicone

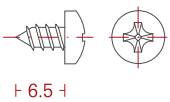
								
F	A		B		C		D	E
mm	code	mm	code	mm	code	mm	mm	mm
53	G99104-61	5	G99204-61	5.5	FV 2003R-06	2.5	21	1
54	G99104-61	5	G99203-61	4.5	FV 2003R-06	2.5	21	1
55	G99104-61	5	G99202-61	3.5	FV 2003R-06	2.5	21	1
56	G99104-61	5	G99201-61	2.5	FV 2003R-06	2.5	21	1
57	G99105-61	3	G99202-61	3.5	FV 2003R-06	2.5	21	1
58	G99105-61	3	G99201-61	2.5	FV 2003R-06	2.5	21	1



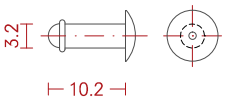
FV 2003R-06



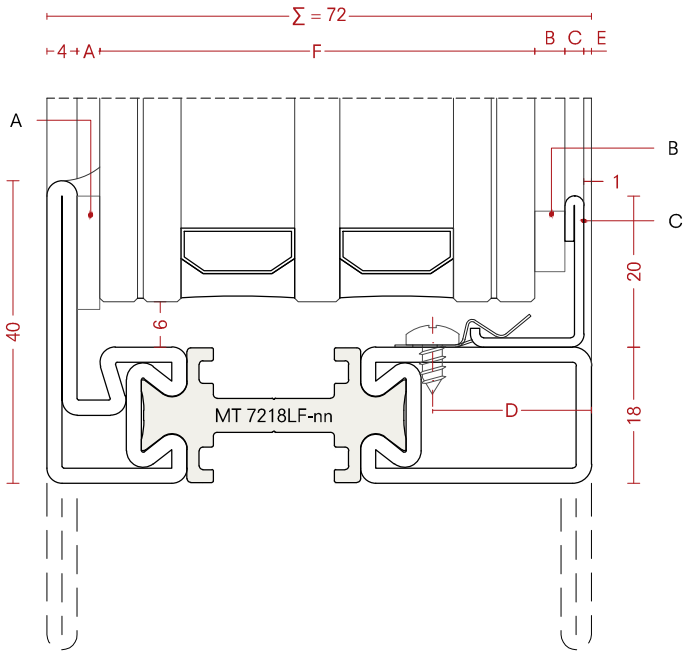
F99008-03



D99801-03
Ø3.5 x 6.5 mm



D99950-03
Ø3.2 x 8 mm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D
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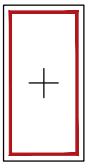

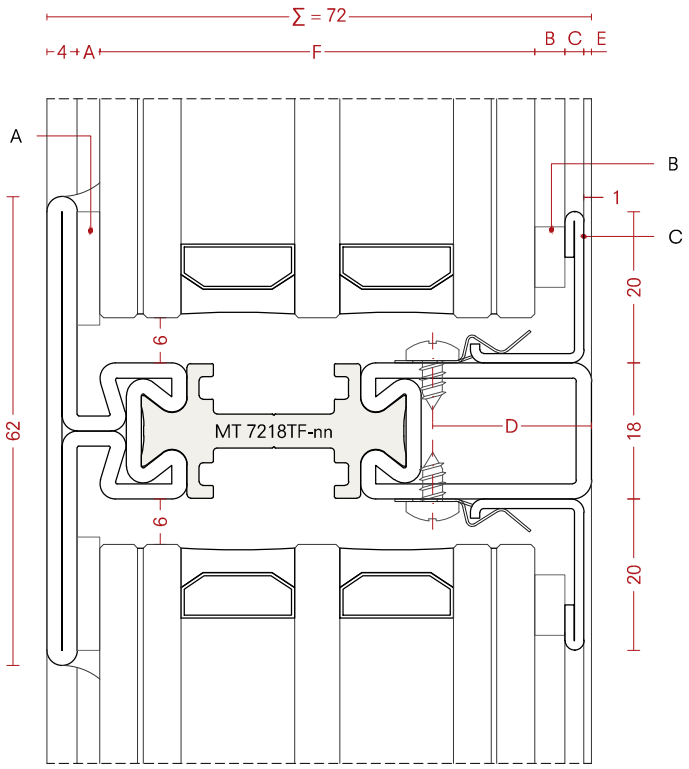
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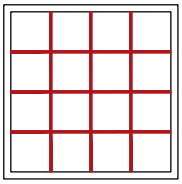


Accessories | Accessori | Accesorios 3.0

Opening scheme	Schema di apertura	Diagrama de apertura	
Surface finishes	Finiture	Acabados de superficie	
Gaskets	Guarnizioni	Juntas de sellado	3.1
System accessories	Accessori di sistema	Accesorios del sistema	3.2
Hinges	Cerniere	Bisagras	3.3
Flush bolts	Catenacci	Pasador de canto	3.4
General fittings	Ferramenta generale	Herrajes generales	3.5
Tilt&Turn window	Finestra anta ribalta	Ventana oscilante	3.6
Handles	Maniglie	Manillas	3.7
Locks	Serrature	Cerraduras	3.8
Screws	Viti	Tornillos	3.9
Assembling tools	Utensili di assemblaggio	Herramientas de montaje	3.10
Installation templates	Dime di installazione	Plantillas de instalación	3.11
Cutting templates	Dime di taglio	Plantillas de corte	3.12

Opening scheme

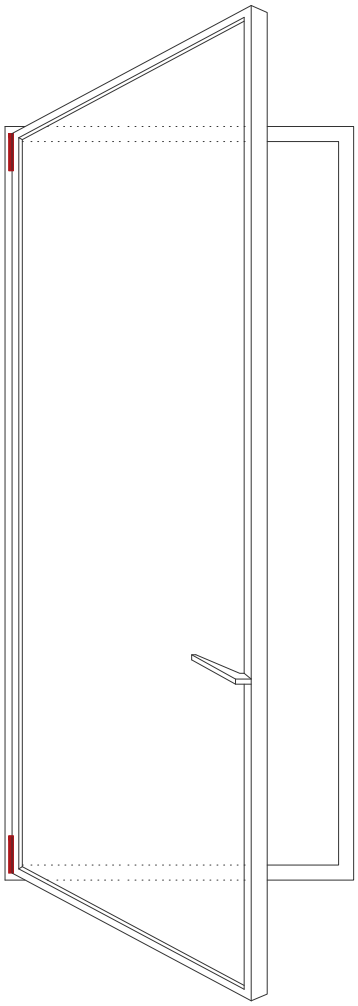
A window or a door is defined as "left opening" or "right opening" when, viewed from the opening side, the hinges are respectively on the left or on the right.

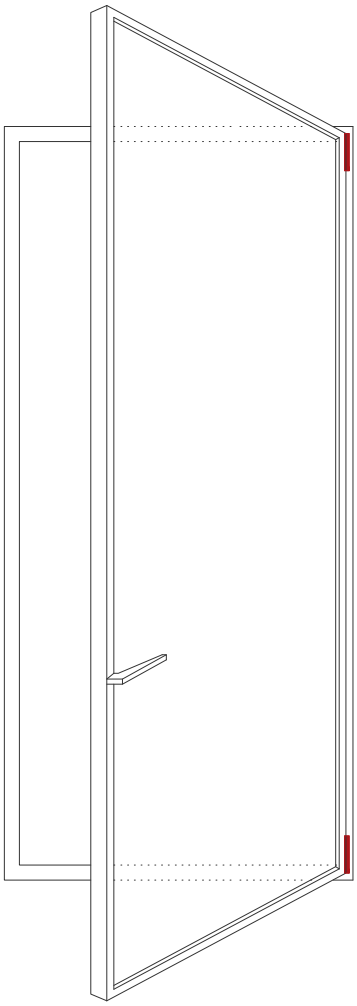
Schema di apertura

Una finestra o una porta si definiscono “apertura sinistra” o “apertura destra” quando, vista dalla parte del verso di apertura, le cerniere si trovano rispettivamente a sinistra o a destra.

Diagrama de apertura

Una ventana o puerta se llama "apertura izquierda" o "apertura derecha" cuando, en la dirección de apertura, las bisagras están respectivamente a la izquierda o a la derecha.



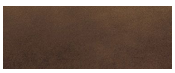
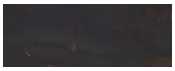


Left opening	Right opening
Apertura sinistra	Apertura destra
Apertura izquierda	Apertura derecha

Surface finishes

Finiture superfici

Acabados de superficie

Satin chrome	Cromo satinato	Cromo mate cepillado	SC	15	
Dark bronze	Bronzo anticato	Bronce oscuro	DB	17	
Oil-rubbed bronze	Bronzo brunito cerato	Bronce engrasado	OB	18	
Gun metal	Grigio canna di fucile	Gris oscuro	GM	42	
Matt black	Nero opaco	Negro mate	MB	43	

Gaskets | Guarnizioni | Juntas de sellado 3.1

Internal/external rebate gasket

EPDM black

PU = 50 m

Guarnizione di battuta interna/esterna

EPDM nero

UV = 50 m

Junta de tope interior/exterior

EPDM negro

CANTIDAD = 50 m

G99030-60

Centre gasket

EPDM black

PU = 25 m

Guarnizione centrale

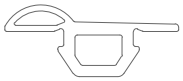
EPDM nero

UV = 25 m

Junta central

EPDM negro

CANTIDAD = 25 m



G10316-60

Centre gasket

EPDM black

PU = 25 m

Guarnizione centrale

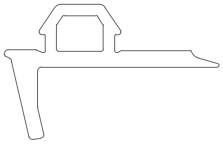
EPDM nero

UV = 25 m

Junta central

EPDM negro

CANTIDAD = 25 m



G10317-60

Condensate collection tray

EPDM black

PU = 25 m

Vaschetta raccogli condensa

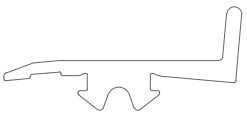
EPDM nero

UV = 25 m

Bandeja de recogida de condensado

EPDM negro

CANTIDAD = 25 m



G99314-60

External glazing gasket

EPDM, black,
self-adhesive, 3 mm

PU = 50 m

Guarnizione vetro esterna

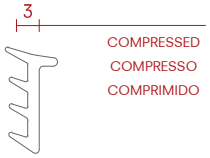
EPDM, nero,
autoadesivo, 3 mm

UV = 50 m

Junta de acristalamiento exterior

EPDM, color negro,
autoadhesiva, 3 mm

CANTIDAD = 50 m



G99107-60

External glazing gasket

EPDM, black,
self-adhesive, 5 mm

PU = 100 m

Guarnizione vetro esterna

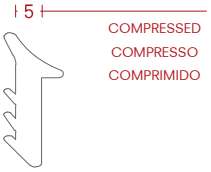
EPDM, nero,
autoadesivo, 5 mm

UV = 100 m

Junta de acristalamiento exterior

EPDM, color negro,
autoadhesiva, 5 mm

CANTIDAD = 100 m



G99108-60

External tape seals

Neoprene, black,
self-adhesive, 3 mm

PU = 25 m

Nastro autoadesivo esterno

Neoprene, nero,
autoadesivo, 3 mm

UV = 25 m

Cinta exterior

Neopreno, color negro,
autoadhesiva, 3 mm

CANTIDAD = 25 m

G99105-61

External tape seals

PVC, black,
self-adhesive, 5 mm

PU = 25 m

Nastro autoadesivo esterno

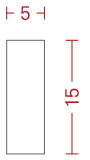
PVC, nero,
autoadesivo, 5 mm

UV = 25 m

Cinta exterior

PVC, color negro,
autoadhesiva, 5 mm

CANTIDAD = 25 m



G99104-61

Internal tape seals

Neoprene, black,
self-adhesive, 3 mm

PU = 20 m

Nastro autoadesivo interno

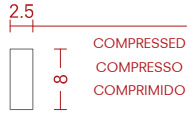
Neoprene, nero,
autoadesivo, 3 mm

UV = 20 m

Cinta interior

Neopreno, color negro,
autoadhesiva, 3 mm

CANTIDAD = 20 m



G99201-61

Internal tape seals

Neoprene, black,
self-adhesive, 4 mm

PU = 20 m

Nastro autoadesivo interno

Neoprene, nero,
autoadesivo, 4 mm

UV = 20 m

Cinta interior

Neopreno, color negro,
autoadhesiva, 4 mm

CANTIDAD = 20 m

G99202-61

Internal tape seals

Neoprene, black,
self-adhesive, 5 mm

PU = 20 m

Nastro autoadesivo interno

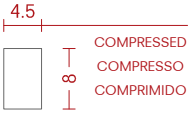
Neoprene, nero,
autoadesivo, 5 mm

UV = 20 m

Cinta interior

Neopreno, color negro,
autoadhesiva, 5 mm

CANTIDAD = 20 m



G99203-61

Internal tape seals

Neoprene, black,
self-adhesive, 6 mm

PU = 20 m

Nastro autoadesivo interno

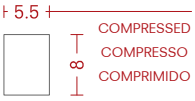
Neoprene, nero,
autoadesivo, 6 mm

UV = 20 m

Cinta interior

Neopreno, color negro,
autoadhesiva, 6 mm

CANTIDAD = 20 m



G99204-61

Internal glazing gasket

EPDM, black, 3-4 mm

PU = 150 m

Guarnizione vetro interna

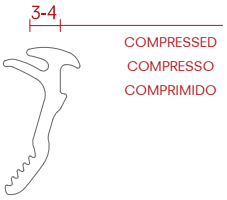
EPDM, nero, 3-4 mm

UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 3-4 mm

CANTIDAD = 150 m



G99209-60

Internal glazing gasket

EPDM, black, 5-6 mm

PU = 150 m

Guarnizione vetro interna

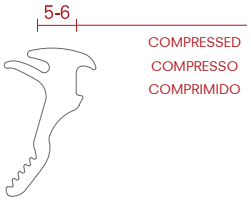
EPDM, nero, 5-6 mm

UV = 150 m

Junta de acristalamiento interior

EPDM, color negro, 5-6 mm

CANTIDAD = 150 m



G99219-60

Brush gasket

For bi-folding doors, plastic, black, 4.8x11 mm

PU = 100 m

Spazzolino

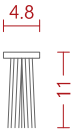
Per sistema di porte a libro, plastica, nero, 4.8x11 mm

UV = 100 m

Junta de cepillo

Para sistema de puerta plegable, plastico, color negro, 4.8x11 mm

CANTIDAD = 100 m



G99404-62

Brush support

For bi-folding doors, aluminium, 8x18 mm, to hold the brush gasket G99404-62

L = 5800 mm

Profilo portaspazzolino

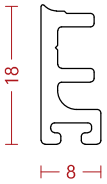
Per sistema di porte a libro, profilo portaspazzolino per G99404-62, alluminio, 8x18 mm

L = 5800 mm

Soporte de cepillo

Para sistema de puerta plegable, aluminio, 8x18 mm, para portacepillo G99404-62

L = 5800 mm



A99401-00

System accessories | Accessori di sistema | Accesorios del sistema 3.2

Weather bar

-00 = Aluminium

Usage only on galvanized steel (-02) and bright steel (-12) profiles.

L = 5800 mm

Gocciolatoio

-00 = Alluminio

Montaggio solo su profili in acciaio zincato (-02) e acciaio decapato (-12).

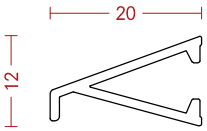
L = 5800 mm

Vierteaguas

-00 = Aluminio

Montaje solo para perfiles en acero galvanizado (-02) y en acero bruto (-12).

L = 5800 mm



A99001-00

Fixing screw

Fixing screw weather bar A99001-00, M4x9 mm DIN84

-02 = Galvanized steel

PU = 50 pieces

Vite di fissaggio

Vite di fissaggio gocciolatoio A99001-00, M4x9 mm DIN84

-02 = Acciaio zincato

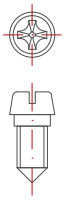
UV = 50 pezzi

Cabezal de fijación

Tornillo de fijación vierteaguas A99001-00, M4x9 mm DIN84

-02 = Acero galvanizado

CANTIDAD = 50 unidades



D99901-02

Weather bar

-02 = Galvanized steel
-06 = Satin stainless steel AISI 316L
-07 = Cor-Ten steel

L = 3000 mm

Gocciolatoio

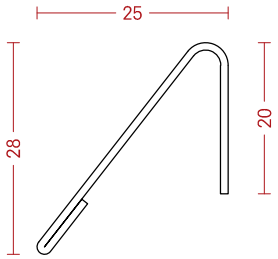
-02 = Acciaio zincato
-06 = Acciaio inox AISI 316L satinato
-07 = Acciaio Cor-Ten

L = 3000 mm

Vierteaguas

-02 = Acero galvanizado
-06 = Acero inoxidable AISI 316L satinado
-07 = Acero Cor-Ten

L = 3000 mm



A99007-nn

Drainage pipe

EPDM, black.

PU = 10 pieces

Tubo di drenaggio

EPDM, nero.

UV = 10 pezzi

Tubo de drenaje

EPDM, negro.

CANTIDAD = 10 unidades

A99286-83

Cover cap

Plastic, black, for covering drainage holes.

PU = 10 pieces

Tappo scarico acqua

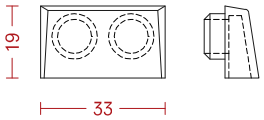
Plastica, nero, per chiusura fori drenaggio.

UV = 10 pezzi

Tapa

Plástico, negro, para orificios de drenaje.

CANTIDAD = 10 unidades



A99201-35

End pieces

For open in and open out double leaf window, 2nd leaf.

B = black

PU = 2 set
(x4 right; x4 left)

Terminali

Per finestra doppia anta, apertura interna ed esterna, 2a anta.

B = nero

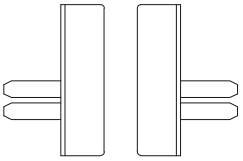
UV = 2 set
(x4 destra; x4 sinistra)

Pieza final

Ventana de dos hojas que se abre hacia dentro y fuera, 2do hoja.

B = negro

CANTIDAD = 2 conjunto
(x4 derecha; x4 izquierda)



K99021

Hinges | Cerniere | Bisagras

Important notes:

All weld-on and/or screw-on hinges are compatible for both open-in and open-out.

Note importanti:

Tutte le cerniere a saldare e/o avvitare sono compatibili sia per apertura interna che per apertura esterna.

Notas importantes:

Todas las bisagras de soldadura y/o atornillable son compatibles tanto para abrir hacia adentro como para abrir hacia afuera.

Weld-on hinge

Ø12 mm, length 80 mm, with fixed pin and brass intermediate washer.

Capacity: 50 kg (pair=2 pc)

-03 = Stainless steel AISI 304 2B
-12 = Bright steel

PU = 1 piece

Cerniera a saldare

Ø12 mm, lunghezza 80 mm, con perno fisso e rondella intermedia in ottone.

Portata: 50 kg (coppia=2 pezzi)

-03 = Acciaio inox AISI 304 2B
-12 = Acciaio decapato

UV = 1 pezzo

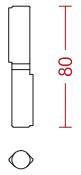
Bisagra de soldadura

Diámetro de Ø12 mm, longitud de 80 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 50 kg (par=2 unidades)

-03 = Acero inoxidable AISI 304 2B
-12 = Acero bruto

CANTIDAD = 1 unidad



C99001-nn

Weld-on hinge

Bright steel, Ø14 mm, length 100 mm, with fixed pin and brass intermediate washer.

Capacity: 80 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø14 mm, lunghezza 100 mm, con perno fisso e rondella intermedia in ottone.

Portata: 80 kg (coppia=2 pezzi)

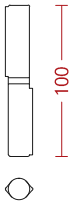
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø14 mm, longitud de 100 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 80 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99002-12

Weld-on hinge

Bright steel, Ø16 mm, length 120 mm, with fixed pin and brass intermediate washer.

Capacity: 100 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø16 mm, lunghezza 120 mm, con perno fisso e rondella intermedia in ottone.

Portata: 100 kg (coppia=2 pezzi)

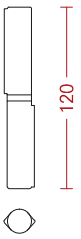
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø16 mm, longitud de 120 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 100 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99003-12

Weld-on hinge

Bright steel, Ø16 mm, length 140 mm, with fixed pin and brass intermediate washer.

Capacity: 140 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio decapato, Ø16 mm, lunghezza 140 mm, con perno fisso e rondella intermedia in ottone.

Portata: 140 kg (coppia=2 pezzi)

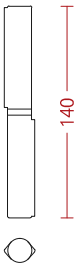
UV = 1 pezzo

Bisagra de soldadura

Acero bruto, diámetro de Ø16 mm, longitud de 140 mm, con perno fijo y anillo intermedio de latón.

Capacidad de carga: 140 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99004-12

Weld-on hinge

Galvanized steel, Ø16 mm, length 140 mm, with galvanized pin intermediate washer with "loose" pin.

Capacity: 200 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio zincato, Ø16 mm, lunghezza 140 mm, con perno zincato sfilabile e rondella intermedia.

Portata: 200 kg (coppia=2 pezzi)

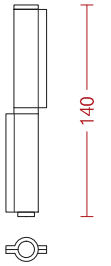
UV = 1 pezzo

Bisagra de soldadura

Acero galvanizado, diámetro de Ø16 mm, longitud de 140 mm, con perno galvanizado y anillo intermedio con pasador "suelto".

Capacidad de carga: 200 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99005-02

Weld-on hinge

Ø12 mm, length 83 mm, with galvanized pin and intermediate washer with "loose" pin.

Capacity: 100 kg (pair=2 pc)

-02 = Galvanized steel
-03 = Stainless steel AISI 304 2B

PU = 1 piece

Cerniera a saldare

Ø12 mm, lunghezza 83 mm, con perno zincato sfilabile e rondella intermedia.

Portata: 100 kg (coppia=2 pezzi)

-02 = Acciaio zincato
-03 = Acciaio inox AISI 304 2B

UV = 1 pezzo

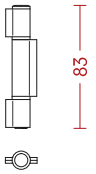
Bisagra de soldadura

Diámetro de Ø12 mm, longitud de 83 mm, con perno galvanizado y anillo intermedio con pasador "suelto".

Capacidad de carga: 100 kg (par=2 unidades)

-02 = Acero galvanizado
-03 = Acero inoxidable AISI 304 2B

CANTIDAD = 1 unidad



C99006-nn

Weld-on hinge

Galvanized steel, Ø16 mm, length 140 mm, 3 pc with galvanized pin and intermediate washer with "loose" pin.

Capacity: 230 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Acciaio zincato, Ø16 mm, lunghezza 140 mm, a tre elementi con perno zincato sfilabile e rondella intermedia.

Portata: 230 kg (coppia=2 pezzi)

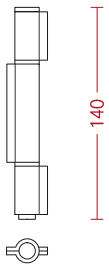
UV = 1 pezzo

Bisagra de soldadura

Acero galvanizado, diámetro de Ø16 mm, longitud de 140 mm, 3 piezas con perno galvanizado y anillo intermedio con pasador "suelto".

Capacidad de carga: 230 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99007-02

Weld-on hinge

Weld-on hinge, bright steel, Ø20 mm, length 178 mm, 2-dimensional adjustable.

Capacity: 260 kg (pair=2 pc)

PU = 1 piece

Cerniera a saldare

Cerniera a saldare, acciaio decapato, Ø20 mm, lunghezza 178 mm, regolabile su due dimensioni.

Portata: 260 kg (coppia=2 pezzi)

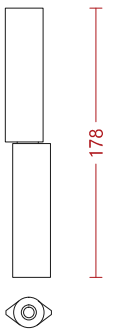
UV = 1 pezzo

Bisagra de soldadura

Bisagra de soldadura, acero bruto, Ø20 mm, longitud 178 mm, tres elementos, no regulable, coplanar.

Capacidad de carga: 260 kg (par=2 unidades)

CANTIDAD = 1 unidad



C99120-12

3D Weld-on hinge

3-dimensional adjustable hinge for windows and doors.
Length 122 mm, Ø16 mm, with low-maintenance bushes made of brass, eccentric spindle and screw plug made from stainless steel AISI 304

Adjustability:
Height ±2 mm;
Lateral contact pressure ±1 mm

Capacity: 160 kg (pair=2 pc)

-04 = Satin stainless steel AISI 304
-12 = Bright steel
(End caps in galvanized steel. In case of Cor-Ten finishing needed n°2 Q99966-12).

PU = 1 piece

Cerniera a saldare regolabile 3D

Cerniera regolabile su tre dimensioni, per finestre o porte. Lunghezza 122 mm,
Ø16 mm, con boccole in ottone, perno eccentrico e vite di chiusura in acciaio inox AISI 304

Regolazione:
Altezza ±2 mm;
Laterale ±1 mm

Portata: 160 kg (coppia=2 pezzi)

-04 = Acciaio inox AISI 304 satinato
-12 = Acciaio decapato
(Tappi di chiusura in acciaio zincato. In caso di finitura Cor-Ten necessari n°2 Q99966-12).

UV = 1 pezzo

Bisagra de soldadura en 3D

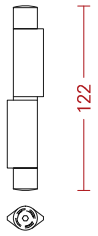
Bisagra ajustable en 3 dimensiones para ventanas y puertas. Longitud de 122 mm, diámetro de Ø16 mm, con cojinete de deslizamiento de escaso mantenimiento de bronce arquitectonico, perno excéntrico y tornillo de cierre de acero inoxidable AISI 304

Ajustabilidad:
Altura ±2 mm;
Laterales ±1 mm

Capacidad de carga: 160 kg (par=2 unidades)

-04 = Acero inoxidable AISI 304 satinado
-12 = Acero bruto
(Tapas en acero galvanizado. En caso de acabado Cor-Ten se requieren n°2 Q99966-12).

CANTIDAD = 1 unidad



C99008-nn

End caps for hinges

For Ø16 mm 3D weld-on hinge.

-02 = Galvanized steel
-04 = Satin stainless steel AISI 304
-12 = Bright steel

PU = 1 piece

Tappi di chiusura per cerniere

Per cerniera a saldare regolabile 3D Ø16 mm

-02 = Acciaio zincato
-04 = Acciaio inox AISI 304 satinato
-12 = Acciaio decapato

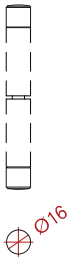
UV = 1 pezzo

Tapas para bisagras

Para bisagra de soldadura en 3 dimensiones Ø16 mm

-02 = Acero galvanizado
-04 = Acero inoxidable AISI 304 satinado
-12 = Acero bruto

CANTIDAD = 1 unidad



Q99966-nn

3D Weld-on hinge

3-dimensional adjustable hinge for windows and doors.
Length 178 mm, Ø20 mm, with low-maintenance bushes made of brass, eccentric spindle and screw plug made from stainless steel AISI 304

Adjustability:
Height ±2 mm;
Lateral contact pressure ±1 mm

Capacity: 210 kg (pair=2 pc)

-04 = Satin stainless steel AISI 304
-12 = Bright steel
(End caps in galvanized steel. In case of Cor-Ten finishing needed n°2 Q99965-12).

PU = 1 piece

Cerniera a saldare regolabile 3D

Cerniera regolabile su tre dimensioni, per finestre o porte. Lunghezza 178 mm, Ø20 mm, con boccole in ottone, perno eccentrico e vite di chiusura in acciaio inox AISI 304

Regolazione:
Altezza ±2 mm;
Laterale ±1 mm

Portata: 210 kg (coppia=2 pezzi)

-04 = Acciaio inox AISI 304 satinato
-12 = Acciaio decapato
(Tappi di chiusura in acciaio zincato. In caso di finitura Cor-Ten necessari n°2 Q99965-12).

UV = 1 pezzo

Bisagra de soldadura en 3D

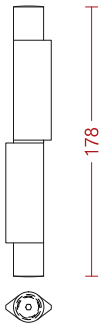
Bisagra ajustable en 3 dimensiones para ventanas y puertas. Longitud de 178 mm, diámetro de Ø20 mm, con cojinete de deslizamiento de escaso mantenimiento de bronce arquitectonico, perno excéntrico y tornillo de cierre de acero inoxidable AISI 304

Ajustabilidad:
Altura ±2 mm;
Laterales ±1 mm

Capacidad de carga: 210 kg (par=2 unidades)

-04 = Acero inoxidable AISI 304 satinado
-12 = Acero bruto
(Tapas en acero galvanizado. En caso de acabado Cor-Ten se requieren n°2 Q99965-12).

CANTIDAD = 1 unidad



C99009-nn

End caps for hinges

For Ø20 mm 3D weld-on hinge.

-02 = Galvanized steel
-04 = Satin stainless steel AISI 304
-12 = Bright steel

PU = 1 piece

Tappi di chiusura per cerniere

Per cerniera a saldare regolabile 3D Ø20 mm

-02 = Acciaio zincato
-04 = Acciaio inox AISI 304 satinato
-12 = Acciaio decapato

UV = 1 pezzo

Tapas para bisagras

Para bisagra de soldadura en 3 dimensiones Ø20 mm

-02 = Acero galvanizado
-04 = Acero inoxidable AISI 304 satinado
-12 = Acero bruto

CANTIDAD = 1 unidad

Q99965-nn

Friction stay (projecting)

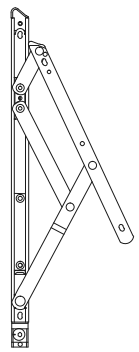
Stainless steel AISI 316L 2B, for open out top hung projecting windows with adjustable opening angles.

Bracci portanti a sporgere

Acciaio inox AISI 316L 2B, per finestra a sporgere apertura esterna con angolo di apertura regolabile.

Bisagra proyectante

Acero inoxidable AISI 316L 2B, para ventana proyectante que se abre hacia fuera con ángulo de apertura ajustable.



C9920X-05

Code Codice Code	Capacity Portata Capacidad [kg]	H size H dimensione H tamaño [mm]	Opening angle Angolo di apertura Ángulo de apertura [°]
C99201-05	40	270-640	50
C99202-05	50	640-800	50
C99203-05	65	800-1100	50
C99204-05	100	600-1100	30
C99205-05	100	1100-1500	45
C99206-05	100	1500-2000	20
C99207-05	180	2000-2500	20

PU = 1 pair

UV = 1 coppia

CANTIDAD = 1 par

Friction stay (turn)

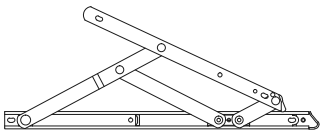
Stainless steel AISI 316L 2B, for open in or open out side hung windows.

Bracci portanti anta battente

Acciaio inox AISI 316L 2B, per finestra battente ad apertura verso l'interno o l'esterno.

Bisagra abatible

Acero inoxidable AISI 316L 2B, para ventana abatible que se abre hacia dentro o hacia fuera.



C9921X-05

Code Codice Code	Capacity Portata Capacidad [kg]	H size H dimensione H tamaño [mm]	Opening angle Angolo di apertura Ángulo de apertura [°]
C99210-05	22	300-600	80
C99211-05	24	400-700	90
C99212-05	38	300-660	85
C99213-05	55	450-840	60

PU = 1 pair

UV = 1 coppia

CANTIDAD = 1 par

Trolley

Galvanized steel, for bi-folding doors, trolley with four wheels an hinge.
Suitable only for galvanized steel (-02) and bright steel (-12) profiles.

PU = 1 piece

Carrello

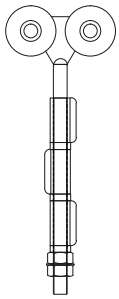
Acciaio zincato, per sistema di porte a libro, carrello fisso a 4 ruote con cerniera.
Adatto solo per profili in acciaio zincato (-02) e decapato (-12).

UV = 1 pezzo

Carro

Acero galvanizado, para sistema de puerta plegable, carro fijo de 4 ruedas con bisagra.
Apto solo para perfiles en acero galvanizado (-02) y acero bruto (-12).

CANTIDAD = 1 unidad



E99901-02

Trolley

Galvanized steel, for bi-folding doors, trolley with four wheels an hinge.

PU = 1 piece

Carrello

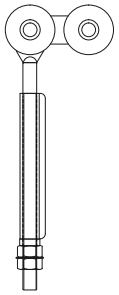
Acciaio zincato, per sistema di porte a libro, carrello laterale a 4 ruote con cerniera.

UV = 1 pezzo

Carro

Acero galvanizado, para sistema de puerta plegable, carro fijo de 4 ruedas con bisagra.

CANTIDAD = 1 unidad



E99907-02

Weld-on hinge

Galvanized steel, for bi-folding doors, hinge with three rotating leaves.

PU = 1 piece

Cerniera a saldare

Acciaio zincato, per sistema di porte a libro, cerniera a saldare a 3 ali su cuscinetti.

UV = 1 pezzo

Bisagra de soldadura

Acero galvanizado, para sistema de puerta plegable, bisagra de soldadura de 3 alas sobre cojinetes.

CANTIDAD = 1 unidad

E99904-02

Lower guide pin

Galvanized steel, for bi-folding doors, lower guide pin with olive and hinge.

PU = 1 piece

Perno guida inferiore

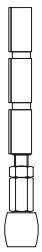
Acciaio zincato, per sistema di porte a libro, perno guida inferiore con oliva e cerniera.

UV = 1 pezzo

Pasador guía inferior

Acero galvanizado, para sistema de puerta plegable, pasador guía inferior con aceituna y bisagra.

CANTIDAD = 1 unidad



E99903-02

Note:

Evaluate the class corrosion.

Nota:

Valutare la classe di corrosione.

Nota:

Evalúe la clase de corrosión.

Lower guide pin

Galvanized steel, for bi-folding doors, lower guide pin with olive and hinge.

PU = 1 piece

Perno guida inferiore

Acciaio zincato, per sistema di porte a libro, perno guida inferiore con oliva e cerniera.

UV = 1 pezzo

Pasador guía inferior

Acero galvanizado, para sistema de puerta plegable, pasador guía inferior con aceituna y bisagra.

CANTIDAD = 1 unidad

E99905-02

Monorail profile

Galvanized steel,
for bi-folding doors.

L = 6000 mm

Monorotaia

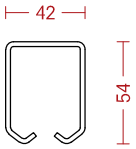
Acciaio zincato,
per sistema di porte a libro.

L = 6000 mm

Monocarril

Acero galvanizado, para sistema de puerta plegable.

L = 6000 mm



99 5442GU-02

Lower guide profile

For bi-folding doors.

-02 = Galvanized steel

L = 6000 mm

Profilo guida inferiore

Per sistema di porte a libro.

-02 = Acciaio zincato

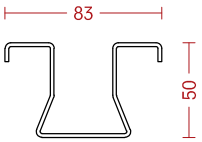
L = 6000 mm

Perfil guía inferior

Para sistema de puerta plegable.

-02 = Acero galvanizado

L = 6000 mm



99 8350GU-02

Lower guide profile

For bi-folding doors.

-04 = Satin stainless steel AISI 304
-06 = Satin stainless steel AISI 316L

L = 4000 mm

Profilo guida inferiore

Per sistema di porte a libro.

-04 = Acciaio inox AISI 304 satinato
-06 = Acciaio inox AISI 316L satinato

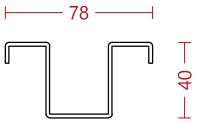
L = 4000 mm

Perfil guía inferior

Para sistema de puerta plegable.

-04 = Acero inoxidable AISI 304 satinado
-06 = Acero inoxidable AISI 316L satinado

L = 4000 mm



99 7840GU-nn

Lower guide profile

For bi-folding doors.

-06 = Satin stainless steel AISI 316L

L = 3000 mm

Profilo guida inferiore

Per sistema di porte a libro.

-06 = Acciaio inox AISI 316L satinato

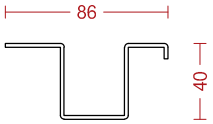
L = 3000 mm

Perfil guía inferior

Para sistema de puerta plegable.

-06 = Acero inoxidable AISI 316L satinado

L = 3000 mm



99 8640GU-nn

Note:

Evaluate the class corrosion.

Nota:

Valutare la classe di corrosione.

Nota:

Evalúe la clase de corrosión.

Flush bolts **Catenacci** **Pasador de canto** 3.4

Flush bolt with lever for doors

Concealed.

PU = 1 piece

Catenaccio con leva per porte

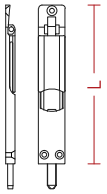
Interno.

UV = 1 pezzo

Pasador de canto para puertas

Oculto.

CANTIDAD = 1 unidad



code	L
E99021-35	140 mm
E99022-35	220 mm
E99023-35	450 mm
E99024-35	650 mm

Shoot bolt for door

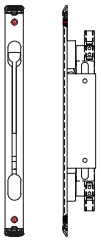
PU = 1 piece

Catenaccio per porte

UV = 1 pezzo

Pasador de canto para puertas

CANTIDAD = 1 unidad



E99035-02

Strike plate

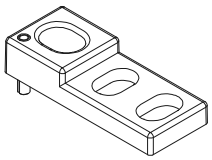
PU = 1 piece

Riscontro

UV = 1 pezzo

Chapa de cierre

CANTIDAD = 1 unidad



E99012-11

Floor recess plate

-05 = Stainless steel AISI 316L 2B

PU = 1 piece

Pozzetto

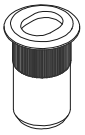
-05 = Acciaio inox AISI 316L 2B

UV = 1 pezzo

Cavidad en el suelo

-05 = Acero inoxidable AISI 316L 2B

CANTIDAD = 1 unidad



E99013-05

General fittings **Ferramenta generale** **Herrajes generales** 3.5

Automatic drop seal

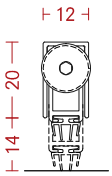
Automatic drop seal with 14 mm lift height, floor compensation.

Guarnizione a ghigliottina

Guarnizione a ghigliottina (14 mm compensazione), automatica a pavimento.

Junta de suelo automática

Junta de suelo descendente con un desplazamiento de 14 mm, descenso paralelo con compensación de suelo automática.



C995XX-62

Code Codice Code	Length Lunghezza Tamaño	Can be shortened Accorciabile Reducible
G99501-62	330 mm	50 mm
G99502-62	430 mm	135 mm
G99503-62	530 mm	200 mm
G99504-62	630 mm	200 mm
G99505-62	730 mm	200 mm
G99506-62	830 mm	200 mm
G99507-62	930 mm	200 mm
G99508-62	1030 mm	200 mm
G99509-62	1130 mm	200 mm
G99510-62	1230 mm	200 mm

PU = 1 piece

UV = 1 pezzo

CANTIDAD = 1 unidad

Lateral cover cap for automatic drop seal

-35 = black
-41 = RAL 7035 grey

PU = 1 pair

Tappo laterale per guarnizione a ghigliottina

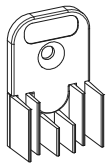
-35 = nero
-41 = grigio RAL 7035

UV = 1 coppia

Tapa lateral para junta de suelo automática

-35 = negro
-41 = gris RAL 7035

CANTIDAD = 1 par



G99511-nn

Handle spindle

-02 = Galvanized steel
8 mm L=140 mm

PU = 1 piece

Quadro maniglia

-02 = Acciaio zincato
8 mm L=140 mm

UV = 1 pezzo

Pasador de la manilla

-02 = Acero galvanizado
8 mm L=140 mm

CANTIDAD = 1 unidad

E99551-02

Reducing sleeve 8 mm to 7 mm

-02 = Galvanized steel
7 mm

PU = 1 piece

Riduttore quadro da 8 mm a 7 mm

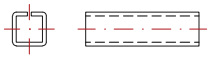
-02 = Acciaio zincato
7 mm

UV = 1 pezzo

Manguito reductor de 8 mm a 7 mm

-02 = Acero galvanizado
7 mm

CANTIDAD = 1 unidad



E99531-02

Opening restrictor

Concealed opening restrictor, right/left, fastening with screws.

-02 = Galvanized steel

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa con apertura destra/sinistra, fissaggio con viti.

-02 = Acciaio zincato

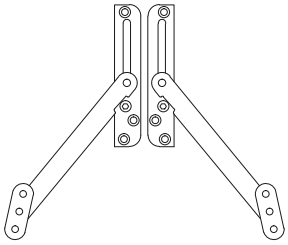
UV = 1 coppia

Limitador de apertura

Limitador de apertura oculto que se abre hacia la derecha/izquierda, fijación con tornillos.

-02 = Acero galvanizado

CANTIDAD = 1 par



E99201-02

Opening restrictor

Concealed opening restrictor, top-hung windows, open out.

-05 = Stainless steel AISI 316L 2B

Capacity: 110 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, finestra a sporgere, apertura esterna.

-05 = Acciaio inox AISI 316L 2B

Portata: 110 kg (coppia)

UV = 1 coppia

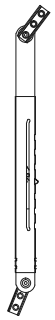
Limitador de apertura

Limitador de apertura oculto, ventana proyectante, apertura hacia fuera.

-05 = Acero inoxidable AISI 316L 2B

Capacidad de carga: 110 kg (par)

CANTIDAD = 1 par



E99203-05

Opening restrictor

Opening restrictor for ironmongery groove profiles. Galvanized steel.

PU = 1 pair

Limitatore di apertura

Limitatore apertura per profili cava ferramenta. Acciaio zincato.

UV = 1 coppia

Limitador de apertura

Limitador de apertura para perfiles ranurados de ferretería. Acero galvanizado.

CANTIDAD = 1 par

K88033

Opening restrictor

Concealed opening restrictor, bottom hung windows, open in and open out.

-05 = Stainless steel AISI 316L 2B

Capacity: 110 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, vasistas, apertura interna ed esterna.

-05 = Acciaio inox AISI 316L 2B

Portata: 110 kg (coppia)

UV = 1 coppia

Limitador de apertura

Limitador de apertura oculto, ventana batiente, apertura hacia dentro y hacia fuera.

-05 = Acero inoxidable AISI 316L 2B

Capacidad de carga: 110 kg (par)

CANTIDAD = 1 par

E99205-05

Opening restrictor

Concealed opening restrictor, side and bottom hung windows, open in and open out.

-03 = Stainless steel AISI 304 2B

Capacity: 90 kg (pair)

PU = 1 pair

Limitatore di apertura

Limitatore di apertura a scomparsa, anta battente e vasistas, apertura interna ed esterna.

-03 = Acciaio inox AISI 304 2B

Portata: 90 kg (coppia)

UV = 1 coppia

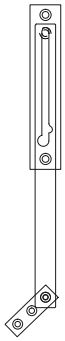
Limitador de apertura

Limitador de apertura oculto, ventana batiente y oscilante, apertura hacia dentro y hacia fuera.

-03 = Acero inoxidable AISI 304 2B

Capacidad de carga: 90 kg (par)

CANTIDAD = 1 par



E99206-03

Tilt&Turn window **Finestra anta ribalta** **Ventana oscilante** 3.6

Stabilising scissor stay

Stabilising scissor stay case Euro-channel 18 mm, silver.

PU = 1 piece

Scontro per forbice supplementare

Scontro per forbice supplementare battuta liscia 18 mm, argento.

UV = 1 pezzo

Cerradero compás adicional

Cerradero compás adicional base 18 mm, plata.

CANTIDAD = 1 unidad

MC 52794

Turn restrictor

Turn restrictor Euro-channel L=187 mm, silver.

PU = 1 piece

Delimitatore d'apertura

Delimitatore d'apertura battuta liscia L=187 mm, argento.

UV = 1 pezzo

Delimitador de apertura

Delimitador de apertura base lisa L=187 mm, plata.

CANTIDAD = 1 unidad

MC 103623

Load transfer

Load transfer for FT 24 mm R, silver.

R = Right opening

PU = 1 piece

Asta di sostegno

Asta di sostegno per PB 24 mm R, argento.

R = Apertura destra

UV = 1 pezzo

Varilla de soporte

Varilla de soporte para FT 24 mm R, plata.

R = Apertura derecha

CANTIDAD = 1 unidad

MC 105336

Load transfer

Load transfer for FT 24 mm L, silver.

L = Left opening

PU = 1 piece

Asta di sostegno

Asta di sostegno per PB 24 mm L, argento.

L = Apertura sinistra

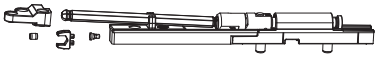
UV = 1 pezzo

Varilla de soporte

Varilla de soporte para FT 24 mm L, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 105339

Adaptor

Adaptor with contact sensor KVS, grey.

PU = 1 piece

Nottolino magnetico

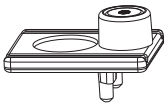
Nottolino magnetico a clips, grigio.

UV = 1 pezzo

Adaptador

Adaptador con bulón magnético KVS, gris.

CANTIDAD = 1 unidad



MC 200906

Faceplate extension

Faceplate extension, extendable 235 mm, with 1 i.S., silver.

PU = 1 piece

Prolunga frontale

Prolunga frontale prolungabile 235 mm, con 1 fungo, argento.

UV = 1 pezzo

Prolongador frontal

Prolongador frontal prolongable 235 mm, con 1 bulón i.S., plata.

CANTIDAD = 1 unidad

MC 201750

Centre lock

Centre lock 1280 mm, with 1 i.S. HBB/LBB 801-1280 mm, silver.

PU = 1 piece

Chiusura centrale

Chiusura centrale 1280 mm, con 1 fungo HBB/LBB 801-1280 mm, argento.

UV = 1 pezzo

Cierre central

Cierre central 1280 mm, con 1 bulón i.S. HBB/LBB 801-1280 mm, plata.

CANTIDAD = 1 unidad

MC 201751

Centre lock

Centre lock 1500 mm, with 1 i.S. HBB/LBB 1281-1500 mm, silver.

PU = 1 piece

Chiusura centrale

Chiusura centrale 1500 mm, con 1 fungo HBB/LBB 1281-1500 mm, argento.

UV = 1 pezzo

Cierre central

Cierre central 1500 mm, con 1 bulón i.S. HBB/LBB 1281-1500 mm, plata.

CANTIDAD = 1 unidad

MC 201752

Centre lock

Centre lock extendable 1500V with 1 i.S. HBB/LBB 1281-1500 mm, silver.

PU = 1 piece

Chiusura centrale

Chiusura centrale prolungabile 1500V con 1 fungo HBB/LBB 1281-1500 mm, argento.

UV = 1 pezzo

Cierre central

Cierre central prolongable 1500V con 1 bulón i.S. HBB/LBB 1281-1500 mm, plata.

CANTIDAD = 1 unidad

MC 201753

Centre lock extendable

Centre lock extendable 2200V with 2 i.S. HBB/LBB 1701-2200 mm, silver.

PU = 1 piece

Chiusura centrale

Chiusura centrale prolungabile 2200V con 2 funghi HBB/LBB 1701-2200 mm, argento.

UV = 1 pezzo

Cierre central

Cierre central prolongable 2200V con 2 bulones i.S. HBB/LBB 1701-2200 mm, plata.

CANTIDAD = 1 unidad

MC 201754

Centre lock extendable

Centre lock extendable 1280V with 1 i.S. HBB/LBB 801-1280 mm, silver.

PU = 1 piece

Chiusura centrale

Chiusura centrale prolungabile 1280V con 1 fungo HBB/LBB 801-1280 mm, argento.

UV = 1 pezzo

Cierre central

Cierre central prolongable 1280V con 1 bulón i.S. HBB/LBB 801-1280 mm, plata.

CANTIDAD = 1 unidad

MC 201840

Tilt&Turn drive gear

Tilt&Turn drive gear 2250 mm, BS 6.5 mm, variabel with 3 i.S. HBB 1751-2250 mm, silver.

PU = 1 piece

Cremonese

Cremonese 2250 mm, E 6.5 mm, variabile con 3 funghi HBB 1751-2250 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 2250 mm, EM 6.5 mm, cota variable con 3 bulones i.S. HBB 1751-2250 mm, plata.

CANTIDAD = 1 unidad

MC 202205

Turn-only drive gear

Turn-only drive gear 660 mm, BS 6.5 mm, fixed handle height SRH 455-660 mm, HH 190 mm, silver.

PU = 1 piece

Cremonese

Cremonese 660 mm, E 6.5 mm, fix con 1 fungo HBB 455-660 mm, HH 190 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB sin elevador 660 mm, EM 6.5 mm, fijo HBB 455-660 mm, HH 190 mm, plata.

CANTIDAD = 1 unidad

MC 202206

Tilt&Turn drive gear

Tilt&Turn drive gear 840 mm, BS 6.5 mm, fixed handle height with 1 i.S. HBB 661-840 mm, HH 300 mm, silver.

PU = 1 piece

Cremonese

Cremonese 840 mm, E 6.5 mm, fix con 1 fungo HBB 661-840 mm, HH 300 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 840 mm, EM 6.5 mm, fijo con 1 bulón i.S. HBB 661-840 mm, HH 300 mm, plata.

CANTIDAD = 1 unidad

MC 202207

Tilt&Turn drive gear

Tilt&Turn drive gear 1090 mm, BS 6.5 mm, fixed handle height with 1 i.S. HBB 841-1090 mm, HH 400 mm, silver.

PU = 1 piece

Supporto cerniera

Cremonese 1090 mm, E 6.5 mm, fix con 1 fungo HBB 841-1090 mm, HH 400 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1090 mm, EM 6.5 mm, fijo con 1 bulón i.S. HBB 841-1090 mm, HH 400 mm, plata.

CANTIDAD = 1 unidad

MC 202208

Tilt&Turn drive gear

Tilt&Turn drive gear 1340 mm, BS 6.5 mm, fixed handle height with 1 i.S. HBB 1091-1340 mm, HH 500 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1340 mm, E 6.5 mm, fix con 1 fungo HBB 1091-1340 mm, HH 500 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1340 mm, EM 6.5 mm, fijo con 1 bulón i.S. HBB 1091-1340 mm, HH 500 mm, plata.

CANTIDAD = 1 unidad

MC 202209

Tilt&Turn drive gear

Tilt&Turn drive gear 1590 mm,
BS 6.5 mm, fixed handle height with
2 i.S. HBB 1341-1590 mm,
HH 600 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1590 mm, E 6.5 mm, fix
con 2 funghi HBB 1341-1590 mm,
HH 600 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1590 mm, EM 6.5 mm,
fijo con 2 bulones i.S. HBB 1341-
1590 mm, HH 600 mm, plata.

CANTIDAD = 1 unidad

MC 202216

Turn-only drive gear

Turn-only drive gear 800 mm,
BS 6.5 mm, variabel
HBB 530-800 mm, silver.

PU = 1 piece

Cremonese A-B

Cremonese A-B 800 mm,
E 6.5 mm, variabile
HBB 530-800 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB sin elevador 800 mm,
EM 6.5 mm, cota variable
HBB 530-800 mm, plata.

CANTIDAD = 1 unidad

MC 202491

Tilt&Turn drive gear

Tilt&Turn drive gear 1250 mm,
BS 6.5 mm, variabel with 1 i.S.
HBB 801-1250 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1250 mm,
E 6.5 mm, variabile con 1 fungo
HBB 801-1250 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1250 mm, EM 6.5 mm,
cota variable con 1 bulón i.S.
HBB 801-1250 mm, plata.

CANTIDAD = 1 unidad

MC 202492

Tilt&Turn drive gear

Tilt&Turn drive gear 1750 mm,
BS 6.5 mm, variabel with 2 i.S.
HBB 1251-1750 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1750 mm,
E 6.5 mm variabile con 2 funghi
HBB 1251-1750 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1750 mm, EM 6.5 mm,
cota variable con 2 bulones i.S.
HBB 1251-1750 mm, plata.

CANTIDAD = 1 unidad

MC 202494

Turn-only drive gear

Turn-only drive gear 2250 mm, BS 6.5 mm, variabel with 3 i.S. HBB 1751-2250 mm, silver.

PU = 1 piece

Cremonese A-B

Cremonese A-B 2250 mm, E 6.5 mm, variabile con 3 funghi HBB 1751-2250 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB sin elevador 2250 mm, EM 6.5 mm, cota variable con 3 bulones i.S. HBB 1751-2250 mm, plata.

CANTIDAD = 1 unidad

MC 202497

Tilt&Turn drive gear

Tilt&Turn drive gear 1950 mm, BS 6.5 mm, fixed handle height with 3 i.S. HBB 1701-1950 mm, HH 1050 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1950 mm, E 6.5 mm, fix con 3 funghi HBB 1701-1950 mm, HH 1050 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1950 mm, EM 6.5 mm, fijo con 3 bulones i.S. HBB 1701-1950 mm, HH 1050 mm, plata.

CANTIDAD = 1 unidad

MC 202737

Tilt&Turn drive gear

Tilt&Turn drive gear 2200 mm, BS 6.5 mm, fixed handle height with 3 i.S. HBB 1951-2200 mm, HH 1050 mm, silver.

PU = 1 piece

Cremonese

Cremonese 2200 mm, E 6.5 mm, fix con 3 funghi HBB 1951-2200 mm, HH 1050 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 2200 mm, EM 6.5 mm, fijo con 3 bulones i.S. HBB 1951-2200 mm, HH 1050 mm, plata.

CANTIDAD = 1 unidad

MC 202738

Faceplate extension

Faceplate extension, extendable 140 mm, silver.

PU = 1 piece

Prolunga frontale

Prolunga frontale prolungabile 140 mm, argento.

UV = 1 pezzo

Prolongador frontal

Prolongador frontal prolongable 140 mm, plata.

CANTIDAD = 1 unidad

MC 206630

Corner element

Corner element horizontally extendable short for variable espagnolettes with 1 i.S.
LBB 320-1800 mm, silver.

PU = 1 piece

Movimento angolare

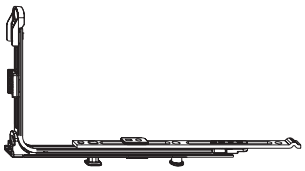
Movimento angolare prolungabile orizzontalmente corto per cremonese variabile con 1 fungo
LBB 320-1800 mm, argento.

UV = 1 pezzo

Mov.angular

Mov.angular corto para CV piv. horizontal prolong. con 1 bulón i.S.
LBB 320-1800 mm, plata.

CANTIDAD = 1 unidad



MC 206860

Tilt&Turn drive gear

Tilt&Turn drive gear 1700 mm, BS 6.5 mm, fixed handle height with 2 i.S. HBB 1591-1700 mm,
HH 700 mm, silver.

PU = 1 piece

Cremonese

Cremonese 1700 mm, E 6.5 mm, fix con 2 funghi HBB 1591-1700 mm,
HH 700 mm, argento.

UV = 1 pezzo

Falleba OB

Falleba OB 1700 mm, EM 6.5 mm, fijo con 2 bulones i.S. HBB 1591-1700 mm, HH 700 mm, plata.

CANTIDAD = 1 unidad

MC 207305

Espagnolette - centred handle

Espagnolette - centred handle height 500 mm, BS 6.5 mm,
with 2 i.S., silver.

PU = 1 piece

Asta rulli centrale

Asta rulli centrale 500 mm,
E 6.5 mm, con 2 funghi, argento.

UV = 1 pezzo

Falleba practicable

Falleba practicable 1 hoja centrada 500 mm, EM 6.5 mm, con 2 bulones i.S., plata.

CANTIDAD = 1 unidad

MC 208323

Espagnolette - centred handle

Espagnolette - centred handle height 700 mm, BS 6.5 mm,
with 2 i.S., silver.

PU = 1 piece

Asta rulli centrale

Asta rulli centrale 700 mm,
E 6.5 mm, con 2 funghi, argento.

UV = 1 pezzo

Falleba practicable

Falleba practicable 1 hoja centrada 700 mm, EM 6.5 mm, con 2 bulones i.S., plata.

CANTIDAD = 1 unidad

MC 208324

Espagnolette - centred handle

Espagnolette - centred handle height 1000 mm, BS 6.5 mm with 2 i.S., silver.

PU = 1 piece

Asta rulli centrale

Asta rulli centrale 1000 mm, E 6.5 mm, con 2 funghi, argento.

UV = 1 pezzo

Falleba practicable

Falleba practicable 1 hoja centrada 1000 mm, EM 6.5 mm, con 2 bulones i.S., plata.

CANTIDAD = 1 unidad

MC 208325

Espagnolette - centred handle

Espagnolette - centred handle height 1400 mm, BS 6.5 mm with 3 i.S., silver.

PU = 1 piece

Asta rulli centrale

Asta rulli centrale 1400 mm, E 6.5 mm, con 3 funghi, argento.

UV = 1 pezzo

Falleba practicable

Falleba practicable 1 hoja centrada 1400 mm, EM 6.5 mm, con 3 bulones i.S., plata.

CANTIDAD = 1 unidad

MC 208326

Espagnolette - centred handle

Espagnolette - centred handle height 1800 mm, BS 6.5 mm with 3 i.S., silver.

PU = 1 piece

Asta rulli centrale

Asta rulli centrale 1800 mm, E 6.5 mm, con 3 funghi, argento.

UV = 1 pezzo

Falleba practicable

Falleba practicable 1 hoja centrada 1800 mm, EM 6.5 mm, con 3 bulones i.S., plata.

CANTIDAD = 1 unidad

MC 208327

End piece

End piece bottom and top 180° with 1 i.S., silver.

PU = 1 piece

Terminale

Terminale 180° inferiore e superiore con 1 fungo, argento.

UV = 1 pezzo

Terminal

Terminal 180° inferior y superior con 1 bulón i.S., plata.

CANTIDAD = 1 unidad

MC 212211

Stabilizing scissor stay

Stabilizing scissor stay mounted without night-vent, silver.

PU = 1 piece

Forbice supplementare

Forbice supplementare premontata senza aerazione, argento.

UV = 1 pezzo

Compás adicional

Compás adicional premontado sin microventilación, plata.

CANTIDAD = 1 unidad

MC 213043

Concealed compression lock ES

Concealed compression lock ES for Eurogroove sash component with lateral adjustment, silver.

PU = 1 piece

Cerniera aggiuntiva a scomparsa

Cerniera centrale a scomparsa regolabile per cava ferramenta parte anta, argento.

UV = 1 pezzo

Cierre de presión

Cierre de presión oculto regulable para canal de herraje parte hoja, plata.

CANTIDAD = 1 unidad

MC 215577

Corner support

Corner support 13 mm offset R, silver.

R = Right opening

PU = 1 piece

Piastra cerniera

Angolo cerniera scostamento 13 mm R, argento.

R = Apertura destra

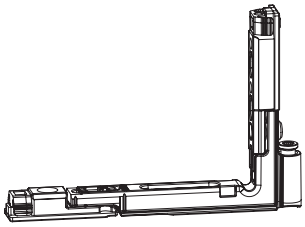
UV = 1 pezzo

Bisagra angular

Bisagra angular desperdicio 13 mm R, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 215804

Corner support

Corner support 13 mm offset L, silver.

L = Left opening

PU = 1 piece

Braccio cerniera superiore

Angolo cerniera scostamento 13 mm L, argento.

L = Apertura sinistra

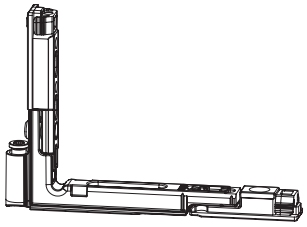
UV = 1 pezzo

Bisagra angular

Bisagra angular desperdicio 13 mm L, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 215805

Pivot post

Pivot post R, 24 mm rebate depth, 13 mm offset, silver.

R = Right opening

PU = 1 piece

Cerniere angolare

Cerniere angolare PB 24 mm, scostamento 13 mm R, argento.

R = Apertura destra

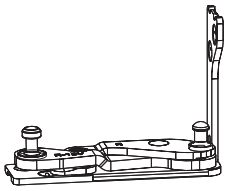
UV = 1 pezzo

Soporte bisagra

Soporte bisagra base 24 mm, desperdicio 13 mm R, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 215810

Pivot post

Pivot post L, 24 mm rebate depth, 13 mm offset, silver.

L = Left opening

PU = 1 piece

Supporto cerniera

Cerniere angolare PB 24 mm, scostamento 13mm L, argento.

L = Apertura sinistra

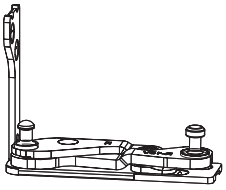
UV = 1 pezzo

Soporte bisagra

Soporte bisagra base 24 mm, desperdicio 13 mm L, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 215811

Tilt&Turn/tilt-first scissor

Tilt&Turn/tilt-first scissor stay faceplate 600 mm, LBB 465-600 mm, silver.

PU = 1 piece

Frontale a forbice

Frontale forbice A-R/R-A 600 m, LBB 465-600 mm, argento.

UV = 1 pezzo

Frontal compás

Frontal compás para OB y apertura lógica 600 mm, LBB 465-600 mm, plata.

CANTIDAD = 1 unidad

MC 217346

Tilt&Turn/tilt-first scissor

Tilt&Turn/tilt-first scissor stay faceplate 800 mm, LBB 601-800 mm, silver.

PU = 1 piece

Frontale a forbice

Frontale forbice A-R/R-A 800 mm, LBB 601-800 mm, argento.

UV = 1 pezzo

Frontal compás

Frontal compás para OB y apertura lógica 800 mm, LBB 601-800 mm, plata.

CANTIDAD = 1 unidad

MC 217347

Tilt&Turn/tilt-first scissor

Tilt&Turn/tilt-first scissor stay faceplate 1050 mm, LBB 801-1050 mm, with 1 i.S., silver.

PU = 1 piece

Frontale a forbice

Frontale forbice A-R/R-A 1050 mm, LBB 801-1050 mm, con 1 fungo, argento.

UV = 1 pezzo

Frontal compás

Frontal compás para OB y apertura lógica 1050 mm, LBB 801-1050 mm, con 1 bulón i.S., plata.

CANTIDAD = 1 unidad

MC 217348

Tilt&Turn/tilt-first scissor

Tilt&Turn/tilt-first scissor stay faceplate 1300 mm, LBB 1051-1300 mm, with 1 i.S., silver.

PU = 1 piece

Frontale a forbice

Frontale forbice A-R/R-A 1300 mm, LBB 1051-1300 mm, con 1 fungo, argento.

UV = 1 pezzo

Frontal compás

Frontal compás para OB y apertura lógica 1300 mm, LBB 1051-1300 mm, con 1 bulón i.S., plata.

CANTIDAD = 1 unidad

MC 217349

Tilt&Turn scissor stay

Tilt&Turn scissor stay arm with bearing 600/800 24 mm rebate depth 13 mm offset right LBB 370-800, silver.

R = Right opening

PU = 1 piece

Braccio a forbice A-R

Braccio forbice A-R con supporto 600/800 mm, PB 24 mm, scostamento 13 mm R, LBB 370-800 mm, argento.

R = Apertura destra

UV = 1 pezzo

Brazo compás OB

Brazo compás OB con soporte 600/800 mm, Base 24 mm, desperdicio 13 mm R, LBB 370-800 mm, plata.

R = Apertura derecha

CANTIDAD = 1 unidad

MC 217470

Tilt&Turn scissor stay

Tilt&Turn scissor stay arm with bearing 600/800 mm, 24 mm rebate depth, 13 mm offset L, LBB 370-800 mm, silver.

L = Left opening

PU = 1 piece

Braccio a forbice A-R

Braccio forbice A-R con supporto 600/800 mm, PB 24 mm, scostamento13 mm L, LBB 370-800 mm, argento.

L = Apertura sinistra

UV = 1 pezzo

Brazo compás OB

Brazo compás OB con soporte 600/800 m, Base 24 mm, desperdicio 13 mm L, LBB 370-800 mm, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad

MC 217471

Tilt&Turn scissor stay

Tilt&Turn scissor stay arm with bearing 1050/1300 mm, 24 mm rebate depth, 13 mm offset R, LBB 801-1300 mm, silver.

R = Right opening

PU = 1 piece

Braccio a forbice A-R

Braccio forbice A-R con supporto 1050/1300 mm, PB 24 mm scostamento, 13 mm R, LBB 801-1300 mm, argento.

R = Apertura destra

UV = 1 pezzo

Brazo compás OB

Brazo compás OB con soporte 1050/1300 mm, Base 24 mm, desperdicio 13 mm R, LBB 801-1300 mm, plata.

R = Apertura derecha

CANTIDAD = 1 unidad

MC 217474

Tilt&Turn scissor stay

Tilt&Turn scissor stay arm with bearing 1050/1300 mm, 24 mm rebate depth, 13 mm offset L, LBB 801-1300 mm, silver.

L = Left opening

PU = 1 piece

Braccio a forbice A-R

Braccio forbice A-R con supporto 1050/1300 mm, PB 24 mm scostamento, 13 mm L, LBB 801-1300 mm, argento.

L = Apertura sinistra

UV = 1 pezzo

Soporte bisagra

Brazo compás OB con soporte 1050/1300 mm, Base 24 mm, desperdicio 13 mm L, LBB 801-1300 mm, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad

MC 217475

Turn-only hinge arm

Turn-only hinge arm with hinge V2 R, 24 mm rebate depth LBB 255-1400 mm, 13 mm offset, silver.

R = Right opening

PU = 1 piece

Braccio cerniera A-B

Braccio cerniera A-B con supporto (V2) R, PB 24 mm LBB 255-1400 mm, scostamento 13 mm, argento.

R = Apertura destra

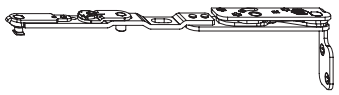
UV = 1 pezzo

Brazo falso compás

Brazo falso compás con soporte V2 R, base 24 mm LBB 255-1400 mm, desperdicio13 mm, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 217691

Turn-only hinge arm

Turn-only hinge arm with hinge V2 L, 24 mm rebate depth, LBB 255-1400 mm, 13 mm offset, silver.

L = Left opening

PU = 1 piece

Braccio cerniera A-B

Braccio cerniera A-B con supporto (V2) L, PB 24 mm LBB 255-1400 mm, scostamento 13 mm, argento.

L = Apertura sinistra

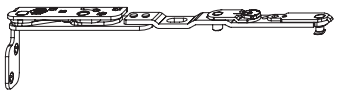
UV = 1 pezzo

Cerradero compás

Brazo falso compás con soporte V2 L, base 24 mm LBB 255-1400 mm, desperdicio 13 mm, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 217692

Tilt-only hinge arm

Tilt-only hinge arm with hinge V2 R, 24 mm rebate depth 13 mm offset, silver.

R = Right opening

PU = 1 piece

Braccio ribalta

Braccio ribalta con supporto (V2) R, PB 24 mm scostamento 13 mm, argento.

R = Apertura destra

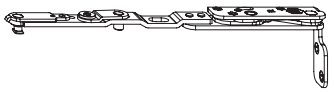
UV = 1 pezzo

Brazo abatible

Brazo abatible con soporte V2 R, Base 24 mm desperdicio 13 mm, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 217723

Tilt-only hinge arm

Tilt-only hinge arm with hinge V2 L, 24 mm rebate depth 13 mm offset, silver.

L = Left opening

PU = 1 piece

Braccio ribalta

Braccio ribalta con supporto (V2) L, PB 24 mm scostamento 13 mm, argento.

L = Apertura sinistra

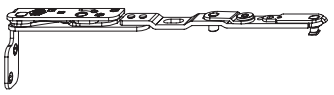
UV = 1 pezzo

Brazo abatible

Brazo abatible con soporte V2 L, Base 24 mm desperdicio 13 mm, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 217724

Tilt-only hinge and turn-only hinge

Turn-only and tilt-only faceplate FHH V2, LBB 255-1400 mm, silver.

PU = 1 piece

Cerniera AB/ ribalta

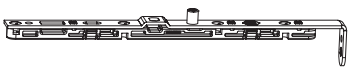
Cerniera AB/ ribalta parte anta (V2) LBB 255-1400 mm, argento.

UV = 1 pezzo

Falso compás

Falso compás practicable y abatible fijo V2 LBB 255-1400 mm, plata.

CANTIDAD = 1 unidad



MC 217729

Corner element

Corner element with 1 i.S. LBB 320-1800 mm, silver.

PU = 1 piece

Movimento angolare

Movimento angolare con 1 fungo LBB 320-1800 mm, argento.

UV = 1 pezzo

Mov.angular

Mov.angular con 1 bulón i.S. LBB 320-1800 mm, plata.

CANTIDAD = 1 unidad

MC 222201

Corner element

Corner element short with 1 i.S. LBB 220-319 mm, silver.

PU = 1 piece

Movimento angolare

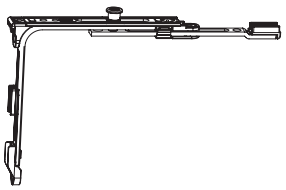
Movimento angolare corto con 1 fungo LBB 220-319 mm, argento.

UV = 1 pezzo

Mov.angular

Mov.angular corta con 1 bulón i.S. LBB 220-319 mm, plata.

CANTIDAD = 1 unidad



MC 222203

Corner element

Corner element horizontally extendable with 1 i.S. LBB 320-1800 mm, silver.

PU = 1 piece

Movimento angolare

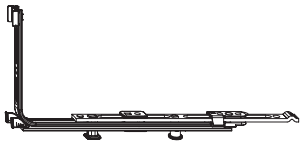
Movimento angolare prolungabile orizzontalmente con 1 fungo LBB 320-1800 mm, argento.

UV = 1 pezzo

Mov.angular

Mov.angular para CF piv.horizontal prolong. con 1 bulón i.S. LBB 320-1800 mm, plata.

CANTIDAD = 1 unidad



MC 222205

Corner element

Corner element horizontally extendable for variable drive gear with 1 i.S. LBB 320-1800 mm, silver.

PU = 1 piece

Movimento angolare

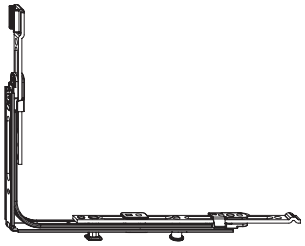
Movimento angolare prolungabile orizzontalmente per cremonese variabile con 1 fungo LBB 320-1800 mm, argento.

UV = 1 pezzo

Mov.angular

Mov.angular para CV piv. horizontal prolong. con 1 bulón i.S. LBB 320-1800 mm, plata.

CANTIDAD = 1 unidad



MC 222206

Corner element

Corner element vertically extendable with 1 i.S. HBB 750-2800 mm, silver.

PU = 1 piece

Movimento angolare

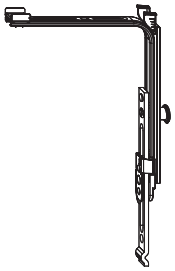
Movimento angolare prolungabile verticalmente con 1 fungo HBB 750-2800 mm, argento.

UV = 1 pezzo

Esquina angular

Mov.angular de conexión rápida prolong. con 1 bulón i.S. HBB 750-2800 mm, plata.

CANTIDAD = 1 unidad



MC 222209

Travel restriction

90° Travel restriction surface-mounted, silver.

PU = 1 piece

Delimitatore di ribalta

Delimitatore di ribalta su movimento angolare, argento.

UV = 1 pezzo

Tapón delimitador

Tapón delimitador 90° atornillable, plata.

CANTIDAD = 1 unidad

MC 357081

Lifting component

Lifting component for R, silver.

R = Right opening

PU = 1 piece

Scontro alza anta

Scontro alza anta R, argento.

R = Apertura destra

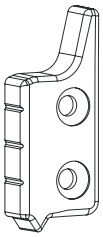
UV = 1 pezzo

Cerradero elevador

Cerradero elevador R, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 361004

Lifting component

Lifting component L, silver.

L = Left opening

PU = 1 piece

Scontro alza anta

Scontro alza anta L, argento.

L = Apertura sinistra

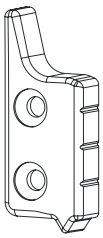
UV = 1 pezzo

Cerradero elevador

Cerradero elevador L, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 361005

Striker plate

Striker plate i.S., silver.

PU = 1 pieceww

Scontro fungo

Scontro fungo, argento.

UV = 1 pezzo

Cerradero de seguridad

Cerradero de seguridad, plata.

CANTIDAD = 1 unidad

MC 364310

Strike plate for concealed compression

Strike plate for concealed compression lock ES Euro-channel 24 mm rebate depth 13 mm offset frame component, pearl light grey RAL9022.

PU = 1 piece

Riscontro per cerniera centrale

Riscontro per cerniera centrale a scomparsa regolabile battuta liscia PB 24 mm scostamento 13 mm parte telaio, grigio chiaro perlato RAL9022.

UV = 1 pezzo

Pieza de bloqueo para cierre de presión

Pieza de bloqueo para cierre de presión oculto regulable base lisa 24 mm parte marco desperdicio 13 mm, gris claro perla RAL9022.

CANTIDAD = 1 unidad

MC 365161

Flat magnet contact

Flat magnet contact for surface safety class 2 cable 3 m, light grey RAL7035.

PU = 1 piece

Contatto magnetico

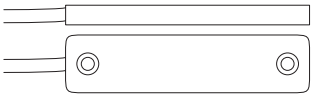
Contatto magnetico piatto per superficie grado protezione 2 cavo 3 m, grigio luce RAL7035.

UV = 1 pezzo

Contacto magnético

Contacto magnético plano superficial GR 2 cable 3 m, gris luminoso RAL7035.

CANTIDAD = 1 unidad



MC 473010

French casement drive gear

French casement drive gear fixed handle height 660 mm, HBB 431-660 mm, HH 190 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fix 660 mm, HBB 431-660 mm, HH 190 mm, argento

UV = 1 pezzo.

Varilla de palanca

Varilla de palanca fija 660 mm HBB 431-660 mm, HH 190 mm, plata.

CANTIDAD = 1 unidad

MC 202873

French casement drive gear

French casement drive gear fixed handle height 840 mm, for 1 i.S. HBB 661-840 mm, HH 300 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 840 mm, 1 fungo HBB 661-840 mm, HH 300 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 840 mm, 1 seta HBB 661-840 mm, HH 300 mm, plata.

CANTIDAD = 1 unidad

MC 221901

French casement drive gear

French casement drive gear fixed handle height 1090 mm, for 1 i.S. HBB 841-1090 mm, HH 400 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 1090 mm, 1 fungo HBB 841-1090 mm, HH 400 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 1090 mm, 1 seta HBB 841 – 1090 mm, HH 400 mm, plata.

CANTIDAD = 1 unidad

MC 221902

French casement drive gear

French casement drive gear fixed handle height 1340 mm, for 1 i.S. HBB 1091-1340 mm, HH 500mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 1340 mm, 1 fungo HBB 1091-1340 mm, HH 500 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 1340 mm, 1 seta HBB 1091-1340 mm, HH 500 mm, plata.

CANTIDAD = 1 unidad

MC 221903

French casement drive gear

French casement drive gear fixed handle height 1590 mm, for 2 i.S. HBB 1341-1590 mm, HH 600 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 1590 mm, 2 funghi HBB 1341-1590 mm, HH 600 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 1590 mm, 2 setas HBB 1341-1590 mm, HH 600 mm, plata.

CANTIDAD = 1 unidad

MC 221906

French casement drive gear

French casement drive gear fixed handle height 1700 mm, for 2 i.S. HBB 1591-1700 mm, HH 700 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 1700 mm, 2 funghi HBB 1591-1700 mm, HH 700 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 1700 mm, 2 setas HBB 1591-1700 mm, HH 700 mm, plata.

CANTIDAD = 1 unidad

MC 207242

French casement drive gear

French casement drive gear fixed handle height 1950 mm, for 3 i.S. HBB 1701-1950 mm, HH 1050 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 1950 mm, 3 funghi HBB 1701-1950 mm, HH 1050 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 1950 mm, 3 setas HBB 1701-1950 mm, HH 1050 mm, plata.

CANTIDAD = 1 unidad

MC 221907

French casement drive gear

French casement drive gear fixed handle height 2200 mm, for 3 i.S. HBB 1951-2200 mm, HH 1050 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 2200 mm, 3 funghi HBB 1951-2200 mm, HH 1050 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 2200 mm, 3 setas HBB 1951-2200 mm, HH 1050 mm, plata

CANTIDAD = 1 unidad

MC 221908

French casement drive gear

French casement drive gear fixed handle height 2450 mm, for 4 i.S HBB 2201-2450 mm, HH 1050 mm, silver.

PU = 1 piece

Asta a leva

Asta a leva cava ferramenta fissa 2450 mm, 4 funghi HBB 2201-2450 mm, HH 1050 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca fija 2450 mm, 4 setas HBB 2201-2450 mm, HH 1050 mm, plata.

CANTIDAD = 1 unidad

MC 221909

Corner element

Corner element french casement drive gear variable 1250 mm, lever, with 1 i.S. HBB 801-1250 mm, silver.

PU = 1 piece

Movimento angolare

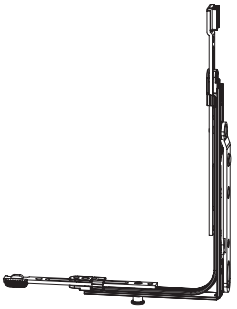
Movimento angolare asta a leva variabile 1250 mm, con leva e 1 fungo HBB 801-1250 mm, argento.

UV = 1 pezzo

Guía de esquina

Guía de esquina eje variable 1250 mm, 1 seta HBB 801-1250 mm, plata.

CANTIDAD = 1 unidad



MC 202475

French casement drive gear

French casement drive gear variable 800 mm, with 1 i.S. HBB 695-800 mm, silver.

PU = 1 piece

Asta leva cava

Asta leva cava ferramenta variabile 800 mm, 1 fungo HBB 695-800 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca eje variable 800 mm, 1 seta HBB 695-800 mm, plata.

CANTIDAD = 1 unidad

MC 227937

French casement drive gear

French casement drive gear variable 1250 mm, with 1 i.S. HBB 801-1250 mm, silver.

PU = 1 piece

Asta leva

Asta leva cava ferramenta variabile 1250 mm, 1 fungo HBB 801-1250 mm, argento.

UV = 1 pezzo

Varilla de palanca

Varilla de palanca eje variable 1250 mm, 1 seta HBB 801- 1250 mm, plata.

CANTIDAD = 1 unidad

MC 202471

Faceplate extension

Faceplate extension French casement drive gear 235 mm with striker, silver.

PU = 1 piece

Prolunga frontale

Prolunga frontale asta a leva 235 mm con scontro, argento.

UV = 1 pezzo

Extensión frontal

Extensión frontal de varilla de palanca 235 mm con tope, plata

CANTIDAD = 1 unidad

MC 203810

Faceplate extension

Faceplate extension French casement drive gear 470 mm with striker, silver.

PU = 1 piece

Prolunga frontale

Prolunga frontale asta a leva 470 mm con scontro, argento.

UV = 1 pezzo

Extensión frontal

Extensión frontal de la barra de la palanca 470 mm con choque, plata.

CANTIDAD = 1 unidad

MC 208333

Rebated corner support

Rebated corner support 12/20-13 R, silver.

R = Right opening

PU = 1 piece

Angolo cerniera

Angolo cerniera cava 12/20-13 R, argento.

R = Apertura destra

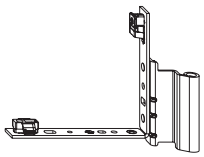
UV = 1 pezzo

Angulo de bisagra

Angulo de bisagra 12/20 R, plata.

R = Apertura derecha

CANTIDAD = 1 unidad



MC 54892

Rebated corner support

Rebated corner support 12/20-13 L, silver.

L = Left opening

PU = 1 piece

Angolo cerniera

Angolo cerniera cava 12/20-13 L, argento.

L = Apertura sinistra

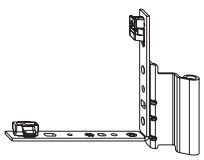
UV = 1 pezzo

Angulo de bisagra

Angulo de bisagra 12/20-13 L, plata.

L = Apertura izquierda

CANTIDAD = 1 unidad



MC 54893

Pivot post

Pivot post with supporting pins 3 mm D=7 mm, silver.

PU = 1 piece

Supporto cerniera

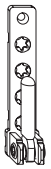
Supporto cerniera con perni 3 mm D=7 mm, argento.

UV = 1 pezzo

Soporte de bisagra

Soporte de bisagra con pasador 3 mm D=7 mm, plata.

CANTIDAD = 1 unidad



MC 52485

Scissor stay hinge

Scissor stay hinge with D=7 mm supporting pin, silver.

PU = 1 piece

Supporto forbice

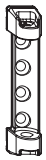
Supporto forbice perni D=7 mm, argento.

UV = 1 pezzo

Soporte de herraje

Soporte de herraje para compás D =7 mm, plata.

CANTIDAD = 1 unidad



MC 52481

Scissor stay hinge pin

Scissor stay hinge pin for scissor stay hinges, silver.

PU = 1 piece

Perno

Perno supporto forbice, argento.

UV = 1 pezzo

Perno

Perno de compás, plata.

CANTIDAD = 1 unidad

MC 94491

Scissor stay mounted

Scissor stay mounted without night-vent 400 mm,
LBB 320-400 mm, silver.

PU = 1 piece

Forbice ad angolo premontata

Forbice ad angolo premontata senza aerazione controllata 400 mm, LBB 320-400 mm, argento.

UV = 1 pezzo

Compás de esquina

Compás de esquina premontada sin ventilación 400 mm, plata
LBB 320-400 mm

CANTIDAD = 1 unidad

MC 211694

Scissor stay mounted

Scissor stay mounted without night-vent 600 mm,
LBB 401-600 mm, silver.

PU = 1 piece

Forbice ad angolo premontata

Forbice ad angolo premontata senza aerazione controllata 600 mm, LBB 401-600 mm, argento.

UV = 1 pezzo

Compás de esquina

Compás de esquina premontada sin ventilación controlada 600 mm, plata LBB 401-600 mm

CANTIDAD = 1 unidad

MC 211695

Scissor stay mounted

Scissor stay mounted without night-vent 800 mm,
LBB 601-800 mm, silver.

PU = 1 piece

Forbice ad angolo premontata

Forbice ad angolo premontata senza aerazione controllata 800 mm, LBB 601-800 mm, argento.

UV = 1 pezzo

Compás de esquina

Compás de esquina premontada sin ventilación controlada 800 mm, plata LBB 601-800 mm

CANTIDAD = 1 unidad

MC 211696

Scissor stay mounted

Scissor stay mounted without night-vent 1050 mm,
LBB 801-1050 mm with 1 i.S. silver.

PU = 1 piece

Forbice ad angolo premontata

Forbice ad angolo premontata senza aerazione controllata 1050 mm, LBB 801-1050 mm, con 1 fungo, argento.

UV = 1 pezzo

Compás de esquina

Compás de esquina premontada sin ventilación controlada 1050 mm, 1 seta, plata LBB 801- 1050 mm

CANTIDAD = 1 unidad

MC 211905

Scissor stay mounted

Scissor stay mounted without night-vent 1300 mm, LBB 1051-1300 mm with1 i.S. silver.

PU = 1 piece

Forbice ad angolo premontata

Forbice ad angolo premontata senza aerazione controllata 1300 mm, LBB 1051-1300 mm, con 1 fungo, argento.

UV = 1 pezzo

Compás de esquina

Compás de esquina premontada sin ventilación controlada 1300 mm, 1 seta, plata LBB 1051- 1300 mm

CANTIDAD = 1 unidad

MC 211906

Rebated scissor stay support

Rebated scissor stay support arm 12/20-13, silver.

PU = 1 piece

Bandella forbice ad angolo

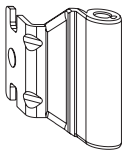
Bandella forbice ad ango, in appoggio 12/20-13, argento.

UV = 1 pezzo

Soporte de compas

Soporte de compas esquina en 12/20-13, plata.

CANTIDAD = 1 unidad



MC 52486

Turn-only hinge

Turn-only hinge on top + AS corner hinge version, silver.

PU = 1 piece

Braccio cerniera A-B

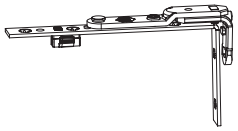
Braccio cerniera A-B superiore, in appoggio, argento.

UV = 1 pezzo

Guía de bisagra

Guía de bisagra superior, plata.

CANTIDAD = 1 unidad



MC 52462

Tilt-only hinge

Tilt-only hinge and turn-only hinge, adjustable, silver.

PU = 1 piece

Piastra cerniera ribalta e battente

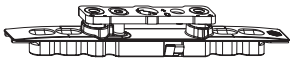
Piastra cerniera ribalta e battente, regolabile, argento.

UV = 1 pezzo

Placa de bisagra

Placa de bisagra oscilo y batiente regulable, plata.

CANTIDAD = 1 unidad



MC 52321

Basic kits for Tilt&Turn windows

K88001
Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Kit base per finestre anta ribalta

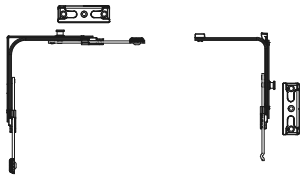
K88001
Finestre standard

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

Kits básicos para ventana oscilante

K88001
Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm



K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

MC 222203 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

K88002
Short corner
for low windows

LBB = 465 - 815 mm
HBB = 370 - 454 mm

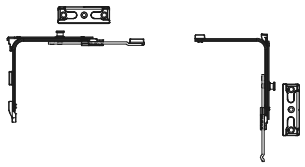
MC 222203 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88002
Angolo ridotto
per finestre basse

LBB = 465 - 815 mm
HBB = 370 - 454 mm

K88002
Esquina corta
para ventanas bajas

LBB = 465 - 815 mm
HBB = 370 - 454 mm



Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

Kit cremonese

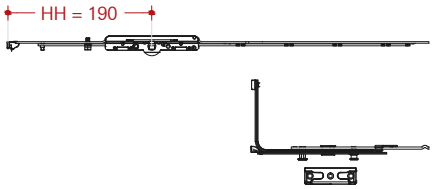
K88003

HH = 190 mm
HBB = 340 - 1608 mm

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm



K88004

HH = 300 mm
HBB = 661 - 1790 mm

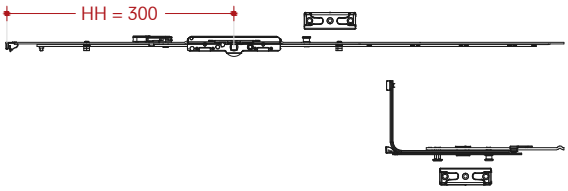
MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm



K88005

HH = 400 mm
HBB = 841 - 2040 mm

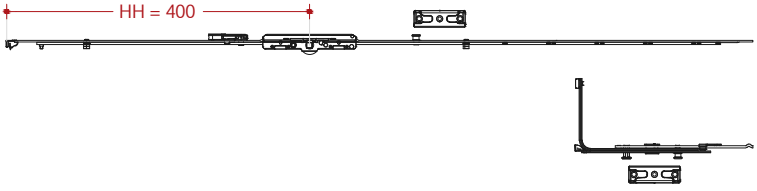
MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm



K88006

HH = 500 mm
HBB = 1091 - 2290 mm

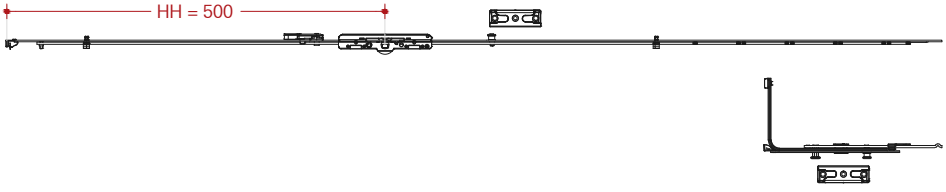
MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm



Gear kits

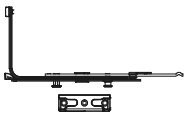
Kit cremonese

Kits de equipo

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces



K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

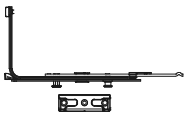
K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces



K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

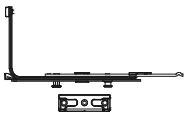
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

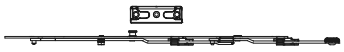


K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Extension kits	Kit estensione Cremonese	Kits extensión	
K88011 0 - 140 mm MC 206630 n°01 piece	K88011 0 - 140 mm	K88011 0 - 140 mm	
K88012 141 - 235 mm MC 201750 n°01 piece MC 364310 n°01 piece	K88012 141 - 235 mm	K88012 141 - 235 mm	
K88059 236 - 375 mm MC 201750 n°01 piece MC 206630 n°01 piece MC 364310 n°01 piece	K88059 236 - 375 mm	K88059 236 - 375 mm	
K88013 376 - 470 mm MC 201840 n°01 piece MC 364310 n°01 piece	K88013 376 - 470 mm	K88013 376 - 470 mm	

Extension kits

Kit prolunga

Kits extensión

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece1
MC 364310 n°02 pieces

K88015

611 - 705 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

K88016

846 - 940 mm

K88016

846 - 940 mm

Scissors and hinges kits
Right opening

Kit forbice e cerniere
Apertura destra

Kits de cizallas y bisagras
Apertura derecha

K88017

LBB = 370 - 600 mm

MC 217470 n°01 piece
MC 217346 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88017

LBB = 370 - 600 mm

K88017

LBB = 370 - 600 mm

K88018

LBB = 601 - 800 mm

MC 217470 n°01 piece
MC 217347 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88018

LBB = 601 - 800 mm

K88018

LBB = 601 - 800 mm

K88019

LBB = 801 - 1050 mm

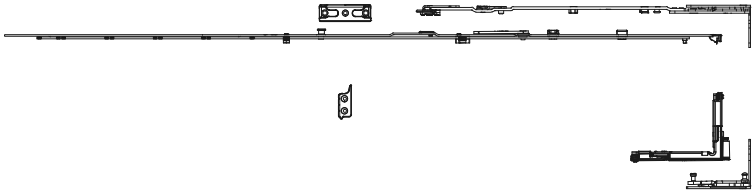
MC 217474 n°01 piece
MC 217348 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88019

LBB = 801 - 1050 mm

K88019

LBB = 801 - 1050 mm



Scissors and hinges kits
Right opening

Kit forbice e cerniere
Apertura destra

Kits de cizallas y bisagras
Apertura derecha

K88020

LBB = 1051 - 1285 mm

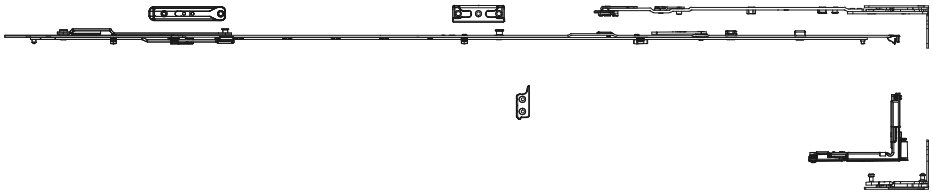
MC 217474 n°01 piece
MC 217348 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88020

LBB = 1051 - 1285 mm

K88020

LBB = 1051 - 1285 mm



K88021

LBB = 1286 - 1400 mm

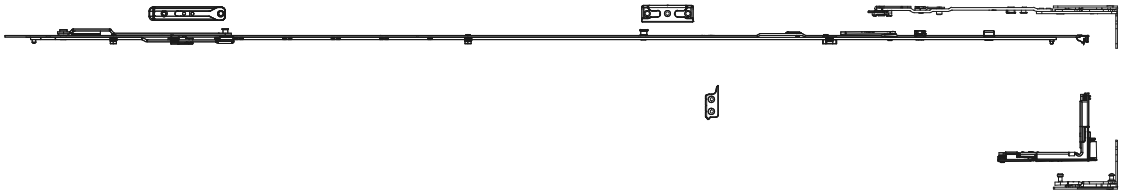
MC 217474 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88021

LBB = 1286 - 1400 mm

K88021

LBB = 1286 - 1400 mm



Scissors and hinges kits
Left opening

Kit forbice e cerniere
Apertura sinistra

Kits de cizallas y bisagras
Apertura izquierda

K88022

LBB = 370 - 600 mm

MC 217471 n°01 piece
MC 217346 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88022

LBB = 370 - 600 mm

K88022

LBB = 370 - 600 mm

K88023

LBB = 601 - 800 mm

MC 217471 n°01 piece
MC 217347 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88023

LBB = 601 - 800 mm

K88023

LBB = 601 - 800 mm

K88024

LBB = 801 - 1050 mm

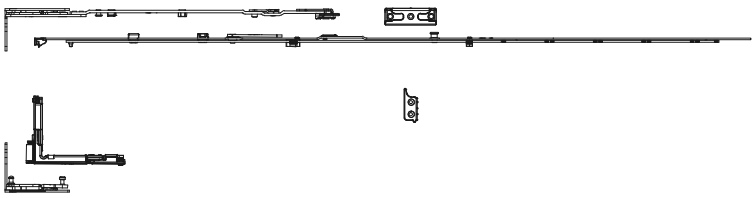
MC 217475 n°01 piece
MC 217348 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88024

LBB = 801 - 1050 mm

K88024

LBB = 801 - 1050 mm



Scissors and hinges kits
Left opening

Kit forbice e cerniere
Apertura sinistra

Kits de cizallas y bisagras
Apertura izquierda

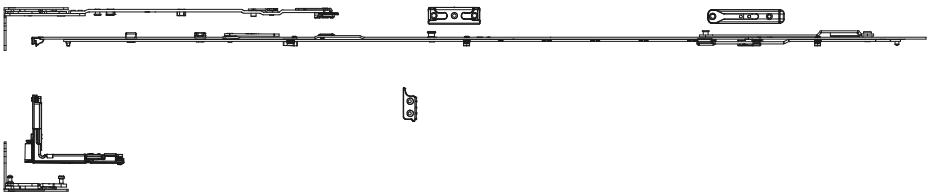
K88025

LBB = 1051 - 1285 mm

MC 217475 n°01 piece
MC 217348 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88025

LBB = 1051 - 1285 mm



K88025

LBB = 1051 - 1285 mm

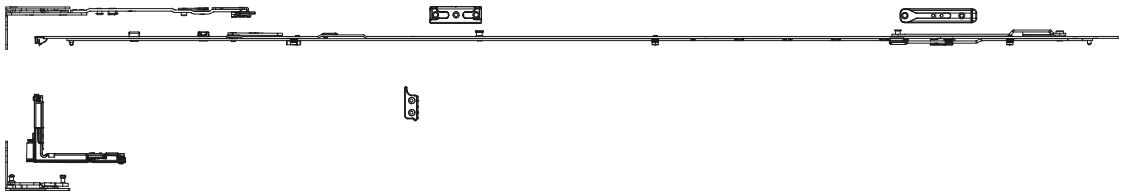
K88026

LBB = 1286 - 1400 mm

MC 217475 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88026

LBB = 1286 - 1400 mm



K88026

LBB = 1286 - 1400 mm

Additional hinge side locking point

Punto di chiusura aggiuntivo lato cerniera

Punto de bloqueo adicional lado de la bisagra

K88027

HBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88027

HBB = 801 - 1280 mm

K88027

HBB = 801 - 1280 mm

K88028

HBB = 1281 - 1500 mm

MC 201752 n°01 piece
MC 364310 n°01 piece

K88028

HBB = 1281 - 1500 mm

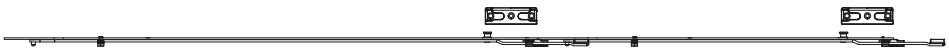
K88028

HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

MC 201840 n°01 piece
MC 201753 n°01 piece
MC 364310 n°02 pieces



K88029

HBB = 1501 - 1700 mm

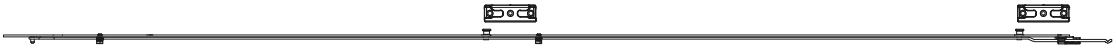
K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm

MC 201754 n°01 piece
MC 364310 n°02 pieces



K88030

HBB = 1701 - 2800 mm

K88030

HBB = 1701 - 2800 mm

Additional hinge bottom side locking point

Punto di chiusura aggiuntivo lato inferiore cerniera

Punto de bloqueo adicional lado inferior de la bisagra

K88031

LBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88031

LBB = 801 - 1280 mm

K88031

LBB = 801 - 1280 mm

K88032

LBB = 1281 - 1400 mm

MC 201752 n°01 piece
MC 364310 n°01 piece

K88032

LBB = 1281 - 1400 mm

K88032

LBB = 1281 - 1400 mm

Hinges kits
2nd leaf

Kit cerniere
2a anta

Kits de bisagras
2do hoja

K88034

Right hinges

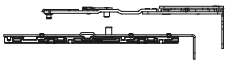
MC 217691 n°01 piece
MC 217729 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece

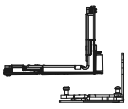
K88034

Cerniere destre

K88034

Derecha bisagras





K88035

Left hinges

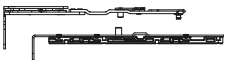
MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece

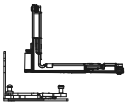
K88035

Cerniere sinistre

K88035

Izquierda bisagras





Concealed compression locks kits

Kit cerniere centrali a scomparsa

Kits de bisagras ocultas centrales

K88036

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece

K88036

HBB = 1280 - 2000 mm

K88036

HBB = 1280 - 2000 mm

K88037

HBB = 2001 - 2800 mm

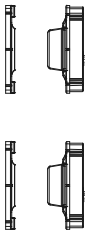
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm



French casement lock extendable

Catenacci angolari estendibili

Cerradura abatible francesa extensible

K88038

LBB = 370 - 800 mm

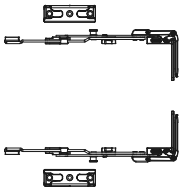
MC 215336 n°02 pieces
MC 364310 n°02 pieces

K88038

LBB = 370 - 800 mm

K88038

LBB = 370 - 800 mm



Door catch

Scrocco porta

Pestillo de puerta

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

K88061

HBB = 661 - 2800 mm

K88061

HBB = 661 - 2800 mm

Opening restrictor

Limitatore di apertura

Limitador de apertura

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

K88033

LBB = 490 - 1400 mm

K88033

LBB = 490 - 1400 mm

Load transfer 180 kg

E99510-02

Right

MC 105336 n°01 piece

Asta di sostegno 180 kg

E99510-02

Destro

Varilla de soporte 180 kg

E99510-02

Derecha

E99511-02

Left

MC 105339 n°01 piece

E99511-02

Sinistro

E99511-02

Izquierda

Alarm contact

K99062

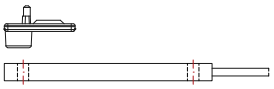
MC 200906 n°01 piece
MC 473010 n°01 piece

Contatto allarme

K99062

Contacto de alarma

K99062



Lifting component
Only for single leaf window
Visible hinge

Componente di sollevamento
Solo per finestra ad anta singola
Cerniera a vista

Componente de elevación
Solo para ventana de una hoja
Bisagra visible

K88047

Right

MC 361004 n°01 piece

K88047

Destro

K88047

Derecha

K88048

Left

MC 361005 n°01 piece

K88048

Sinistro

K88048

Izquierda

French casement drive kits
Visible hinge

Kit aste a leva
Cerniera a vista

Kit Cremona semifija
Bisagra visible

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88062

HH = 190 mm

K88062

HH = 190 mm

K88063

HH = 300 mm

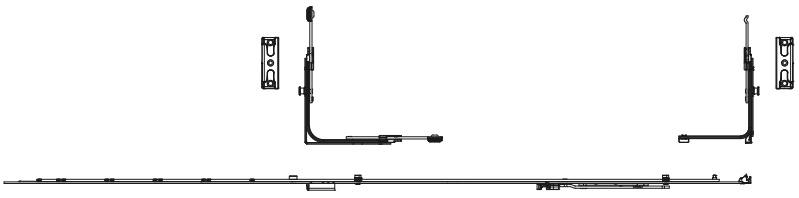
MC 221902 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

K88063

HH = 300 mm



K88064

HH = 400 mm

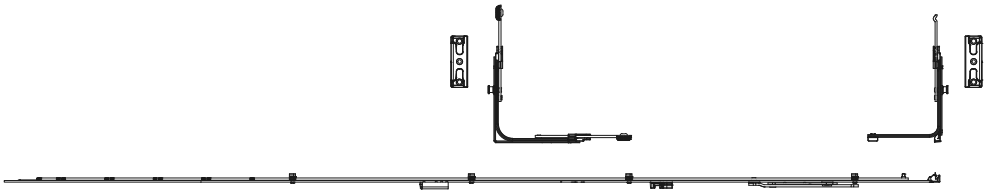
MC 221903 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

K88064

HH = 400 mm



K88065

HH = 500 mm

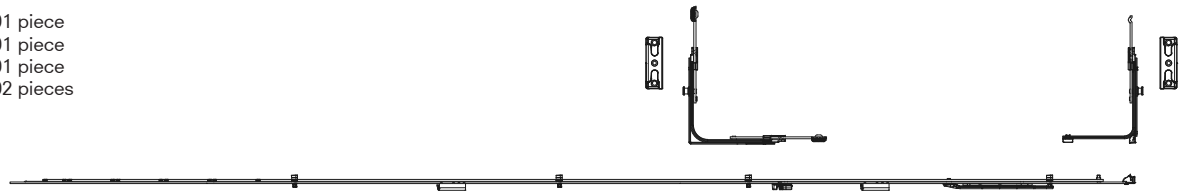
MC 221906 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

K88065

HH = 500 mm



K88066

HH = 600 mm

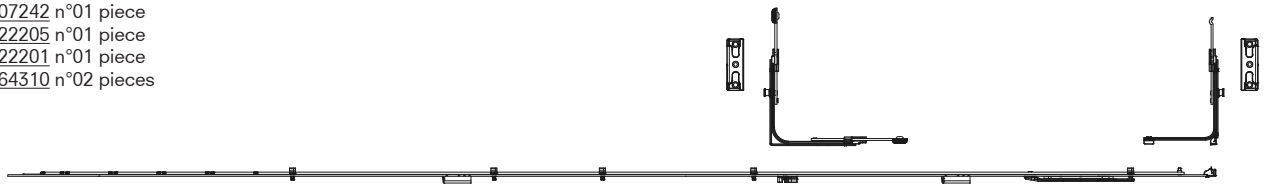
MC 207242 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

K88066

HH = 600 mm



K88067

HH = 700 mm

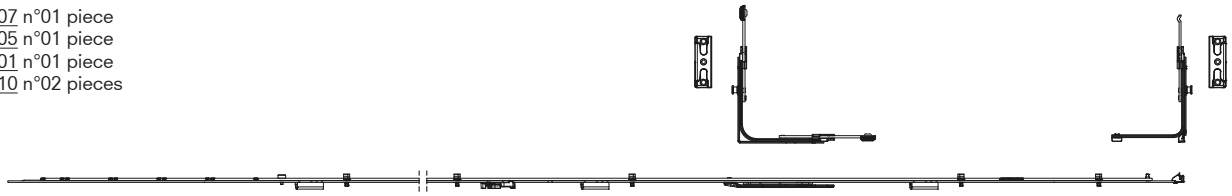
MC 221907 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

K88067

HH = 700 mm



K88068

HH = 1050 mm

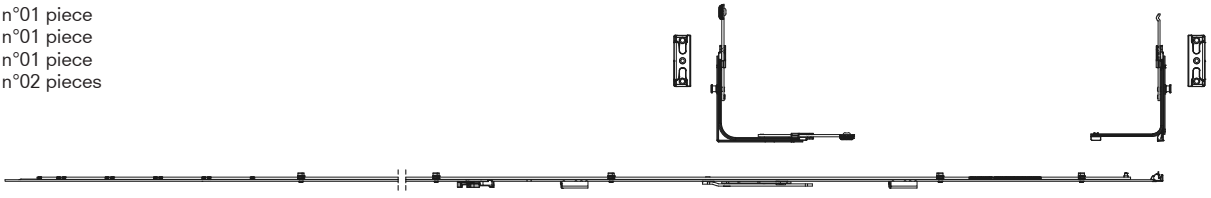
MC 221908 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

K88068

HH = 1050 mm



French casement drive extension kits
Visible hinge

Kit estensione Cremonese
Cerniera a vista

Kit de extensión Cremona
Bisagra visible

K88071

141 - 235 mm

MC 203810 n°01 piece

K88071

141 - 235 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88072

236 - 375 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

MC 208333 n°01 piece

K88073

376 - 470 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

MC 206630 n°01 piece
MC 208333 n°01 piece

K88074

471 - 610 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

MC 203810 n°01 piece
MC 208333 n°01 piece

K88075

611 - 705 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88076

706 - 845 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

MC 208333 n°02 pieces

K88077

846 - 940 mm

K88077

846 - 940 mm

Scissors and hinges kits
Visible hinge
Right opening

Kit forbice e cerniere
Cerniera a vista
Apertura destra

Kits de cizallas y bisagras
Bisagra visible
Apertura derecha

K88078

LBB = 370 - 400 mm

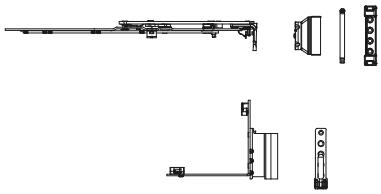
MC 211694 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88078

LBB = 370 - 400 mm

K88078

LBB = 370 - 400 mm



K88079

LBB = 401 - 600 mm

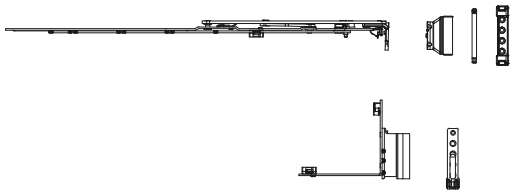
MC 211695 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88079

LBB = 401 - 600 mm

K88079

LBB = 401 - 600 mm



K88080

LBB = 601 - 800 mm

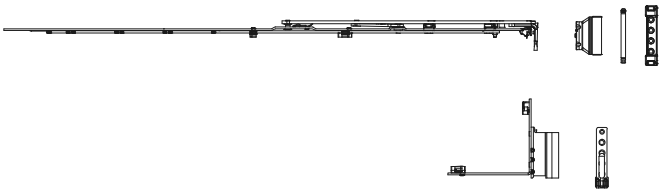
MC 211696 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88080

LBB = 601 - 800 mm

K88080

LBB = 601 - 800 mm



K88081

LBB = 801 - 1050 mm

MC 211905 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 364310 n°01 piece

K88081

LBB = 801 - 1050 mm

K88081

LBB = 801 - 1050 mm

K88082

LBB = 1051 - 1300 mm

MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 364310 n°01 piece

K88082

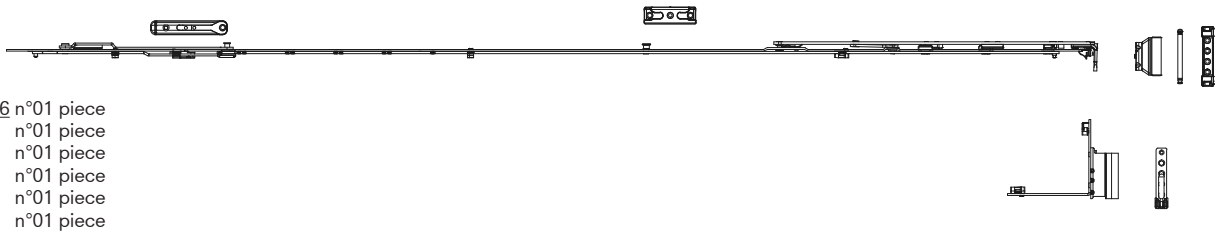
LBB = 1051 - 1300 mm

K88082

LBB = 1051 - 1300 mm

K88083

LBB = 1301 - 1400 mm



MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 52794 n°01 piece
MC 213043 n°01 piece
MC 364310 n°01 piece

K88083

LBB = 1301 - 1400 mm

K88083

LBB = 1301 - 1400 mm

Scissors and hinges kits
Visible hinge
Left opening

Kit forbice e cerniere
Cerniera a vista
Apertura sinistra

Kits de cizallas y bisagras
Bisagra visible
Apertura izquierda

K88084

LBB = 370 - 400 mm

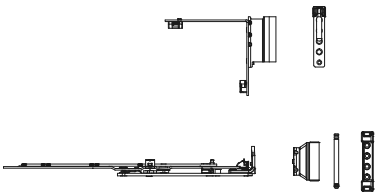
MC 211694 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88084

LBB = 370 - 400 mm

K88084

LBB = 370 - 400 mm



K88085

LBB = 401 - 600 mm

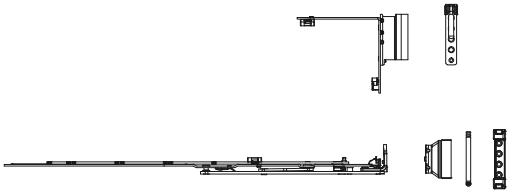
MC 211695 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88085

LBB = 401 - 600 mm

K88085

LBB = 401 - 600 mm



K88086

LBB = 601 - 800 mm

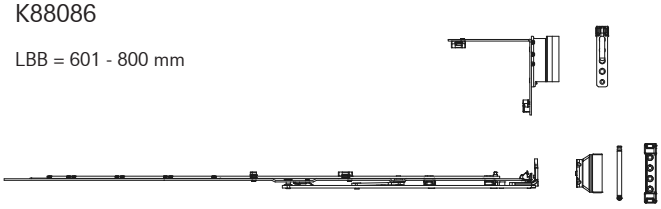
MC 211696 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88086

LBB = 601 - 800 mm

K88086

LBB = 601 - 800 mm



K88087

LBB = 801 - 1050 mm

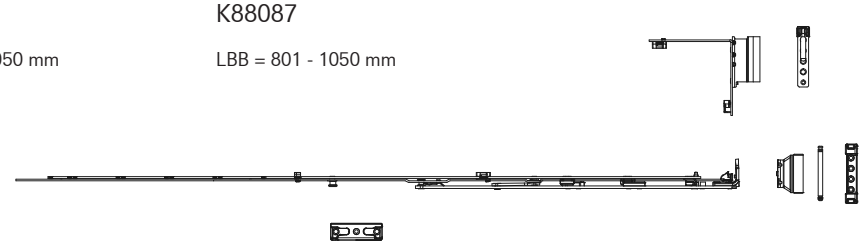
MC 211905 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 364310 n°01 piece

K88087

LBB = 801 - 1050 mm

K88087

LBB = 801 - 1050 mm



K88088

LBB = 1051 - 1300 mm

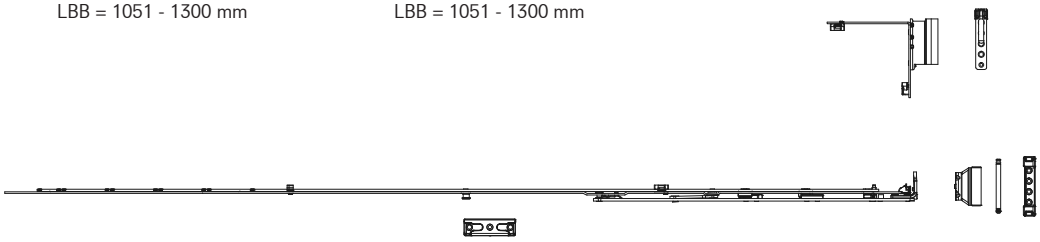
MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 364310 n°01 piece

K88088

LBB = 1051 - 1300 mm

K88088

LBB = 1051 - 1300 mm



K88089

LBB = 1301 - 1400 mm

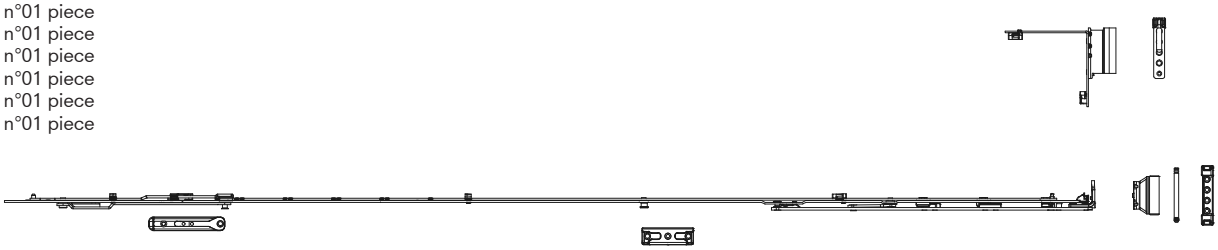
MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 52794 n°01 piece
MC 213043 n°01 piece
MC 364310 n°01 piece

K88089

LBB = 1301 - 1400 mm

K88089

LBB = 1301 - 1400 mm



Hinges kits
2nd leaf
Visible hinge

Kit cerniere
2a anta
Cerniera a vista

Kits de bisagras
2do hoja
Bisagra visible

K88090

Right hinges

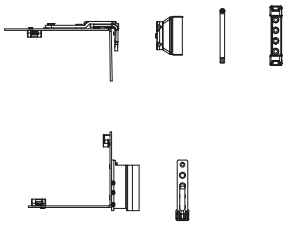
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88090

Cerniere destre

K88090

Derecha bisagras



K88091

Left hinges

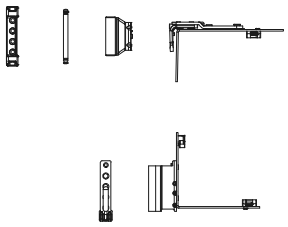
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88091

Cerniere sinistre

K88091

Izquierda bisagras



Double croppable gear kits
Visible hinge

Kit cremonesi doppiorasabili
Cerniera a vista

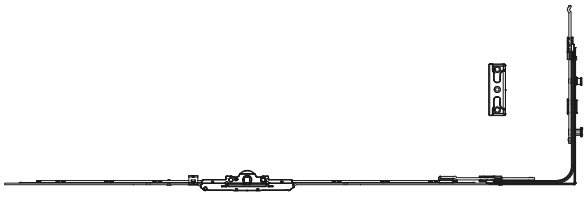
Kits de equipo recortables dobles
Bisagra visible

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

K88109

K88109

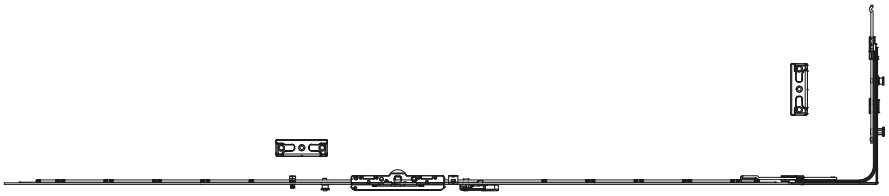


K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

K88110

K88110

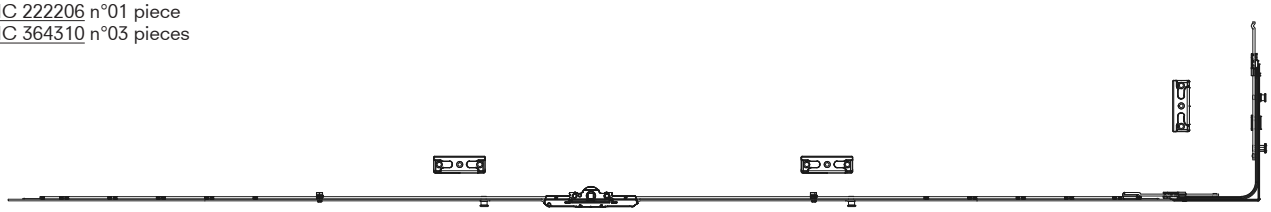


K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

K88111

K88111

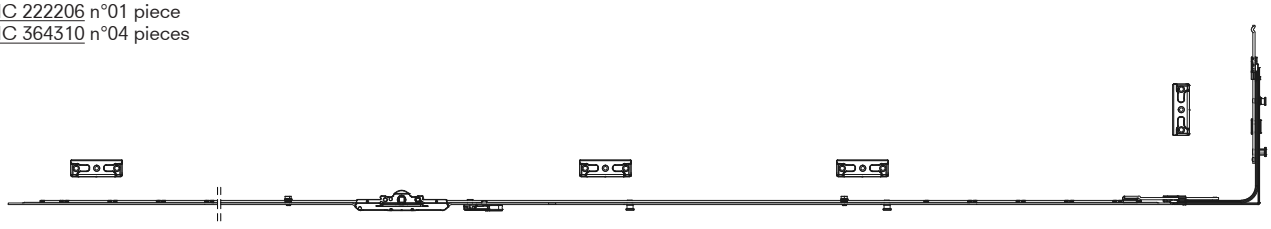


K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces

K88112

K88112



French casement drive kits
Visible hinge

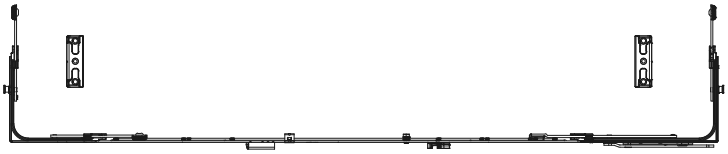
Kit aste a leva per cremonesi doppiorasabili
Cerniera a vista

Kit Cremona semifija
Bisagra visible

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88113



K88113

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88114

K88114

K88115

MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

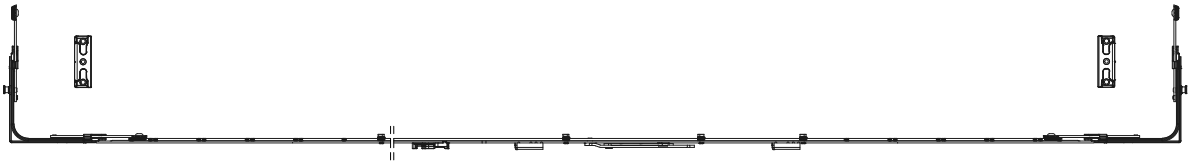
K88115

K88115

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116



K88116

Basic kits for side hung windows

Kit base per finestre battenti

Kits básicos para ventana batiente

K88043

Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

K88043

Finestre standard

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

K88043

Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

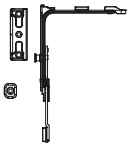
MC 222203 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm



K88044

Short corner
for low windows

LBB = 465 - 815 mm
HBB = 370 - 454 mm

MC 222203 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

K88044

Angolo ridotto
per finestre basse

LBB = 465 - 815 mm
HBB = 370 - 454 mm

K88044

Esquina corta
para ventanas bajas

LBB = 465 - 815 mm
HBB = 370 - 454 mm

Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

Kit cremonese

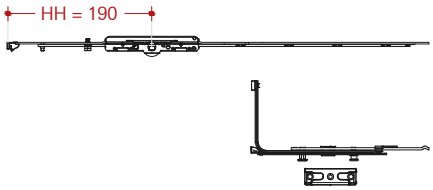
K88003

HH = 190 mm
HBB = 340 - 1608 mm

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm



K88004

HH = 300 mm
HBB = 661 - 1790 mm

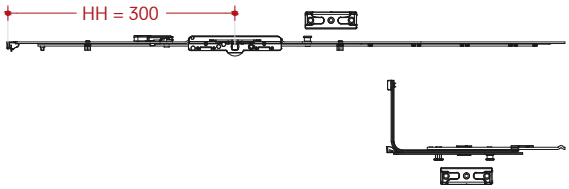
MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm



K88005

HH = 400 mm
HBB = 841 - 2040 mm

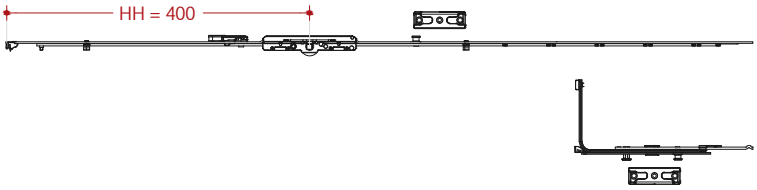
MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm



K88006

HH = 500 mm
HBB = 1091 - 2290 mm

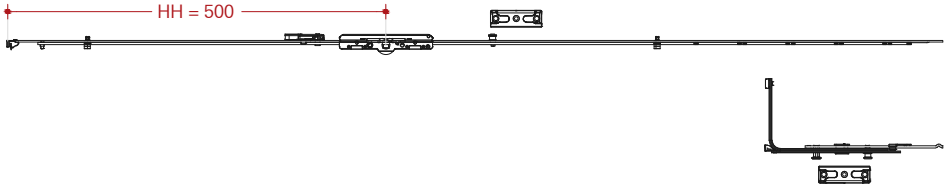
MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm



Gear kits

Kit cremonese

Kits de equipo

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

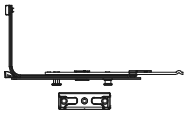
K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces



K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

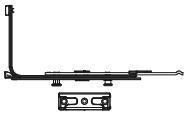
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces



K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Extension kits

Kit estensione Cremonese

Kits extensión

K88011

0 - 140 mm

MC 206630 n°01 piece

K88011

0 - 140 mm

K88011

0 - 140 mm

K88012

141 - 235 mm

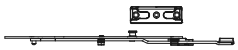
MC 201750 n°01 piece
MC 364310 n°01 piece

K88012

141 - 235 mm

K88012

141 - 235 mm



K88059

236 - 375 mm

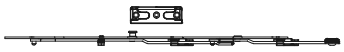
MC 201750 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88059

236 - 375 mm

K88059

236 - 375 mm



K88013

376 - 470 mm

MC 201840 n°01 piece
MC 364310 n°01 piece

K88013

376 - 470 mm

K88013

376 - 470 mm

Extension kits

Kit prolunga

Kits extensión

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88015

611 - 705 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

K88016

846 - 940 mm

K88016

846 - 940 mm

Hinges kits

Kit cerniere

Kits de bisagras

K88034

Right hinges

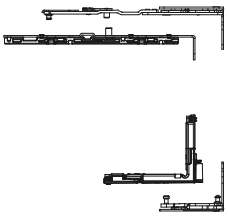
MC 217691 n°01 piece
MC 217729 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece

K88034

Cerniere destre

K88034

Derecha bisagras



K88035

Left hinges

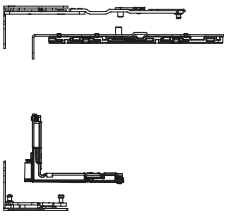
MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece

K88035

Cerniere sinistre

K88035

Izquierda bisagras



Concealed compression locks kits

Kit cerniere centrali a scomparsa

Kits de bisagras ocultas centrales

K88036

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece

K88036

HBB = 1280 - 2000 mm

K88036

HBB = 1280 - 2000 mm

K88037

HBB = 2001 - 2800 mm

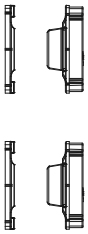
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm



Additional top and bottom locking point

Punto di chiusura aggiuntivo superiore e inferiore

Superior e inferior adicionales punto de bloqueo

K88045

LBB = 801 - 1280 mm

MC 201751 n°02 pieces
MC 364310 n°02 pieces

K88045

LBB = 801 - 1280 mm

K88045

LBB = 801 - 1280 mm

K88046

LBB = 1281 - 1400 mm

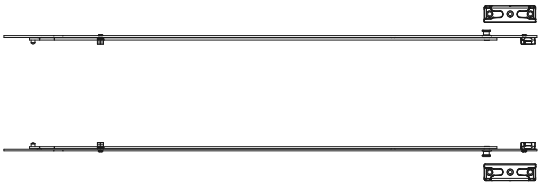
MC 201752 n°02 pieces
MC 364310 n°02 pieces

K88046

LBB = 1281 - 1400 mm

K88046

LBB = 1281 - 1400 mm



Lifting component	Componente di sollevamento	Componente de elevación	
K88047 Right MC 361004 n°01 piece	K88047 Destra	K88047 Derecha	
K88048 Left MC 361005 n°01 piece	K88048 Sinistra	K88048 Izquierda	

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Scrocco porta

K88061

HBB = 661 - 2800 mm

Pestillo de puerta

K88061

HBB = 661 - 2800 mm

Opening restrictor

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

Limitatore di apertura

K88033

LBB = 490 - 1400 mm

Limitador de apertura

K88033

LBB = 490 - 1400 mm

Load transfer 180 kg

Asta di sostegno 180 kg

Varilla de soporte 180 kg

E99510-02

Right

MC 105336 n°01 piece

E99510-02

Destro

E99510-02

Derecha

E99511-02

Left

MC 105339 n°01 piece

E99511-02

Sinistro

E99511-02

Izquierda

Alarm contact

Contatto allarme

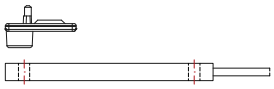
Contacto de alarma

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

K99062

K99062



French casement drive kits
Visible hinge

Kit aste a leva
Cerniera a vista

Kit Cremona semifija
Bisagra visible

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88062

HH = 190 mm

K88062

HH = 190 mm

K88063

HH = 300 mm

MC 221902 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

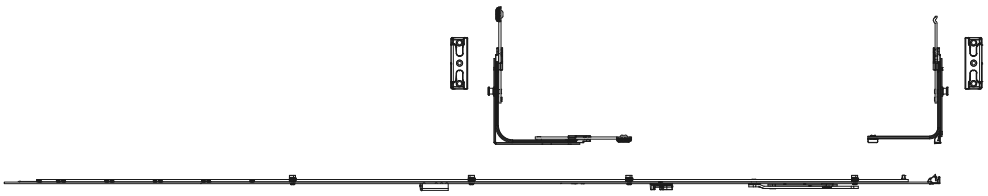
MC 221903 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

K88064

HH = 400 mm



K88065

HH = 500 mm

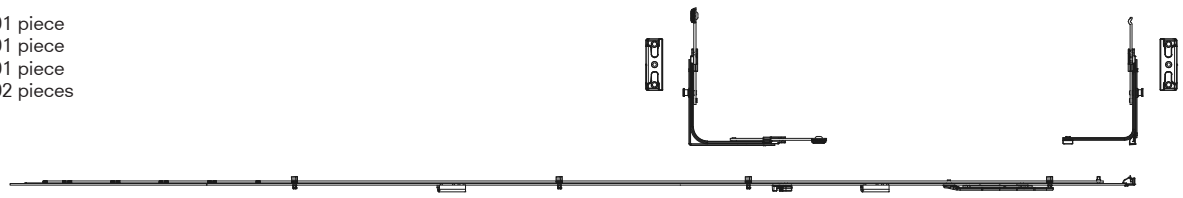
MC 221906 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

K88065

HH = 500 mm



K88066

HH = 600 mm

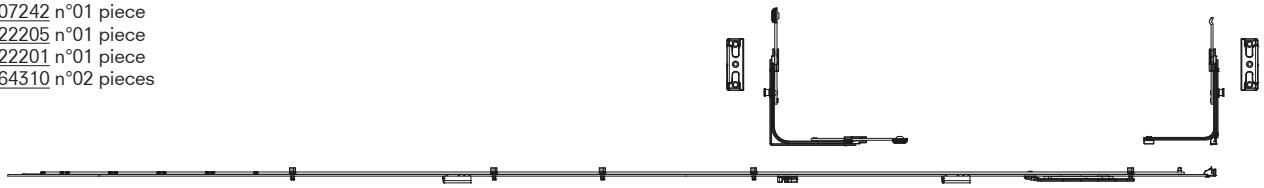
MC 207242 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

K88066

HH = 600 mm



K88067

HH = 700 mm

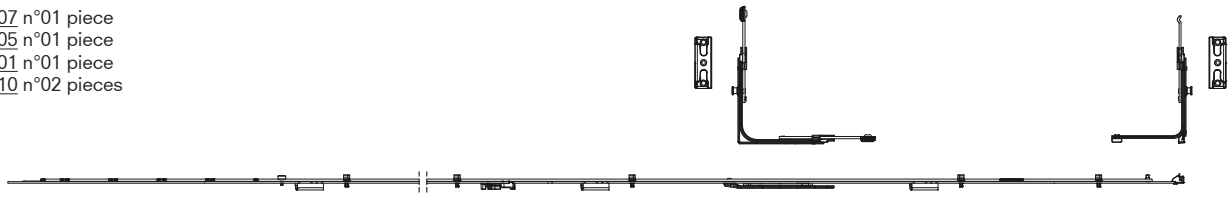
MC 221907 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

K88067

HH = 700 mm



K88068

HH = 1050 mm

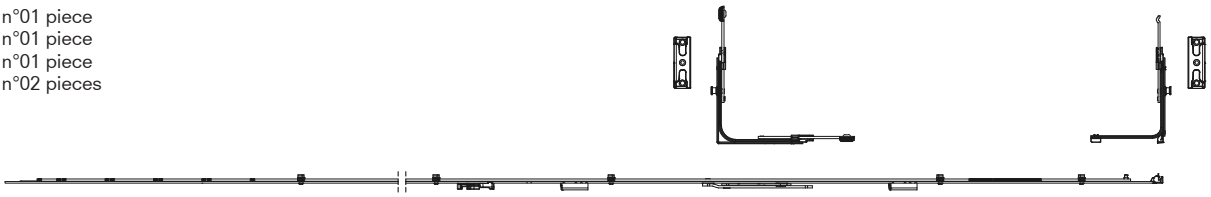
MC 221908 n°01 piece
MC 222205 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

K88068

HH = 1050 mm



French casement drive extension kits
Visible hinge

Kit estensione Cremonese
Cerniera a vista

Kit de extensión Cremona
Bisagra visible

K88071

141 - 235 mm

MC 203810 n°01 piece

K88071

141 - 235 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88072

236 - 375 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

MC 208333 n°01 piece

K88073

376 - 470 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

MC 206630 n°01 piece
MC 208333 n°01 piece

K88074

471 - 610 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

MC 203810 n°01 piece
MC 208333 n°01 piece

K88075

611 - 705 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88076

706 - 845 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

MC 208333 n°02 pieces

K88077

846 - 940 mm

K88077

846 - 940 mm

Hinges kits
2nd leaf
Visible hinge

Kit cerniere
2a anta
Cerniera a vista

Kits de bisagras
2do hoja
Bisagra visible

K88090

Right hinges

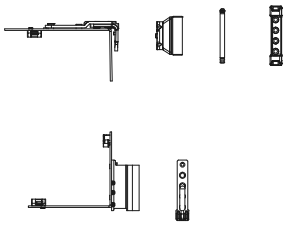
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88090

Cerniere destre

K88090

Derecha bisagras



K88091

Left hinges

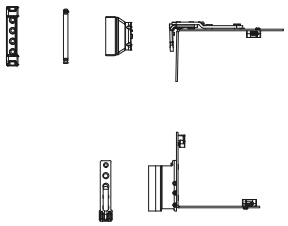
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88091

Cerniere sinistre

K88091

Izquierda bisagras



Double croppable gear kits
Visible hinge

Kit cremonesi doppiorasabili
Cerniera a vista

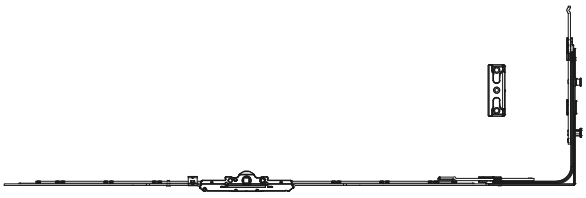
Kits de equipo recortables dobles
Bisagra visible

K88109

K88109

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

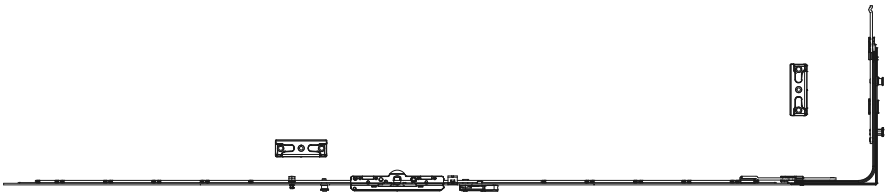


K88110

K88110

K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

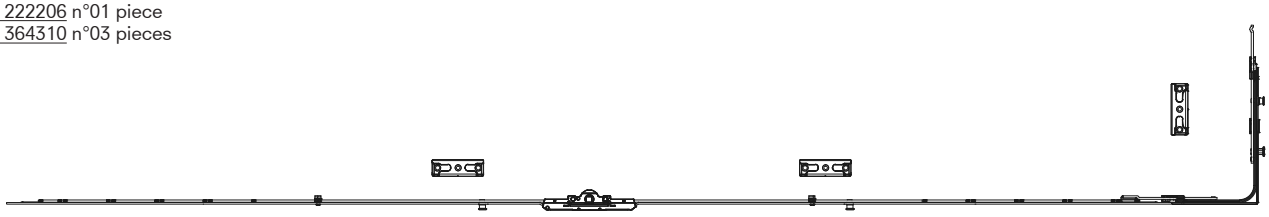


K88111

K88111

K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

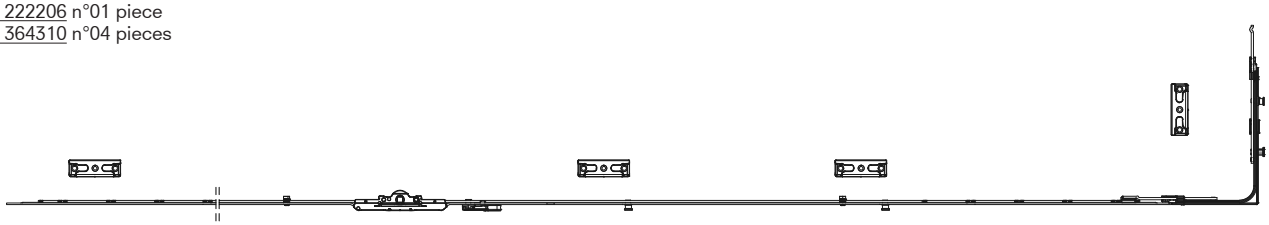


K88112

K88112

K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces



French casement drive kits
Visible hinge

Kit aste a leva per cremonesi doppiorasabili
Cerniera a vista

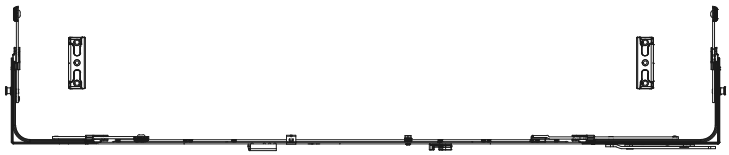
Kit Cremona semifija
Bisagra visible

K88113

K88113

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces



K88114

K88114

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88115

K88115

K88115

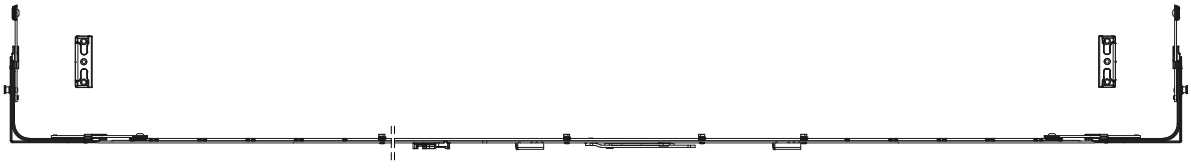
MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116

K88116

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces



Kits for bottom hung windows

Kit Cremonesi

Kits para ventana oscillante

Gear kits

Kit cremonese

Kits de equipo

K88049

LBB = 390 - 500 mm

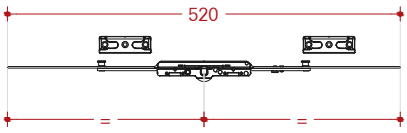
MC 208323 n°01 piece
MC 364310 n°02 pieces

K88049

LBB = 390 - 500 mm

K88049

LBB = 390 - 500 mm



K88050

LBB = 501 - 700 mm

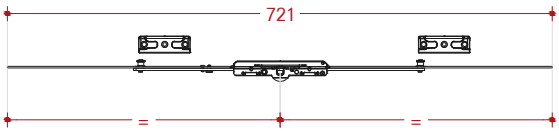
MC 208324 n°01 piece
MC 364310 n°02 pieces

K88050

LBB = 501 - 700 mm

K88050

LBB = 501 - 700 mm



K88051

LBB = 701 - 1000 mm

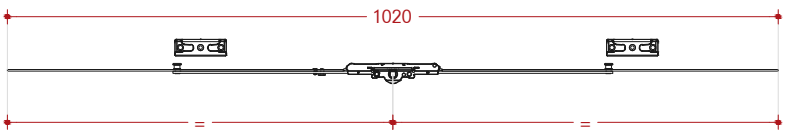
MC 208325 n°01 piece
MC 364310 n°02 pieces

K88051

LBB = 701 - 1000 mm

K88051

LBB = 701 - 1000 mm

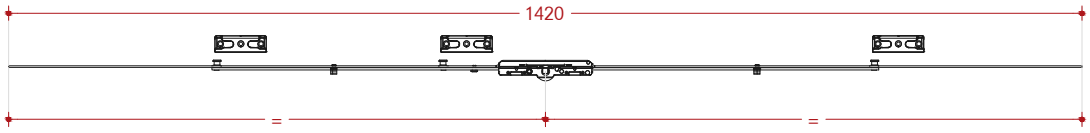


Gear kits

K88052

LBB = 1001 - 1400 mm

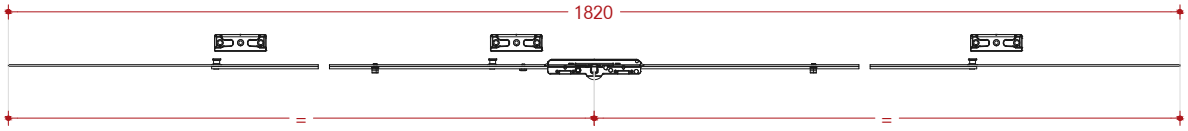
MC 208326 n°01 piece
MC 364310 n°03 pieces



K88053

LBB = 1401 - 1800 mm

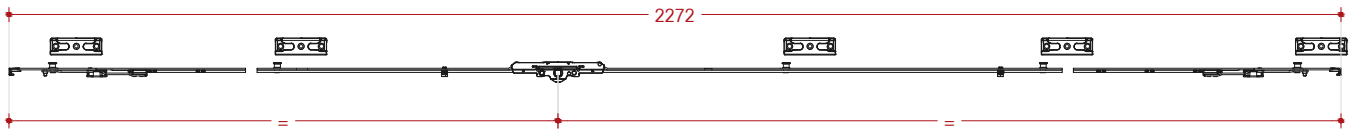
MC 208327 n°01 piece
MC 364310 n°03 pieces



K88054

LBB = 1801 - 2250 mm

MC 202497 n°01 piece
MC 212211 n°02 pieces
MC 364310 n°05 pieces



Kit cremonese

K88052

LBB = 1001 - 1400 mm

K88053

LBB = 1401 - 1800 mm

K88054

LBB = 1801 - 2250 mm

Kits de equipo

K88052

LBB = 1001 - 1400 mm

K88053

LBB = 1401 - 1800 mm

K88054

LBB = 1801 - 2250 mm

Hinges kits

Kit cerniere a scomparsa

Kits de bisagras

K88055

LBB = 390 - 1000 mm

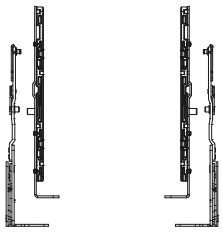
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88055

LBB = 390 - 1000 mm

K88055

LBB = 390 - 1000 mm



K88056

LBB = 1001 - 1400 mm

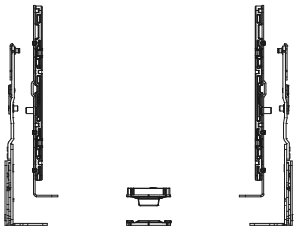
MC 215577 n°01 piece
MC 365161 n°01 piece
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88056

LBB = 1001 - 1400 mm

K88056

LBB = 1001 - 1400 mm



K88057

LBB = 1401 - 1800 mm

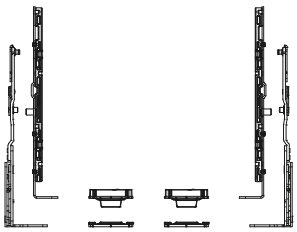
MC 215577 n°02 pieces
MC 365161 n°02 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88057

LBB = 1401 - 1800 mm

K88057

LBB = 1401 - 1800 mm



K88058

LBB = 1801 - 2250 mm

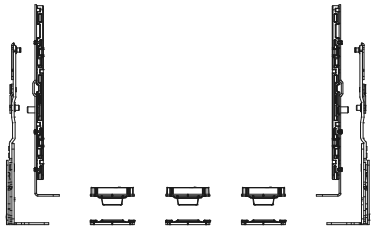
MC 215577 n°03 pieces
MC 365161 n°03 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88058

LBB = 1801 - 2250 mm

K88058

LBB = 1801 - 2250 mm



Opening restrictor

E99205-05

With clicks.
HBB = 400 - 1200 mm

Capacity: 110 kg (pair)

n°02 pieces

Limitatore di apertura

E99205-05

Con scatti.
HBB = 400 - 1200 mm

Portata: 110 kg (coppia)

n°02 pezzi

Limitador de apertura

E99205-05

Con clics.
HBB = 400 - 1200 mm

Capacidad de carga: 110 kg (par)

n°02 unidades

E99206-03

HBB = 400 - 1200 mm

Capacity: 110 kg (pair)

n°02 pieces

E99206-03

HBB = 400 - 1200 mm

Portata: 110 kg (coppia)

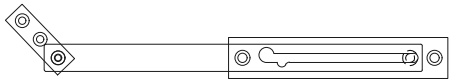
n°02 pezzi

E99206-03

HBB = 400 - 1200 mm

Capacidad de carga: 110 kg (par)

n°02 unidades



Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Contatto allarme

K99062

Contacto de alarma

K99062

Hinges kits
Visible hinge

K88040
n°1 kit per hinge

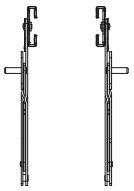
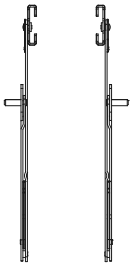
MC 52321 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece

Kit cerniere
Cerniera a vista

K88040
n°1 kit per cerniera

Kits de bisagras
Bisagra visible

K88040
n°1 kit por bisagra

Opening restrictor	Limitatore di apertura	Limitador de apertura	
K88107 HBB = 520 - 620 mm MC 455347 n°02 pieces	K88107 HBB = 520 - 620 mm	K88107 HBB = 520 - 620 mm	
K88108 HBB = 621 - 1200 mm MC 455348 n°02 pieces	K88108 HBB = 621 - 1200 mm	K88108 HBB = 621 - 1200 mm	

Handles | Maniglie | Manillas

Locks **Serrature** **Cerraduras** 3.8

Mortise lock

Single latch and deadbolt, faceplate 24x3 mm, backset 35 mm, handle/lock distance 92 mm

-02 = Galvanized steel

PU = 1 piece

Serratura con scrocco e mandata

Serratura con scrocco e mandata, frontale 24x3 mm, entrata 35 mm, interasse maniglia/cilindro 92 mm

-02 = Acciaio zincato

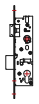
UV = 1 pezzo

Cerradura de pestillo y cerrojo

Cerradura empotrable 24x3 mm, medida de aguja de 35 mm, distancia manilla/cilindro 92 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99016-02

Multi-point locking

3-point locking device, deadbolt and head locking, faceplate 24x6 mm, backset 35 mm, handle/lock distance 92 mm; minimum vent height 2400 mm

-02 = Galvanized steel

PU = 1 piece

Serratura multipunto

Serratura a 3 punti di chiusura con scrocco, mandata e ganci, frontale 24x6 mm, entrata 35 mm, interasse maniglia/cilindro 92 mm;
altezza minima anta 2400 mm

-02 = Acciaio zincato

UV = 1 pezzo

Cerradura múltiple

Bloqueo de 3 puntos 24x6 mm, mandril + bloqueo de gancho, medida de aguja de 35 mm, distancia manilla/cilindro 92 mm; altura mínima hoja 2400 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad

B99172-02

Extension

Extension for B99172-02 lock, faceplate 24x6 mm, L 500 mm

-02 = Galvanized steel

PU = 1 piece

Prolunga

Prolunga per serratura B99172-02, frontale 24x6 mm, L 500 mm

-02 = Acciaio zincato

UV = 1 pezzo

Extensión

Extensión para cerradura B99172-02, frente 24x6 mm, L 500 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad

B99169-02

French casement drive gear

French casement drive gear for B99172-02 lock, faceplate 24x6 mm, H 2150 mm

-02 = Galvanized steel

R = Right opening

PU = 1 piece

Asta a leva cava

Asta a leva per serratura B99172-02, frontale 24x6 mm, H 2150 mm

-02 = Acciaio zincato

R = Apertura destra

UV = 1 pezzo

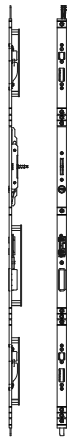
Varilla de palanca

Varilla de palanca para cerradura B99172-02, frente 24x6 mm, H 2150 mm

-02 = Acero galvanizado

R = Apertura derecha

CANTIDAD = 1 unidad



B99162-02

French casement drive gear

French casement drive gear for B99172-02 lock, faceplate 24x6 mm, H 2150 mm

-02 = Galvanized steel

L = Left opening

PU = 1 piece

Asta a leva cava

Asta a leva per serratura B99172-02, frontale 24x6 mm, H 2150 mm

-02 = Acciaio zincato

L = Apertura sinistra

UV = 1 pezzo

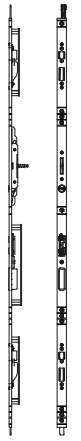
Varilla de palanca

Varilla de palanca para cerradura B99172-02, frente 24x6 mm, H 2150 mm

-02 = Acero galvanizado

L = Apertura izquierda

CANTIDAD = 1 unidad



B99163-02

Extension

Extension for french casement drive gear B99162-02 and B99163-02, faceplate 24x6 mm, H 700 mm

-02 = Galvanized steel

PU = 1 piece

Prolunga

Prolunga per asta a leva B99162-02 e B99163-02, frontale 24x6 mm, H 700 mm

-02 = Acciaio zincato

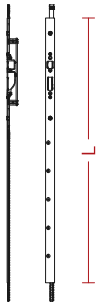
UV = 1 pezzo

Extensión

Extensión para varilla de palanca B99162-02 y B99163-02, frente 24x6 mm, H 700 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99164-02

Shoot bolt

Shoot bolt for french casement drive gear B99162-02 and B99163-02, faceplate 24x6 mm, H 530 mm

-02 = Galvanized steel

PU = 1 piece

Puntale

Puntale per asta a leva B99162-02 e B99163-02, frontale 24x6 mm, H 530 mm

-02 = Acciaio zincato

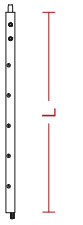
UV = 1 pezzo

Pasador de canto

Pasador de canto para varilla de palanca B99162-02 y B99163-02, frente 24x6 mm, H 530 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99165-02

Upper strike for 2nd leaf gear shoot bolt

Upper strike plate for 2nd leaf gear shoot bolt B99165-02, 100x24 mm

-02 = Galvanized steel

PU = 1 piece

Riscontro superiore per puntale 2a anta

Riscontro superiore per puntale 2a anta B99165-02, 100x24 mm

-02 = Acciaio zincato

UV = 1 pezzo

Chapa de cierre superior para pasador de canto 2do hoja

Chapa de cierre superior para pasador de canto 2do hoja B99165-02, 100x24 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad

B99176-02

Lower strike for 2nd leaf gear shoot bolt

Lower strike plate for 2nd leaf gear shoot bolt B99165-02

-02 = Galvanized steel

PU = 1 piece

Riscontro inferiore per puntale 2a anta

Riscontro inferiore per puntale 2a anta B99165-02

-02 = Acciaio zincato

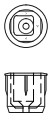
UV = 1 pezzo

Chapa de cierre inferior para pasador de canto 2do hoja

Chapa de cierre inferior para pasador de canto 2do hoja B99165-02

-02 = Acero galvanizado

CANTIDAD = 1 unidad



B99177-02

Central strike plate

Central strike plate for 3-point locking device B99172-02, 22x6 mm

-02 = Galvanized steel

R = Right opening
L = Left opening

PU = 1 piece

Riscontro centrale

Riscontro centrale per serratura a 3 punti di chiusura B99172-02, 22x6 mm

-02 = Acciaio zincato

R = Apertura destra
L = Apertura sinistra

UV = 1 pezzo

Chapa de cierre central

Chapa de cierre central para bloqueo de 3 puntos B99172-02, 22x6 mm

-02 = Acero galvanizado

R = Apertura derecha
L = Apertura izquierda

CANTIDAD = 1 unidad

B99203-02 R
B99204-02 L

Strike plate

Upper and lower strike plate for B99170-02, B99171-02, B99173-02 locks and B99169-02 extension, 22x6 mm

-02 = Galvanized steel

PU = 1 piece

Riscontro

Riscontro superiore e inferiore per serratura B99170-02, B99171-02, B99173-02 e prolunga B99169-02, 22x6 mm

-02 = Acciaio zincato

UV = 1 pezzo

Chapa de cierre

Chapa de cierre superior y inferior para cerradures B99170-02, B99171-02, B99173-02 y extensión B99169-02, 22x6 mm

-02 = Acero galvanizado

CANTIDAD = 1 unidad

B99205-02

Central strike plate

Central strike plate for mortise lock device B99015-02, 24x6 mm

-04 = Satin stainless steel AISI 304

PU = 1 piece

Riscontro centrale

Riscontro centrale per serratura B99015-02, 24x6 mm

-04 = Acciaio inox AISI 304 satinato

UV = 1 pezzo

Chapa de cierre central

Chapa de cierre central para cerradura B99015-02, 24x6 mm

-04 = Acero inoxidable AISI 304 satinado

CANTIDAD = 1 unidad

B99207-04

Rebate protection for latchbolt

Rebate protection for latchbolt, for open in door, 60x26.8x0.8 mm

-04 = Satin stainless steel AISI 304

PU = 1 piece

Protezione battuta per scrocco

Protezione battuta per scrocco, per porta apertura interna, 60x26.8x0.8 mm

-04 = Acciaio Inox AISI 304 satinato

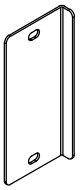
UV = 1 pezzo

Protección de parada para pestillo

Protección de parada para pestillo, para puerta que se abre hacia dentro, 60x26.8x0.8 mm

-04 = Acero inoxidable AISI 304 satinado

CANTIDAD = 1 unidad



D10155-04

Rebate protection for latchbolt

Rebate protection for latchbolt, for open out door, 60x7.8x0.8 mm

-04 = Satin stainless steel AISI 304

PU = 1 piece

Protezione battuta per scrocco

Protezione battuta per scrocco, per porta apertura esterna, 60x7.8x0.8mm

-04 = Acciaio Inox AISI 304 satinato

UV = 1 pezzo

Protección de parada para pestillo

Protección de parada para pestillo, para puerta que se abre hacia fuera, 60x7.8x0.8 mm

-04 = Acero inoxidable AISI 304 satinado

CANTIDAD = 1 unidad

D10156-04

Screws **Viti** **Tornillos** 3.9

Screw

Cross recessed pan head screw,
stainless steel A2 Ø3.5x6.5 mm
DIN7981 / ISO7049

PU = 100 pieces

Vite

Vite testa bombata intaglio croce,
acciaio inox A2 Ø3.5x6.5 mm
DIN7981 / ISO7049

UV = 100 pezzi

Tornillo

Tornillo alomado y de chapa con ranura en cruz,
acero inoxidable A2 Ø3.5x6.5 mm
DIN7981 / ISO7049

CANTIDAD = 100 unidades

D99801-03

Screw

Cross recessed countersunk head screw,
stainless steel A2 Ø3.9x13 mm
DIN7982 / ISO7050

PU = 100 pieces

Vite

Vite testa svasata intaglio a croce,
acciaio inox A2 Ø3.9x13 mm
DIN7982 / ISO7050

UV = 100 pezzi

Tornillo

Tornillo avellanado con ranura en cruz,
acero inoxidable A2 Ø3.9x13 mm
DIN7982 / ISO7050

CANTIDAD = 100 unidades

D99802-03

Screw

Cross recessed countersunk head screw,
stainless steel A2 Ø4.2x9.5 mm
DIN7982 / ISO7050

PU = 100 pieces

Vite

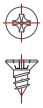
Vite testa svasata intaglio a croce,
acciaio inox A2 Ø4.2x9.5 mm
DIN7982 / ISO7050

UV = 100 pezzi

Tornillo

Tornillo avellanado con ranura en cruz,
acero inoxidable A2 Ø4.2x9.5 mm
DIN7982 / ISO7050

CANTIDAD = 100 unidades



D99815-03

Screw

Hexagon recessed cap head screw,
stainless steel A2 M4x6 mm
DIN912 / ISO4762

PU = 100 pieces

Vite

Vite testa cilindrica esagono incassato, acciaio inox A2 M4x6 mm
DIN912 / ISO4762

UV = 100 pezzi

Tornillo

Tornillo cilíndrico con hexágono interior,
acero inoxidable A2 M4x6 mm
DIN912 / ISO4762

CANTIDAD = 100 unidades

D99866-03

Screw

Hexagon recessed countersunk screw,
stainless steel A2 M4x6 mm
DIN7991 / ISO10642

PU = 100 pieces

Vite

Vite testa svasata piana esagono incassato,
acciaio inox A2 M4x6 mm
DIN7991 / ISO10642

UV = 100 pezzi

Tornillo

Tornillo cabeza plana avellanada con hexágono interior,
acero inoxidable A2 M4x6 mm
DIN7991 / ISO10642

CANTIDAD = 100 unidades

D99867-03

Note:

All uncoded screws are the responsibility of the customer.

Nota:

Tutte le viti non codificate sono a carico del cliente.

Nota:

Todos los tornillos no codificados son responsabilidad del cliente.

Screw

Cross recessed countersunk head screw, M4x8 mm
DIN7982 / ISO7050

PU = 100 pieces

Vite

Vite testa svasata intaglio a croce, M4x8 mm
DIN7982 / ISO7050

UV = 100 pezzi

Tornillo

Tornillo avellanado y de chapa con ranura en cruz, M4x8 mm
DIN7982 / ISO7050

CANTIDAD = 100 unidades

D99980-02

Screw

Glazing bead screw,
Ø4.8 x 9.5 mm, galvanized steel.

PU = 50 pieces

Vite

Vite fermavetro,
Ø4.8 x 9.5 mm, acciaio zincato.

UV = 50 pezzi

Tornillo

Tornillo para acristalamiento,
Ø4.8 x 9.5 mm, acero galvanizado.

CANTIDAD = 50 unidades

F99051-02

Screw

Glazing bead screw,
Ø4.2 x 9.5 mm, galvanized steel.

PU = 100 pieces

Vite

Vite fermavetro,
Ø4.2 x 9.5 mm, acciaio zincato.

UV = 100 pezzi

Tornillo

Tornillo para acristalamiento,
Ø4.2 x 9.5 mm, acero galvanizado.

CANTIDAD = 100 unidades

F99054-02

Screw

Glazing bead screw,
Ø4.8 x 13 mm, stainless steel A4.

PU = 100 pieces

Vite

Vite fermavetro,
Ø4.8 x 13 mm, acciaio inox A4.

UV = 100 pezzi

Tornillo

Tornillo para acristalamiento,
Ø4.8 x 13 mm, acero inoxidable A4.

CANTIDAD = 100 unidades

F99055-05

Rivet

Button-head rivet,
stainless steel A2 Ø3.2x8 mm
DIN7337 / ISO15973

PU = 100 pieces

Rivetto

Rivetto testa tonda
acciaio inox A2 Ø3.2x8 mm
DIN7337 / ISO15973

UV = 100 pezzi

Remache

Remache semiesférico,
acero inoxidable A2 Ø3.2x8 mm
DIN7337 / ISO15973

CANTIDAD = 100 unidades

D99950-03

Note:

All uncoded screws are the responsibility of the customer.

Nota:

Tutte le viti non codificate sono a carico del cliente.

Nota:

Todos los tornillos no codificados son responsabilidad del cliente.

Bushing

Bushing Ø10.8 mm, h 4.8 mm for snap-on glazing beads, stainless steel A2.

PU = 50 pieces

Boccola

Boccola Ø10.8 mm, h 4.8 mm per fissaggio fermavetri a scatto, acciaio inox A2.

UV = 50 pezzi

Casquillo

Casquillo Ø10.8 mm, h 4.8 mm para junquillos de acristalamiento a presión, acero inoxidable A2.

CANTIDAD = 50 unidades

F99061-03

Bonding

Adhesive for rebate gaskets.

PU = 1 piece

Adesivo

Adesivo per guarnizione di battuta.

UV = 1 pezzo

Pegamento

Pegamento para juntas de encaje.

CANTIDAD = 1 unidad

OS 364991

Primer

Primer for self-adhesive tape.

PU = 1 piece

Primer

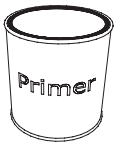
Primer per nastro autoadesivo.

UV = 1 pezzo

Primer

Primer para cinta autoadhesiva.

CANTIDAD = 1 unidad



I99005-75

Assembling tools — Utensili di assemblaggio — Herramientas de montaje

Alignment pin

For welding of hinge
C99008-nn

-03 = Stainless steel AISI 304 2B

PU = 1 piece

Spina di allineamento

Per saldatura cerniera
C99008-nn

-03 = Acciaio inox AISI 304 2B

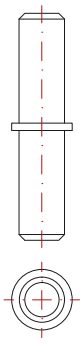
UV = 1 pezzo

Pasador de posicionamiento

Pasador de posicionamiento para
soldadura de bisagra C99008-nn

-03 = Acero inoxidable AISI 304 2B

CANTIDAD = 1 unidad



D99401-03

Adjusting tool

Adjusting tool for 3D hinge
C99008-nn

-03 = Stainless steel AISI 304 2B

PU = 1 piece

Chiave di regolazione

Chiave di regolazione per cerniera
3D C99008-nn

-03 = Acciaio inox AISI 304 2B

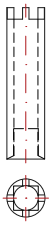
UV = 1 pezzo

Llave

Llave de ajuste para calibrar
bisagras 3D C99008-nn

-03 = Acero inoxidable AISI 304 2B

CANTIDAD = 1 unidad



D99501-03

Alignment pin

For welding of hinge
C99009-nn

PU = 1 piece

Spina di allineamento

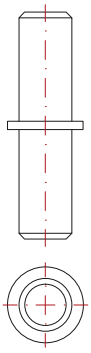
Per saldatura cerniera
C99009-nn

UV = 1 pezzo

Pasador de posicionamiento

Pasador de posicionamiento para
soldadura de bisagra C99009-nn

CANTIDAD = 1 unidad



D99402-31

Adjusting tool

Adjusting tool for 3D hinge
C99009-nn

PU = 1 piece

Chiave di regolazione

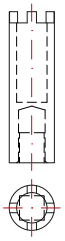
Chiave di regolazione per cerniera
3D C99009-nn

UV = 1 pezzo

Llave

Llave de ajuste para calibrar
bisagras 3D C99009-nn

CANTIDAD = 1 unidad



D99502-31

Scissors

Seal-cutting scissor,
15°, 30°, 45°, 90° cutting angle.

PU = 1 piece

Forbici

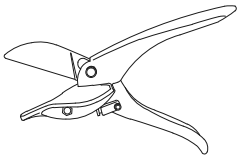
Forbici per guarnizioni,
taglio 15°, 30°, 45°, 90°.

UV = 1 pezzo

Cizallas

Cizalla para juntas,
corte de 15°, 30°, 45°, 90°.

CANTIDAD = 1 unidad



D99540-02

Scissors
Spare parts

Blades for scissor D99540-02

PU = 1 pair

Forbici
Pezzi di ricambio

Lame per forbici D99540-02

UV = 1 coppia

Cizallas
Piezas de repuesto

Cuchillas por cizalla D99540-02

CANTIDAD = 1 par

Q99540C-99

Scissors

Seal-cutting scissor,
45° cutting angle.
For G99019-60

PU = 1 piece

Forbici

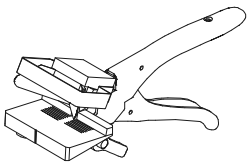
Forbici per guarnizioni,
taglio 45°.
Per G99019-60

UV = 1 pezzo

Cizallas

Cizalla para juntas,
corte de 45°.
Para G99019-60

CANTIDAD = 1 unidad



D99543-02

Scissors
Spare parts

Base for scissor D99543-02

PU = 1 piece

Forbici
Pezzi di ricambio

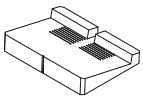
Base per forbici D99543-02

UV = 1 pezzo

Cizallas
Piezas de repuesto

Soporte por cizalla D99543-02

CANTIDAD = 1 unidad



Q99543A-99

Scissors
Spare parts

Blades retainer with blades and safety bracket for scissor D99543-02

PU = 1 piece

Forbici
Pezzi di ricambio

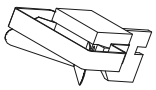
Porta lame con lame e protezione per forbici D99543-02

UV = 1 pezzo

Cizallas
Piezas de repuesto

Portacuchillas completo con cuchillas por cizalla D99543-02

CANTIDAD = 1 unidad



Q99543B-99

Scissors
Spare parts

Blades for scissor D99543-02

PU = 4 pieces

Forbici
Pezzi di ricambio

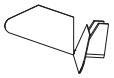
Lame per forbici D99543-02

UV = 4 pezzi

Cizallas
Piezas de repuesto

Cuchillas por cizalla D99543-02

CANTIDAD = 4 unidades



Q99543C-99

Scissors
Spare parts

Locking lever for scissor D99543-02

PU = 1 pair

Forbici
Pezzi di ricambio

Leva di bloccaggio per forbici D99543-02

UV = 1 coppia

Cizallas
Piezas de repuesto

Palanca de bloqueo por cizalla D99543-02

CANTIDAD = 1 par

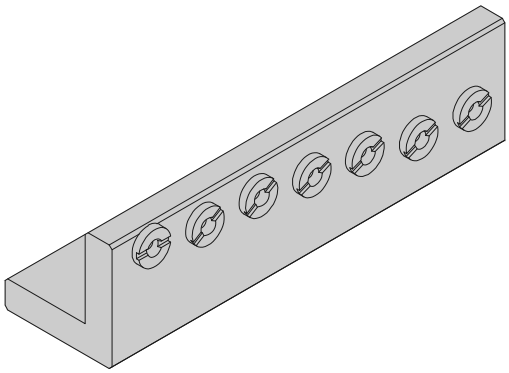
Q99543D-99

Installation templates | Dime di installazione | Plantillas de instalación 3.11

Installation
Template for glazing beads

Montaggio
Dima per fermavetri

Montaje
Plantilla para junquillos



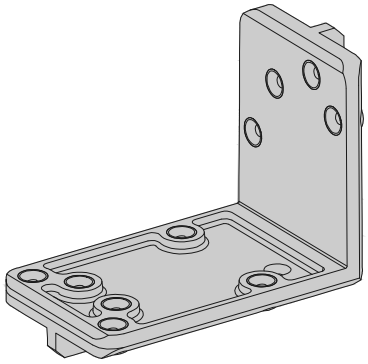
D99441-00

See installation page 5.12.17

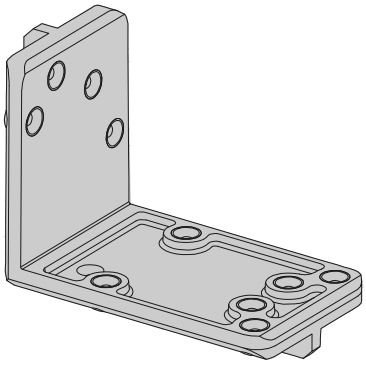
Templates for Tilt&Turn fittings

Dime per ferramenta anta ribalta

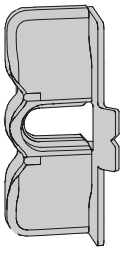
Plantilla para herrajes para ventana oscilante



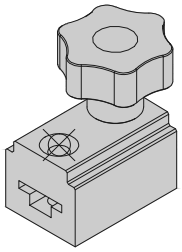
MC 217092
See installation page 5.9.211



MC 217093
See installation page 5.9.211



MC 229643
See installation page 5.9.227



MC 463153
See installation page 5.9.199

Cutting templates | Dime di taglio | Plantillas de corte

Cutting templates

Aluminum, supports for cutting profiles, length 300 mm

PU = 1 piece

Dime di taglio

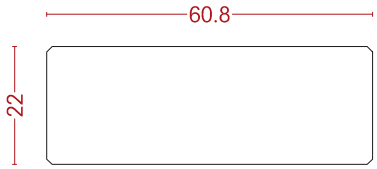
Alluminio, per il taglio dei profili, lunghezza 300 mm

UV = 1 pezzo

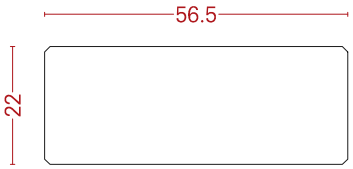
Plantilla de corte

Aluminio, base para serrar los perfiles, longitud de 300 mm

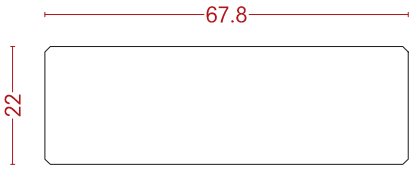
CANTIDAD = 1 unidad



D10414-00



D10415-00



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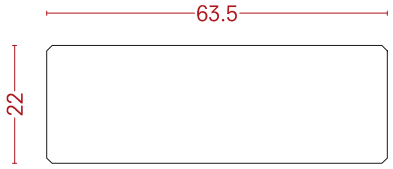


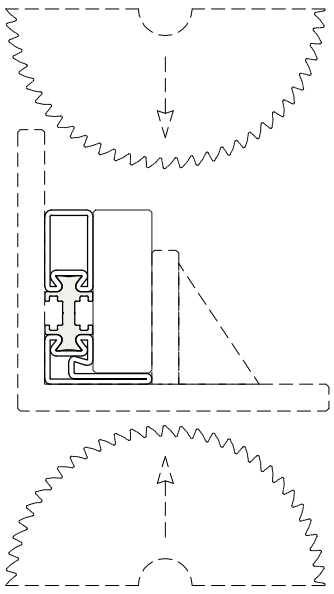
D10417-00

Profile cutting

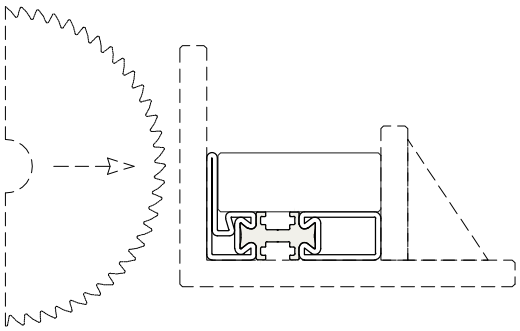
Taglio dei profili

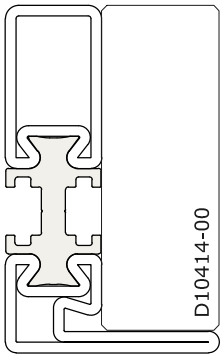
Corte de Perfil

Top cut
Taglio dall'alto
Corte vertical



Side cut
Taglio dal lato
Corte horizontal





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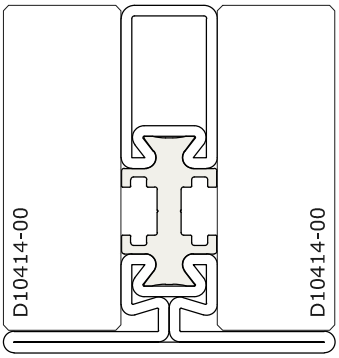

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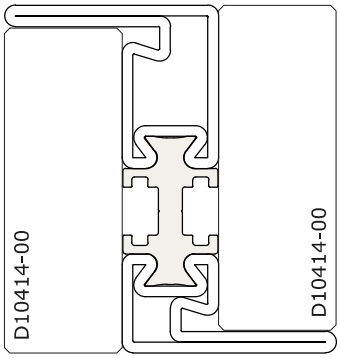

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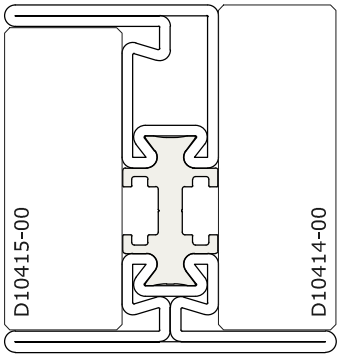

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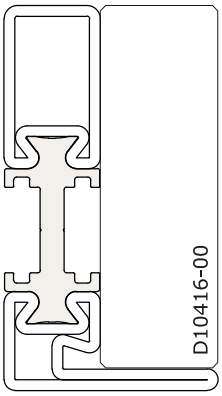

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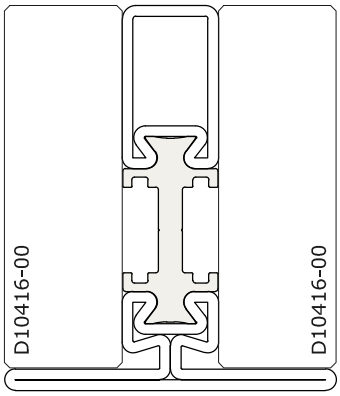

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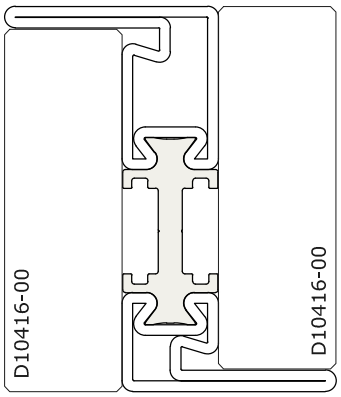

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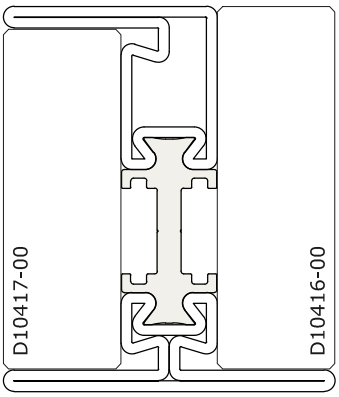

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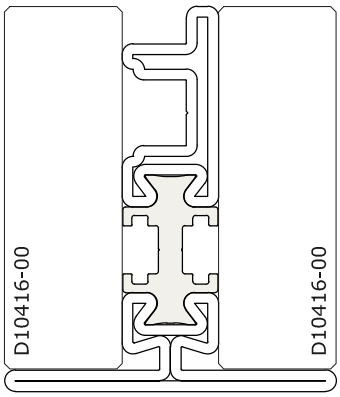

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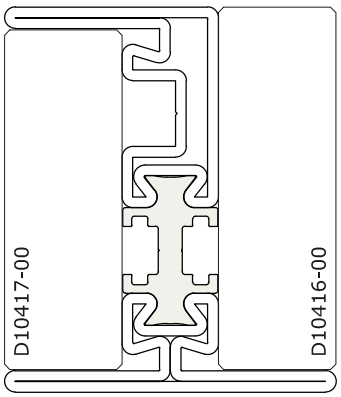

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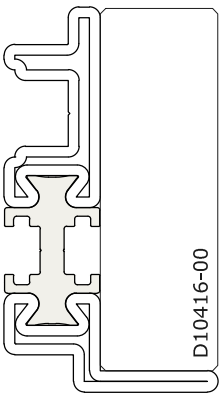

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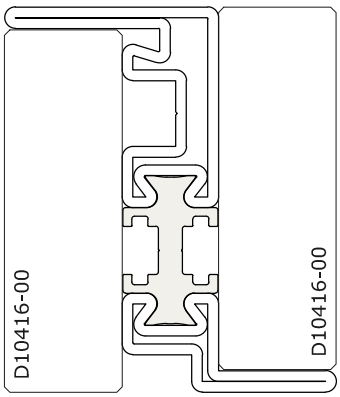


MT 7218ZR-nn

Examples | Esempi | Ejemplos 4.0

Window details	Sezioni finestre	Detalles de ventanas	4.1
Door details	Sezioni porte	Detalles de puertas	4.2
Details, structural connections	Dettagli di costruzione	Detalles de construcción	4.3
Wall connections	Attacchi a muro	Cierres constructivos	4.4

Window details

Sezioni finestre

Detalles de ventanas

Legend

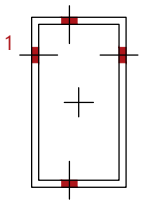
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

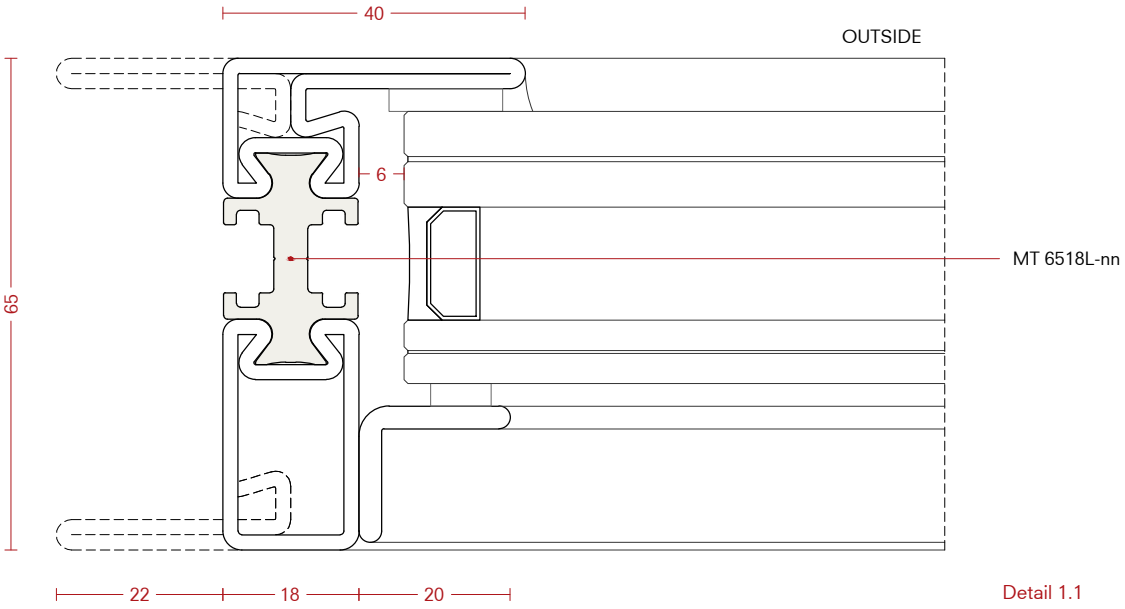
Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

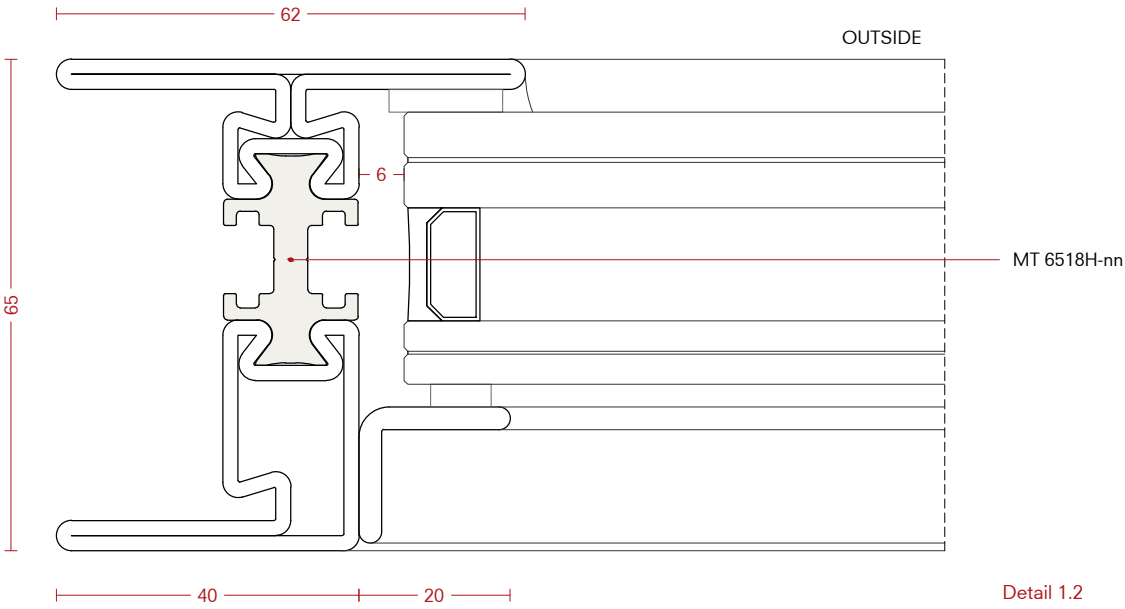
Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2





Detail 1.1



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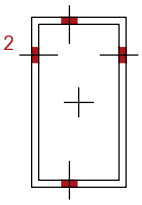

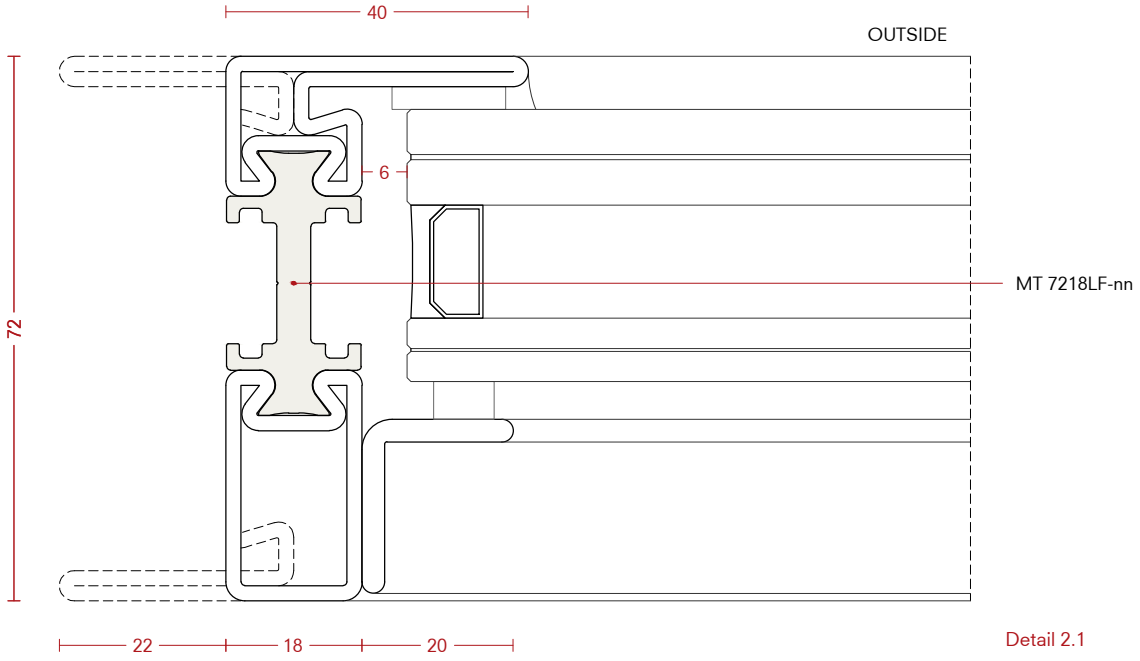

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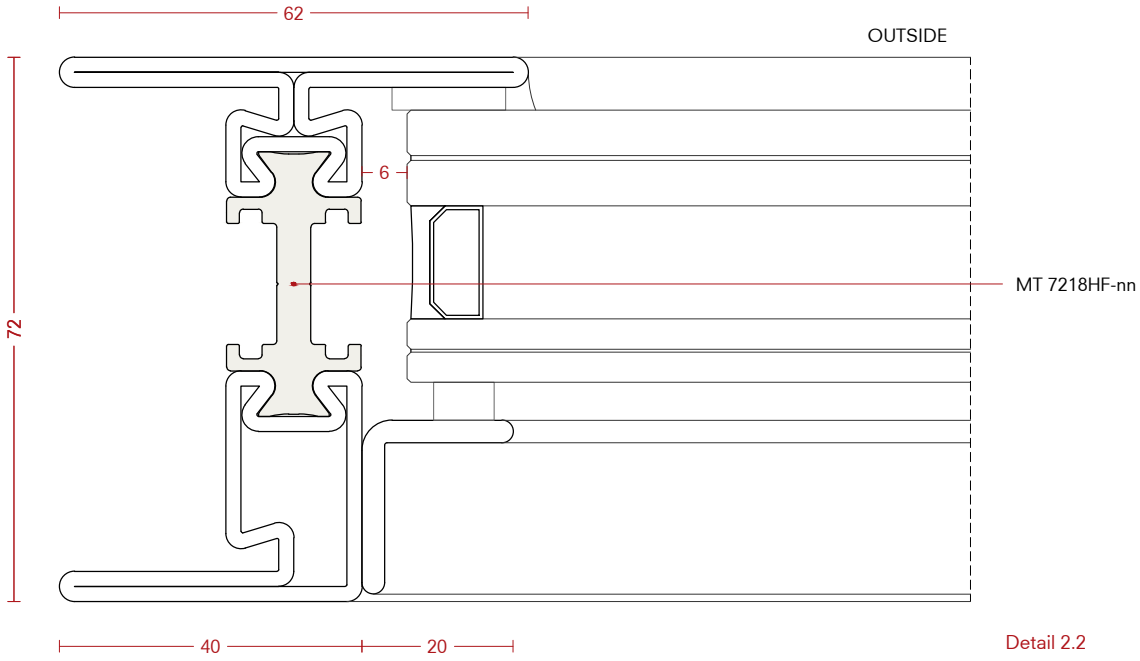

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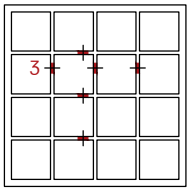

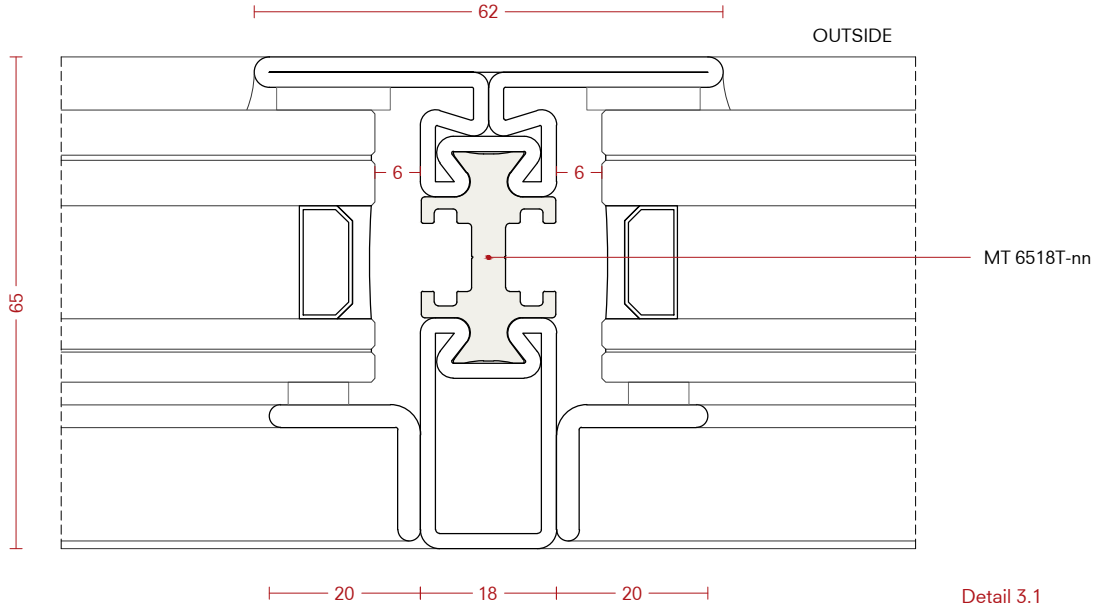

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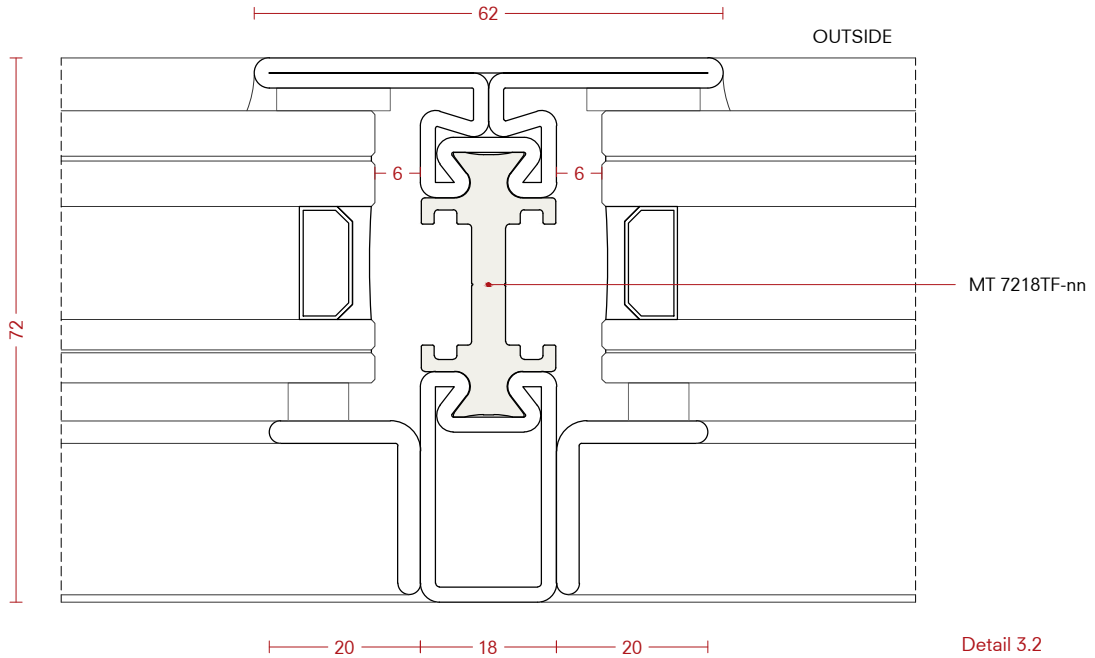

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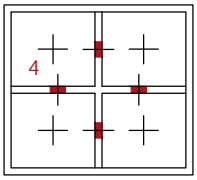

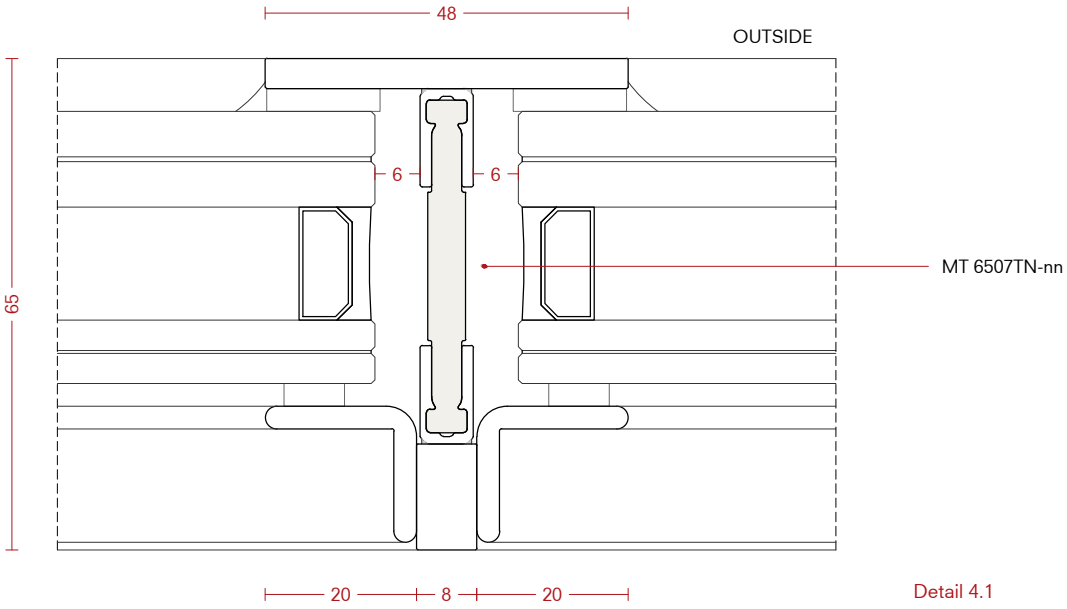

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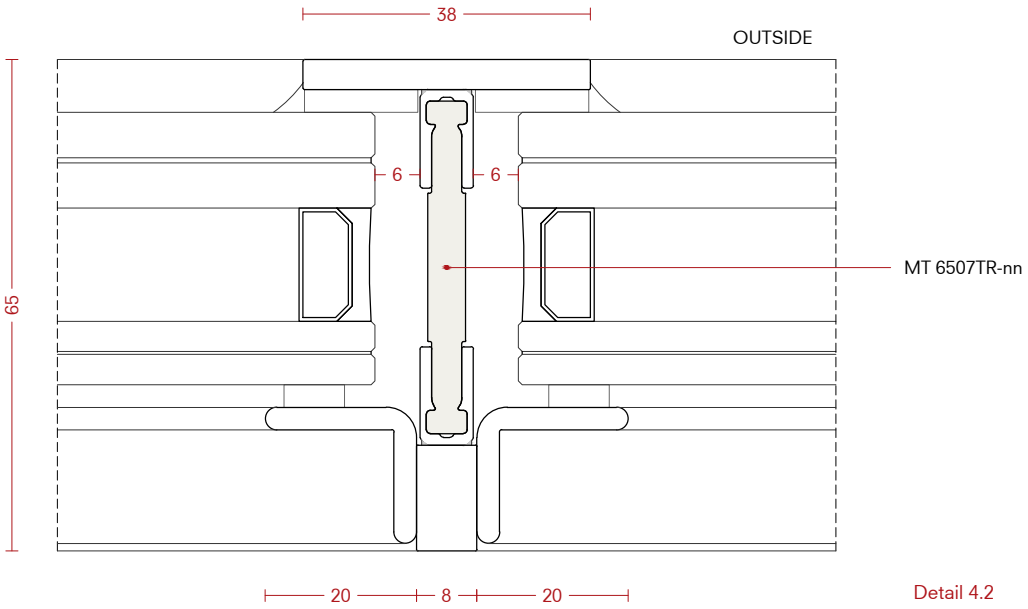

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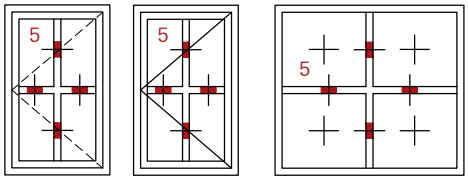

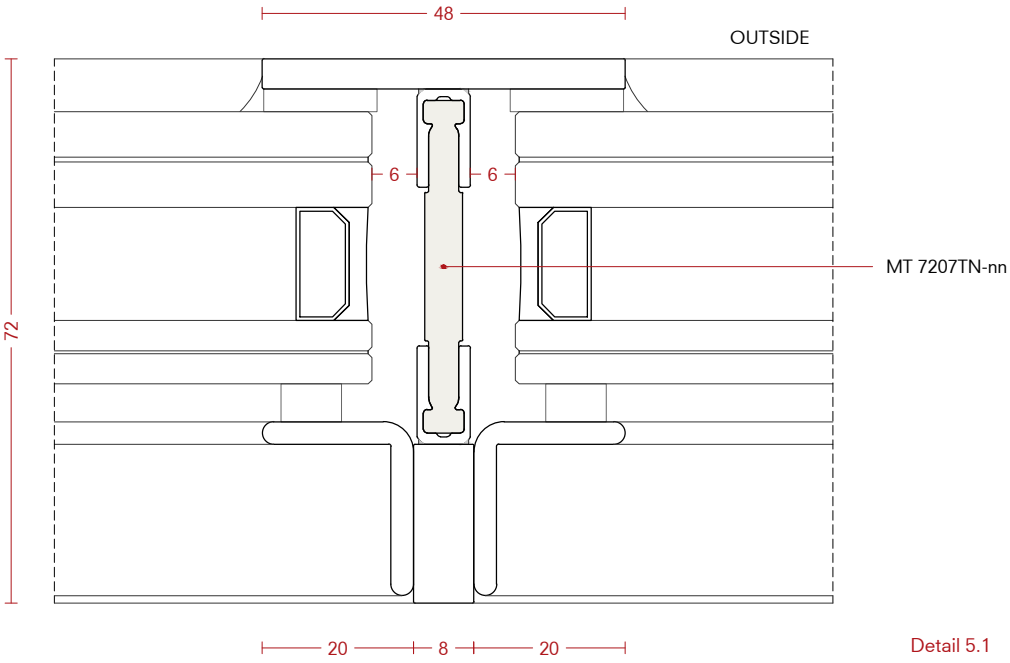

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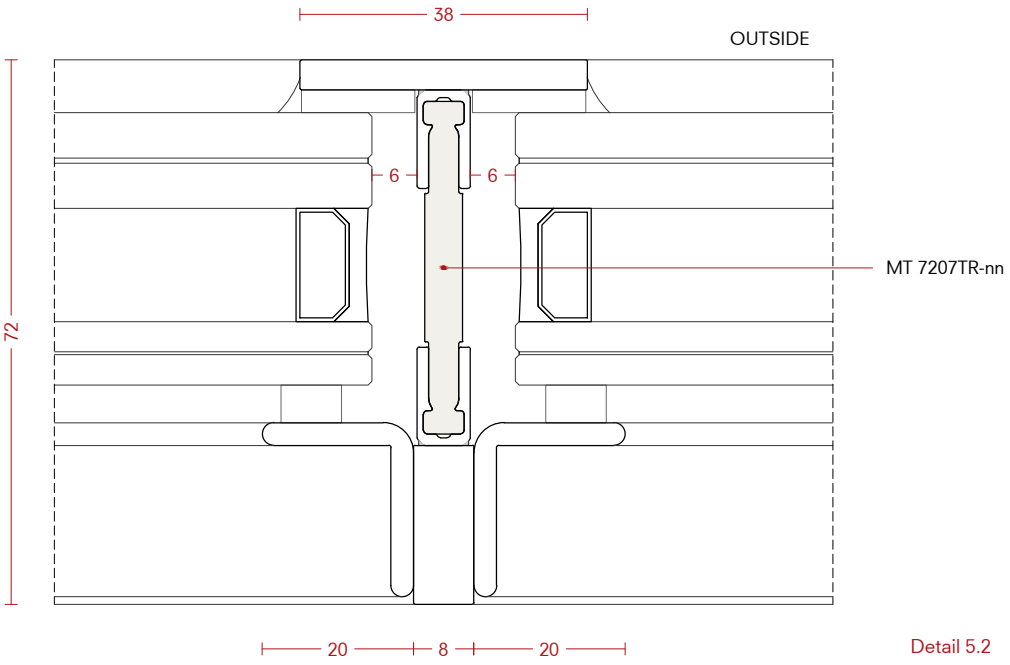

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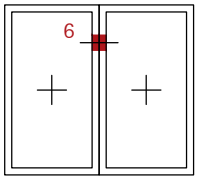

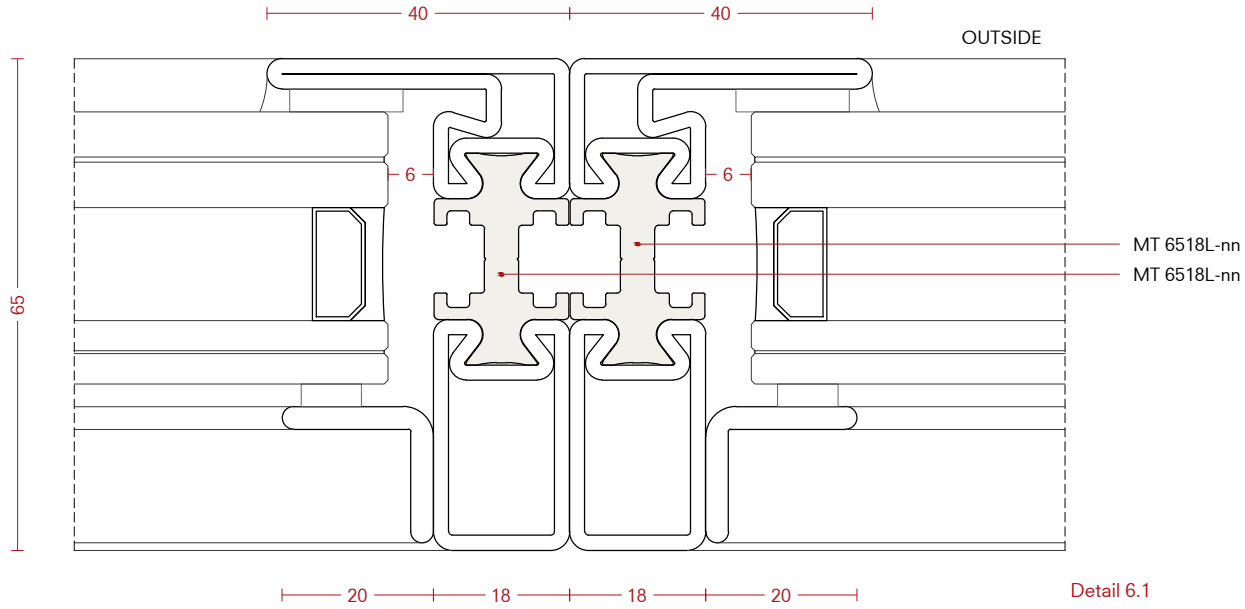

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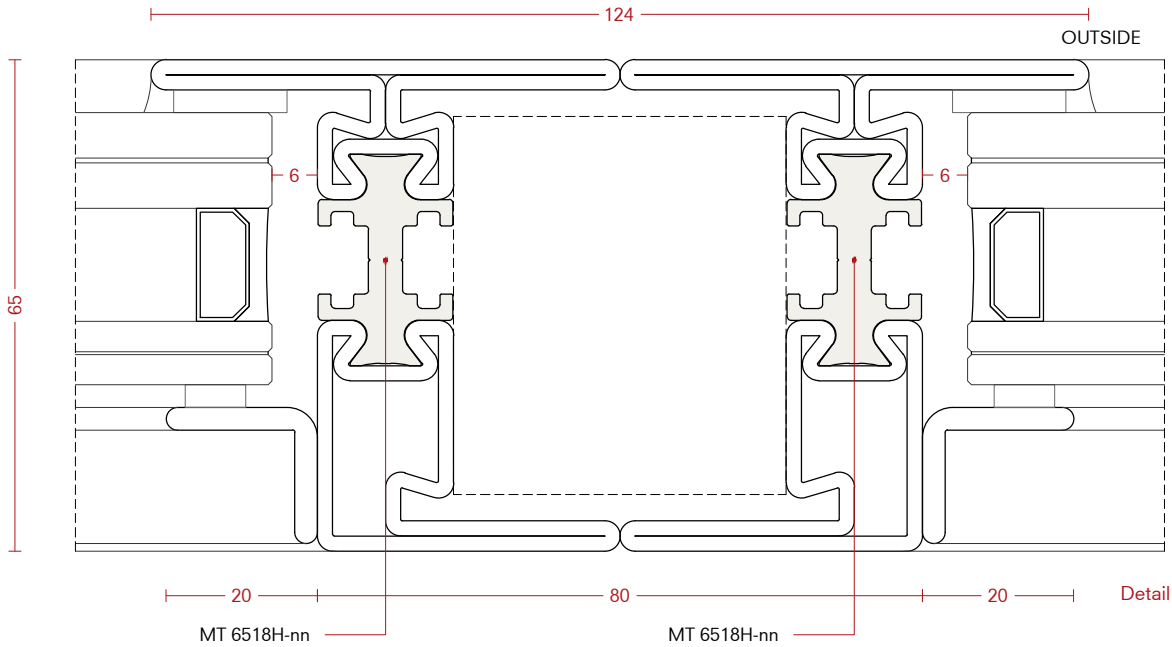

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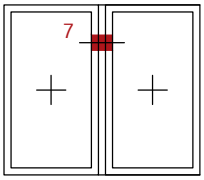
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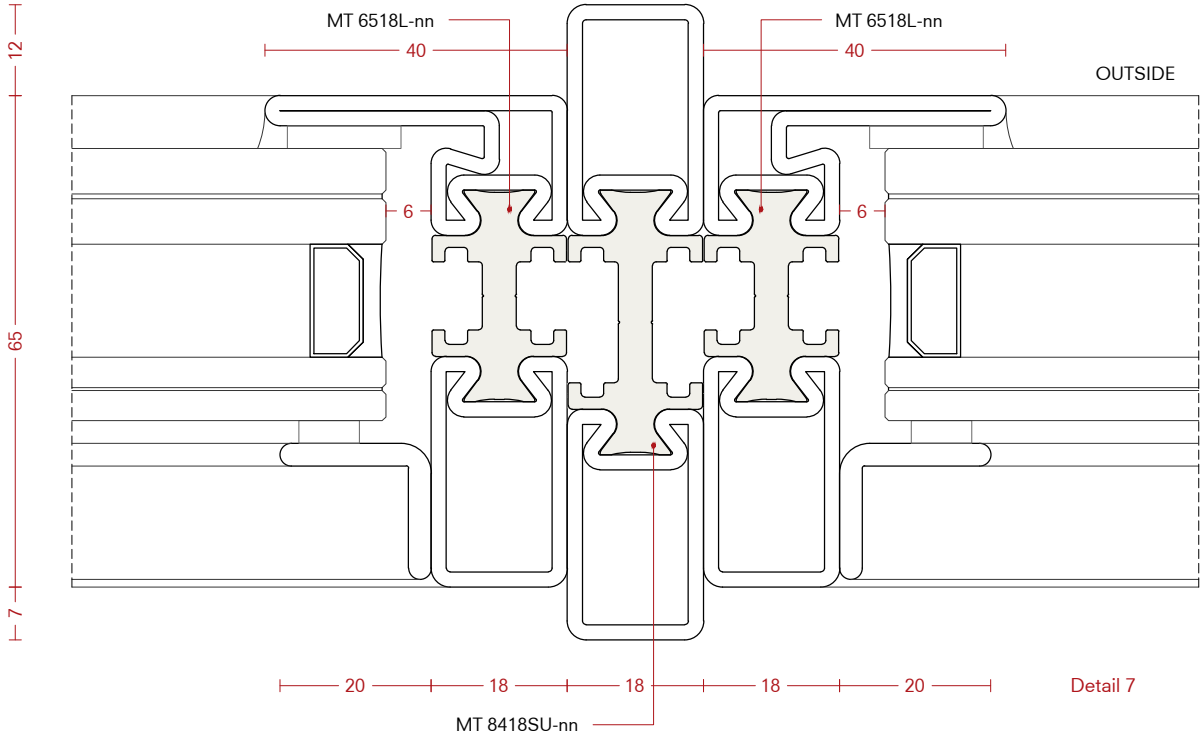
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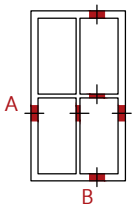
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B

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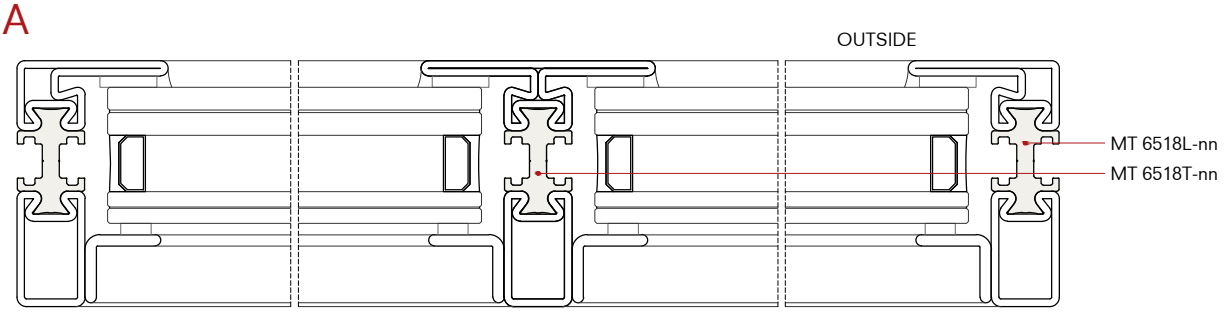
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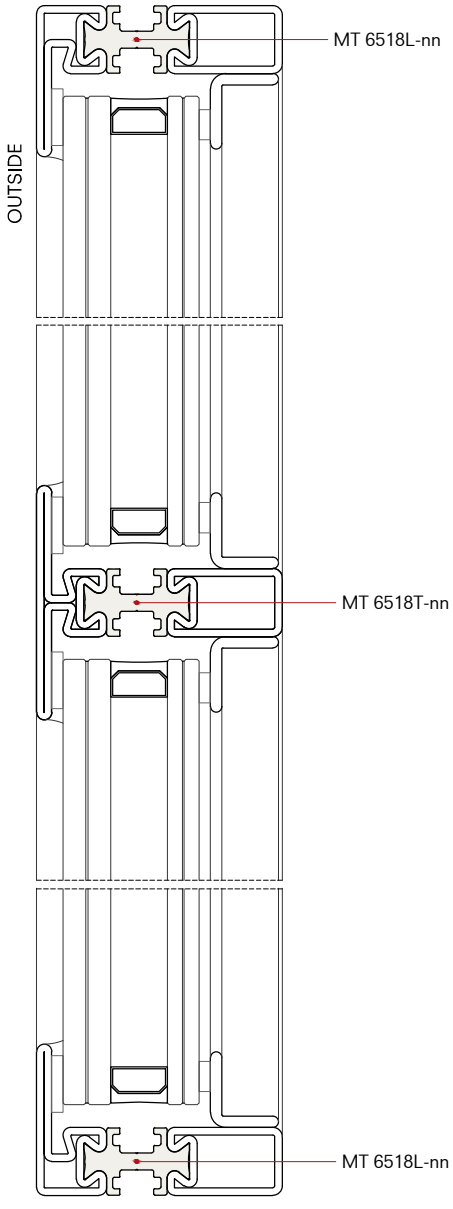
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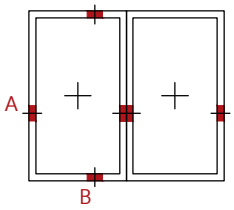

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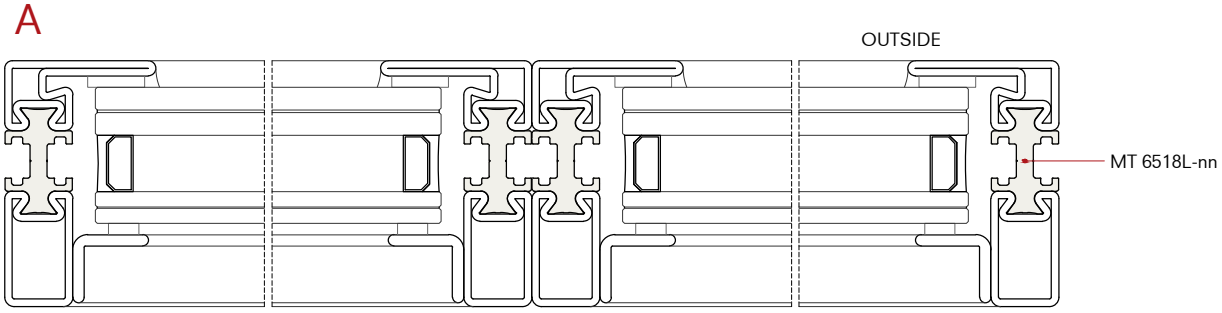

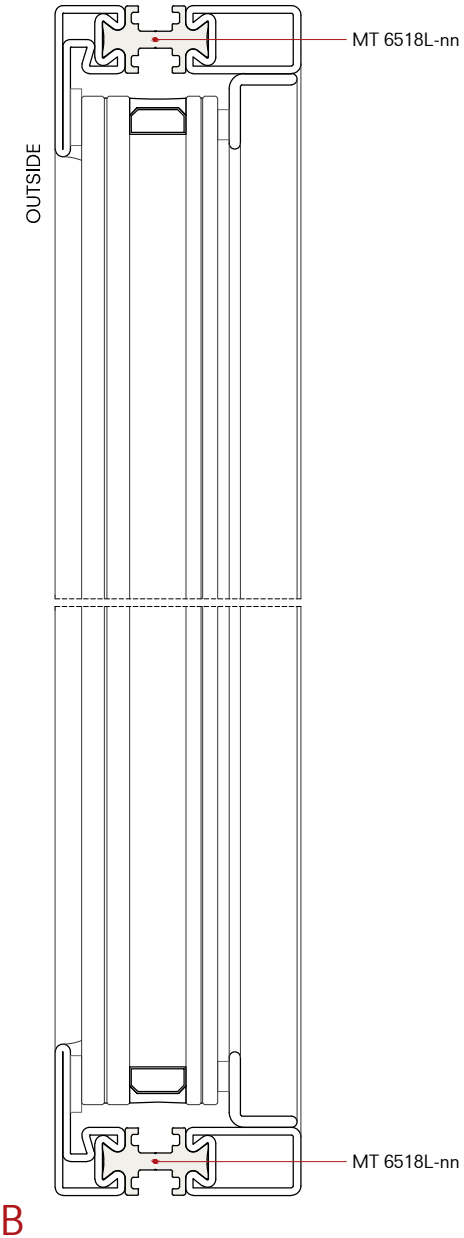

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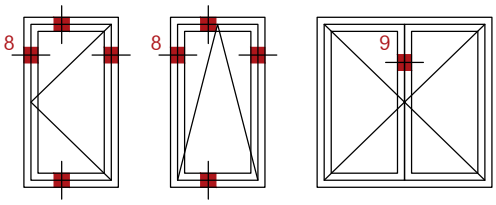

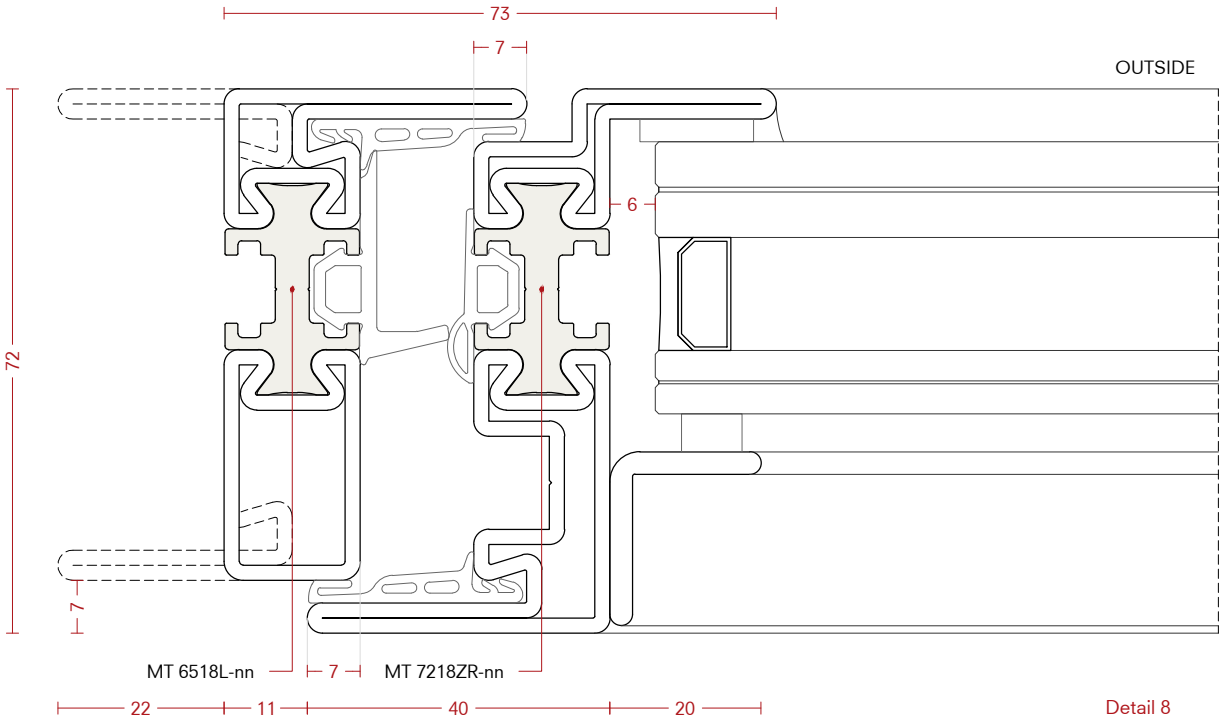

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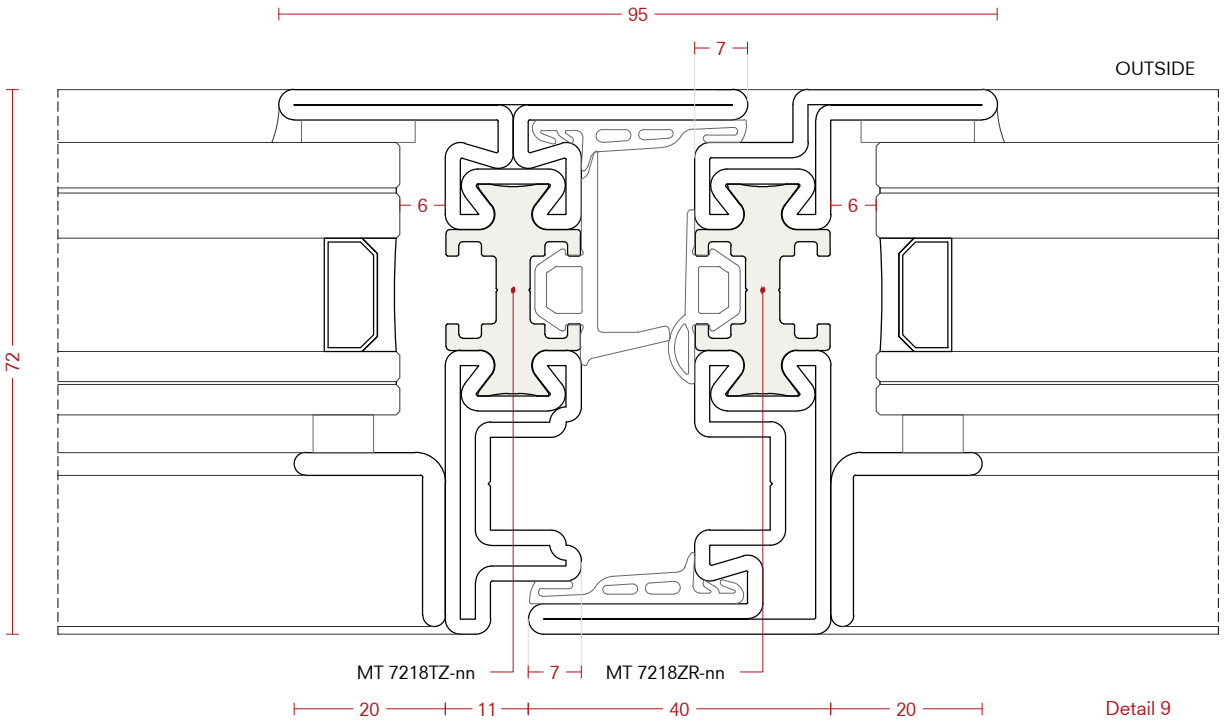

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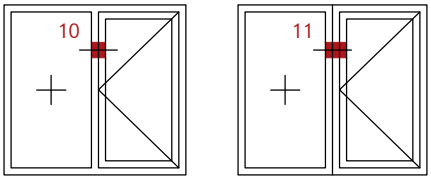

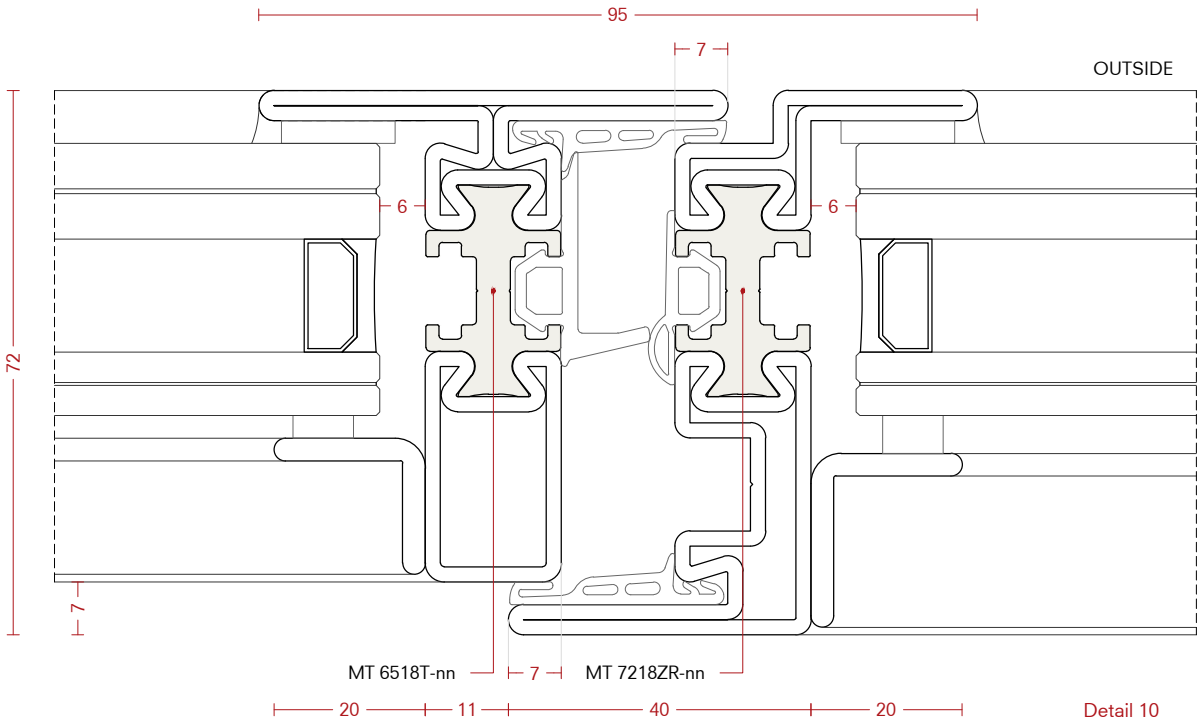

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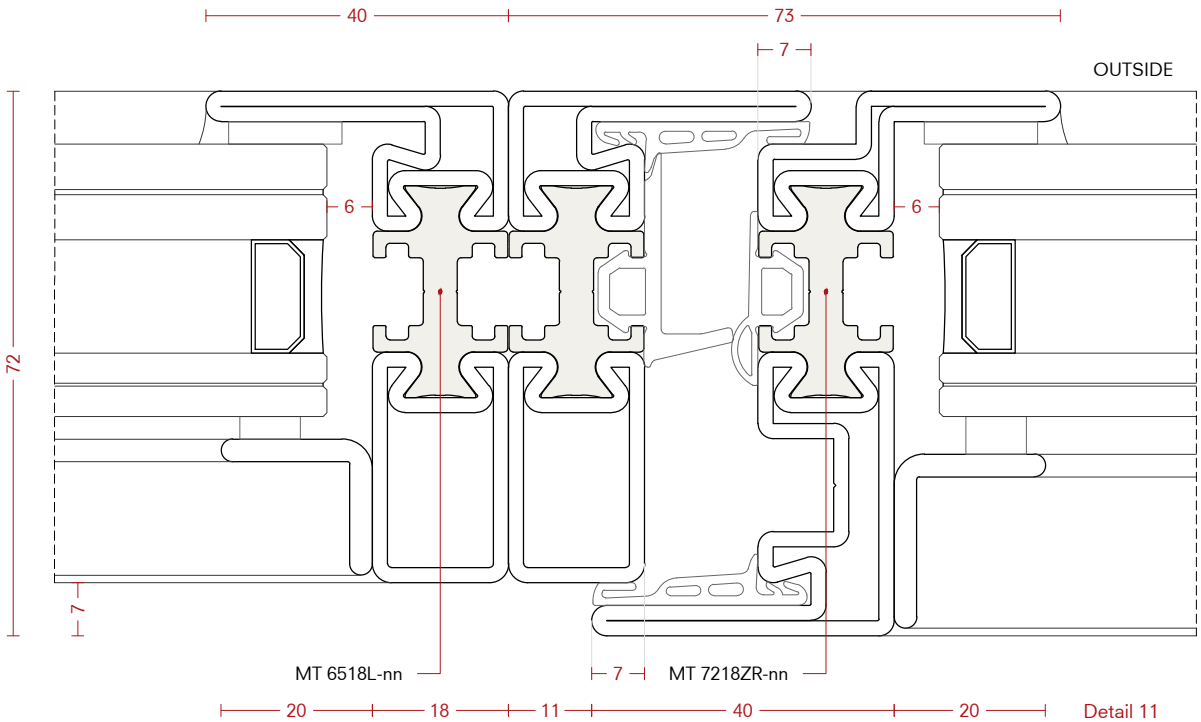

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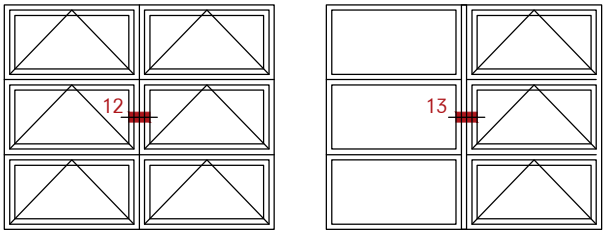
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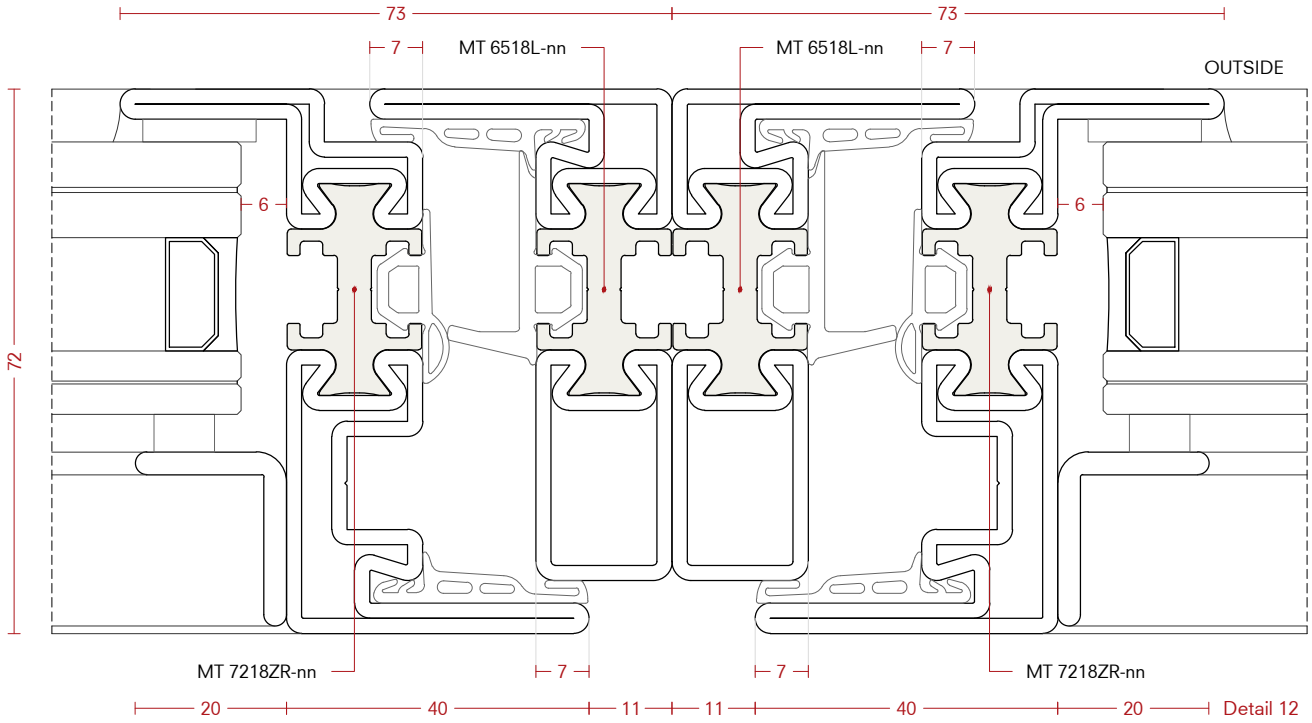
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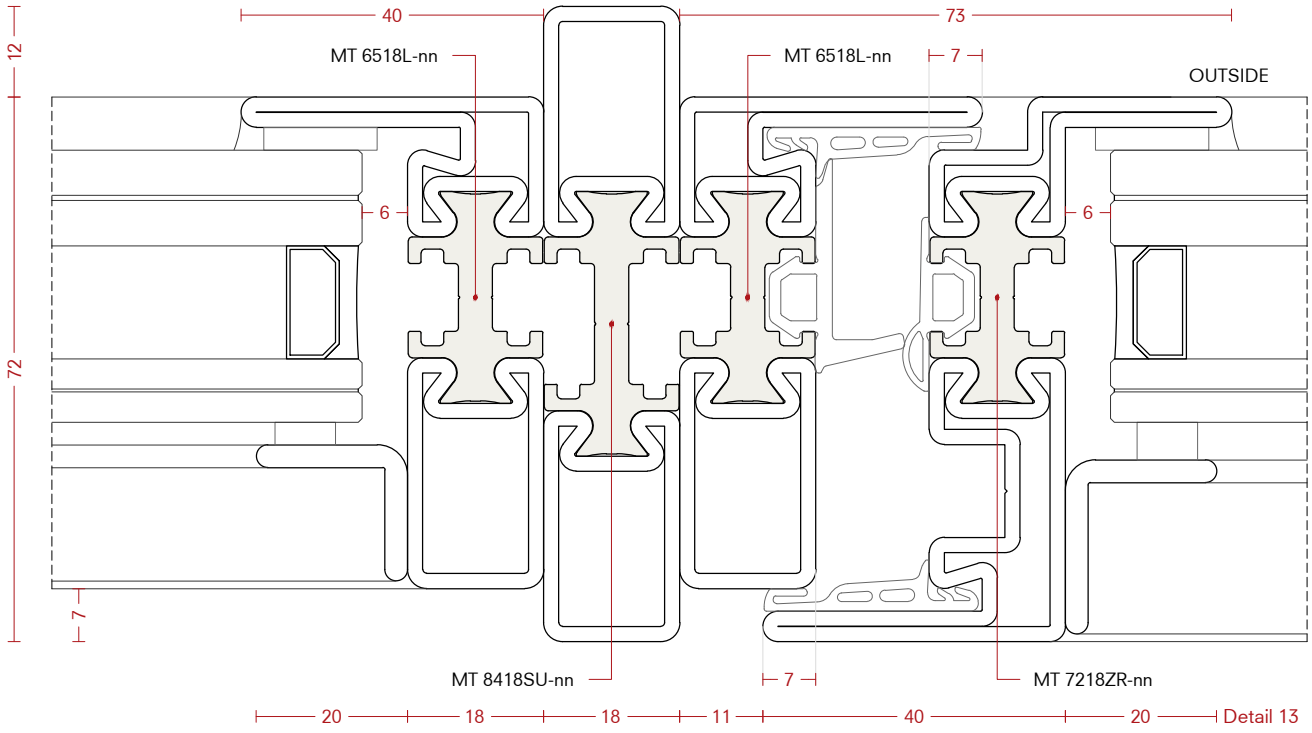
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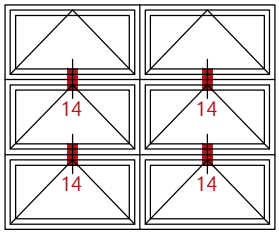
Detail 13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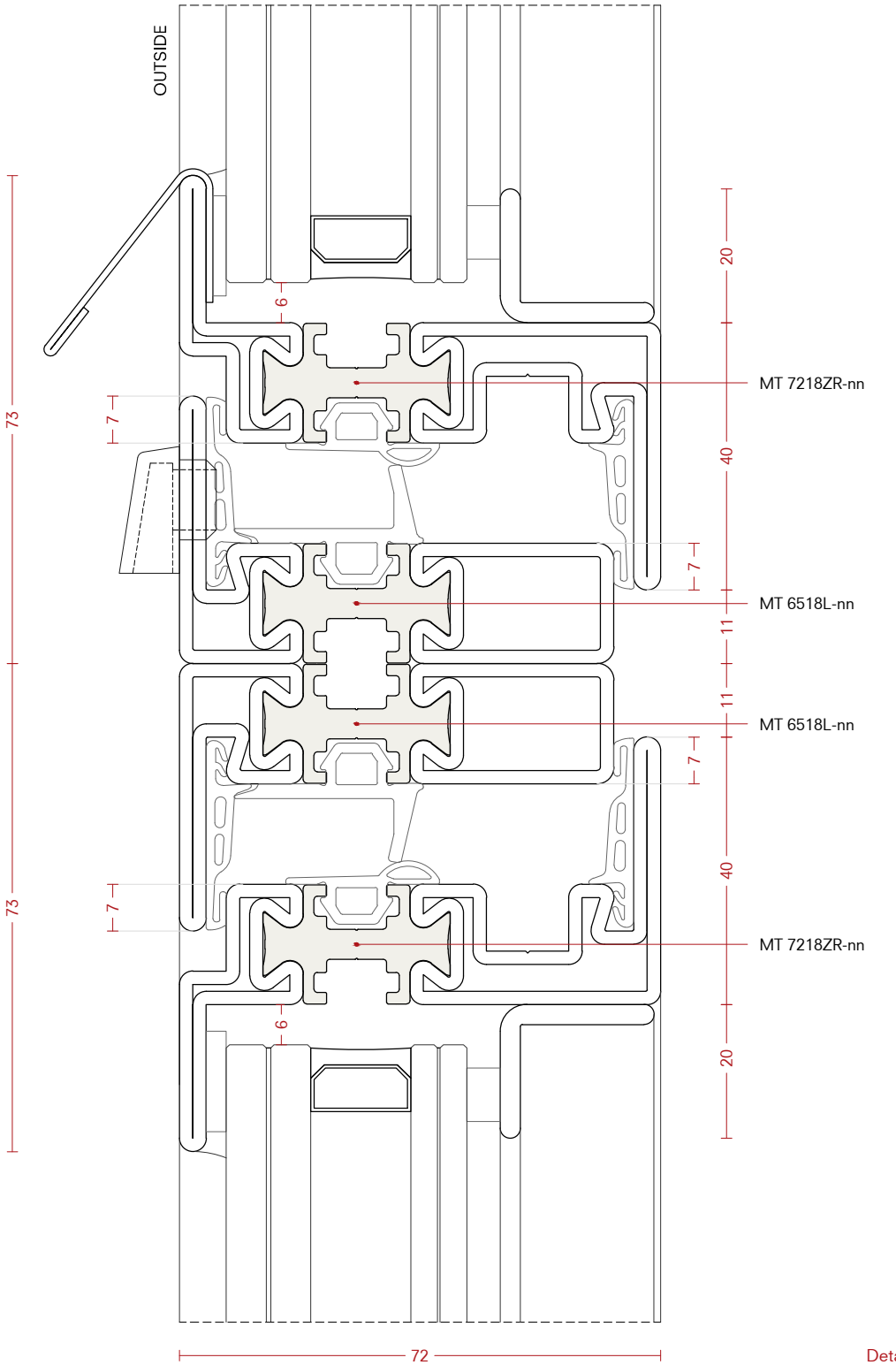
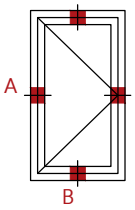
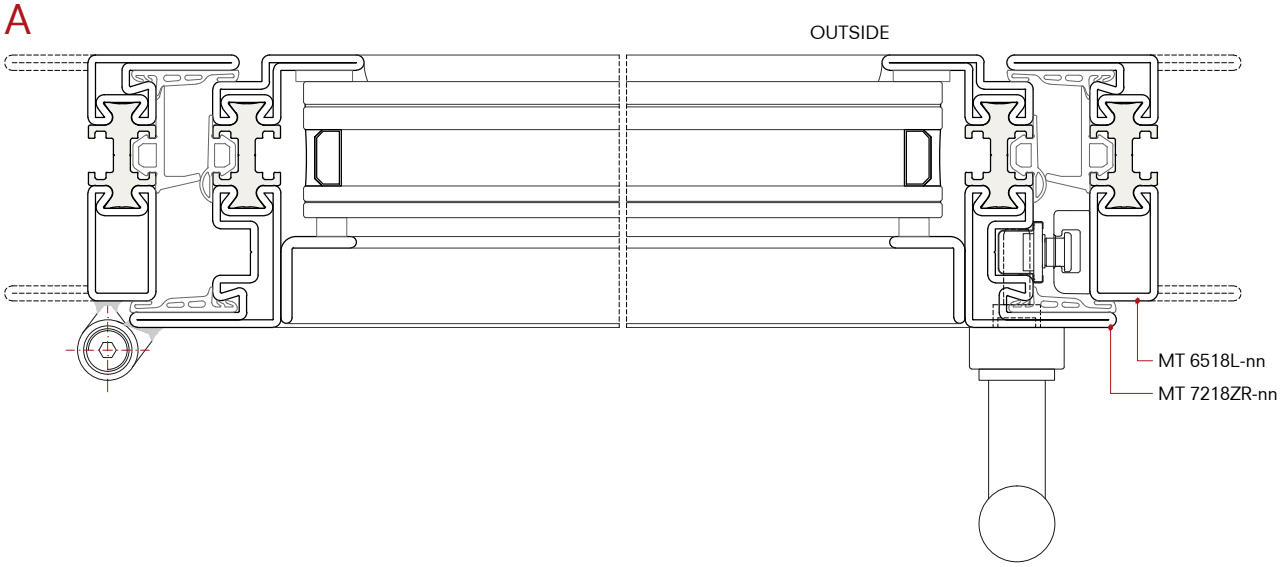

OUTSIDE
6
7
73
20
40
MT 7218ZR-nn
7
MT 6518L-nn
11
11
MT 6518L-nn
7
7
40
MT 7218ZR-nn
73
6
20
72

Detail 14


A
B

A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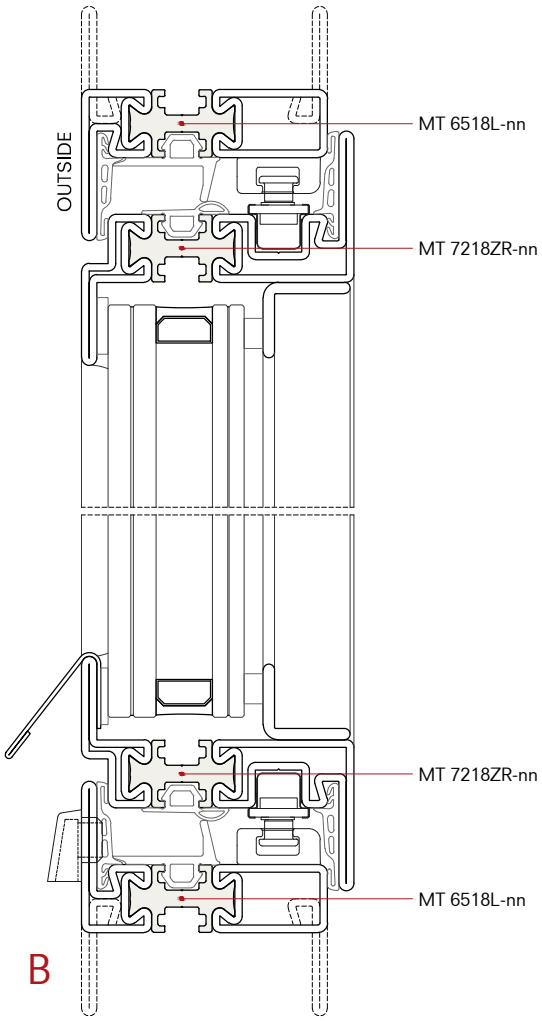
MT 7218ZR-nn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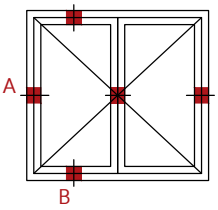
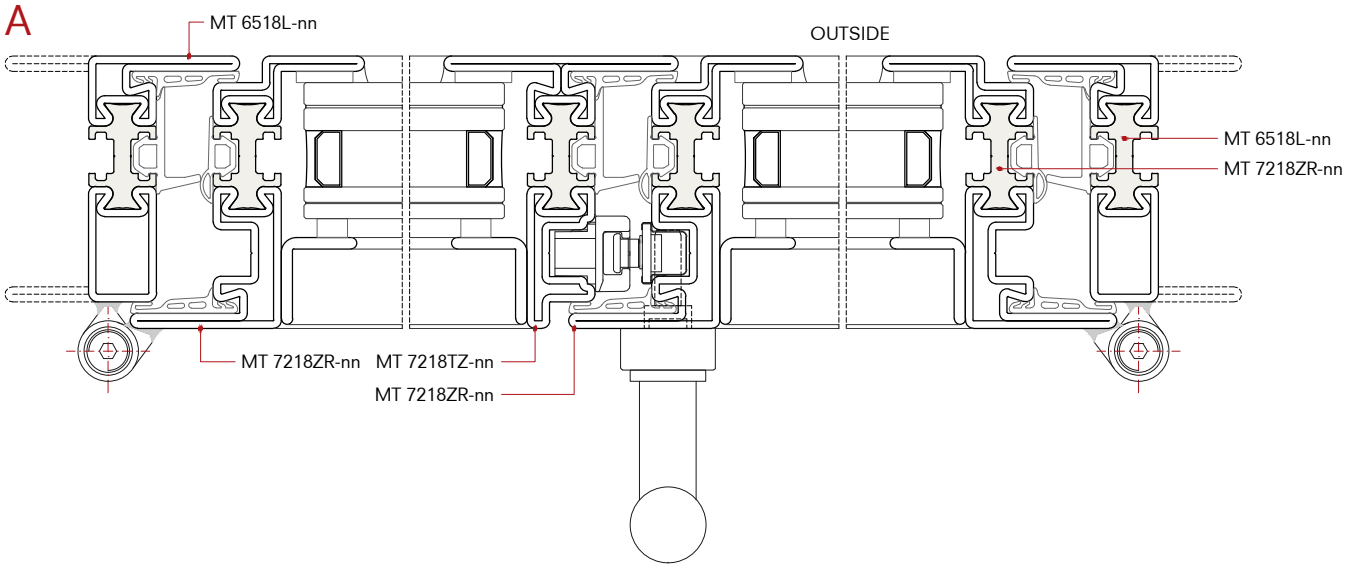
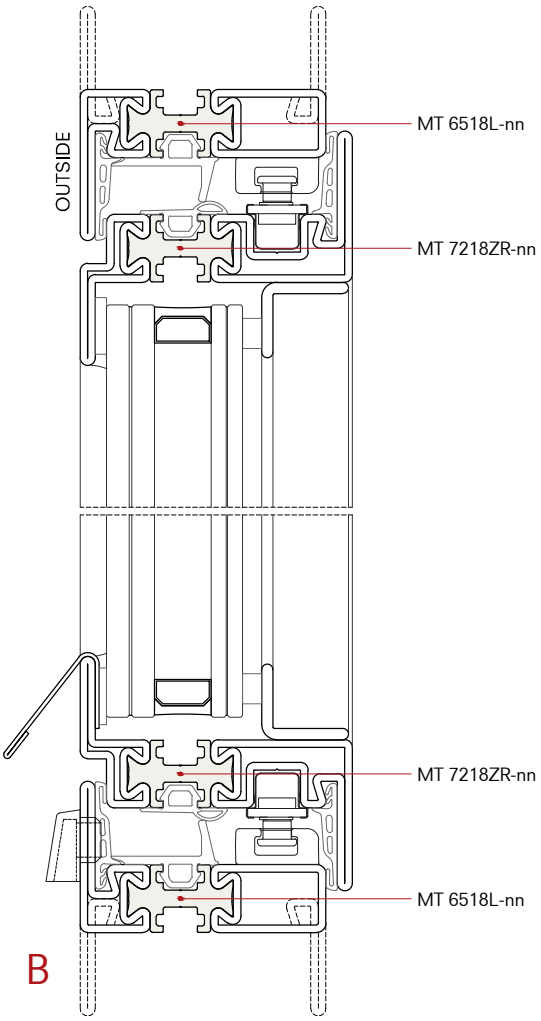
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518L-nn
B


A
B


A
MT 6518L-nn
OUTSIDE
MT 6518L-nn
MT 7218ZR-nn
MT 7218ZR-nn
MT 7218TZ-nn
MT 7218ZR-nn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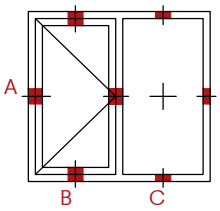
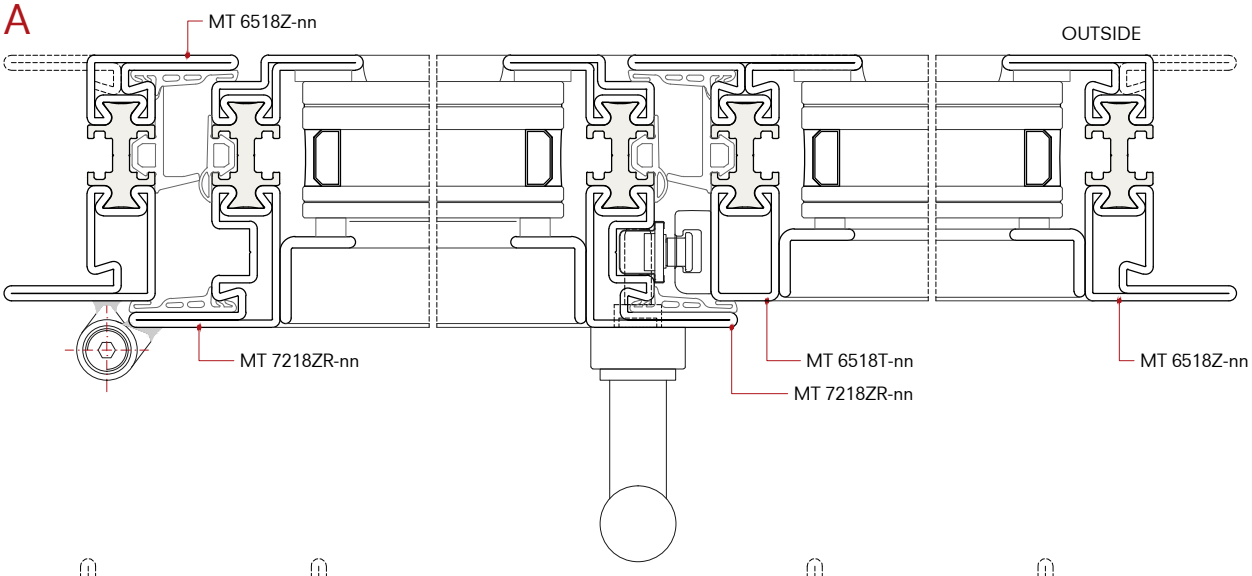
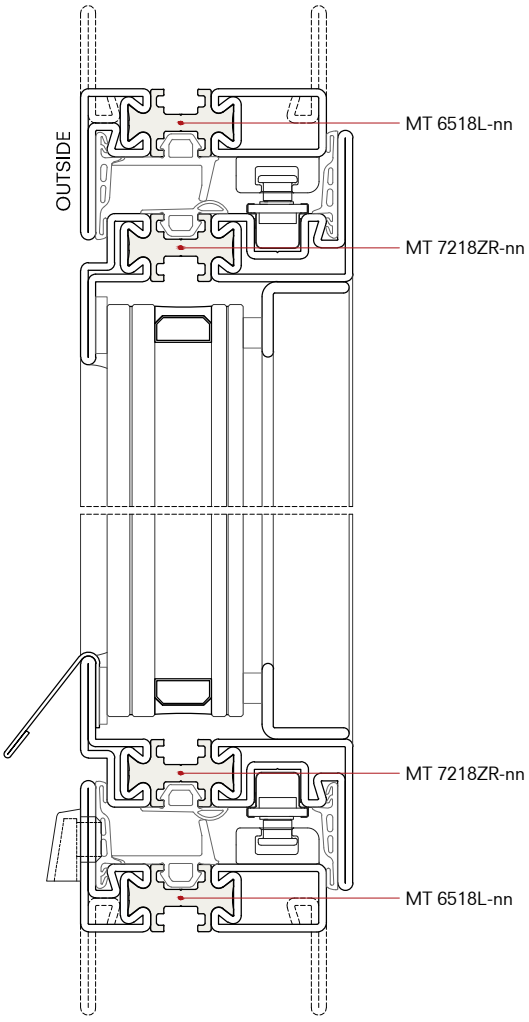
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518L-nn
B


A
B
C

A


MT 6518Z-nn
OUTSIDE
MT 7218ZR-nn
MT 6518T-nn
MT 7218ZR-nn
MT 6518Z-nn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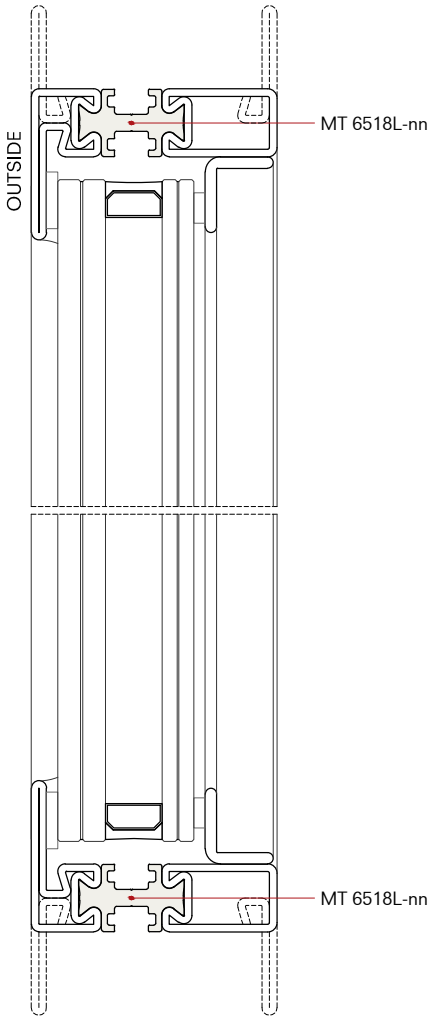
MT 6518L-nn
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518L-nn

B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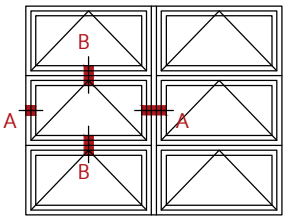
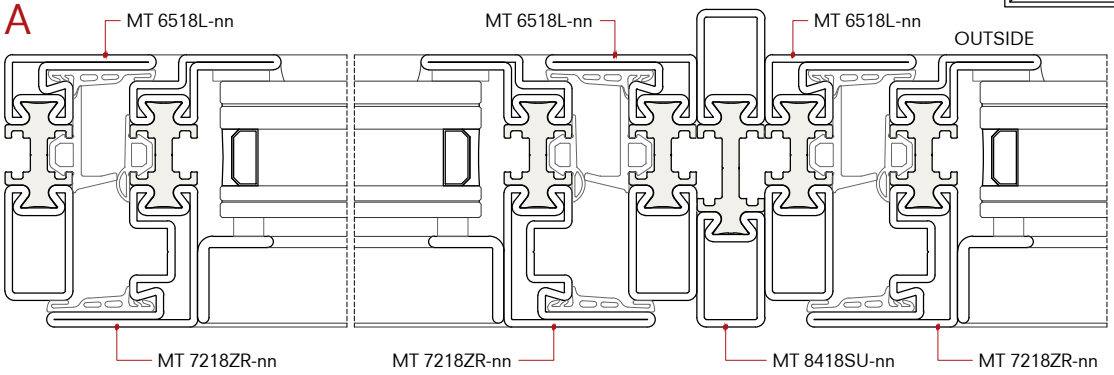
MT 6518L-nn
MT 6518L-nn

C


B
A
A
B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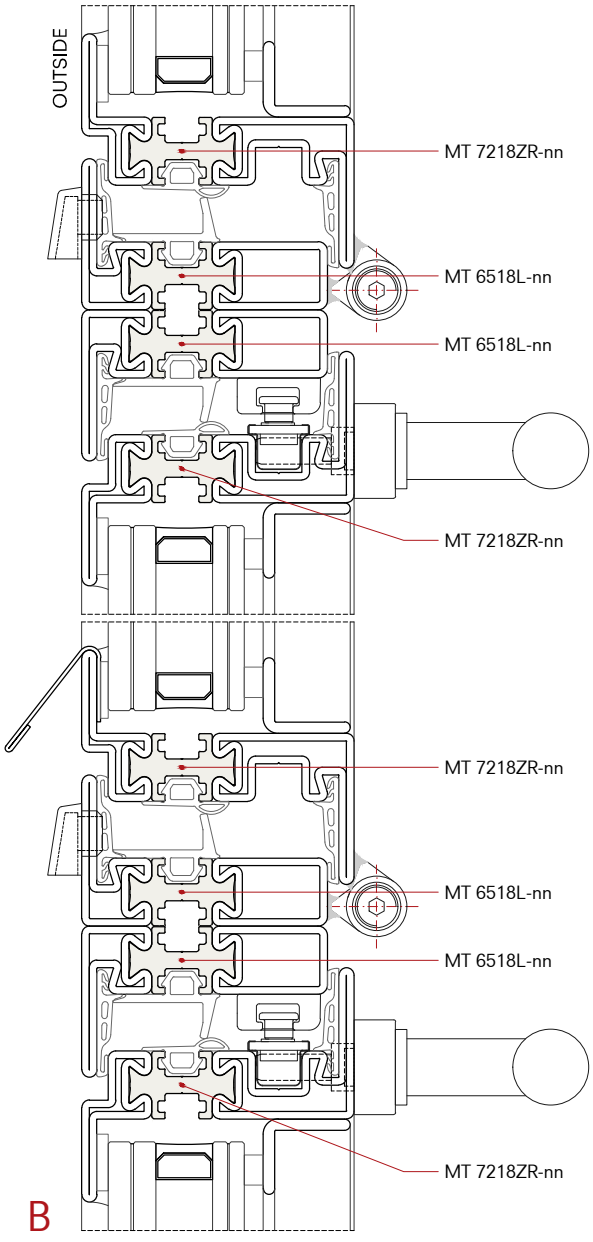
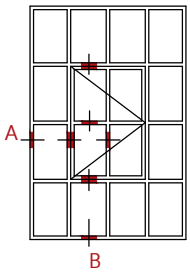
MT 6518L-nn
MT 6518L-nn
MT 6518L-nn
OUTSIDE
MT 7218ZR-nn
MT 7218ZR-nn
MT 8418SU-nn
MT 7218ZR-nn


OUTSIDE
MT 7218ZR-nn
MT 6518L-nn
MT 6518L-nn
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518L-nn
MT 6518L-nn
MT 7218ZR-nn
B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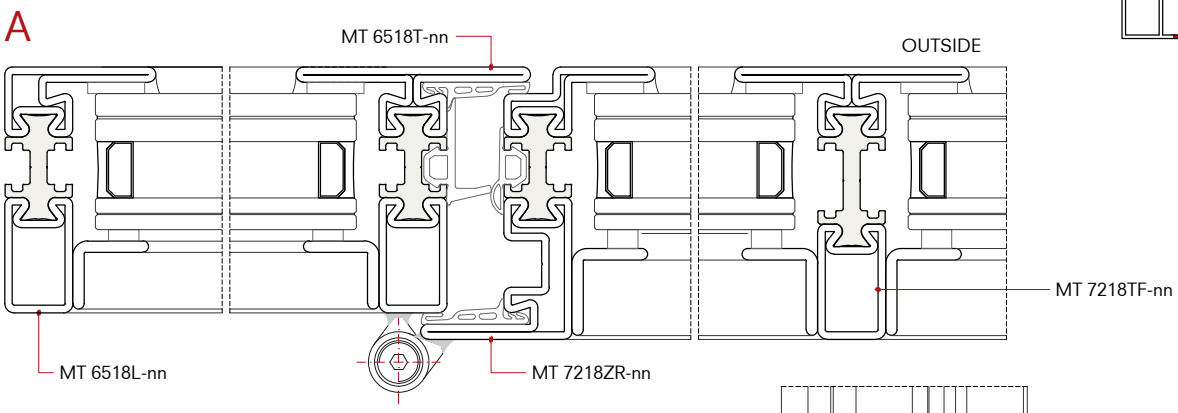
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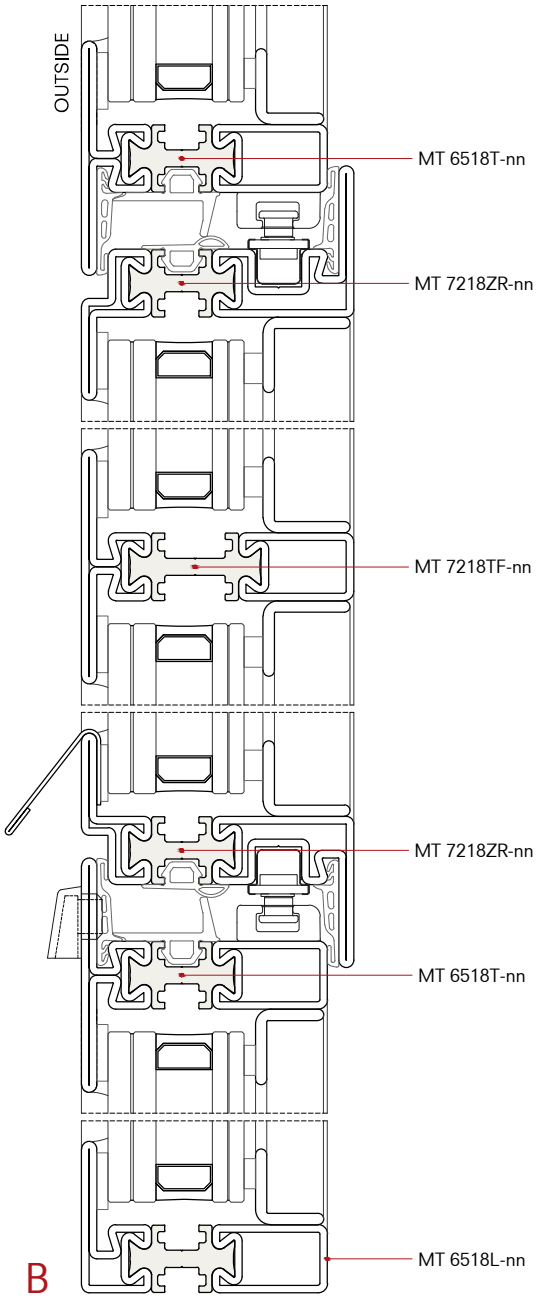
MT 6518T-nn
OUTSIDE
MT 7218TF-nn
MT 6518L-nn
MT 7218ZR-nn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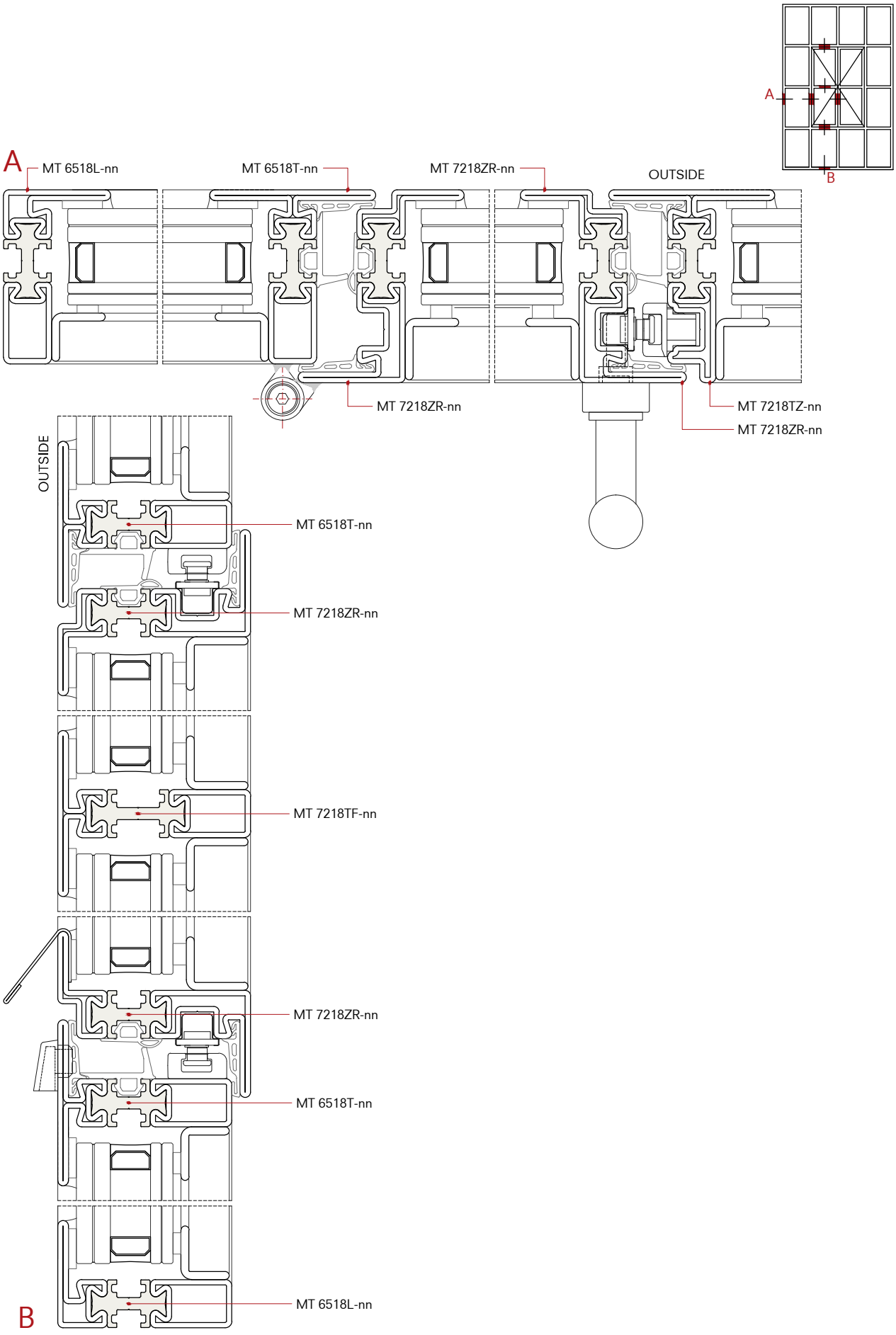
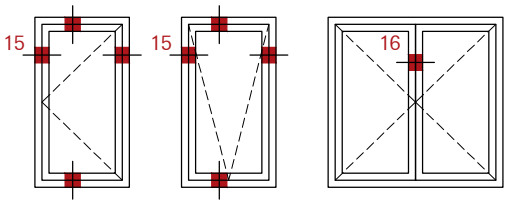
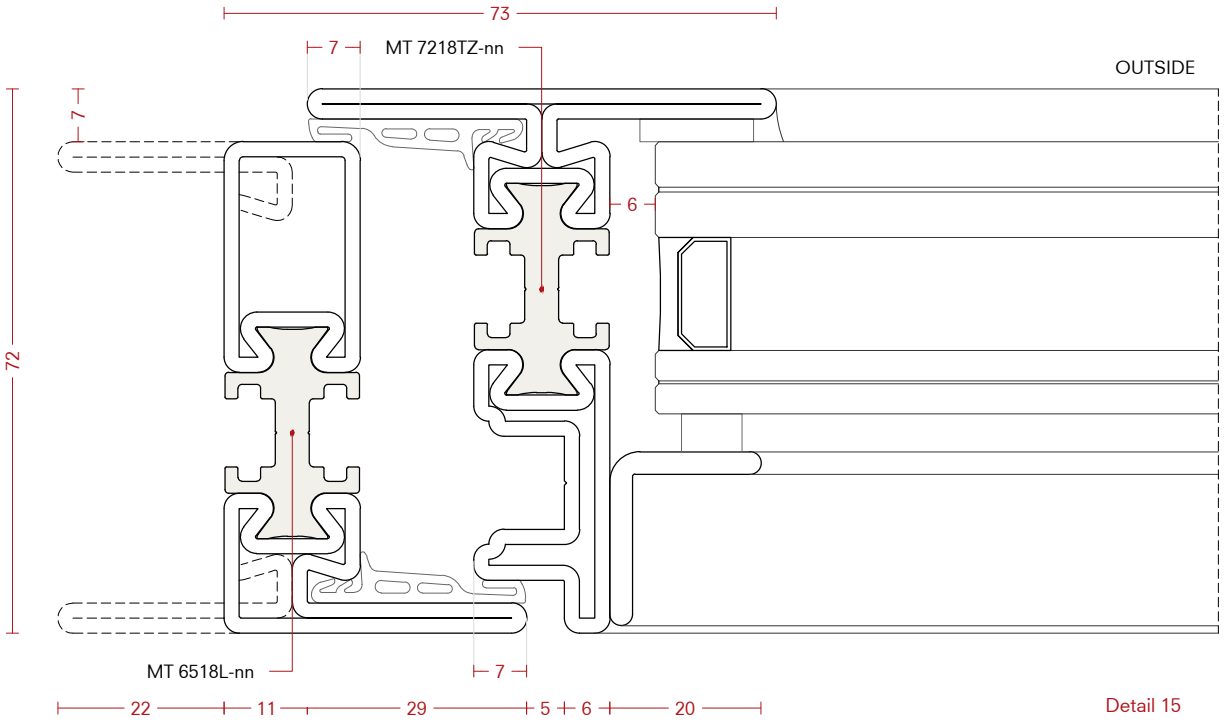
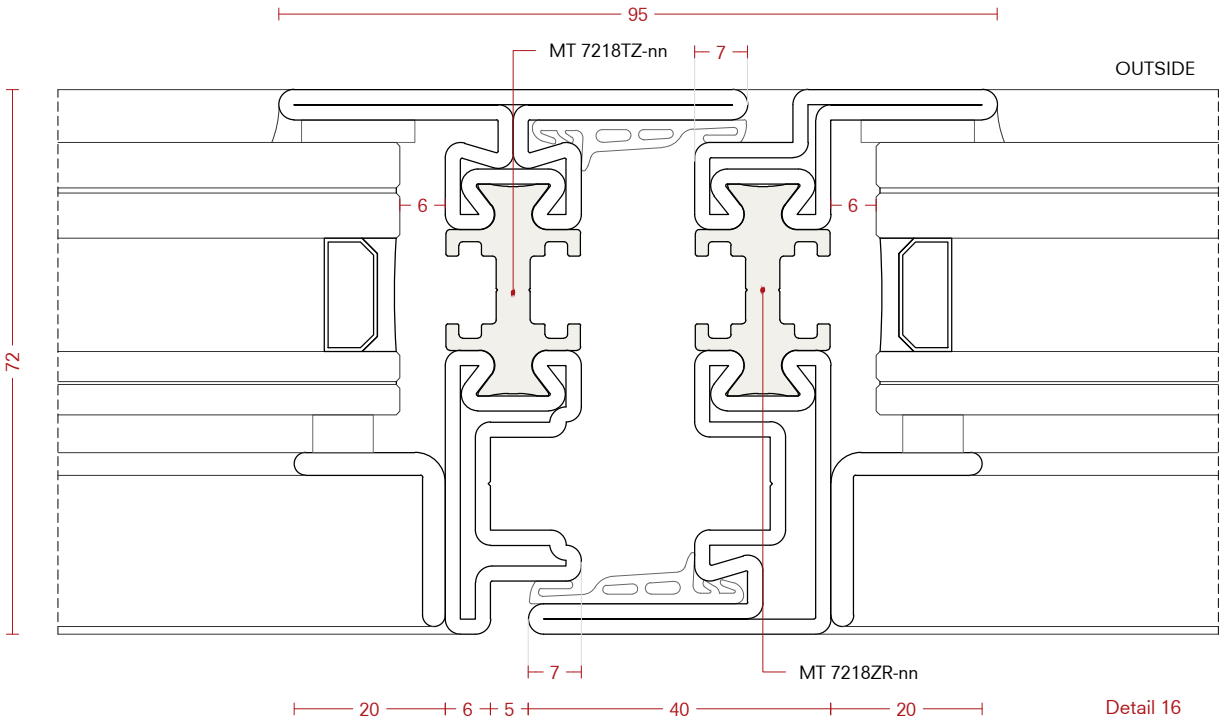
MT 7218ZR-nn
MT 7218TF-nn
MT 7218ZR-nn
MT 6518T-nn
B
MT 6518L-nn


A
B
A
MT 6518L-nn
MT 6518T-nn
MT 7218ZR-nn
OUTSIDE
MT 7218ZR-nn
MT 7218TZ-nn
MT 7218ZR-nn
OUTSIDE
MT 6518T-nn
MT 7218ZR-nn
MT 7218TF-nn
MT 7218ZR-nn
MT 6518T-nn
MT 6518L-nn
B

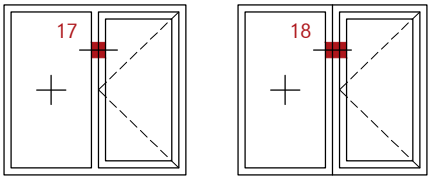


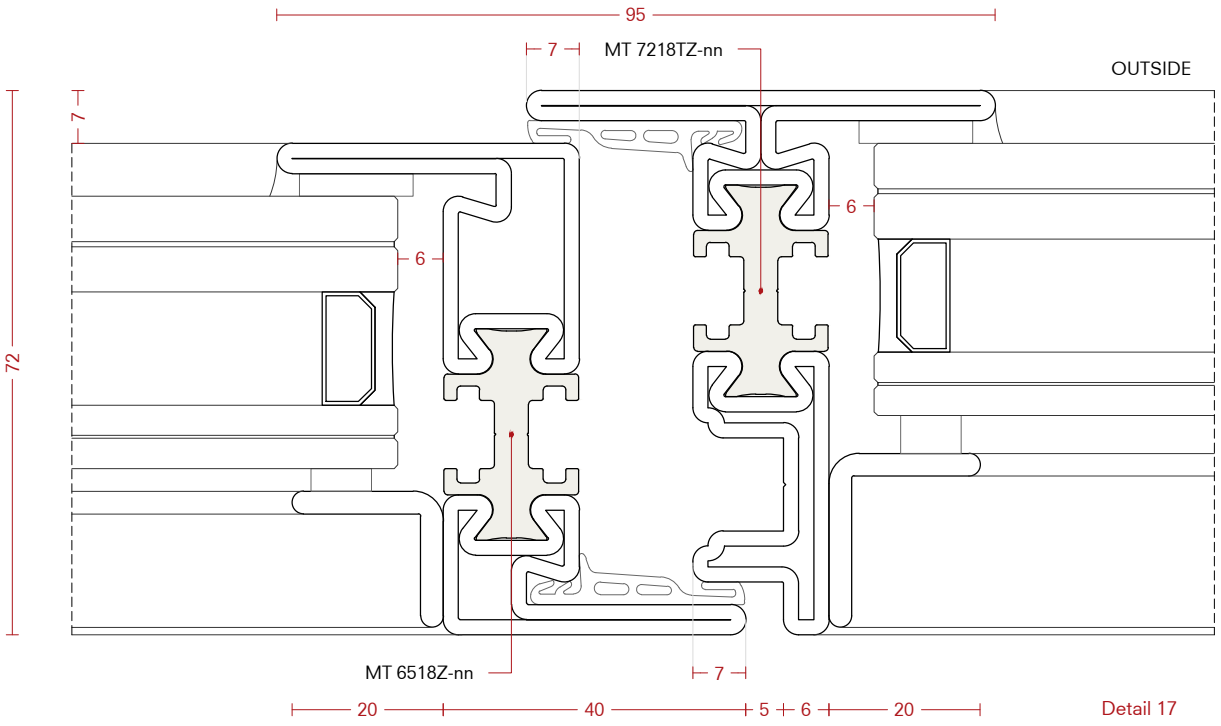


Detail 15

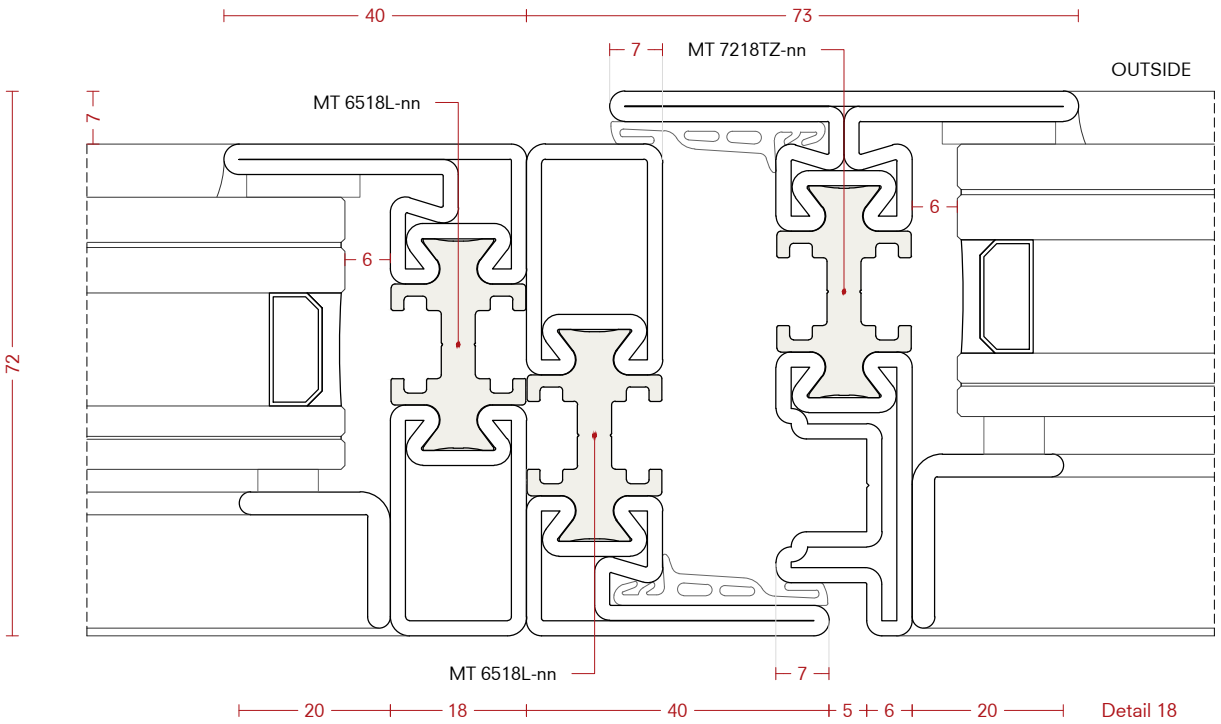


Detail 16

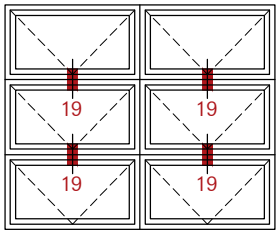




Detail 17



Detail 18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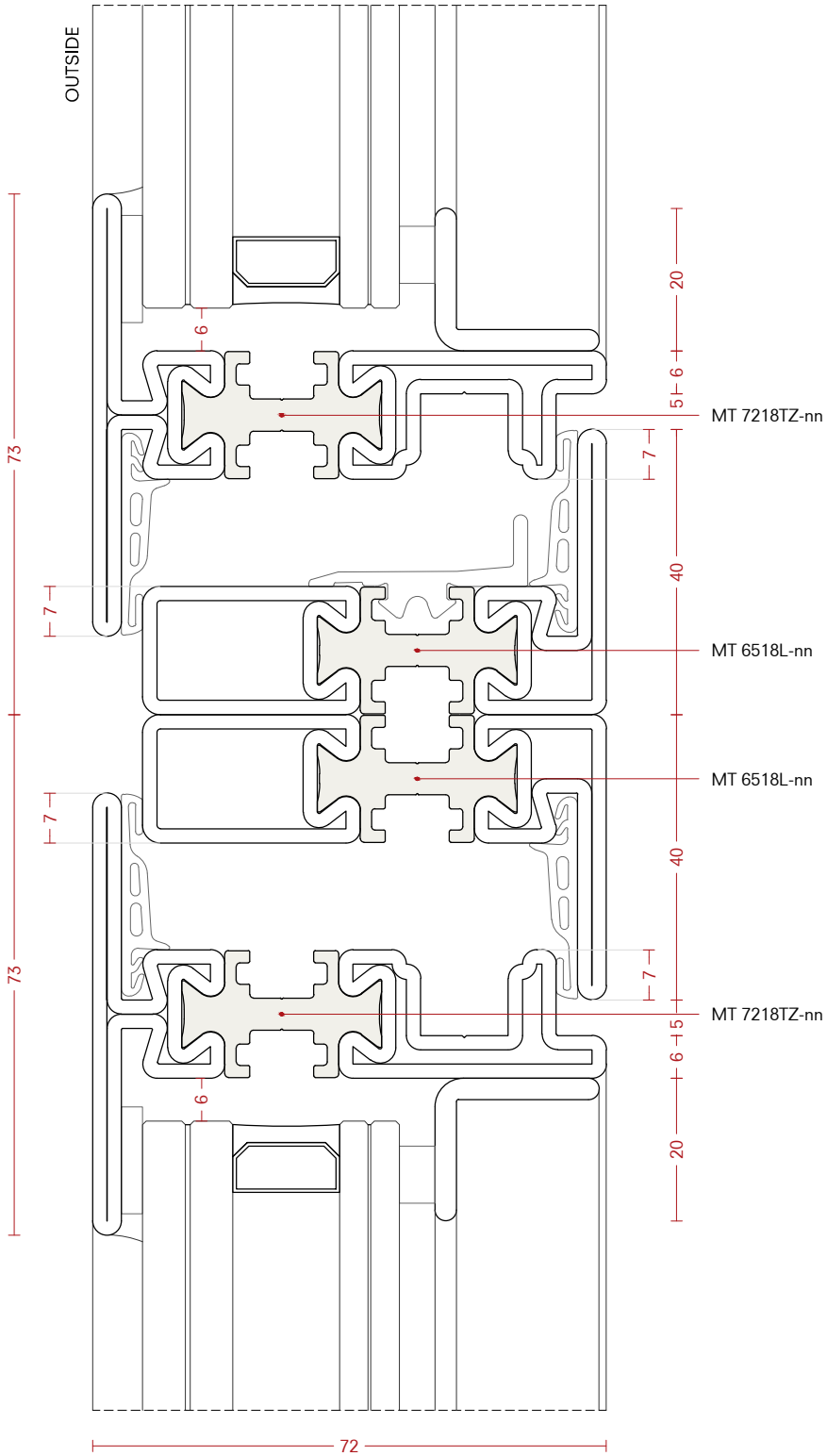
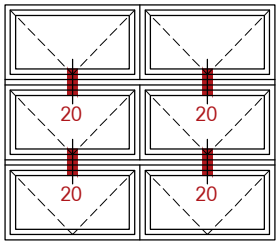

OUTSIDE
6
73
7
7
MT 7218TZ-nn
MT 6518L-nn
MT 6518L-nn
MT 7218TZ-nn
7
7
6
73
72
20
5
6
40
40
5
6
20

Detail 19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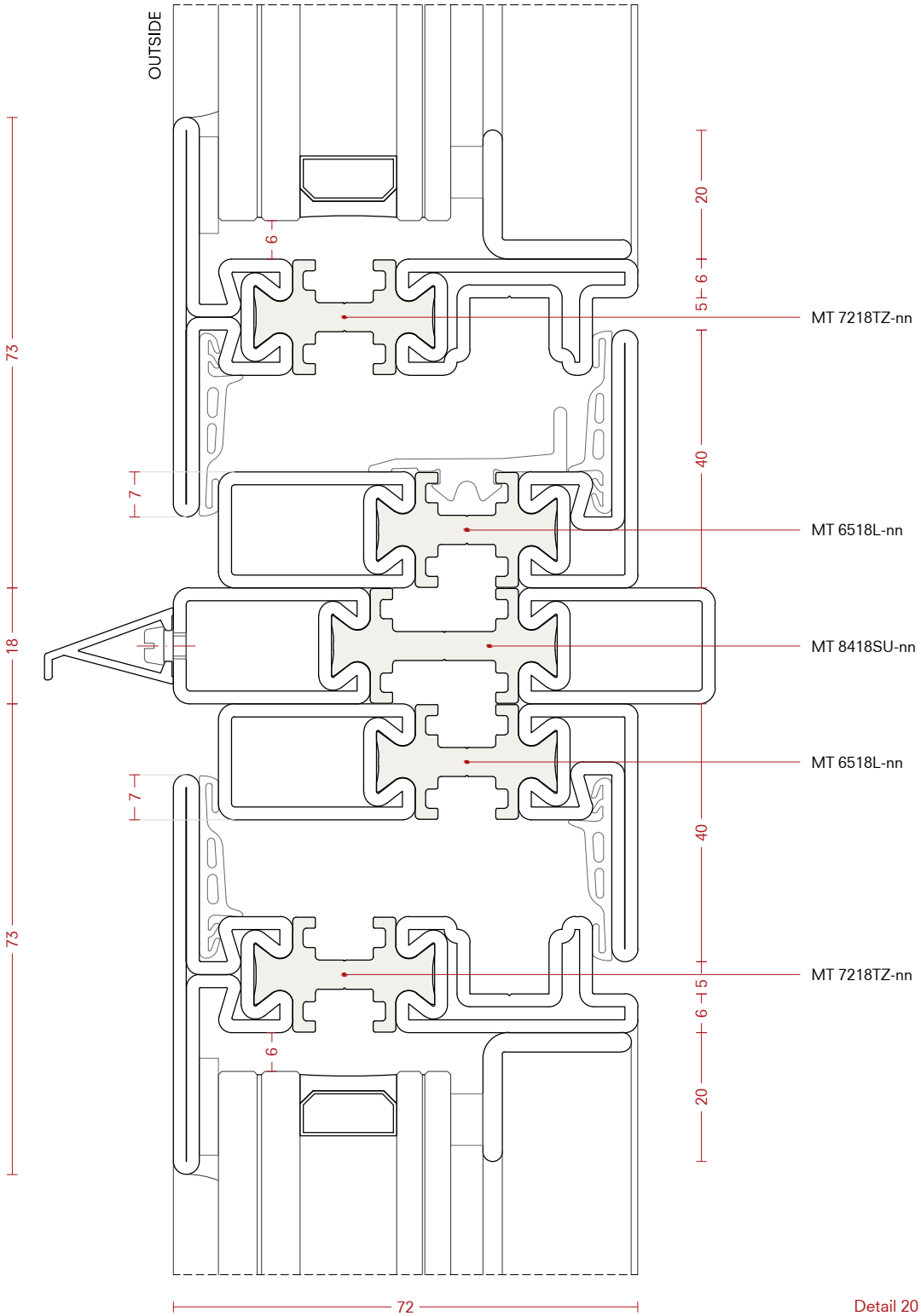
OUTSIDE
73
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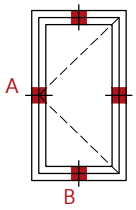
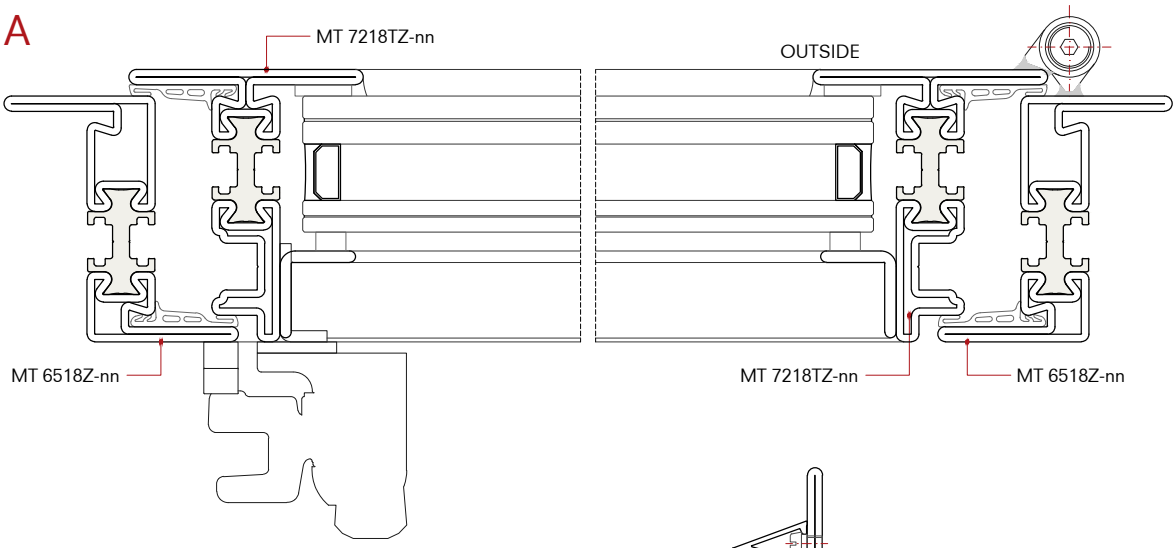
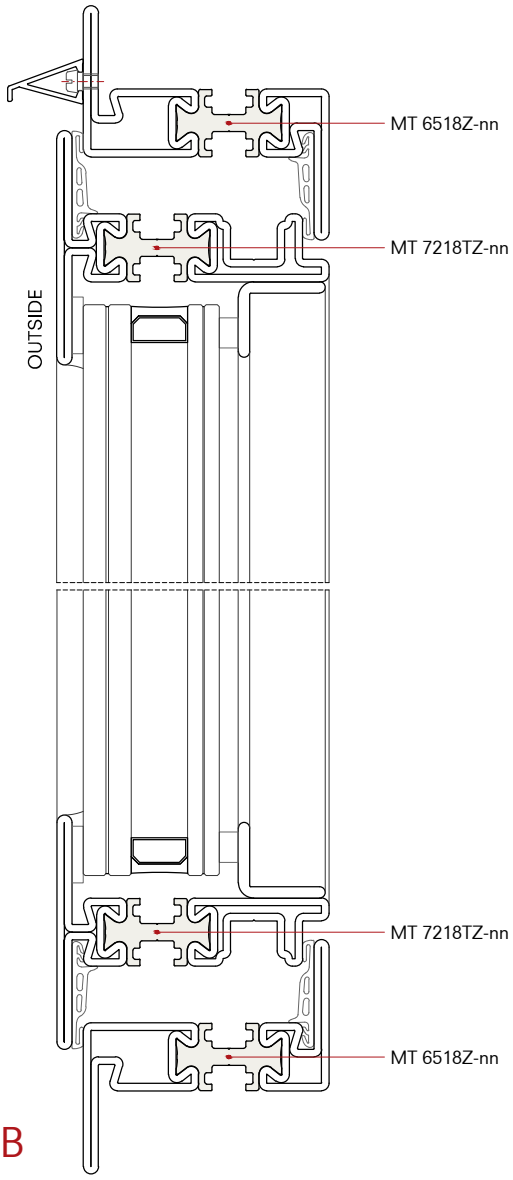
MT 7218TZ-nn
MT 6518L-nn
MT 8418SU-nn
MT 6518L-nn
MT 7218TZ-nn
72

Detail 20


A
B

A


MT 7218TZ-nn
OUTSIDE
MT 6518Z-nn
MT 7218TZ-nn
MT 6518Z-nn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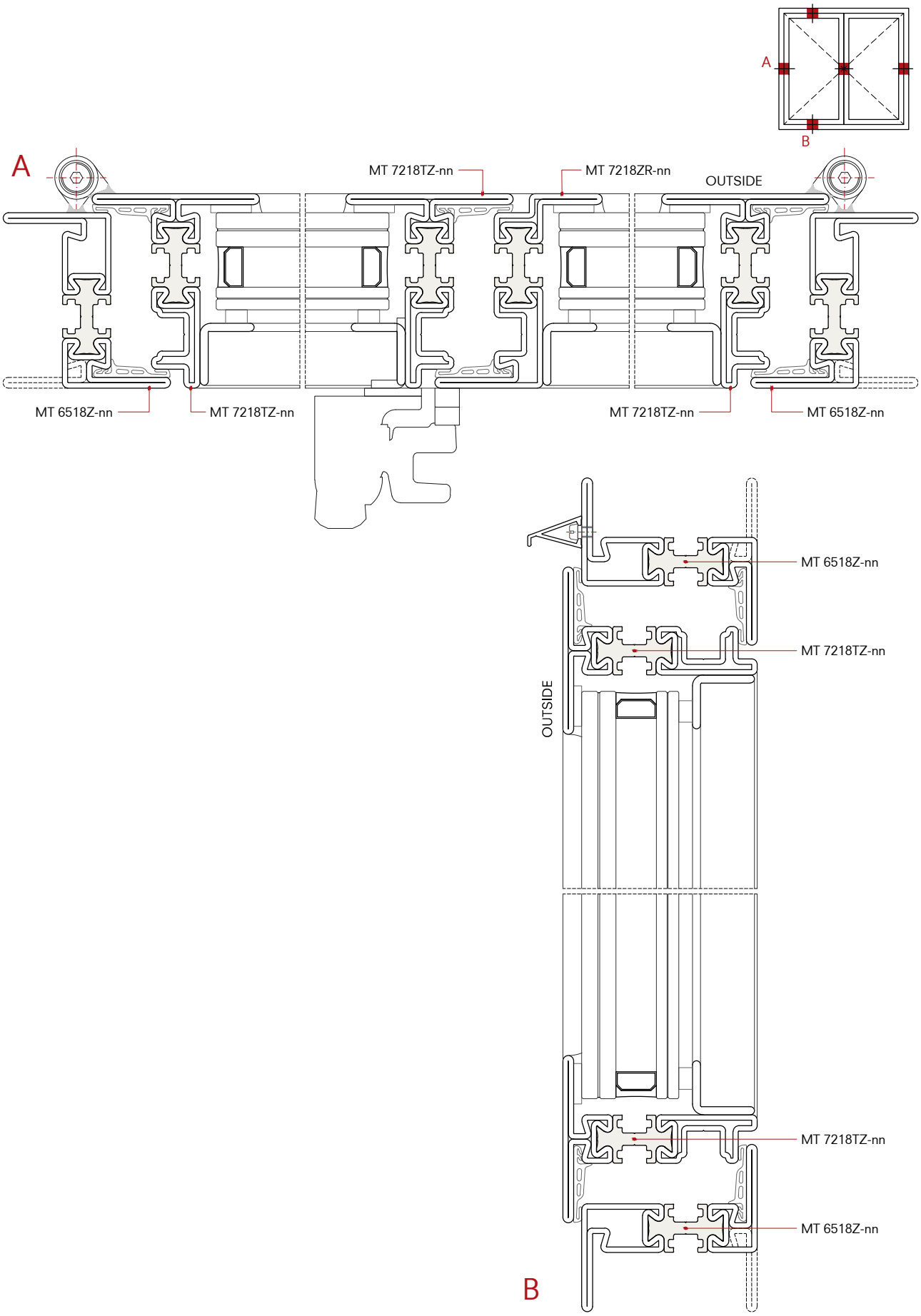
OUTSIDE
MT 7218TZ-nn
MT 6518Z-nn

B


A
B
A
MT 7218TZ-nn
MT 7218ZR-nn
OUTSIDE
MT 6518Z-nn
MT 7218TZ-nn
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MT 6518Z-nn
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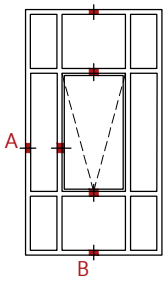
MT 7218TZ-nn
OUTSIDE
MT 7218TZ-nn
MT 6518Z-nn
B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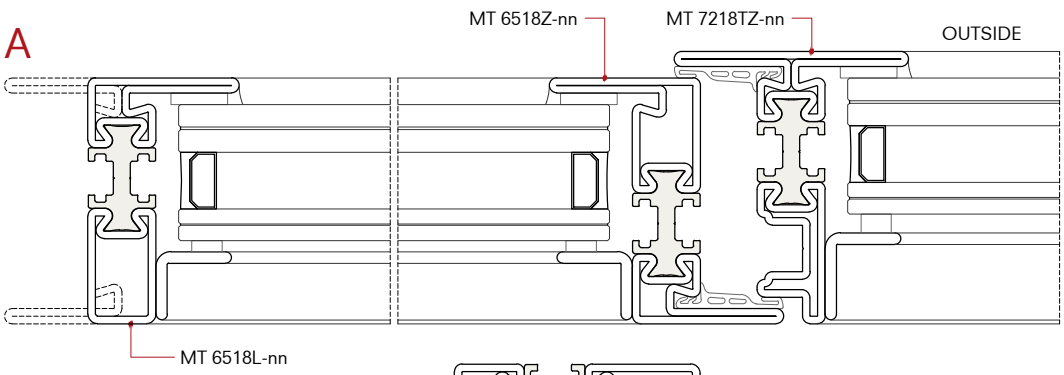
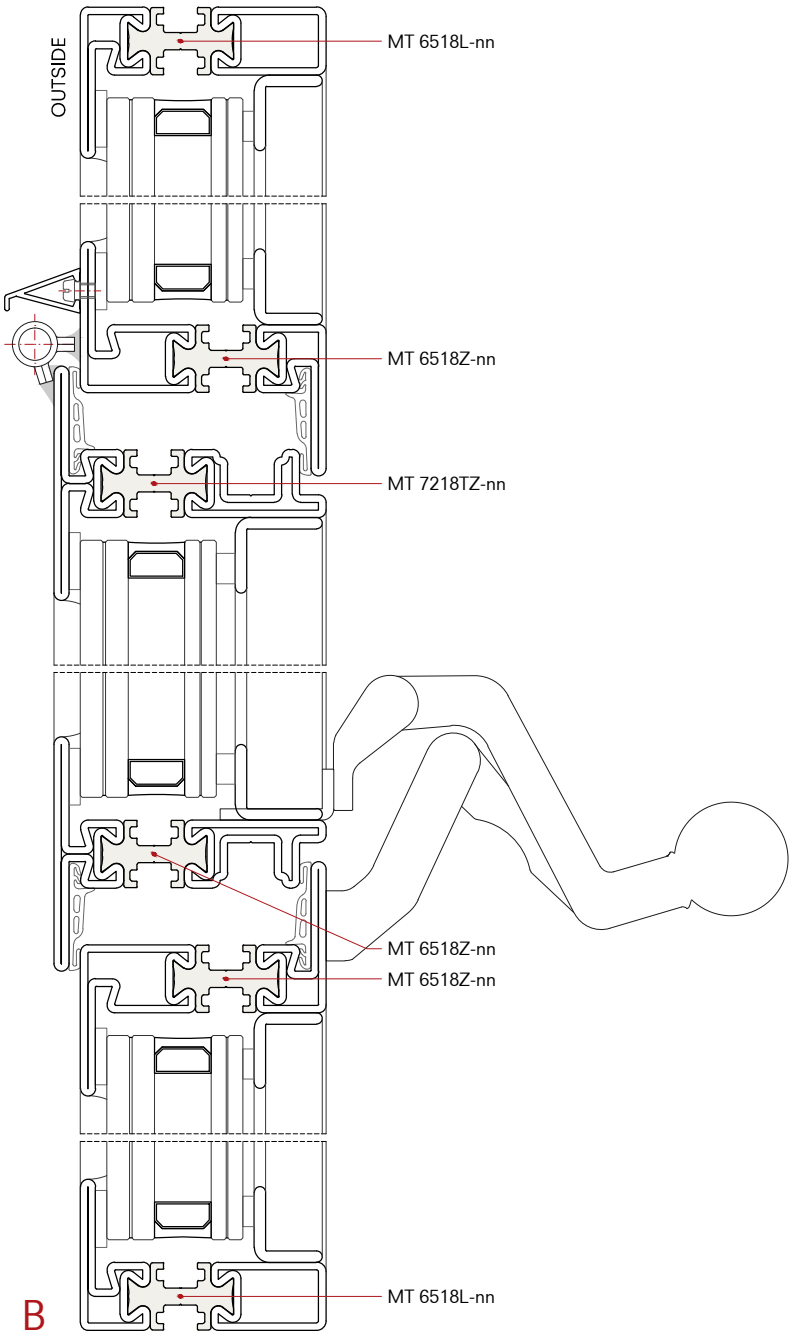
B


A
MT 6518Z-nn
MT 7218TZ-nn
OUTSIDE
MT 6518L-nn


OUTSIDE
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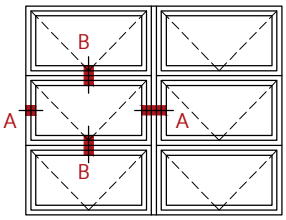
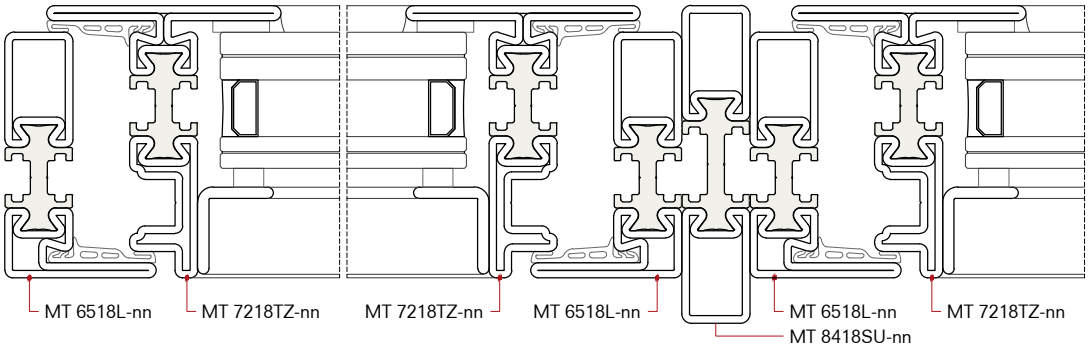
MT 6518Z-nn
MT 7218TZ-nn
MT 6518Z-nn
MT 6518Z-nn
MT 6518L-nn
B


B
A
A
B

A


OUTSIDE
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MT 7218TZ-nn
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MT 6518L-nn
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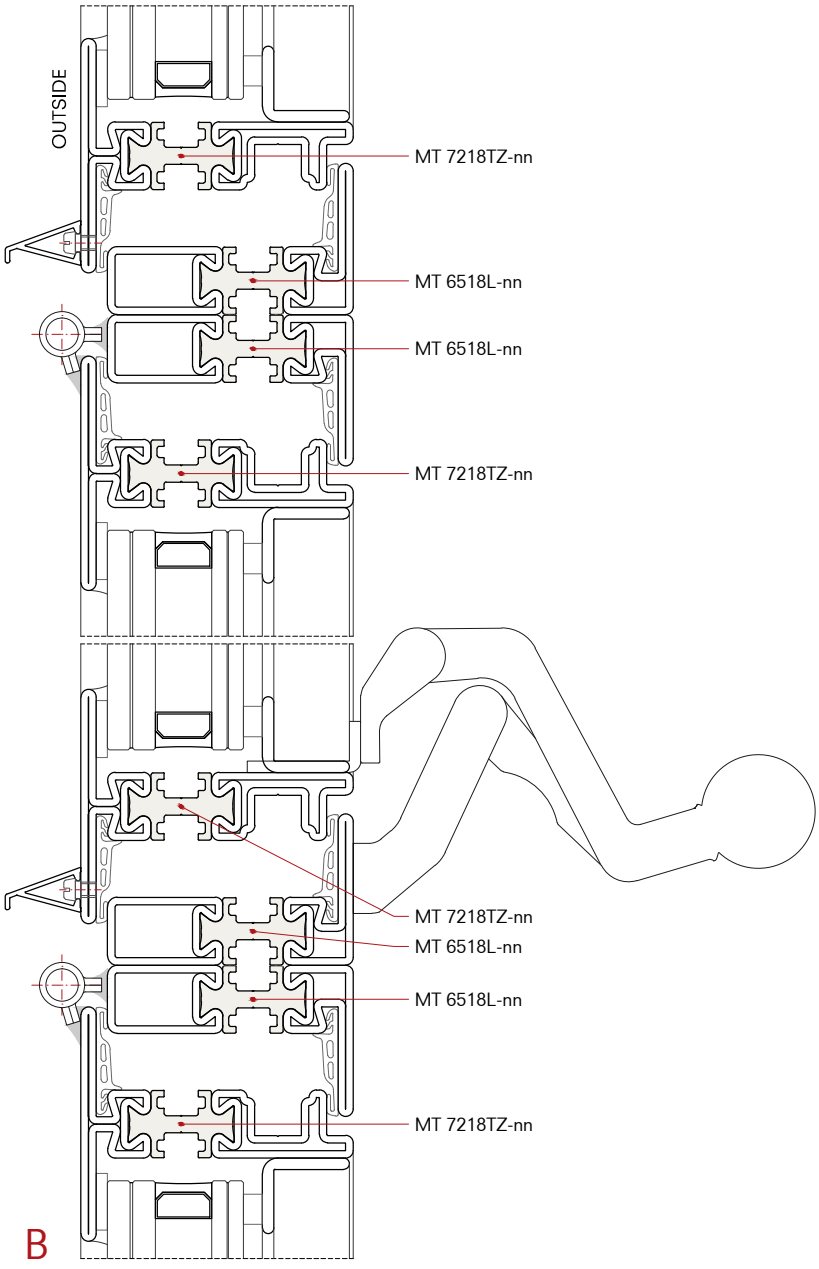
MT 8418SU-nn


OUTSIDE
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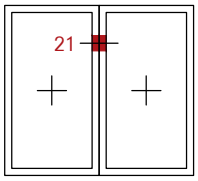
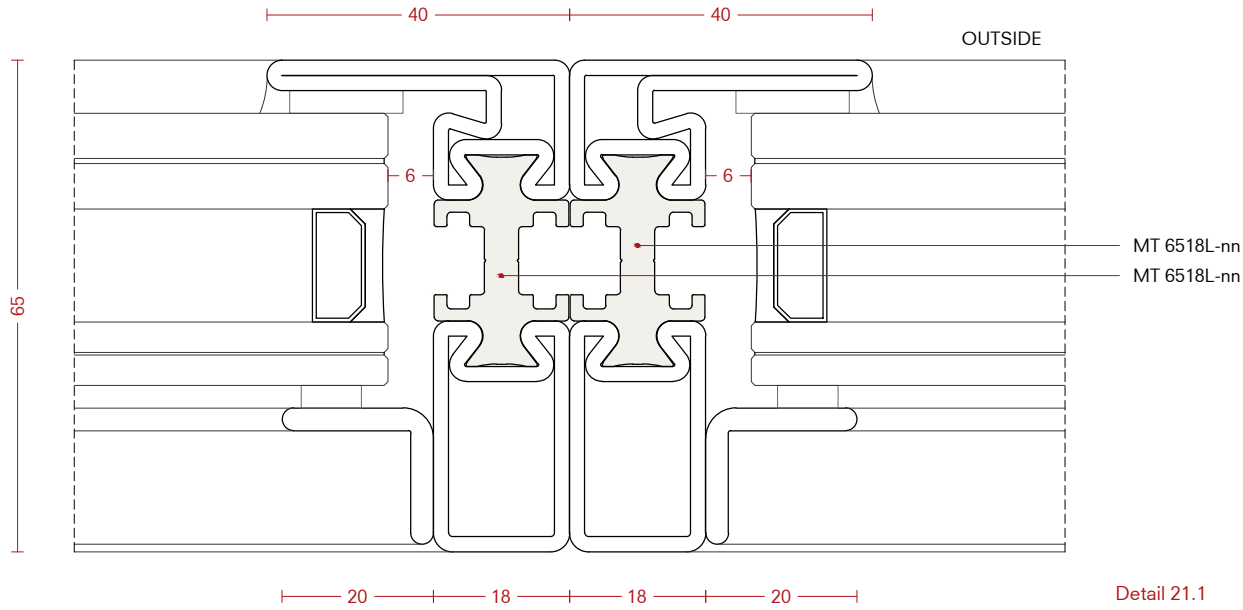
MT 6518L-nn
MT 6518L-nn
MT 7218TZ-nn
MT 7218TZ-nn
MT 6518L-nn
MT 6518L-nn
MT 7218TZ-nn
B

Profile matching

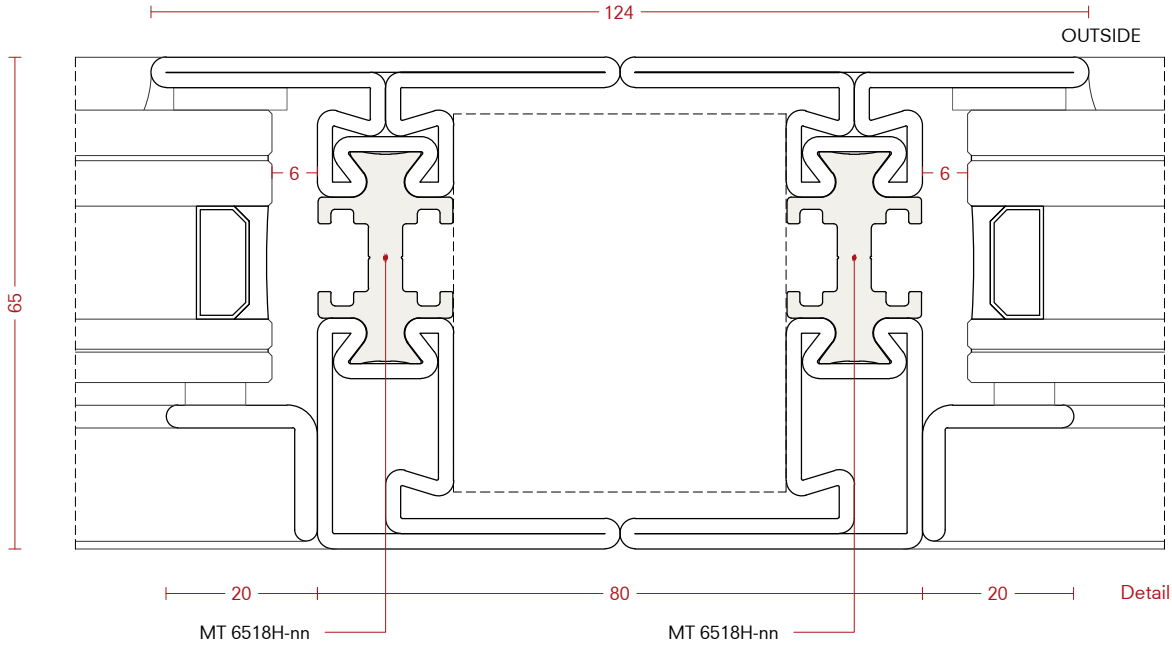
Accostamento telai

Combinación de marcos





Detail 21.1



Detail 21.2

Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

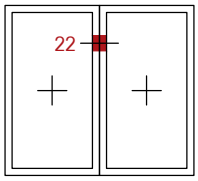
Nota:

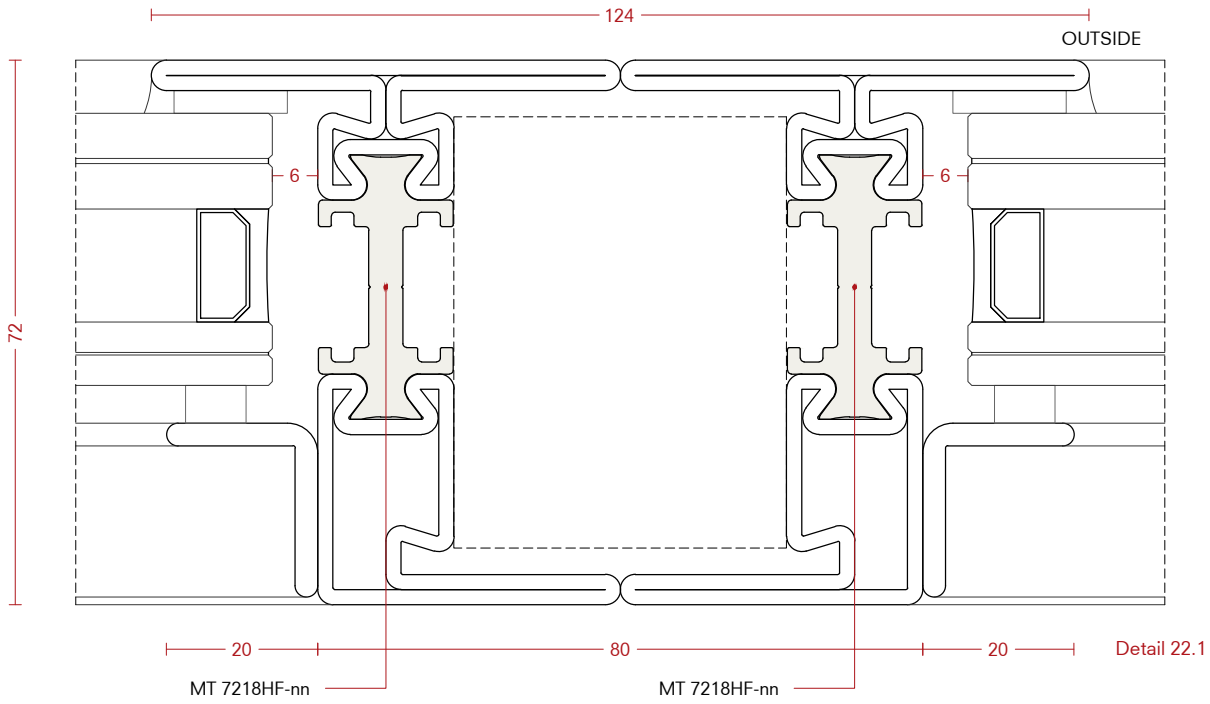
Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

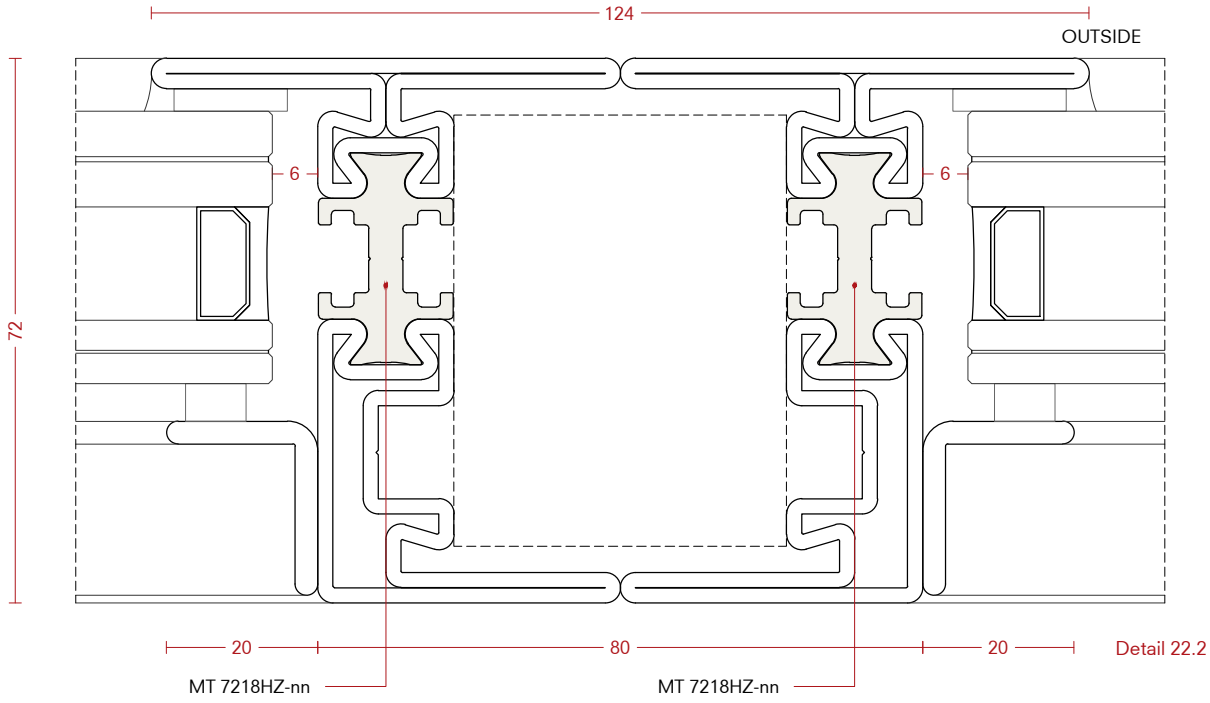
Accostamento telai

Combinación de marcos





Detail 22.1



Detail 22.2

Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

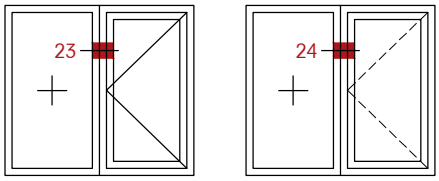
Nota:

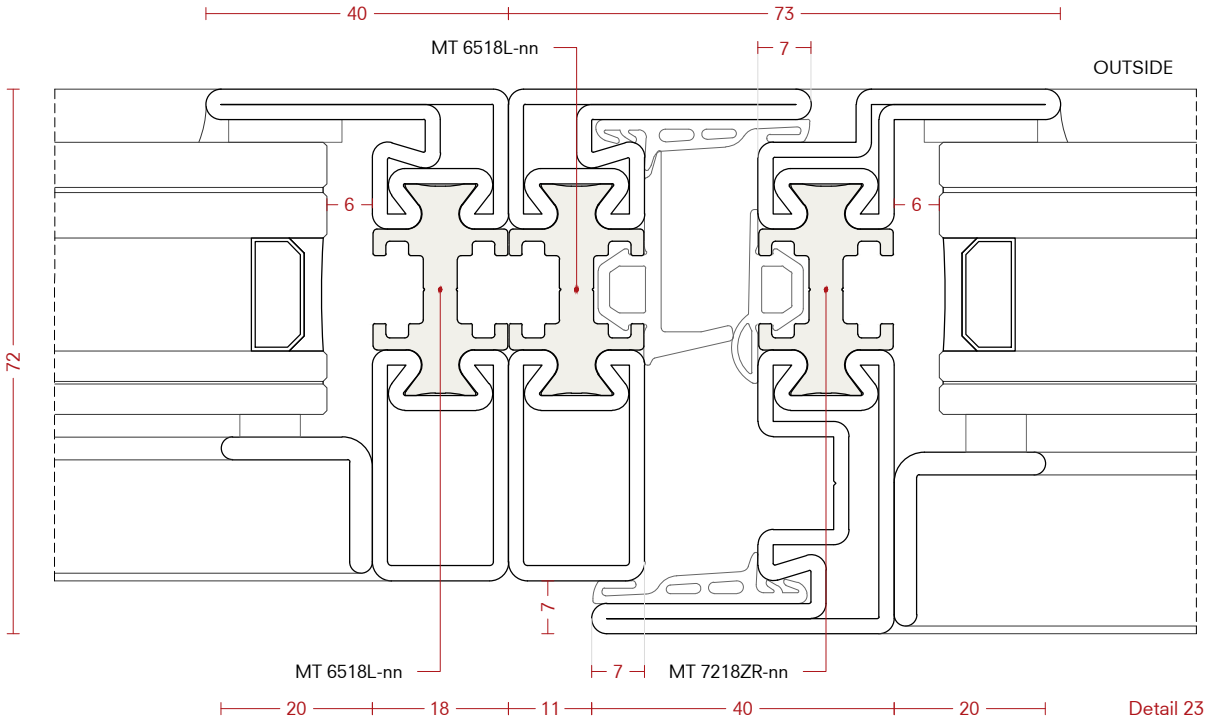
Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

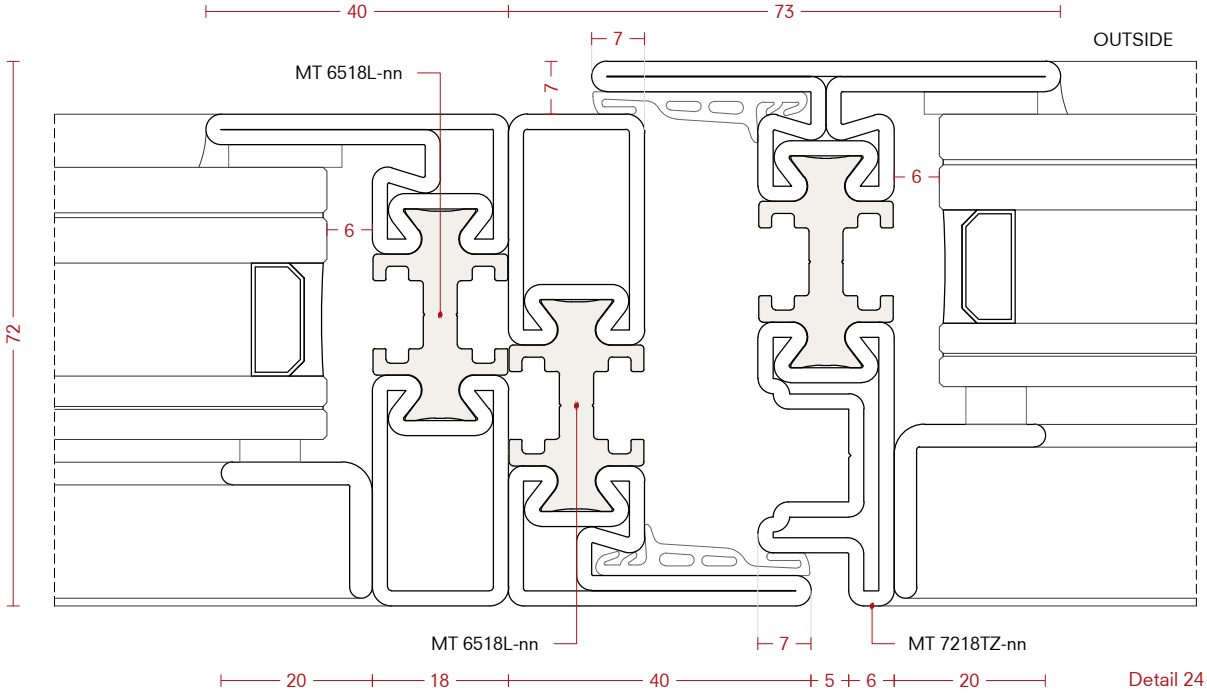
Accostamento telai

Combinación de marcos





Detail 23



Detail 24

Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

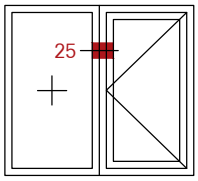
Nota:

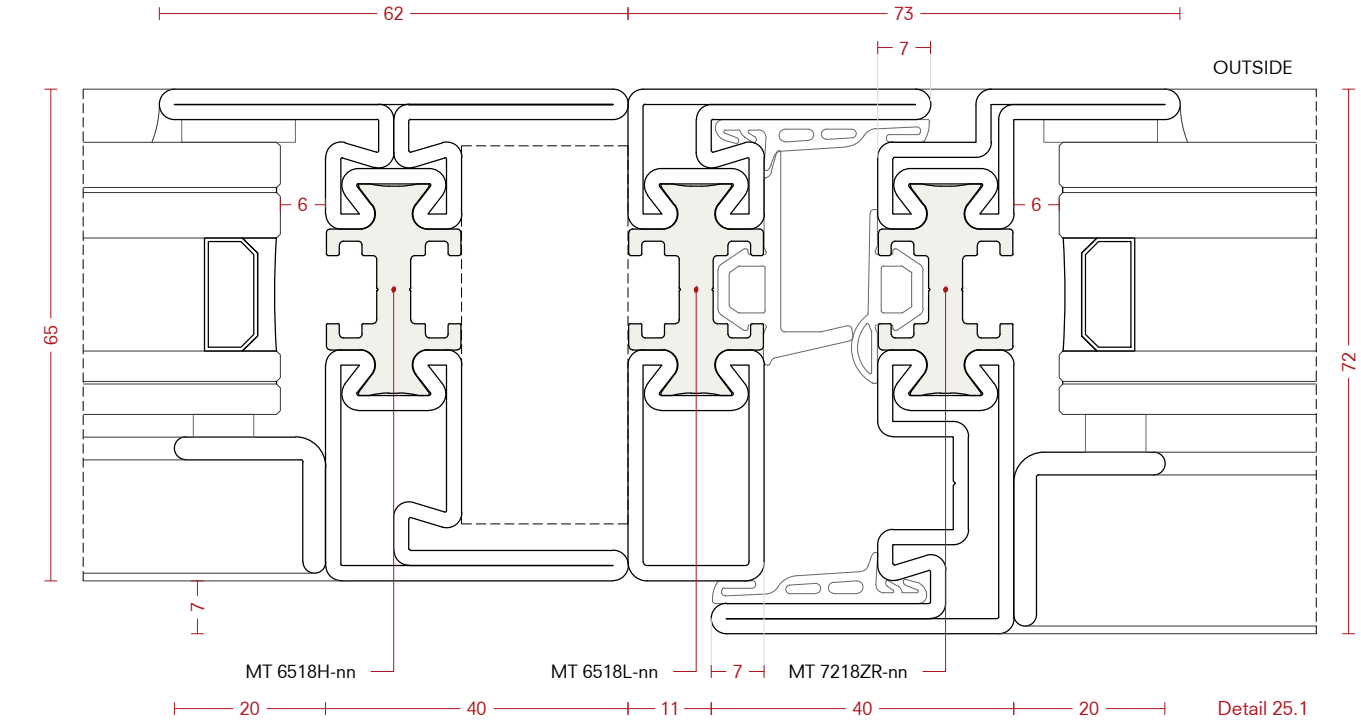
Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

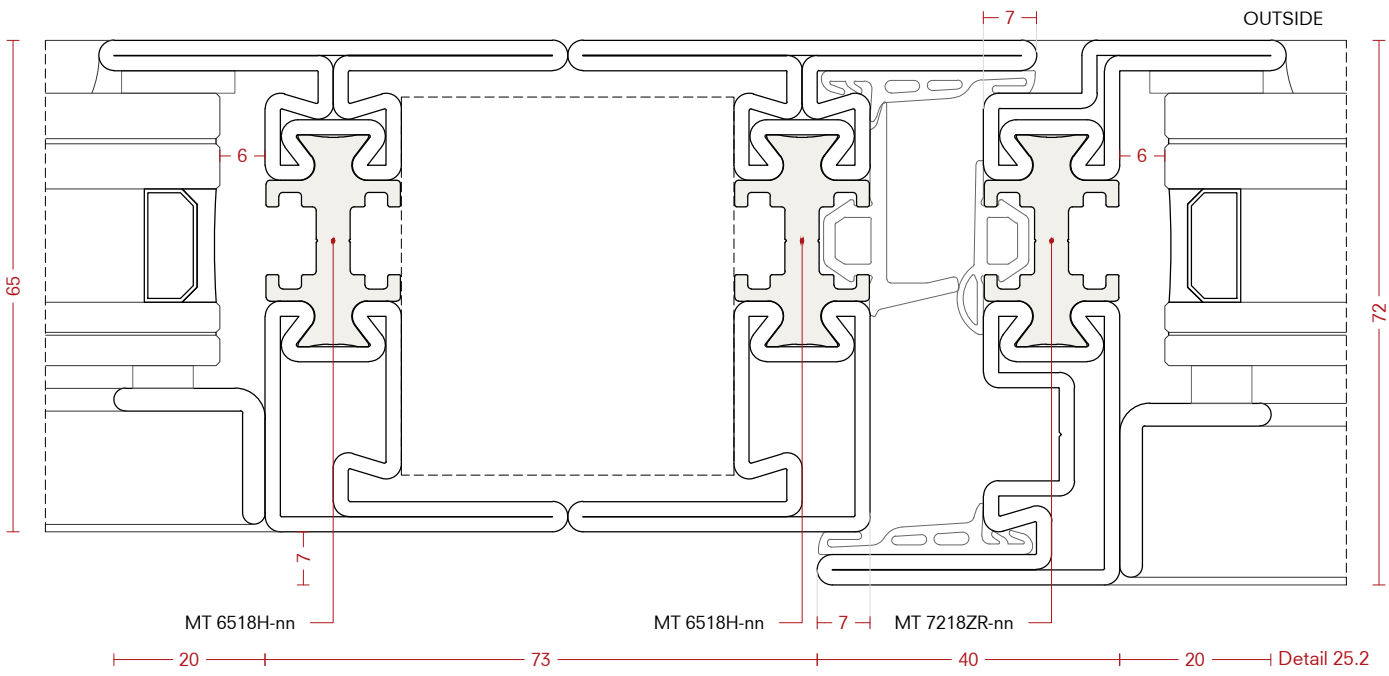
Profile matching

Accostamento telai

Combinación de marcos







Note:

For the cutting list, consider the appropriate machining and welding tolerances in relation to the laying areas and the sealing chosen.

Nota:

Per la distinta di taglio considerare le opportune tolleranze di lavorazione e saldatura in relazione alle arie di posa e alle sigillature scelte.

Nota:

Para la lista de cortes, considere las tolerancias apropiadas de mecanizado y soldadura en relación con las áreas de colocación y los sellos elegidos.

Profile matching

Note:

For the cutting list, consider the relevant machining and welding tolerances taking into account the necessary gaps in the installation of frames and the chosen gasket.

Accostamento telai

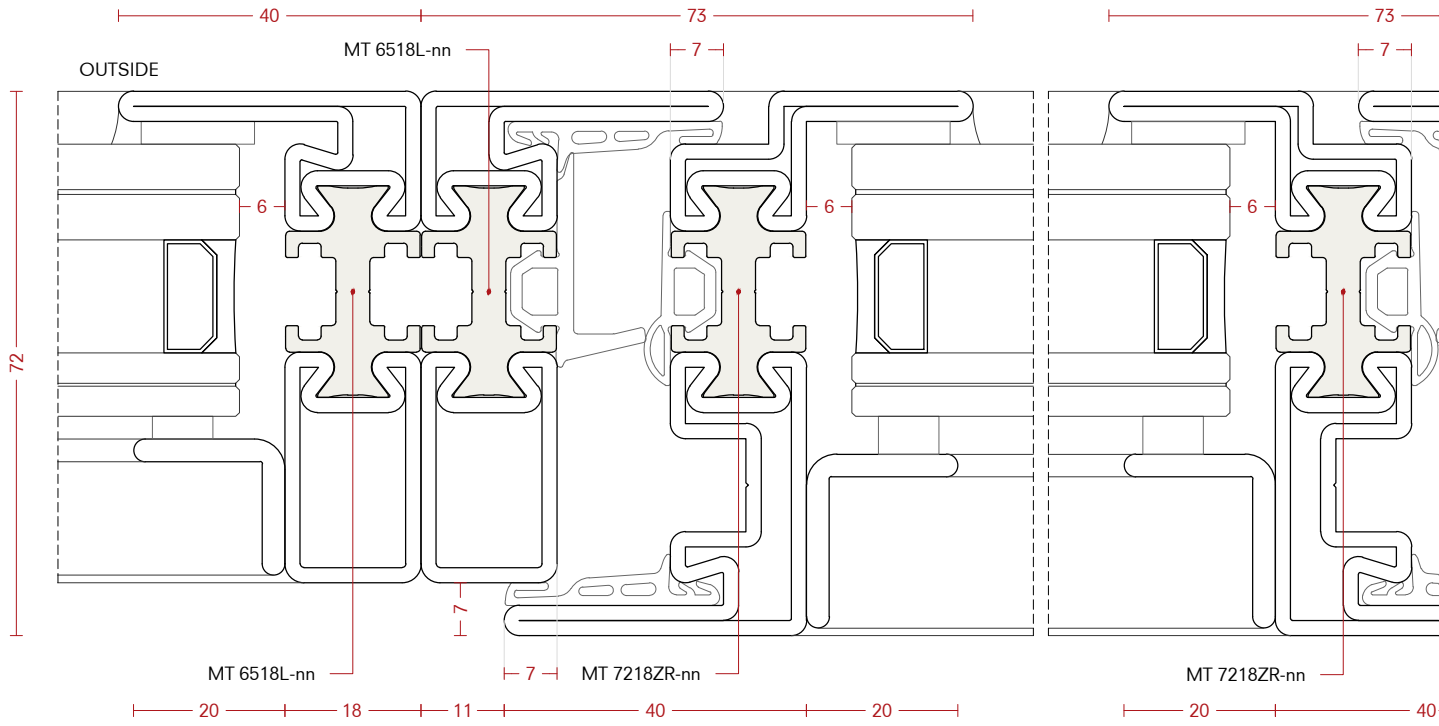
Nota:

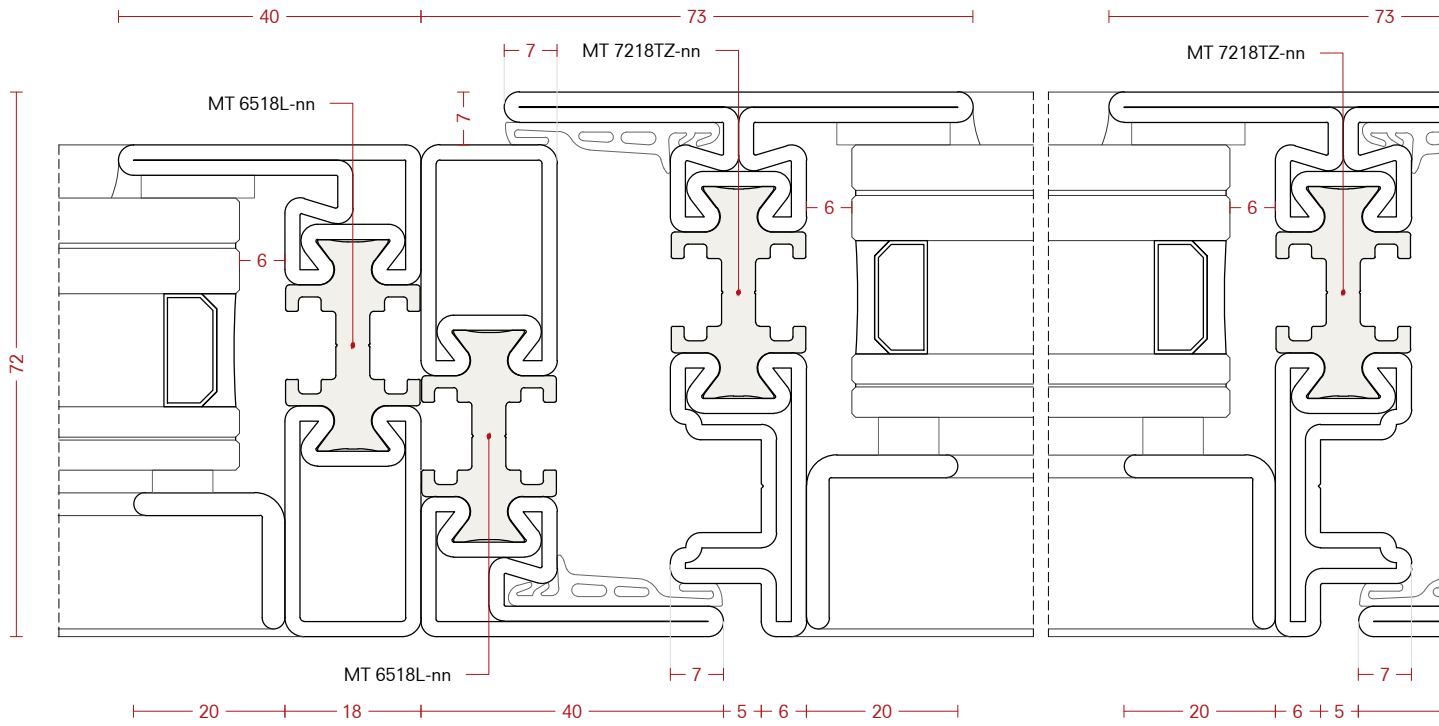
Per la distinta di taglio, considerare le corrette tolleranze di lavorazione e saldatura, in relazione all'aria necessaria nell'installazione e alla sigillatura scelta.

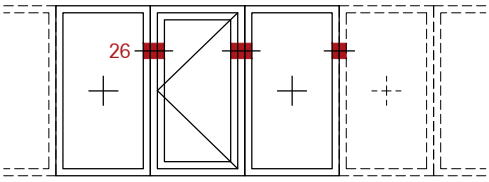
Combinación de marcos

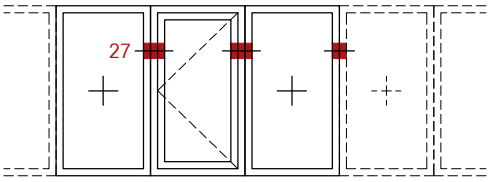
Nota:

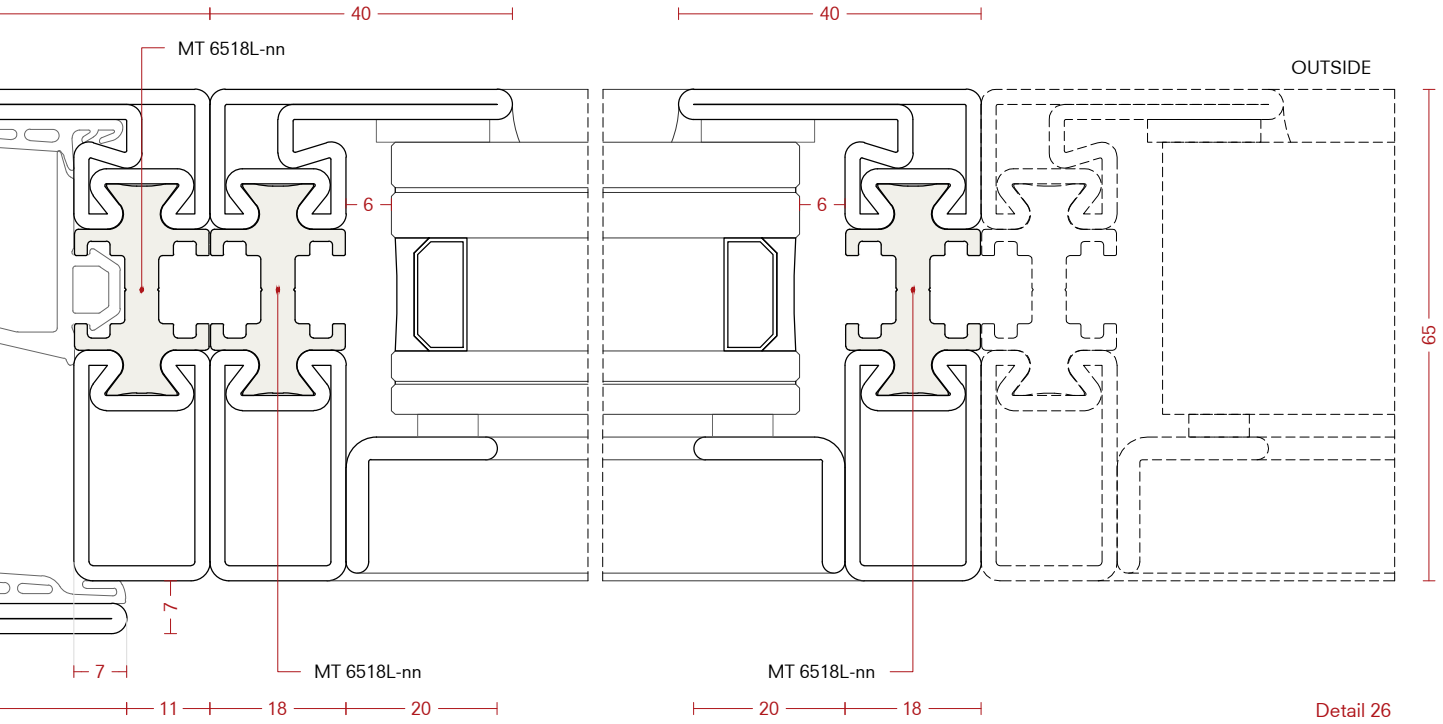
Para la lista de cortes, considere las correctas tolerancias de mecanizado y soldadura, en relación al aire requerido en la instalación y el sello elegido.



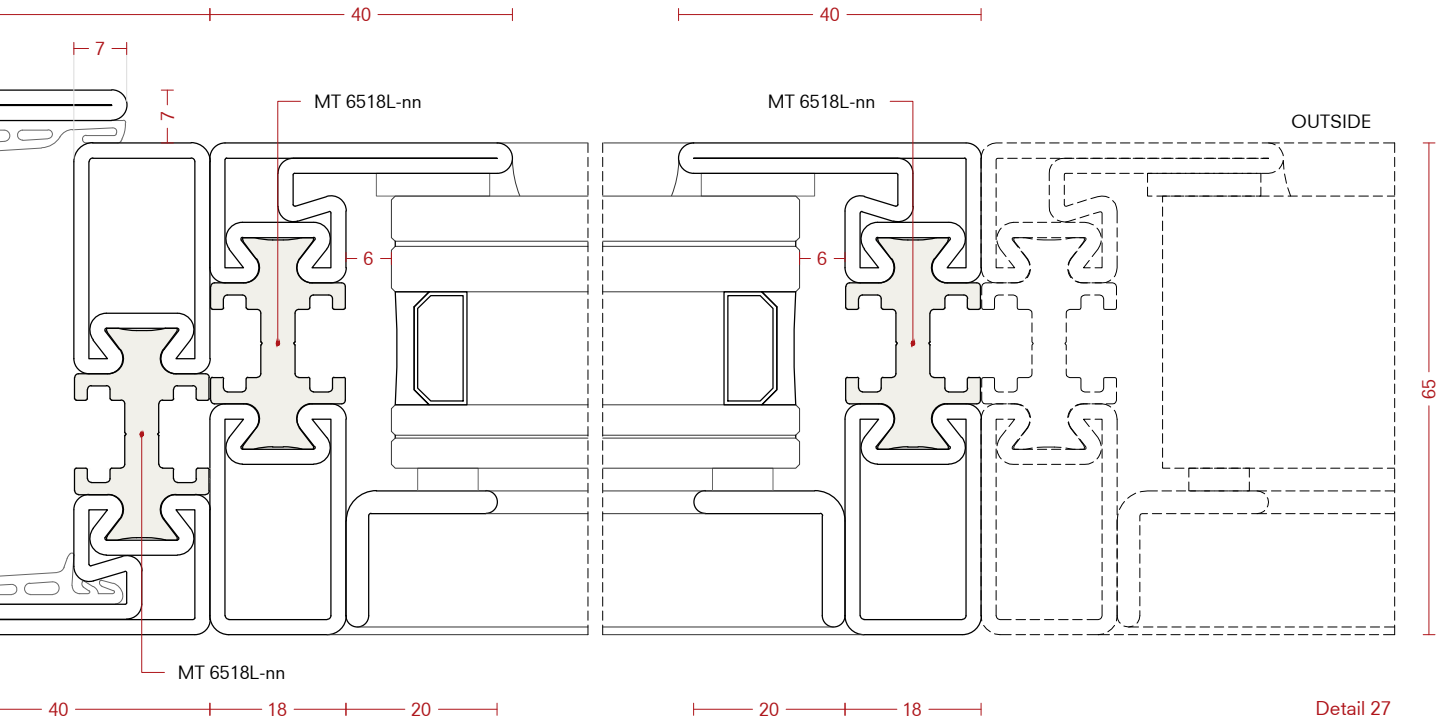








Detail 26



Detail 27

Door details

Sezioni porte

Detalles de puertas

Legend

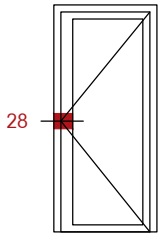
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

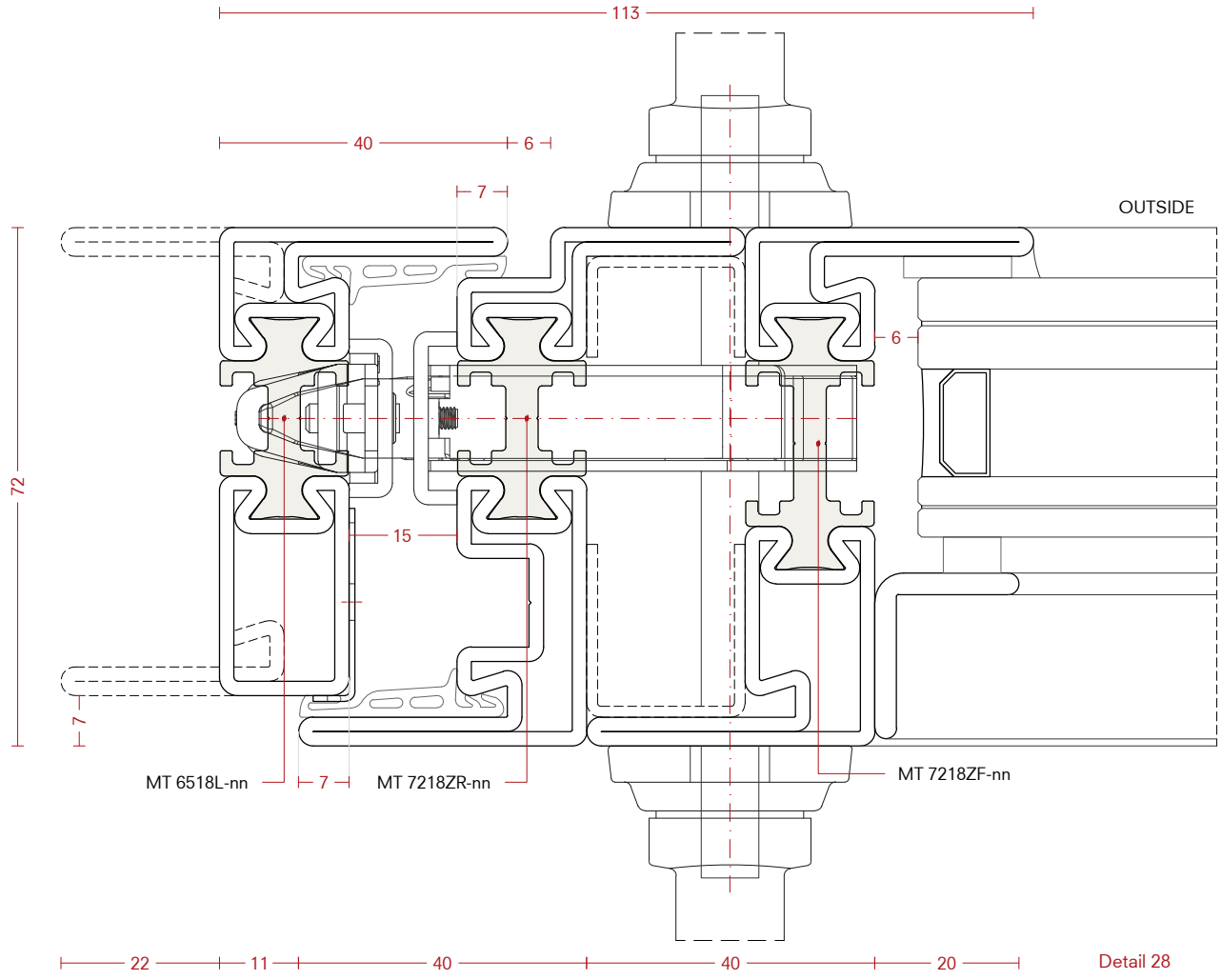
Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2





Note:

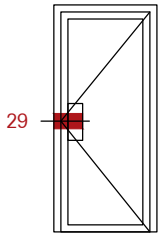
For the installation of the locks, please consult the processing sheets in the dedicated paragraph 5.4

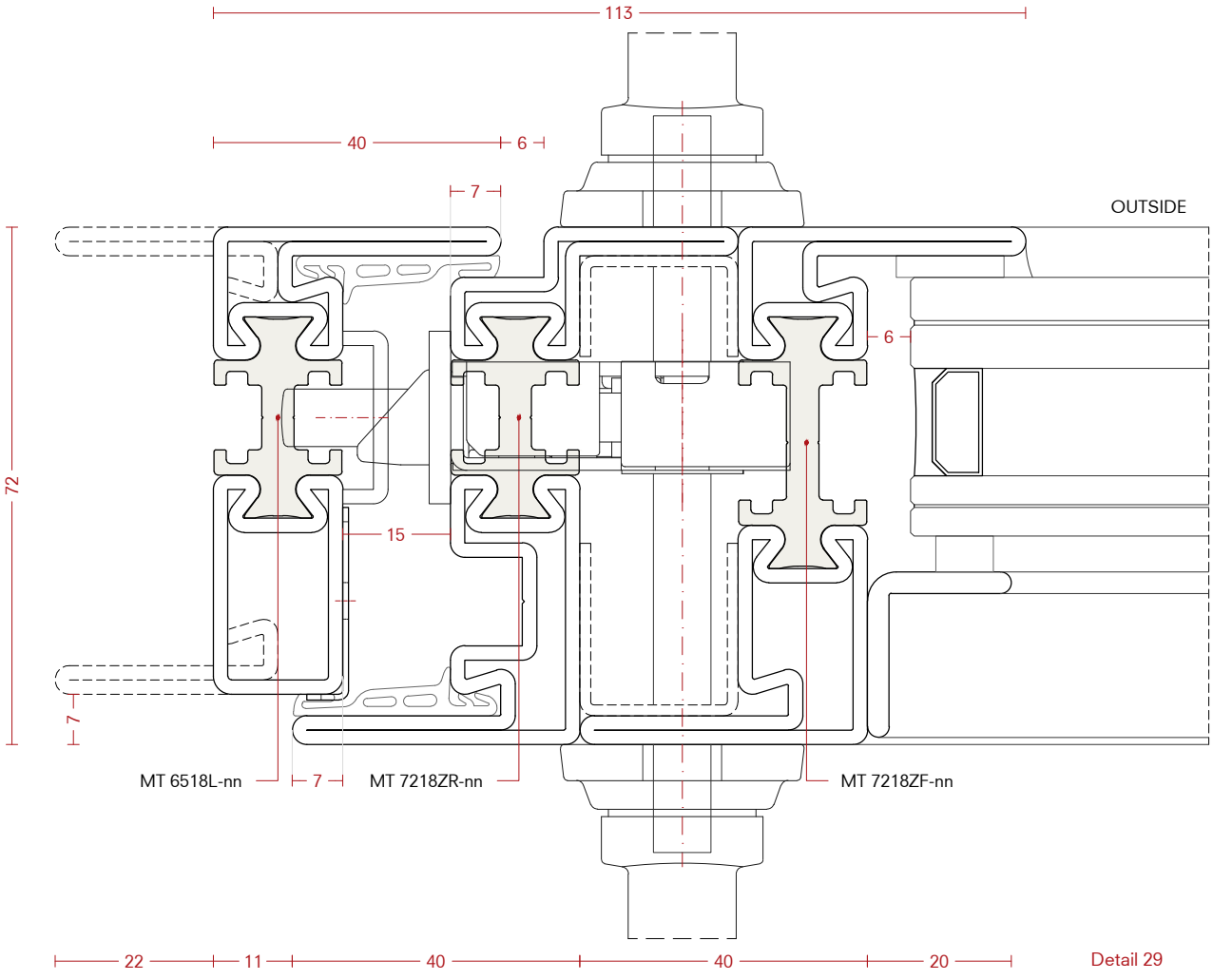
Nota:

Per l'installazione delle serrature si prega di consultare le schede di lavorazione al paragrafo dedicato 5.4

Nota:

Para la instalación de las cerraduras, consulte las hojas de procesamiento en el párrafo específico 5.4





Detail 29

Note:

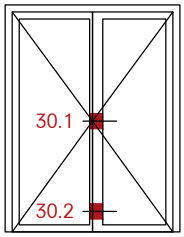
For the installation of the locks, please consult the processing sheets in the dedicated paragraph 5.4

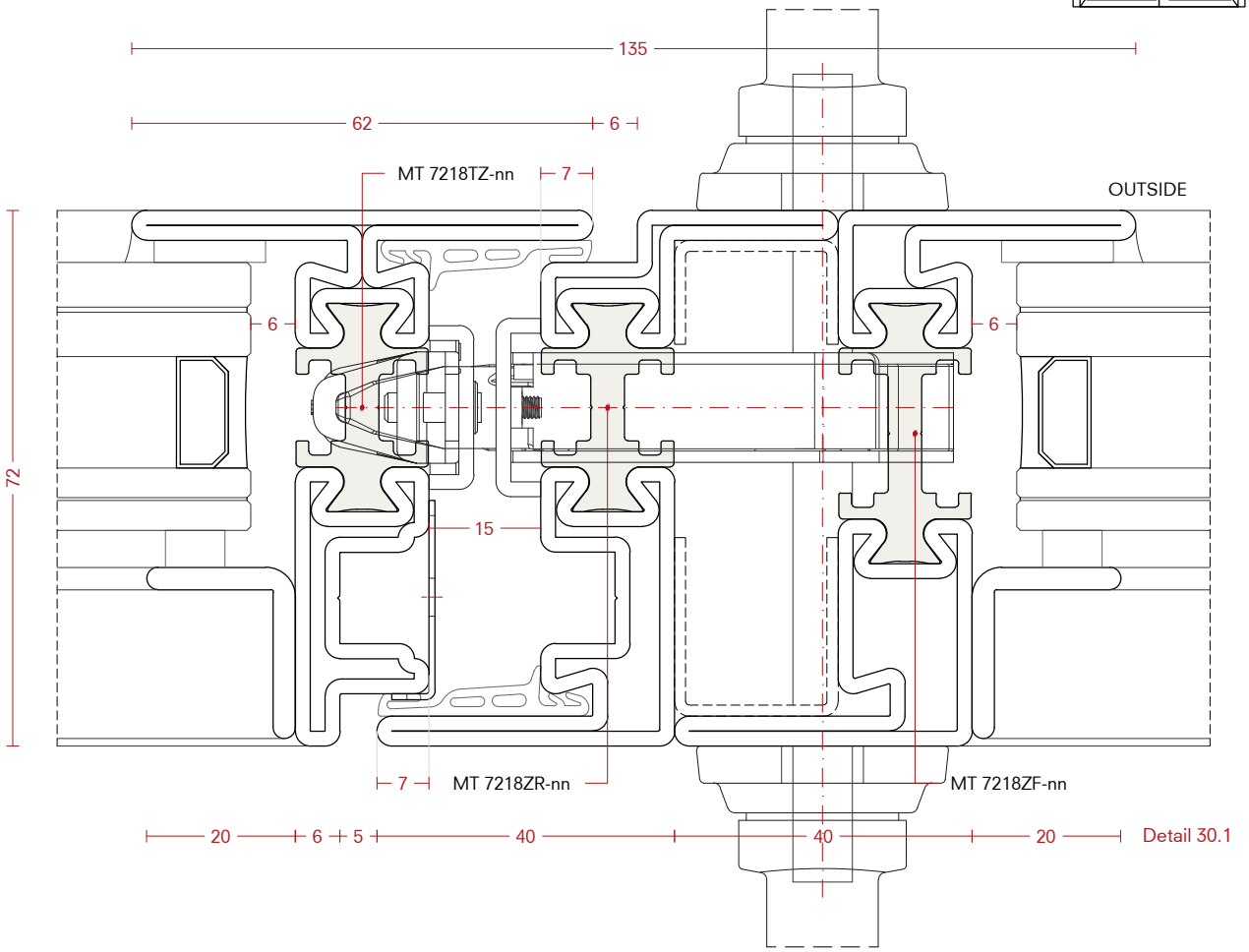
Nota:

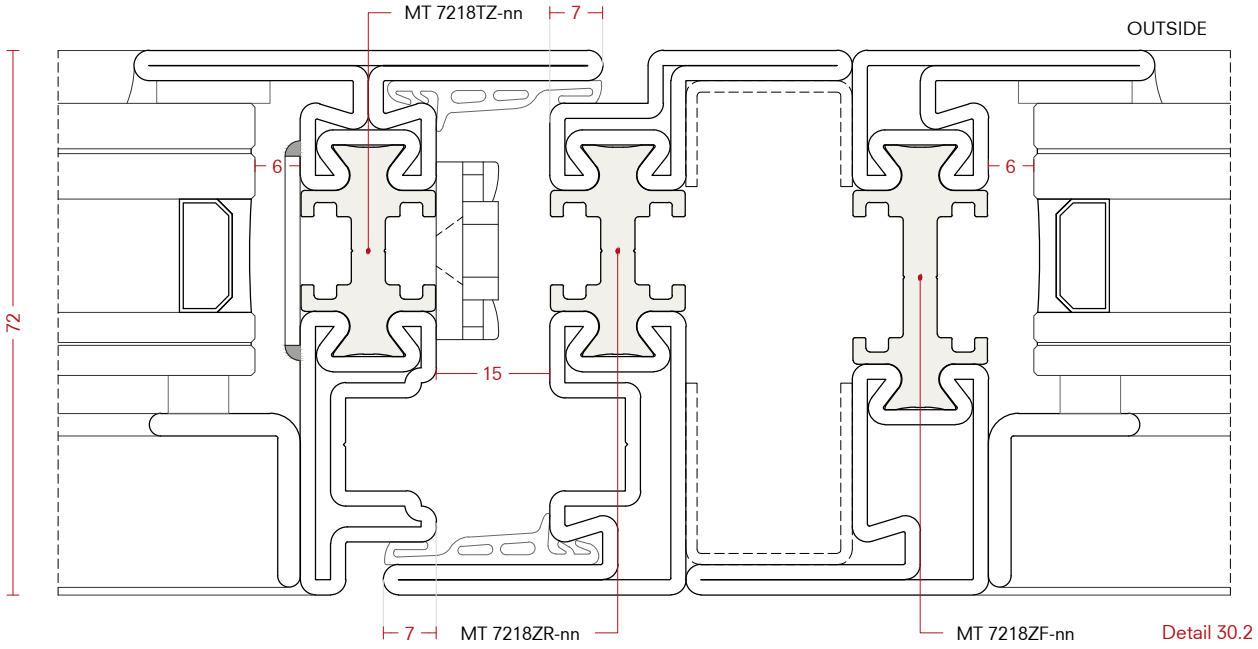
Per l'installazione delle serrature si prega di consultare le schede di lavorazione al paragrafo dedicato 5.4

Nota:

Para la instalación de las cerraduras, consulte las hojas de procesamiento en el párrafo específico 5.4


30.1
30.2


135
62
6
MT 7218TZ-nn
7
OUTSIDE
72
6
6
15
7
MT 7218ZR-nn
MT 7218ZF-nn
20
6
5
40
40
20
Detail 30.1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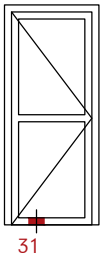
7
OUTSIDE
72
6
6
15
7
MT 7218ZR-nn
MT 7218ZF-nn
Detail 30.2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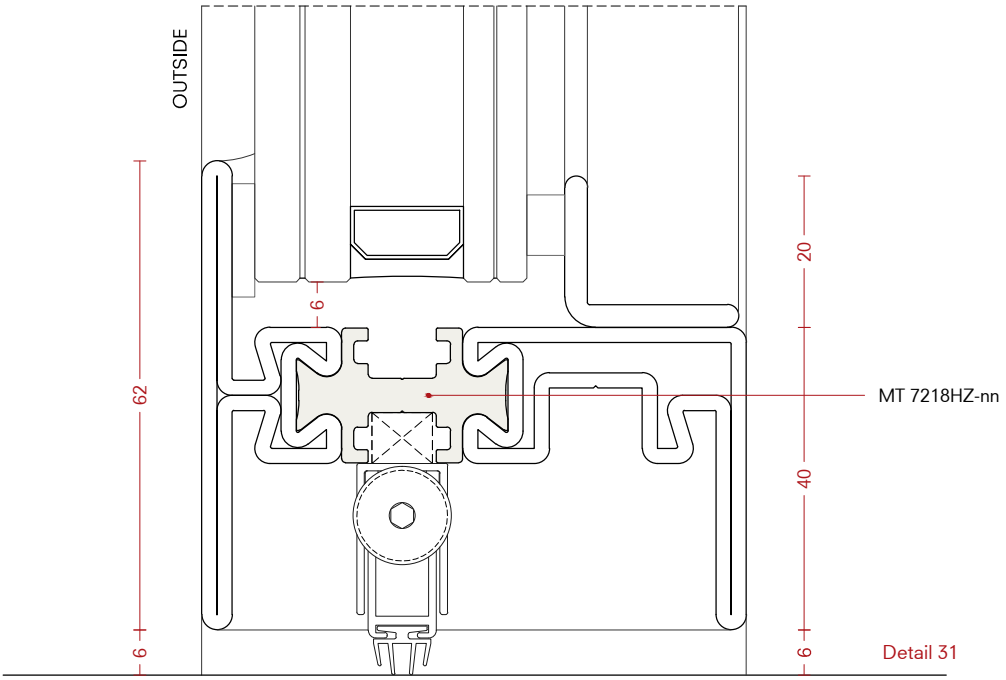
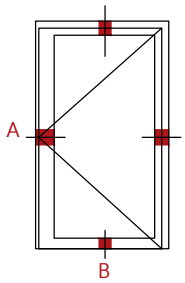

OUTSIDE
6
62
6
20
40
6
MT 7218HZ-nn
Detail 31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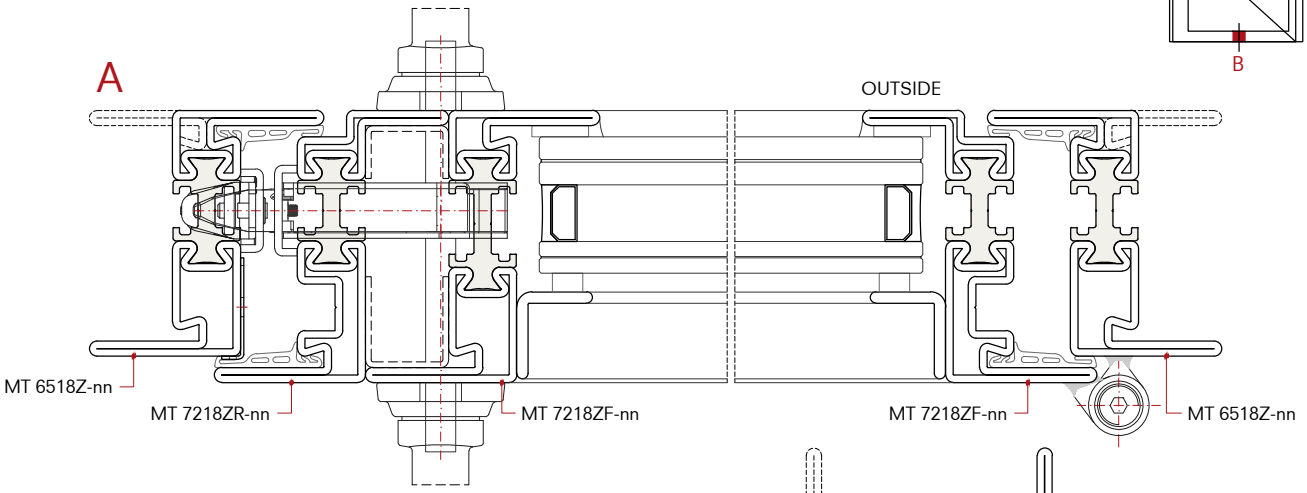
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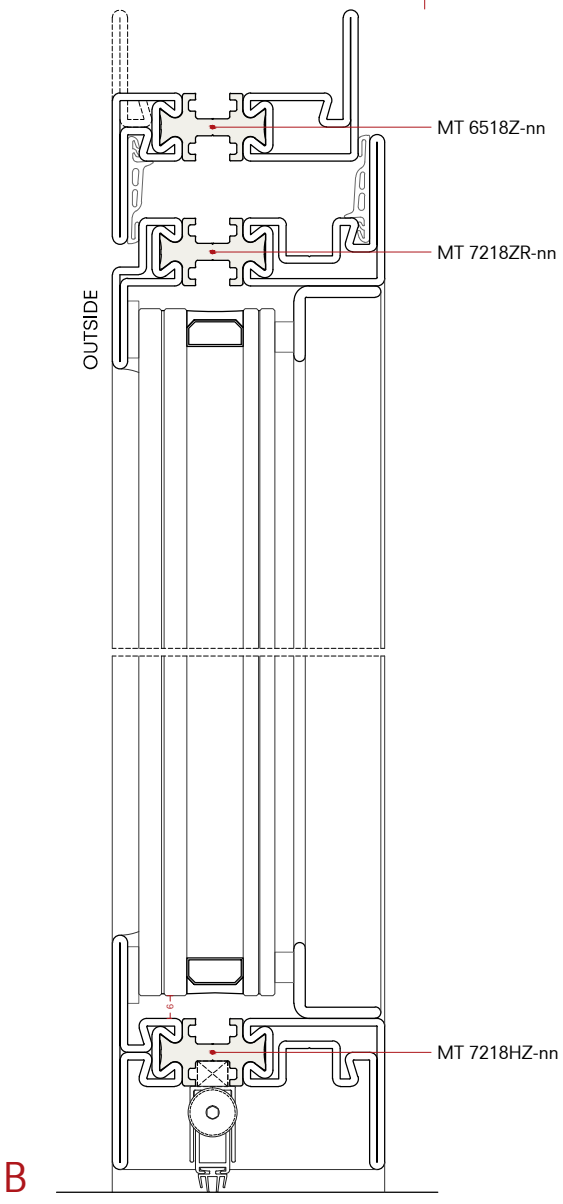
MT 7218ZR-nn
MT 7218ZF-nn
MT 7218ZF-nn
MT 6518Z-nn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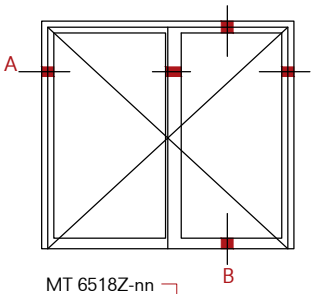
MT 7218ZR-nn
OUTSIDE
MT 7218HZ-nn
B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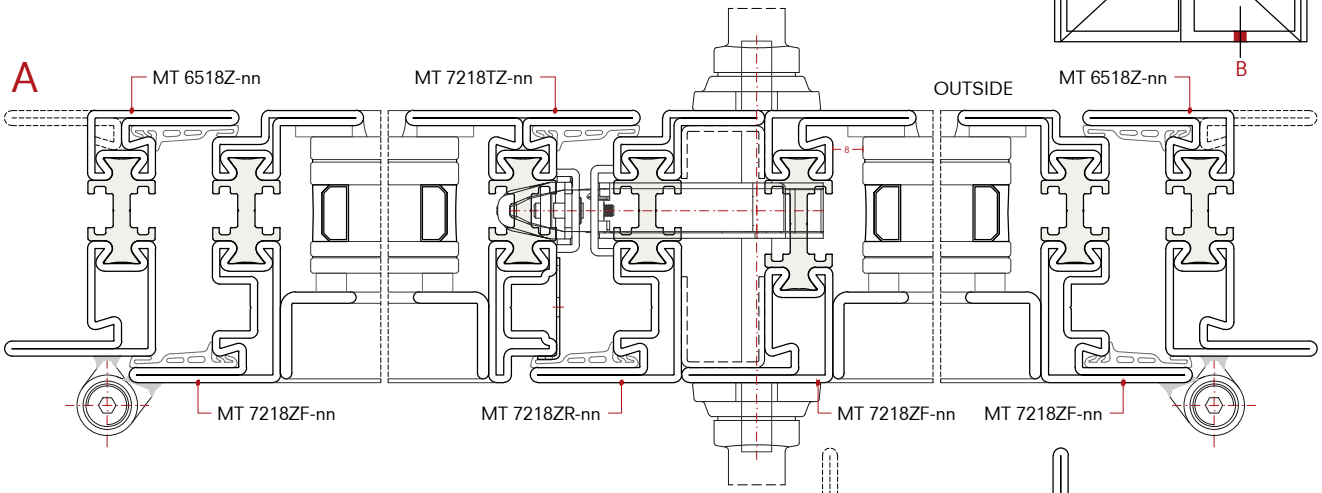
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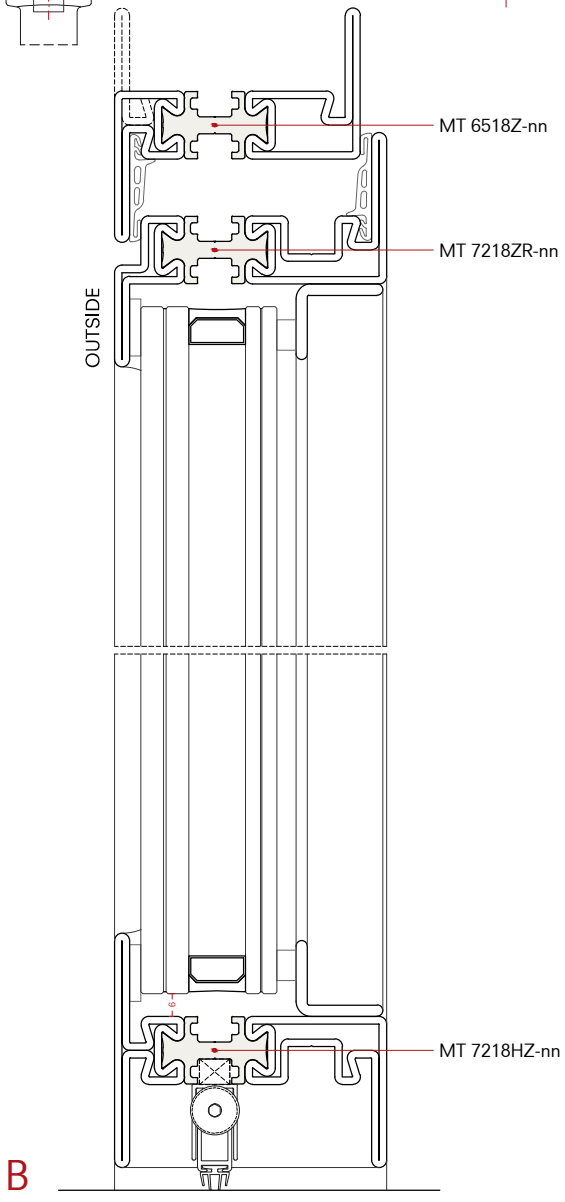
MT 7218ZR-nn
MT 7218ZF-nn
MT 7218ZF-nn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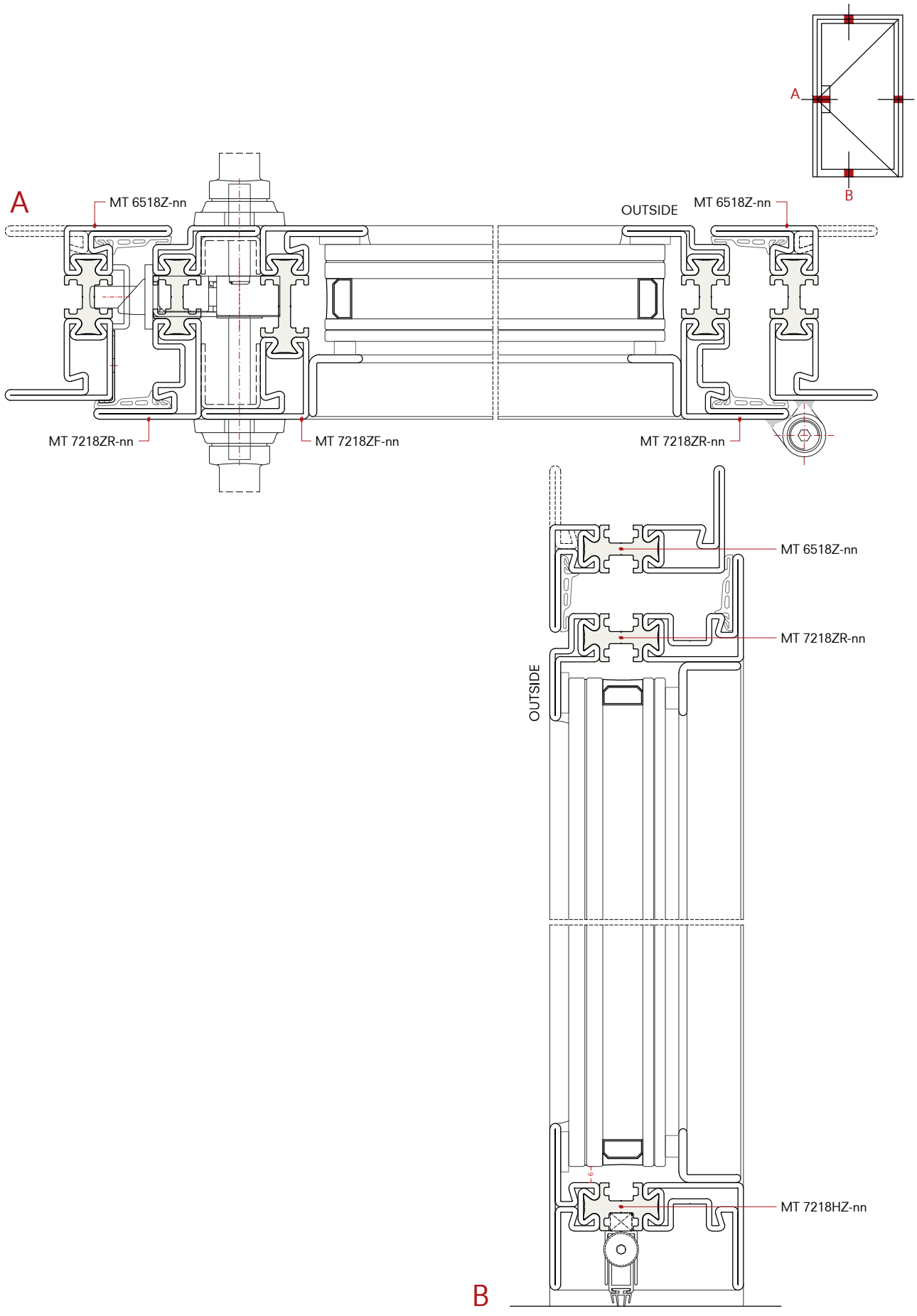
MT 7218ZR-nn
OUTSIDE
MT 7218HZ-nn
B


A
B
A
MT 6518Z-nn
OUTSIDE
MT 6518Z-nn
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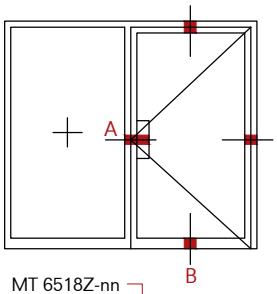
MT 7218ZR-nn
MT 6518Z-nn
MT 7218ZR-nn
OUTSIDE
MT 7218HZ-nn
B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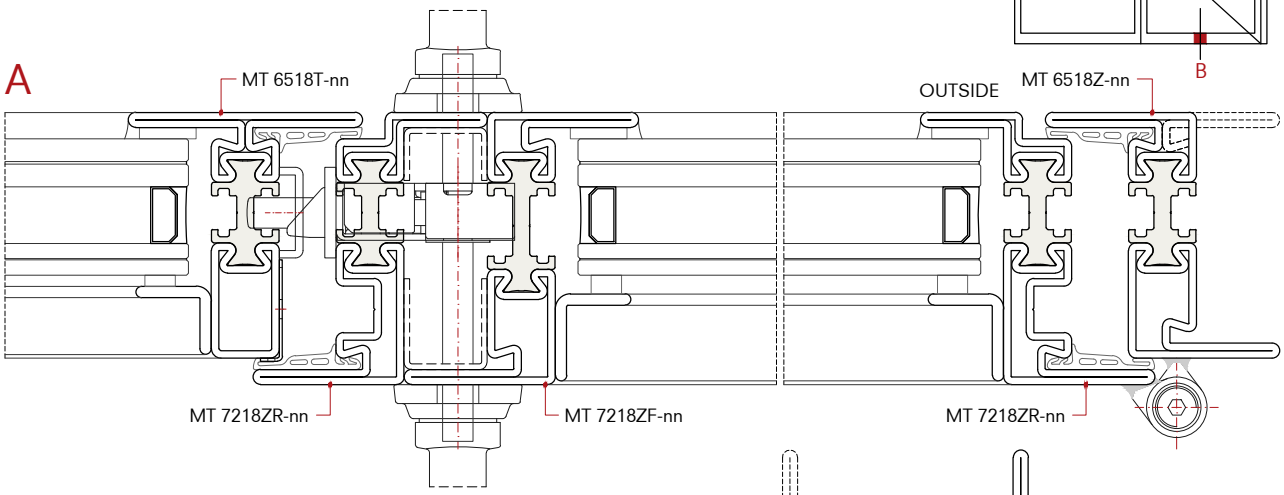
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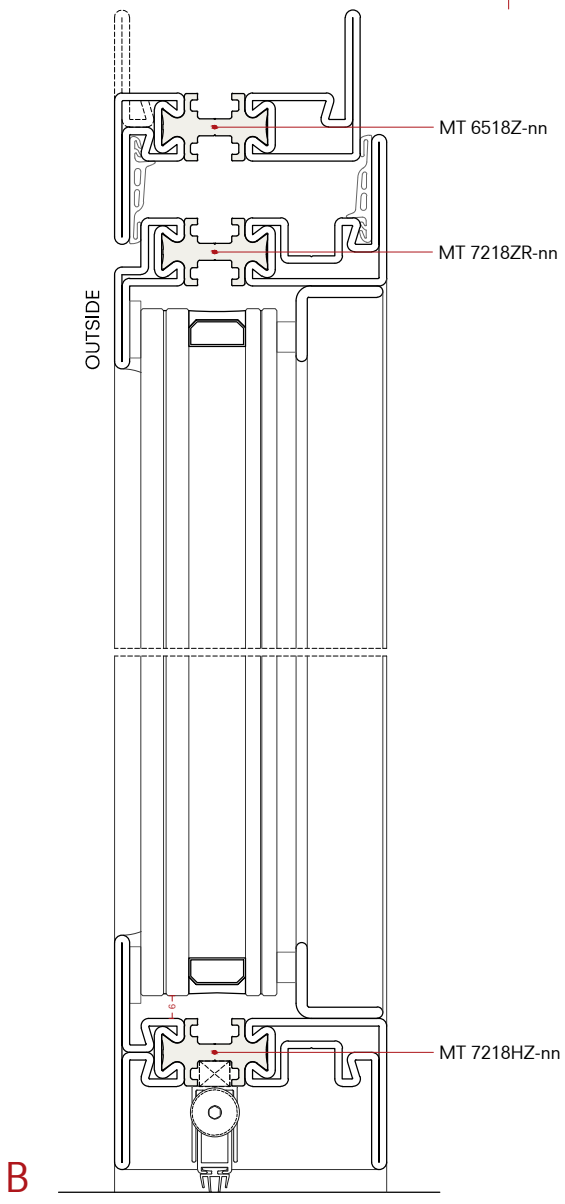
OUTSIDE
MT 6518Z-nn
MT 7218ZR-nn
MT 7218ZF-nn
MT 7218ZR-nn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OUTSIDE
MT 7218HZ-nn
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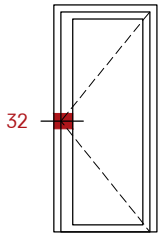
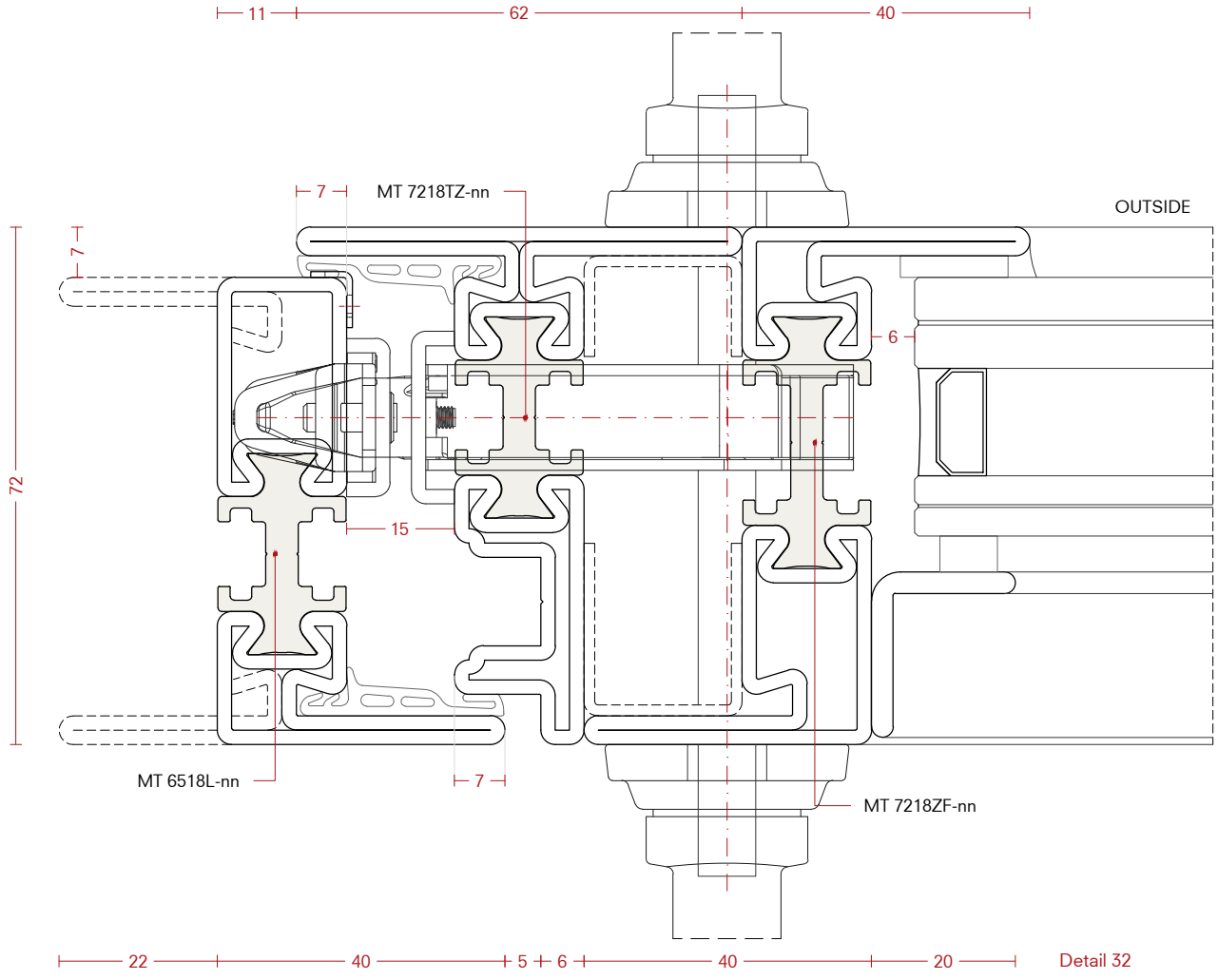




Note:

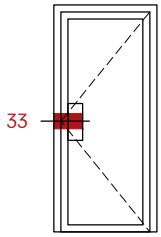
For the installation of the locks, please consult the processing sheets in the dedicated paragraph 5.4

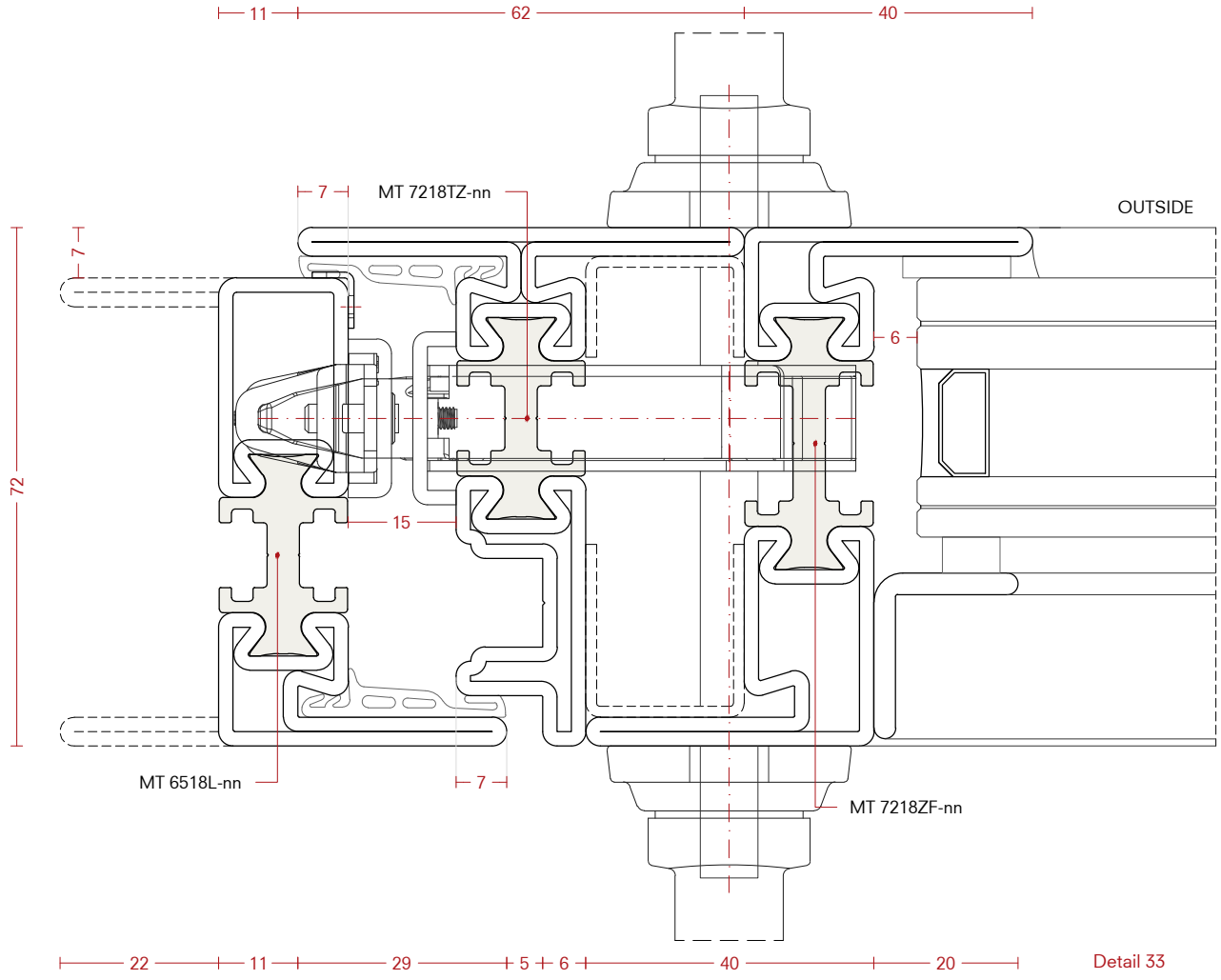
Nota:

Per l'installazione delle serrature si prega di consultare le schede di lavorazione al paragrafo dedicato 5.4

Nota:

Para la instalación de las cerraduras, consulte las hojas de procesamiento en el párrafo específico 5.4





Note:

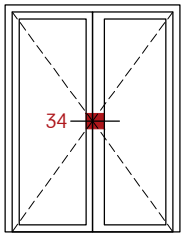
For the installation of the locks, please consult the processing sheets in the dedicated paragraph 5.4

Nota:

Per l'installazione delle serrature si prega di consultare le schede di lavorazione al paragrafo dedicato 5.4

Nota:

Para la instalación de las cerraduras, consulte las hojas de procesamiento en el párrafo específico 5.4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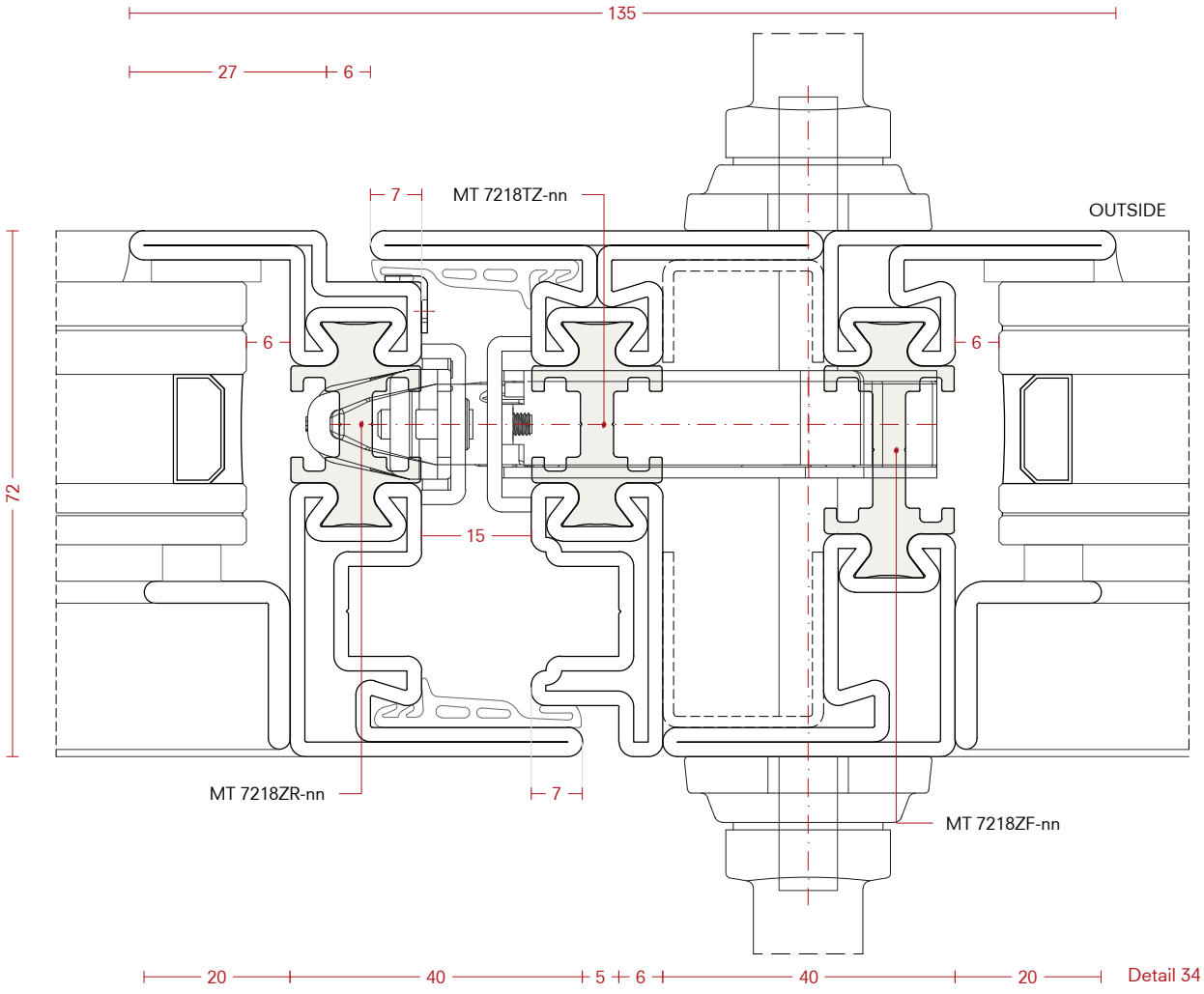
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27
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MT 7218ZR-nn
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MT 7218ZF-nn
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40
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6
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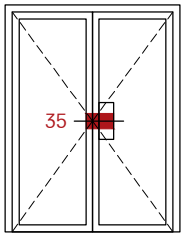
20
Detail 34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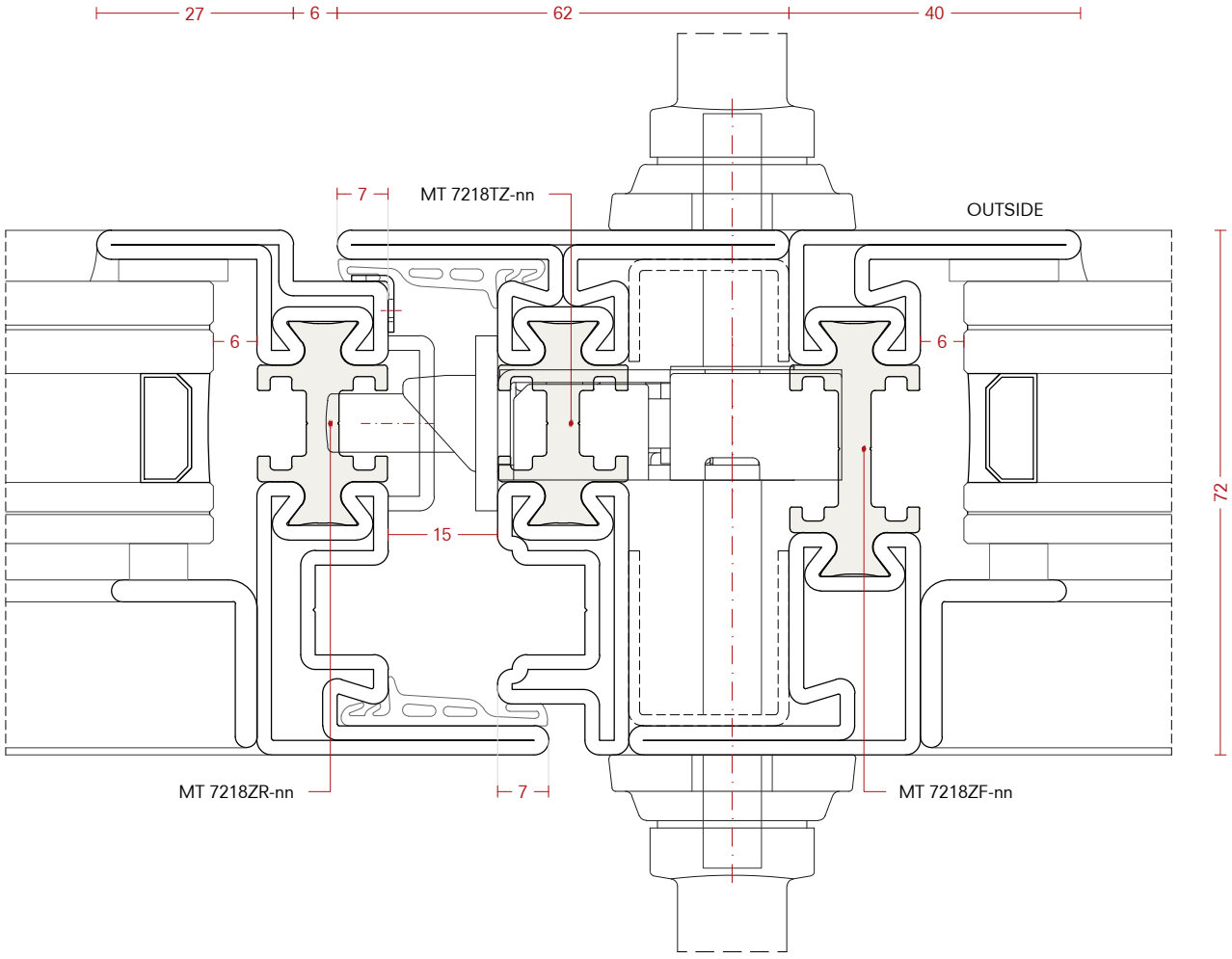
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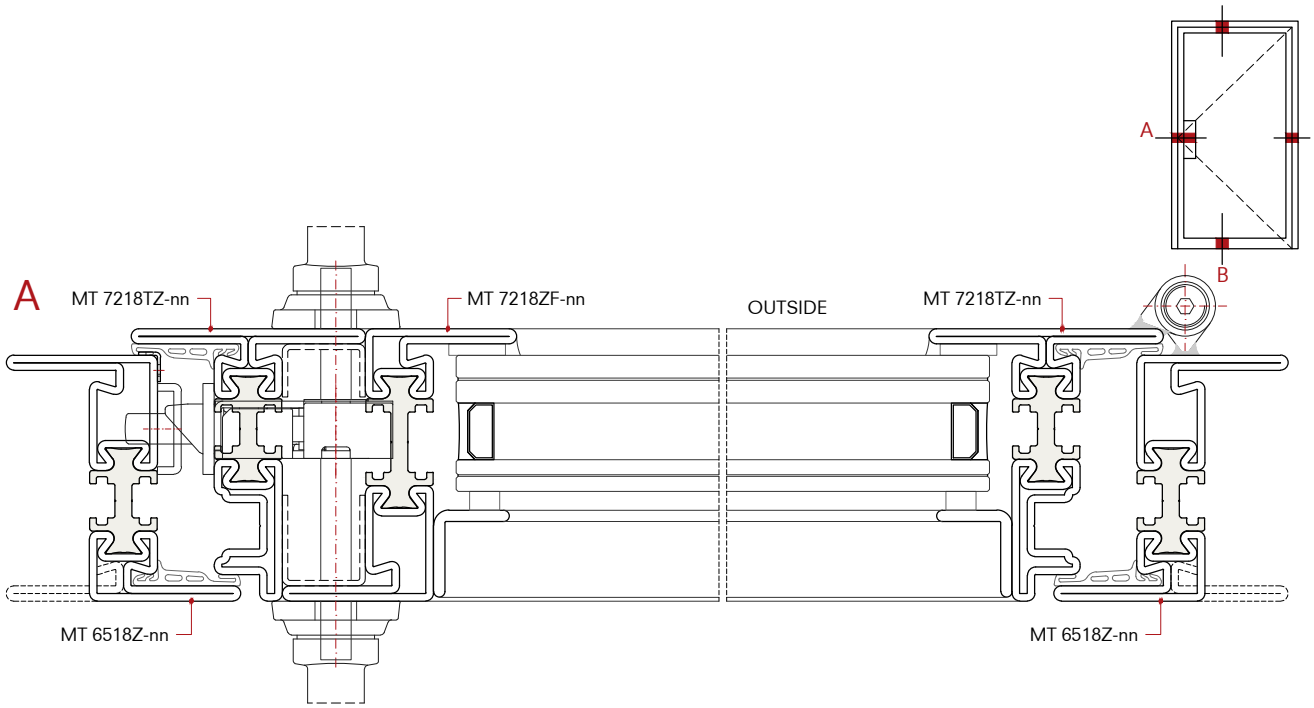
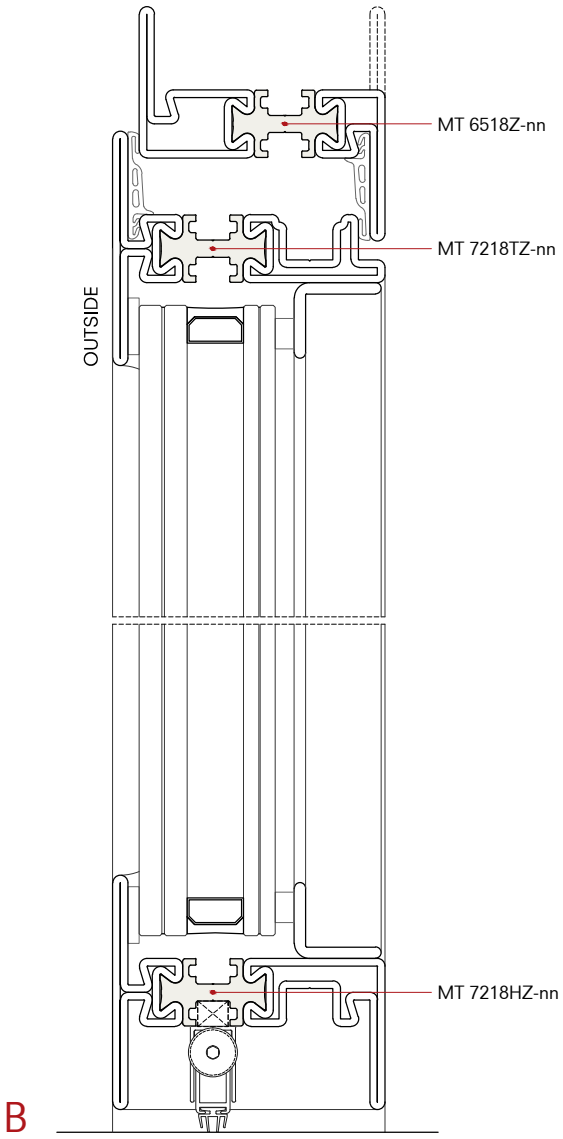
Detail 35


A
B
A
MT 7218TZ-nn
MT 7218ZF-nn
OUTSIDE
MT 7218TZ-nn
MT 6518Z-nn
MT 6518Z-nn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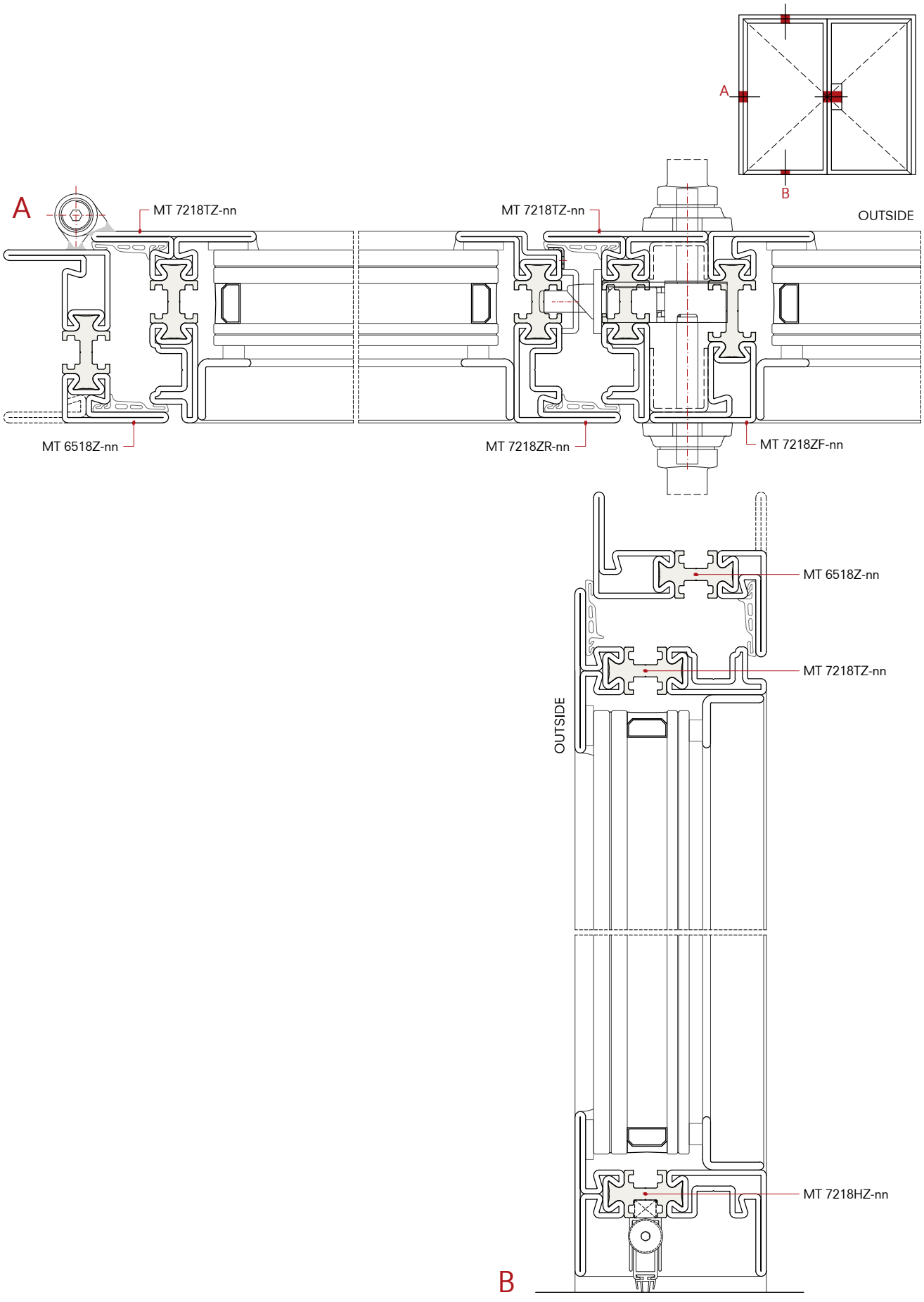
MT 7218TZ-nn
OUTSIDE
MT 7218HZ-nn
B


A
B
A
MT 7218TZ-nn
MT 7218TZ-nn
OUTSIDE
MT 6518Z-nn
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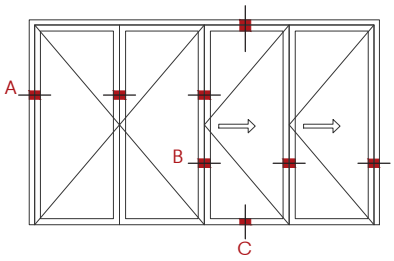
MT 7218HZ-nn
B



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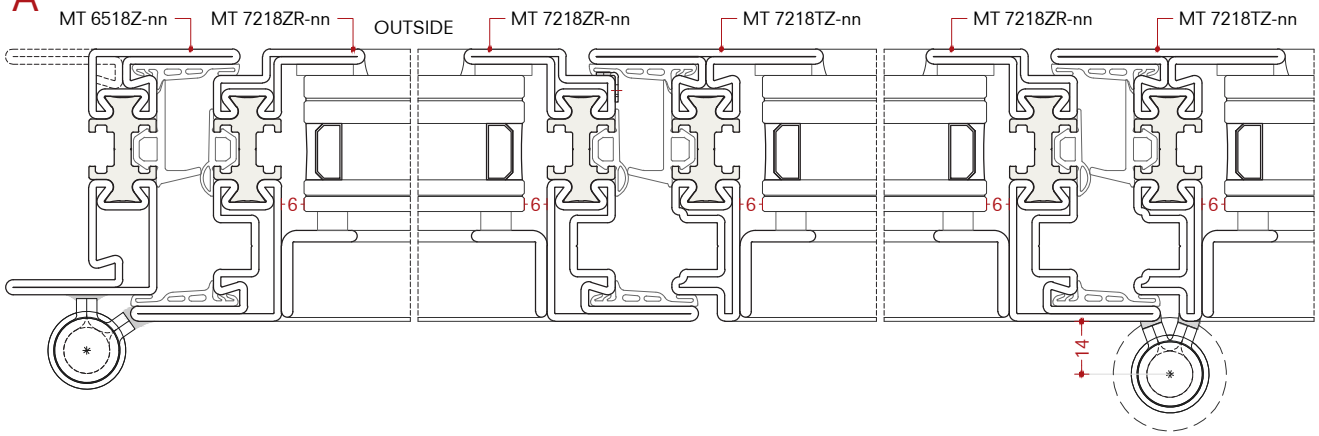

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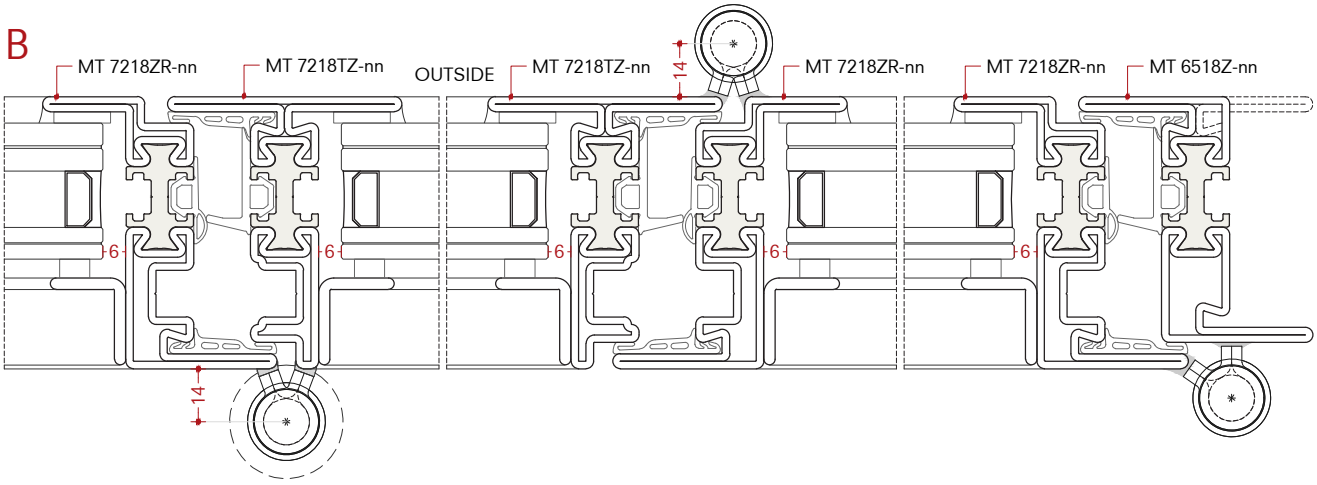


Note to bi-folding door systems:

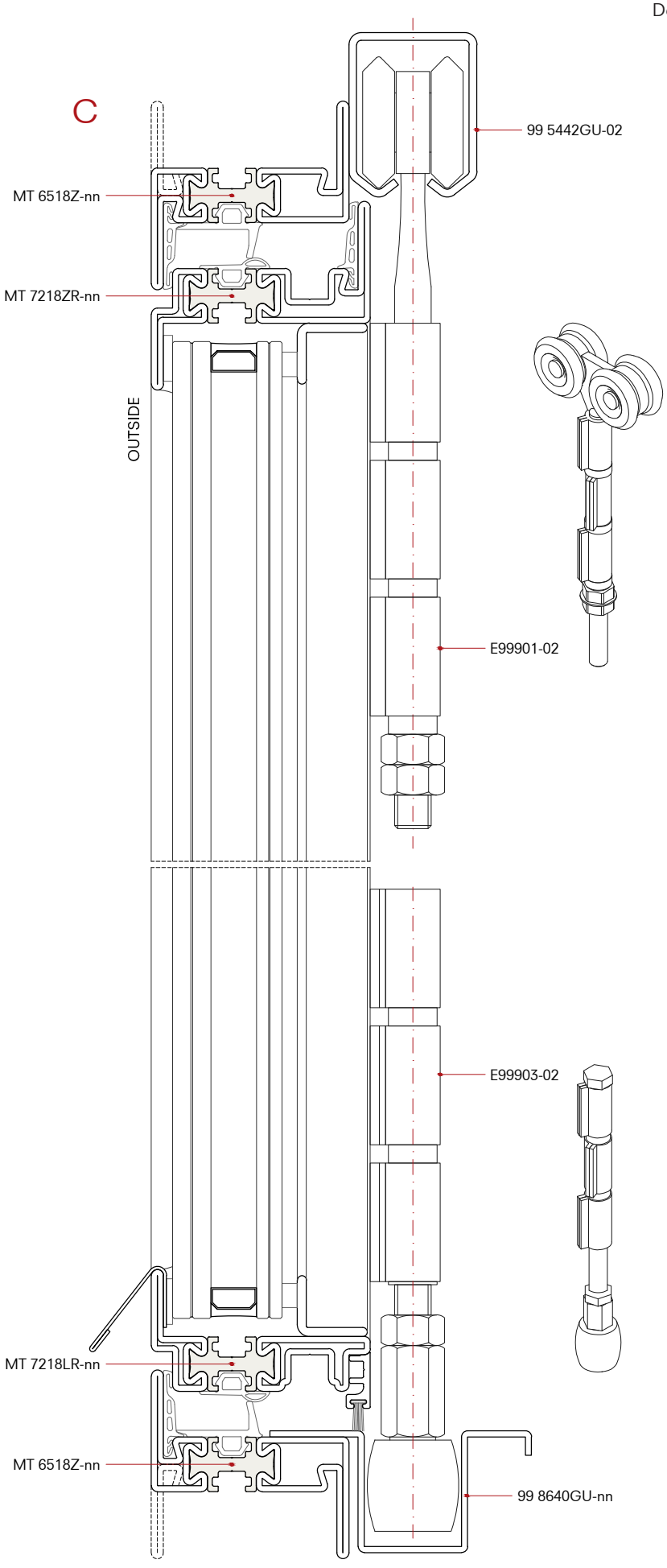
- In this documentation the bi-folding door systems are only included in extracts and must be adapted to the respective installation situation.
- Opening of the leaves only possible to the inside.
- Closure is by means of the Euro groove window fittings.
- Further information and processing instructions are available from your technical advisor.
- Building physical aspects are to be taken into account and independently adapted.

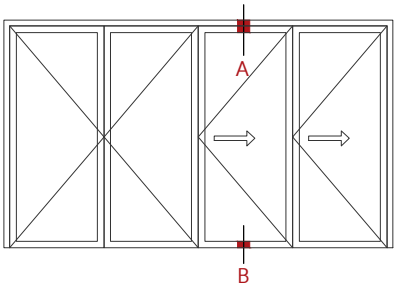
Nota per i sistemi di porte chiusura a libro:

- In questa documentazione i sistemi per porte a libro sono inclusi solo in parte e devono essere adattati alla rispettiva situazione di installazione.
- L'apertura delle ante è possibile solo verso l'interno.
- La chiusura avviene tramite ferramenta a cava Euro.
- Ulteriori informazioni e istruzioni per la lavorazione sono disponibili presso il proprio consulente tecnico.
- Gli aspetti fisici dell'edificio devono essere presi in considerazione e adattati in modo indipendente.

Nota para los sistemas de puertas plegables:

- En esta documentación, los sistemas de puertas plegables solo se incluyen en extractos y deben adaptarse a la situación de instalación respectiva.
- Apertura de las hojas solo posible hacia el interior.
- El cierre se realiza mediante herrajes para ventanas con ranura Euro.
- Su asesor técnico le proporcionará más información e instrucciones de procesamiento.
- Los aspectos físicos del edificio deben tenerse en cuenta y adaptarse de forma independiente.


C
99 5442GU-02
MT 6518Z-nn
MT 7218ZR-nn
OUTSIDE
E99901-02
E99903-02
MT 7218LR-nn
MT 6518Z-nn
99 8640GU-nn



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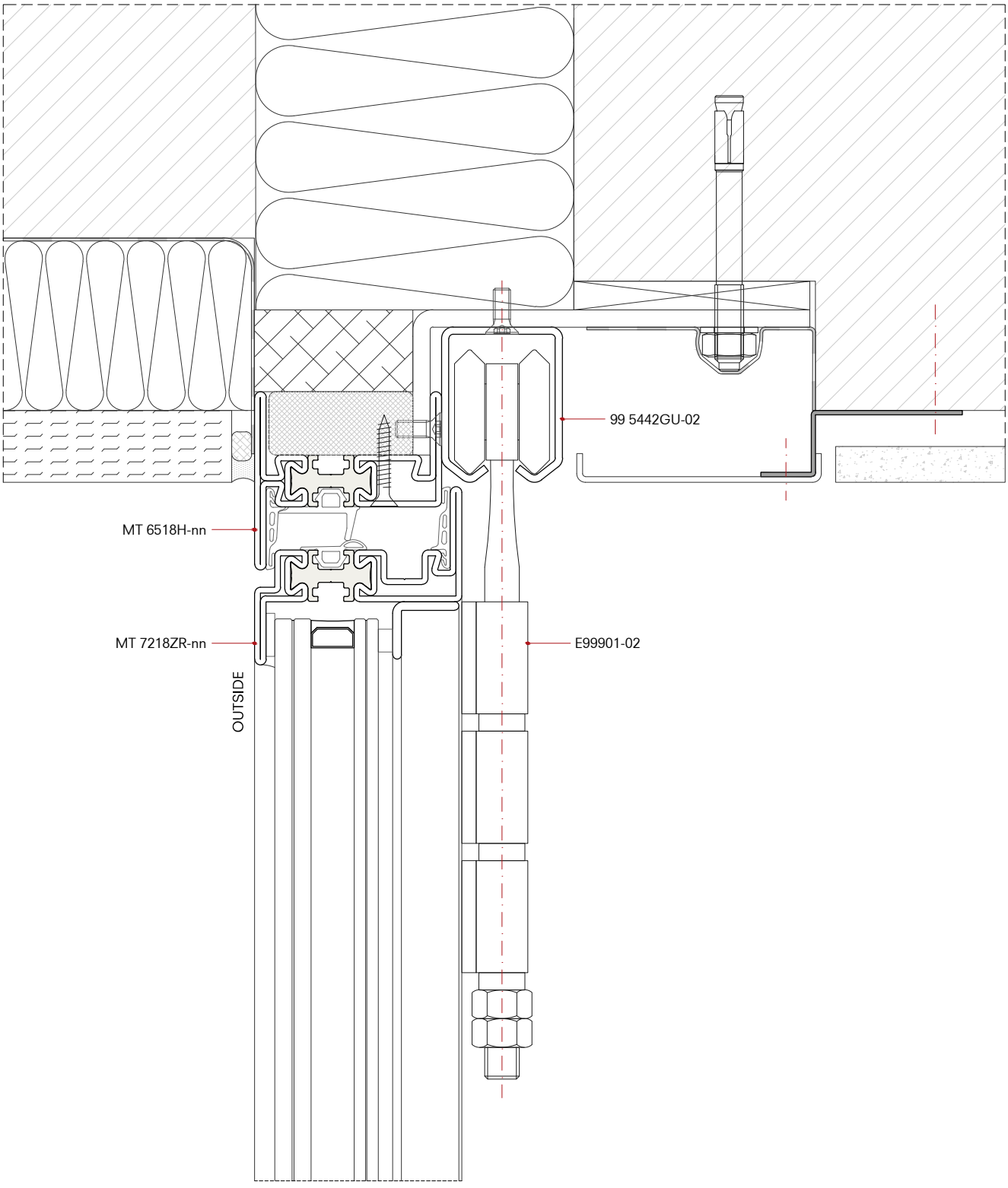
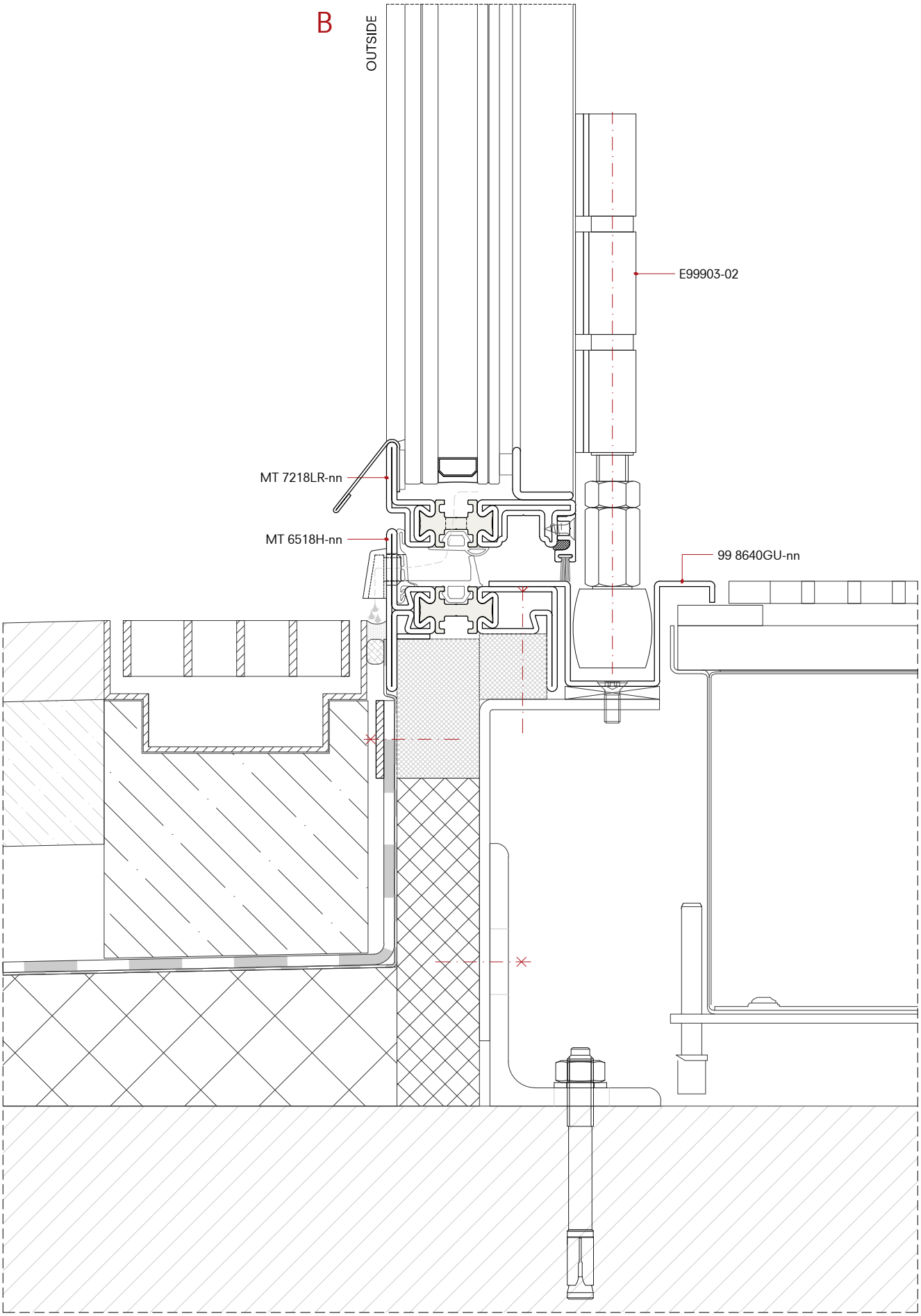



B
OUTSIDE
E99903-02
MT 7218LR-nn
MT 6518H-nn
99 8640GU-nn

Details, structural connections

Dettagli di costruzione giunti d'angolo

Detalles de construcción

Legend

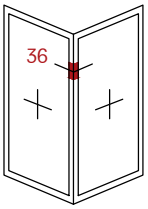
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1

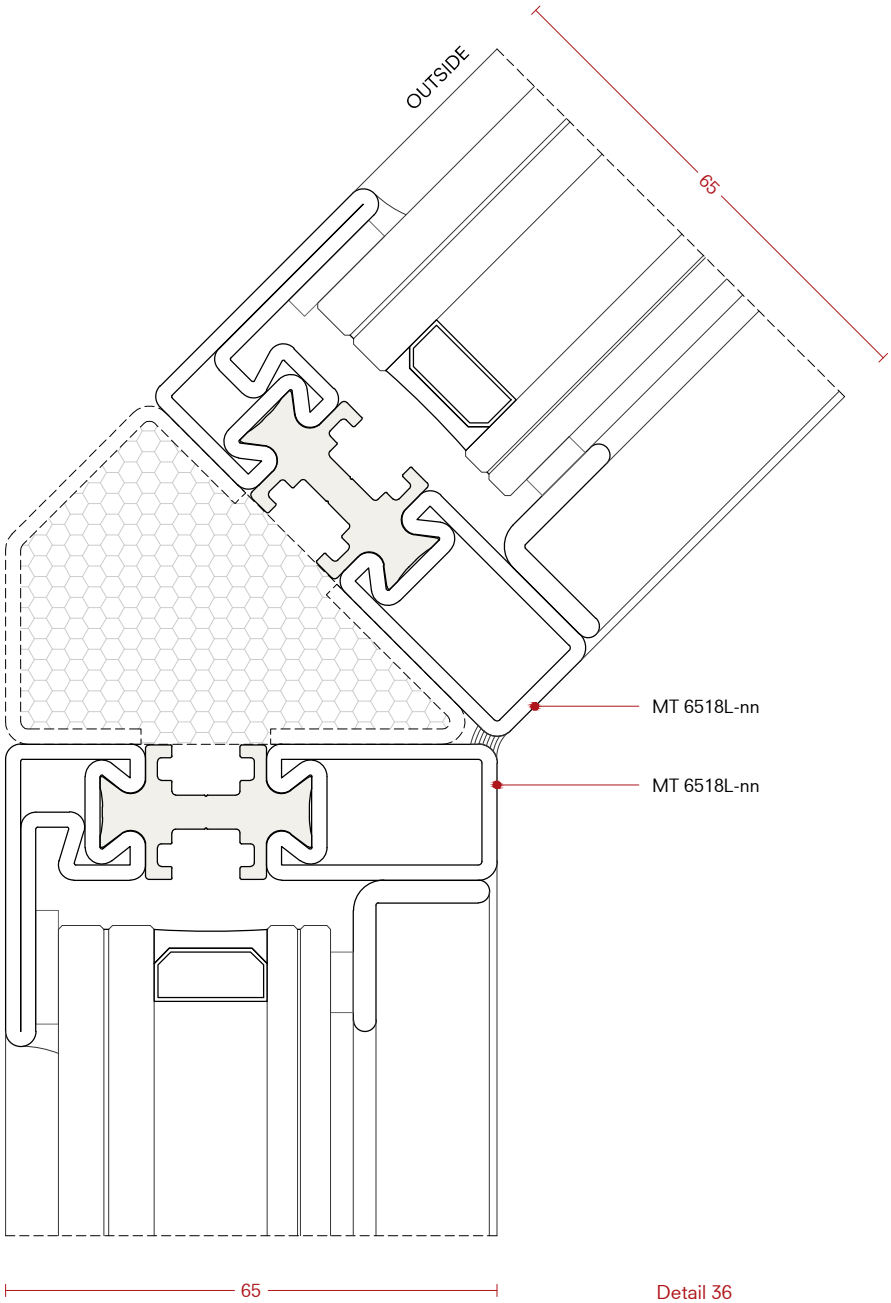
Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1

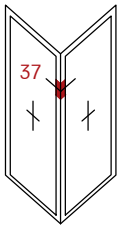
Leyenda

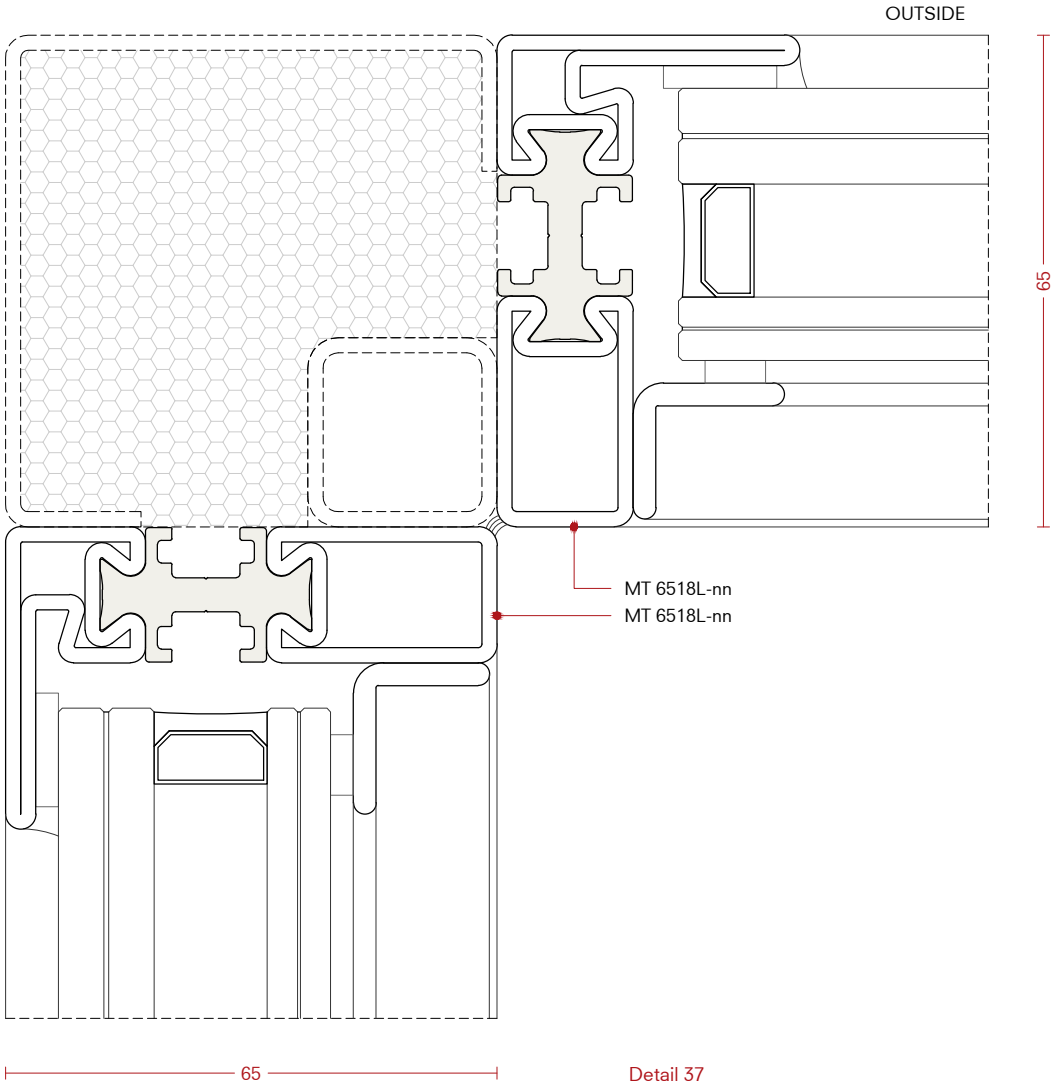
+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1





Detail 36





Detail 37

Wall connections

Attacchi a muro

Cierres constructivos

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:2

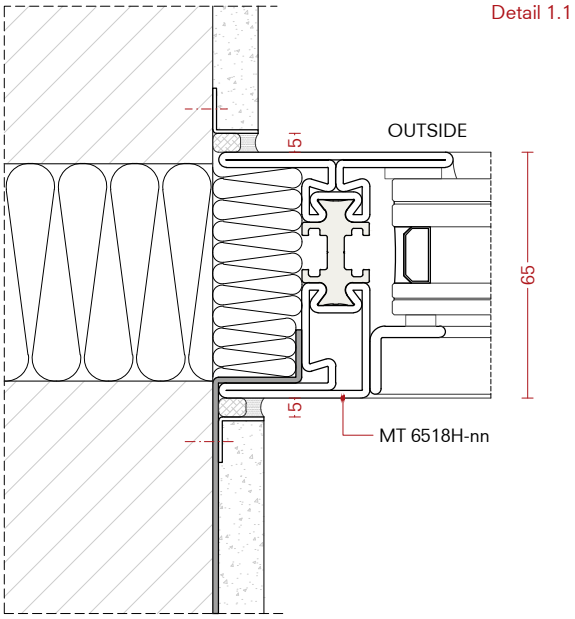
Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:2

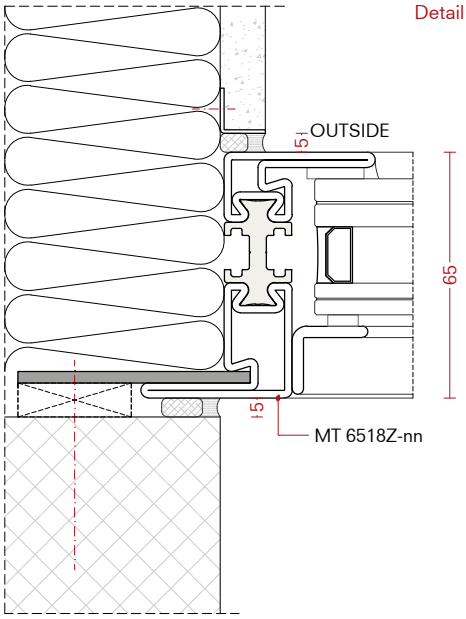
Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:2

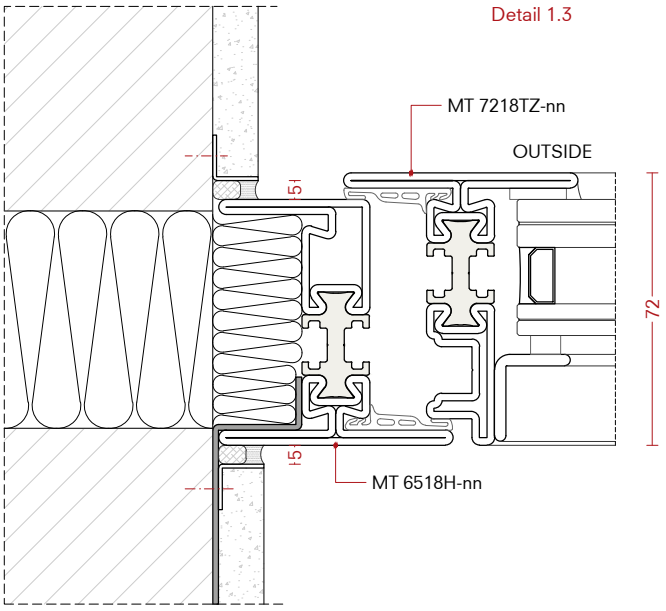
Detail 1.1



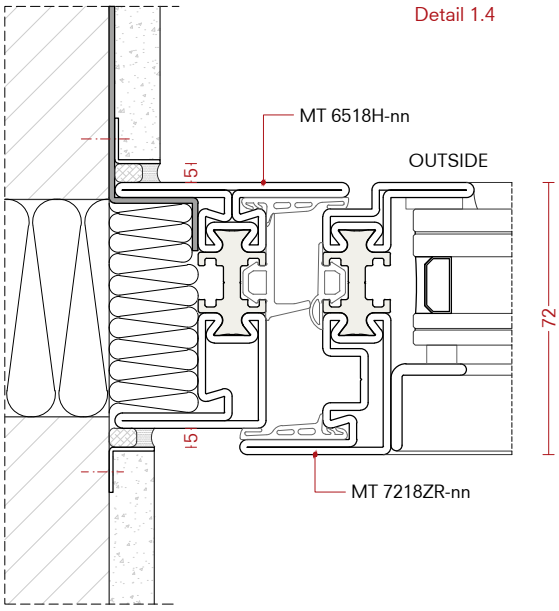
Detail 1.2



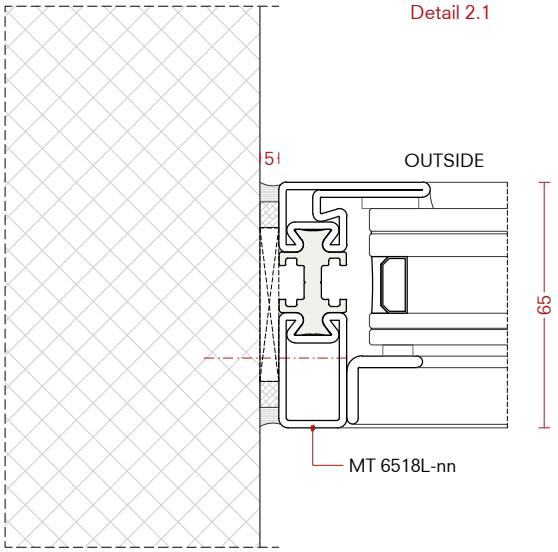
Detail 1.3



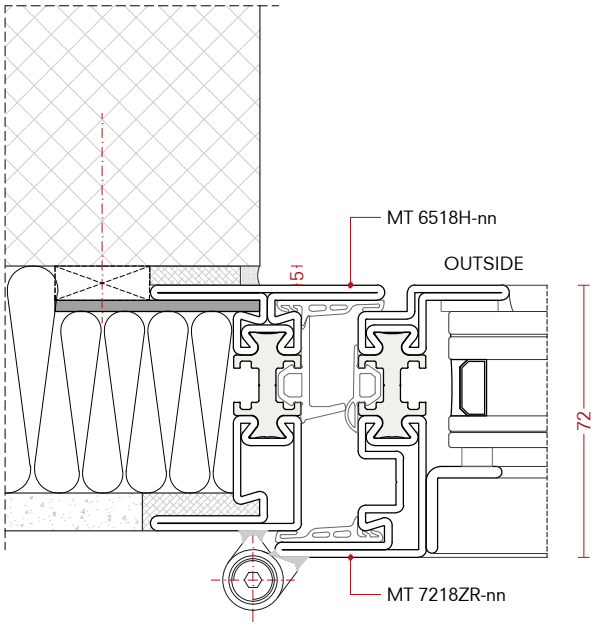
Detail 1.4



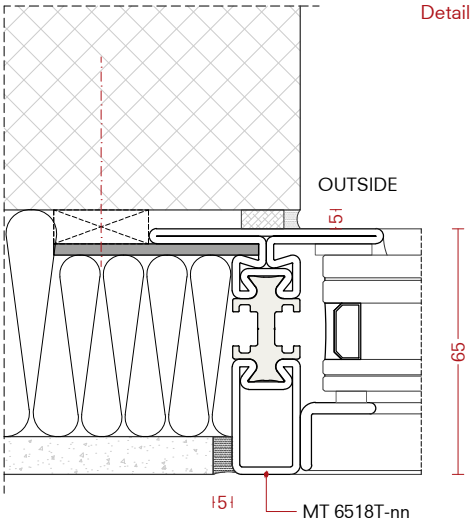
Detail 2.1



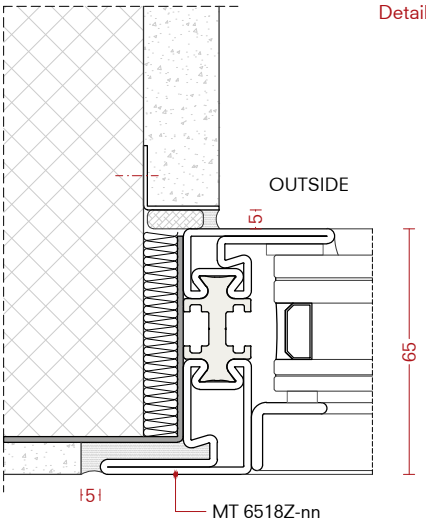
Detail 2.2



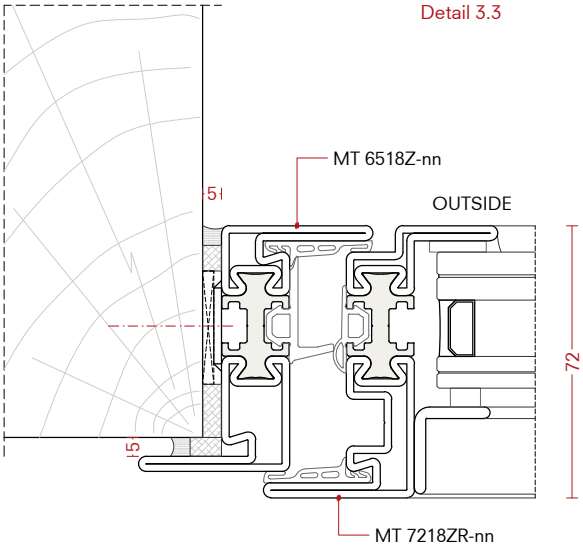
Detail 3.1



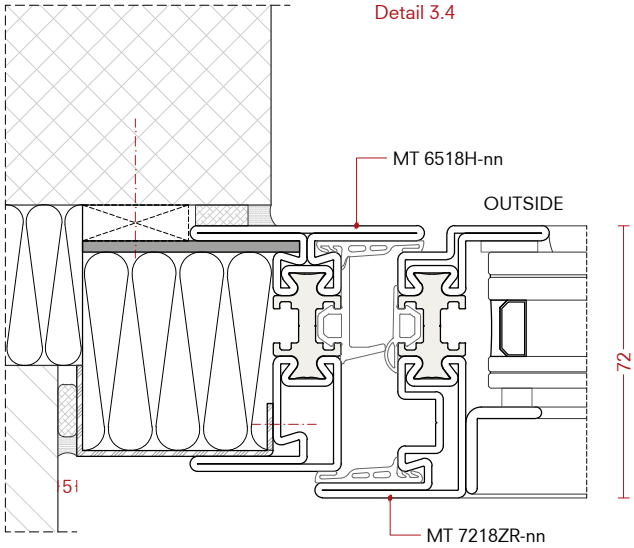
Detail 3.2



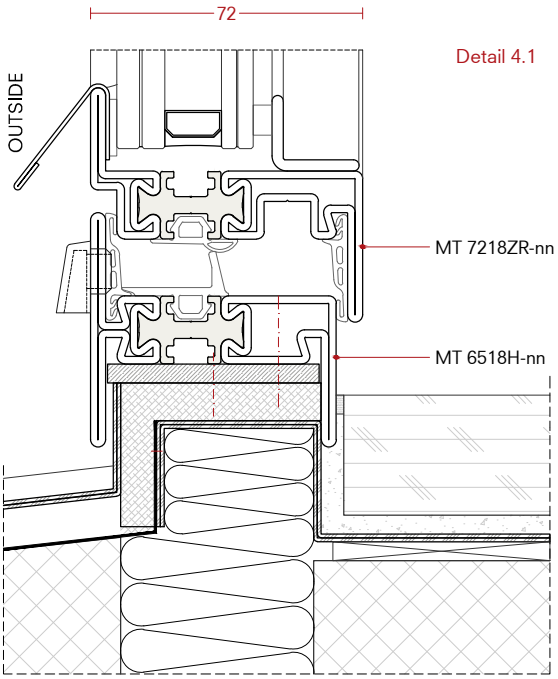
Detail 3.3



Detail 3.4



Detail 4.1



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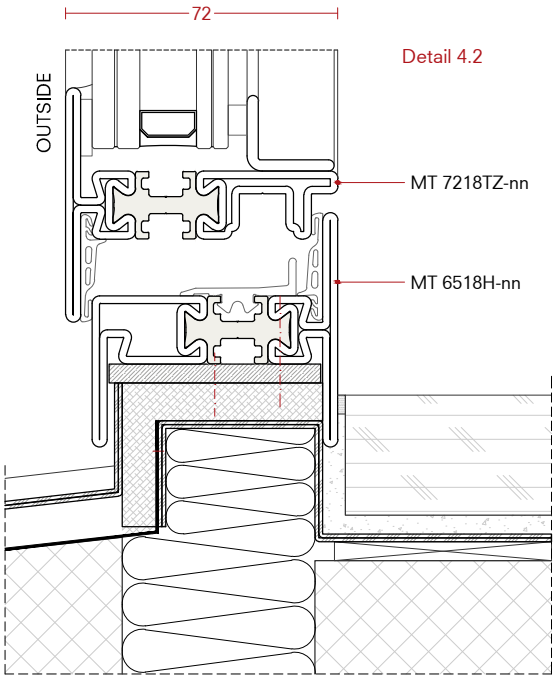
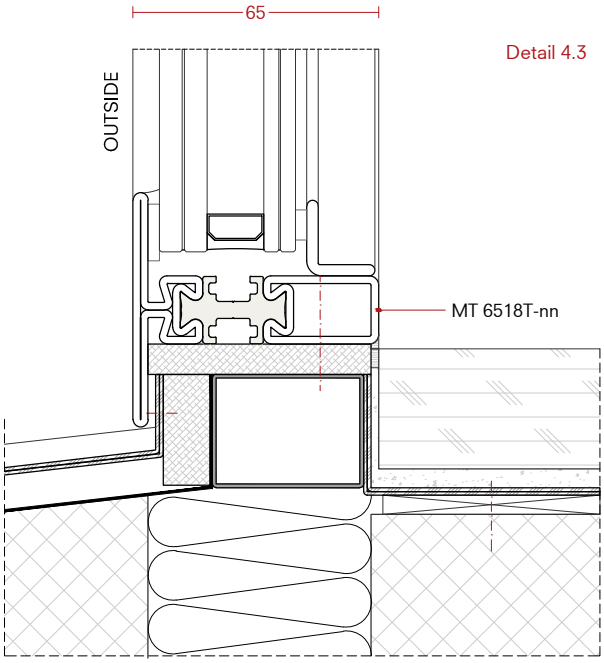
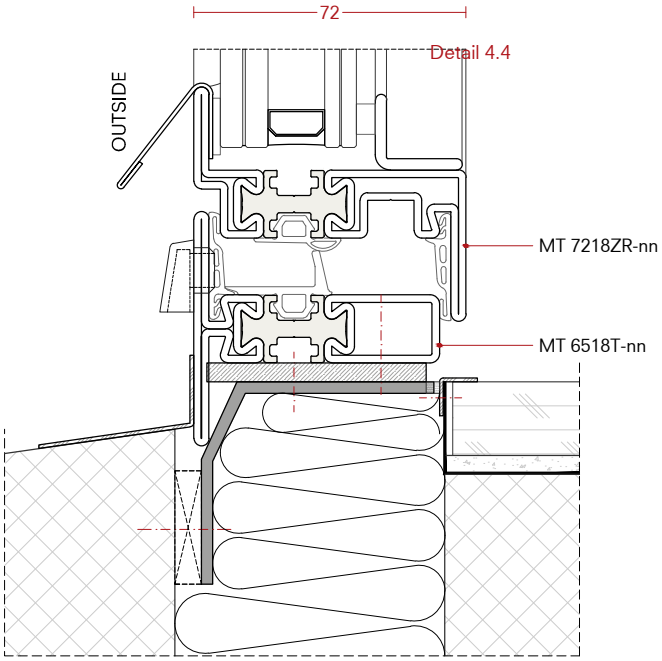


Detail 4.3



Detail 4.4



Processing	**Lavorazioni**	**Procesamiento**	5.0
Health and safety	Prevenzione e sicurezza	Prevención y seguridad	5.1
Cutting	Taglio	Corte	5.2
Welding	Saldatura	Soldadura	5.3
Accessories installation:	Montaggio accessori:	Montaje accesorios:	
Gaskets	Guarnizioni	Juntas de sellado	5.4
System accessories	Accessori di sistema	Accesorios del sistema	5.5
Hinges	Cerniere	Bisagras	5.6
Flush bolts	Catenacci	Pasador de canto	5.7
General fittings	Ferramenta generale	Herrajes generales	5.8
Installation Tilt&Turn fittings	Montaggio accessori finestra anta ribalta	Montaje accesorios ventana oscilante	5.9
Handles	Maniglie	Manillas	5.10
Locks	Serrature	Cerraduras	5.11
Glazing	Vetrazione	Acristalamiento	5.12

Important notes:

All processes are considered glazed-in except where specified.

Note importanti:

Tutte le lavorazioni si intendono glazed-in tranne dove specificato.

Notas importantes:

Todos los procesos se consideran acristalados, excepto donde se especifique.

Health and safety | Prevenzione e sicurezza | Prevención y seguridad

5.1

Health and safety

M65 TB profiles with polyamide thermal barrier can generally be processed the same way as other thermal barrier steel window profile systems.
No special machines or process for fabrication are required. The standard fabrication processes, such as welding and grinding, can be carried out easily. While drilling, sawing or machining the polyamide web a dust, similar to wood dust, is released. This dust does not require dedicated filters or extractors. However, we recommend to protect eyes and airways according to country specific health and safety regulations.
Heating any polyamide items releases gaseous substances. For this reason is recommended to weld with the special personal protective equipment suggested and in areas with sufficient ventilation and fume-disposing systems.

Prevenzione e sicurezza

I profili M65 TB a taglio termico con poliammide possono generalmente essere lavorati analogamente ad altri profili per finestre a taglio termico in acciaio.
Non sono necessarie macchine speciali o processi particolari per la fabbricazione. I processi di fabbricazione standard, come saldatura e rettifica, possono essere eseguiti facilmente. Durante la foratura, il taglio o la lavorazione dell'anima in poliammide viene rilasciata una polvere, simile alla polvere di legno. Questa polvere non richiede filtri o aspiratori dedicati. Tuttavia, raccomandiamo di proteggere gli occhi e le vie respiratorie secondo le norme specifiche di salute e sicurezza del Paese.
L'eventuale surriscaldamento del poliammide libera sostanze gassose: per questa ragione si consiglia di saldare con appositi DPI previsti e in zone con sufficiente aerazione e comunque in presenza di sistema per l'evacuazione dei fumi.

Salud y seguridad

Los Perfiles M65 TB con separadores de poliamida generalmente se pueden procesar de la misma manera que otros sistemas de perfiles de ventana de acero con barrera térmica.
No se requieren máquinas especiales o medidas para la fabricación. Los procesos de fabricación estándar, como la soldadura y el pulido, se pueden llevar a cabo fácilmente. Al perforar, aserrar o mecanizar la banda de poliamida se libera un polvo similar al polvo de madera. Este polvo no requiere filtros o extractores dedicados. Sin embargo, recomendamos proteger los ojos y las vías respiratorias de acuerdo con las normas de salud y seguridad específicas del país.
Cualquier sobrecalentamiento del poliamida libera sustancias gaseosas: por esta razón es aconsejable soldar con el EPP adecuado y en áreas con suficiente ventilación y en cualquier caso en presencia de un sistema de extracción de humos.

Cutting **Taglio** **Corte** 5.2

Cutting

M65 TB profiles can be cut with conventional steel saws. However, when cutting and, in particular, when creating mitre cuts, cutting templates (D1041X-00) have to be used to ensure that the profiles are securely fixed.
The feed rate on saws have to be reduced compared to conventional tubular steel profiles. We recommend a proper lubrification during cutting operations.

For further information, see also the chapter “General Information”.

Taglio

I profili M65 TB possono essere tagliati con seghe per acciaio convenzionali. Tuttavia, durante il taglio e, in particolare durante la creazione di tagli obliqui utilizzare dime di taglio adeguate (D1041X-00) per garantire che i profili siano fissati in modo sicuro. La velocità di avanzamento delle seghe deve essere ridotta rispetto a quella comunemente usata per i convenzionali profili tubolari in acciaio. Raccomandiamo una lubrificazione adeguata durante le operazioni di taglio.

Per ulteriori indicazioni, vedere anche il Capitolo “informazioni generali”.

Cutting

Los perfiles M65 TB se pueden cortar con sierras para metales convencionales. Sin embargo, al cortar y, sobre todo, al cortar con ingletes, deben utilizarse bases de fijación adecuadas (D1041X-00) para garantizar un tensado estable del perfil. Dado que los perfiles presentan muchas filigranas, la velocidad de avance al serrar debe reducirse en comparación con los perfiles tubulares de acero convencionales. Recomendamos utilizar una lubricación de micropulverización para cortar los perfiles.

Para más información, véase también el capítulo “Información general”.

Legend

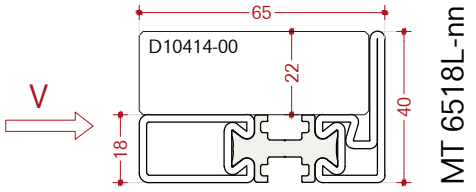
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
V = View
R = Reference cut length peak/peak
CL = Cutting Length
HF = Height Frame
HG = Height Glass
HL = Height Leaf
WF = Width Frame
WG = Width Glass
WL = Width Leaf

Legenda

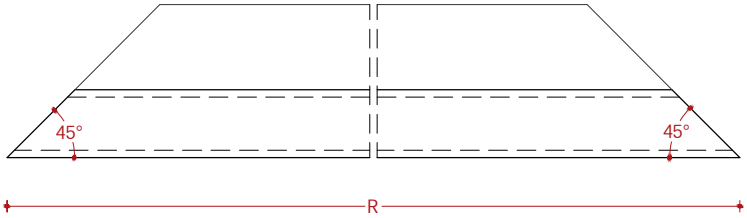
+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2
V = Vista
R = Riferimento lunghezza di taglio
CL = Lunghezza di taglio
HF = Altezza telaio
HG = Altezza vetro
HL = Altezza anta
WF = Larghezza telaio
WG = Larghezza vetro
WL = Larghezza anta

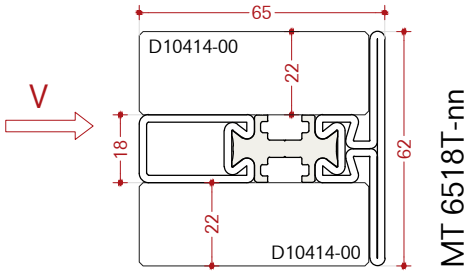
Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2
V = Vista
R = Referencia de la longitud de corte de los extremos
CL = Longitud de corte
HF = Altura marco
HG = Altura vidrio
HL = Altura hoja
WF = Longitud marco
WG = Longitud vidrio
WL = Longitud hoja

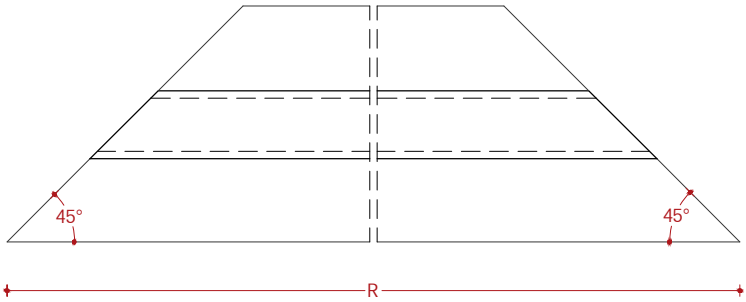


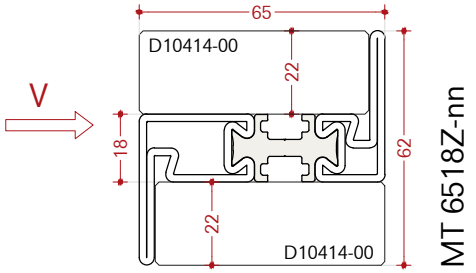
MT 6518L-nn





MT 6518T-nn





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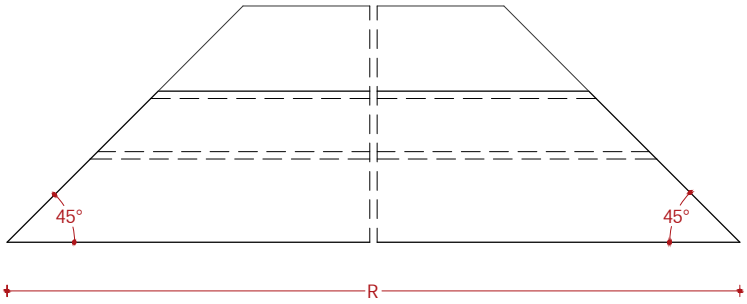

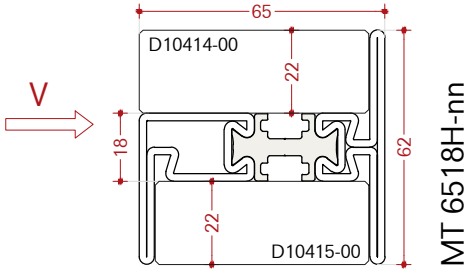

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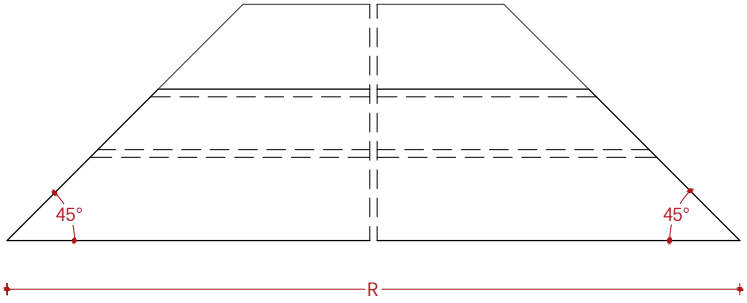
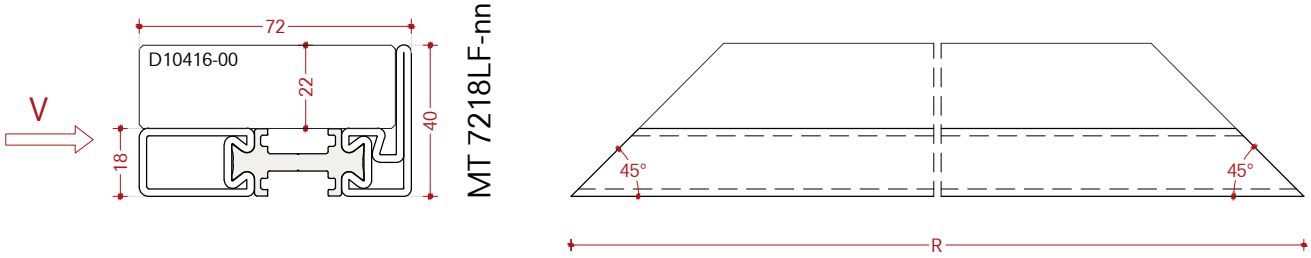


MT 7218LF-nn



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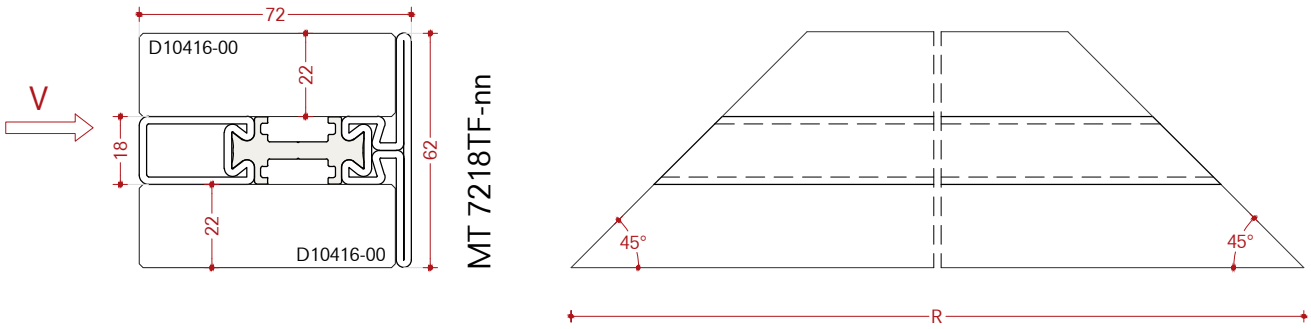

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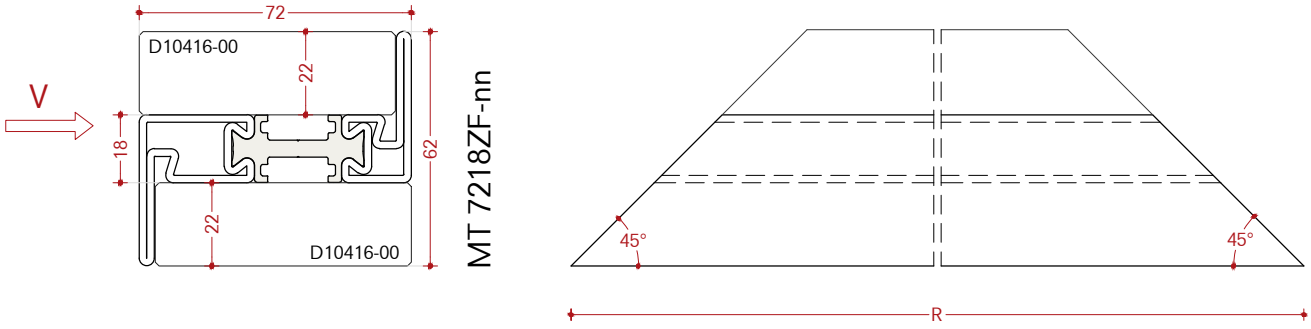

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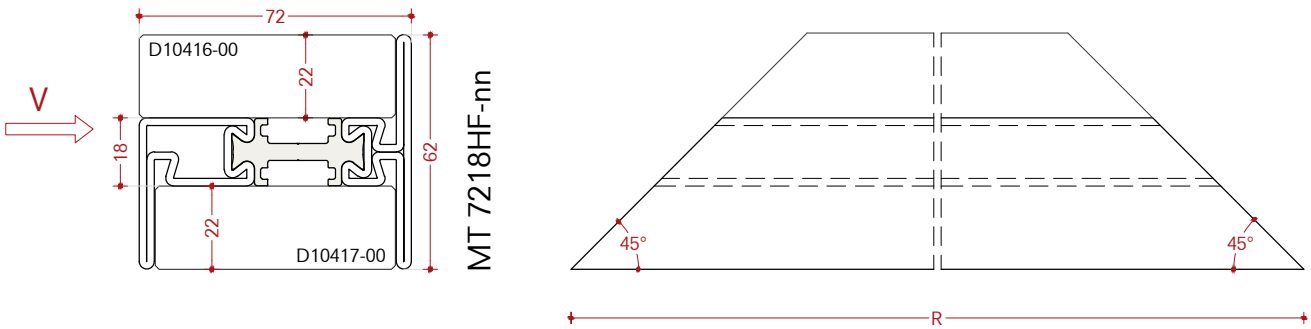

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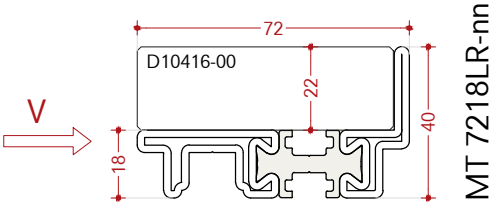

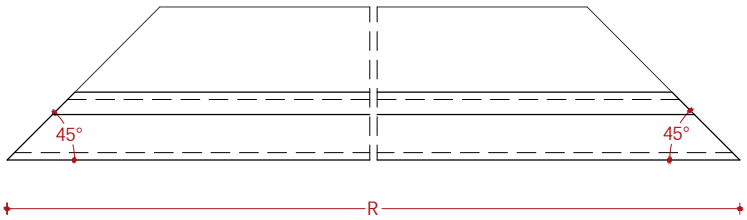

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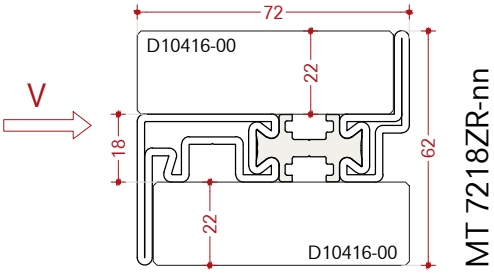

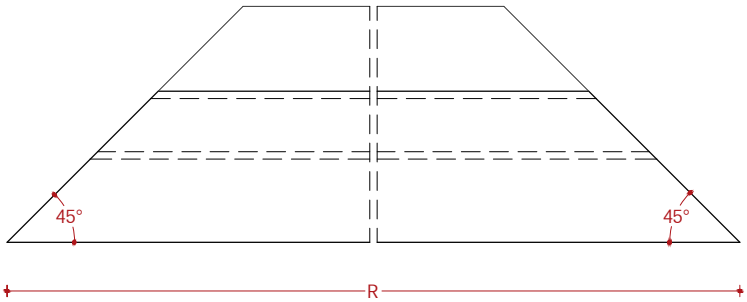

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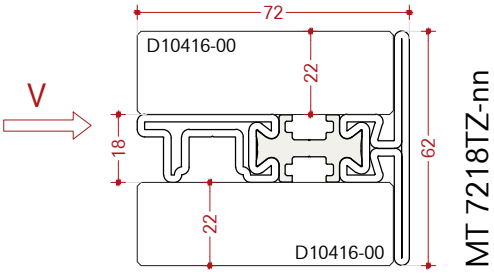
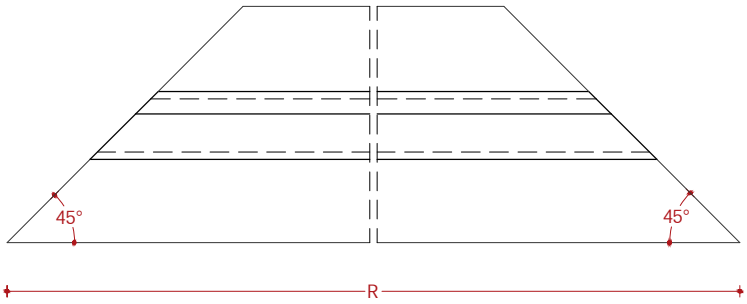
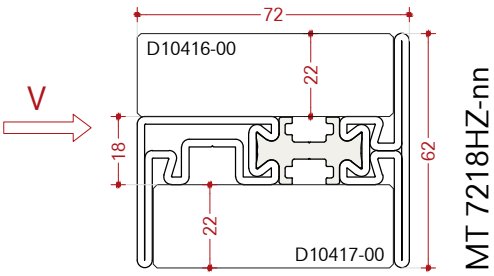
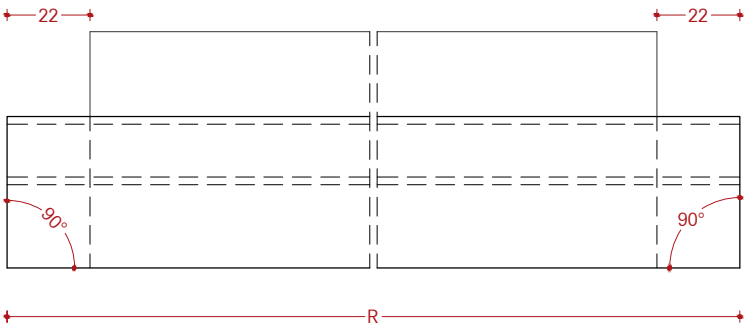




MT 7218HZ-nn

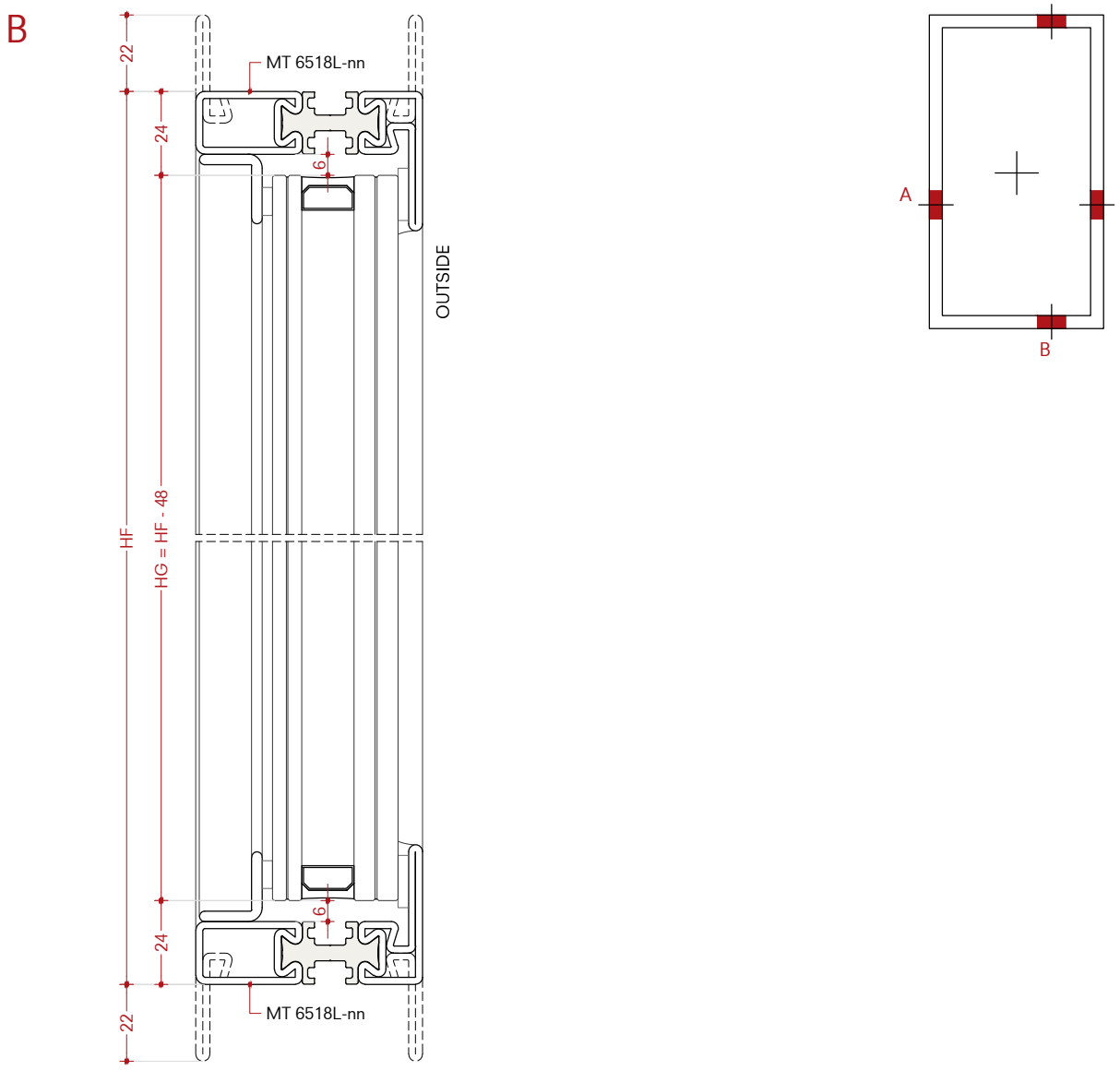


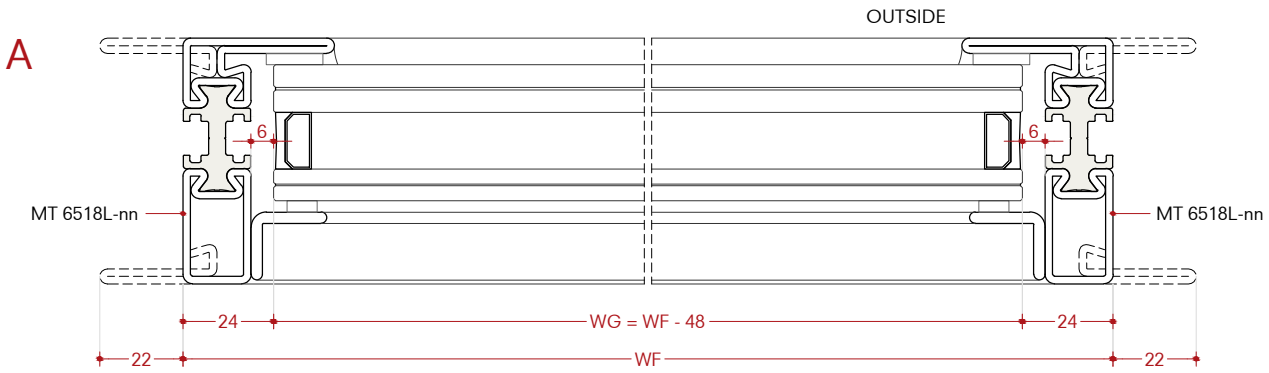


Cutting length
MT 6518L-nn
Fixed frame

Liste di taglio
MT 6518L-nn
Anta fissa

Longitud de corte
MT 6518L-nn
Ventana fija



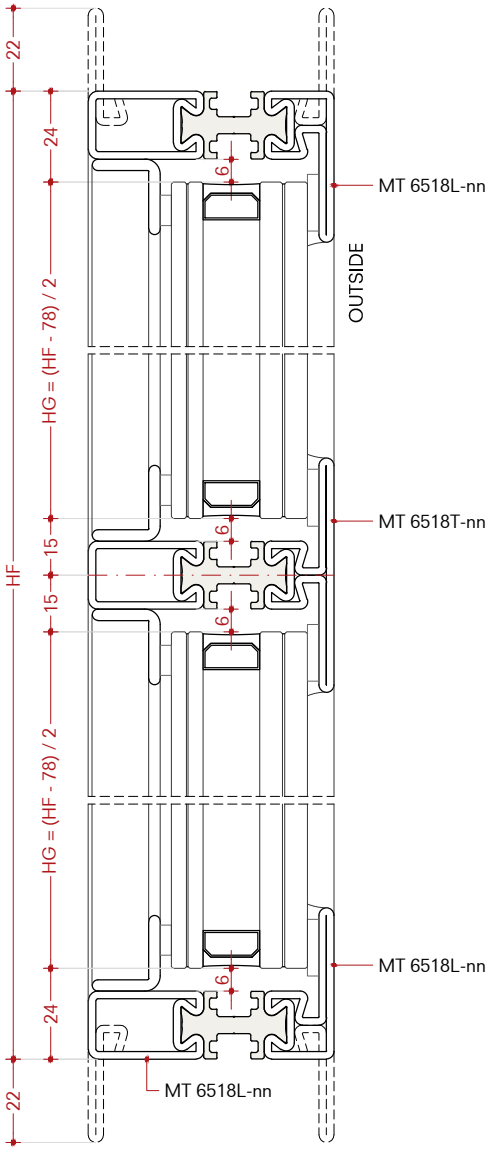


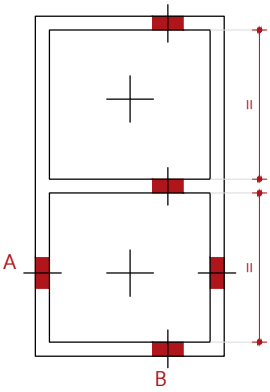
Cutting length
MT 6518L-nn / MT 6518T-nn
Fixed frame

Liste di taglio
MT 6518L-nn / MT 6518T-nn
Anta fissa

Longitud de corte
MT 6518L-nn / MT 6518T-nn
Ventana fija

B





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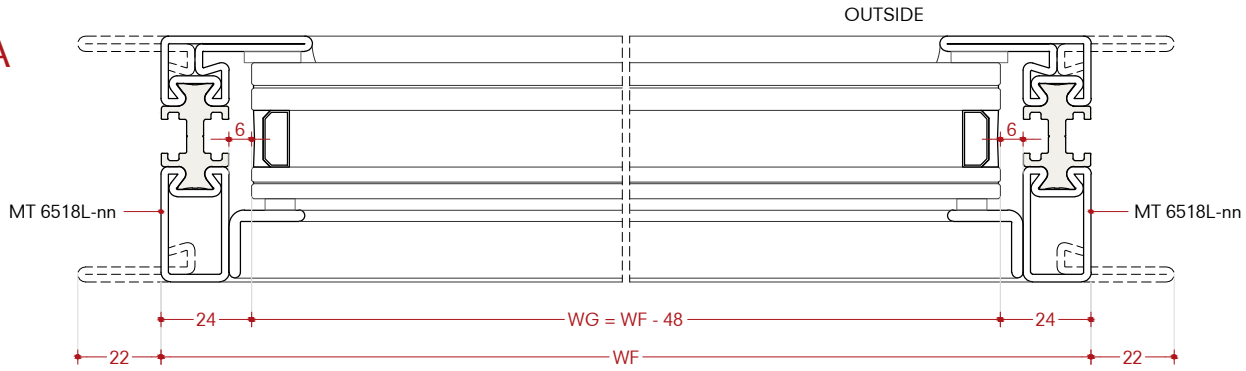
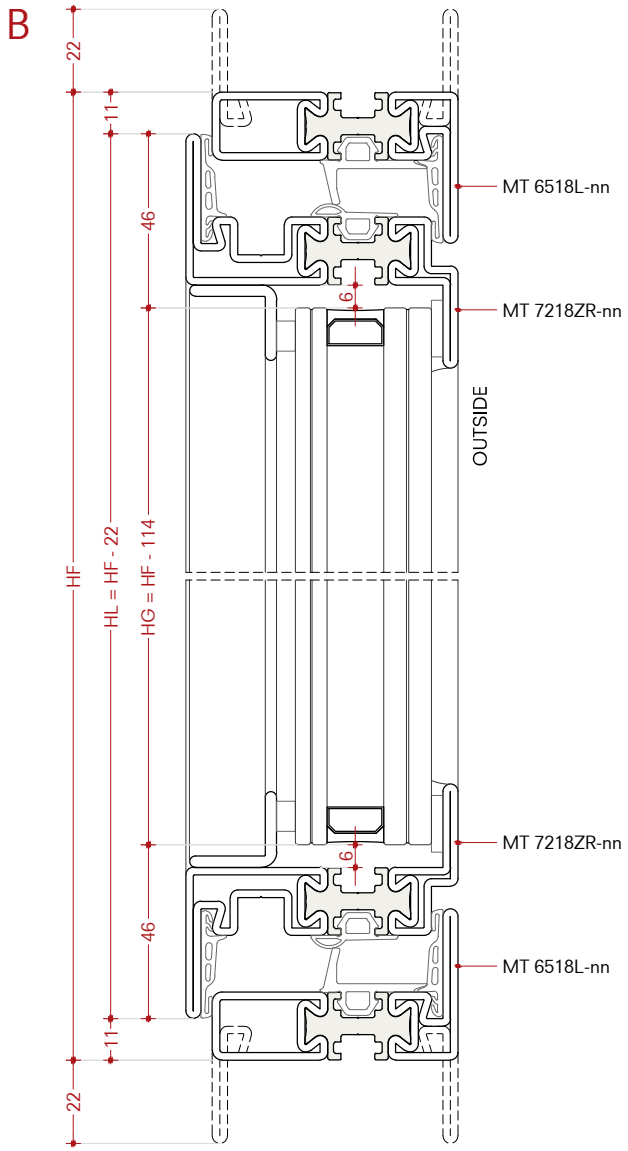
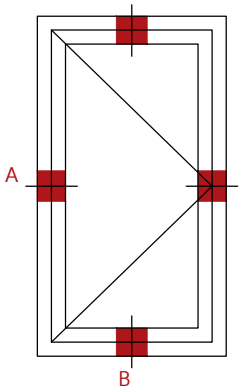


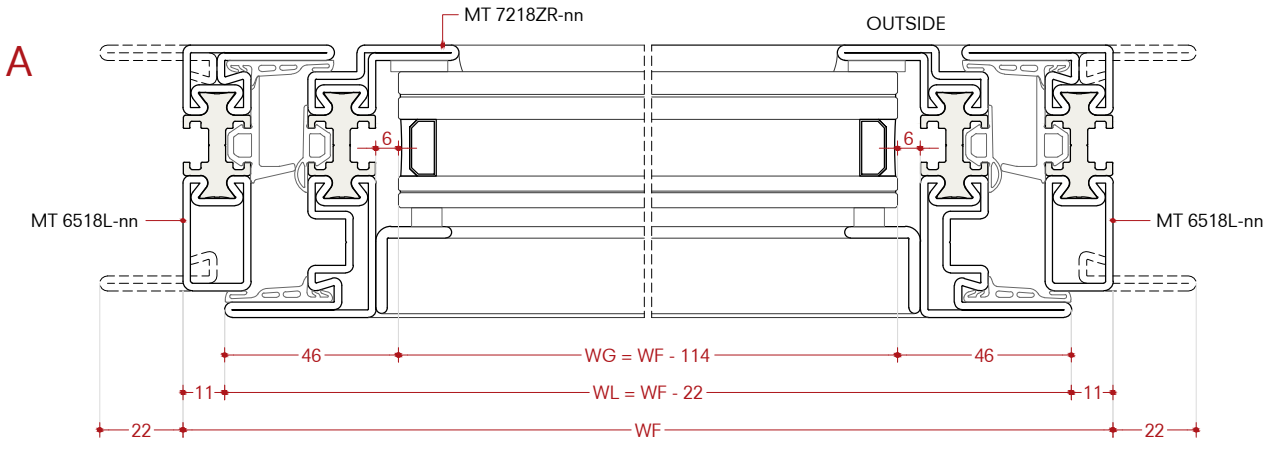
Cutting length
Single leaf window
Open in

Liste di taglio
Finestra a un battente
Apertura interna

Longitud de corte
Ventana de una hoja
Que se abre hacia dentro



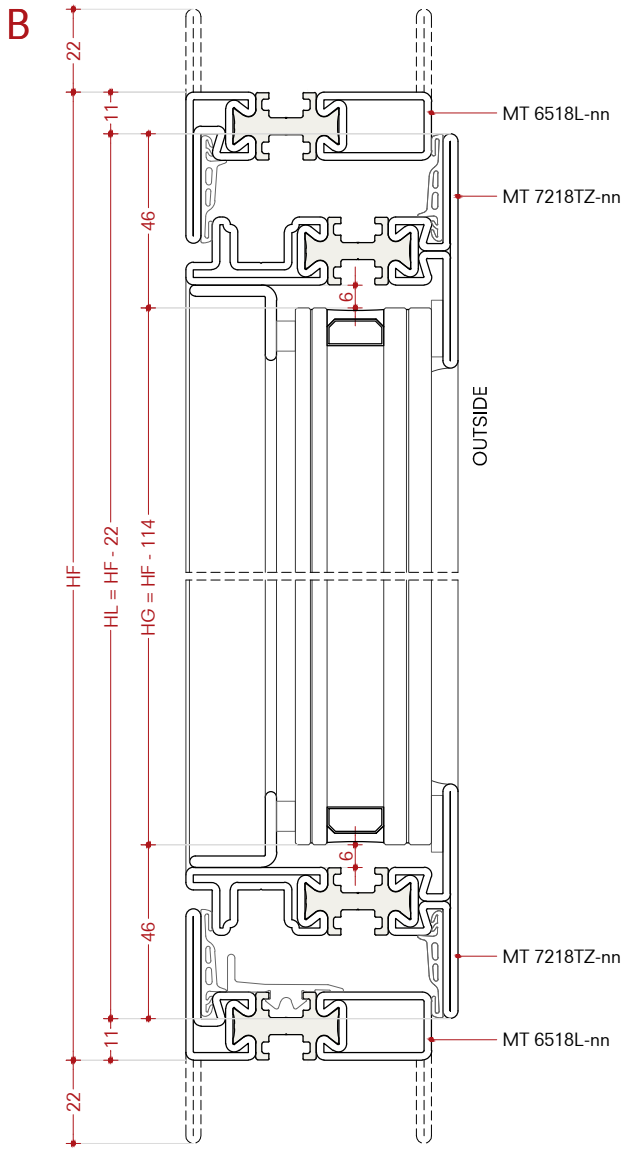


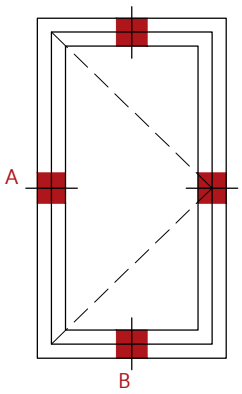


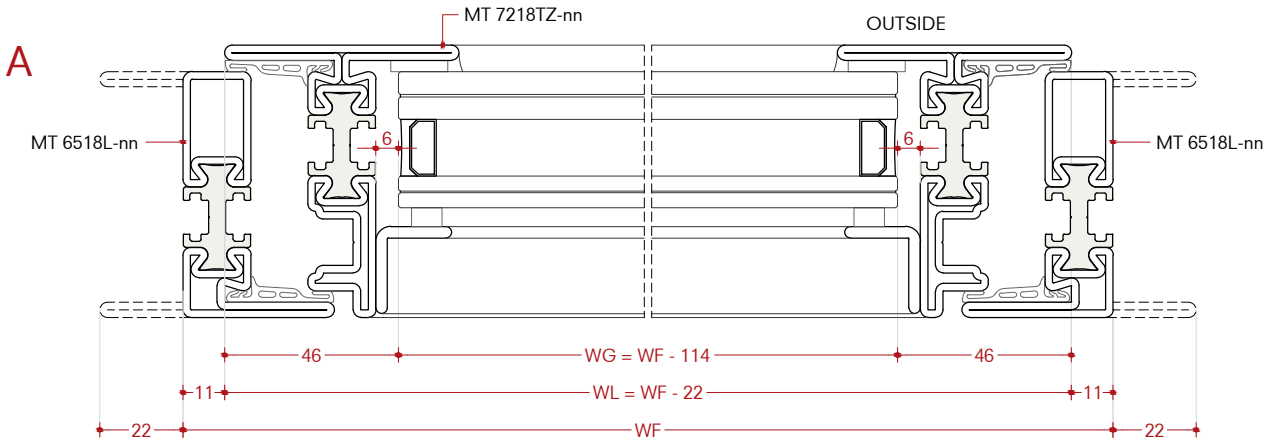
Cutting length
Single leaf window
Open out

Liste di taglio
Finestra a un battente
Apertura esterna

Longitud de corte
Ventana de una hoja
Que se abre hacia fuera



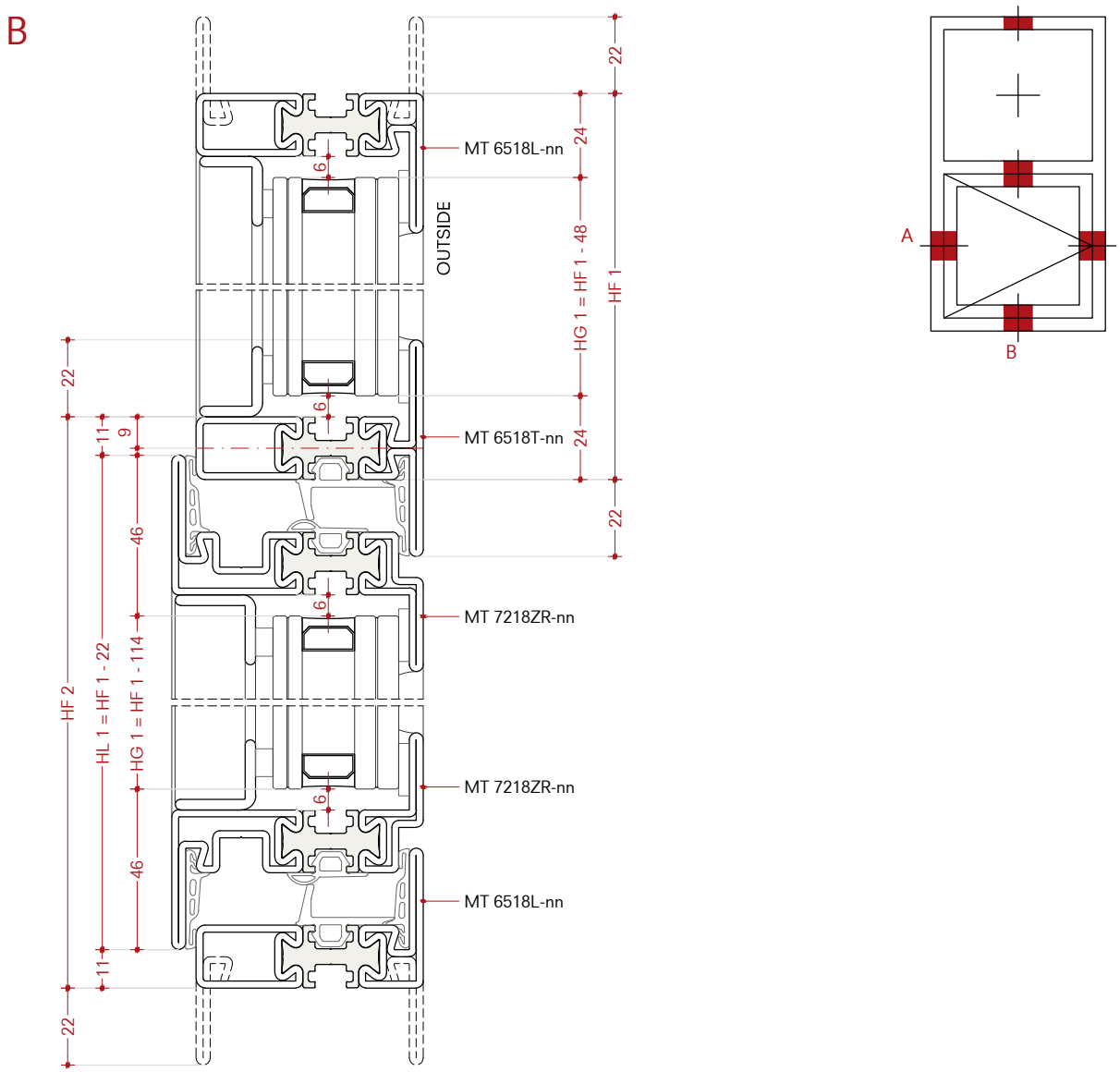


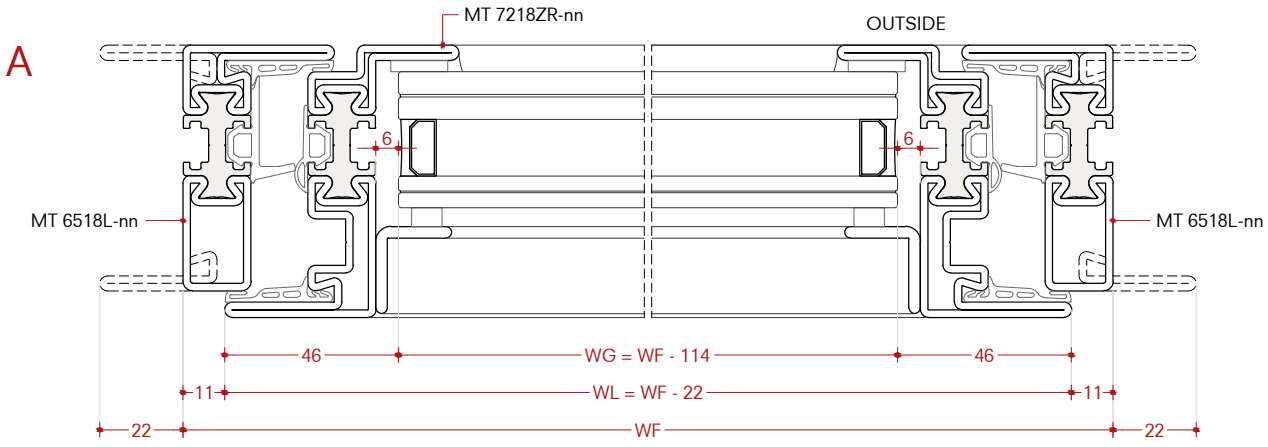


Cutting length
Window with top light
Open in

Liste di taglio
Finestra con imposta
Apertura interna

Longitud de corte
Ventana con impuestos
Que se abre hacia dentro

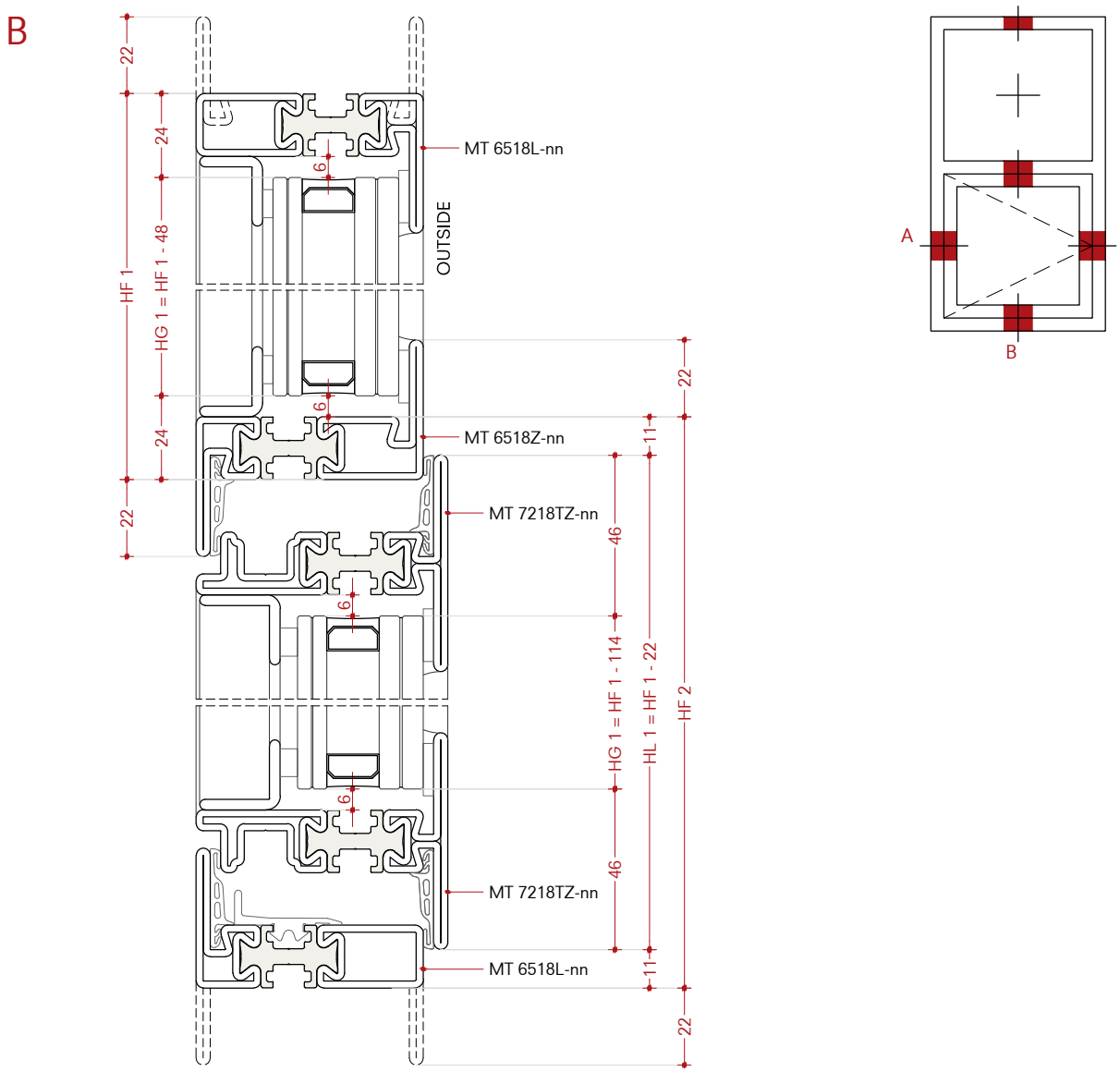


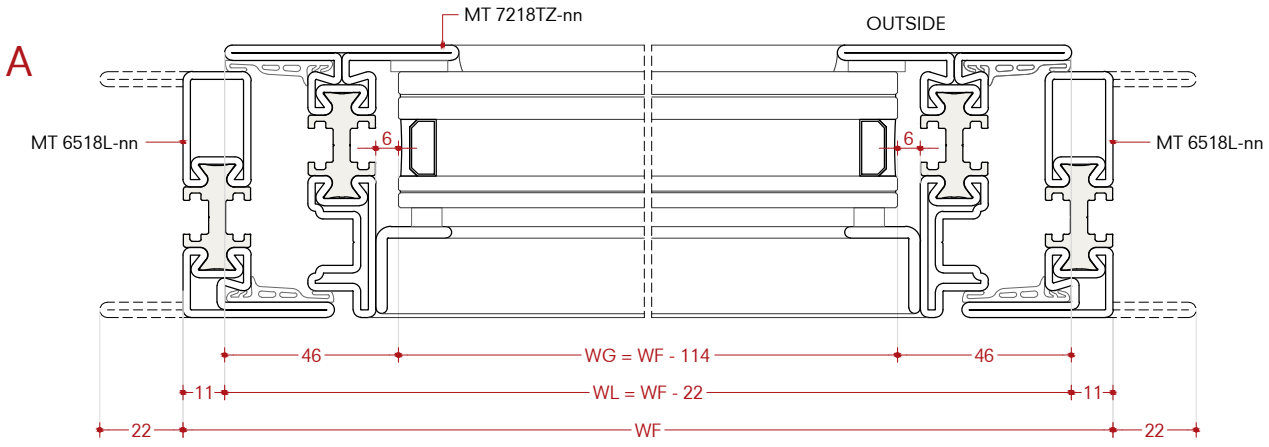


Cutting length
Window with top light
Open out

Liste di taglio
Finestra con imposta
Apertura esterna

Longitud de corte
Ventana con impuestos
Que se abre hacia fuera

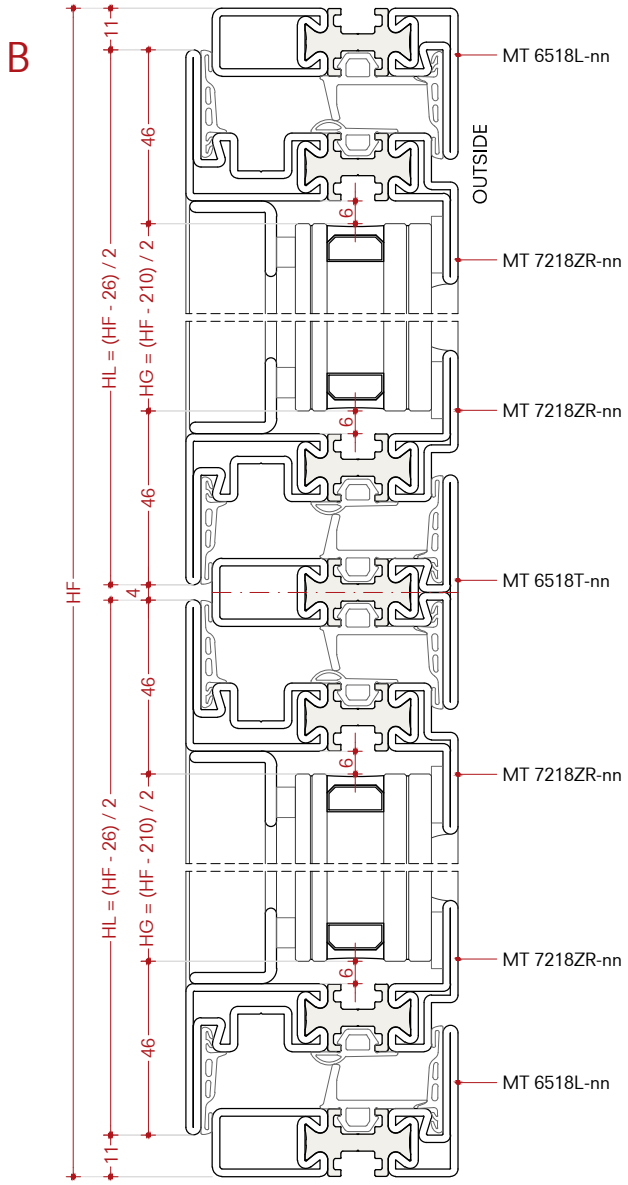


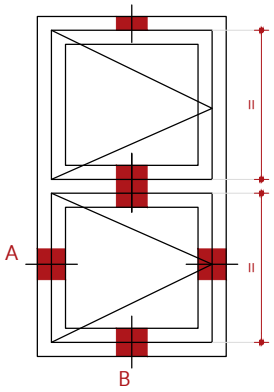


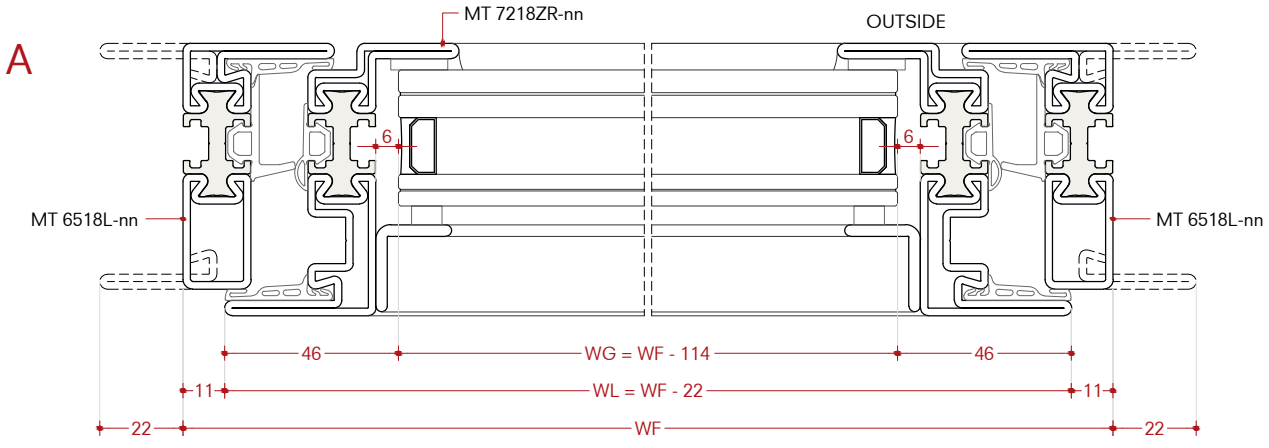
Cutting length
Two leaves one about another
Open in

Liste di taglio
Due ante una sull'altra
Apertura interna

Longitud de corte
dos hojas uno en el otro
Que se abre hacia dentro



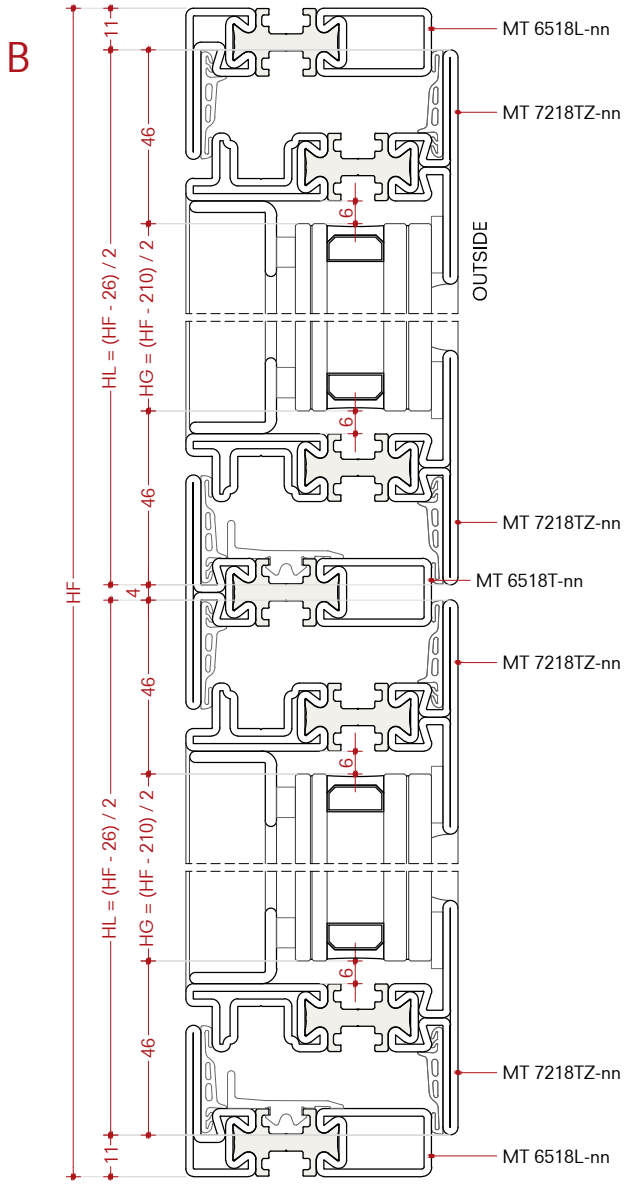


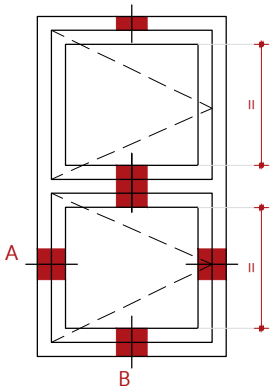


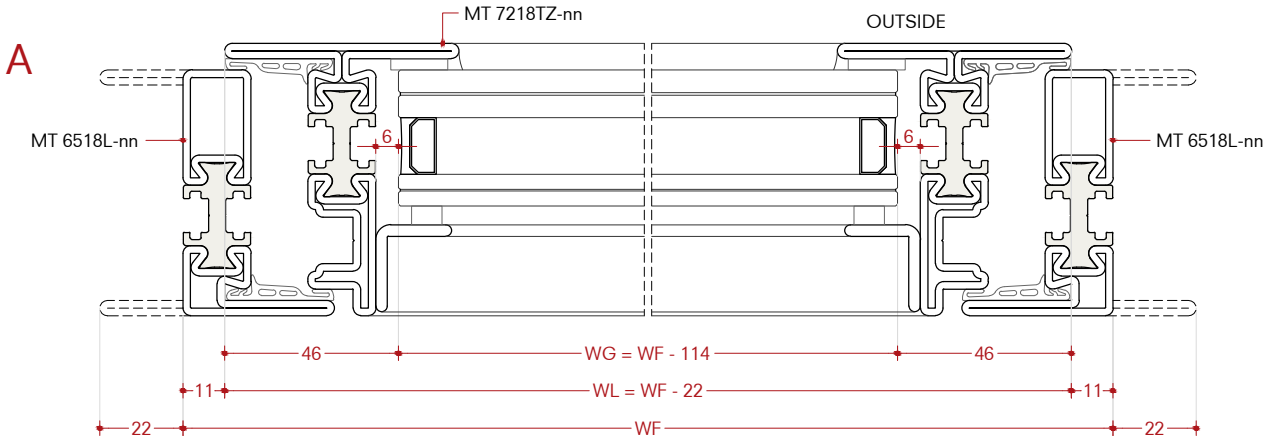
Cutting length
Two leaves one about another
Open out

Liste di taglio
Dueante una sull'altra
Apertura esterna

Longitud de corte
Dos hojas uno en el otro
Que se abre hacia fuera



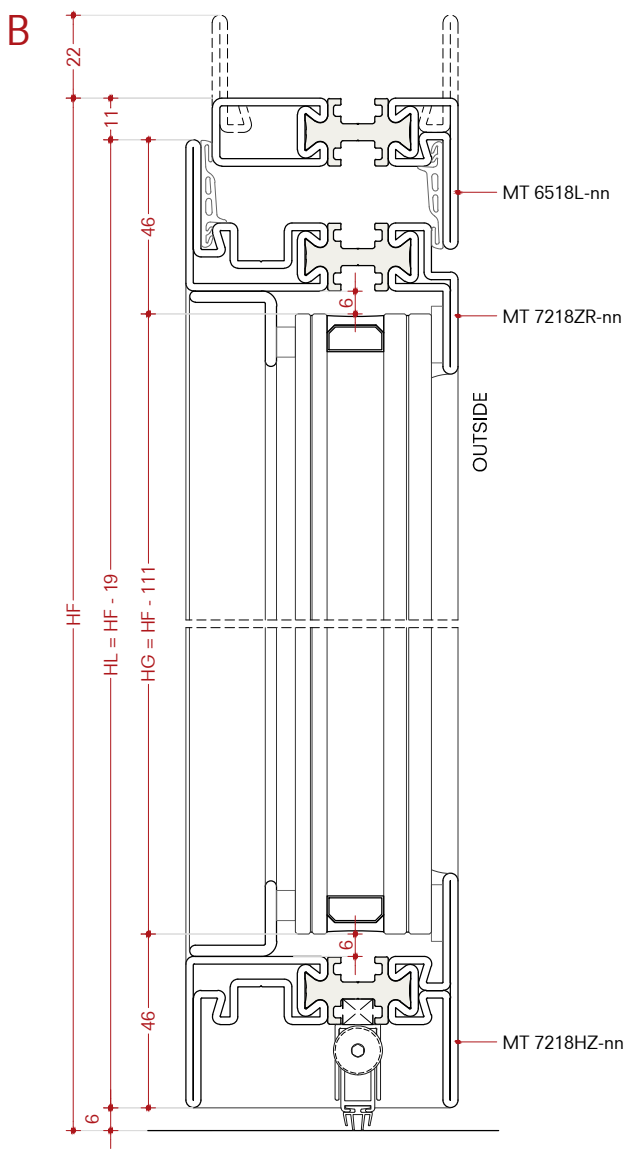


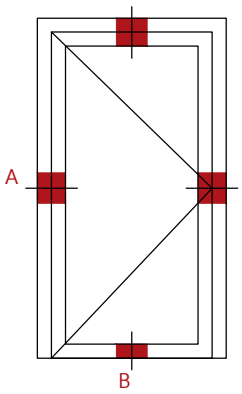


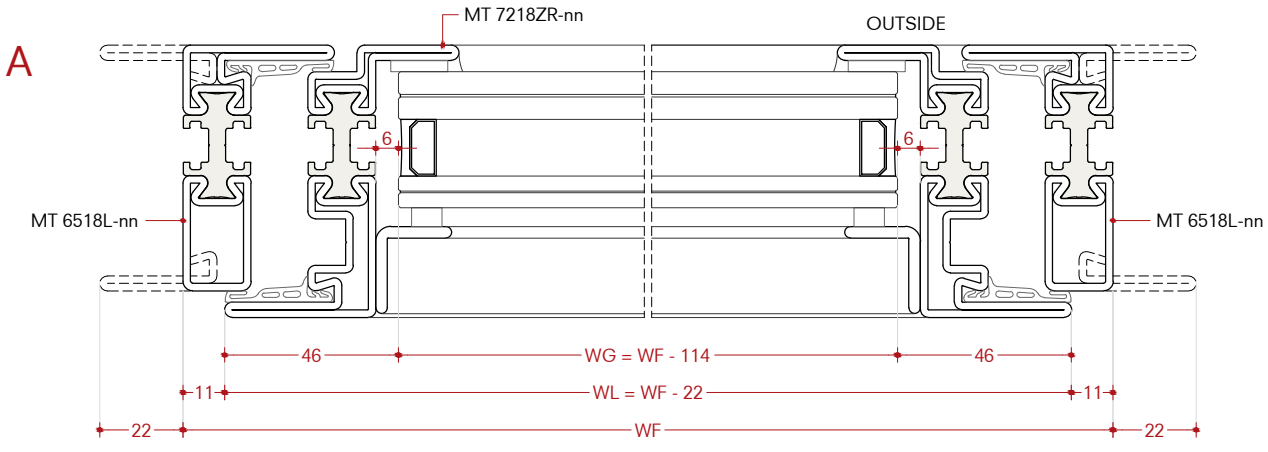
Cutting length
Single leaf door
Open in

Liste di taglio
Porta a un battente
Apertura interna

Longitud de corte
Puerta abatible de una hoja
Que se abre hacia dentro



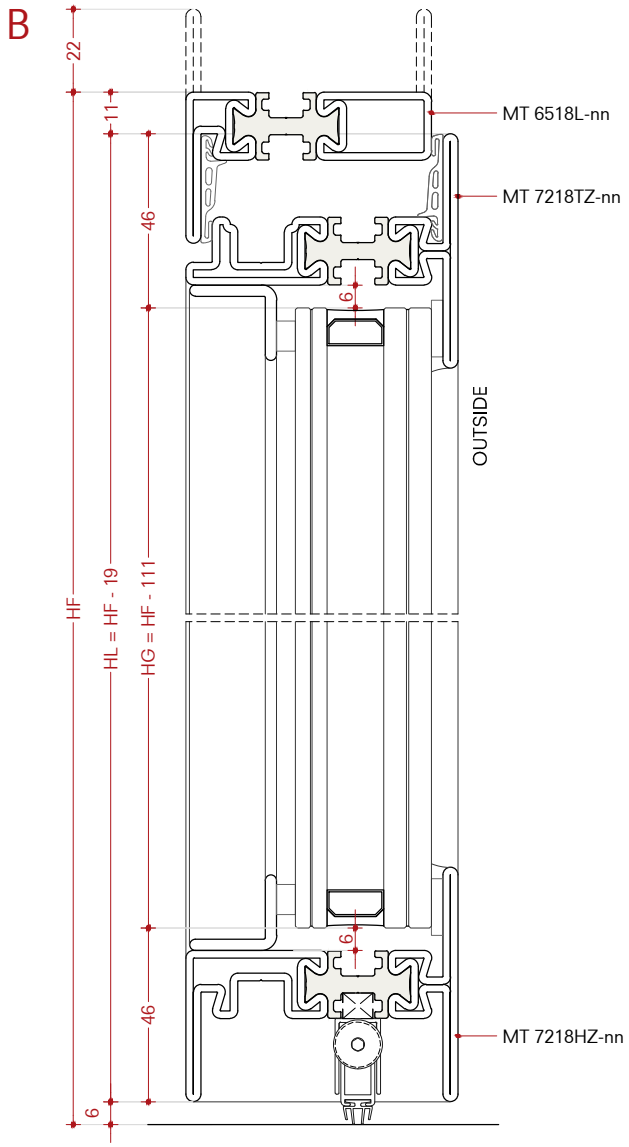


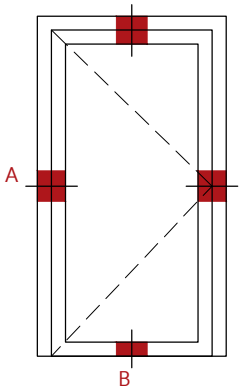


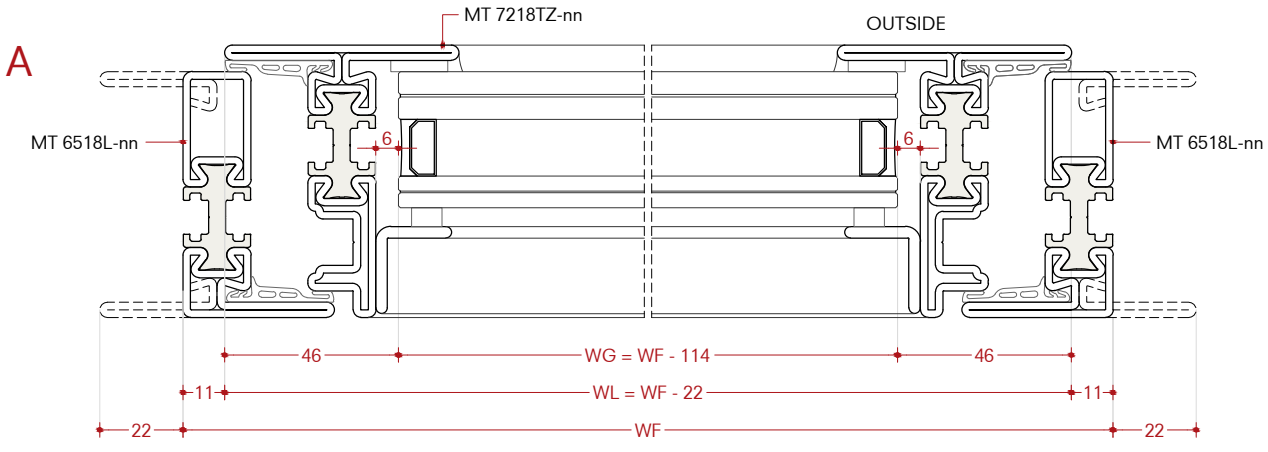
Cutting length
Single leaf door
Open out

Liste di taglio
Porta a un battente
Apertura esterna

Longitud de corte
Puerta abatible de una hoja
Que se abre hacia fuera



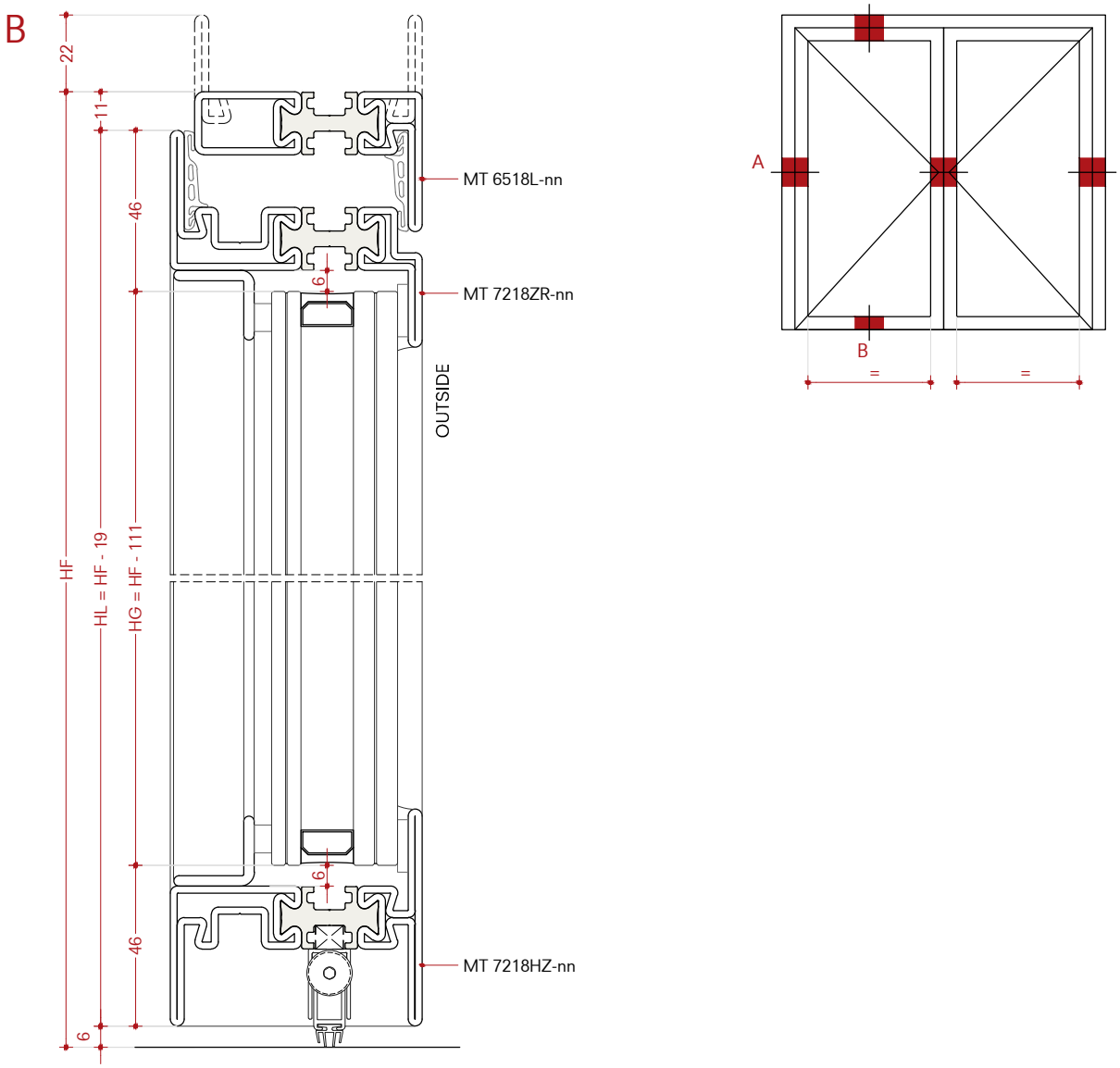


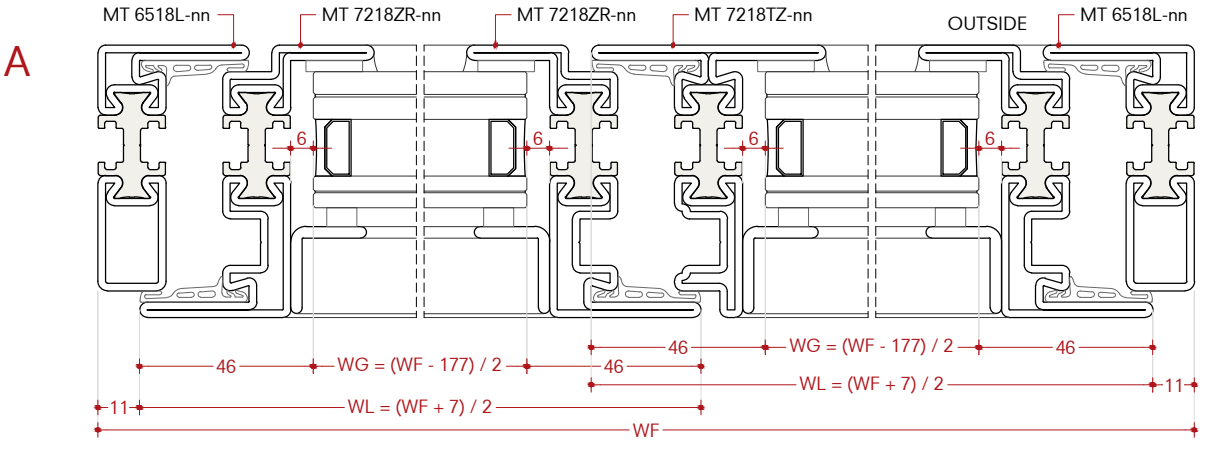


Cutting length
Double leaf door
Open in

Liste di taglio
Porta a due battentl
Apertura interna

Longitud de corte
Puerta abatible de dos hojas
Que se abre hacia dentro

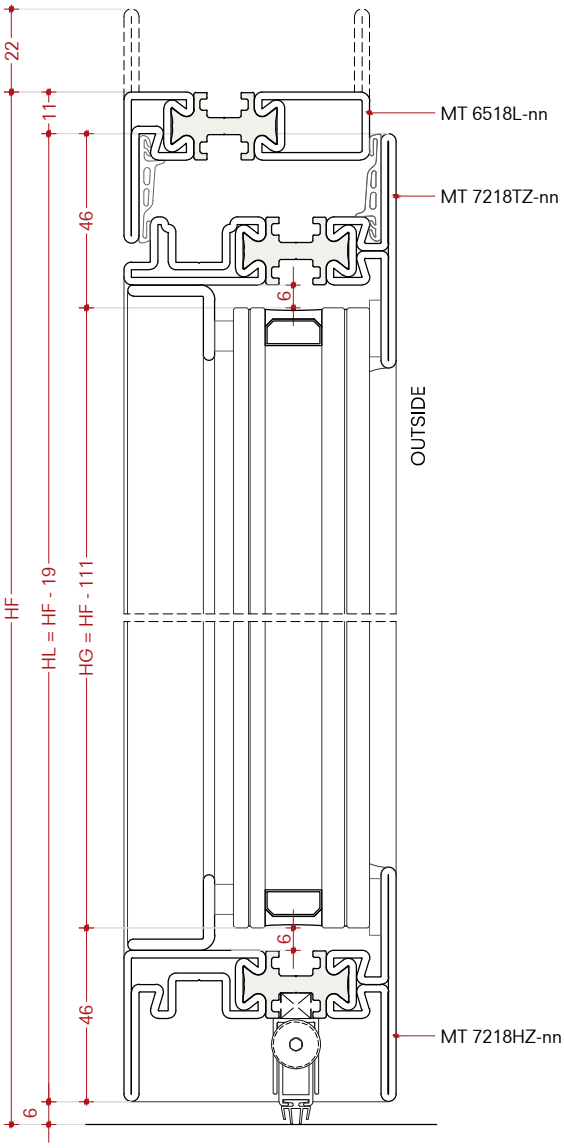


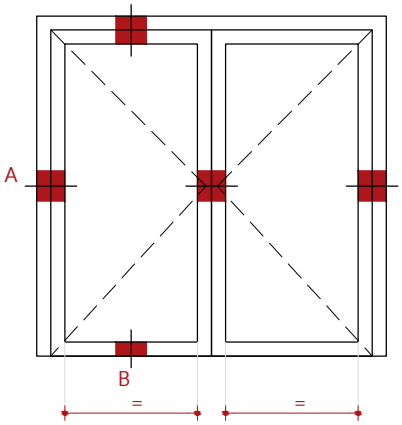


Cutting length
Double leaf door
Open out

Liste di taglio
Porta a due battentl
apertura esterna

Longitud de corte
Puerta abatible de dos hojas
Que se abre hacia fuera





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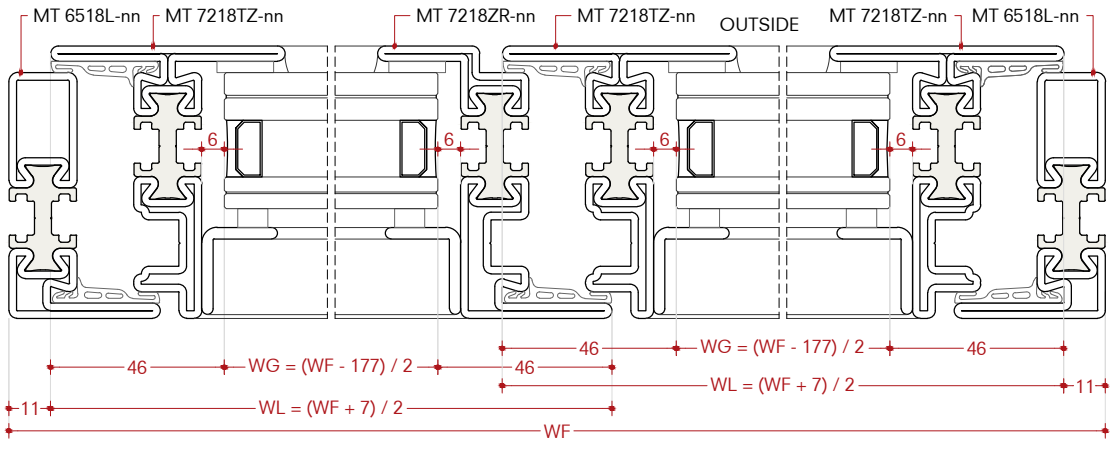
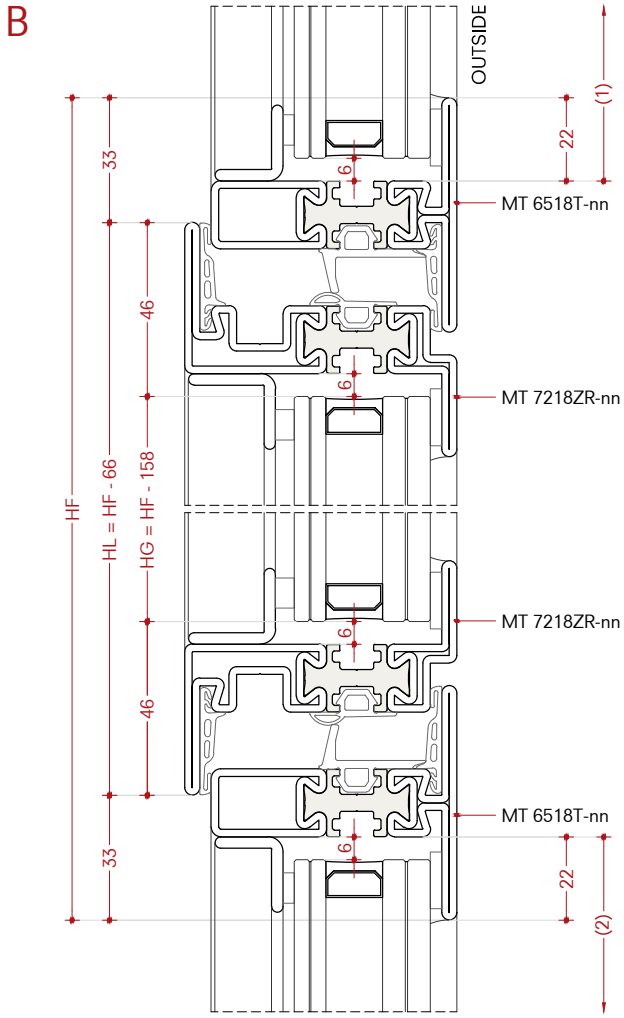
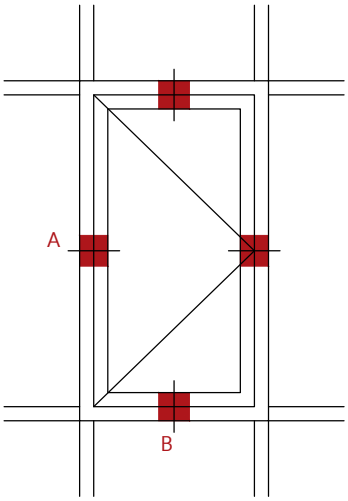


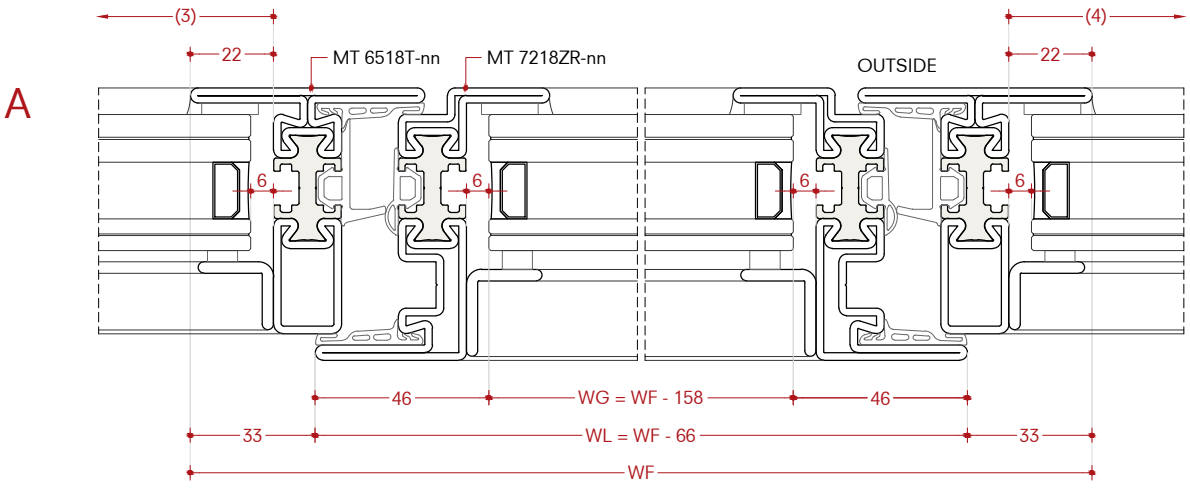
Cutting length
Single leaf in fixed frame
Open in

Liste di taglio
Anta singola su telaio fisso
Apertura interna

Longitud de corte
Hoja en marco fijo
Que se abre hacia dentro







(1) Height top frame
(2) Height bottom frame
(3) Length left frame
(4) Length right frame

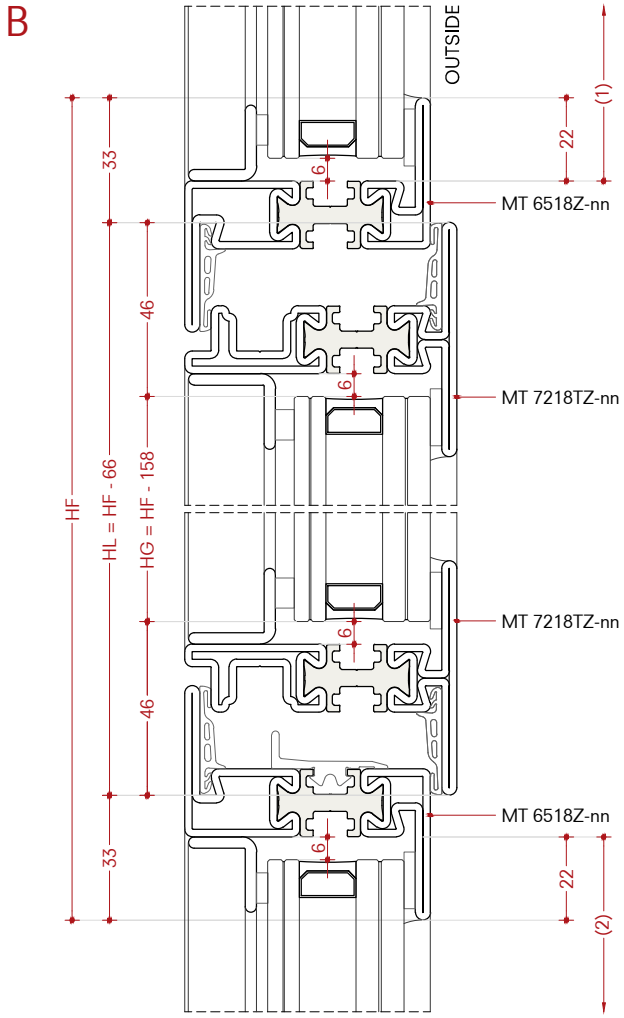
(1) Altezza telaio superiore
(2) Altezza telaio inferiore
(3) Lunghezza telaio sinistro
(4) Lunghezza telaio destro

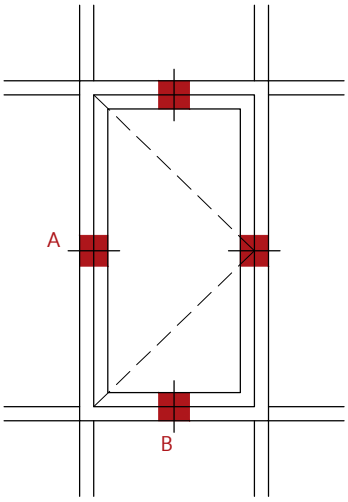
(1) Altura del marco superior
(2) Altura del marco inferior
(3) Largo del marco izquierdo
(4) Longitud del marco derecho

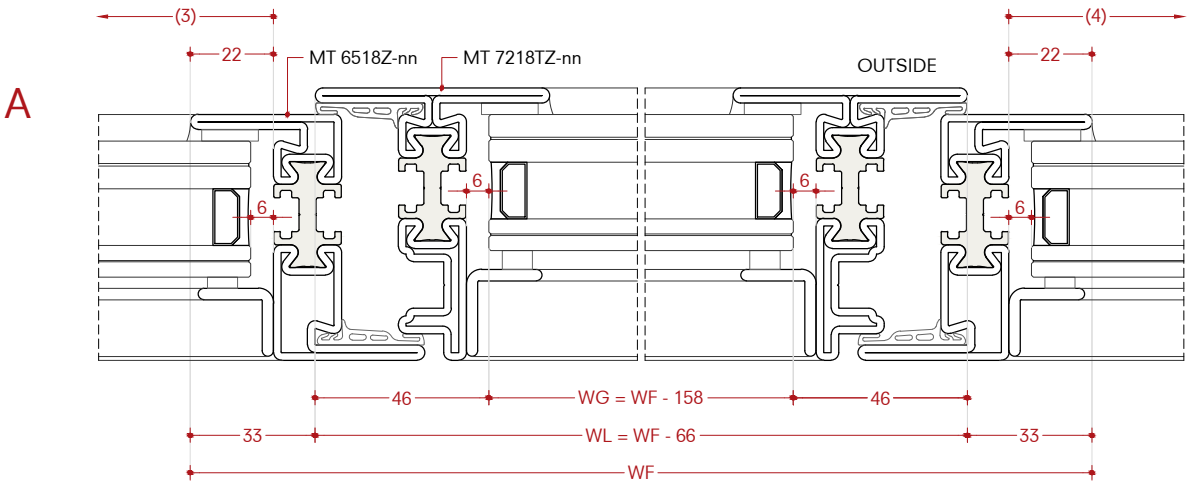
Cutting length
Single leaf in fixed frame
Open out

Liste di taglio
Anta singola su telaio fisso
Apertura esterna

Longitud de corte
Hoja en marco fijo
Que se abre hacia fuera







(1) Height top frame
(2) Height bottom frame
(3) Length left frame
(4) Length right frame

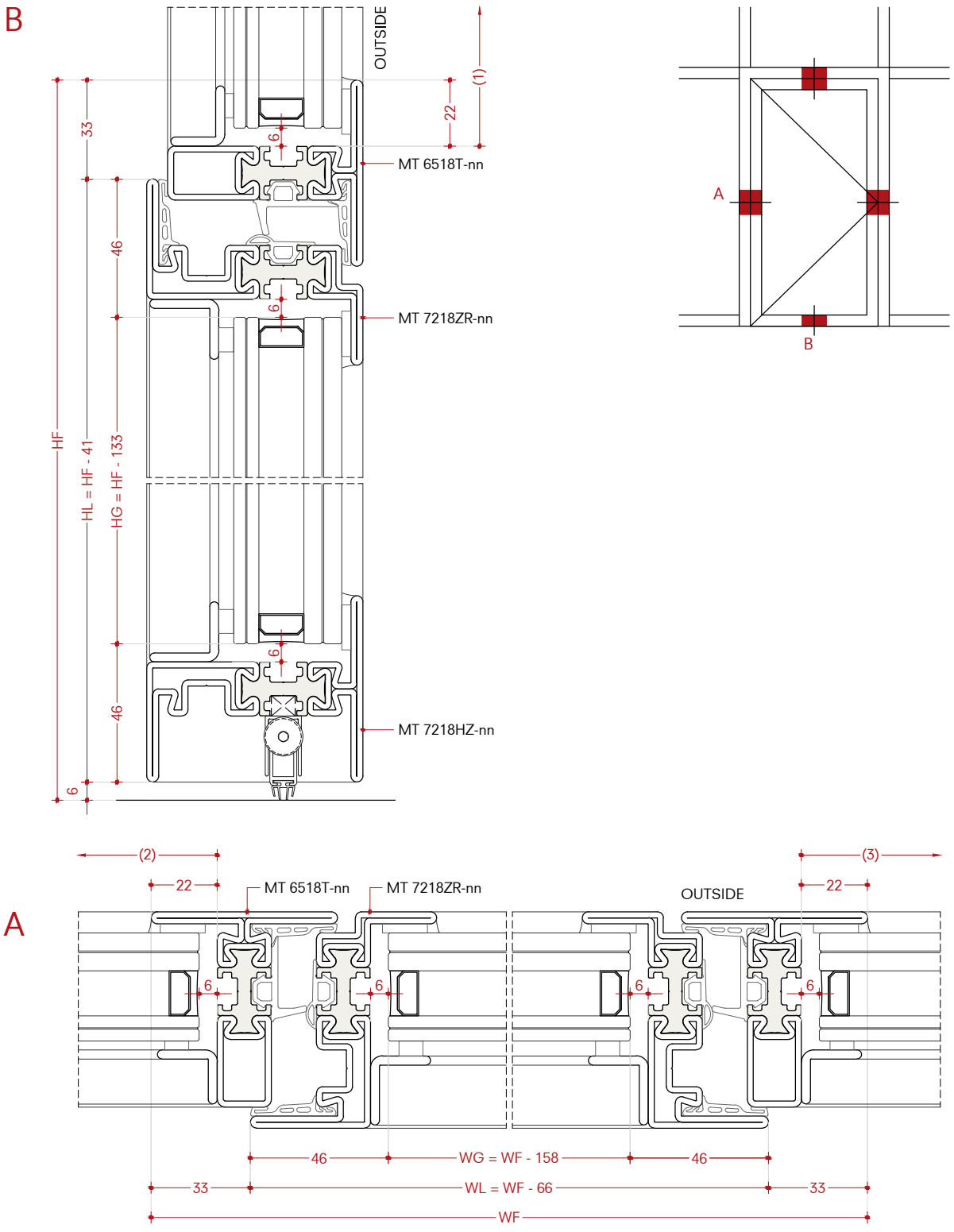
(1) Altezza telaio superiore
(2) Altezza telaio inferiore
(3) Lunghezza telaio sinistro
(4) Lunghezza telaio destro

(1) Altura del marco superior
(2) Altura del marco inferior
(3) Largo del marco izquierdo
(4) Longitud del marco derecho

Cutting length
Door in fixed frame
Open in

Liste di taglio
Porta su telaio fisso
Apertura interna

Longitud de corte
Puerta en marco fijo
Que se abre hacia dentro



(1) Height top frame
(2) Length left frame
(3) Length right frame

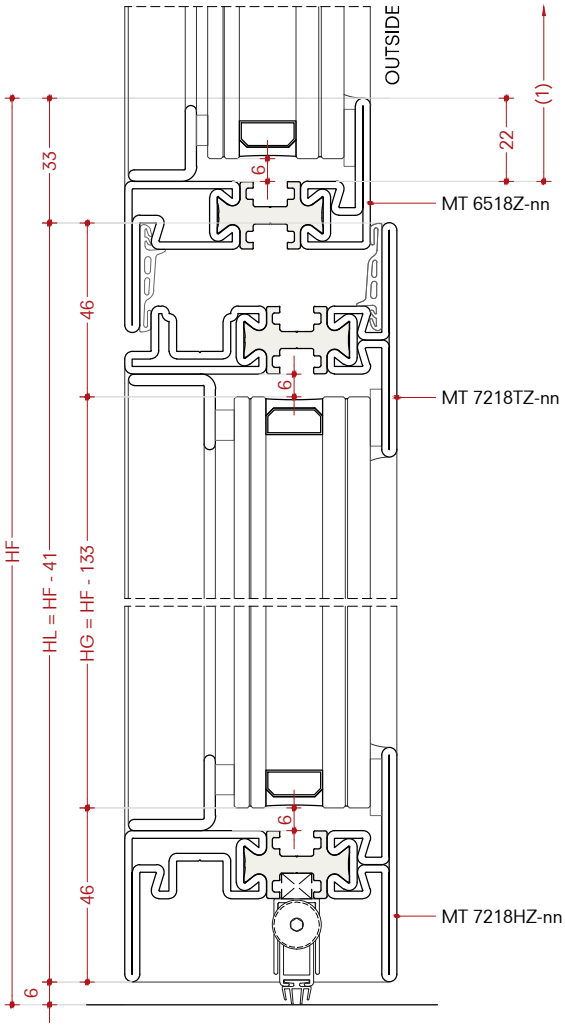
(1) Altezza telaio superiore
(2) Lunghezza telaio sinistro
(3) Lunghezza telaio destro

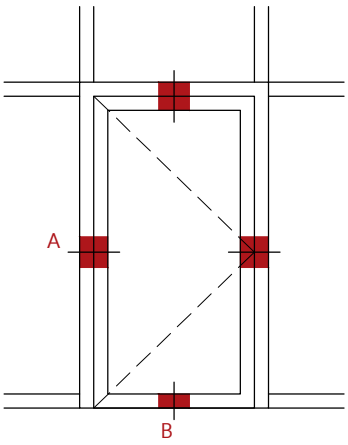
(1) Altura del marco superior
(2) Largo del marco izquierdo
(3) Longitud del marco derecho

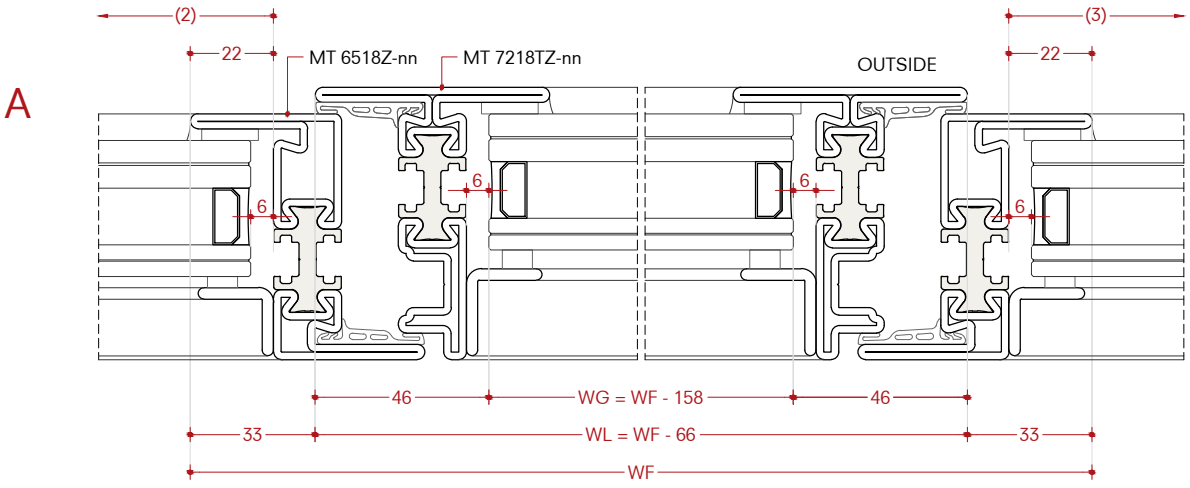
Cutting length
Door in fixed frame
Open out

Liste di taglio
Porta su telaio fisso
Apertura esterna

Longitud de corte
Puerta en marco fijo
Que se abre hacia fuera







(1) Height top frame
(2) Length left frame
(3) Length right frame

(1) Altezza telaio superiore
(2) Lunghezza telaio sinistro
(3) Lunghezza telaio destro

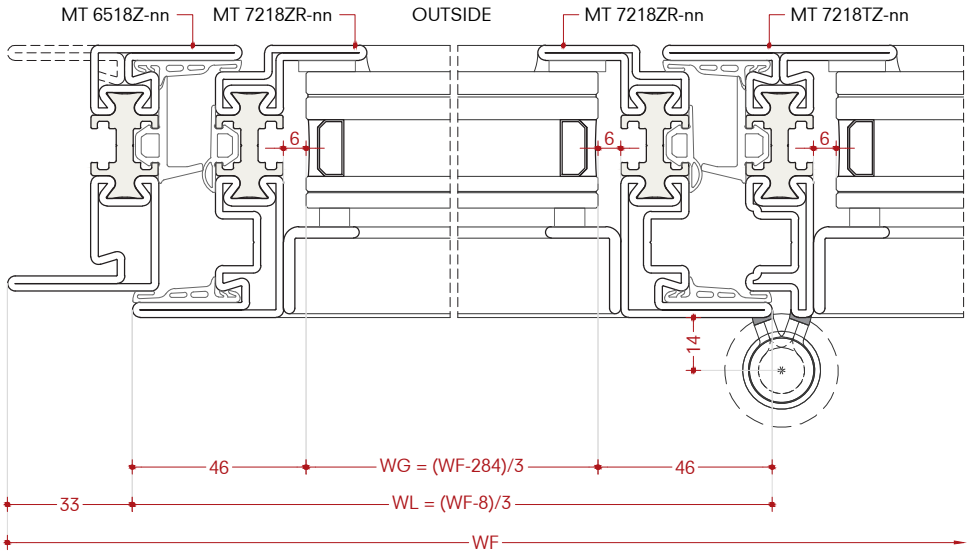
(1) Altura del marco superior
(2) Largo del marco izquierdo
(3) Longitud del marco derecho

Cutting length
Bi-folding door system
3 leaves
Open in

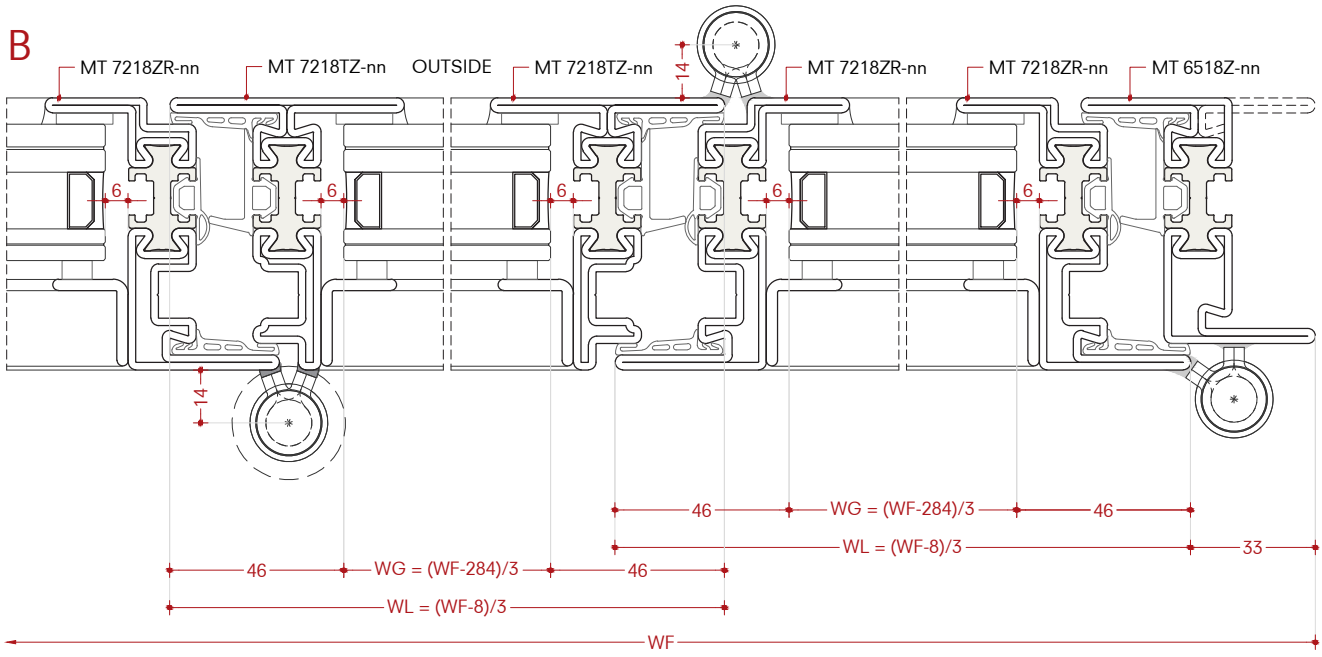
Liste di taglio
Sistema di porte a libro
3 ante
Apertura interna

Longitud de corte
Sistema de puerta plegable
3 hojas
Que se abre hacia dentro

A



B



Note:

Cutting dimensions of the bi-folding door system only apply to this arrangement of profiles and hinges.

Further installation instructions can be obtained from the technical advisor.

Nota:

Le dimensioni di taglio del sistema di porta a libro valgono solo per questa disposizione di profili e cerniere.

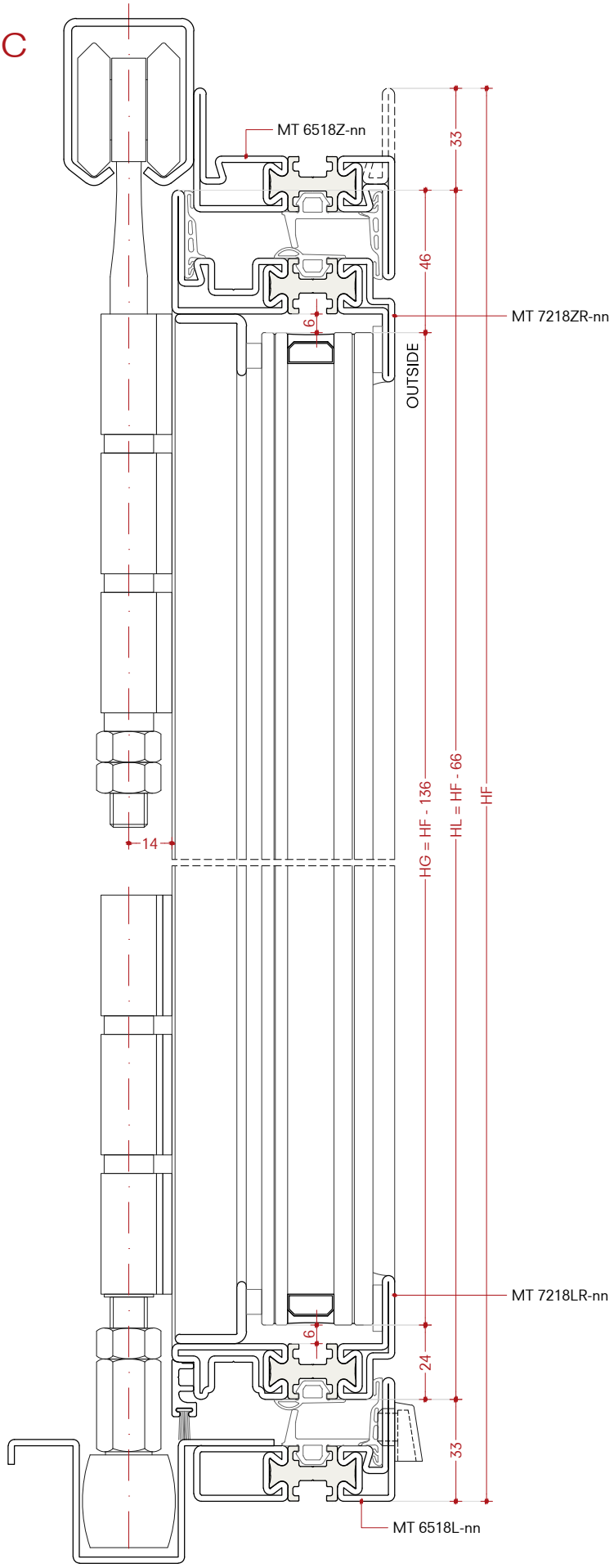
Ulteriori istruzioni per l'installazione possono essere ottenute dal consulente tecnico.

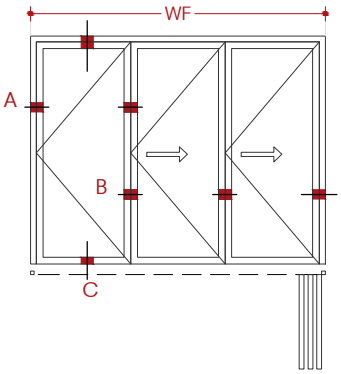
Nota:

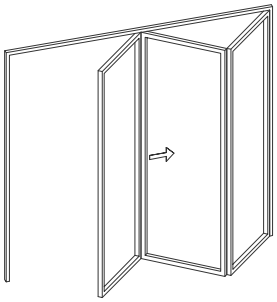
Las dimensiones de corte del sistema de puertas plegables solo se aplican a esta disposición de perfiles y bisagras.

Se pueden obtener más instrucciones de instalación del asesor técnico.

C


MT 6518Z-nn
33
46
6
MT 7218ZR-nn
OUTSIDE
14
HG = HF - 136
HL = HF - 66
HF
MT 7218LR-nn
6
24
33
MT 6518L-nn


WF
A
B
C

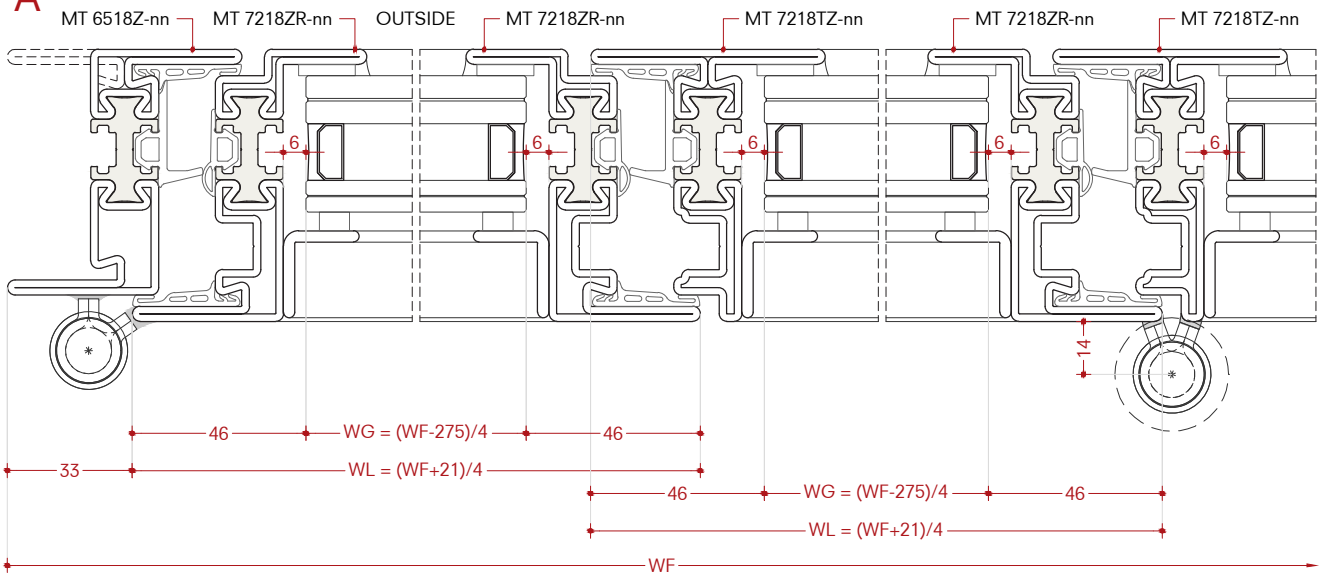


Cutting length
Bi-folding door system
4 leaves (1+3 leaves)
Open in

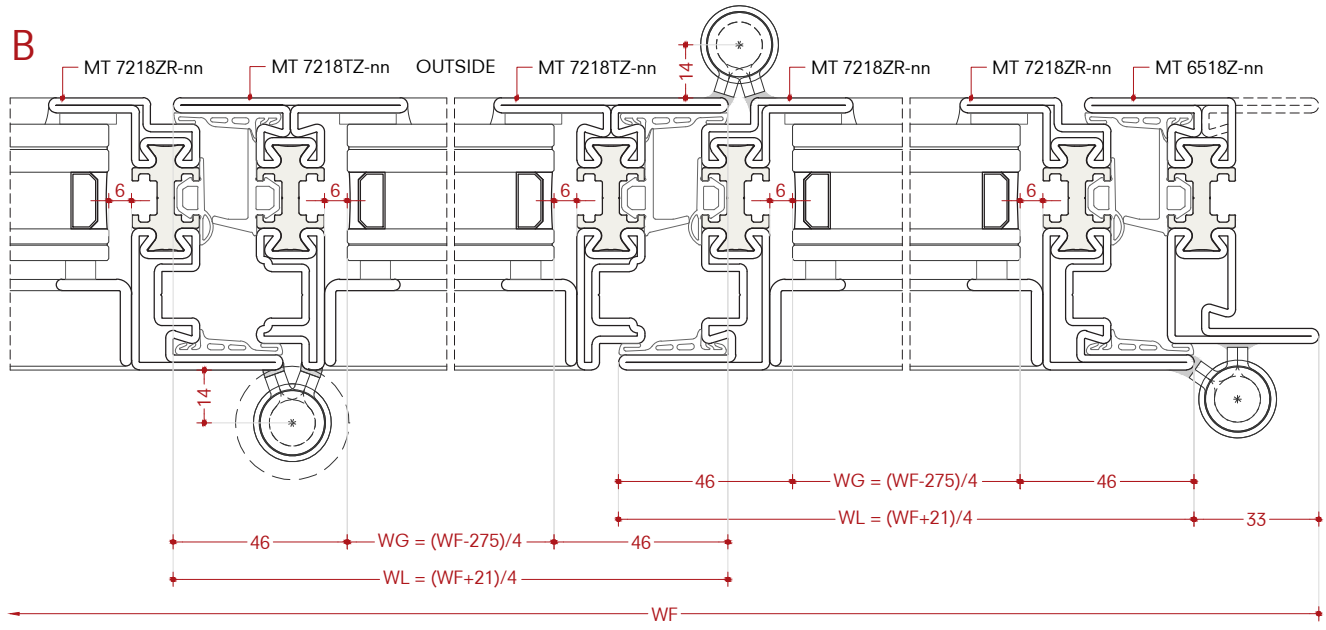
Liste di taglio
Sistema di porte a libro
4 ante (1+3 ante)
Apertura interna

Longitud de corte
Sistema de puerta plegable
4 hojas (1+3 hojas)
Que se abre hacia dentro

A



B



Note:

Cutting dimensions of the bi-folding door system only apply to this arrangement of profiles and hinges.

Further installation instructions can be obtained from the technical advisor.

Nota:

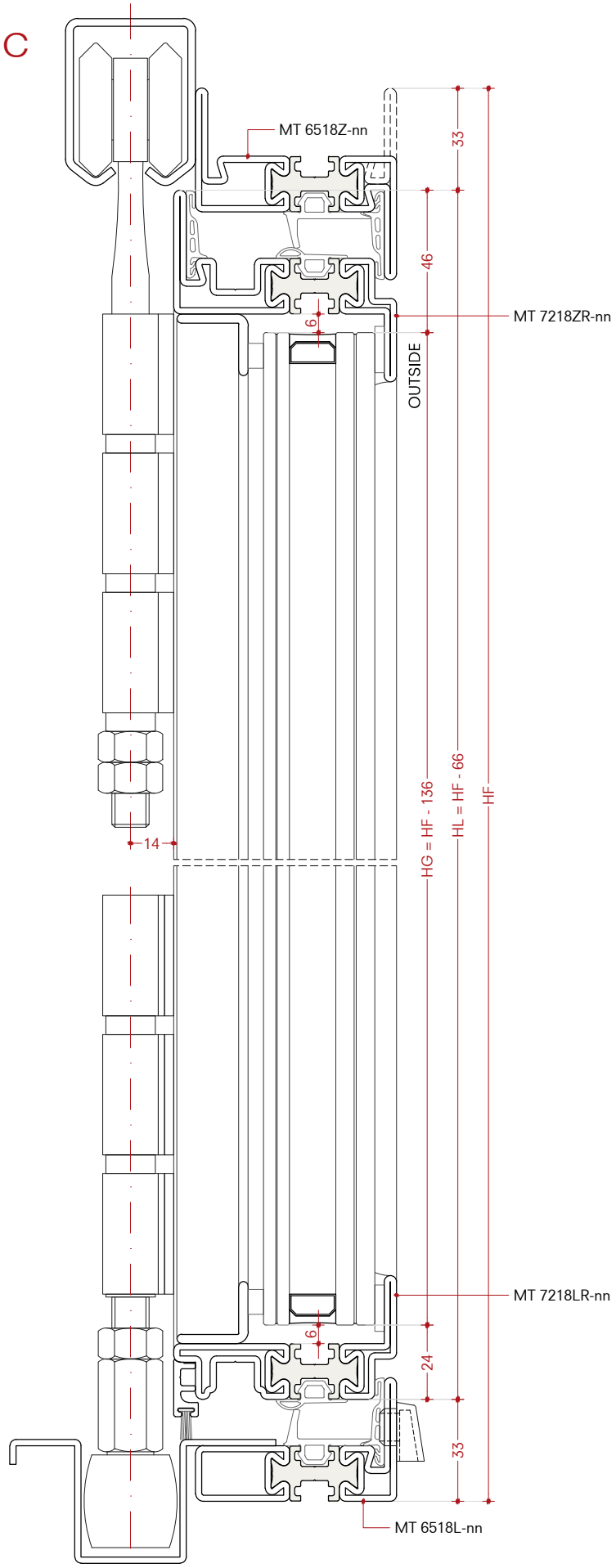
Le dimensioni di taglio del sistema di porta a libro valgono solo per questa disposizione di profili e cerniere.

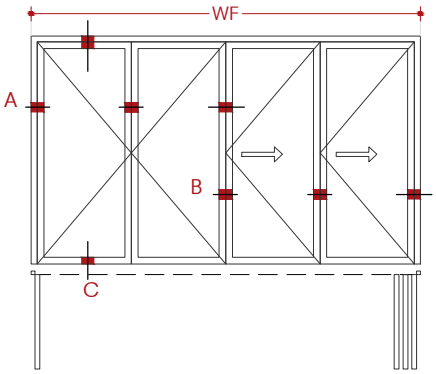
Ulteriori istruzioni per l'installazione possono essere ottenute dal consulente tecnico.

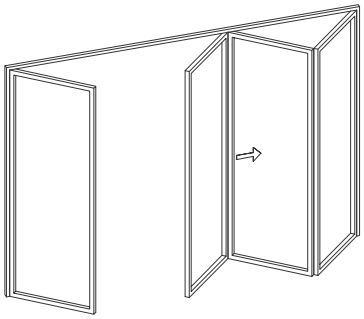
Nota:

Las dimensiones de corte del sistema de puertas plegables solo se aplican a esta disposición de perfiles y bisagras.

Se pueden obtener más instrucciones de instalación del asesor técnico.


C
MT 6518Z-nn
33
46
6
MT 7218ZR-nn
OUTSIDE
14
HG = HF - 136
HL = HF - 66
HF
MT 7218LR-nn
6
24
33
MT 6518L-nn

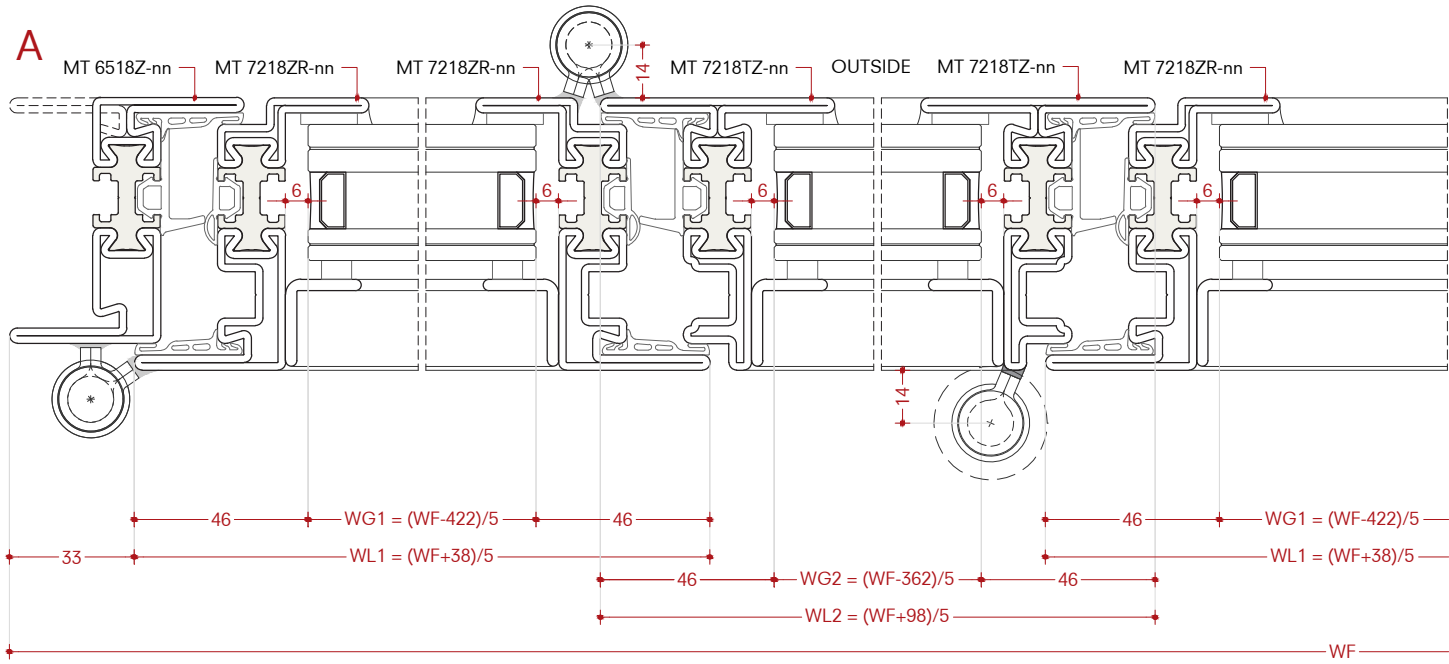

WF
A
B
C



Cutting length
Bi-folding door system
5 leaves (2+3 leaves)
Open in

Liste di taglio
Sistema di porte a libro
5 ante (2+3 ante)
Apertura interna

Longitud de corte
Sistema de puerta plegable
5 hojas (2+3 hojas)
Que se abre hacia dentro



Note:

Cutting dimensions of the bi-folding door system only apply to this arrangement of profiles and hinges.

Further installation instructions can be obtained from the technical advisor.

Nota:

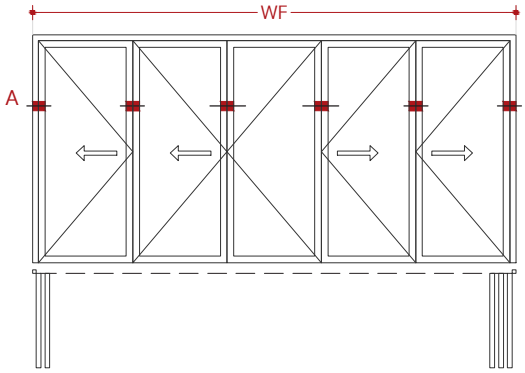
Le dimensioni di taglio del sistema di porta a libro valgono solo per questa disposizione di profili e cerniere.

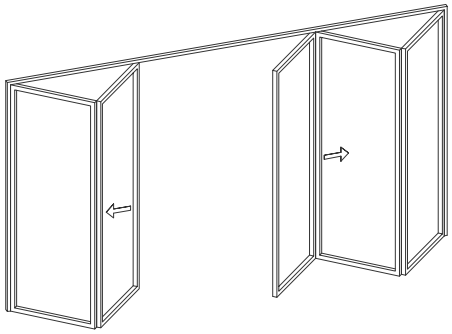
Ulteriori istruzioni per l'installazione possono essere ottenute dal consulente tecnico.

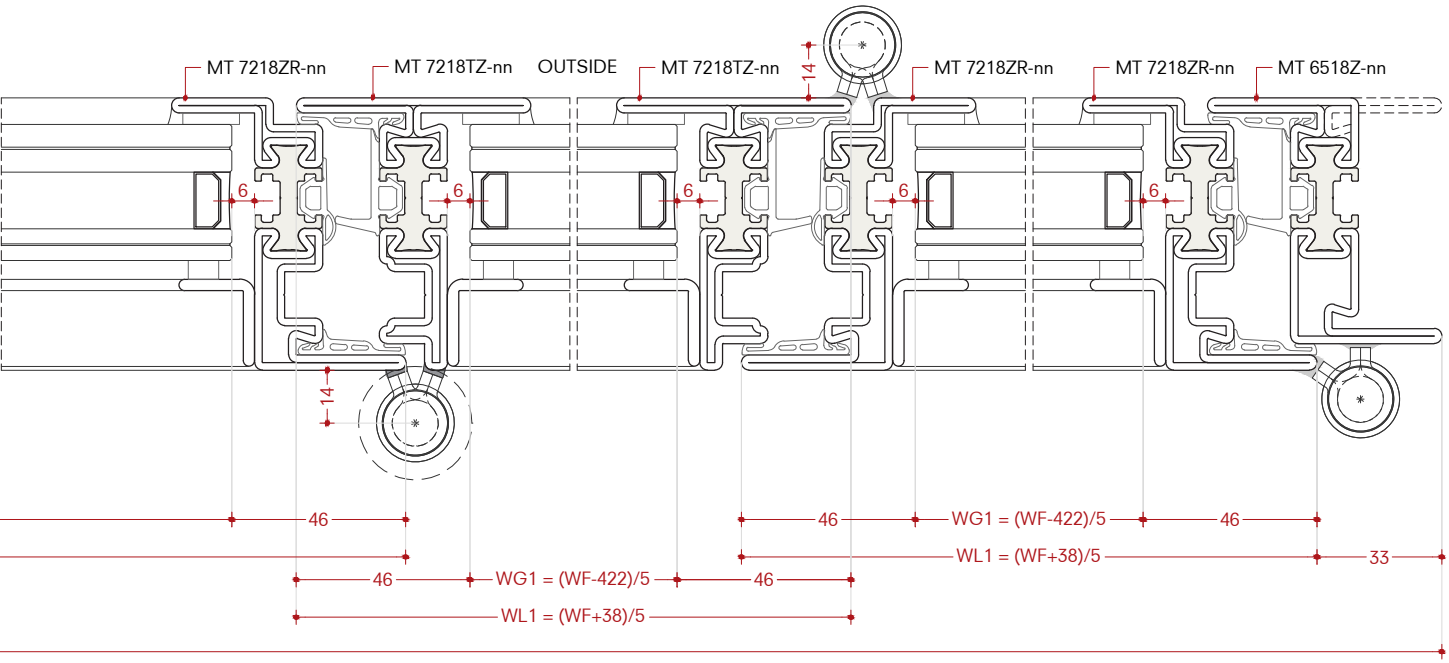
Nota:

Las dimensiones de corte del sistema de puertas plegables solo se aplican a esta disposición de perfiles y bisagras.

Se pueden obtener más instrucciones de instalación del asesor técnico.


WF
A

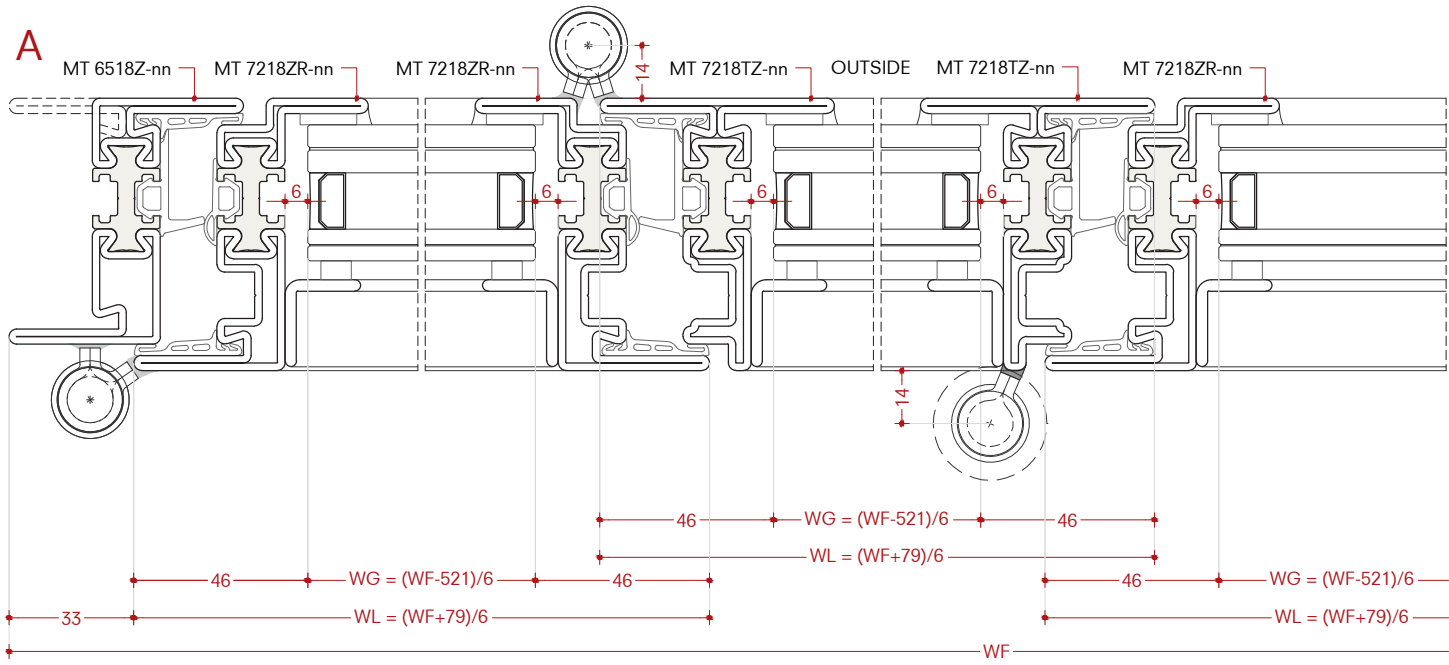


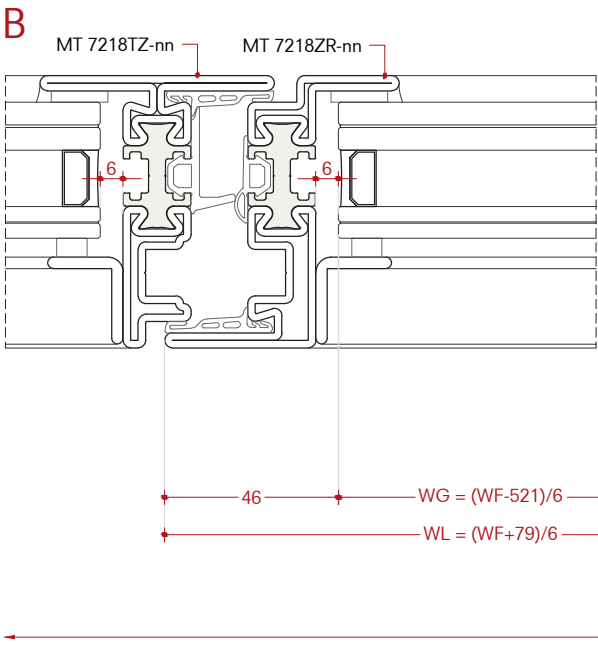

MT 7218ZR-nn
MT 7218TZ-nn
OUTSIDE
MT 7218TZ-nn
14
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518Z-nn
6
6
6
6
6
14
46
46
WG1 = (WF-422)/5
46
WL1 = (WF+38)/5
33
46
WG1 = (WF-422)/5
46
WL1 = (WF+38)/5

Cutting length
Bi-folding door system
6 leaves (3+3 leaves)
Open in

Liste di taglio
Sistema di porte a libro
6 ante (3+3 ante)
Apertura interna

Longitud de corte
Sistema de puerta plegable
6 hojas (3+3 hojas)
Que se abre hacia dentro





Note:

Cutting dimensions of the bi-folding door system only apply to this arrangement of profiles and hinges.

Further installation instructions can be obtained from the technical advisor.

Nota:

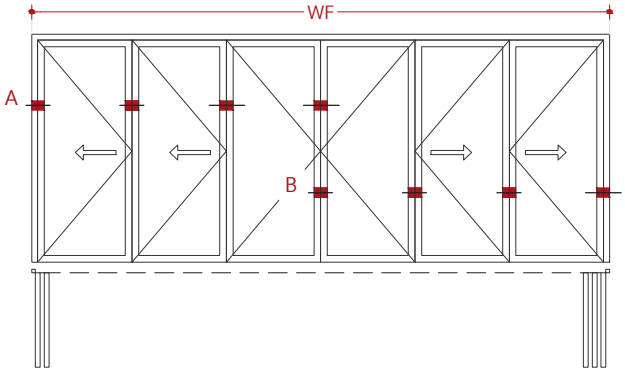
Le dimensioni di taglio del sistema di porta a libro valgono solo per questa disposizione di profili e cerniere.

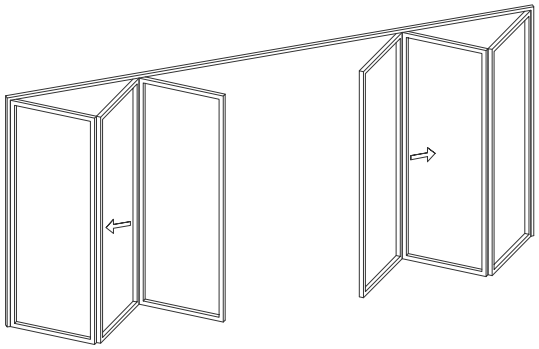
Ulteriori istruzioni per l'installazione possono essere ottenute dal consulente tecnico.

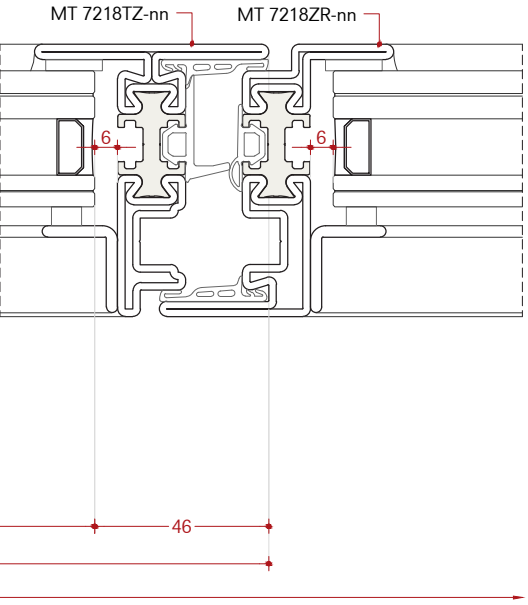
Nota:

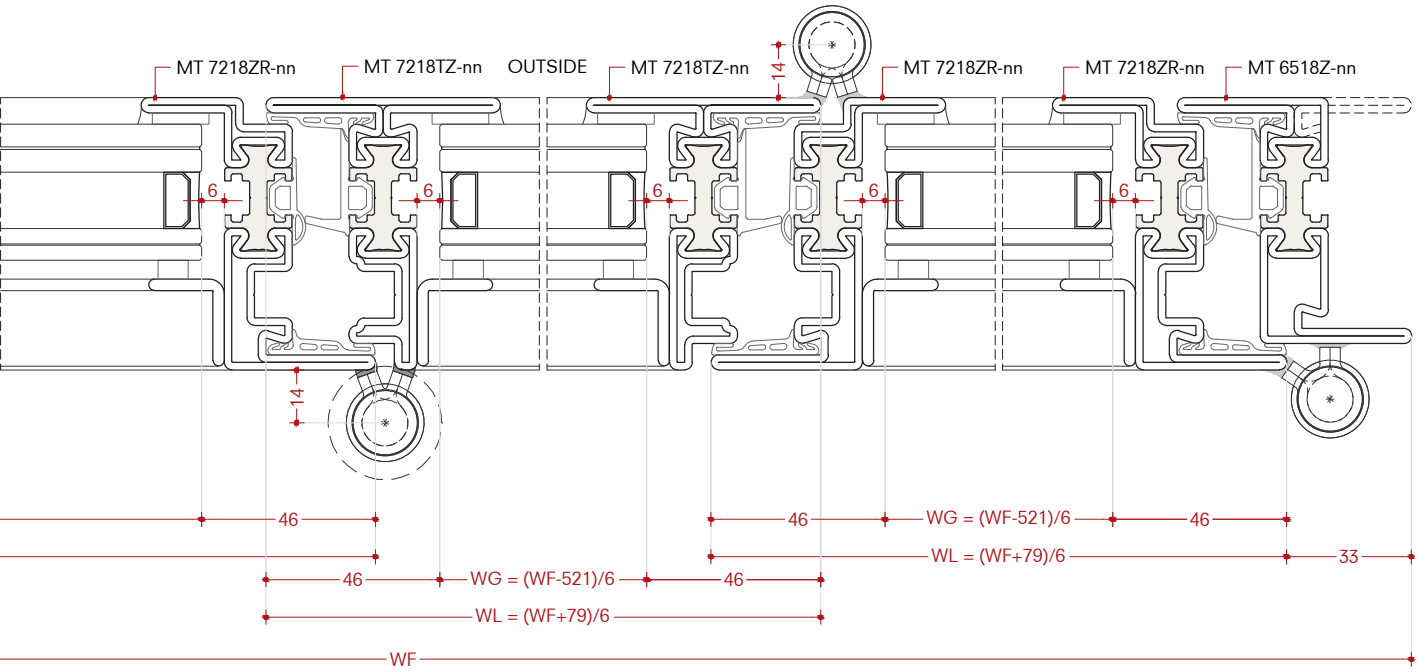
Las dimensiones de corte del sistema de puertas plegables solo se aplican a esta disposición de perfiles y bisagras.

Se pueden obtener más instrucciones de instalación del asesor técnico.


WF
A
B




MT 7218TZ-nn
MT 7218ZR-nn
6
6
46


MT 7218ZR-nn
MT 7218TZ-nn
OUTSIDE
MT 7218TZ-nn
14
MT 7218ZR-nn
MT 7218ZR-nn
MT 6518Z-nn
6
6
6
6
6
14
46
46
WG = (WF-521)/6
46
WL = (WF+79)/6
33
46
WG = (WF-521)/6
46
WL = (WF+79)/6
WF

Welding

Saldatura

Soldadura

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
✹ = Spot weld
= Welding

CL = Cutting Length
HF = Height Frame
HG = Height Glass
HL = Height Leaf
WF = Width Frame
WG = Width Glass
WL = Width Leaf

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2
✹ = Punto saldatura
= Saldatura

CL = Lunghezza di taglio
HF = Altezza telaio
HG = Altezza vetro
HL = Altezza anta
WF = Larghezza telaio
WG = Larghezza vetro
WL = Larghezza anta

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2
✹ = Punto soldadura
= Soldadura

CL = Longitud de corte
HF = Altura marco
HG = Altura vidrio
HL = Altura hoja
WF = Longitud marco
WG = Longitud vidrio
WL = Longitud hoja

Welding

M65 TB profiles can be welded
without taking any particular precautions, using the welding procedure according to the material to be welded:
- MAG or CMT welding for galvanized steel.
- TIG welding for stainless steel.
- MAG welding for Cor-Ten and bright steel.

We recommend using a smoke extraction system and ensuring sufficient ventilation of the room. Ensure the welding is thorough and clean.

Only M65 TB galvanized steel profiles (finishing -02) are coated with a special zinc-magnesium coating, which is suitable for welding and avoids unwanted pore formation.

The heat generated during welding of profiles and hinges must be dissipated using brass, copper and aluminium welding attachments.

Keep minimum 3 mm distance from welding seam to polyamide web.

Saldatura

I profili M65 TB possono essere saldati senza particolari precauzioni, utilizzando la procedura di saldatura in base al materiale da saldare:
- Per l'acciaio zincato utilizzare la saldatura tramite MAG o CMT.
- Per l'acciaio inox utilizzare saldatura tramite TIG.
- Per l'acciaio Cor-Ten e decapato utilizzare la saldatura tramite MAG.

Raccomandiamo di utilizzare un sistema di aspirazione fumi e di garantire una ventilazione sufficiente della stanza. Assicurarsi che la saldatura sia accurata e pulita.

Solamente i profili M65 TB zincati (finitura -02) sono rivestiti con uno speciale rivestimento in zinco-magnesio, che è adatto alla saldatura ed evita la formazione indesiderata di pori.

Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio.

Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

Soldadura

Los perfiles M65 TB pueden procesarse utilizando el procedimiento de soldadura según el material a soldar:
- Para acero galvanizado, use soldadura MAG o CMT.
- Para acero inoxidable, use soldadura TIG.
- Para acero Cor-Ten y bruto, use soldadura MAG.

Durante la soldadura, recomendamos utilizar un extractor de humos y garantizar la ventilación adecuada de la sala. Garantizar una soldadura concienzuda y limpia.

Solo perfiles galvanizados M65 TB (acabado -02) cuentan con un revestimiento especial de cinc y magnesio que reduce los poros.

El calor generado durante la soldadura de perfiles y bisagras se debe disipar utilizando accesorios de soldadura de latón, cobre y aluminio.

Mantenga una distancia mínima de 3 mm desde la costura de soldadura hasta la banda de poliamida.

Frame welding

1. Deburr and bevel bar ends.
2. Assemble the frame on the welding table.
3. Check frame dimensions.
4. Check angularity.
5. Check diagonal dimensions.
6. Fix position with small welding spots.
7. Recheck diagonal dimensions.
8. Carry out the welding alternating from the inside to the outside.
9. Recheck diagonal dimensions.
10. Grind the corners, creating a flat and smooth surface.

Saldatura del telaio

1. Sbavare e smussare l'estremità della barra.
2. Assemblare il telaio su di un tavolo di saldatura.
3. Controllare le dimensioni del telaio.
4. Controllare gli angoli.
5. Controllare le dimensioni delle diagonali.
6. Fissare la posizione con piccoli punti di saldatura.
7. Ricontrollare le dimensioni delle diagonali.
8. Eseguire la saldatura procedendo dall'interno verso l'esterno dell'angolo.
9. Ricontrollare le dimensioni delle diagonali.
10. Rettificare i cordoni di saldatura, creando una superficie piana e liscia.

Soldadura del marco

1. Desbarbar y biselar los extremos de las barras.
2. Montar el marco sobre la mesa de soldadura.
3. Comprobar las dimensiones del marco.
4. Comprobar los ángulos.
5. Comprobar las diagonales.
6. Fijar la posición del marco con pequeños puntos de soldadura.
7. Volver a comprobar las diagonales.
8. Ejecutar la soldadura desde el lado interior al lado exterior, alternándolos.
9. Volver a comprobar las diagonales.
10. Rectificar en plano las costuras de soldadura en las esquinas.

Welding thermal break profiles made of zinc-magnesium steel, stainless steel, Cor-Ten steel.

The best results were achieved using the following welding procedures:

MAG (metal-arc active gas)

Inert gas: CAR 18 (18% CO_2 and 82% Argon sec. EN 439 M21)
Welding rod for galvanized steel profiles (-02):
- DT-ZiRo, Ø0.8 mm (Dratec).
- TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparation of profile cut: bevel bar ends (ca. 1.5-2 mm x 45°). Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. When welding galvanized steel, tiny weld pores can occur occasionally. In the case that these pores need to be sealed for aesthetic reasons, we do not recommend secondary TIG welding. Instead, filling should be done using the TIG procedure or a temperature-resistant polyester putty (200°C). Excessive welding temperatures can be avoided by leaning special copper, brass or aluminium plates in the areas surrounding the welding area.

MAG (metal-arc active gas)

Inert gas: CAR 18 (18% CO_2 and 82% Argon sec. EN 439 M21)
Welding rod for bright steel profiles (-12):
- NI-CO, Ø0.8 mm - Arroweld.
- ECO BRONZ, Ø0.8 mm - Arroweld (C: 0.070; Si: 0.850; Mn: 1.450; P: <0.020; S: <0.020).

Preparation of profile cut: bevel bar ends (ca. 1.5-2 mm x 45°). Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. Excessive welding temperatures can be avoided by leaning special copper, brass or aluminium plates in the areas surrounding the welding area.

MAG (metal-arc active gas)

Inert gas: CAR 18 (18% CO_2 and 82% Argon sec. EN 439 M21)
Welding rod for Cor-Ten steel profiles (-07):
- CORTEN, Ø0.8 mm - Arroweld (C: 0.080; Si: 0.800; Mn: 1.500; Cr: 0.300; Ni: 0.400; Cu: 0.500).

Preparation of profile cut: bevel bar ends (ca. 1.5-2 mm x 45°). Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. Excessive welding temperatures can be avoided by leaning special copper, brass or aluminium plates in the areas surrounding the welding area.

Saldatura di profili a taglio termico in acciaio, zincati zinco-magnesio, inox, Cor-Ten.

I migliori risultati di saldatura si raggiungono con i seguenti metodi:

MAG (metal-arc active gas)

Tipo di gas: miscela CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Materiale di riempimento per profili in acciaio zincato (-02):
- DT-ZiRo, Ø0.8 mm (es. Dratec).
- TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparazione dell'angolo: creare uno smusso di ca. 1.5-2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo.
Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. Durante la saldatura MAG di acciaio zincato occasionalmente potrebbero verificarsi piccoli fori o pori nel cordone di saldatura. Se per ragioni estetiche è ritenuto opportuno chiudere questi pori si consiglia di ritoccare con punti al TIG. In alternativa al TIG, e nel caso di successiva verniciatura a polvere, si può usare uno stucco epossidico adatto. Eccessive temperature di saldatura possono essere evitate usando apposite piastre di rame, ottone o alluminio appoggiate nelle aree circostanti la zona di saldatura.

MAG (metal-arc active gas)

Tipo di gas: miscela CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Materiale di riempimento per profili in acciaio decapato (-12):
- NI-CO, Ø0.8 mm - Arroweld.
- ECO BRONZ, Ø0.8 mm - Arroweld (C: 0.070; Si: 0.850; Mn: 1.450; P: <0.020; S: <0.020).

Preparazione dell'angolo: creare uno smusso di ca. 1.5-2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. Eccessive temperature di saldatura possono essere evitate usando apposite piastre di rame, ottone o alluminio appoggiate nelle aree circostanti la zona di saldatura.

MAG (metal-arc active gas)

Tipo di gas: miscela CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Materiale di riempimento per profili in acciaio Cor-Ten (-07):
- CORTEN, Ø0.8 mm - Arroweld (C: 0.080; Si: 0.800; Mn: 1.500; Cr: 0.300; Ni: 0.400; Cu: 0.500).

Preparazione dell'angolo: creare uno smusso di ca. 1.5-2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. Eccessive temperature di saldatura possono essere evitate usando apposite piastre di rame, ottone o alluminio appoggiate nelle aree circostanti la zona di saldatura.

Soldadura de perfiles con rotura térmica en acero con capa de zinc y magnesio, inoxidable, Cor-ten.

Con los siguientes procedimientos de soldadura se consiguen los mejores resultados:

MAG (metal-arc active gas)

Gas de protección: CAR 18 (18% de CO_2 y 82% de argón, de acuerdo con EN 439 M21). Cordón de soldadura para perfiles en acero galvanizado (-02):
- DT-ZiRo, Ø0.8 mm (es. Dratec).
- TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparación de los cortes del perfil: biselar los extremos de las barras (aprox. 1.5-2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. En la soldadura de acero galvanizado es posible que, ocasionalmente, aparezcan pequeños poros de soldadura. En el caso de que estos poros debieran cerrarse por motivos estéticos, recomendamos no hacer el repaso mediante el procedimiento TIG, sino con el TIG; o bien rellenarlos con una espátula de poliéster con la suficiente resistencia térmica (200°C). Las temperaturas de soldadura excesivas se pueden evitar utilizando placas especiales de cobre, latón o aluminio colocadas en las áreas que rodean el área de soldadura.

MAG (metal-arc active gas)

Gas de protección: CAR 18 (18% de CO_2 y 82% de argón, de acuerdo con EN 439 M21). Cordón de soldadura para perfiles en acero bruto (-12):
- NI-CO, Ø0.8 mm - Arroweld.
- ECO BRONZ, Ø0.8 mm - Arroweld (C: 0.070; Si: 0.850; Mn: 1.450; P: <0.020; S: <0.020).

Preparación de los cortes del perfil: biselar los extremos de las barras (aprox. 1.5-2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. Las temperaturas de soldadura excesivas se pueden evitar utilizando placas especiales de cobre, latón o aluminio colocadas en las áreas que rodean el área de soldadura.

MAG (metal-arc active gas)

Gas de protección: CAR 18 (18% de CO_2 y 82% de argón, de acuerdo con EN 439 M21). Cordón de soldadura para perfiles en acero Cor-Ten (-07):
- CORTEN, Ø0.8 mm - Arroweld (C: 0.080; Si: 0.800; Mn: 1.500; Cr: 0.300; Ni: 0.400; Cu: 0.500).

Preparación de los cortes del perfil: biselar los extremos de las barras (aprox. 1.5-2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. Las temperaturas de soldadura excesivas se pueden evitar utilizando placas especiales de cobre, latón o aluminio colocadas en las áreas que rodean el área de soldadura.

CMT (cold metal transfer)

Type of gas: 100% Argon
Welding rod for galvanized steel profiles (-02):
- $CuSi_3$, Ø0.8 mm - Dratec (Cu: Basis; Sn: 0.100; Si: 3.000; Mn: 1.000; Zn: 0.100; Fe: 0.070).
- DT-ZiRo, Ø0.8 mm - Dratec. TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparation of profile cut: bevel bar ends (ca. 1.5-2 mm x 45°). Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. The CMT welding procedure is well suited to welding thermal break steel profiles made of galvanized steel. Assuming the equipment (Fronius) is properly adjusted, neither splatter nor pores occur. One advantage of the $CuSi_3$ welding rod is that weld seams can be ground flat in a significantly shorter amount of time. This kind of rod also proves especially advantageous when dealing with stepped flanges. The mechanical resistance of $CuSi_3$ filling material is lower than that of DT-ZiRo/TS Zn Al, which means that it should not be used with very large casement windows or doors. The resistance of $CuSi_3$corners is roughly comparable to welded architectural bronze or brass windows. Smaller and medium size window leaves can be welded with $CuSi_3$. However, steel hinges should be welded only with DT-ZiRo/TS Zn Al filling material. Excessive welding temperatures can be avoided by leaning special copper, brass or aluminium plates in the areas surrounding the welding area.

TIG (tungsten inert gas)

Type of gas: 100% Argon
Welding rod for stainless steel profiles (-05):
- stainless steel bars AISI 316L, Ø1.6mm

Preparation of profile cut: bevel bar ends (ca. 1.5 mm x 45°). Do not bevel the last 5 mm of the outermost point in order to avoid burning away the sharp edge. Spot-weld the inner and outer corners, then draw a weld seam from the inside outward. Excessive welding temperatures can be avoided by leaning special copper, brass or aluminium plates in the areas surrounding the welding area.

CMT (cold metal transfer)

Tipo di gas: 100% Argon
Materiale di riempimento per profili in acciaio zincato (-02):
- $CuSi_3$, Ø0.8 mm - Dratec (Cu: Basis; Sn: 0.100; Si: 3.000; Mn: 1.000; Zn: 0.100; Fe: 0.070).
- DT-ZiRo, Ø0.8 mm - Dratec. TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparazione dell'angolo: creare uno smusso di ca. 1.5-2 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. La saldatura CMT è particolarmente adatta per la saldatura di profili in acciaio zincato a taglio termico. Con una corretta regolazione dell'attrezzatura (es. Fronius) la saldatura avviene senza schizzi e senza formazione di fori o pori nella giuntura. Il filo $CuSi_3$ ha il vantaggio di poter rettificare le saldature in pochissimo tempo.
La resistenza meccanica del riempitivo $CuSi_3$ è inferiore a quella del filler DT-ZiRo/TS Zn Al, quindi non dovrebbe essere utilizzato su ante molto grandi. La resistenza meccanica del giunto realizzato in $CuSi_3$ è paragonabile a quella delle finestre di bronzo architettonico. Per tale motivo, questo tipo di riempitivo può tranquillamente essere utilizzato su porte e finestre di dimensioni piccole e medie. Inoltre, le cerniere devono essere sempre saldate solo con riempimento DT-ZiRo/TS Zn Al. Eccessive temperature di saldatura possono essere evitate usando apposite piastre di rame, ottone o alluminio appoggiate nelle aree circostanti la zona di saldatura.

TIG (tungsten inert gas)

Tipo di gas: 100% Argon
Materiale di riempimento per profili in acciaio inox (-05):
- Bacchette inox AISI 316L, Ø1.6 mm

Preparazione dell'angolo: creare uno smusso di ca. 1.5 mm x 45° su entrambe le facce esterne del profilo. Non smussare gli ultimi 5 mm della punta esterna per mantenere inalterata la forma dello spigolo. Fissare l'angolo con un punto di saldatura sui due lati del bordo, quindi eseguire la saldatura. Eccessive temperature di saldatura possono essere evitate usando apposite piastre di rame, ottone o alluminio appoggiate nelle aree circostanti la zona di saldatura.

CMT (cold metal transfer)

Gas de protección: 100% Argón
Cordón de soldadura para perfiles en acero galvanizado (-02):
- $CuSi_3$, Ø0.8 mm - Dratec (Cu: Basis; Sn: 0.100; Si: 3.000; Mn: 1.000; Zn: 0.100; Fe: 0.070).
- DT-ZiRo, Ø0.8 mm - Dratec. TS Zn Al, Ø0.8 mm - Arroweld (C: 0.060; Si: 0.500; Mn: 1.100; Ti: 0.100; Zr: 0.090; Al 0.100).

Preparación de los cortes del perfil:
Biselar los extremos de las barras (aprox. 1.5-2 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. El procedimiento de soldadura CMT es muy apropiado para soldar perfiles de acero galvanizado separados térmicamente. Si se emplean correctamente los equipos (Fronius), no habrá proyecciones ni poros. Una ventaja del cordón de soldadura $CuSi_3$ es que permite realizar el rectificado plano de las costuras de soldadura en un periodo de tiempo considerablemente reducido. Este cordón más blando resulta particularmente útil y beneficioso para las bridas escalonadas. En comparación con el material de relleno DT-ZiRo/TS Zn Al, el agarre mecánico del material de relleno $CuSi_3$ es menor, por lo que no debe utilizarse para ventanas o puertas abatibles particularmente grandes. El agarre de las esquinas corresponde aprox. al de las ventanas de bronce arquitectónico o latón soldados. Las hojas de ventana más pequeñas y medianas se pueden soldar de forma segura con el cordón $CuSi_3$. Sin embargo, para la soldadura de bisagras de acero solo debe utilizarse el material de relleno DT-ZiRo/TS Zn Al.

TIG (tungsten inert gas)

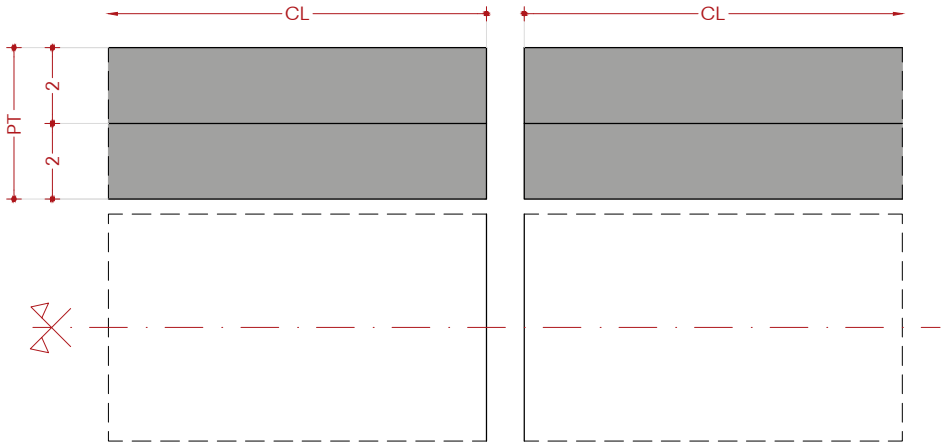
Gas de protección: 100% Argón
Cordón de soldadura para perfiles en acero inoxidable (-05):
- Barras en acero inoxidable AISI 316L, Ø1.6 mm

Preparación de los cortes del perfil: biselar los extremos de las barras (aprox. 1.5 mm x 45°). No biselar los últimos 5 mm del extremo exterior para evitar la abrasión del borde afilado. Puntear las esquinas interiores y exteriores; luego, tirar de la costura de soldadura desde dentro hacia fuera. Las temperaturas de soldadura excesivas se pueden evitar utilizando placas especiales de cobre, latón o aluminio colocadas en las áreas que rodean el área de soldadura.

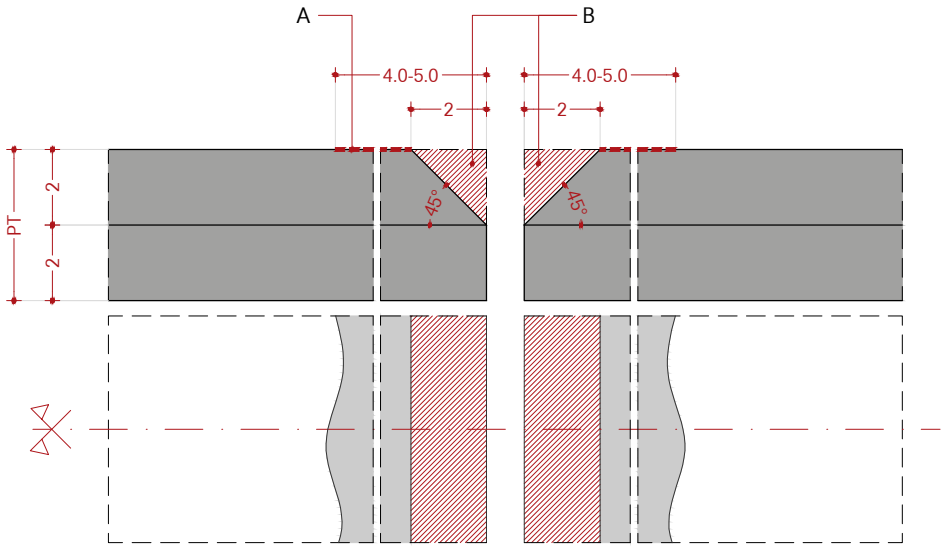
WELDING INSTRUCTIONS

ISTRUZIONI SALDATURA

INSTRUCCIONES DE SOLDADURA



1

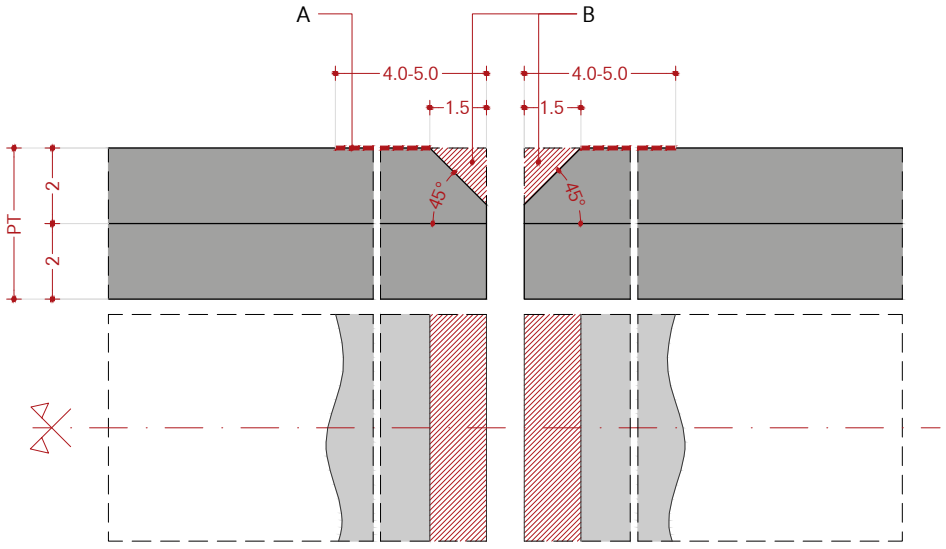


2-A

Only for galvanized steel (-02) profiles.

Solo per profili in acciaio zincato (-02).

Solo para perfiles en acero galvanizado (-02).

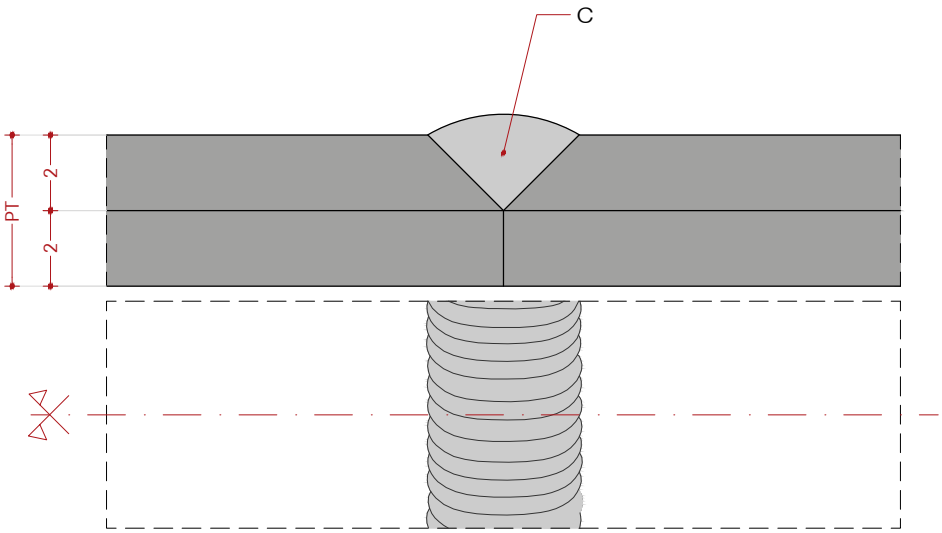


2-B

Only for stainless steel (-05) profiles.

Solo per profili in acciaio inox (-05).

Solo para perfiles en acero inoxidable (-05).



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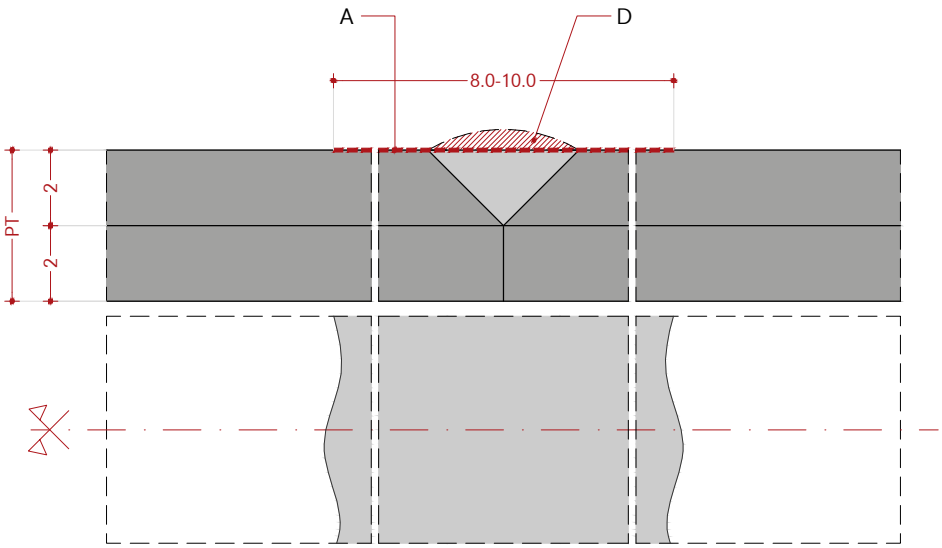


4

PT = Profile thickness

A) Remove zinc coating approx (4.0-5.0 mm) next to welding seam.
B) Chamfer
C) Welding
D) Grind excess part

PT = Spessore profilo

A) Rimuovere la zincatura di ca (4.0-5.0 mm) accanto alla saldatura.
B) Smussare
C) Saldatura
D) Smerigliare parte in eccesso

PT = Espesor de perfil

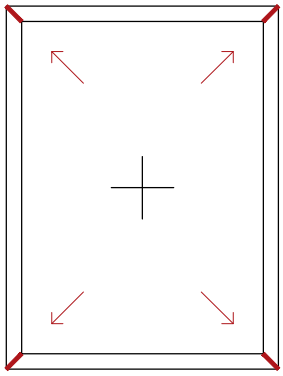
A) Retire la tira de galvanizado ca (4.0-5.0 mm) al lado de la soldadura.
B) Chaflán
C) Soldadura
D) Esmerilar la parte sobrante

MT 6518L-nn / MT 6518L-nn

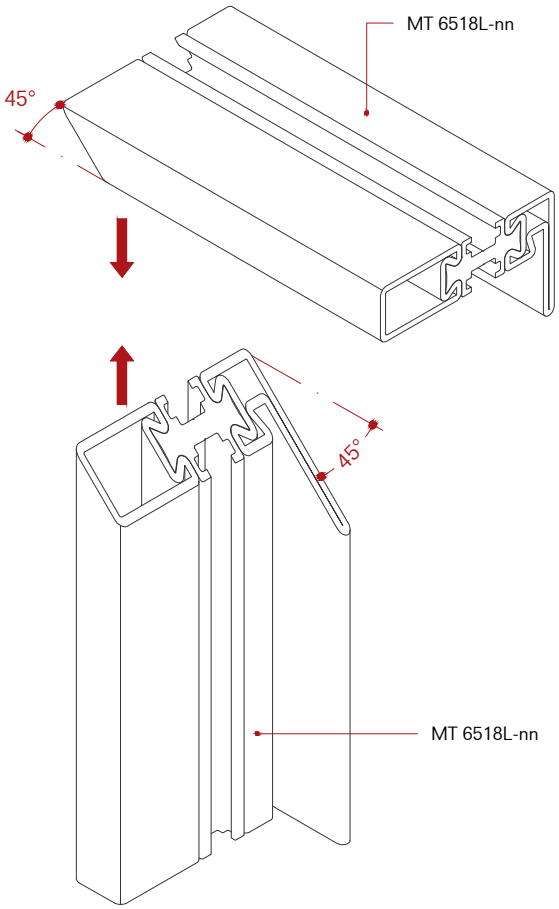
Fixed partition

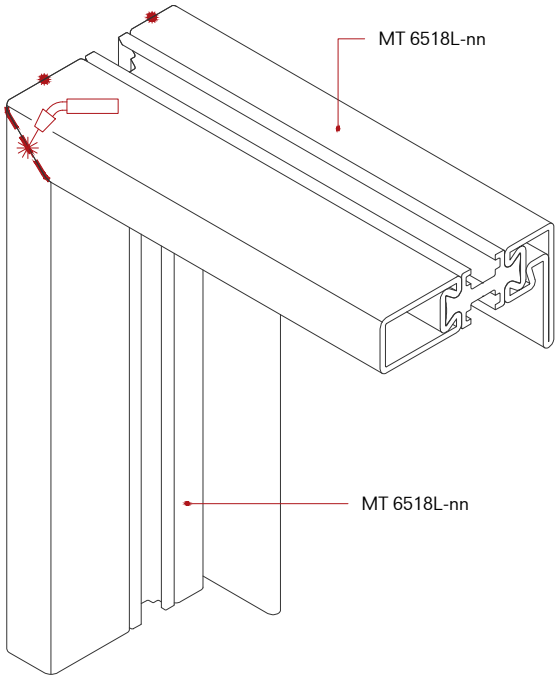
Finestra telaio fisso

Ventana fija



Internal view
Vista interna
Vista interna



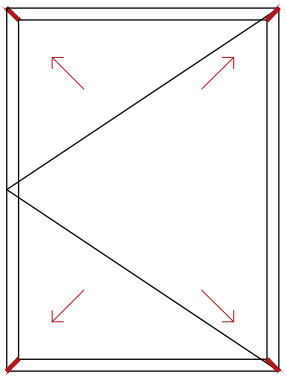


MT 7218ZR-nn / MT 7218ZR-nn

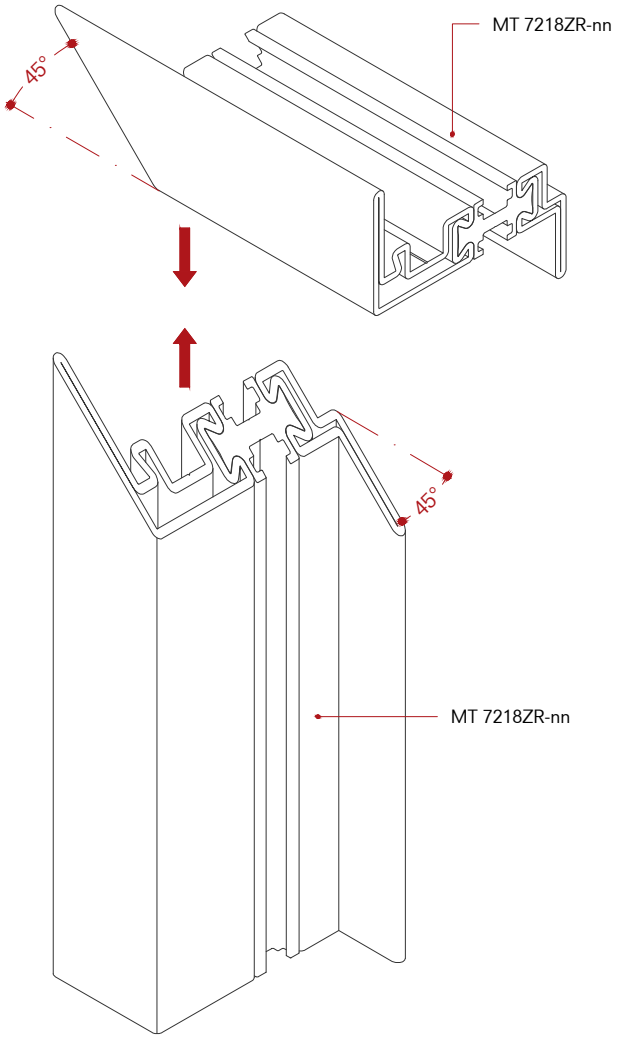
Single leaf window open in

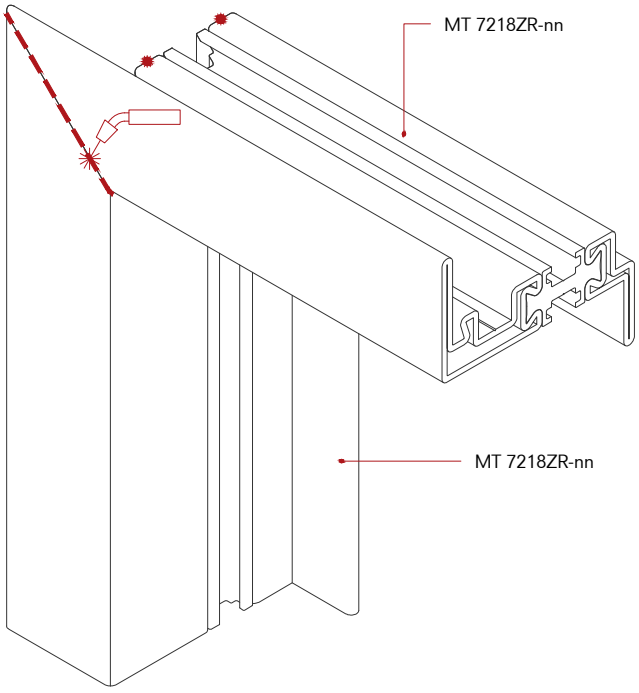
Finestra a un battente apertura interna

Ventana de una hoja que se abre hacia dentro



Internal view
Vista interna
Vista interna



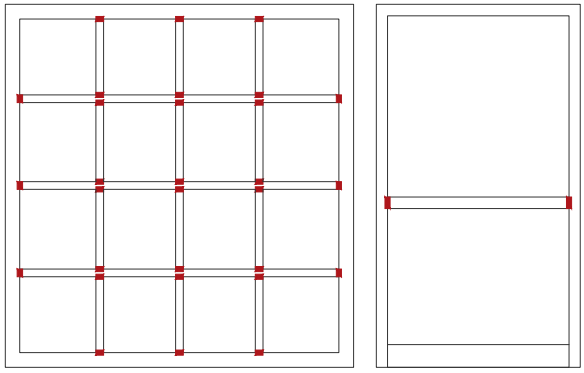


MT 6518L-nn / MT 6518T-nn

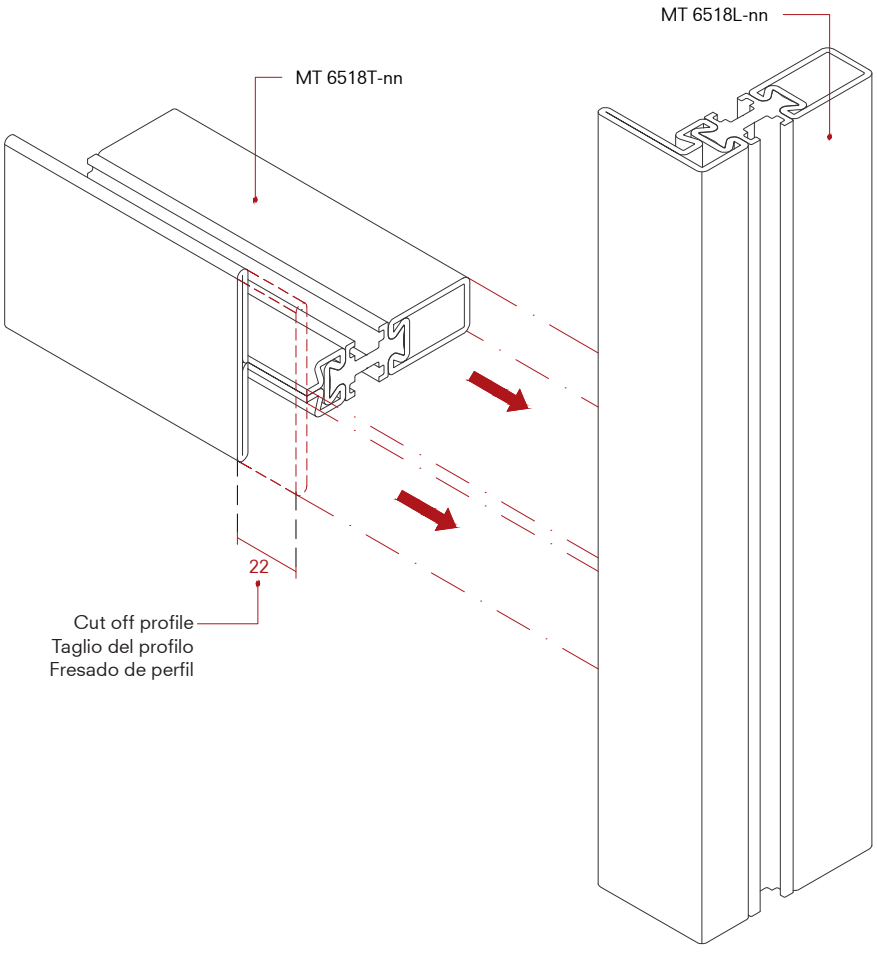
Fixed partitions

Partizioni fisse

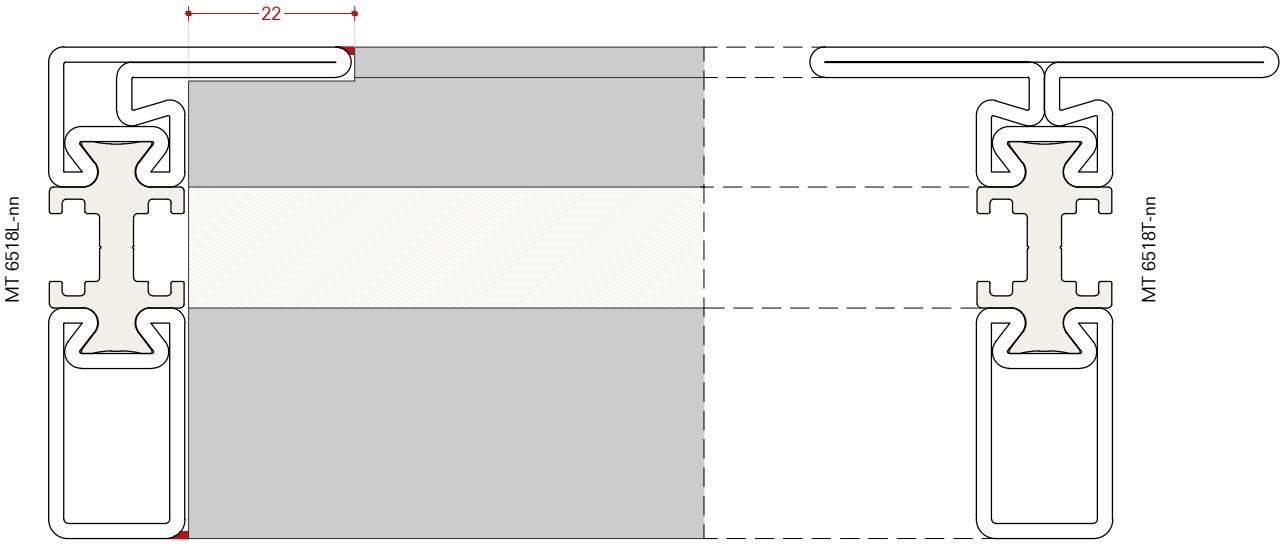
Particiones - secciones fijas

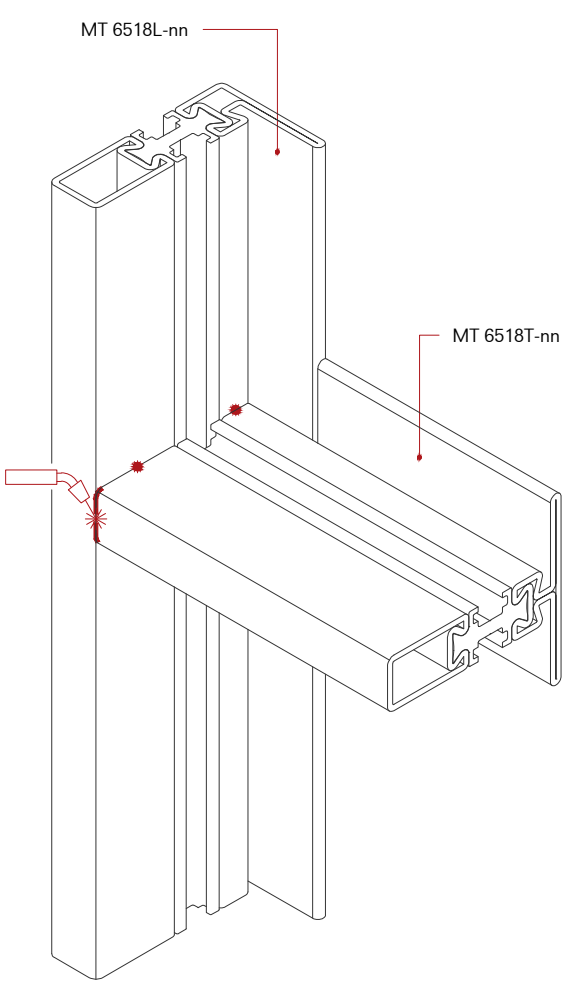


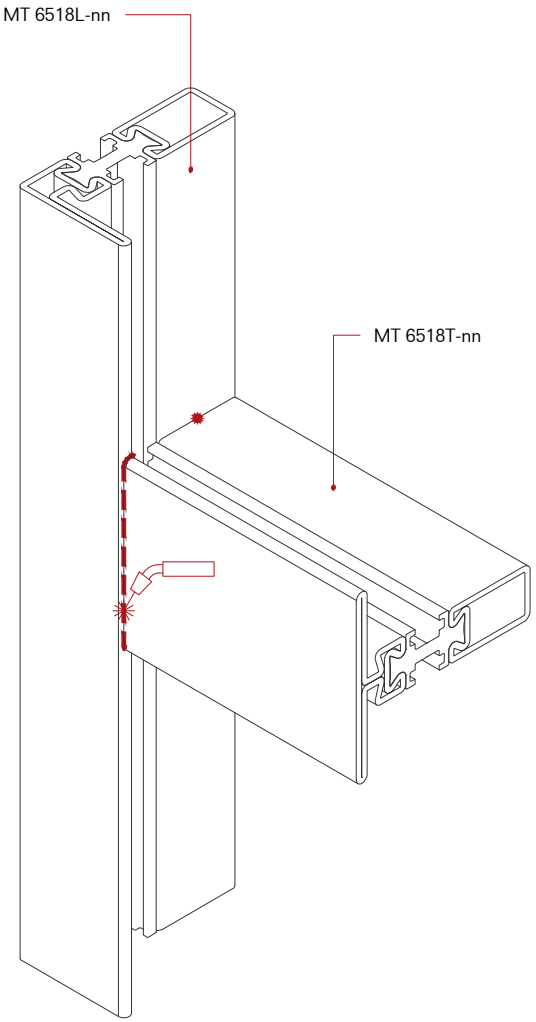
Internal view
Vista interna
Vista interna



External view
Vista esterna
Vista externa







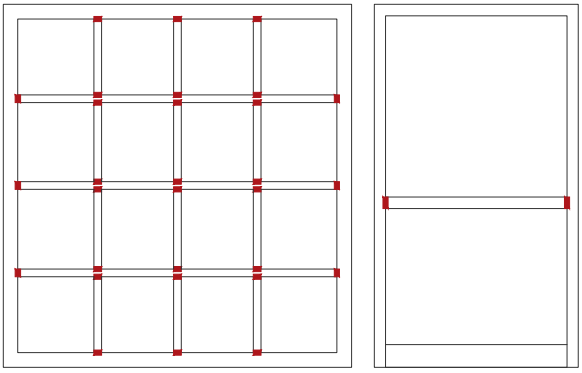
External view
Vista esterna
Vista externa

MT 6518L-nn / MT 6507TR-nn (MT 6507TN-nn)

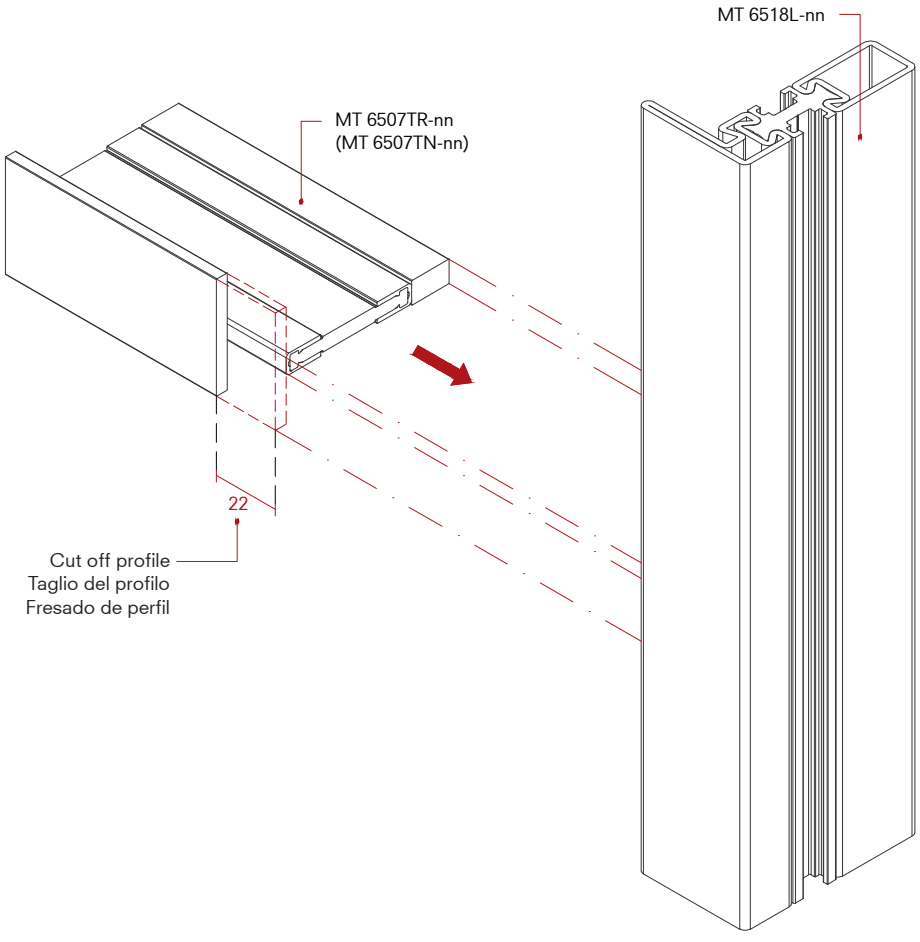
Fixed partitions

Partizioni fisse

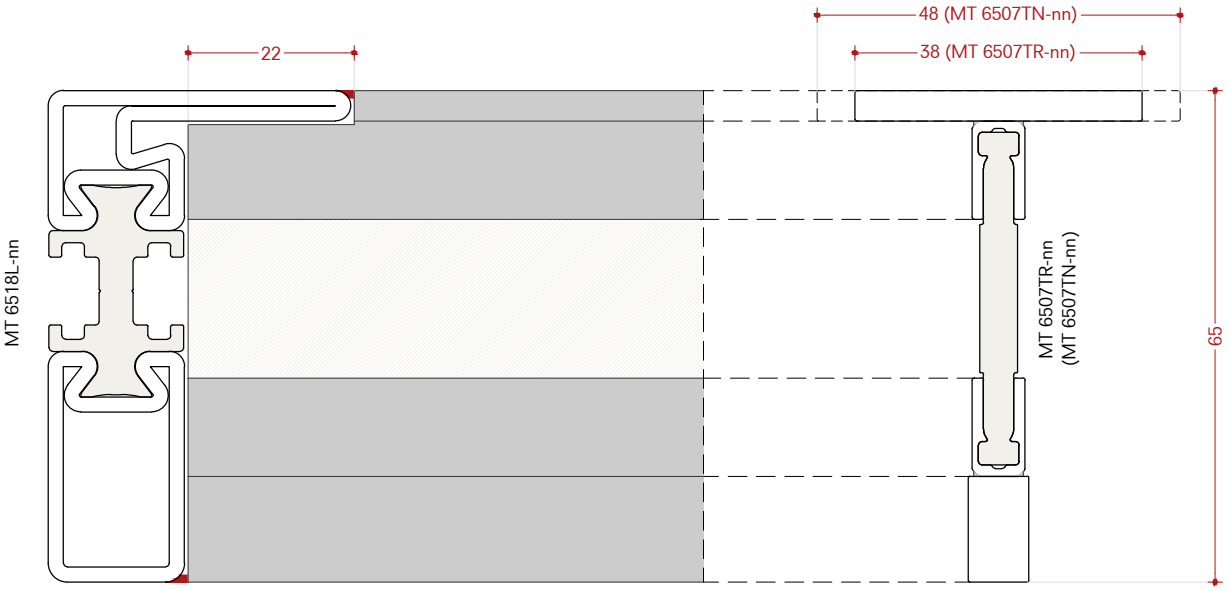
Particiones - secciones fijas

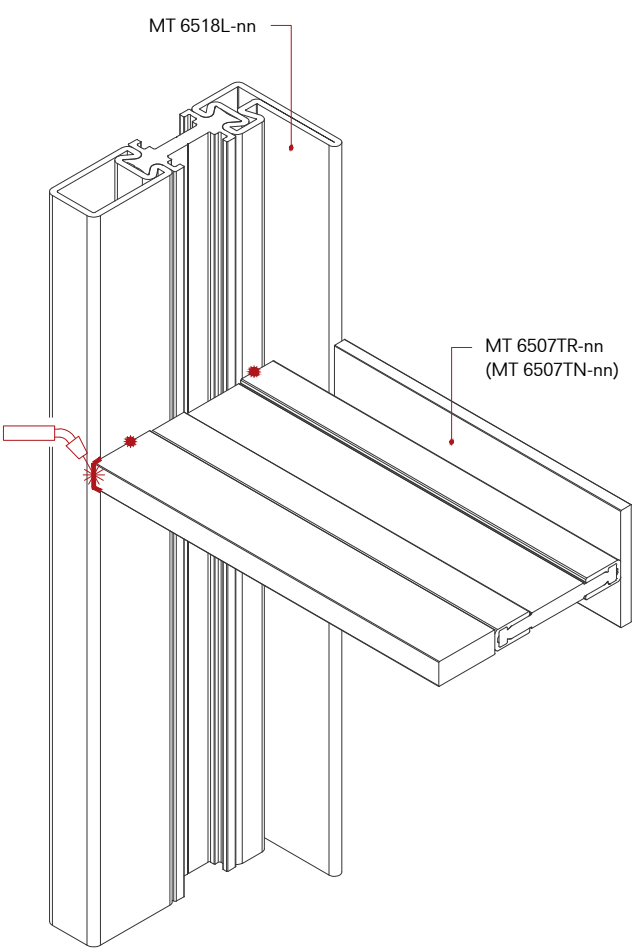


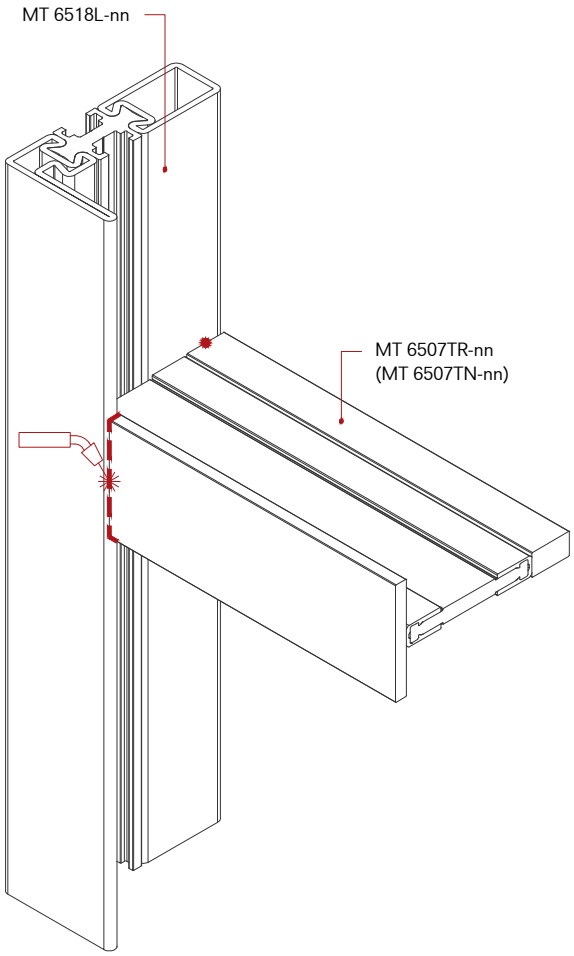
Internal view
Vista interna
Vista interna



External view
Vista esterna
Vista externa







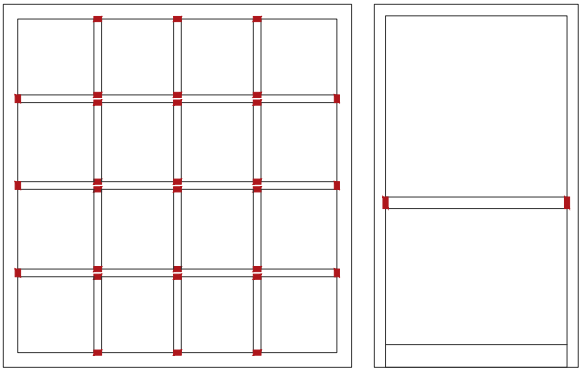
External view
Vista esterna
Vista externa

MT 7218LF-nn / MT 7207TR-nn (MT 7207TN-nn)

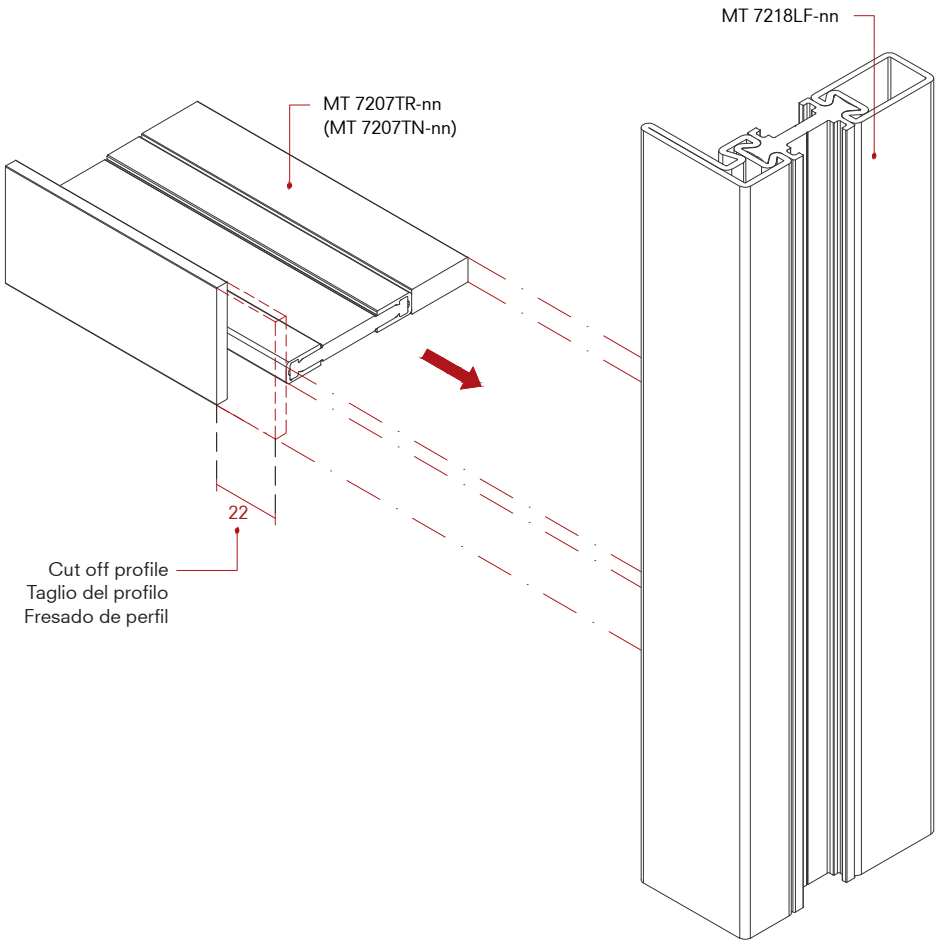
Fixed partitions

Partizioni fisse

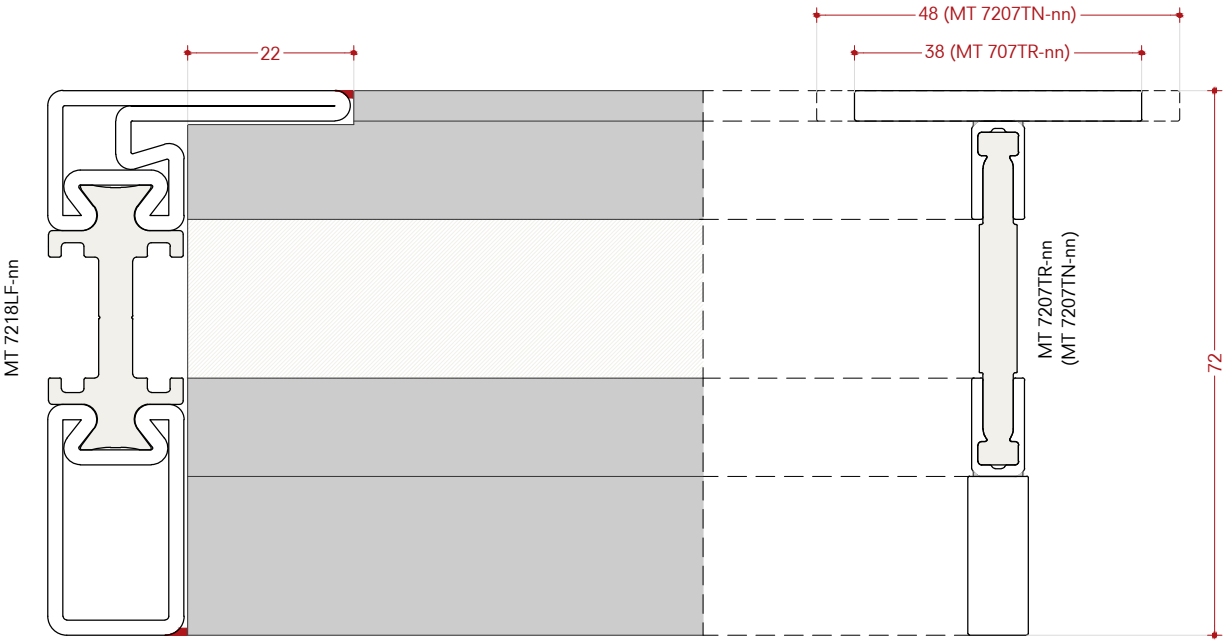
Particiones - secciones fijas

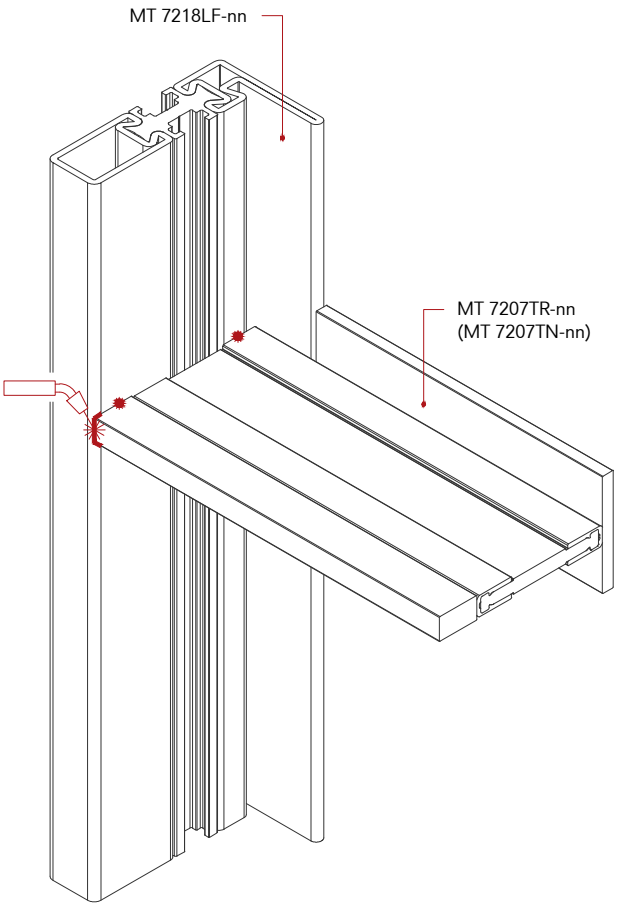


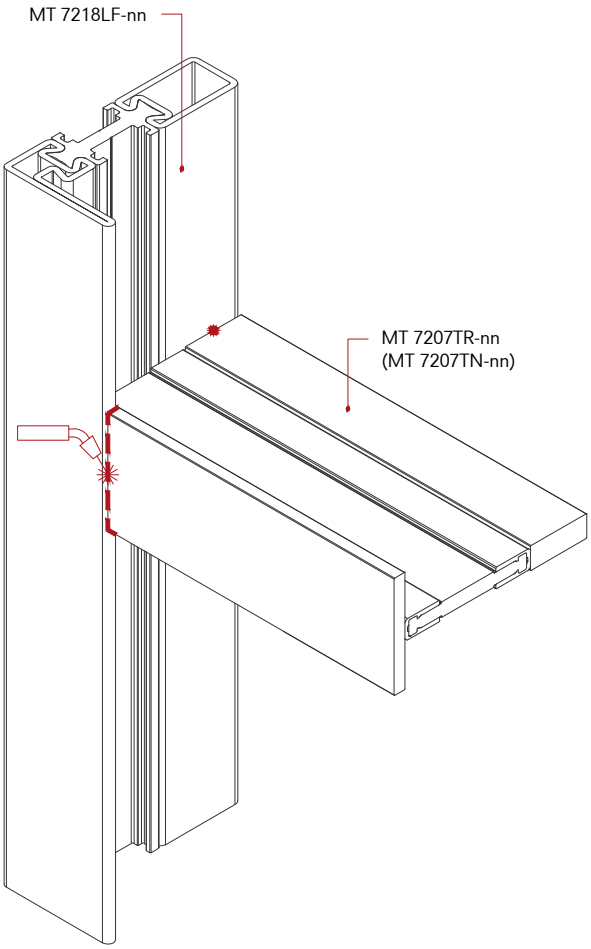
Internal view
Vista interna
Vista interna



External view
Vista esterna
Vista externa







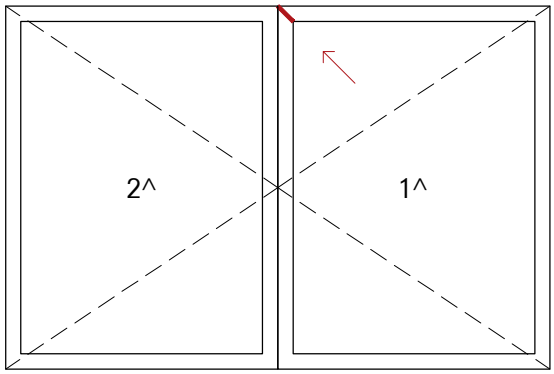
External view
Vista esterna
Vista externa

MT 7218TZ-nn / MT 7218TZ-nn

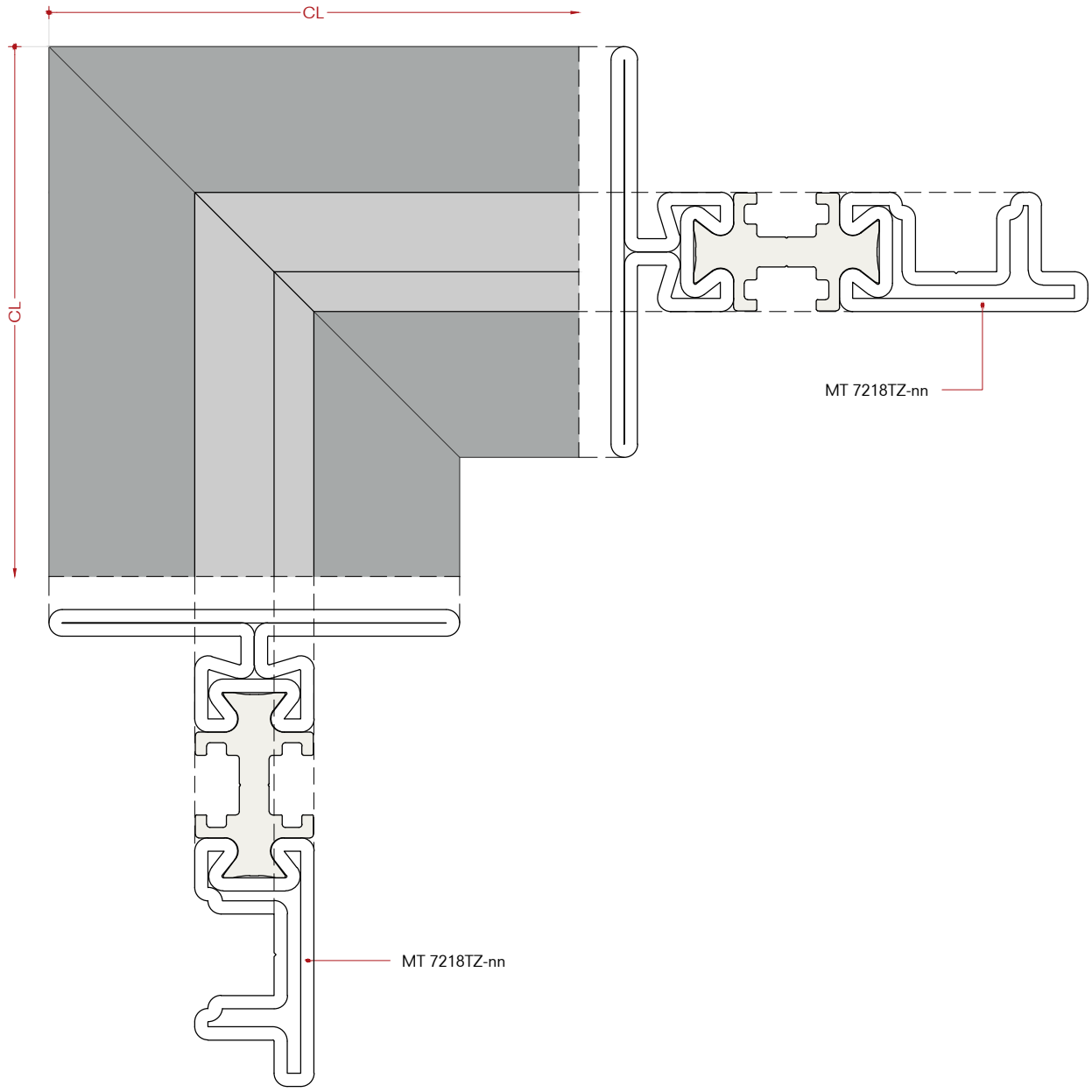
Double leaf window open out

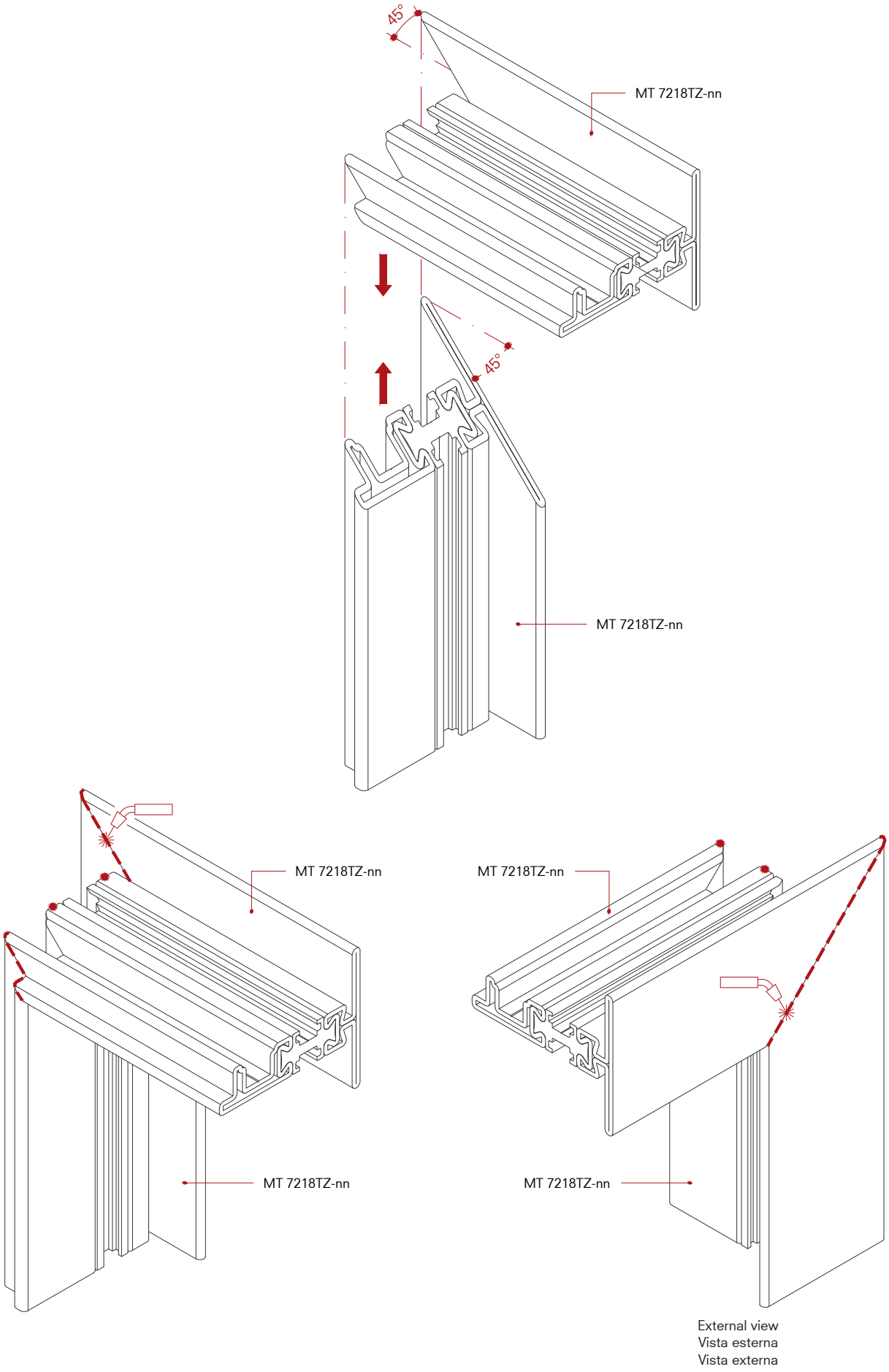
Finestra doppia anta apertura esterna

Doble ventana que se abre hacia fuera



Internal view
Vista interna
Vista interna





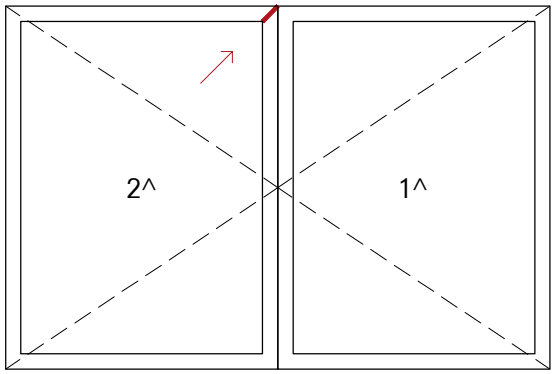
External view
Vista esterna
Vista externa

MT 7218TZ-nn / MT 7218ZR-nn

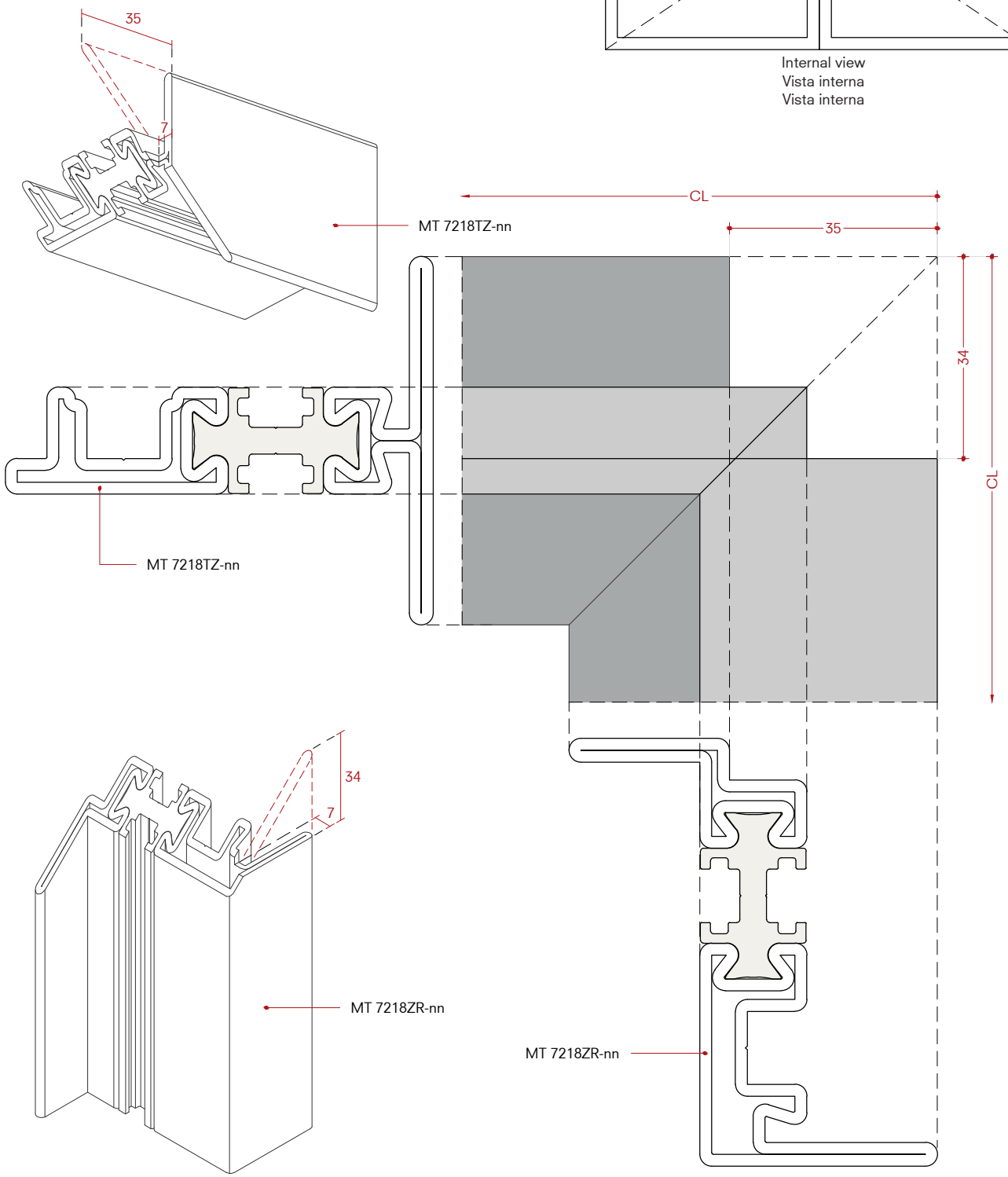
Double leaf window open out

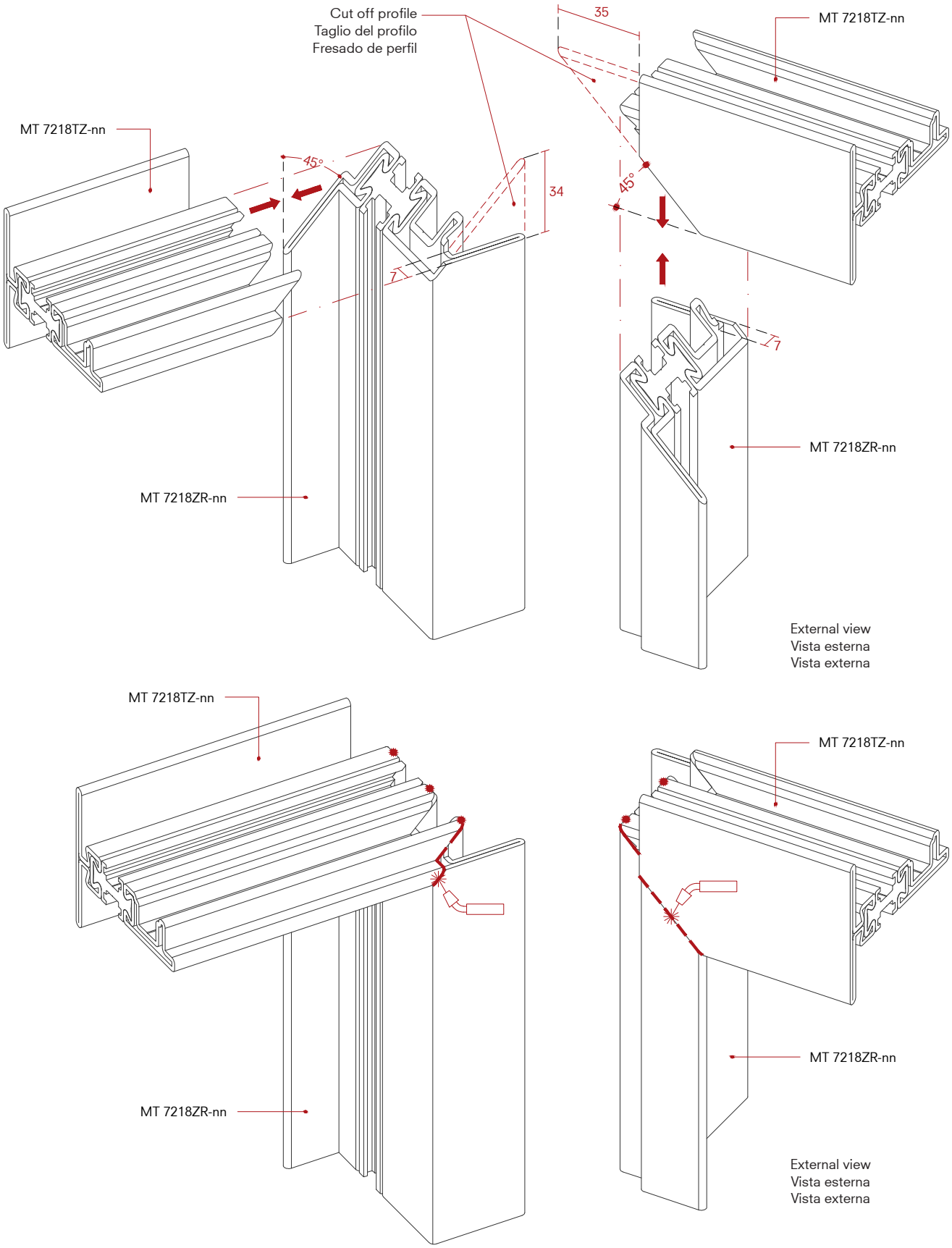
Finestra doppia anta apertura esterna

Doble ventana que se abre hacia fuera



Internal view
Vista interna
Vista interna



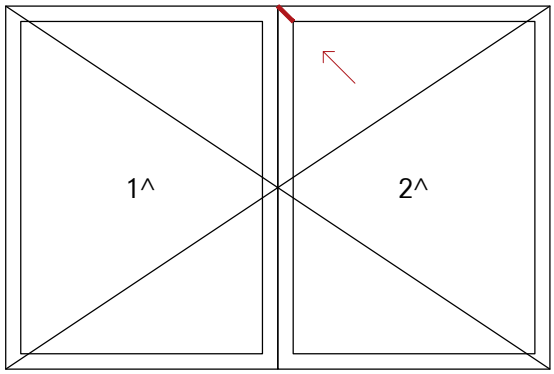

Cut off profile
Taglio del profilo
Fresado de perfil
35
MT 7218TZ-nn
MT 7218TZ-nn
45°
34
7
MT 7218ZR-nn
45°
7
MT 7218ZR-nn
External view
Vista esterna
Vista externa
MT 7218TZ-nn
MT 7218TZ-nn
MT 7218ZR-nn
MT 7218ZR-nn
External view
Vista esterna
Vista externa

MT 7218TZ-nn / MT 7218ZR-nn

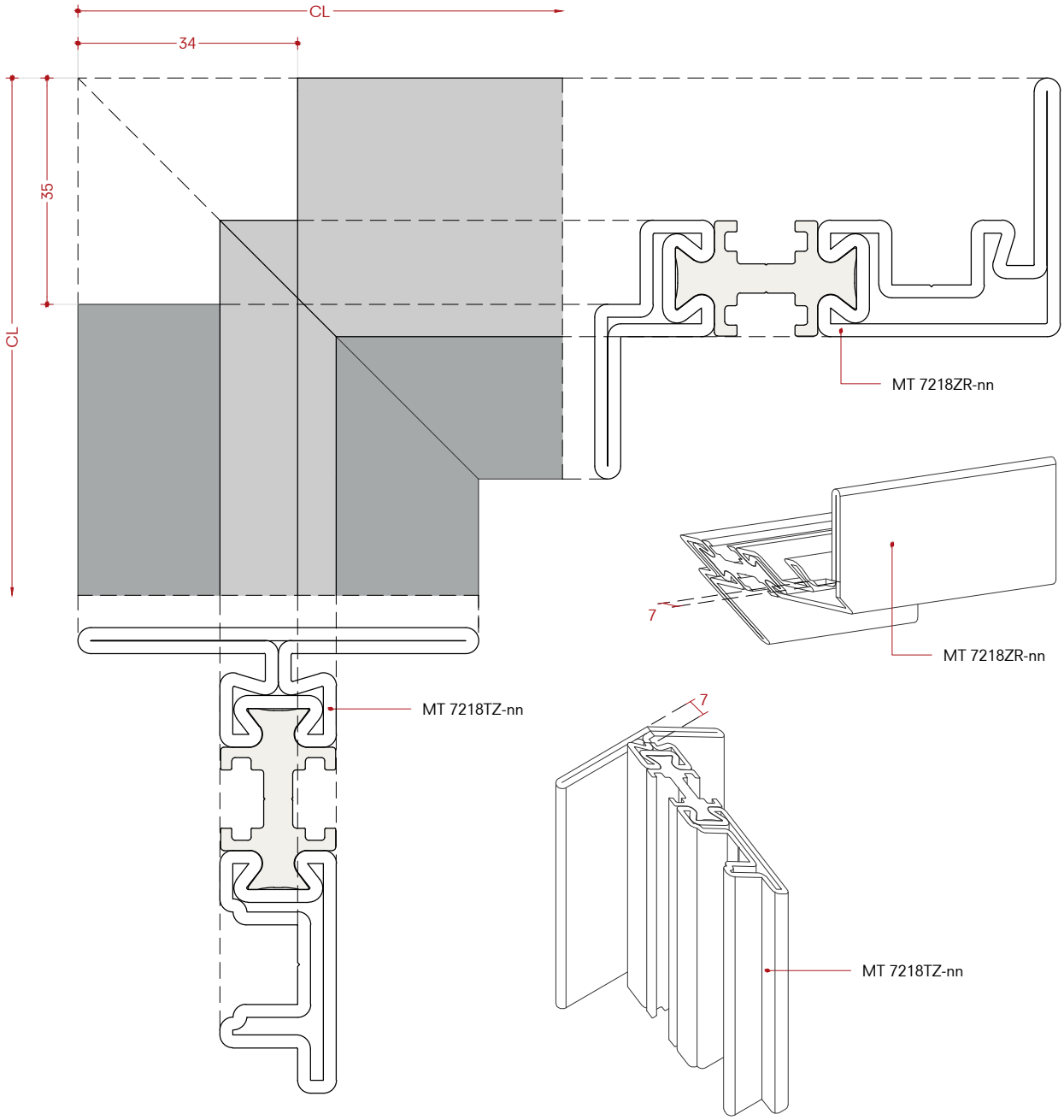
Double leaf window open in

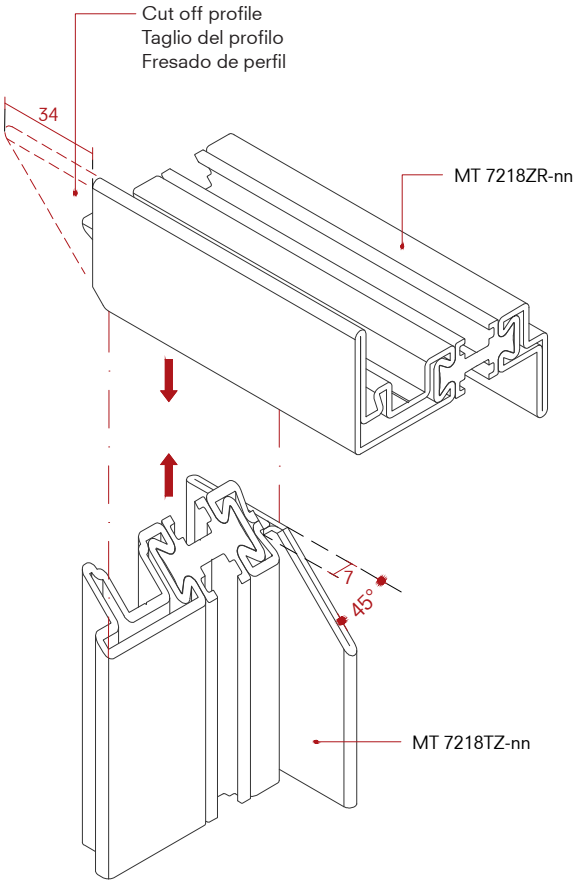
Finestra doppia anta apertura interna

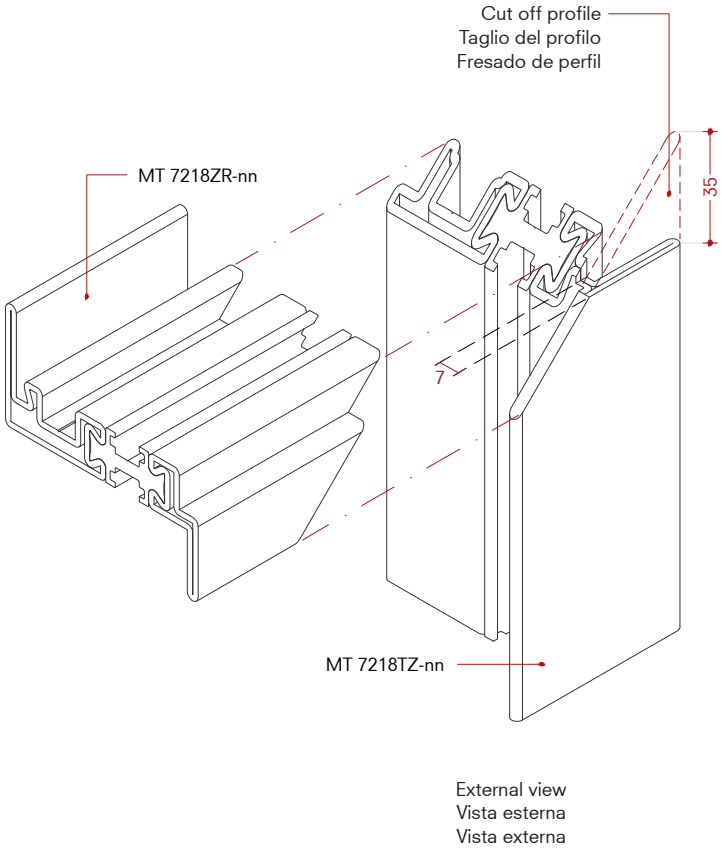
Doble ventana que se abre hacia dentro



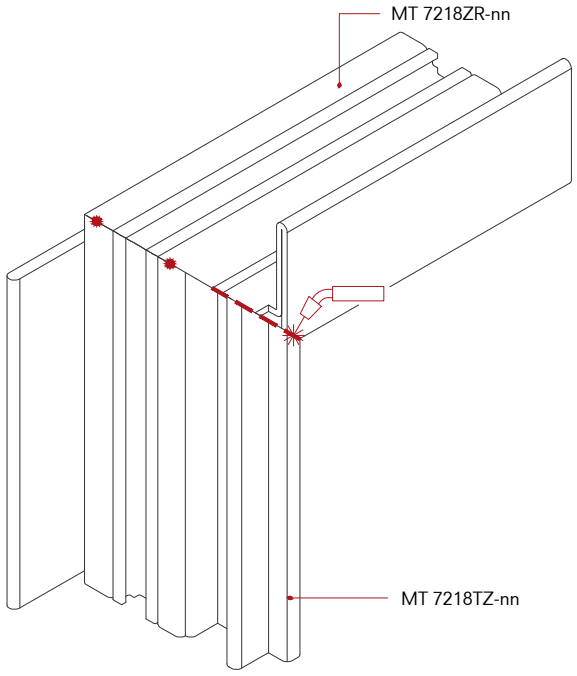
Internal view
Vista interna
Vista interna

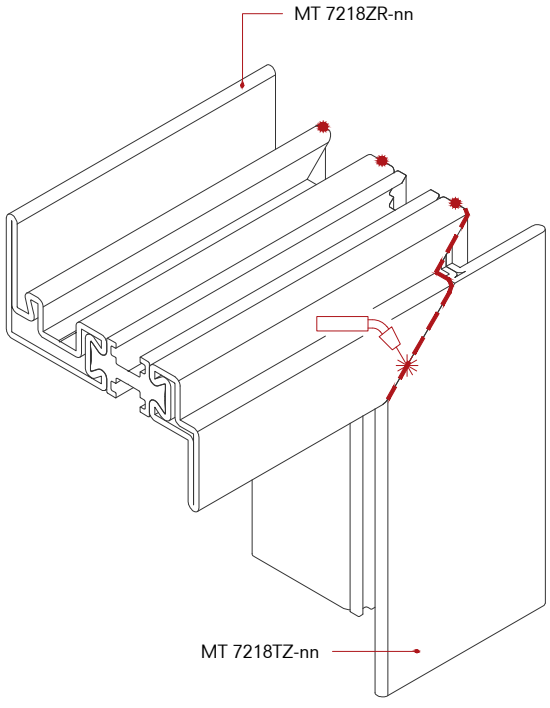






External view
Vista esterna
Vista externa





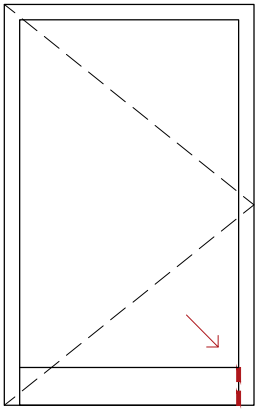
External view
Vista esterna
Vista externa

MT 7218TZ-nn / MT 7218HZ-nn

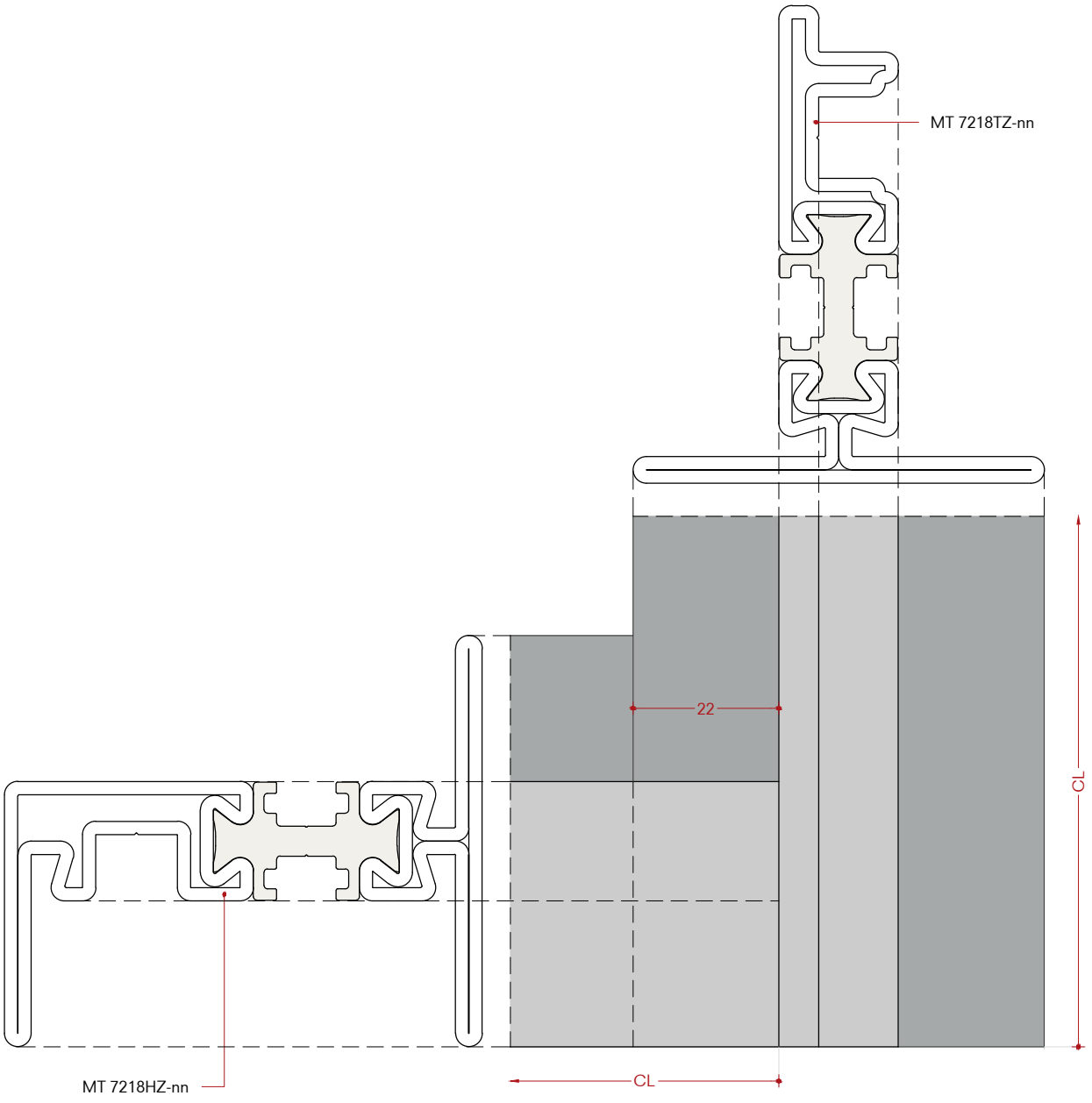
Single leaf door open out

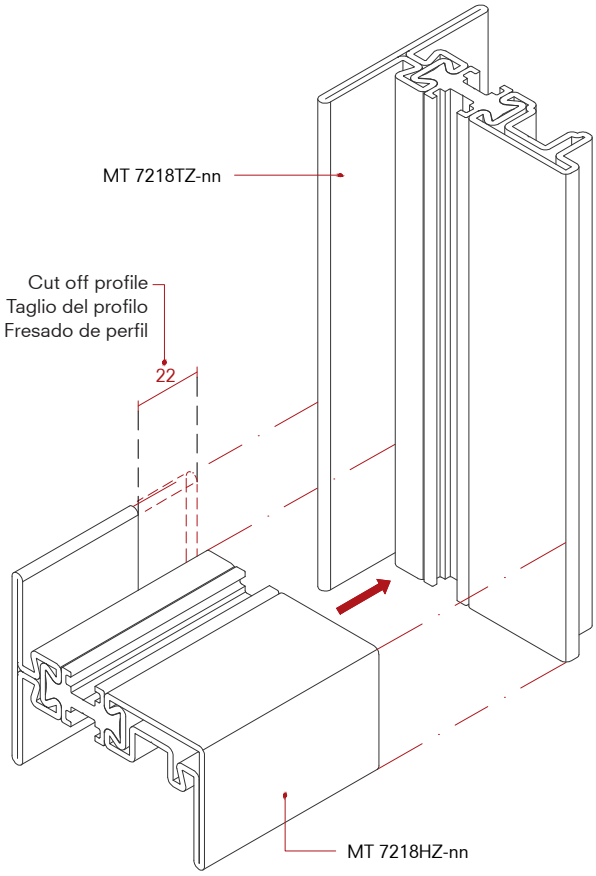
Porta a un battente apertura esterna

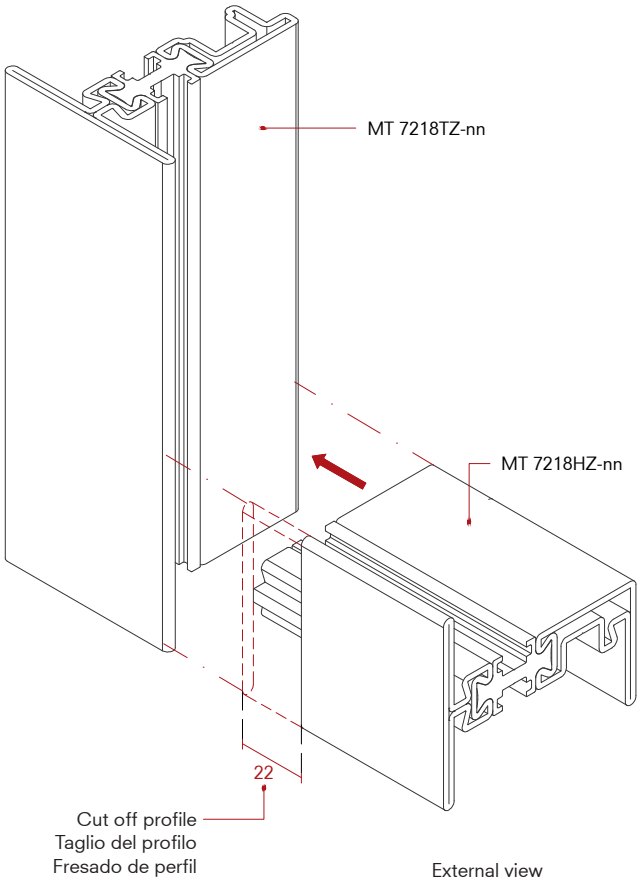
Puerta de una hoja apertura hacia fuera



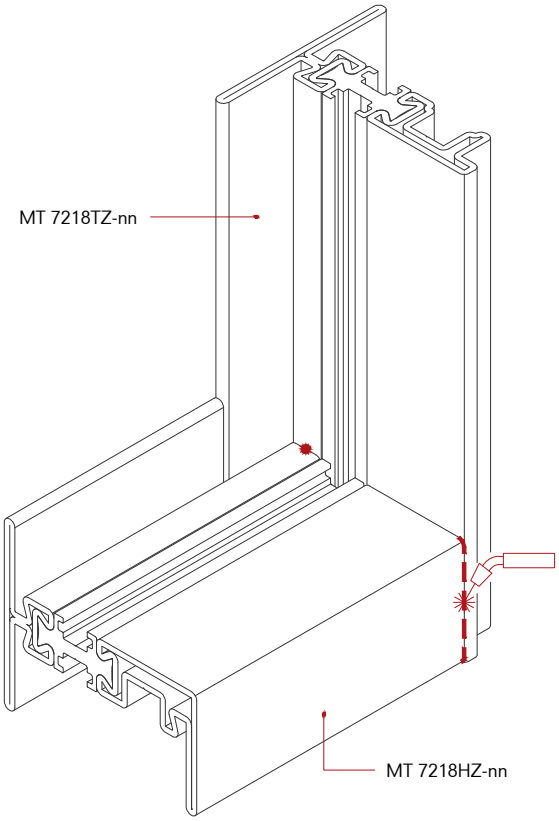
Internal view
Vista interna
Vista interna

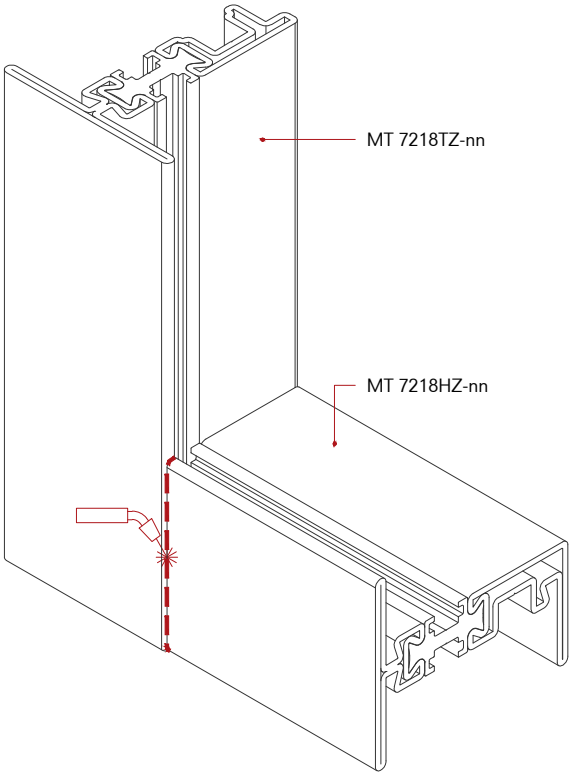






External view
Vista esterna
Vista externa





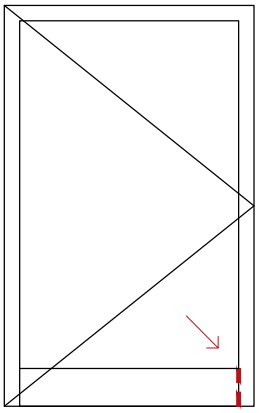
External view
Vista esterna
Vista externa

MT 7218ZR-nn / MT 7218HZ-nn

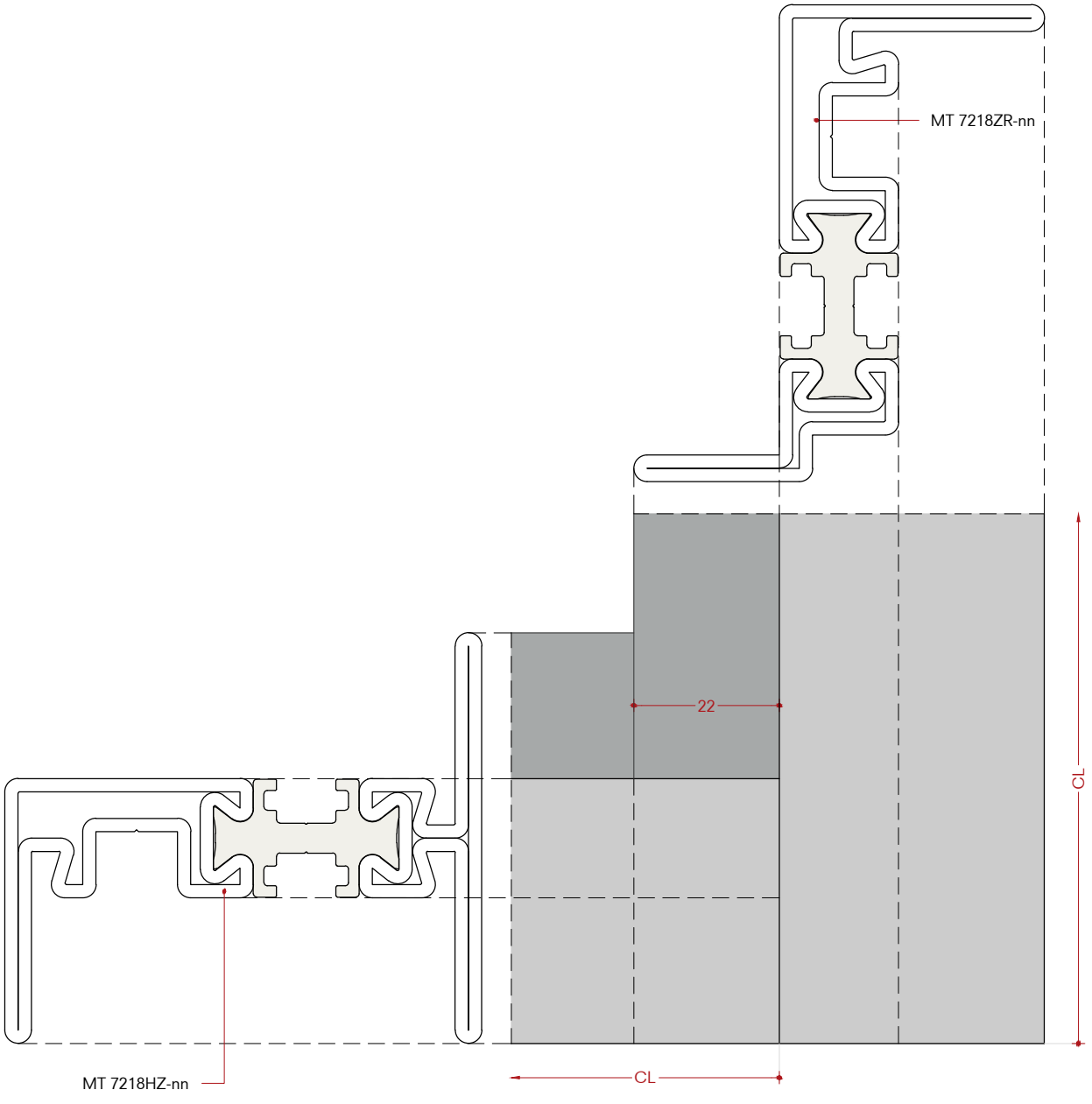
Single leaf door open in

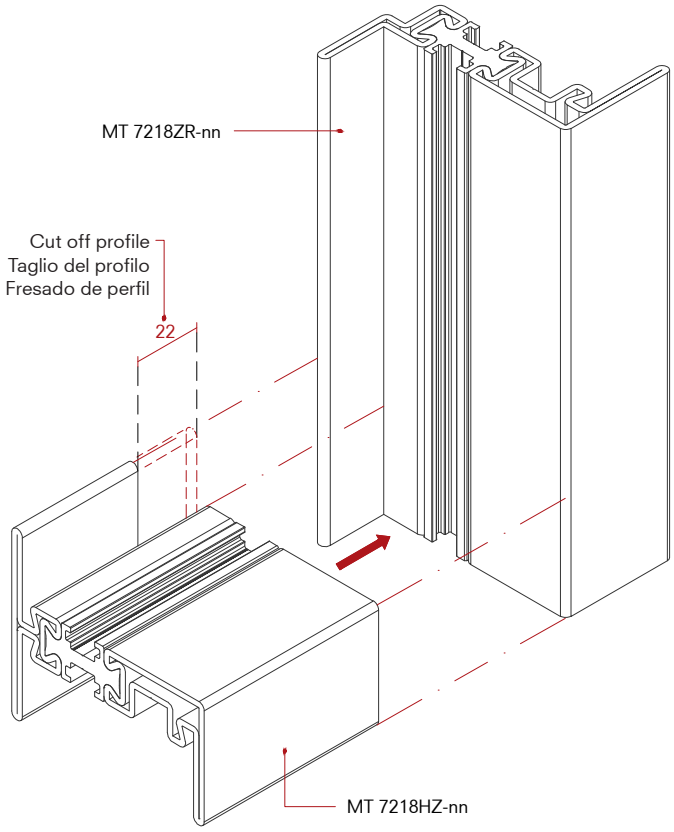
Porta a un battente apertura interna

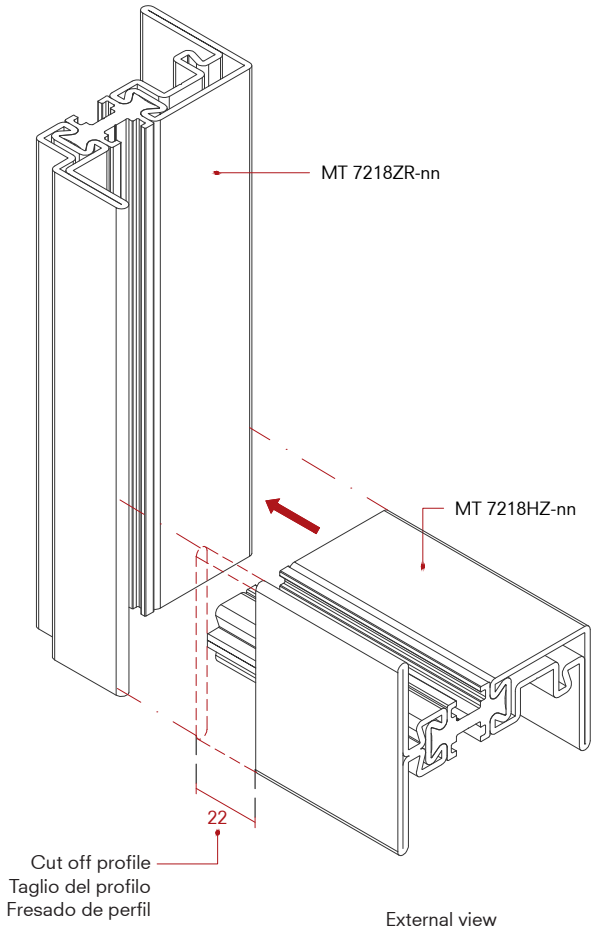
Puerta de una hoja apertura hacia dentro



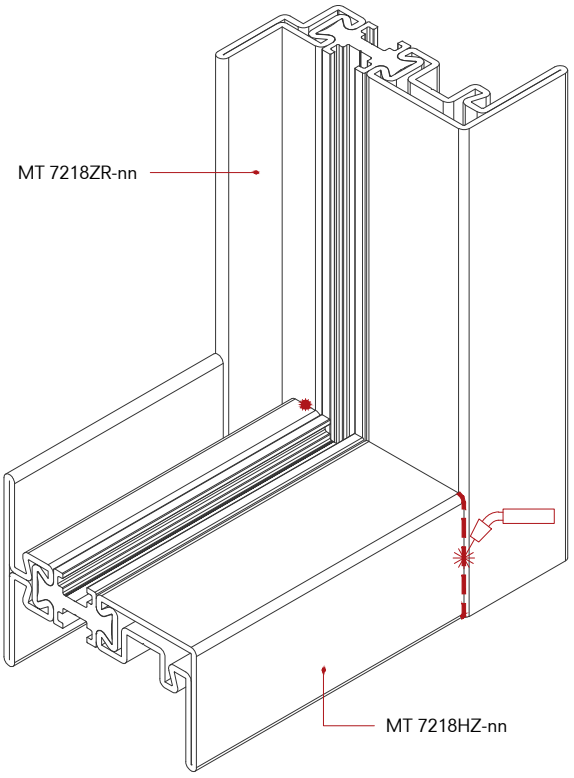
Internal view
Vista interna
Vista interna

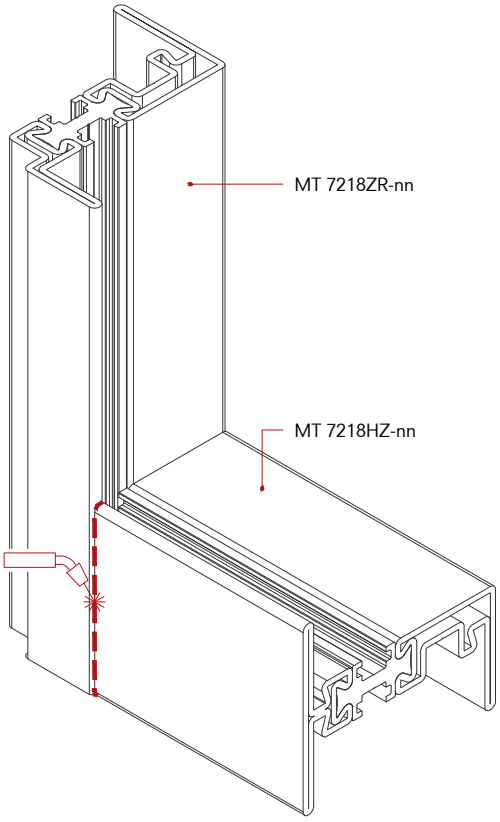






External view
Vista esterna
Vista externa





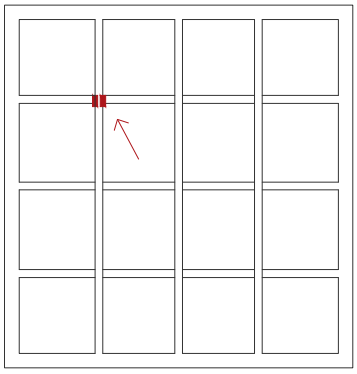
External view
Vista esterna
Vista externa

MT 6518T-nn

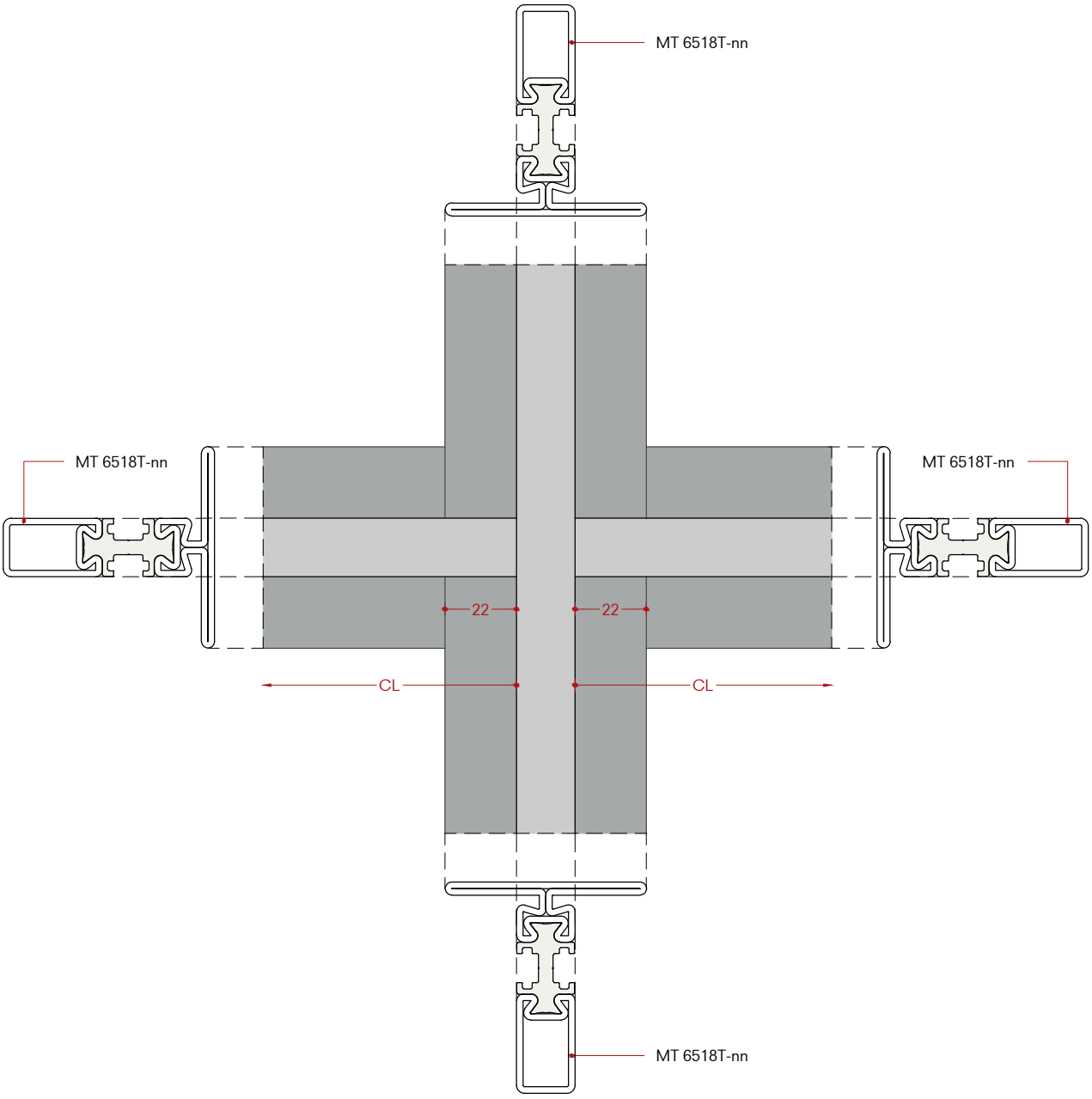
Fixed partitions

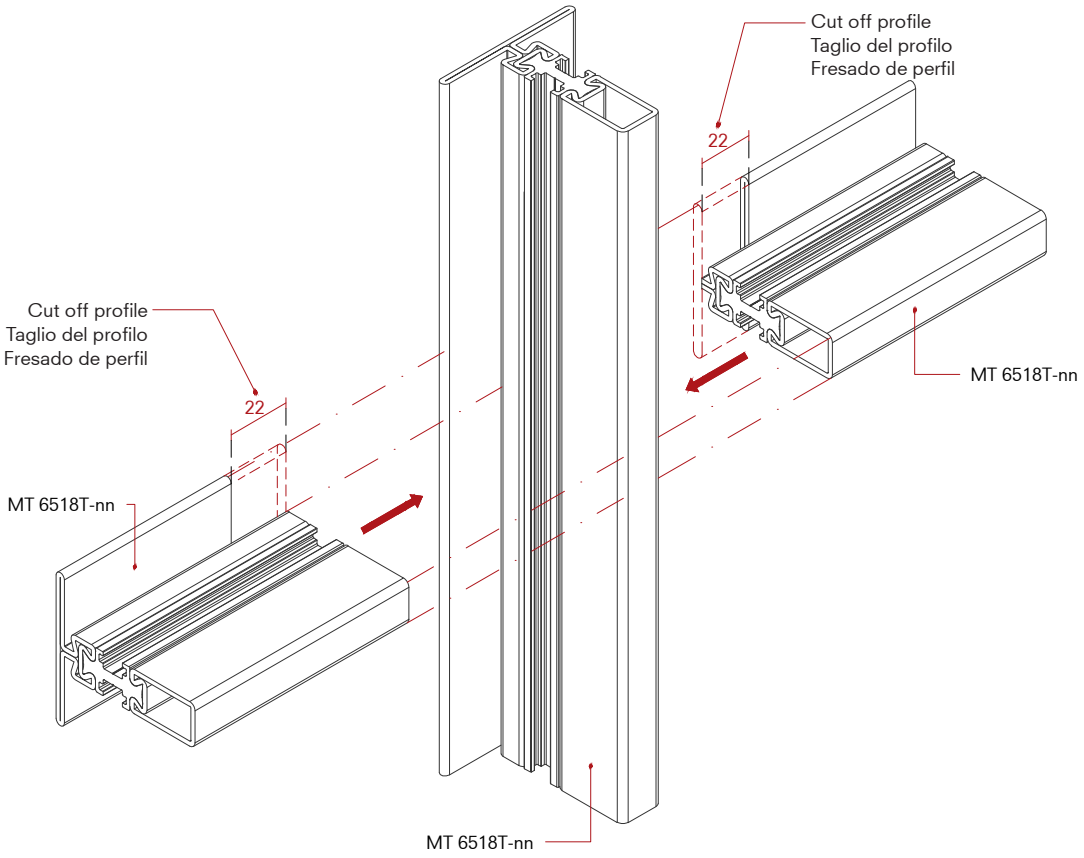
Partizione fissa

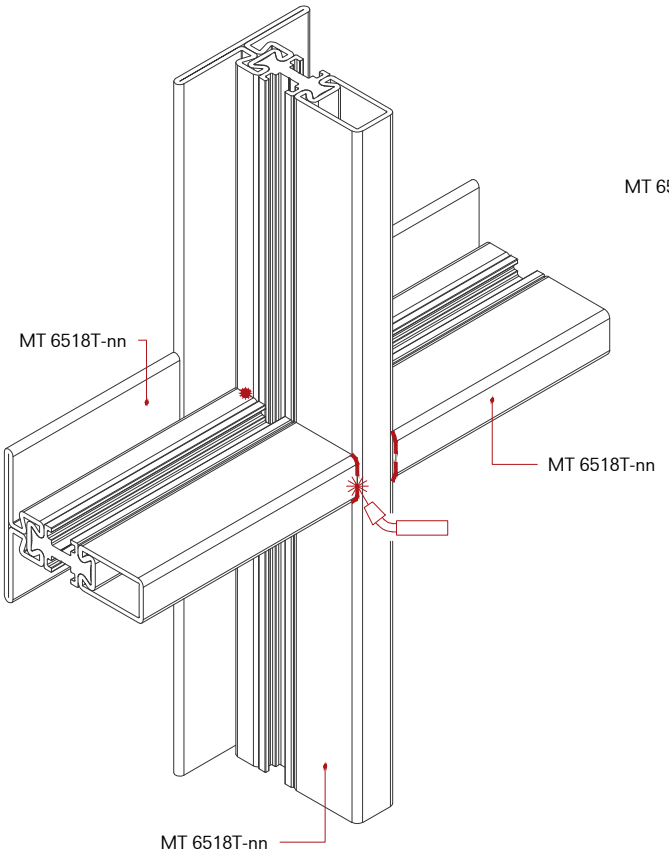
Particiones

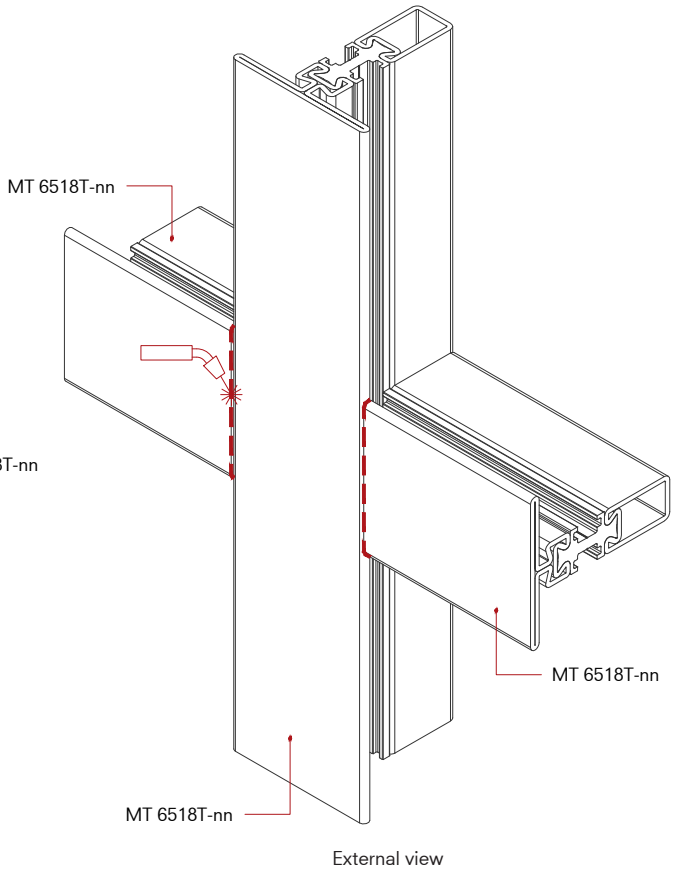


Internal view
Vista interna
Vista interna









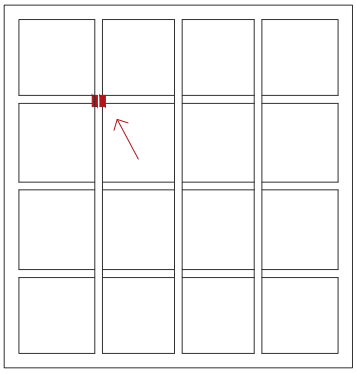
External view
Vista esterna
Vista externa

MT 6507TR-nn - MT 7207TR-nn

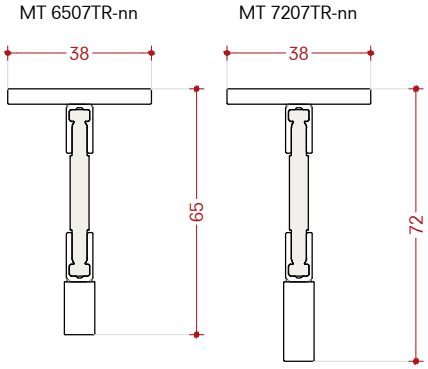
Fixed partitions

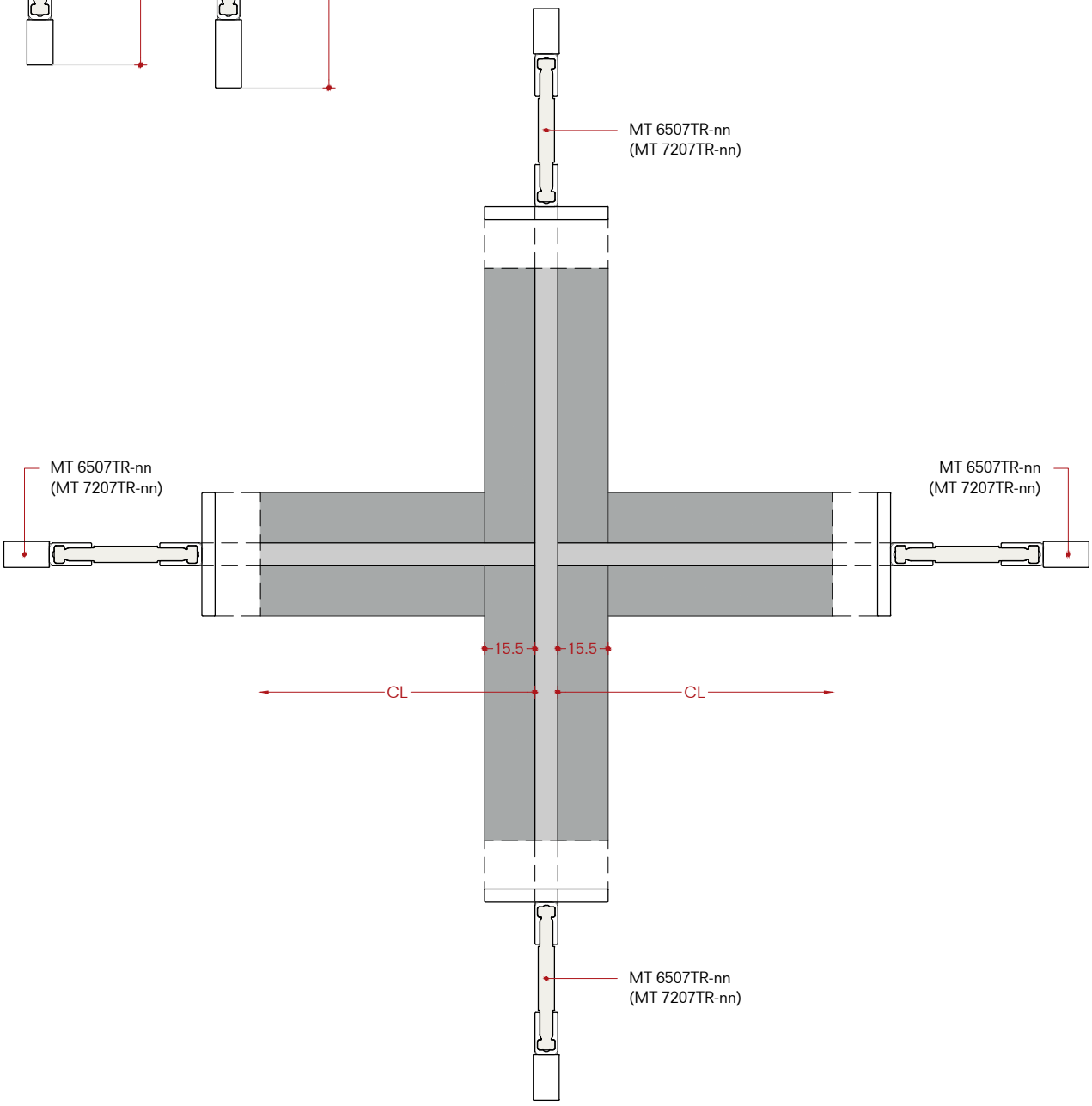
Partizione fissa

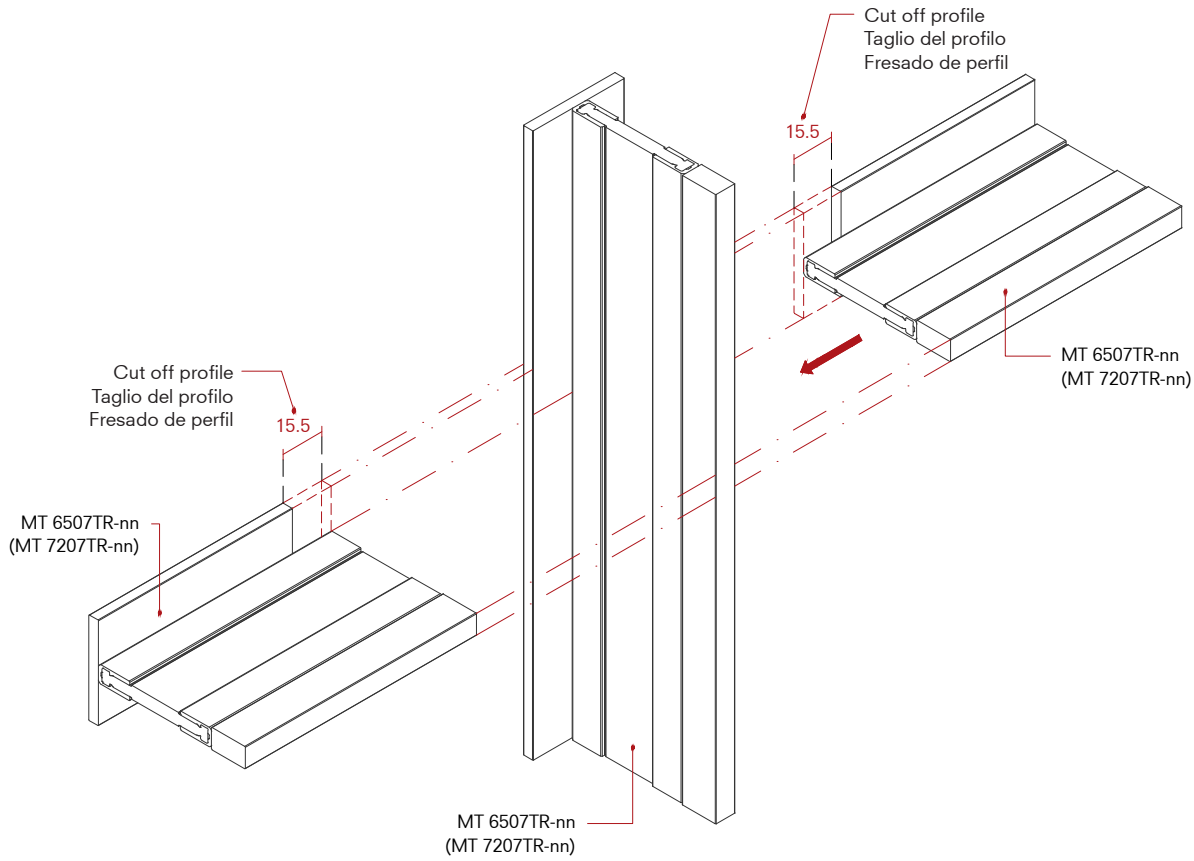
Particiones

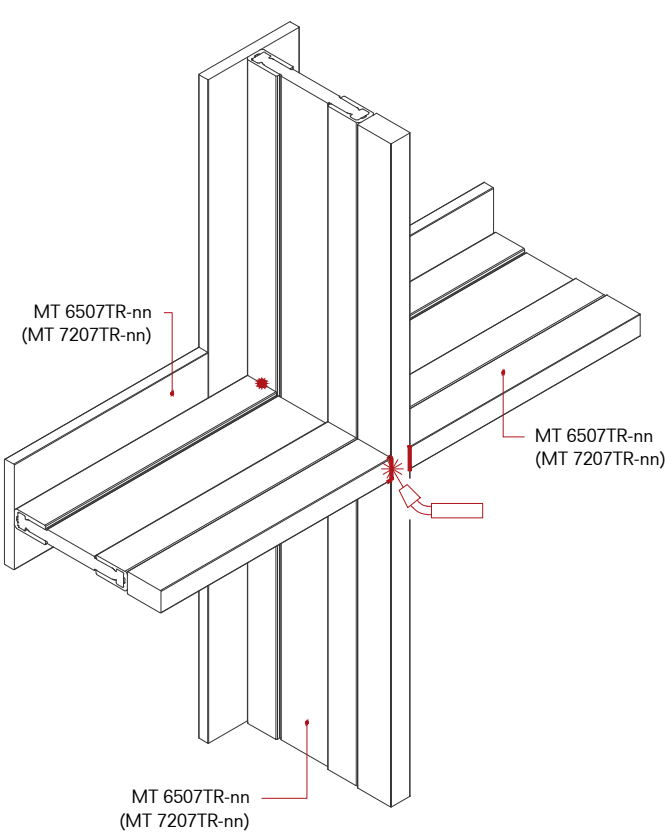


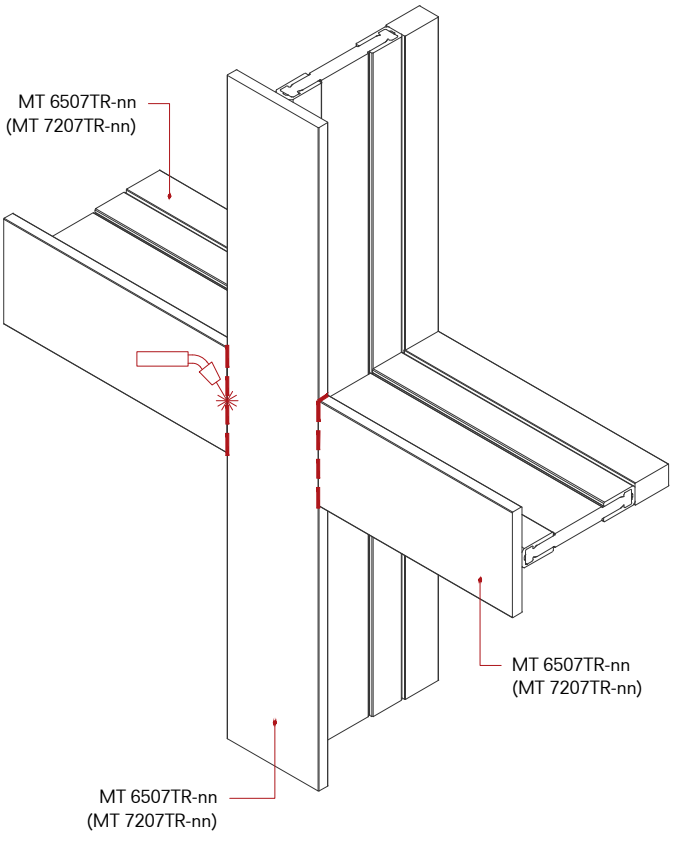
Internal view
Vista interna
Vista interna











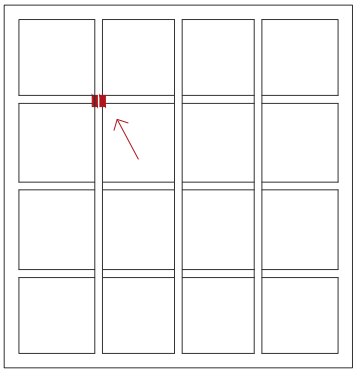
External view
Vista esterna
Vista externa

MT 6507TN-nn - MT 7207TN-nn

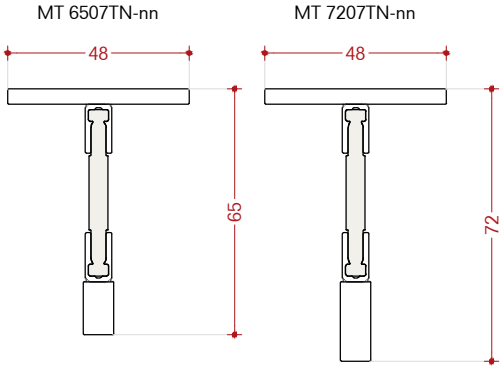
Fixed partitions

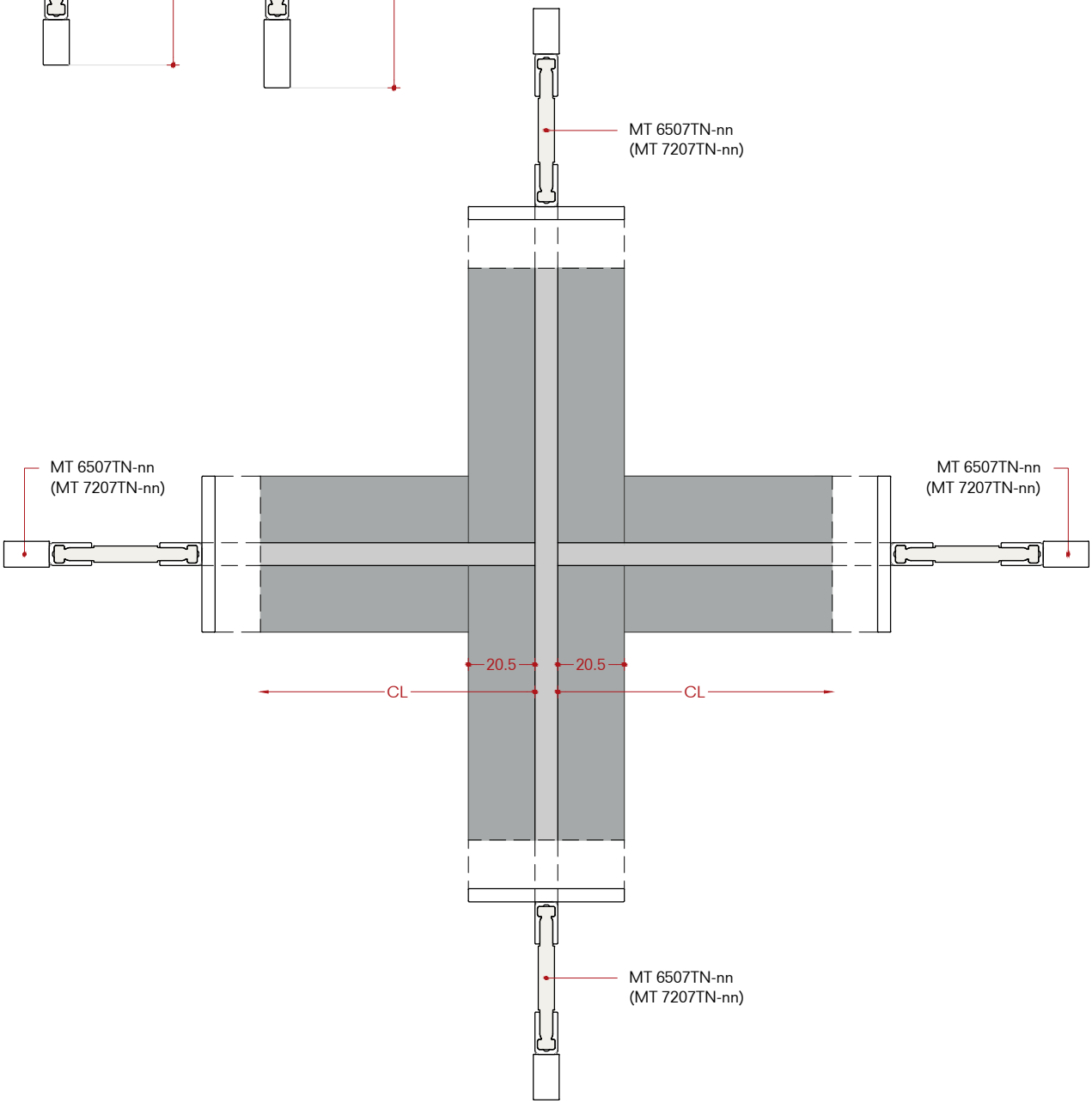
Partizione fissa

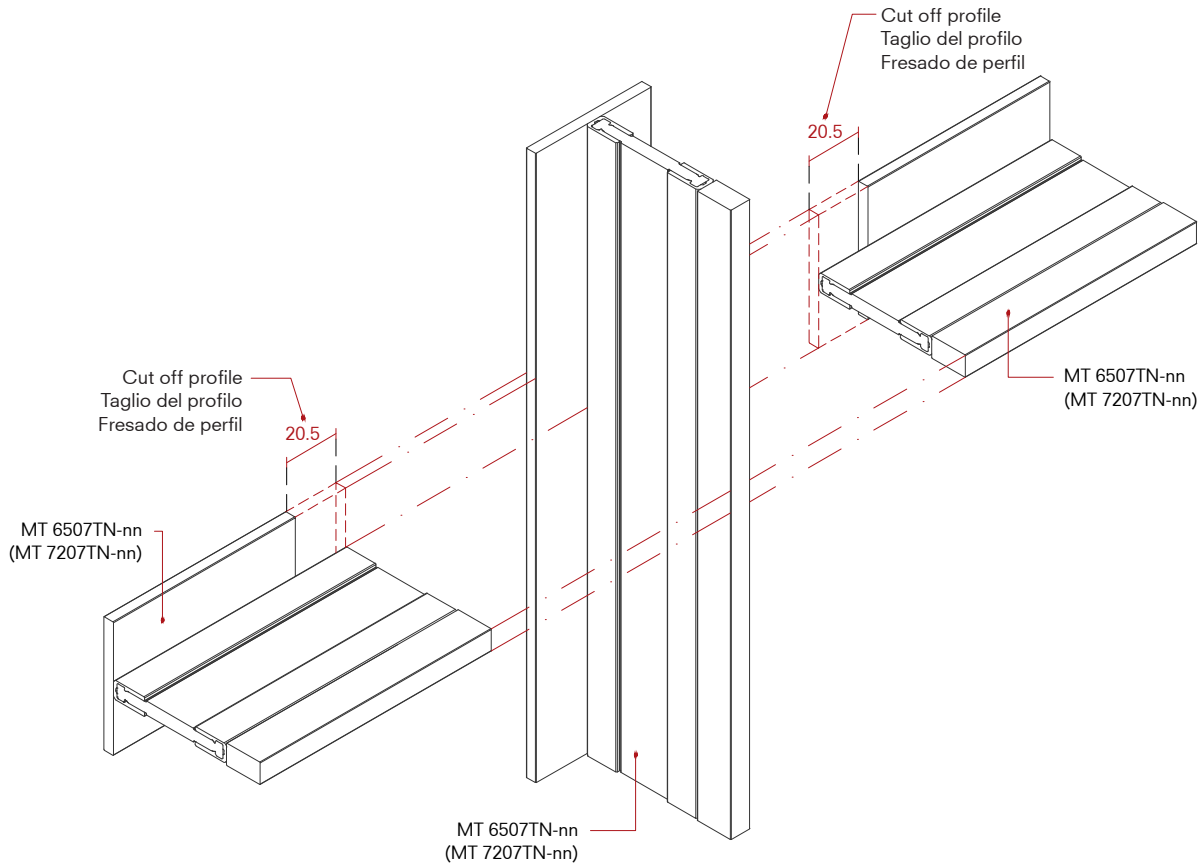
Particiones

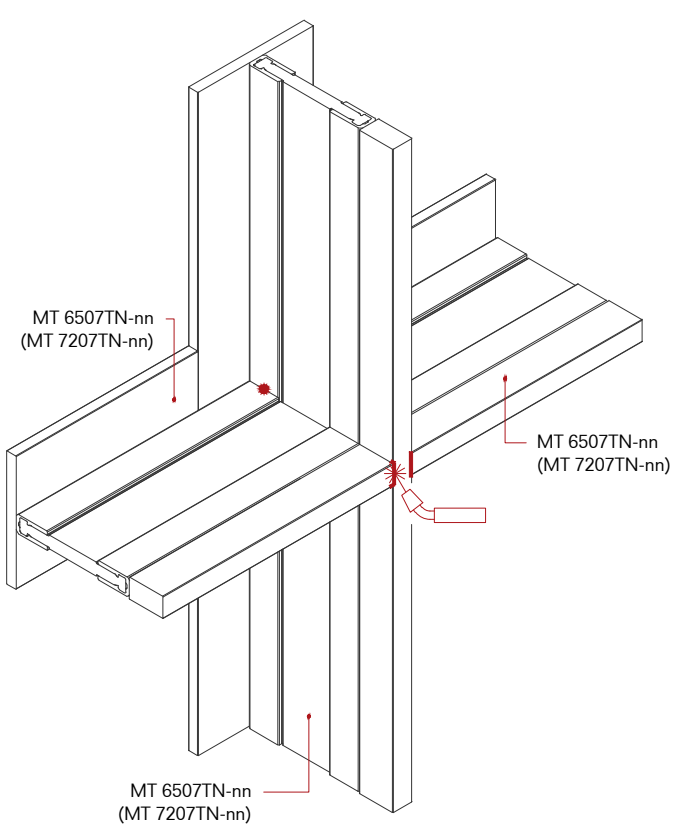


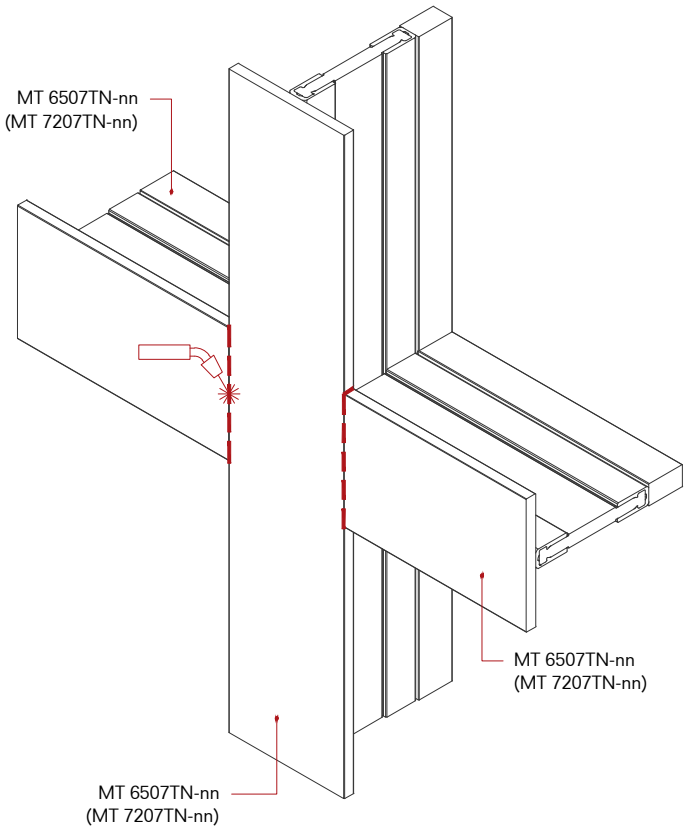
Internal view
Vista interna
Vista interna











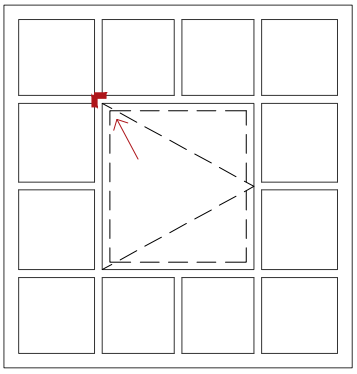
External view
Vista esterna
Vista externa

MT 6518T-nn / MT 6518Z-nn

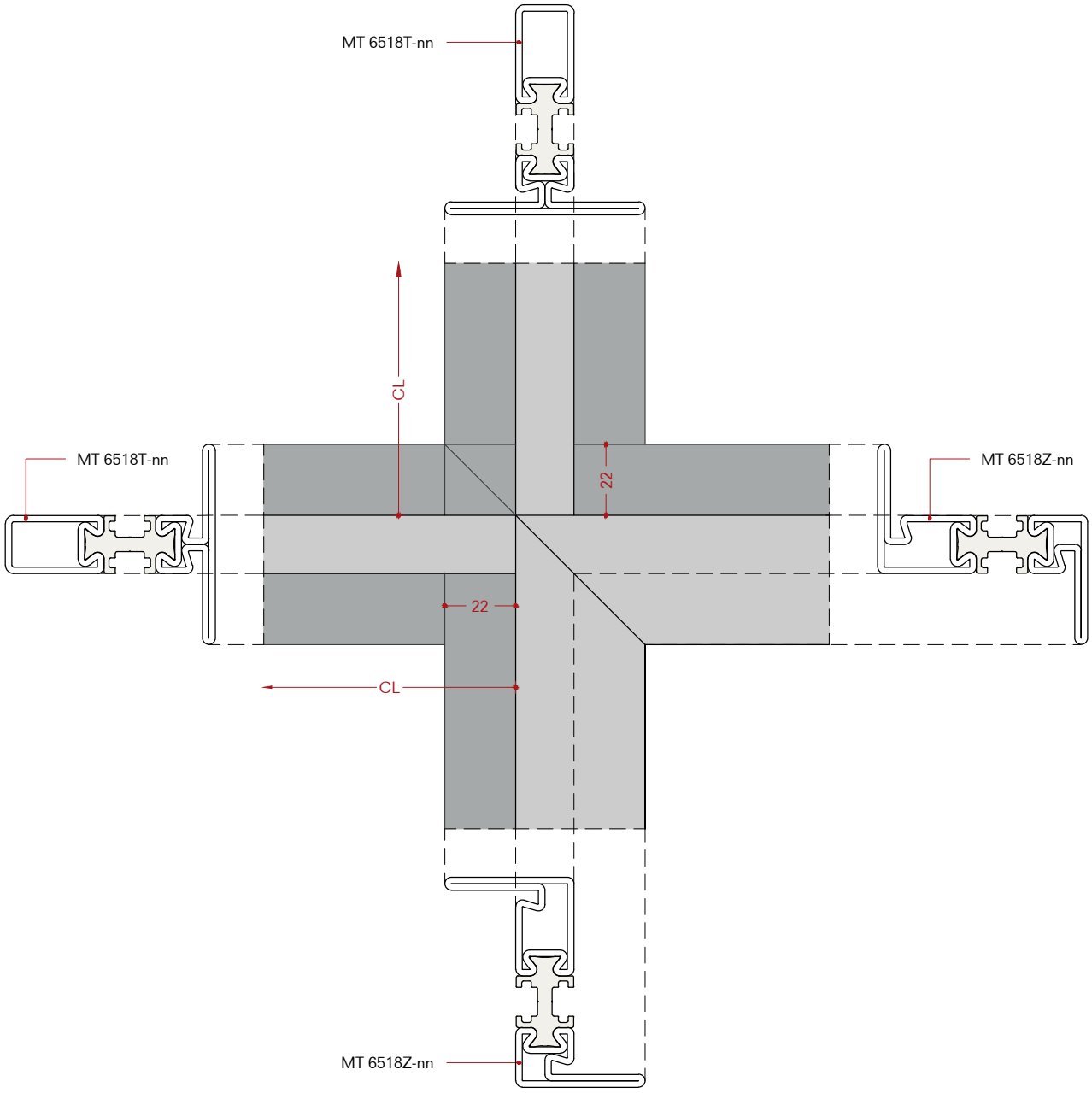
Window open out fixed partitions

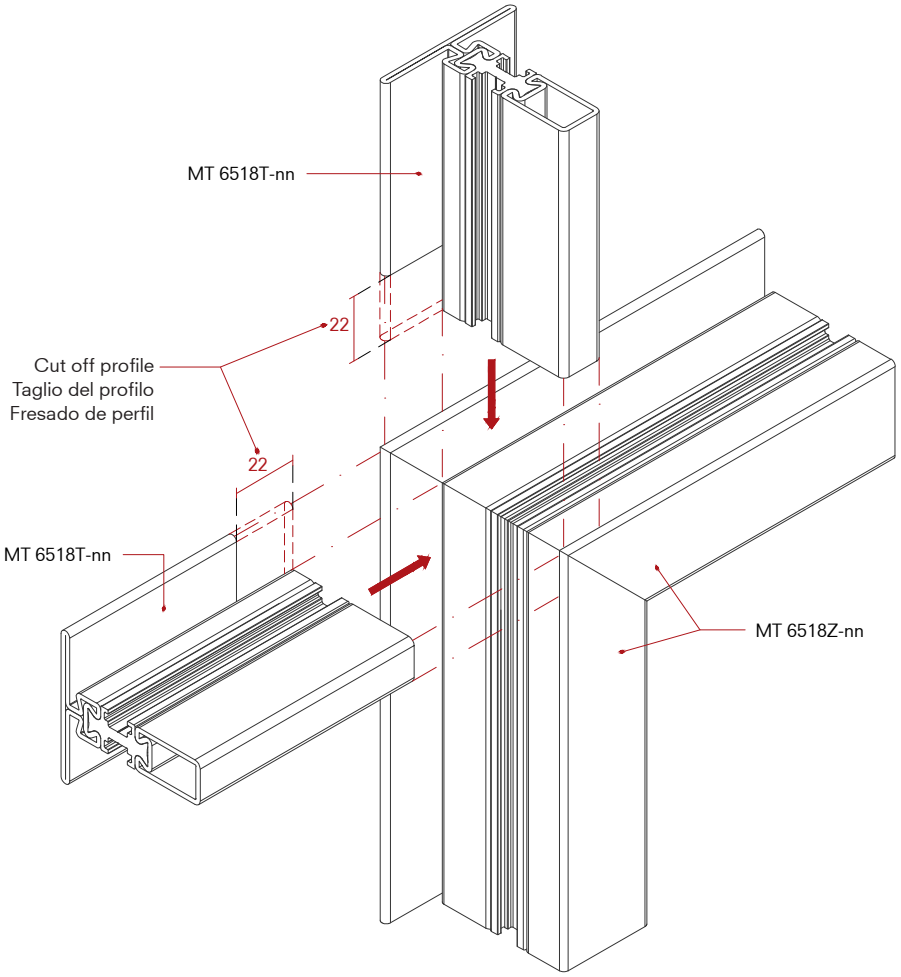
Finestra apertura esterna su partizione fissa

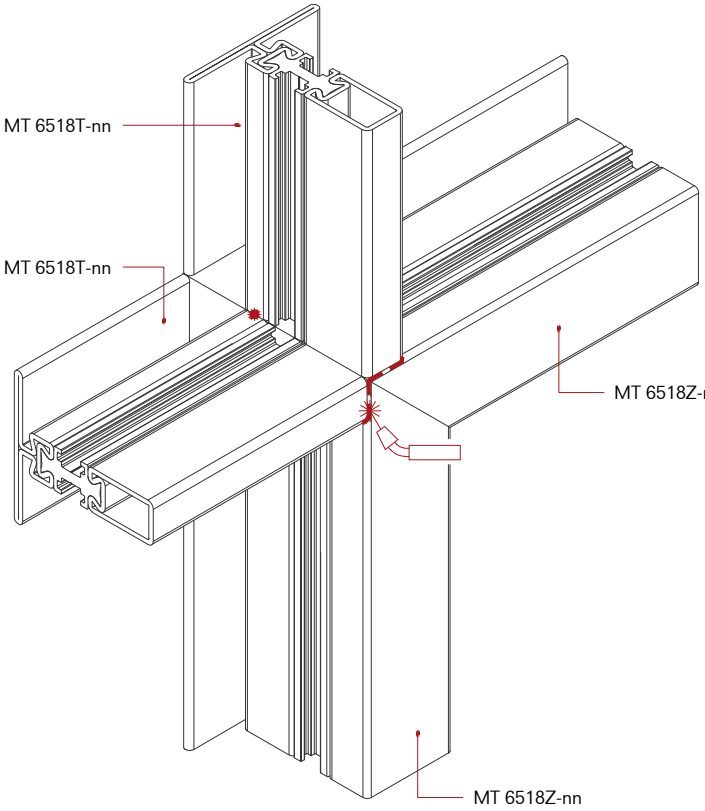
Ventana su particiones apertura hacia fuera

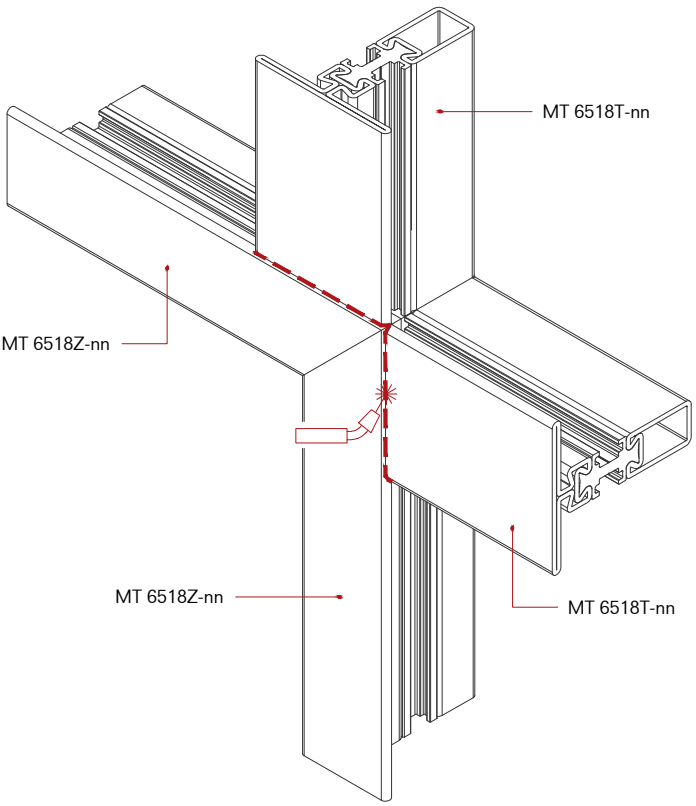


Internal view
Vista interna
Vista interna









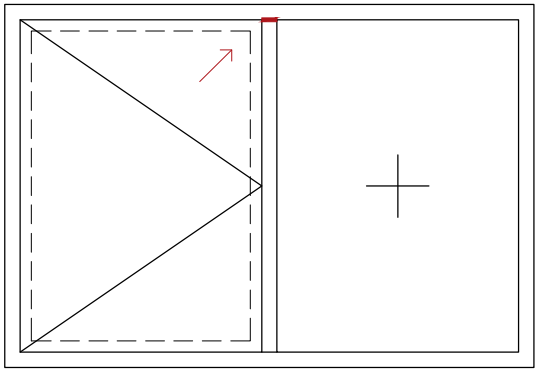
External view
Vista esterna
Vista externa

MT 6518L-nn / MT 6518T-nn

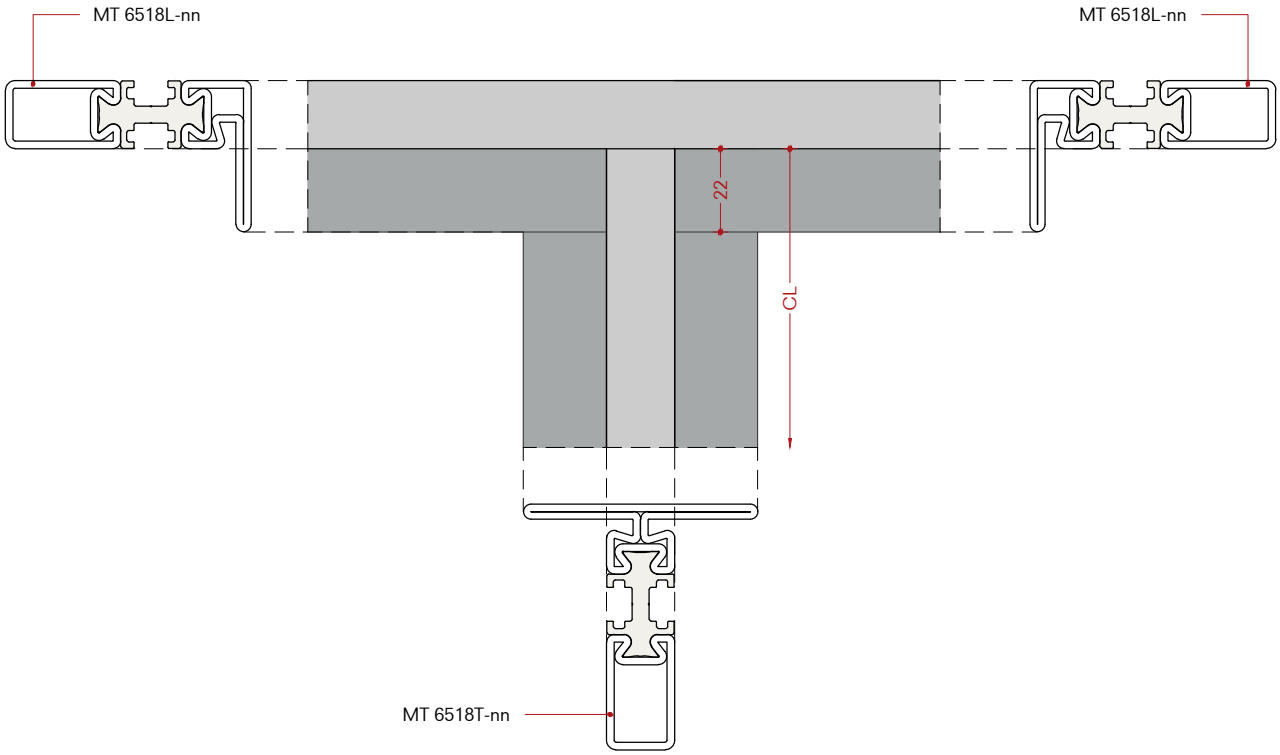
Window open in fixed partitions

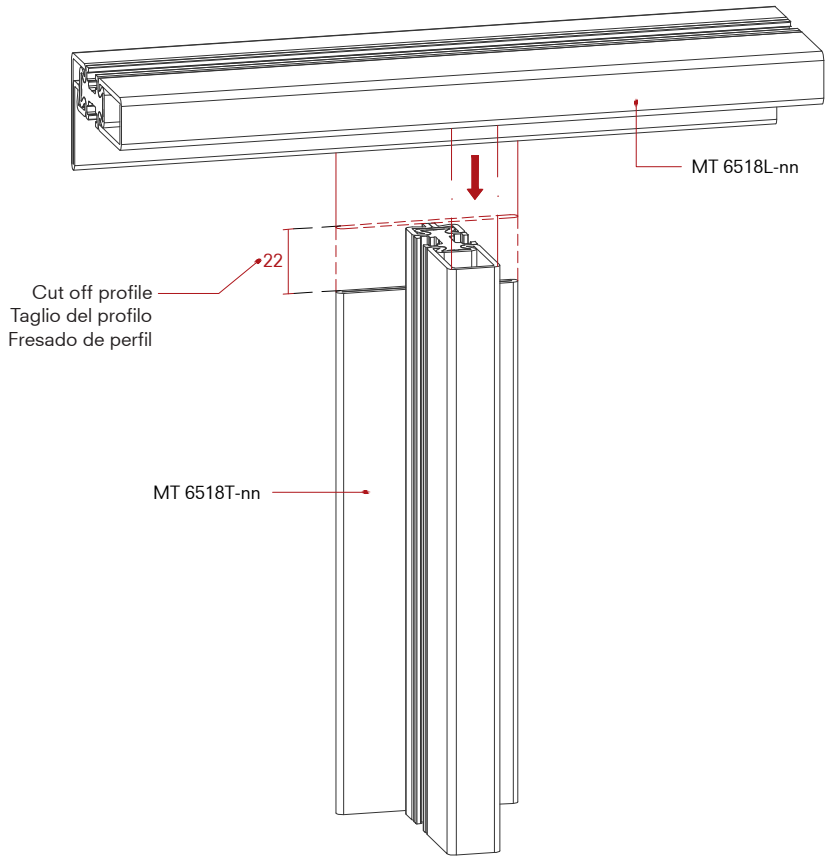
Finestra su partizioni fisse apertura interna

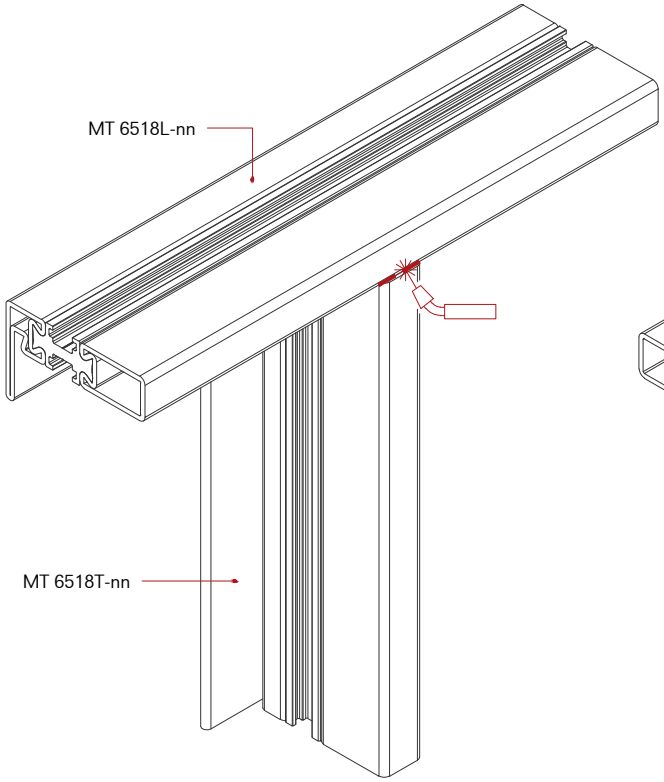
Ventana su particiones apertura hacia dentro

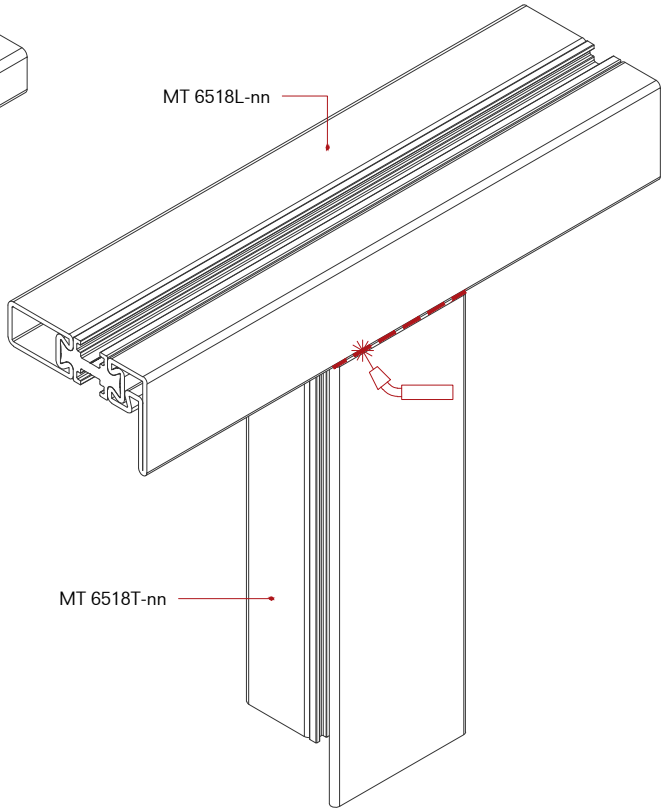


Internal view
Vista interna
Vista interna









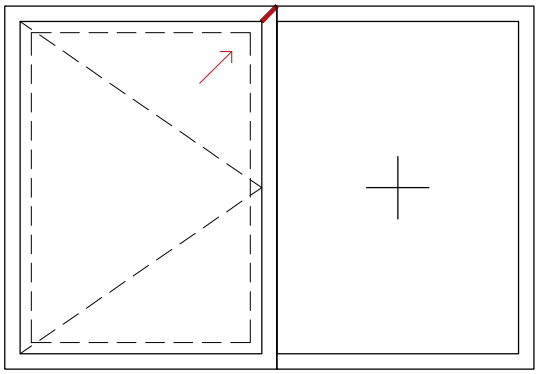
External view
Vista esterna
Vista externa

MT 6518L-nn / MT 6518Z-nn

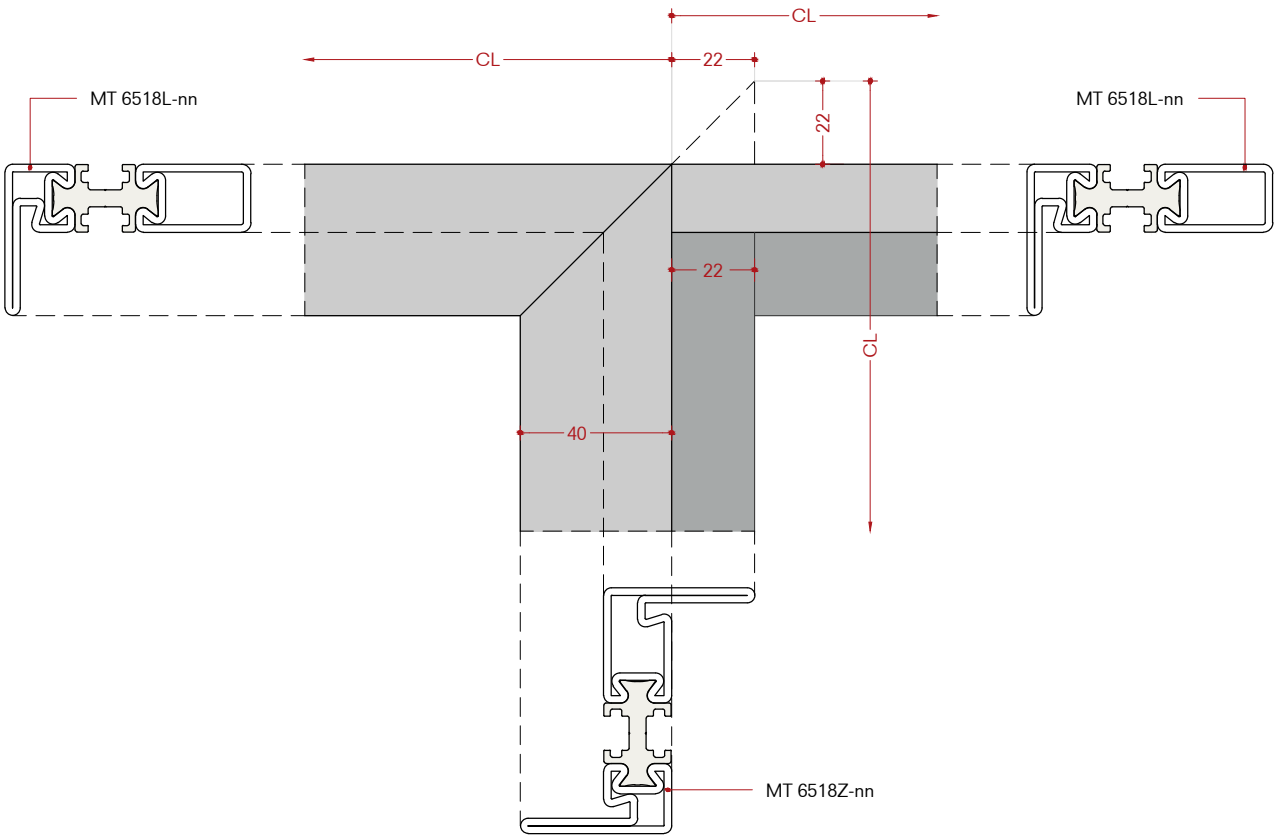
Window open out fixed partitions

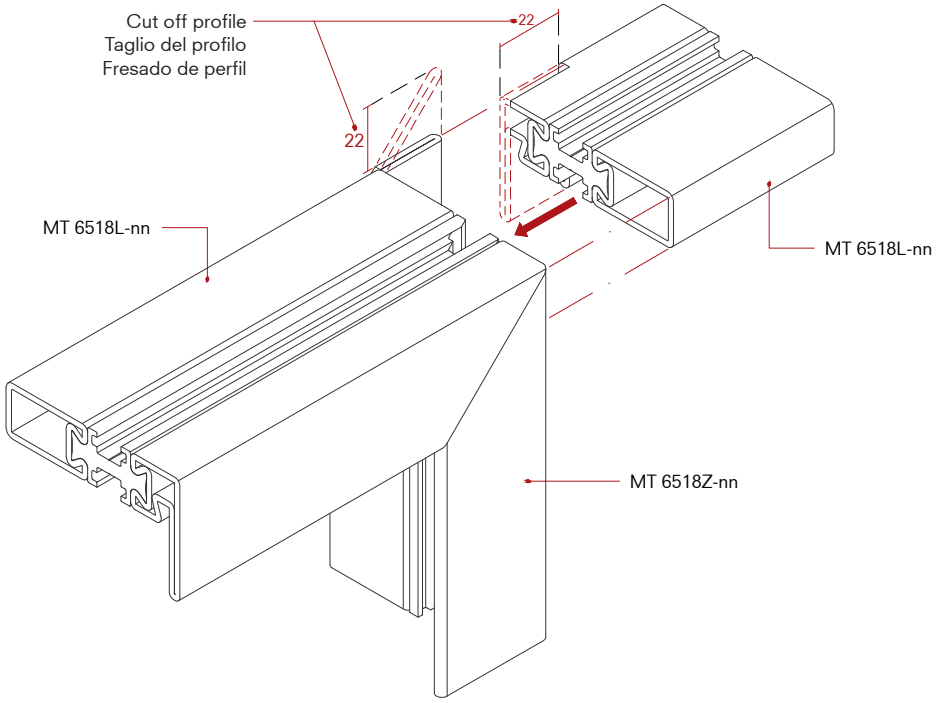
Finestra su partizioni fisse apertura esterna

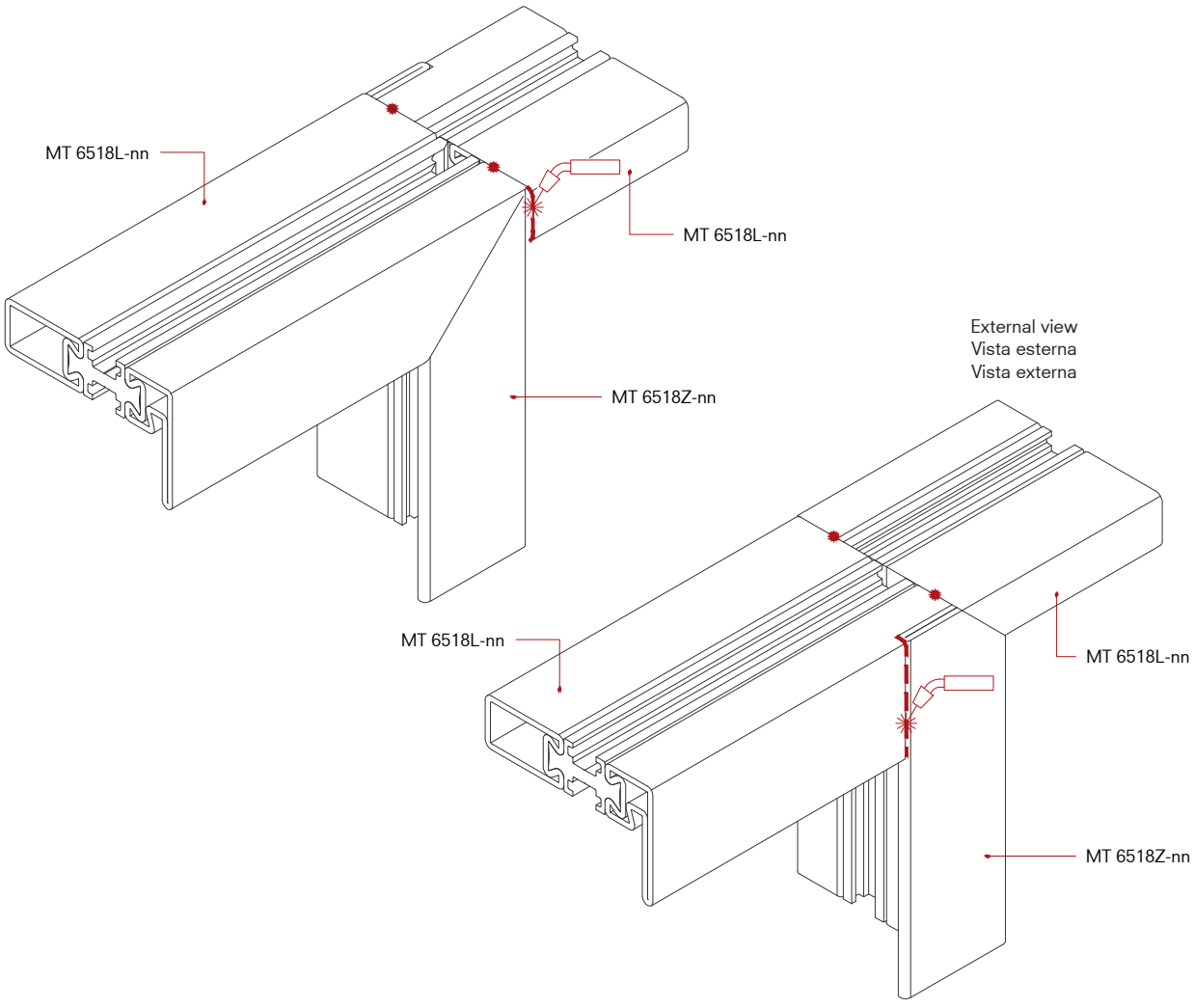
Ventana su particiones apertura hacia fuera



Internal view
Vista interna
Vista interna




Cut off profile
Taglio del profilo
Fresado de perfil
22
22
MT 6518L-nn
MT 6518L-nn
MT 6518Z-nn

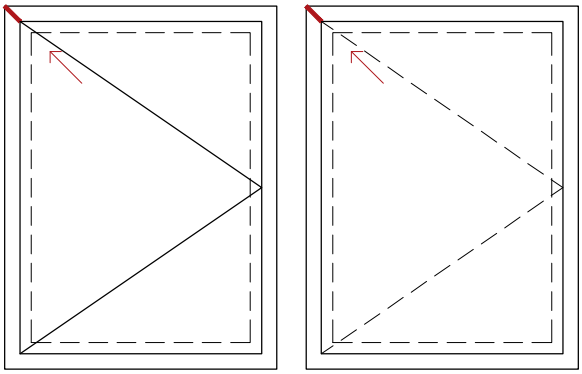

MT 6518L-nn
MT 6518L-nn
MT 6518Z-nn
External view
Vista esterna
Vista externa
MT 6518L-nn
MT 6518L-nn
MT 6518Z-nn

MT 6518L-nn / MT 6518T-nn

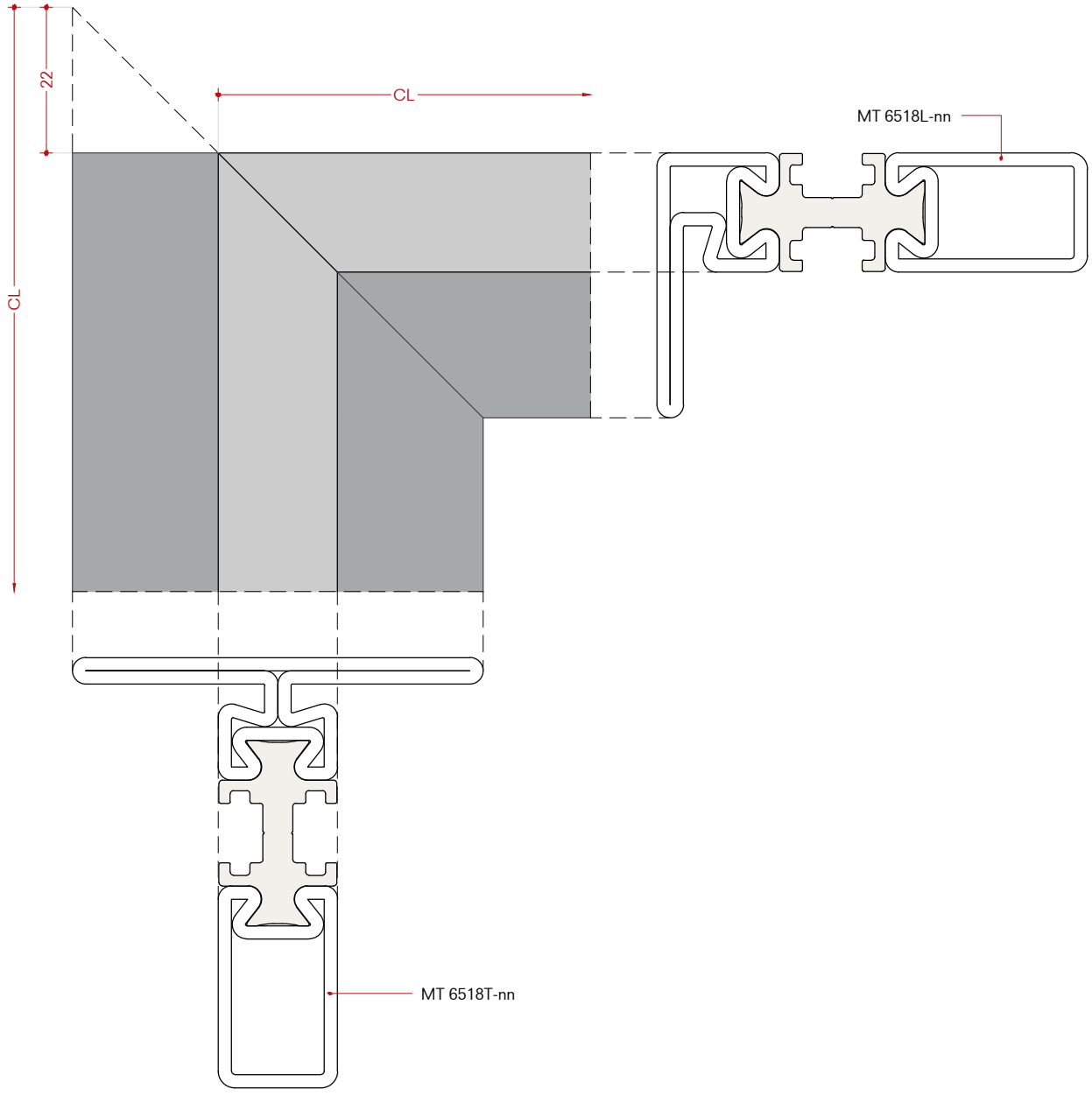
Window open in or open out

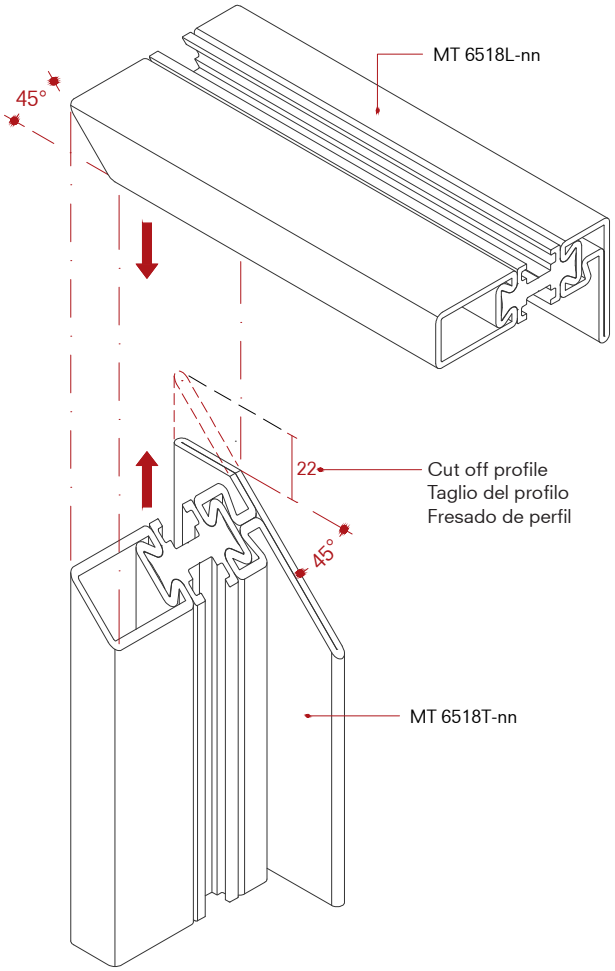
Finestra apertura interna o esterna

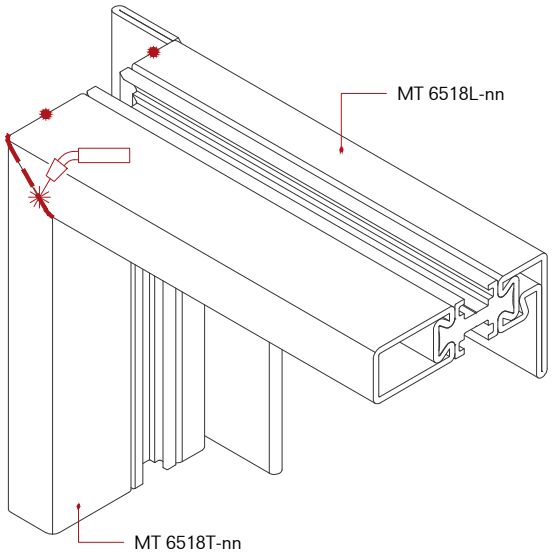
Ventana apertura hacia dentro o fuera

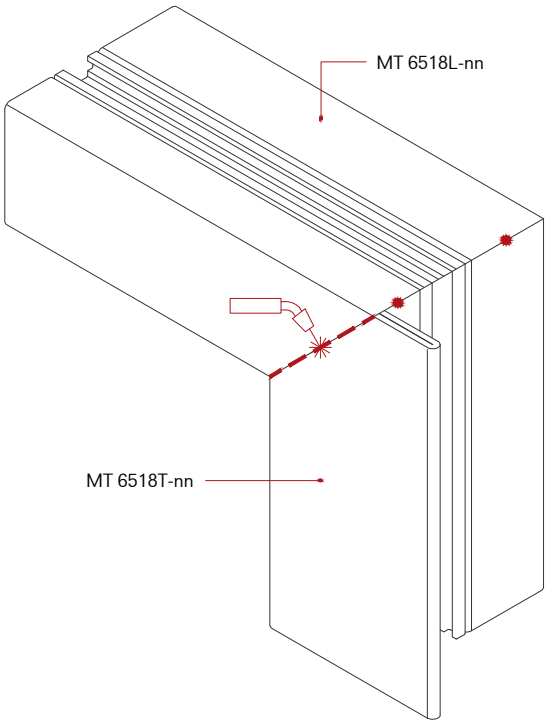


Internal view
Vista interna
Vista interna









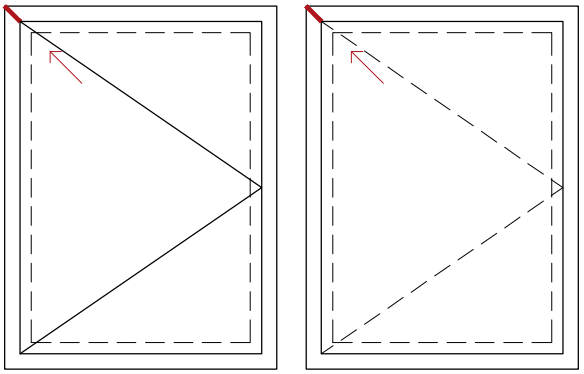
External view
Vista esterna
Vista externa

MT 6518L-nn / MT 6518Z-nn

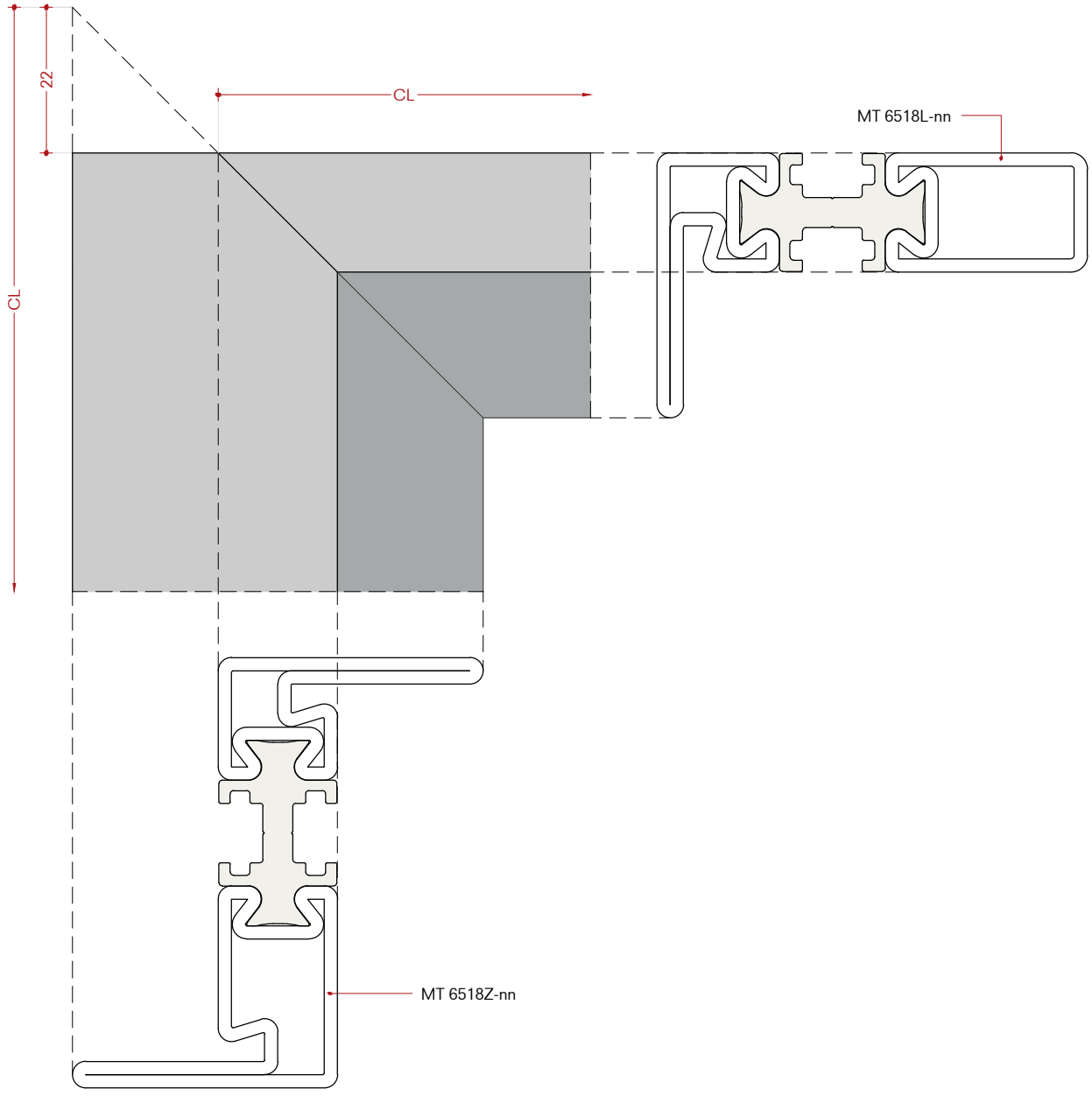
Window open in or open out

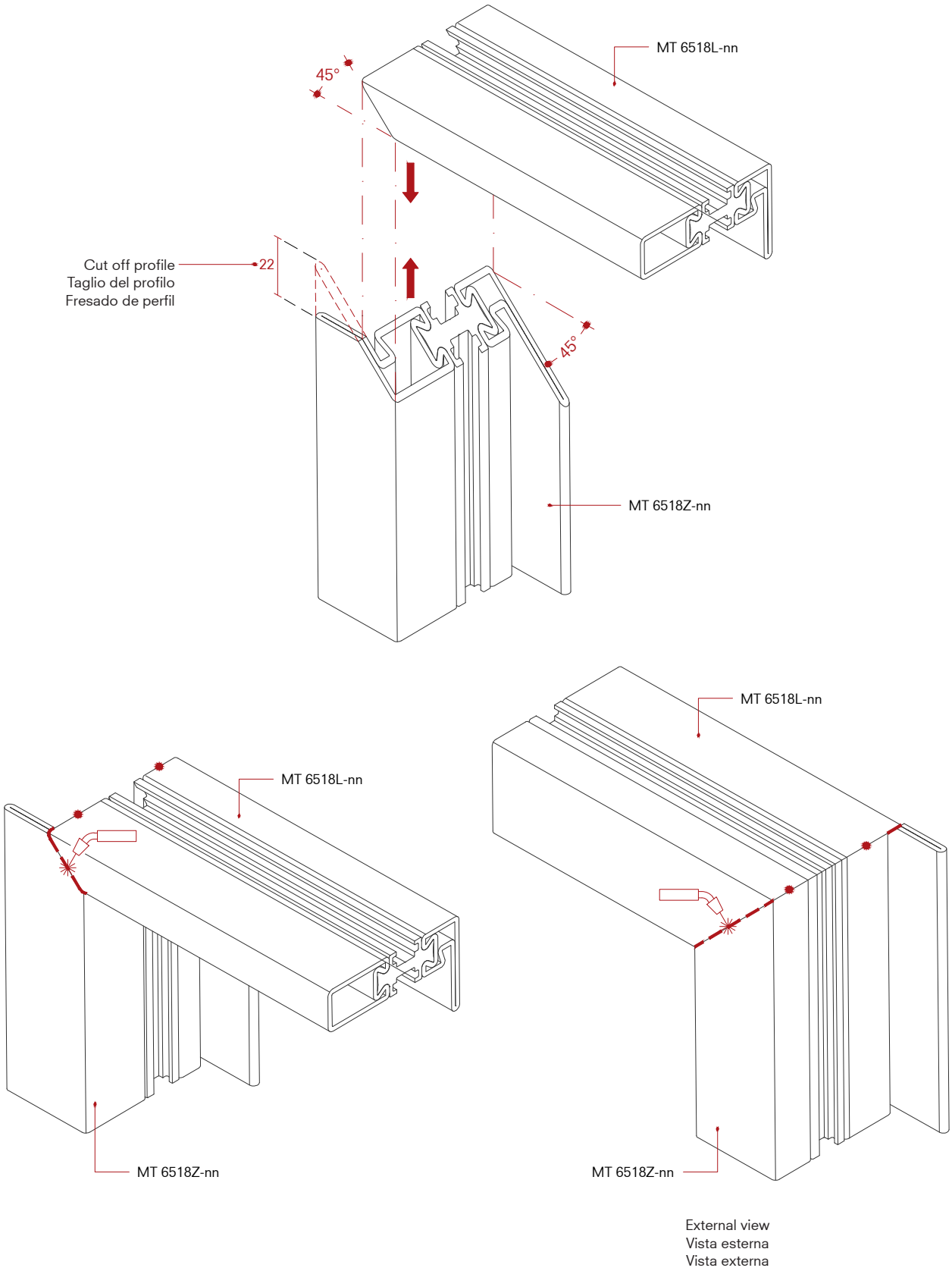
Finestra apertura interna o esterna

Ventana apertura hacia dentro o fuera



Internal view
Vista interna
Vista interna



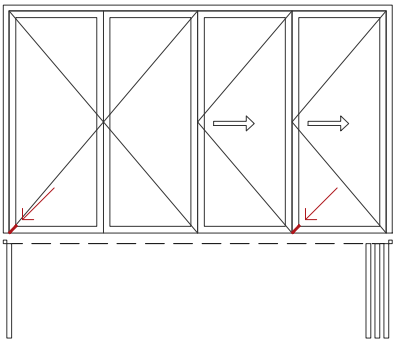

MT 6518L-nn
45°
Cut off profile
Taglio del profilo
Fresado de perfil
22
45°
MT 6518Z-nn
MT 6518L-nn
MT 6518L-nn
MT 6518Z-nn
MT 6518Z-nn
External view
Vista esterna
Vista externa

MT 7218ZR-nn / MT 7218LR-nn

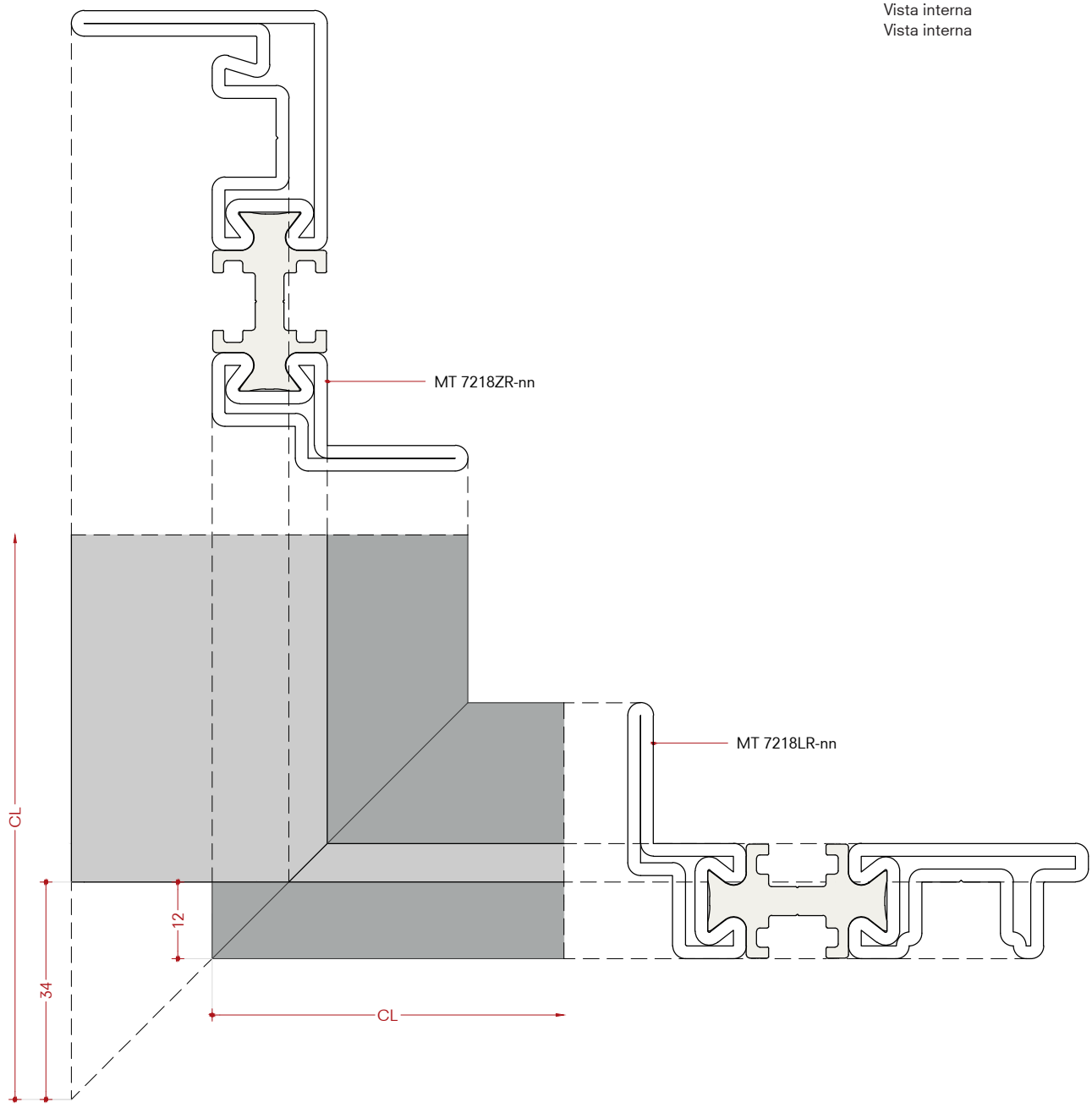
Bi-folding door system

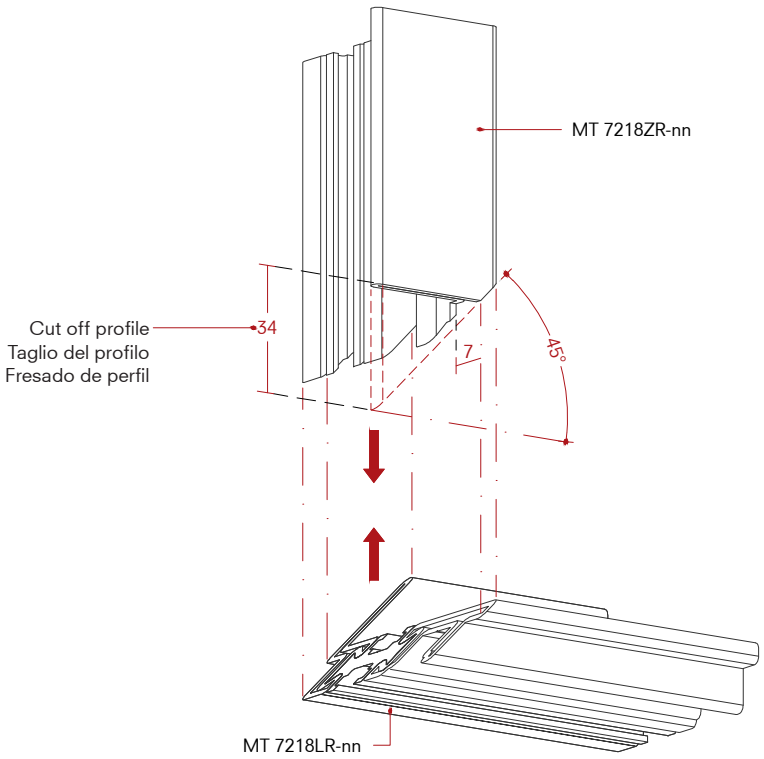
Sistema di porte a libro

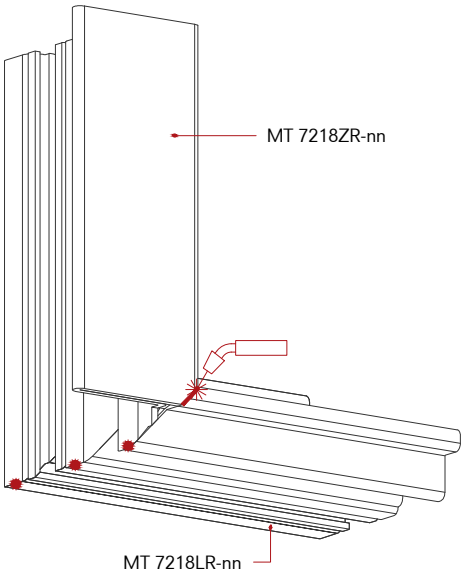
Sistema de puerta plegable

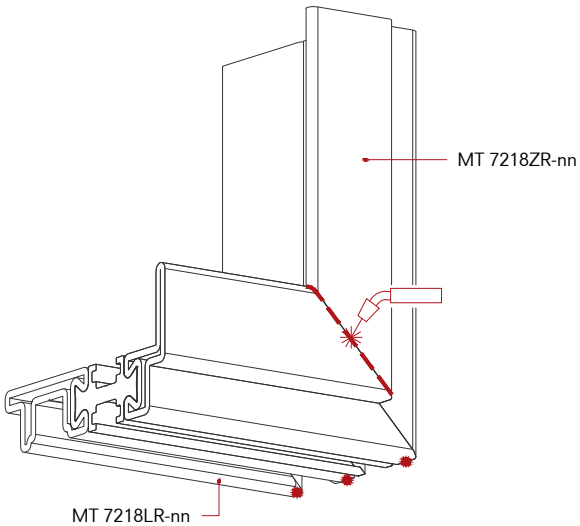


Internal view
Vista interna
Vista interna









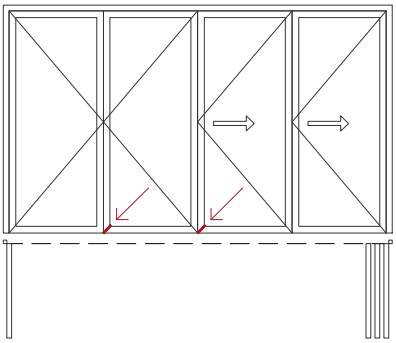
External view
Vista esterna
Vista externa

MT 7218TZ-nn / MT 7218LR-nn

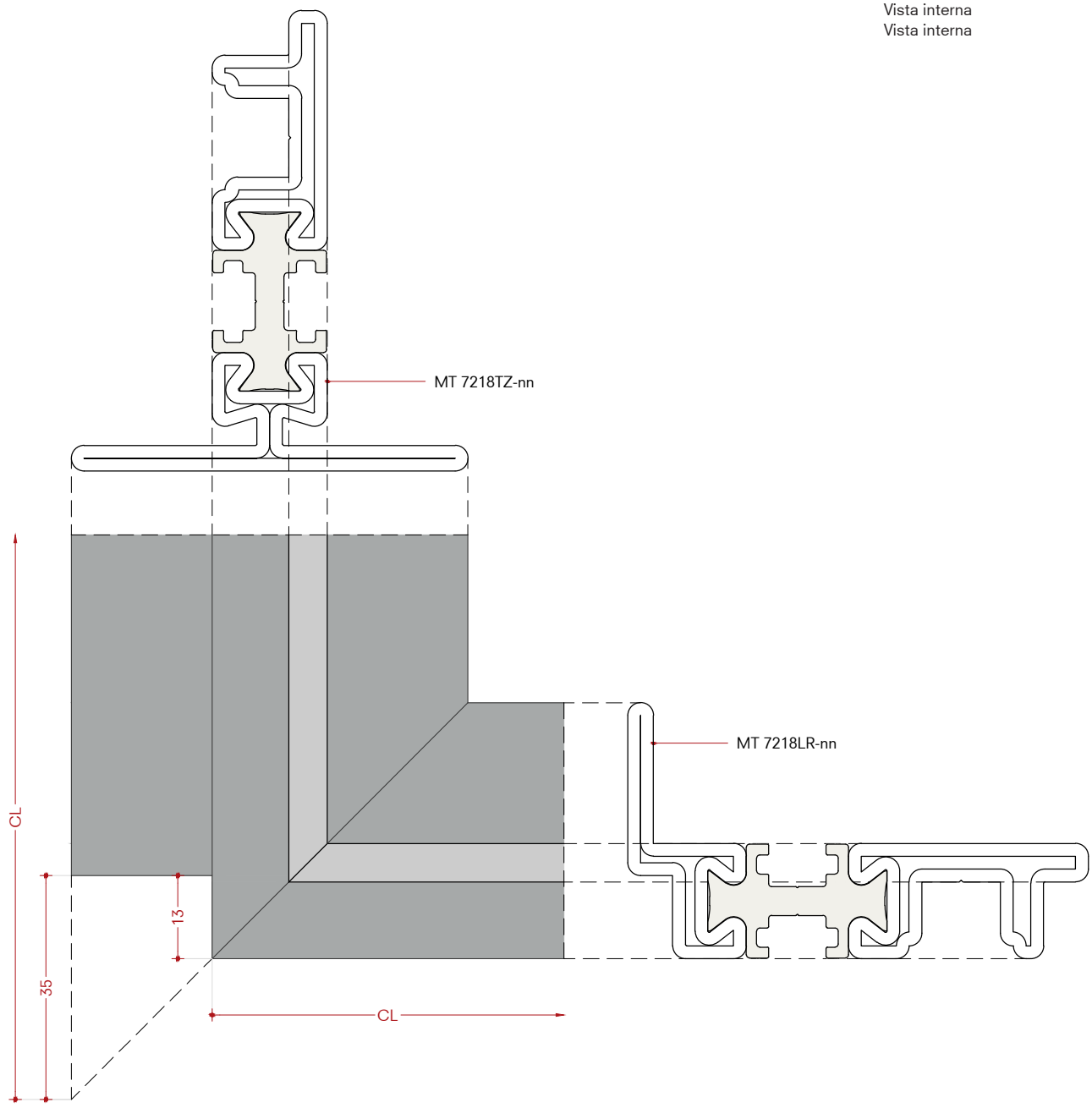
Bi-folding door system

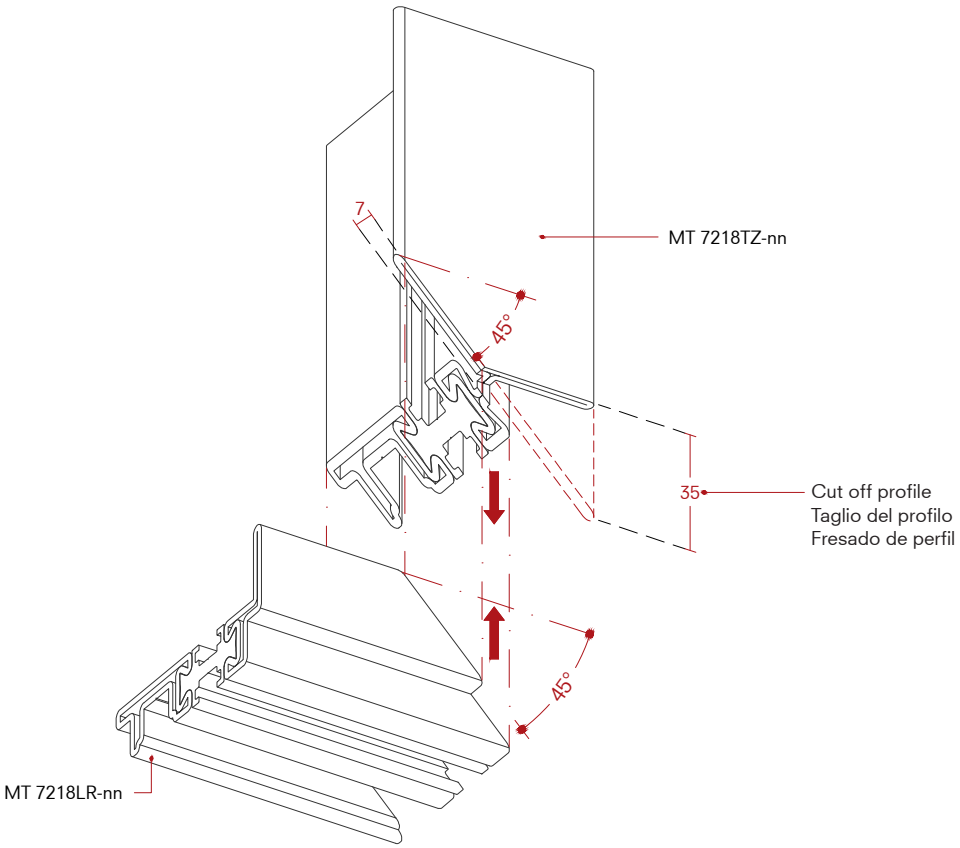
Sistema di porte a libro

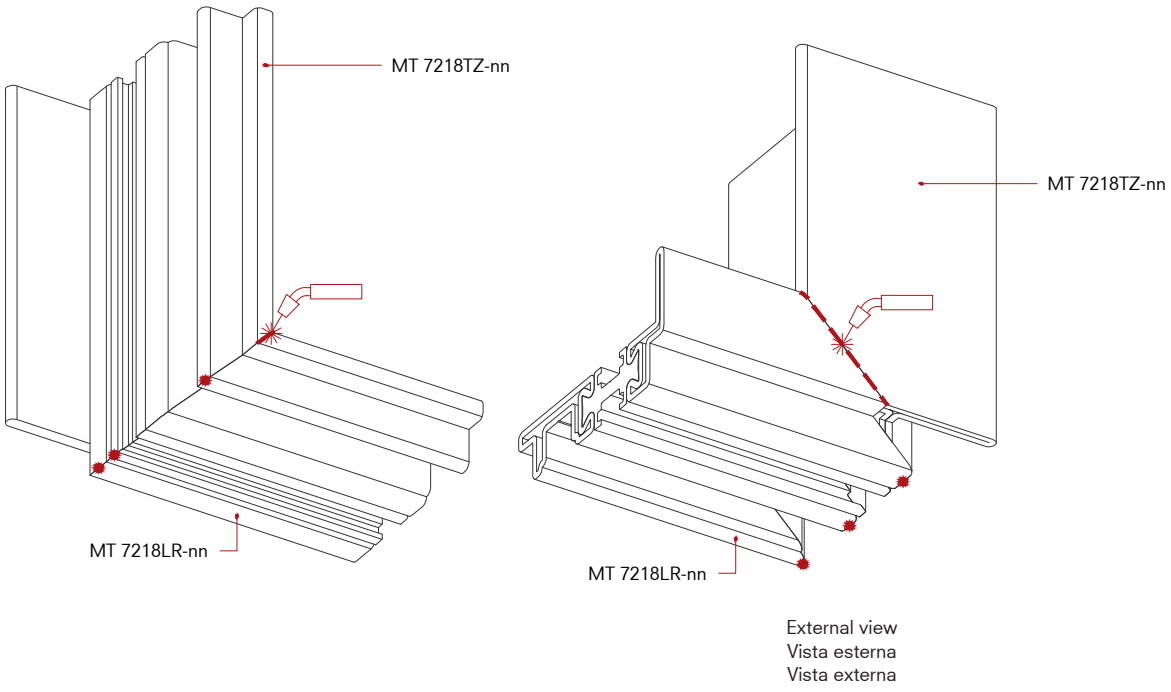
Sistema de puerta plegable



Internal view
Vista interna
Vista interna







External view
Vista esterna
Vista externa

Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

Gaskets **Guarnizioni** **Juntas de sellado** 5.4

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
CL = Cutting Length

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2
CL = Lunghezza di taglio

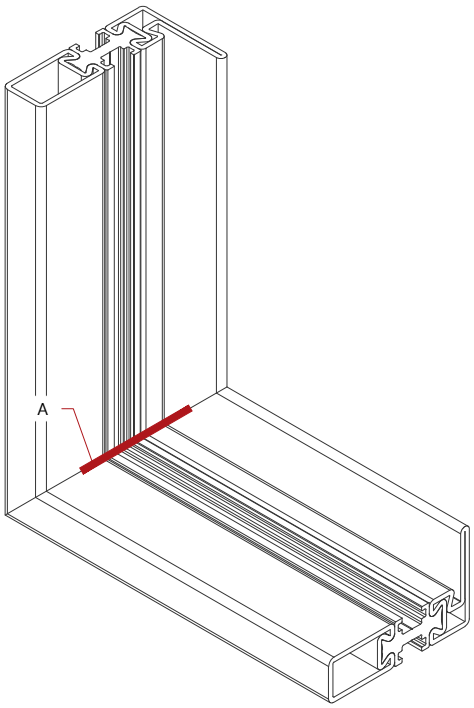
Leyenda

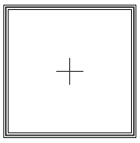
+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2
CL = Longitud de corte

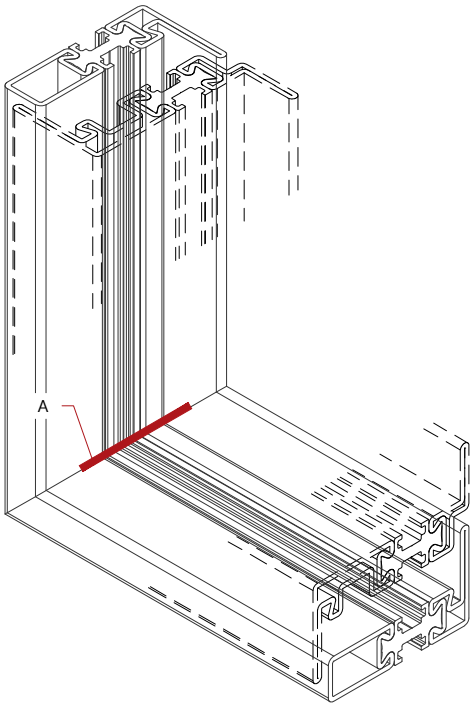
Sealing frame connections
Examples

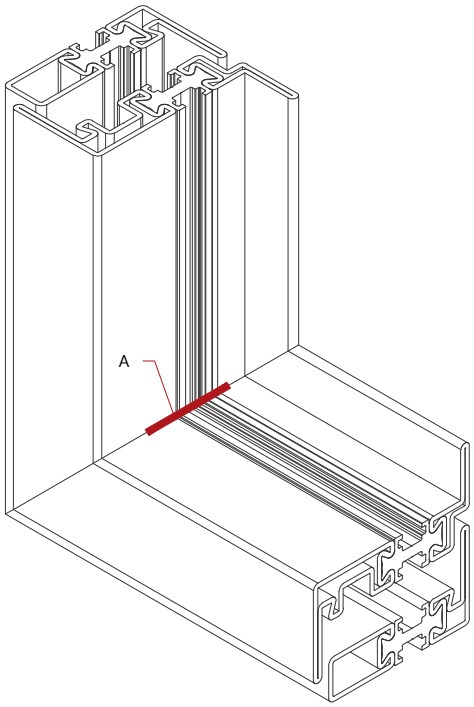
Sigillatura profili
Esempi

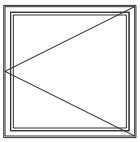
Sellado de perfiles
Ejemplos







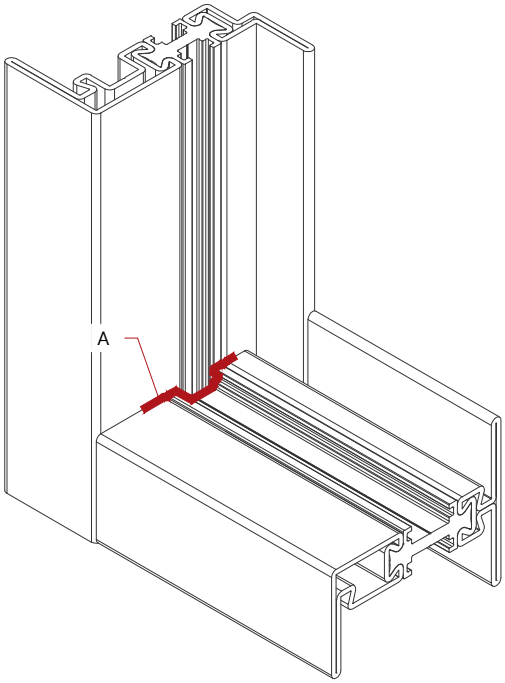


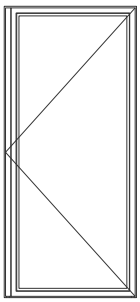


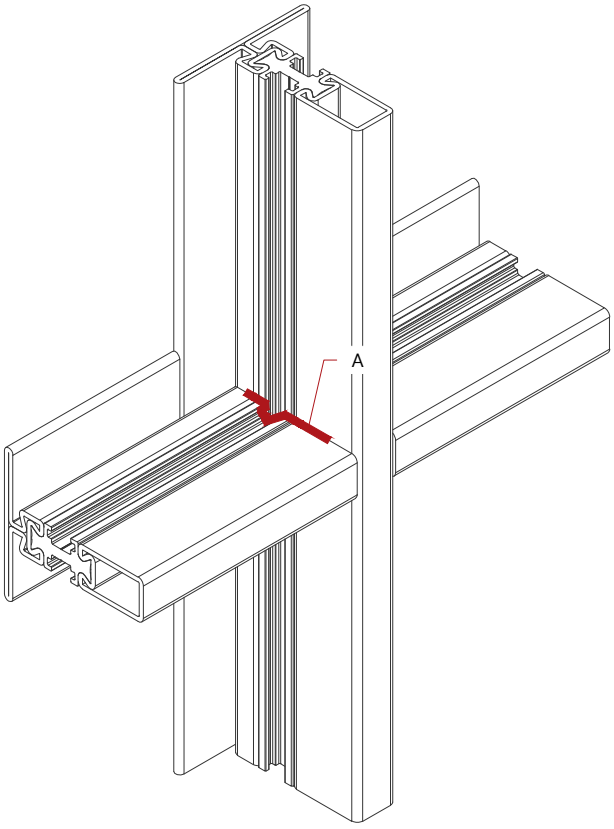
A) For the closure of the zones not closed by welding in joined frame connections, we strongly recommend using a narrow joint sealant on thermal break, for 45° and 90° cuttings after the painting.

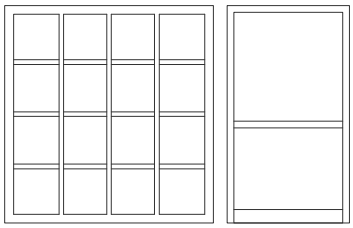
A) Per la chiusura delle fughe in corrispondenza delle giunzioni del telaio che non vengono saldate è necessario l'utilizzo di un apposito sigillante per fughe sottili sul taglio termico in poliuretano, per tagli a 45° e 90°, da eseguire dopo la verniciatura.

A) Para cerrar zonas de fuga cerradas mediante procesos distintos a la soldadura en el caso de las uniones de marcos (45° e 90°) recomendamos encarecidamente el uso del agente sellante para fugas sobre poliamida después de la pintura.









A) For the closure of the zones not closed by welding in joined frame connections, we strongly recommend using a narrow joint sealant on thermal break, for 45° and 90° cuttings after the painting.

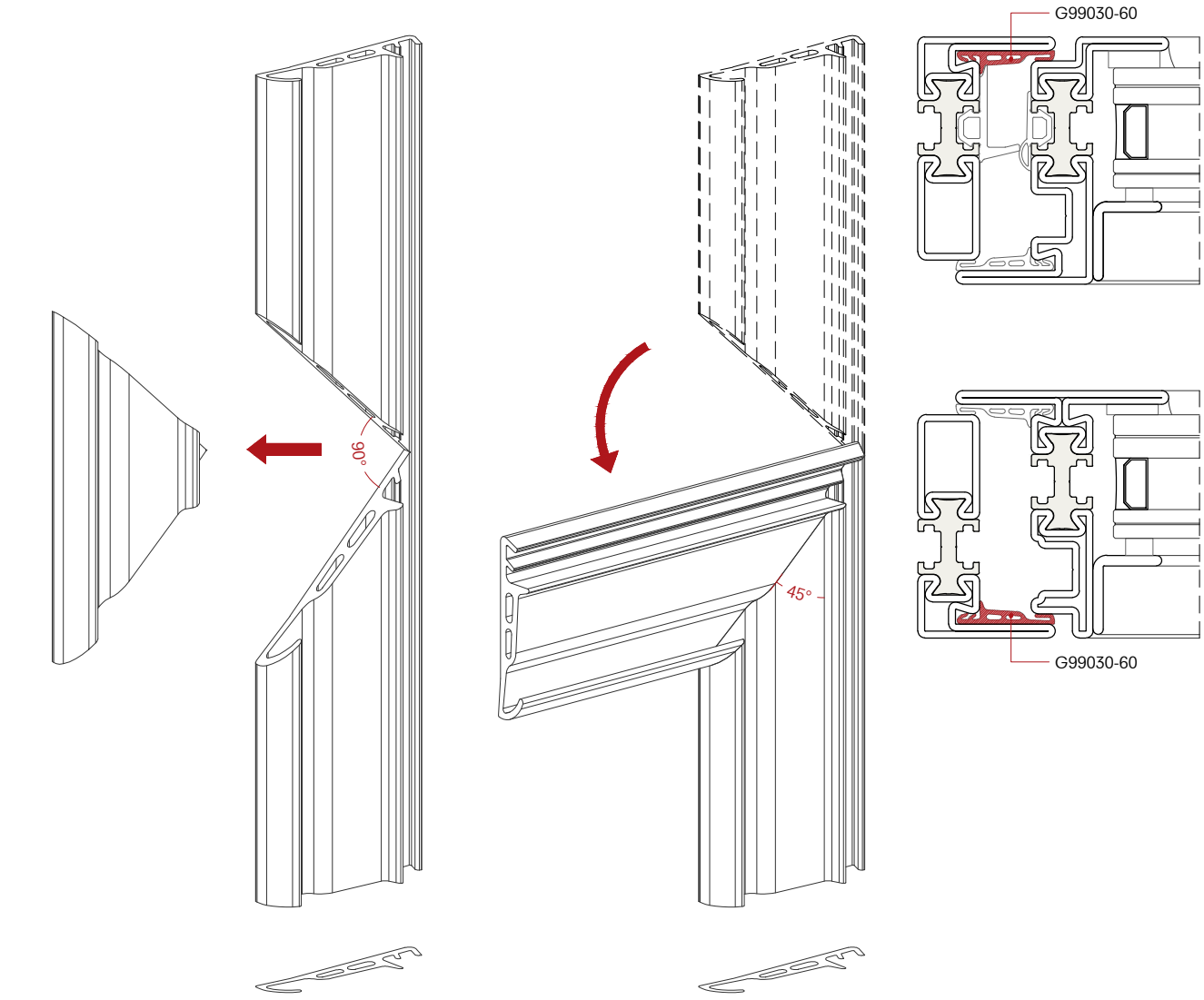
A) Per la chiusura delle fughe in corrispondenza delle giunzioni del telaio che non vengono saldate è necessario l'utilizzo di un apposito sigillante per fughe sottili sul taglio termico in poliuretano, per tagli a 45° e 90°, da eseguire dopo la verniciatura.

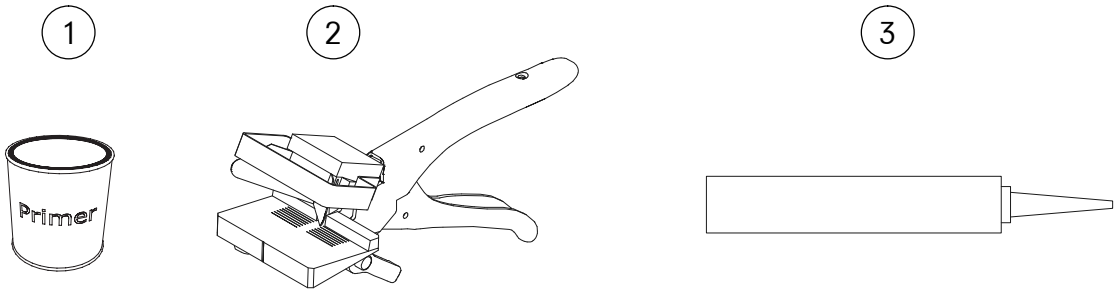
A) Para cerrar zonas de fuga cerradas mediante procesos distintos a la soldadura en el caso de las uniones de marcos (45° e 90°) recomendamos encarecidamente el uso del agente sellante para fugas sobre poliamida después de la pintura.

Cutting
Rebate gasket G99030-60 at 45°
Open in and open out
Frame gasket all around

Taglio
Guarnizione di battuta G99030-60 a 45°
Apertura interna ed esterna
Guarnizione telaio tutto attorno

Corte
Junta de tope G99030-60 en 45°
Apertura interna ed externa
Junta de marco por todas partes





1) Clean surface and apply primer I99005-75
2) Use seal scissor D99543-02
3) Glue with sealant OS 364991

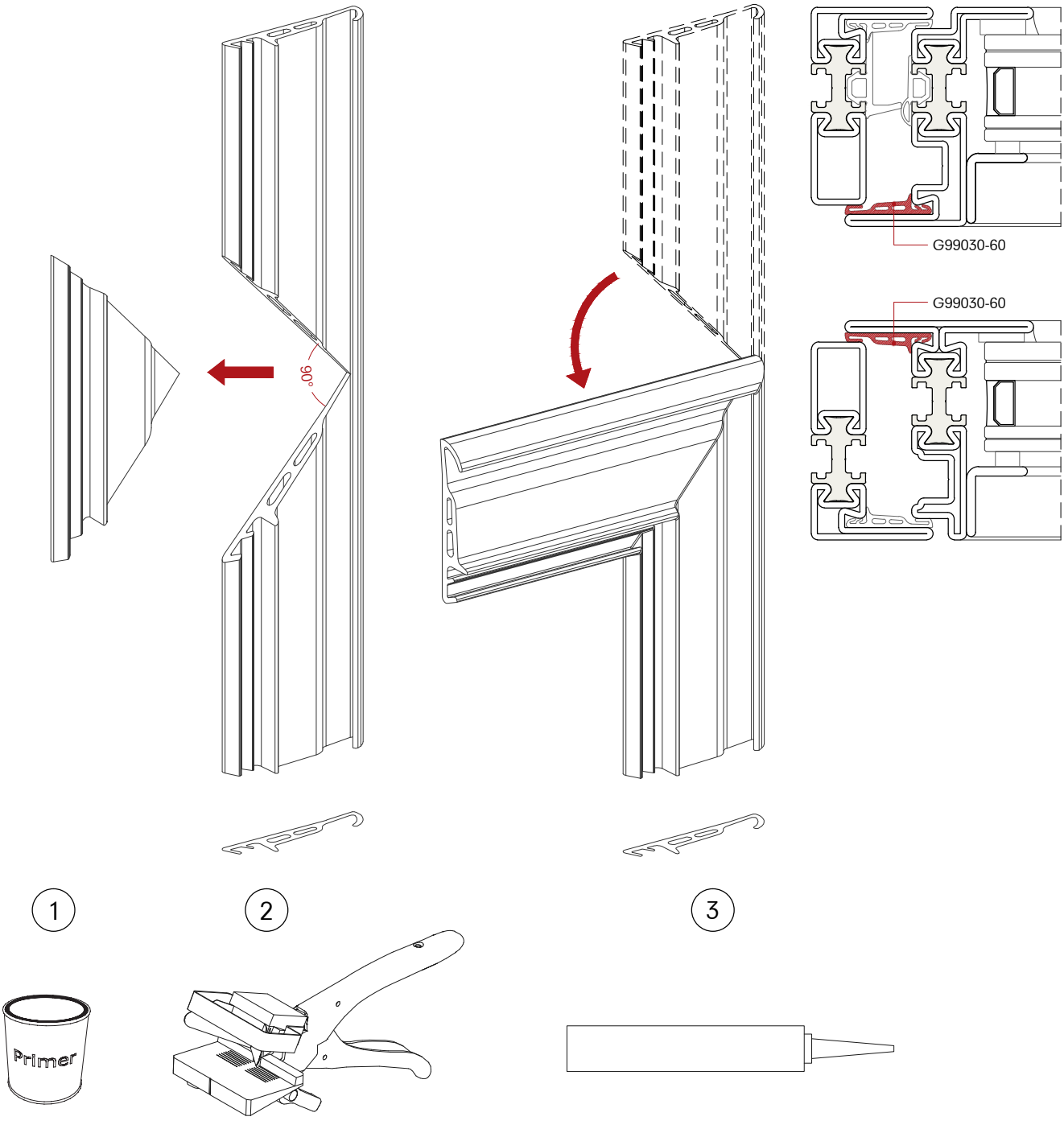
1) Pulire superficie e stendere primer I99005-75
2) Utilizzare la forbice per guarnizioni D99543-02
3) Incollare con sigillante OS 364991

1) Limpiar la superficie y aplicar el Primer I99005-75
2) Use las tijeras para juntas D99543-02
3) Pegar con adherente OS 364991

Cutting
Rebate gasket G99030-60 at 45°
Open in and open out
Leaf gasket all around

Taglio
Guarnizione di battuta G99030-60 a 45°
Apertura interna ed esterna
Guarnizione anta tutto attorno

Corte
Junta de tope G99030-60 en 45°
Apertura interna ed externa
Junta de hoja por todas partes



1) Clean surface and apply primer I99005-75
2) Use seal scissor D99543-02
3) Glue with sealant OS 364991

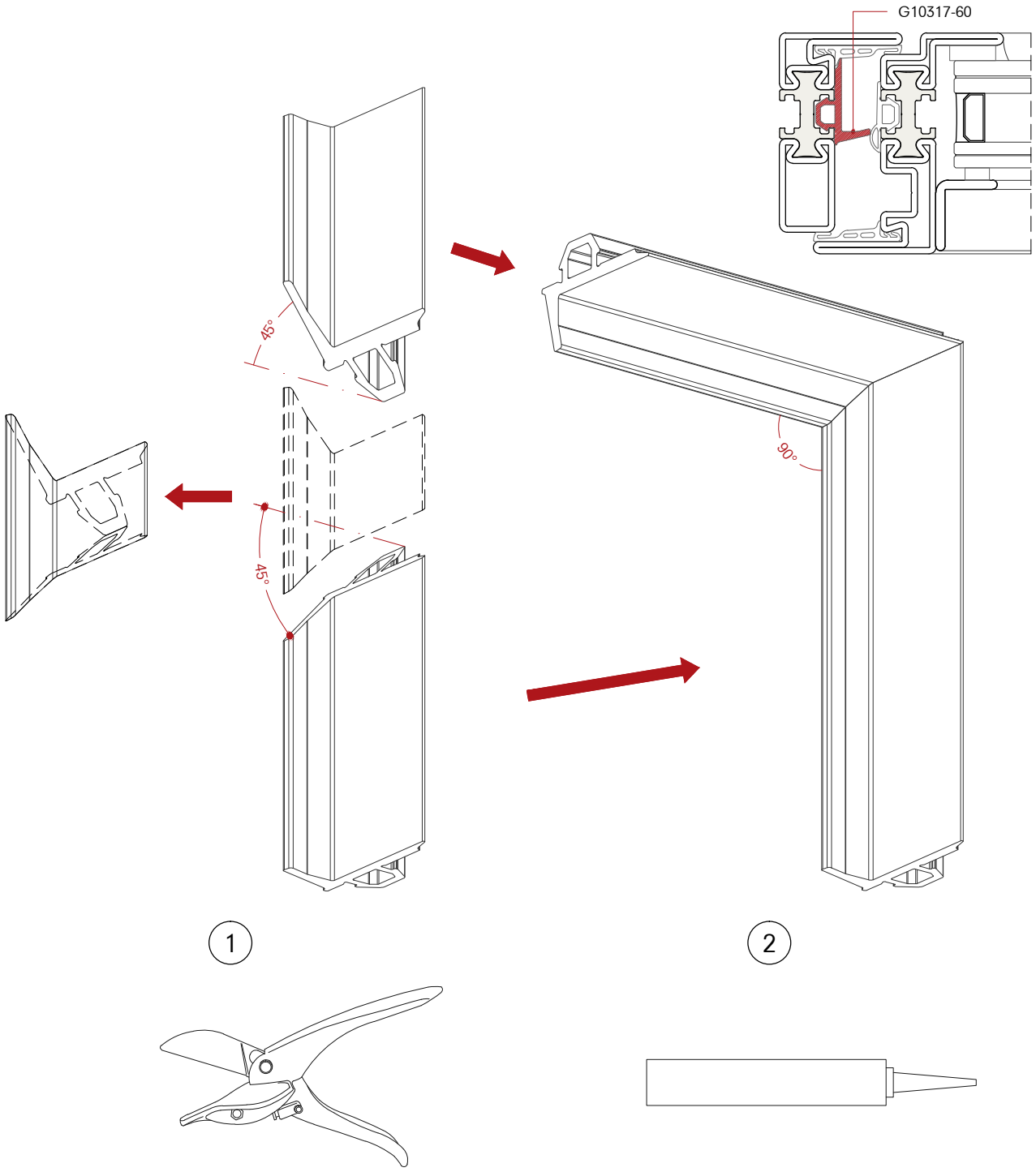
1) Pulire superficie e stendere primer I99005-75
2) Utilizzare la forbice per guarnizioni D99543-02
3) Incollare con sigillante OS 364991

1) Limpiar la superficie y aplicar el Primer I99005-75
2) Use las tijeras para juntas D99543-02
3) Pegar con adherente OS 364991

Cutting
Middle stop profile G10317-60 at 45°
Frame open in
Gasket all around

Taglio
Profilo stop centrale G10317-60 a 45°
Telaio apertura interna
Guarnizione tutto attorno

Corte
Perfil parada central G10317-60 en 45°
Marco apertura interna
Junta por todas partes



1) Use seal scissor D99540-02
2) Glue with sealant OS 364991

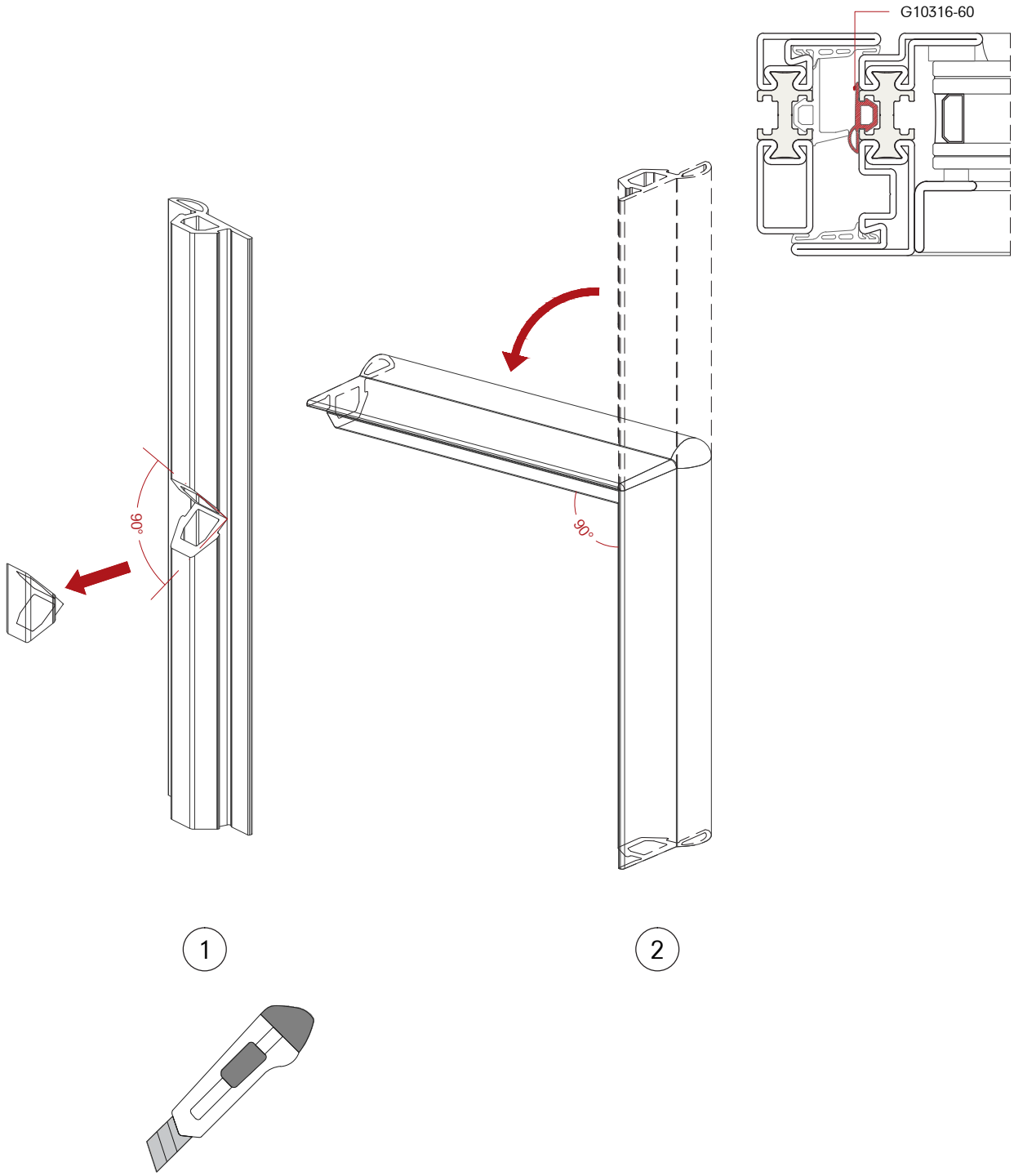
1) Utilizzare la forbice per guarnizioni D99540-02
2) Incollare con sigillante OS 364991

1) Use las tijeras para juntas D99540-02
2) Pegar con adherente OS 364991

Cutting
Middle stop profile G10317-60 at 45°
Leaf open in
Gasket all around

Taglio
Profilo stop centrale G10317-60 a 45°
Anta apertura interna
Guarnizione tutto attorno

Corte
Perfil parada central G10317-60 en 45°
Hoja apertura interna
Junta por todas partes



1) Use a standard cutter
2) Lay the gasket around the corner

1) Utilizzare un taglierino standard
2) Piegare la guarnizione attorno all'angolo

1) Use un cuchillo de uso general
2) Doblar la junta alrededor de la esquina

Installation
Brush gasket G99402-62
and brush support A99401-00

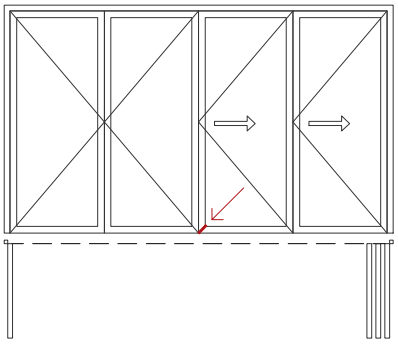
Montaggio
Spazzolino G99402-62
e profilo di supporto A99401-00

Montaje
Junta del cepillo G99402-62
y el soporte A99401-00

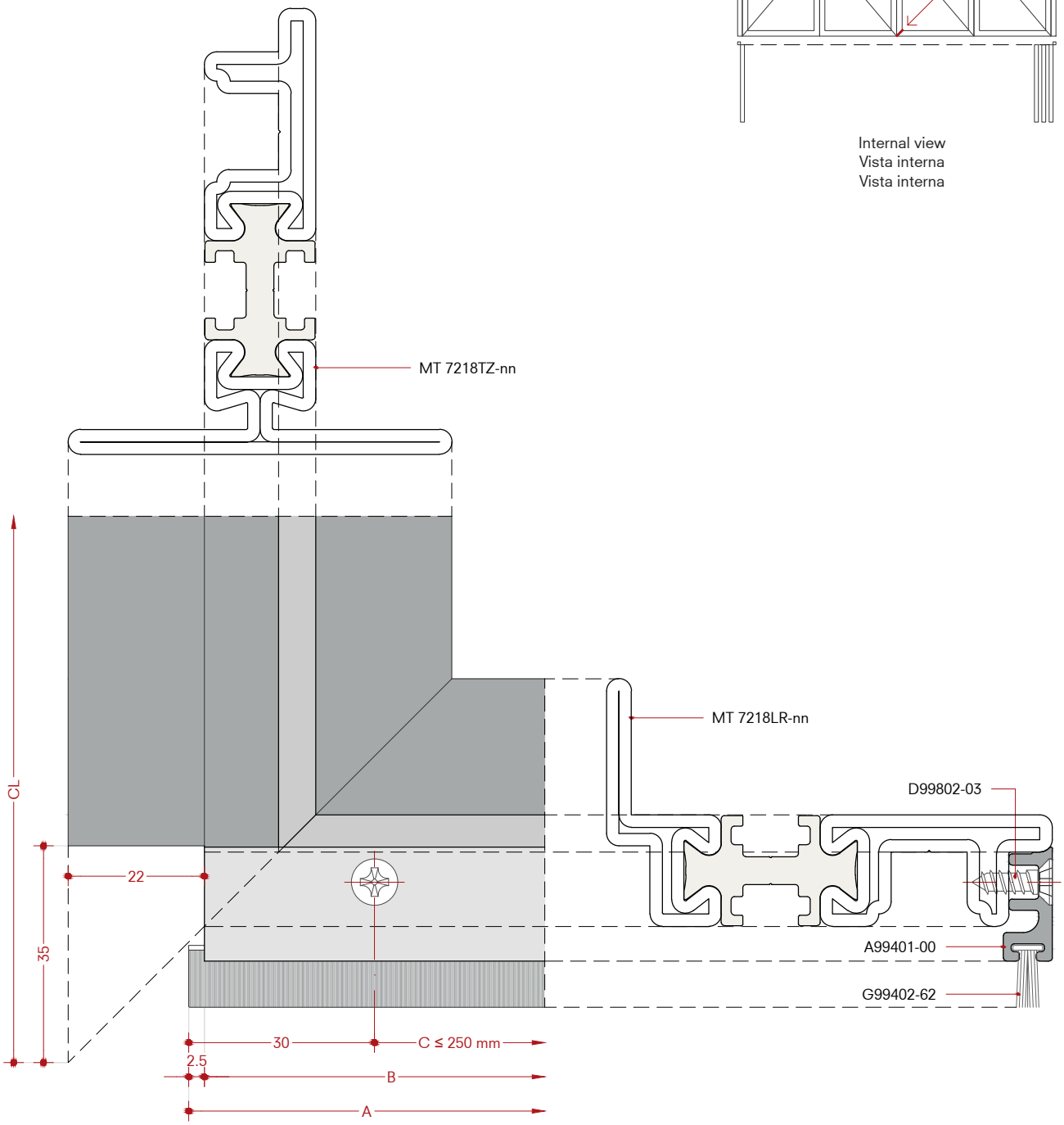
Bi-folding door system

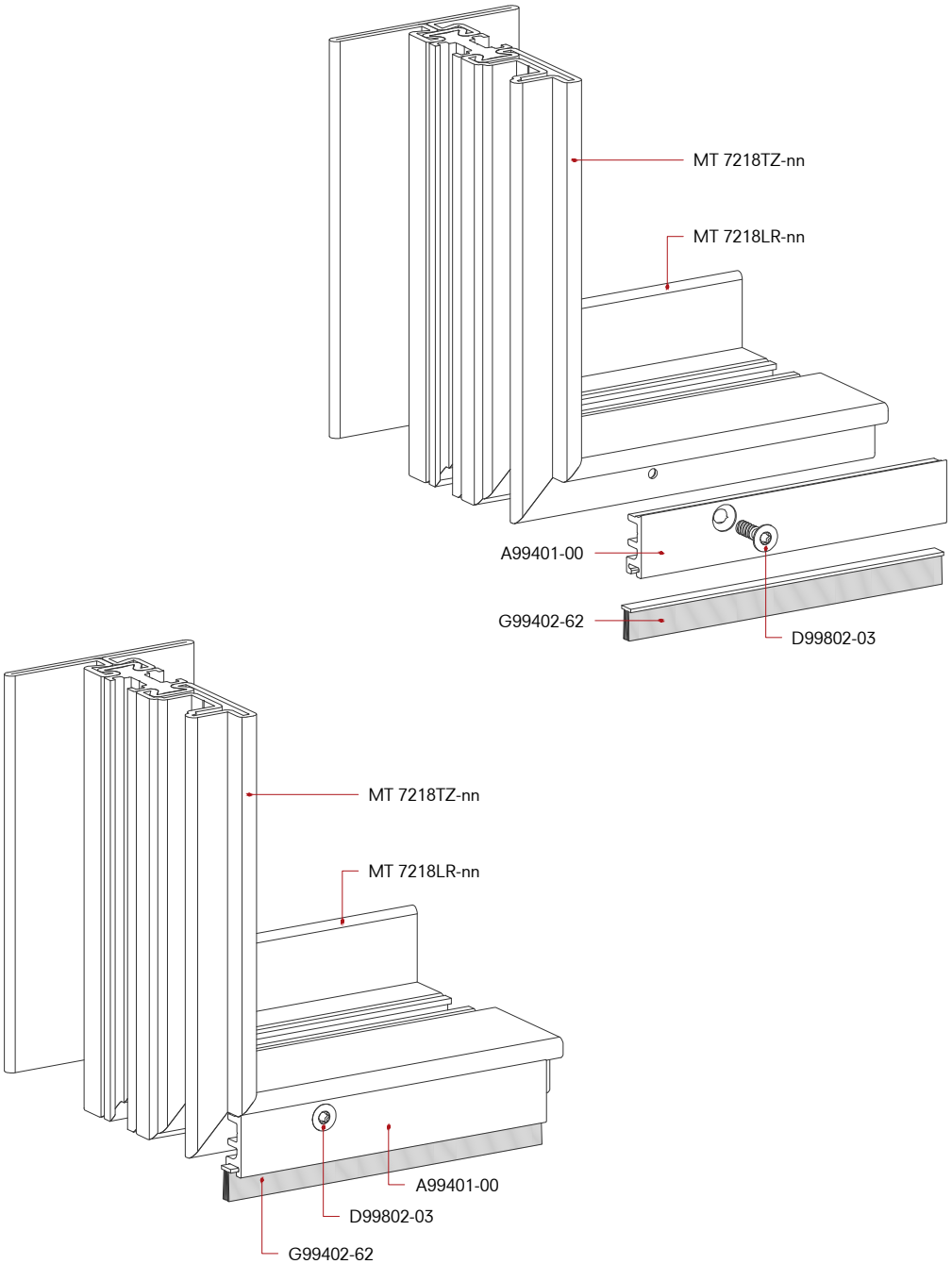
Sistema di porte a libro

Sistema de puerta plegable



Internal view
Vista interna
Vista interna





A) Cutting length brush gasket G99402-62
B) Cutting length brush support A99401-00
C) Screw joint distance D99802-03

A) Lunghezza di taglio spazzolino G99402-62
B) Lunghezza di taglio supporto A99401-00
C) Distanza tra le viti D99802-03

A) Longitud de corte de junta de cepillo G99402-62
B) Longitud de corte de soporte A99401-00
C) Distancia entre tornillos D99802-03

Installation
Brush gasket G99402-62
and brush support A99401-00
And neoprene 15x15x5 mm

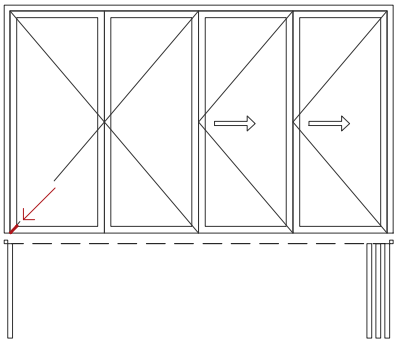
Montaggio
Spazzolino G99402-62 e profilo di supporto A99401-00
E neoprene 15x15x5 mm

Montaje
Junta del cepillo G99402-62
y el soporte A99401-00
Y neoprene 15x15x5 mm

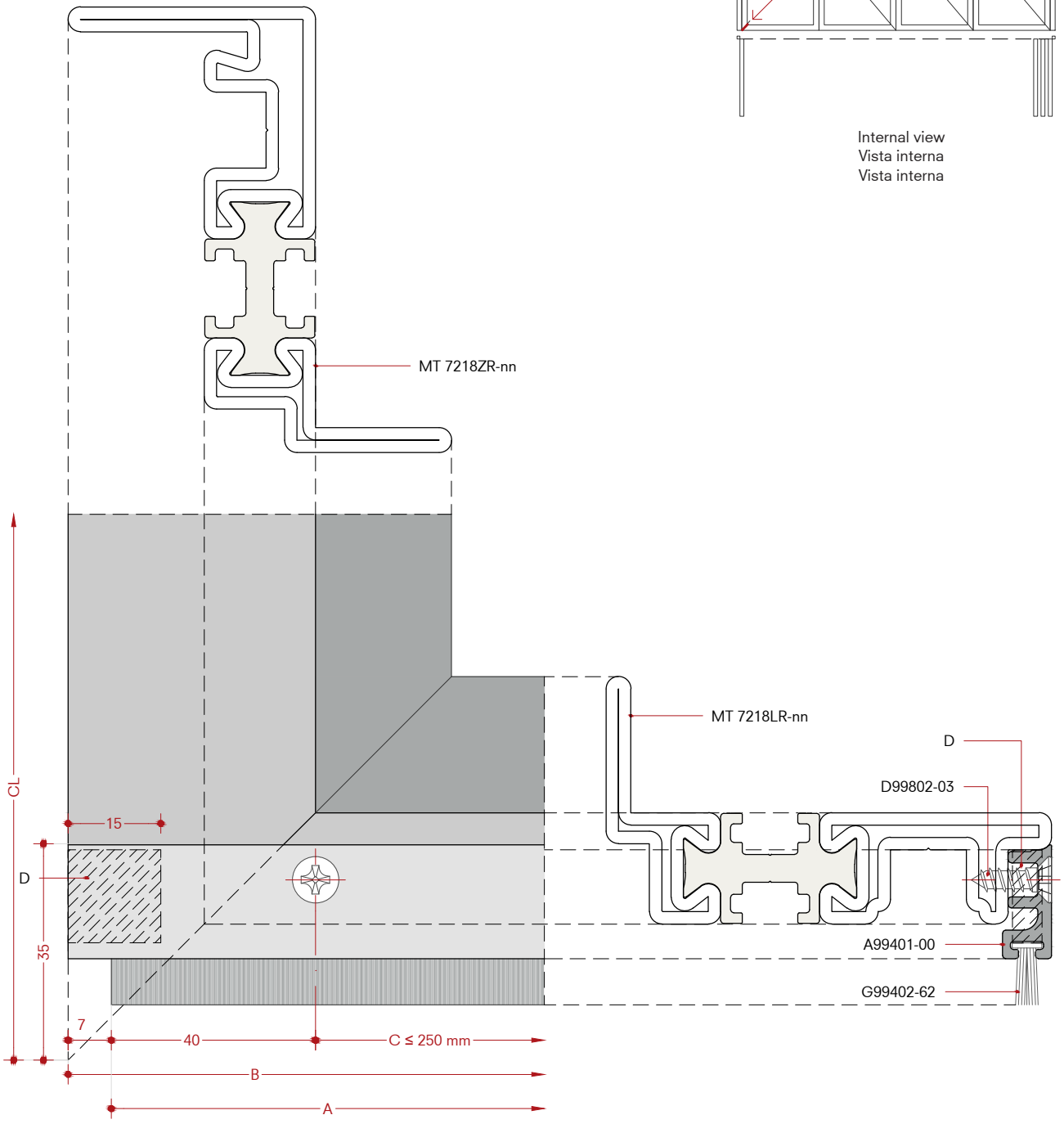
Bi-folding door system

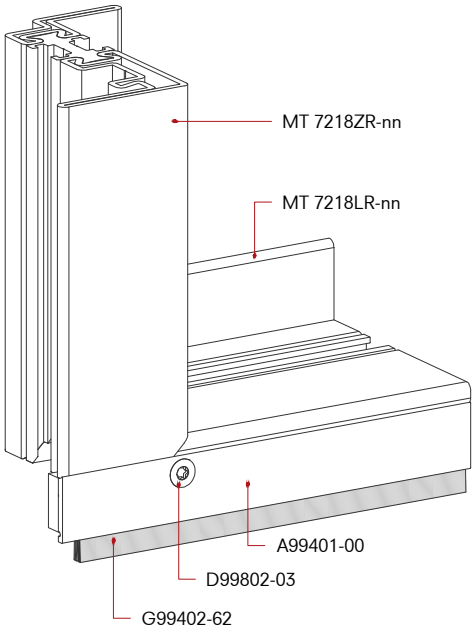
Sistema di porte a libro

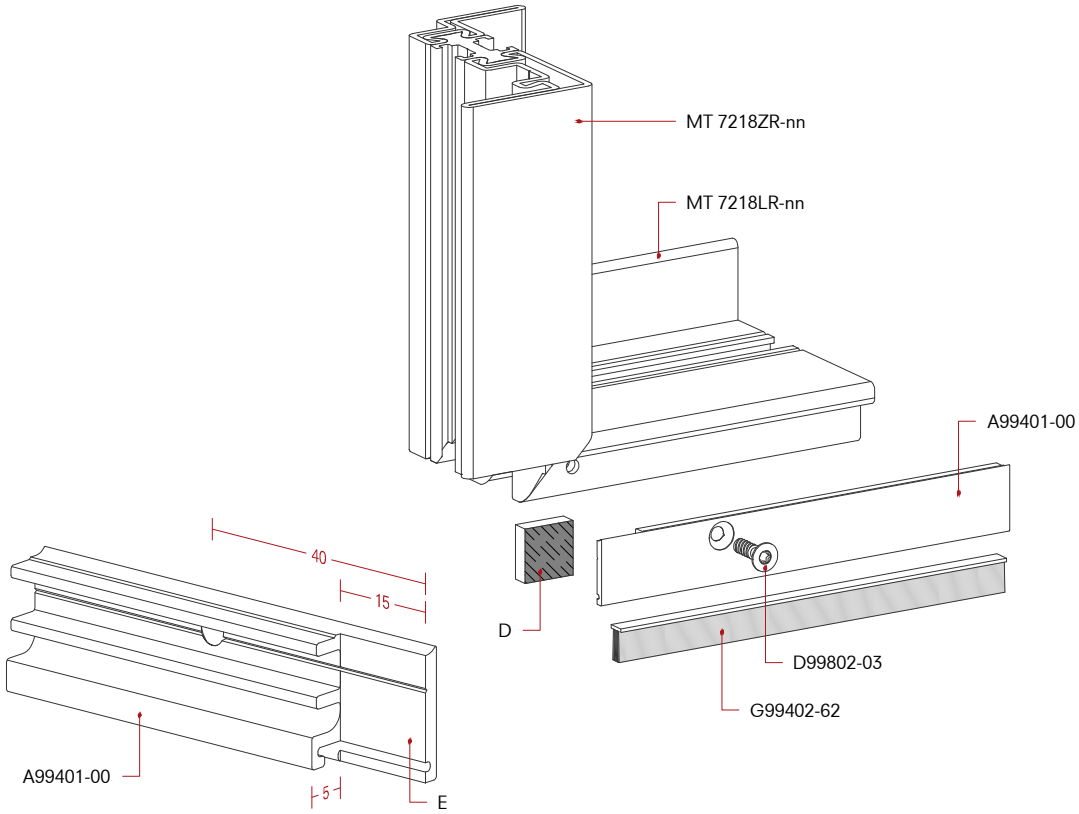
Sistema de puerta plegable



Internal view
Vista interna
Vista interna







A) Cutting length brush gasket G99402-62
B) Cutting length brush support A99401-00
C) Screw joint distance D99802-03
D) Neoprene one-sided self-adhesive 15x15x5 mm in own production
E) Cut off profile

A) Lunghezza di taglio spazzolino G99402-62
B) Lunghezza di taglio supporto A99401-00
C) Distanza tra le viti D99802-03
D) Neoprene autoadesiva 15x15x5 mm
E) Lavorazione sul supporto

A) Longitud de corte de junta de cepillo G99402-62
B) Longitud de corte de soporte A99401-00
C) Distancia entre tornillos D99802-03
D) Neoprene autoadhesivo 15x15x5 mm
E) Fresado de suporte

Installation
Brush gasket G99402-62
and brush support A99401-00
And neoprene 15x15x5 mm

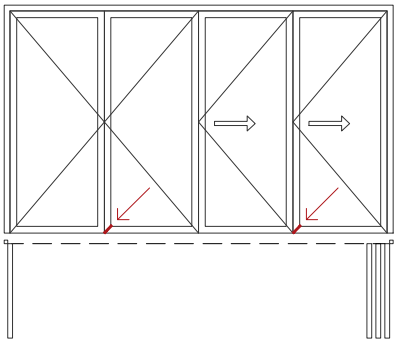
Montaggio
Spazzolino G99402-62 e profilo di
supporto A99401-00
E neoprene 15x15x5 mm

Montaje
Junta del cepillo G99402-62
y el soporte A99401-00
Y neoprene 15x15x5 mm

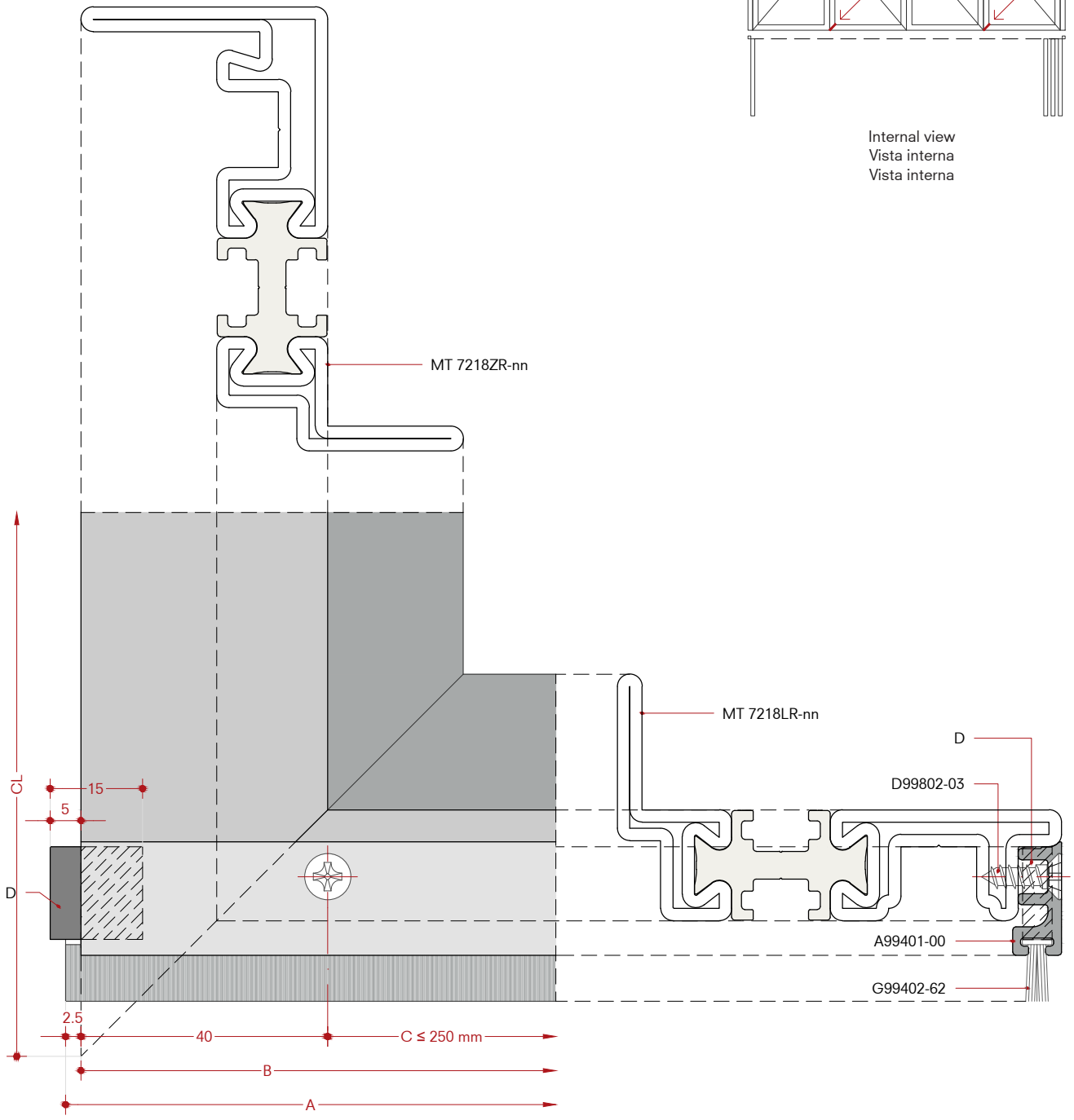
Bi-folding door system

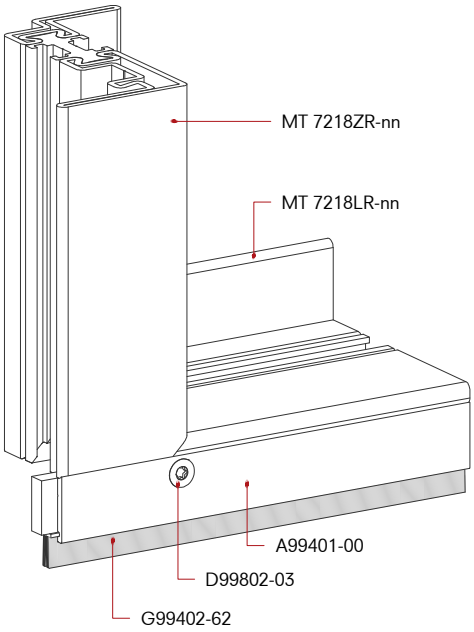
Sistema di porte a libro

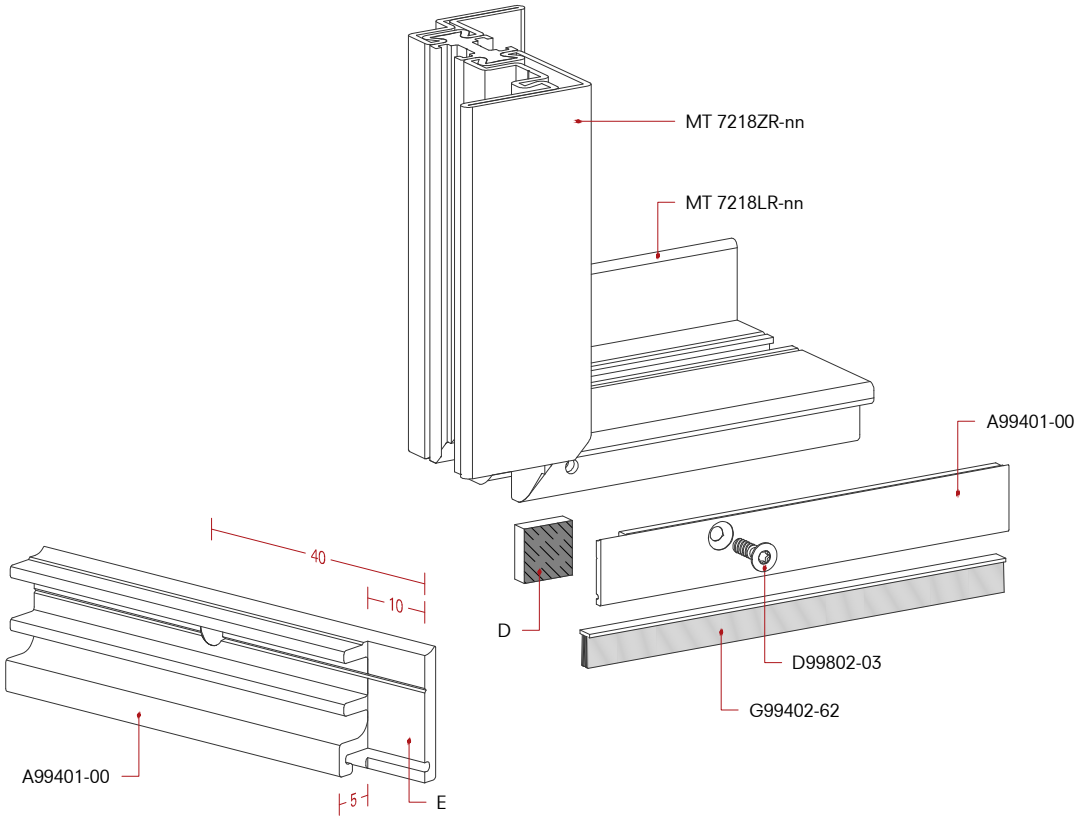
Sistema de puerta plegable



Internal view
Vista interna
Vista interna







A) Cutting length brush gasket G99402-62
B) Cutting length brush support A99401-00
C) Screw joint distance D99802-03
D) Neoprene one-sided self-adhesive 15x15x5 mm in own production
E) Cut off profile

A) Lunghezza di taglio spazzolino G99402-62
B) Lunghezza di taglio supporto A99401-00
C) Distanza tra le viti D99802-03
D) Neoprene autoadesiva 15x15x5 mm
E) Lavorazione sul supporto

A) Longitud de corte de junta de cepillo G99402-62
B) Longitud de corte de soporte A99401-00
C) Distancia entre tornillos D99802-03
D) Neoprene autoadhesivo 15x15x5 mm
E) Fresado de suporte

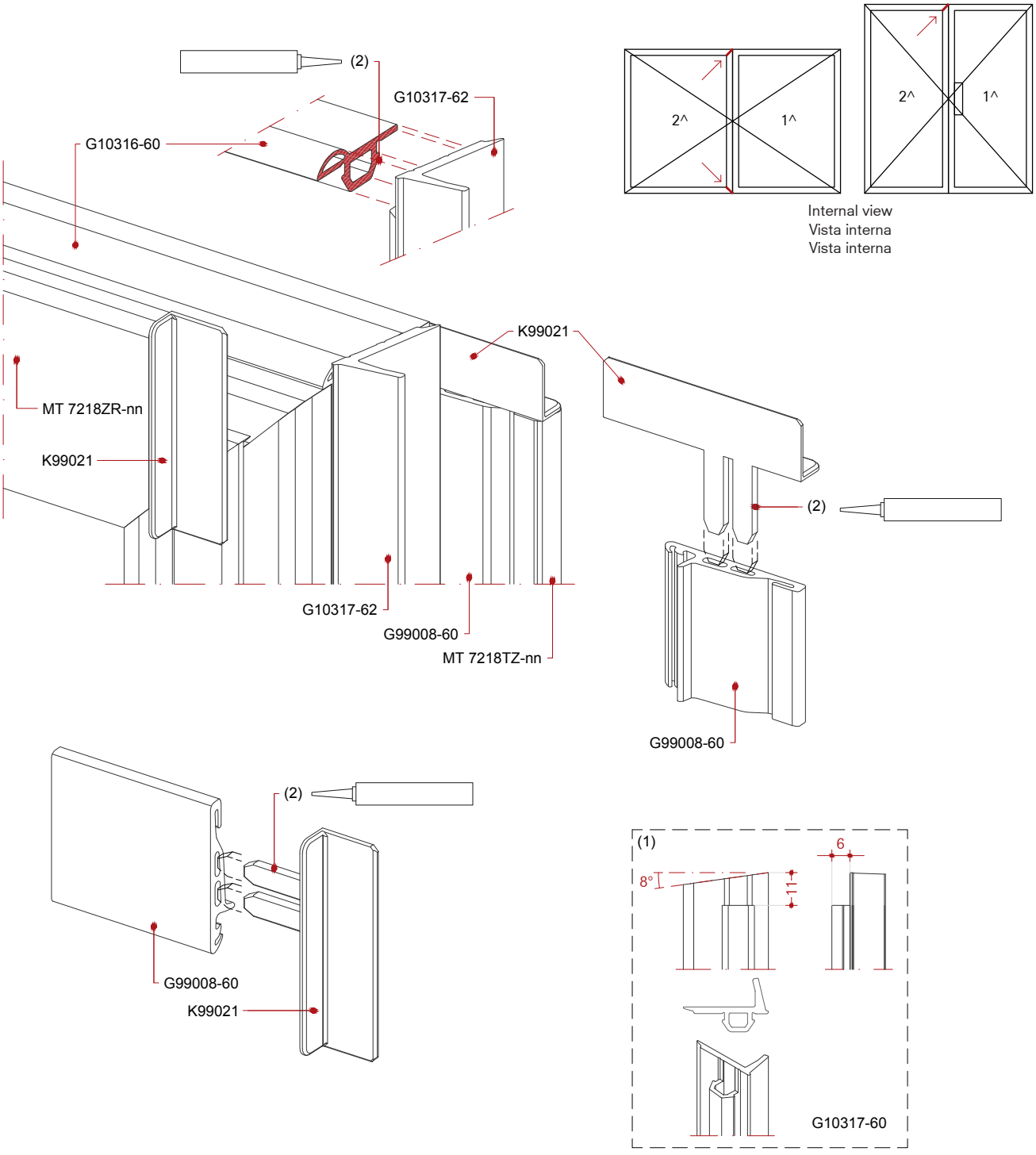
Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

System accessories **Accessori di sistema** **Accesorios del sistema** 5.5

Processing and installation
G10316-60, G10317-60 and K99021
Double leaf open in

Installazione e montaggio
G10316-60, G10317-60 e K99021
Doppia anta apertura interna

Mecanizado y montaje
G10316-60, G10317-60 y K99021
Dos hojas apertura interna



1) Cutting of middle stop profile G10317-60
2) Glue with sealant OS 364991 (glue also on metal profile)

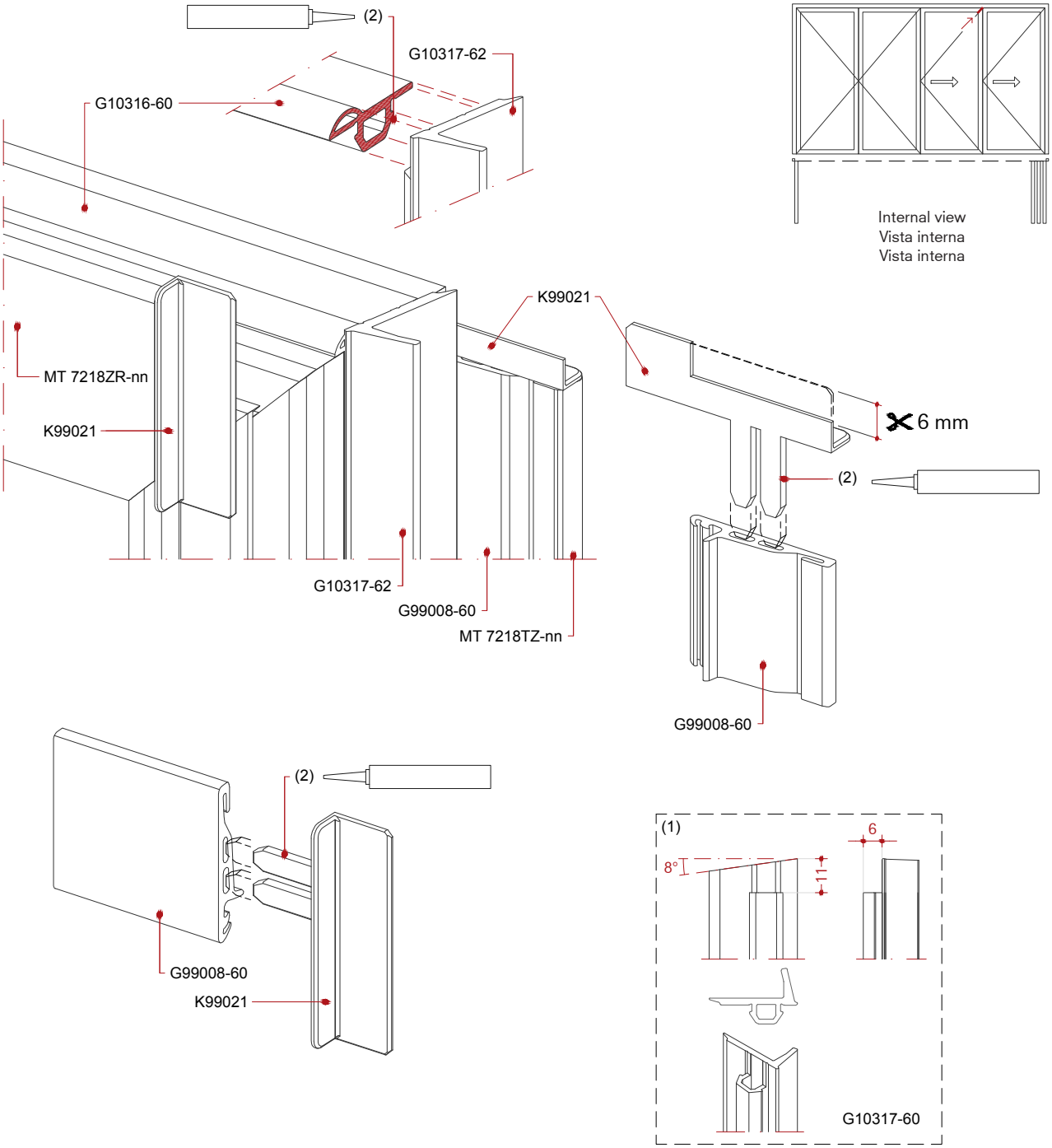
1) Taglio della guarnizione centrale G10317-60
2) Incollare con sigillante OS 364991 (incollare anche sul metallo del profilo)

1) Corte de junta central G10317-60
2) Pegar con adherente OS 364991 (también pegue en el metal del perfil)

Processing and installation
G10316-60, G10317-60 and K99021
Bi-folding door system
Open in

Installazione e montaggio
G10316-60, G10317-60 e K99021
Sistema di porte a libro
Apertura interna

Mecanizado y montaje
G10316-60, G10317-60 y K99021
Sistema de puerta plegable
Apertura interna



1) Cutting of middle stop profile G10317-60
2) Glue with sealant OS 364991 (glue also on metal profile)

1) Taglio della guarnizione centrale G10317-60
2) Incollare con sigillante OS 364991 (incollare anche sul metallo del profilo)

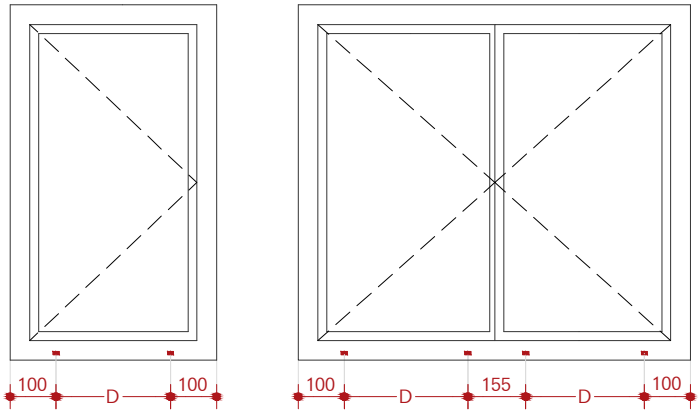
1) Corte de junta central G10317-60
2) Pegar con adherente OS 364991 (también pegue en el metal del perfil)

Assembling
Cover cap A99201-35
Open in
Drain holes with cover caps.

Schema di montaggio
Tappo scarico acqua A99201-35
Apertura interna
Fori di drenaggio con tappi di copertura.

Diagrama de montaje
Tapa de cubierta A99201-35
Apertura interna
Orificios de desagüe con tapas de cubierta.

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes/cover caps
For single leaf window

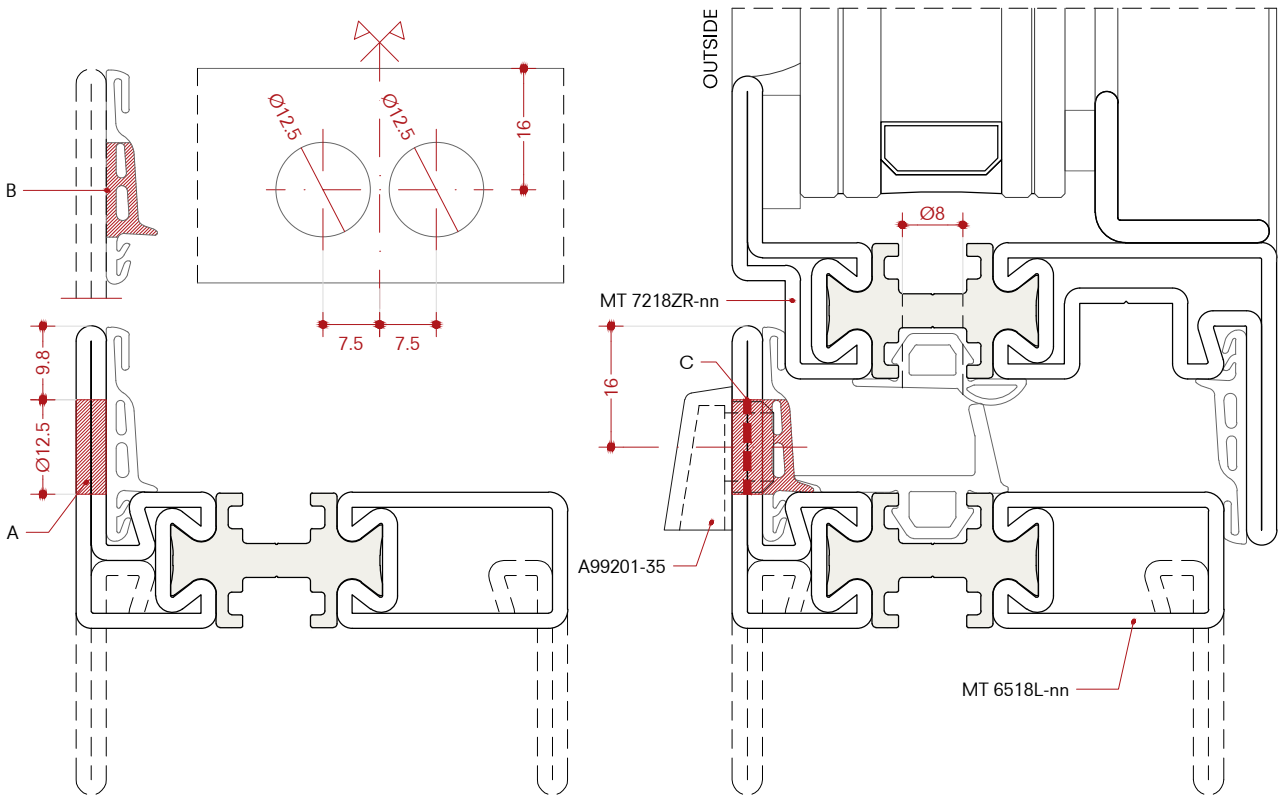
Min. n°04 drain holes/cover caps
For double leaf window

Minimo n°02 fori/tappi di scarico
Per finestra anta singola

Minimo n°04 fori/tappi di scarico
Per finestra anta doppia

Mínimo n°02 orificios/tapas de cubierta
Para ventana de una hoja

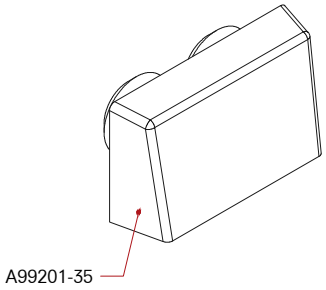
Mínimo n°04 orificios/tapas de cubierta
Para ventana de doble hoja



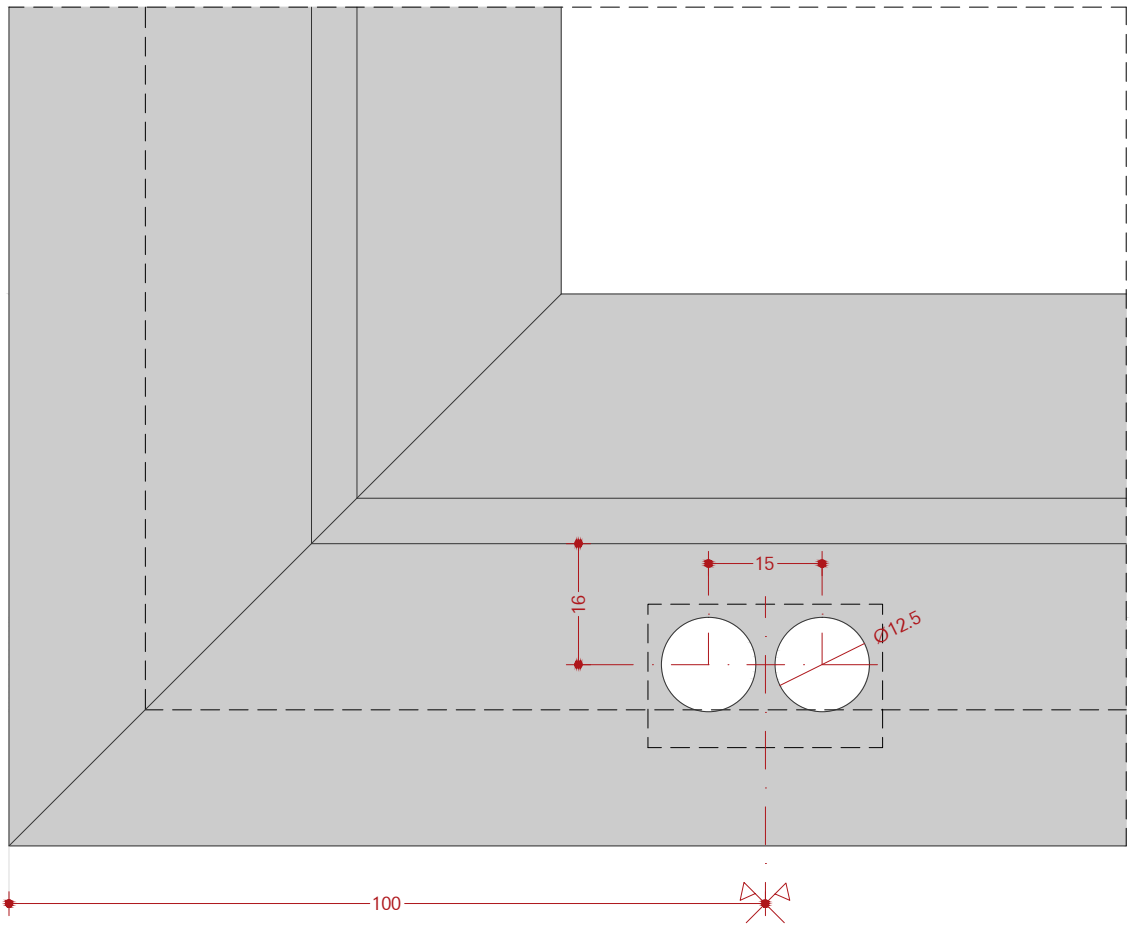
A) n°02 holes Ø12.5 mm frame profile
B) n°02 holes Ø12.5 mm gasket
C) Sealing between cover cap and frame profile
D) Max. distance between drains 800 mm

A) n°02 fori Ø12.5 mm sul profilo telaio
B) n°02 fori Ø12.5 mm sulla guarnizione
C) Sigillatura tra tappo di scarico acqua e profilo telaio
D) Massima distanza tra i tappi 800 mm

A) n°02 orificios Ø12.5 mm en perfil de marco
B) n°02 orificios Ø12.5 mm en junta
C) Agente sellante entre tapa de cubierta y perfil de marco
D) Distancia máxima entre tapas 800 mm



Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

Nota:

Almeno 2 tappi di drenaggio per larghezza anta fino a 1000 mm
Almeno 4 tappi di drenaggio per larghezza anta fino a 2000 mm

Nota:

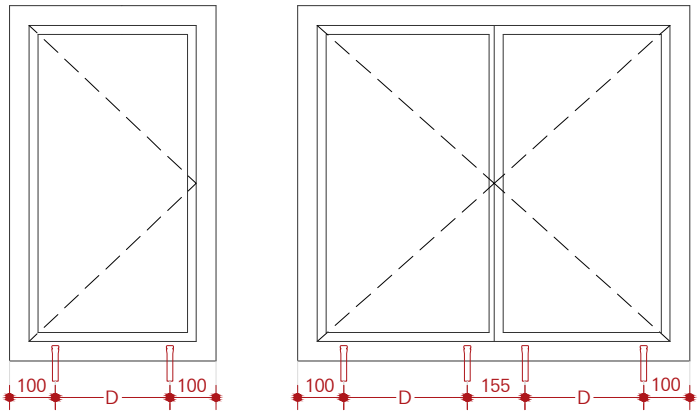
Al menos 2 tapas hasta 1000 mm de ancho de hoja
Al menos 4 tapas hasta 2000 mm de ancho de hoja

Assembling
Drainage pipe A99286-83
Open in
Drainage downwards.

Schema di montaggio
Tubo drenaggio A99286-83
Apertura interna
Drenaggio verso il basso.

Diagrama de montaje
Tubo de drenaje A99286-83
Apertura interna
Drenaje hacia abajo.

Outside view / Vista dall'esterno / Vista desde el exterior



Min. n°02 drain holes/pipes
For single leaf window

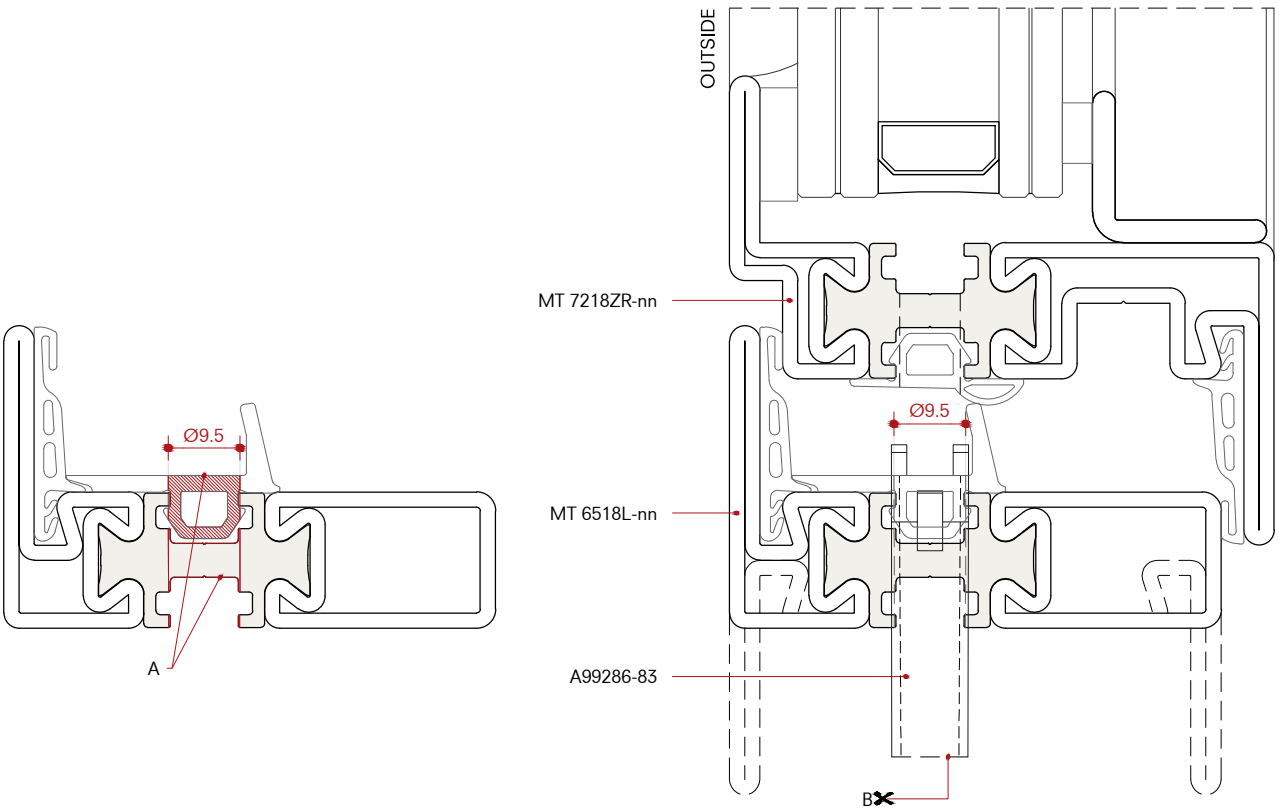
Min. n°04 drain holes/pipes
For double leaf window

Minimo n°02 fori/tubi drenaggio
Per finestra anta singola

Minimo n°04 fori/tubi drenaggio
Per finestra anta doppia

Mínimo n°02 orificios/tubos de drenaje
Para ventana de una hoja

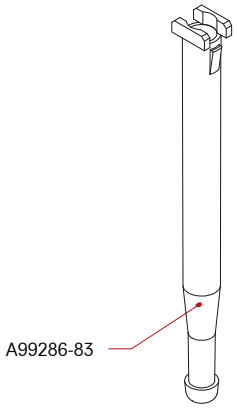
Mínimo n°04 orificios/tubos de drenaje
Para ventana de doble hoja



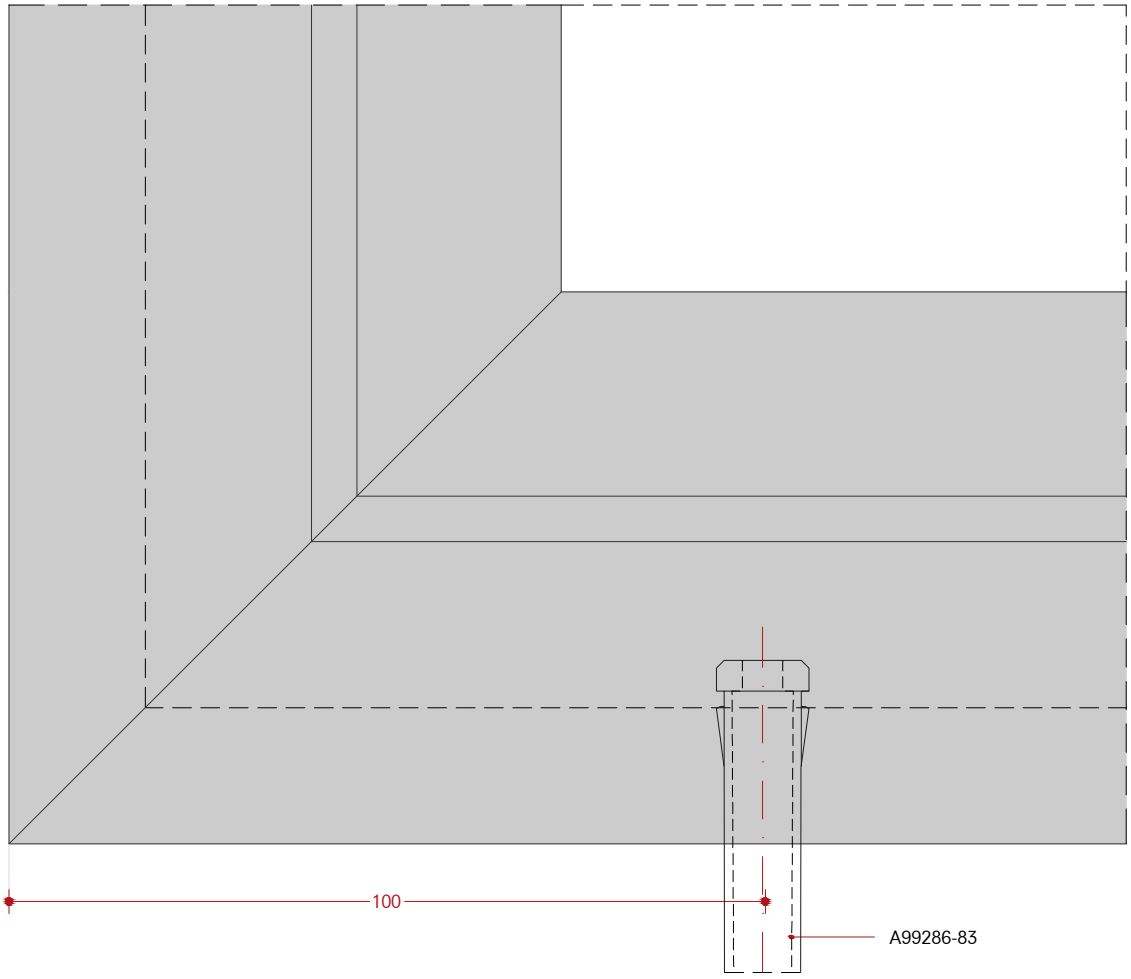
A) Drill or punch out the profile frame and centre gasket (Ø9.5 mm)
B) Push the Tube drainage A99286-83 through and cut off at the bottom

A) Forare il profilo del telaio e la guarnizione centrale (Ø9.5 mm)
B) Inserire il tubo di drenaggio A99286-83 e tagliarlo in basso

A) Taladrar el perfil del marco y la junta central (Ø9.5 mm)
B) Inserte la manguera de desagüe A99286-83 y córtela por la parte inferior



Position of drainage holes
Posizione dei fori di drenaggio
Posición de orificios de desagüe



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

Nota:

Almeno 2 tappi di drenaggio per larghezza anta fino a 1000 mm
Almeno 4 tappi di drenaggio per larghezza anta fino a 2000 mm

Nota:

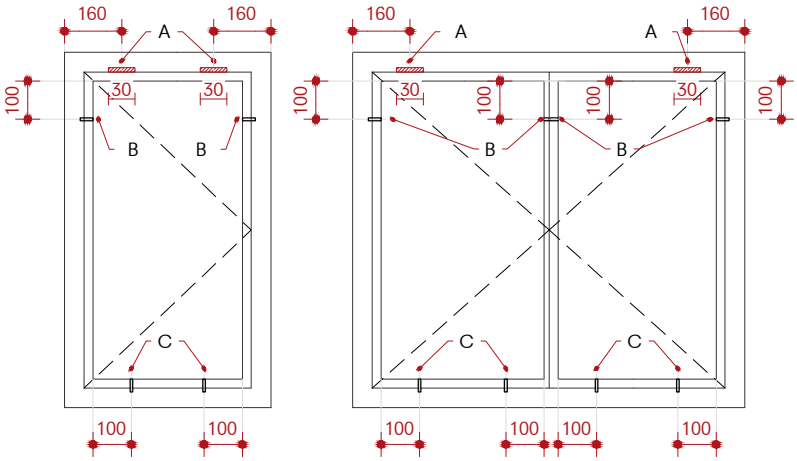
Al menos 2 tapas hasta 1000 mm de ancho de hoja
Al menos 4 tapas hasta 2000 mm de ancho de hoja

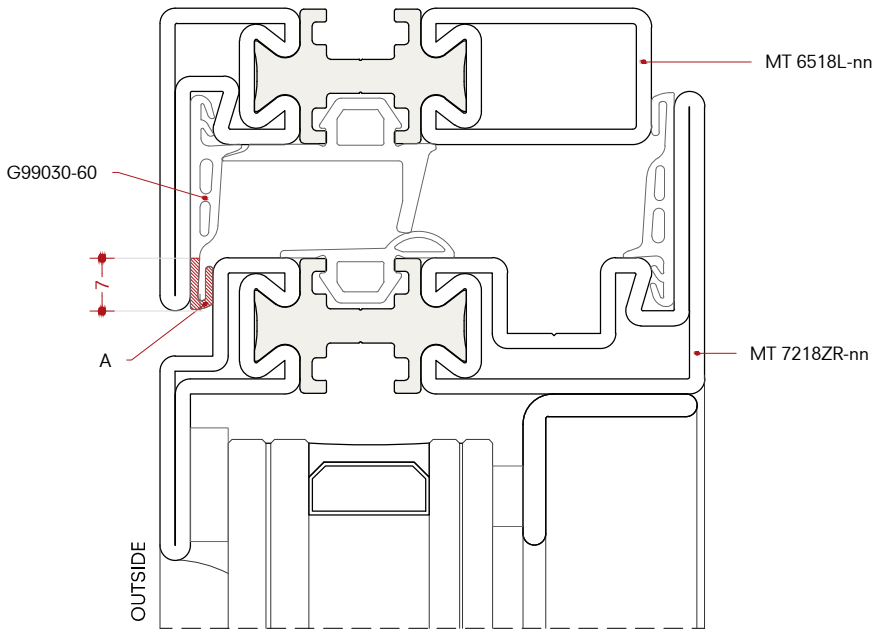
Pressure equalisation and drainage
Open in
Pressure compensation on the side and on top.

Equalizzazione pressione e drenaggio
Apertura interna
Compensazione della pressione laterale e superiore.

Ecualizacion de presion y drenaje
Apertura interna
Compensación de presión lateral y superior.

Outside view / Vista dall'esterno / Vista desde el exterior

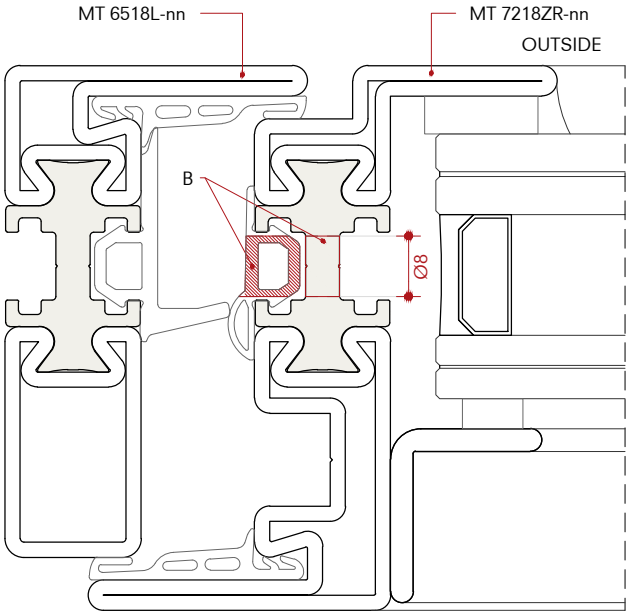


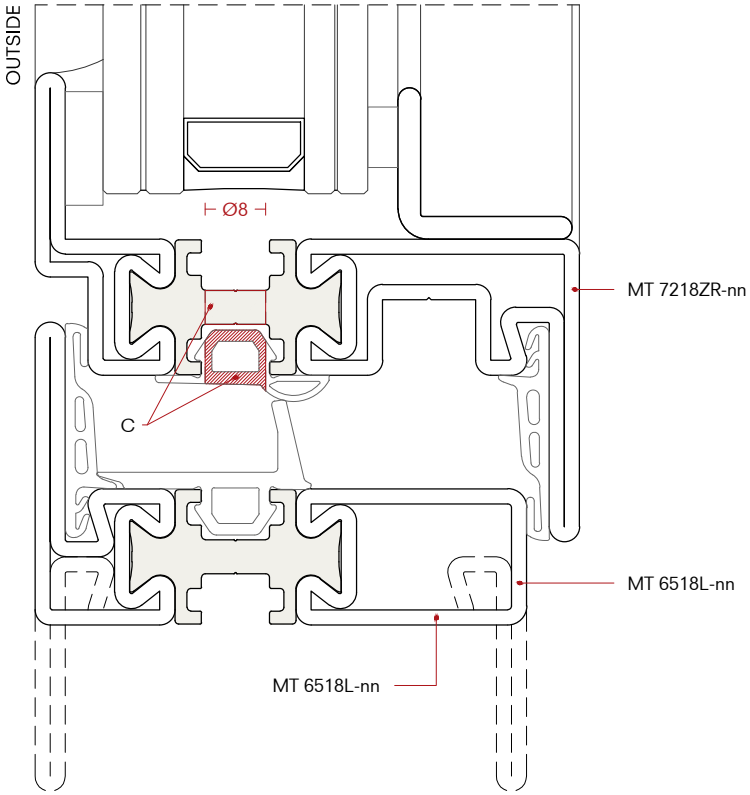


A) Cut out weatherstripping gasket G99030-60 top right and left (7x30 mm)
B) For pressure compensation, drill or punch out the window leaf and centre gasket (Ø8 mm)
C) For drainage at the bottom, drill or punch out the window leaf and centre gasket (Ø8 mm)

A) Taglio della guarnizione di battuta G99030-60 in alto a destra e sinistra (7x30 mm)
B) Per compensare la pressione forare lateralmente l'anta della finestra e la guarnizione centrale (Ø8 mm)
C) Per lo scarico dal basso, forare l'anta della finestra e la guarnizione centrale (Ø8 mm)

A) Corte de la junta de tope G99030-60 en la parte superior derecha e izquierda (7x30 mm)
B) Para compensar la presión, taladre la hoja de la ventana y la junta central lateralmente (Ø8 mm)
C) Para el drenaje desde abajo, taladre la hoja de la ventana y la junta central (Ø8 mm)

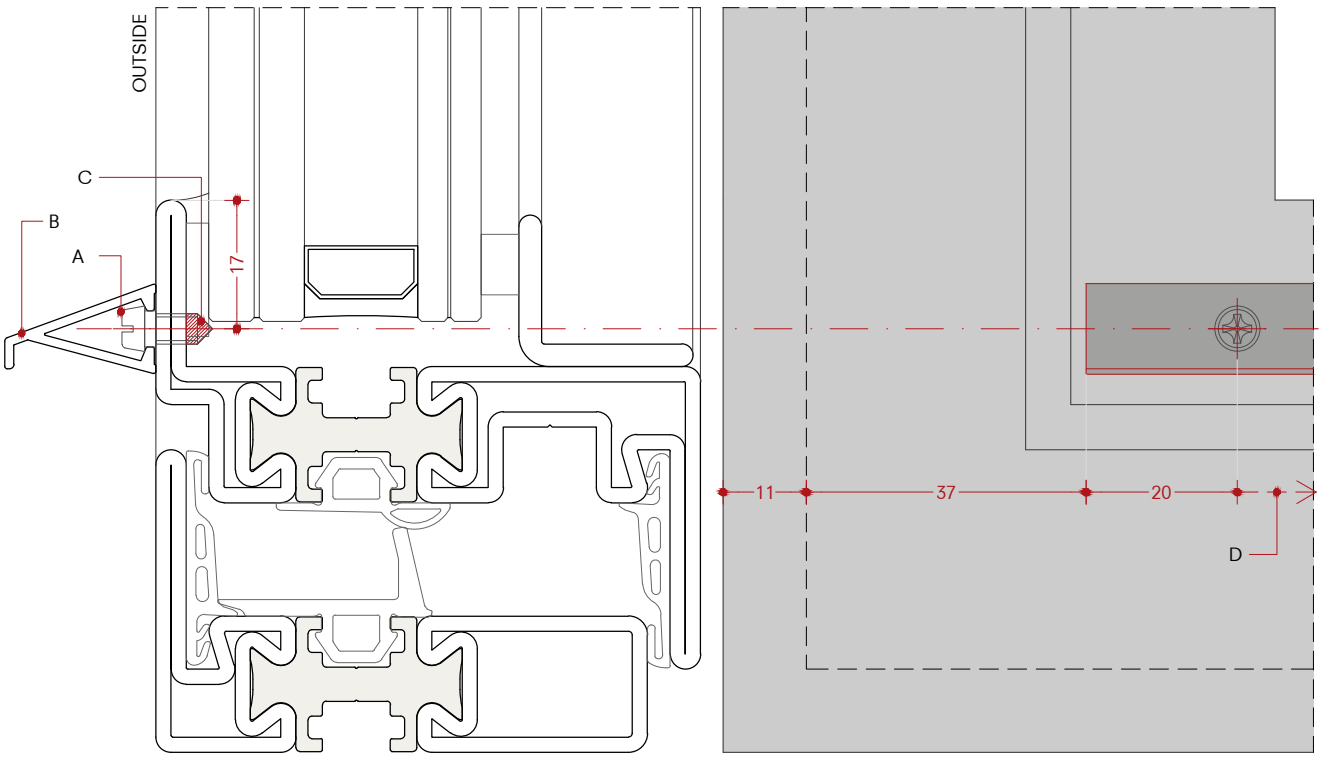

MT 6518L-nn
MT 7218ZR-nn
OUTSIDE
B
Ø8


OUTSIDE
Ø8
MT 7218ZR-nn
C
MT 6518L-nn
MT 6518L-nn

Installation
Weather bar A99001-00
Open in
Single-leaf and double-leaf windows

Montaggio
Gocciolatoio A99001-00
Apertura interna
Finestre a uno e due battenti

Montaje
Vierteaguas A99001-00
Apertura interna
Ventanas de 1 y 2 hojas



A) Fastening with screws D99901-02
B) A99001-00 weather bar
C) Cut the screw flush and paint the frame
D) Maximum pitch 240 mm

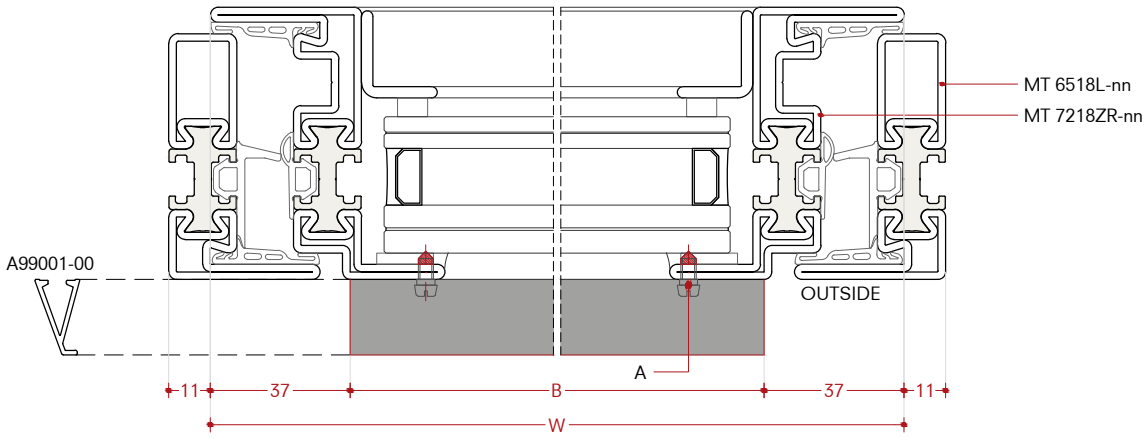
A) Fissaggio con viti D99901-02
B) Gocciolatoio A99001-00
C) Accorciare la vite in eccesso e verniciare il telaio
D) Distanza massima 240 mm

A) Fijación con tornillos D99901-02
B) Vierteaguas A99001-00
C) Recortar tornillo y pintar el marco
D) Distanza massima 240 mm

Single leaf window

Finestra anta singola

Ventana de una hoja



A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = leaf width W - 74 mm

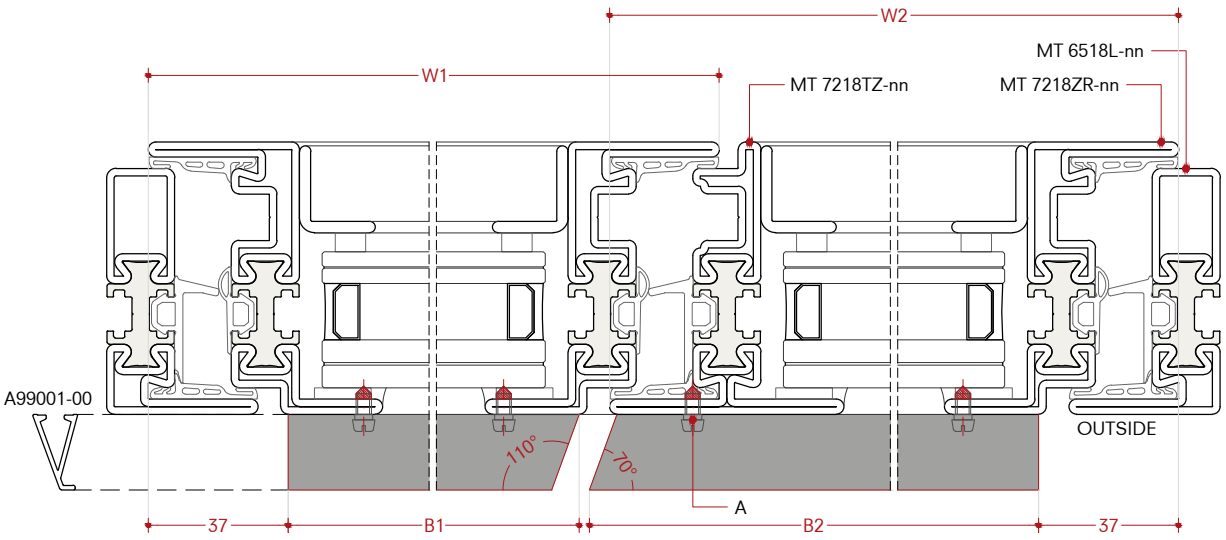
A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza anta W - 74 mm

A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de la hoja W - 74 mm

Double leaf window

Finestra doppia anta

Ventana de dos hoja



A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = leaf width W1 - 74 mm
C) Weather bar lenght = leaf width W2 - 32 mm

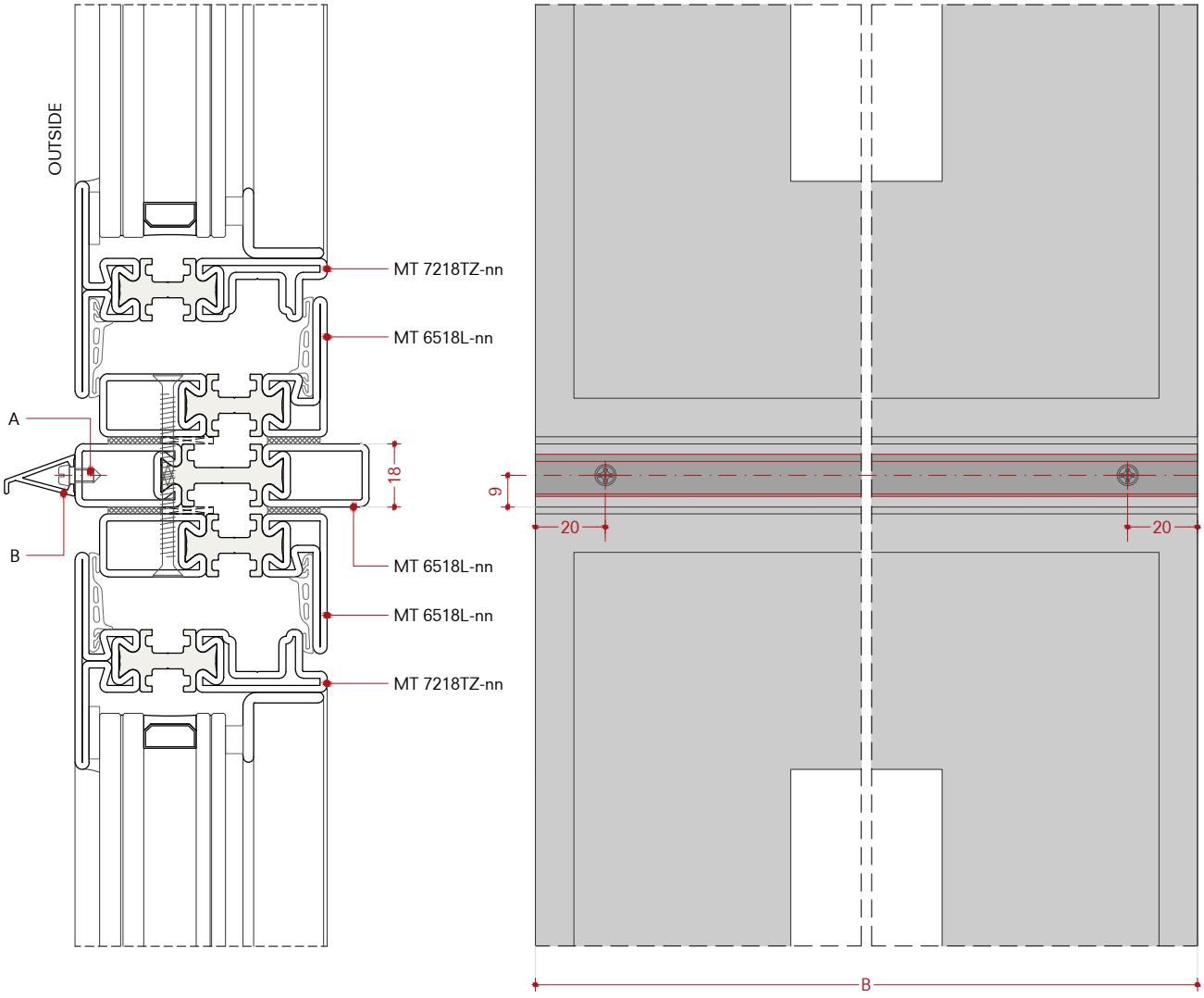
A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza anta W1 - 74 mm
C) Lunghezza gocciolatoio = larghezza anta W2 - 32 mm

A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de la hoja W1 - 74 mm
C) Largo de vierteaguas = ancho de la hoja W2 - 32 mm

Installation
Weather bar A99001-00
Open out

Montaggio
Gocciolatoio A99001-00
Apertura esterna

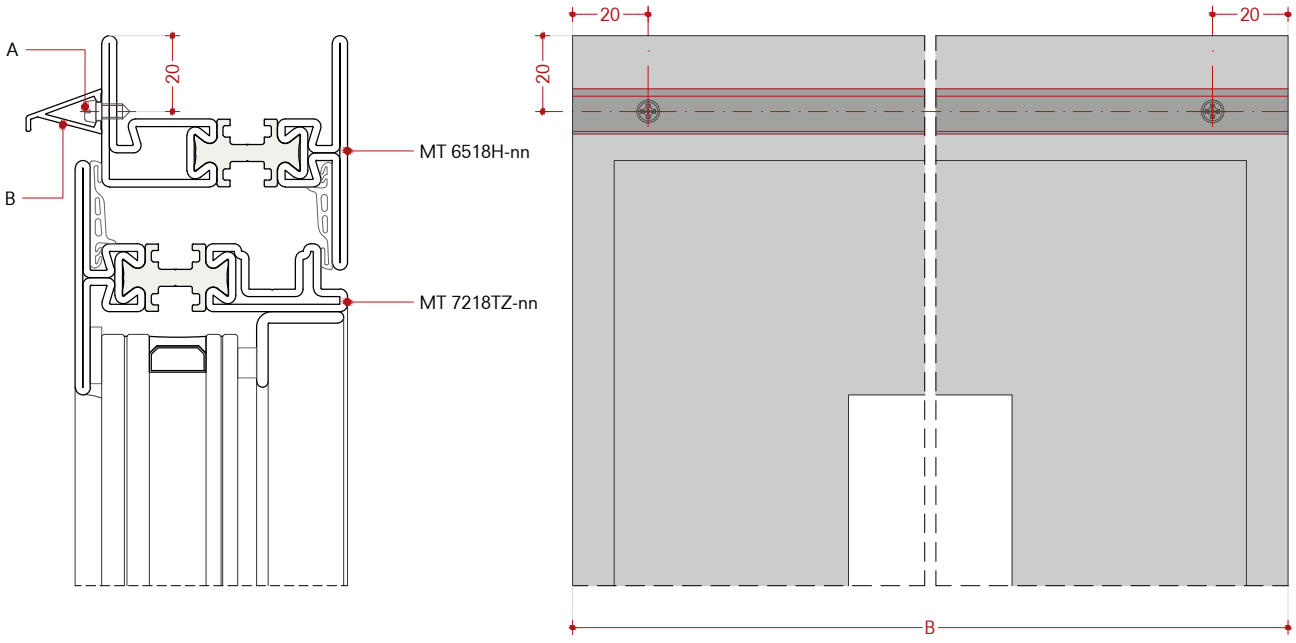
Montaje
Vierteaguas A99001-00
Apertura esterna



A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = frame width

A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza telaio

A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de marco



A) D99901-02 positioning - maximum pitch 240 mm; first D99901-02 at 20 mm from ending of the weather bar
B) Weather bar lenght = frame width

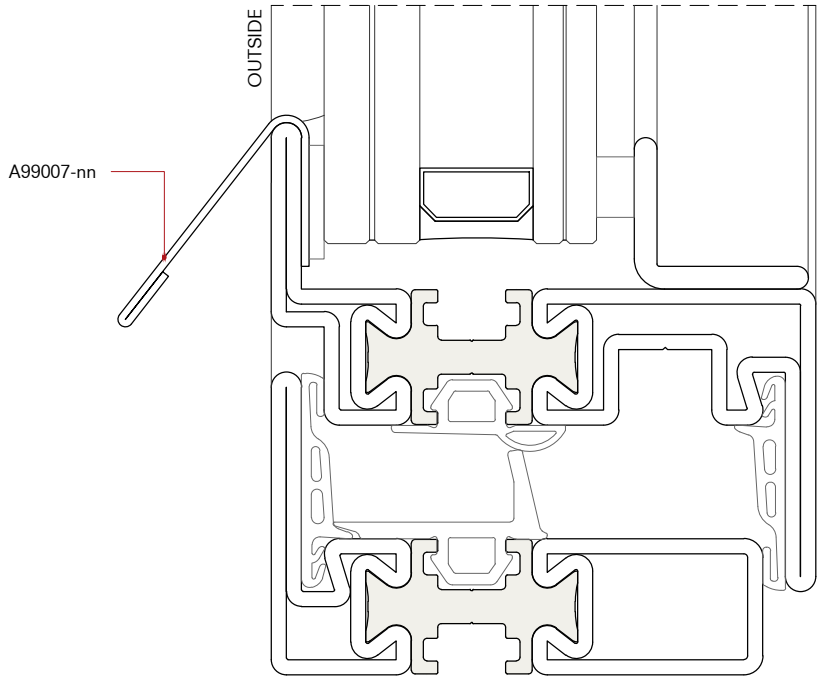
A) Posizione D99901-02 - distanza massima 240 mm; primo D99901-02 a 20 mm dalla parte terminale del gocciolatoio
B) Lunghezza gocciolatoio = larghezza telaio

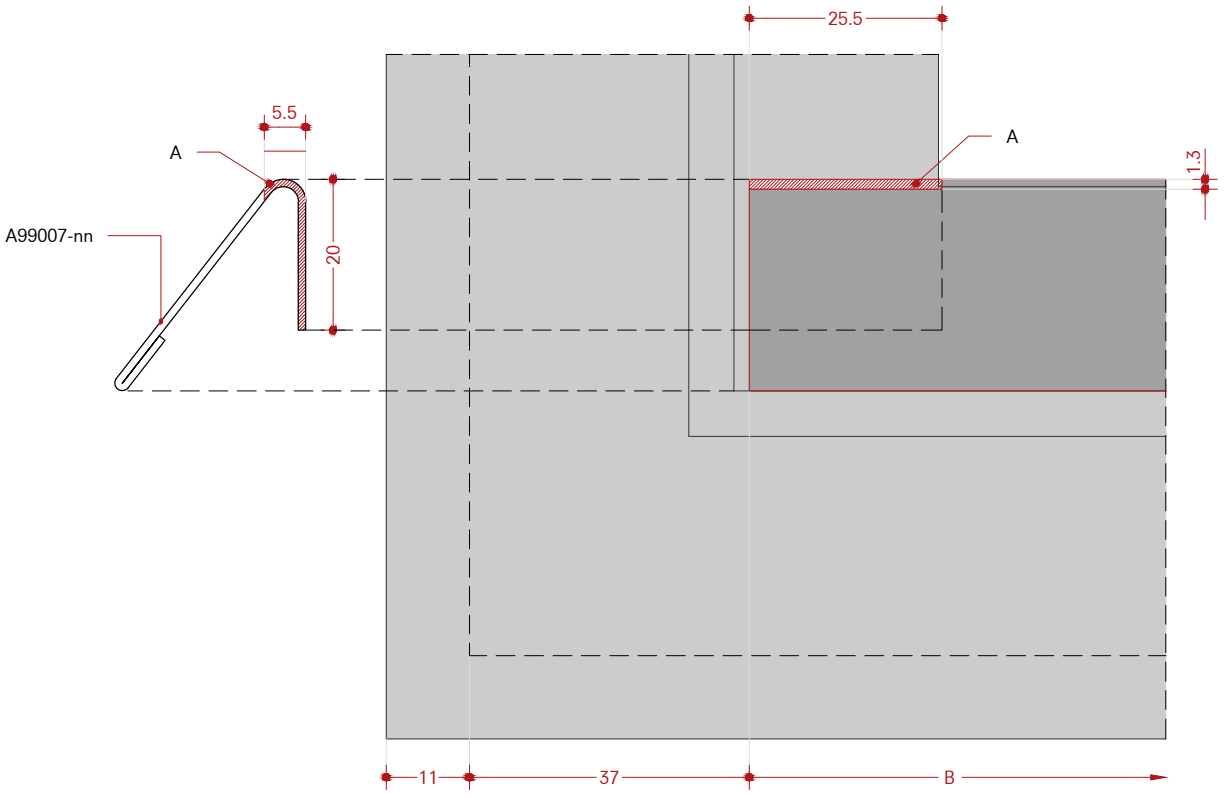
A) Posición D99901-02 - distancia máxima 240 mm; primer D99901-02 a 20 mm del final de vierteaguas
B) Largo de vierteaguas = ancho de marco

Installation
Weather bar A99007-nn
Open in
Single-leaf and double-leaf windows

Montaggio
Gocciolatoio A99007-nn
Apertura interna
Finestre a uno e due battenti

Montaje
Vierteaguas A99007-nn
Apertura interna
Ventanas de 1 y 2 hojas



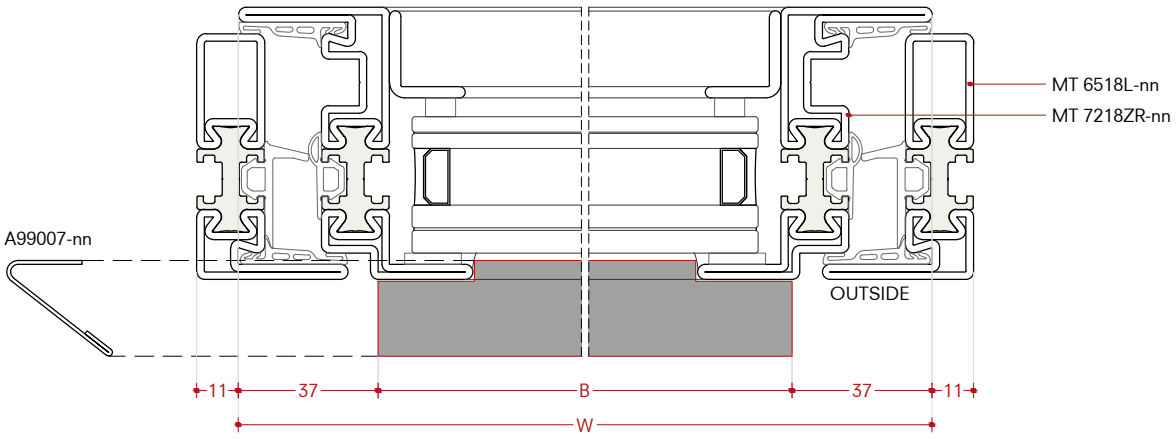


A) Cut out 25.5x5.5 mm weather bar A99007-nn
B) Cutting length

A) Fresata 25.5x5.5 mm su gocciolatoio A99007-nn
B) Lunghezza di taglio

A) Corte de 25.5x5.5 mm en vierteaguas A99007-nn
B) Longitud de corte

Single leaf window | Finestra anta singola | Ventana de una hoja

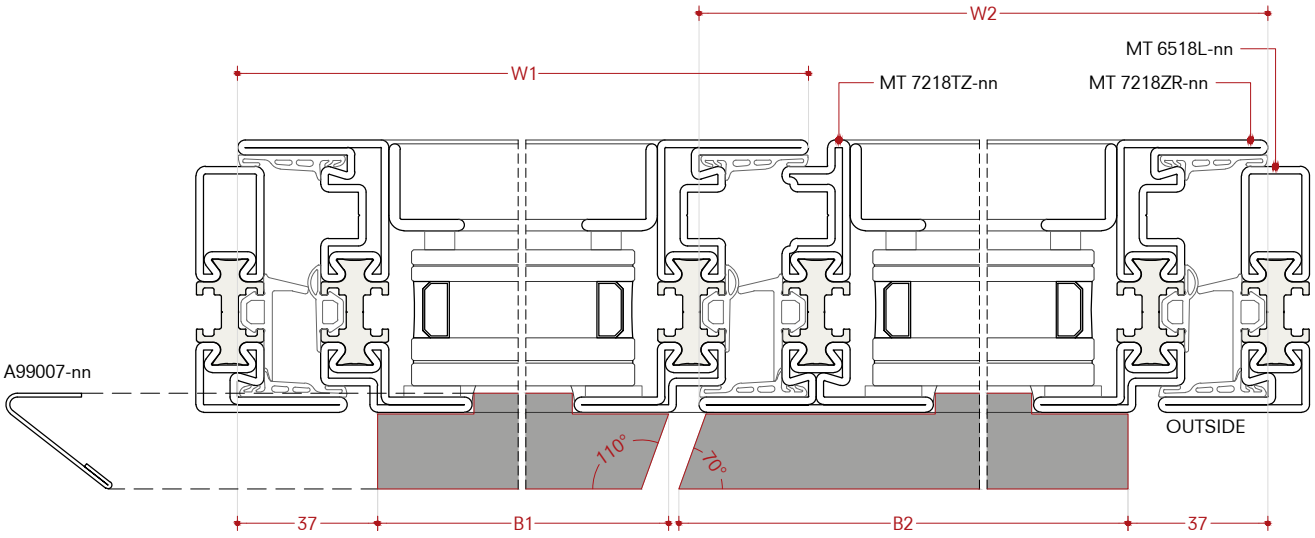


B) Weather bar lenght = leaf width W - 74 mm
W) Leaf width

B) Lunghezza gocciolatoio = larghezza anta W - 74 mm
W) Larghezza anta

B) Largo de vierteaguas = ancho de la hoja W - 74 mm
W) Ancho de la hoja

Double leaf window | Finestra doppia anta | Ventana de dos hoja



B1) Weather bar lenght = leaf width W1 - 74 mm
B2) Weather bar lenght = leaf width W2 - 32 mm

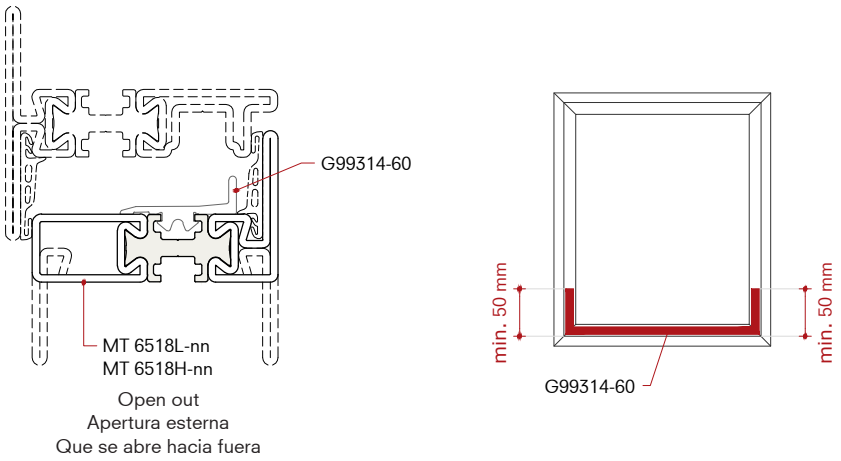
B1) Lunghezza gocciolatoio = larghezza anta W1 - 74 mm
B2) Lunghezza gocciolatoio = larghezza anta W2 - 32 mm

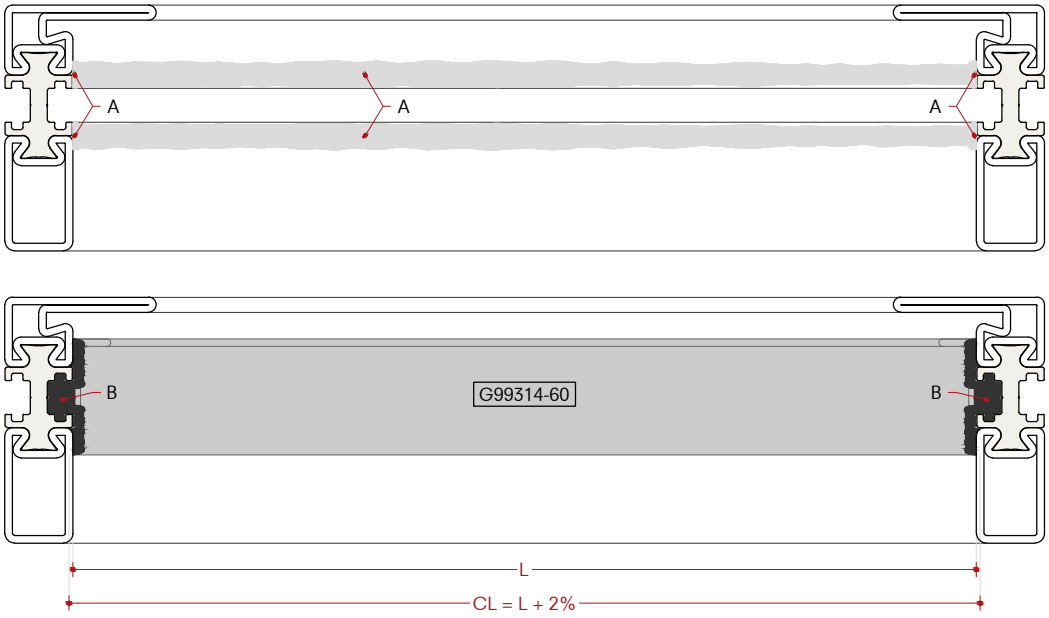
B1) Largo de vierteaguas = ancho de la hoja W1 - 74 mm
B2) Largo de vierteaguas = ancho de la hoja W2 - 32 mm

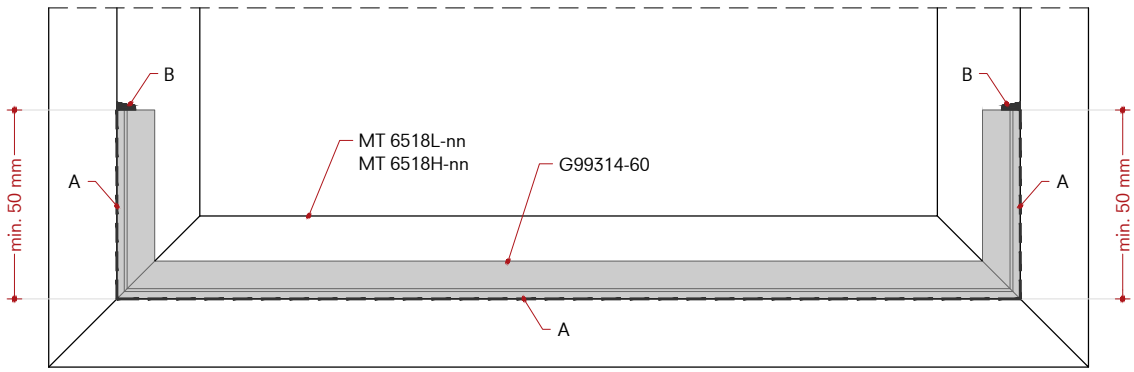
Installation
Condensate collection tray
G99314-60

Montaggio
Vaschetta raccogli condensa
G99314-60

Montaje
Bandeja de recogida de condensado
G99314-60







A) Sealant under the gasket
B) Sealant

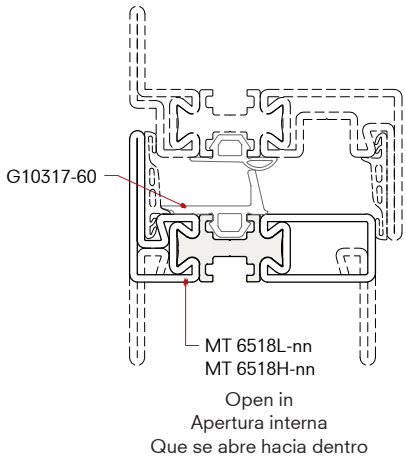
A) Sigillante sotto la guarnizione
B) Sigillante

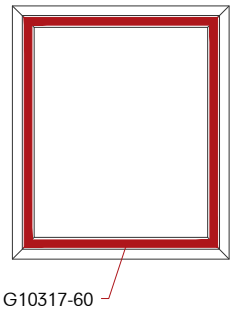
A) Agente sellante debajo de la junta
B) Agente sellante

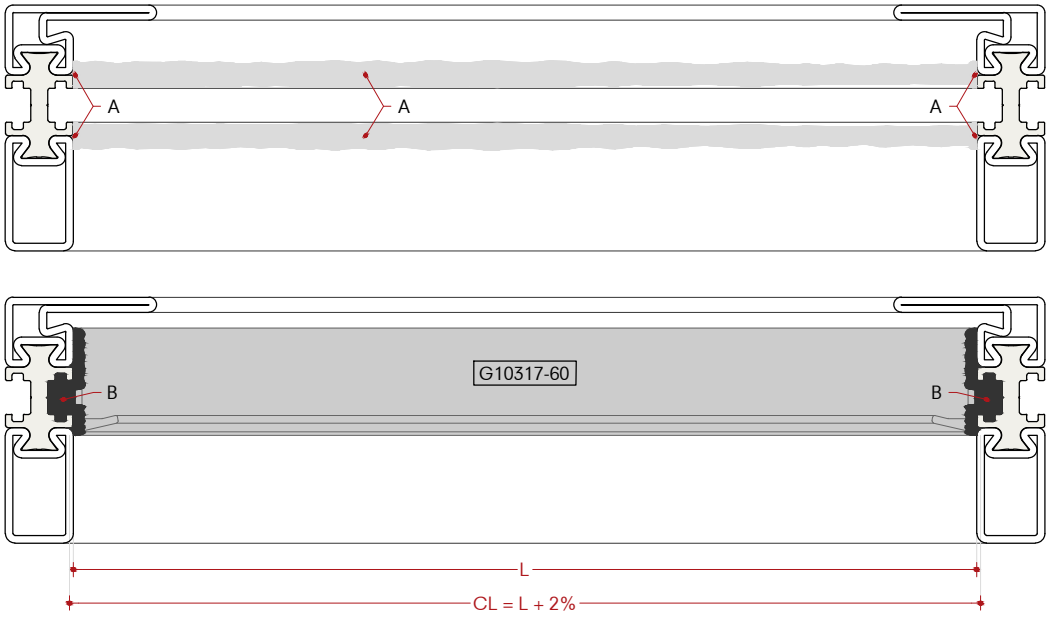
Installation
Middle stop profile G19317-60
in drainage zone

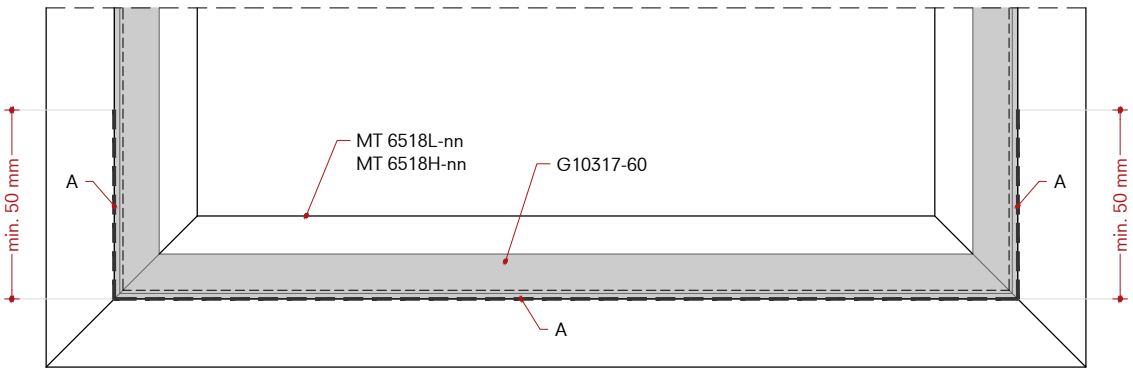
Montaggio
Guarnizione di drenaggio G10317-60

Montaje
Junta de drenaje G10317-60









Note
Install the middle stop profile G10317-60 after the rebate gasket G99030-60.

A) Sealant under the gasket
B) Sealant

Nota
Installare la guarnizione G10317-60 dopo le guarnizioni di battuta.

A) Sigillante sotto la guarnizione
B) Sigillante

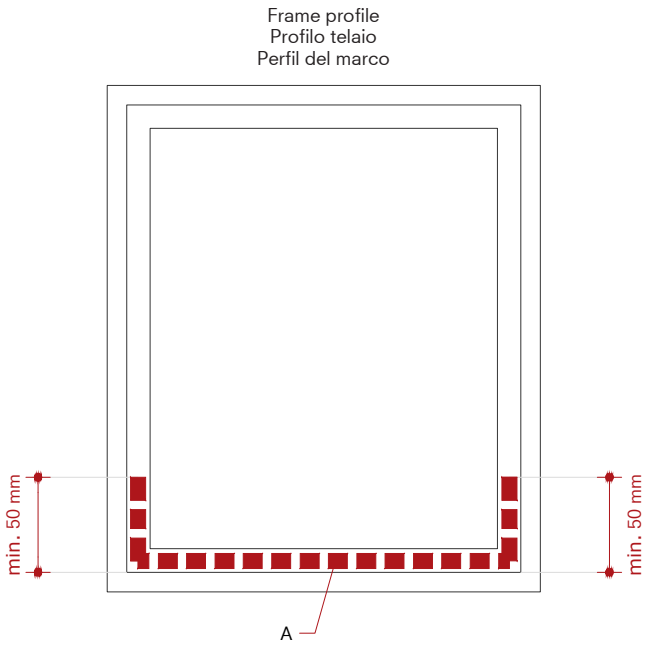
Nota
Instale la junta G10317-60 después de las juntas de tope.

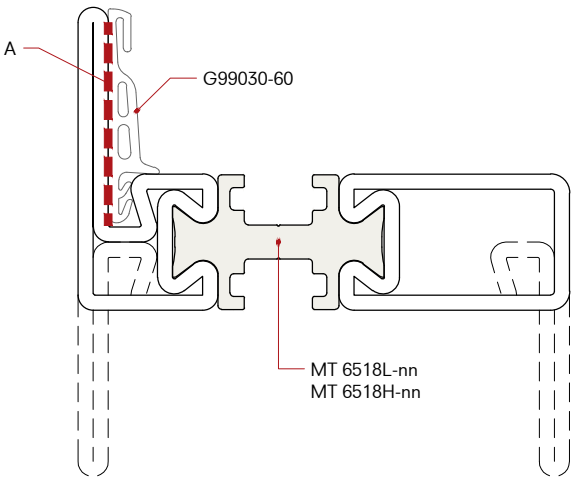
A) Agente sellante debajo de la junta
B) Agente sellante

Installation
Rebate gasket G99030-60
on frame profile

Montaggio
Guarnizione di battuta G99030-60
su profilo telaio

Montaje
Junta de tope G99030-60
en el perfil del marco





A) Sealant under the gasket also vertically at least 50 mm on both sides

A) Sigillante sotto la guarnizione anche in verticale per minimo 50 mm ambo i lati

A) Agente sellante debajo de la junta también vertical por al menos 50 mm en ambos lados

Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

Hinges **Cerniere** **Bisagras** 5.6

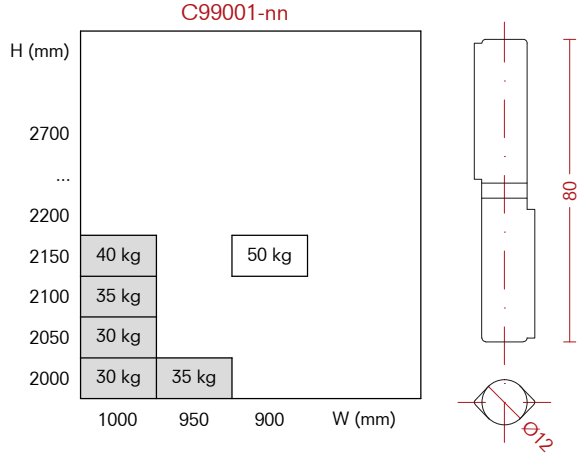
Load capacity tables
Weld-on hinges

Tabella portate
Cerniere a saldare

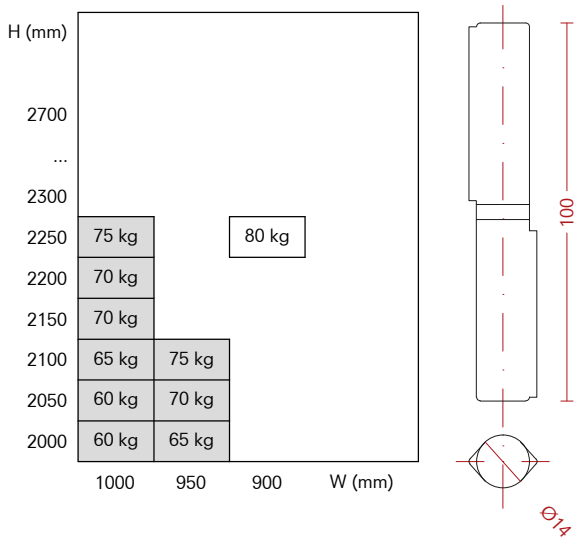
Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99001-nn	-03 Stainless steel -03 Acciaio inossidabile -03 Acero inoxidable -12 Bright steel -12 Acciaio decapato -12 Acero bruto	Ø = 12 mm	80 mm	50 kg
C99002-12	Bright steel Acciaio decapato Acero bruto	Ø = 14 mm	100 mm	80 kg
C99003-12	Bright steel Acciaio decapato Acero bruto	Ø = 16 mm	120 mm	100 kg
C99004-12	Bright steel Acciaio decapato Acero bruto	Ø = 16 mm	140 mm	140 kg

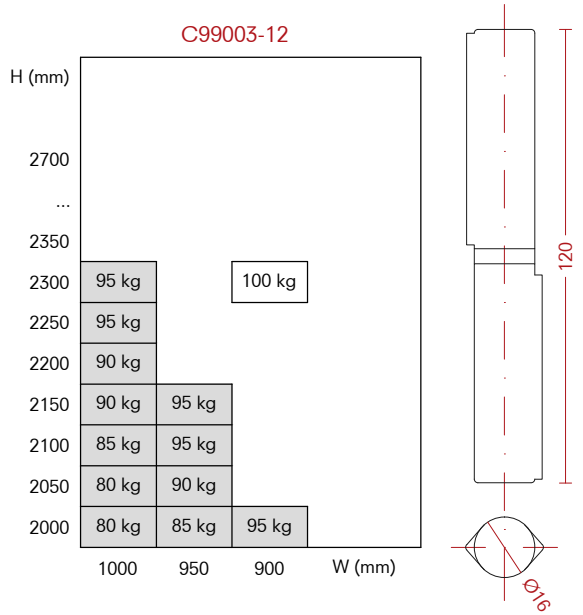
C99001-nn



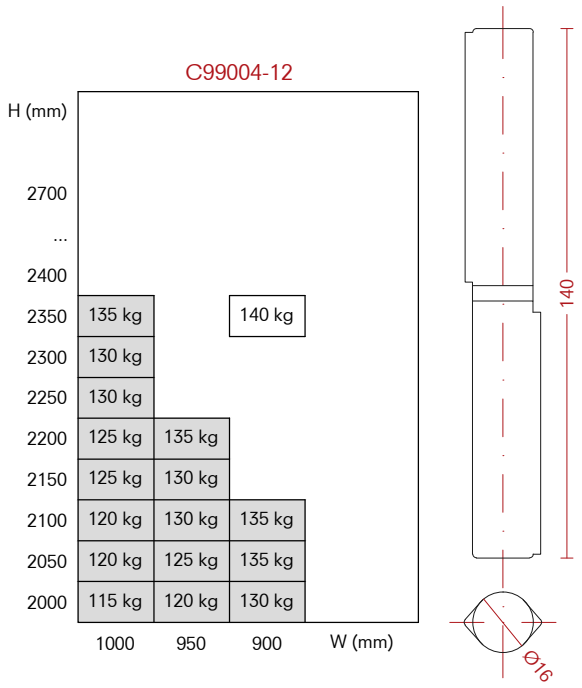
C99002-12

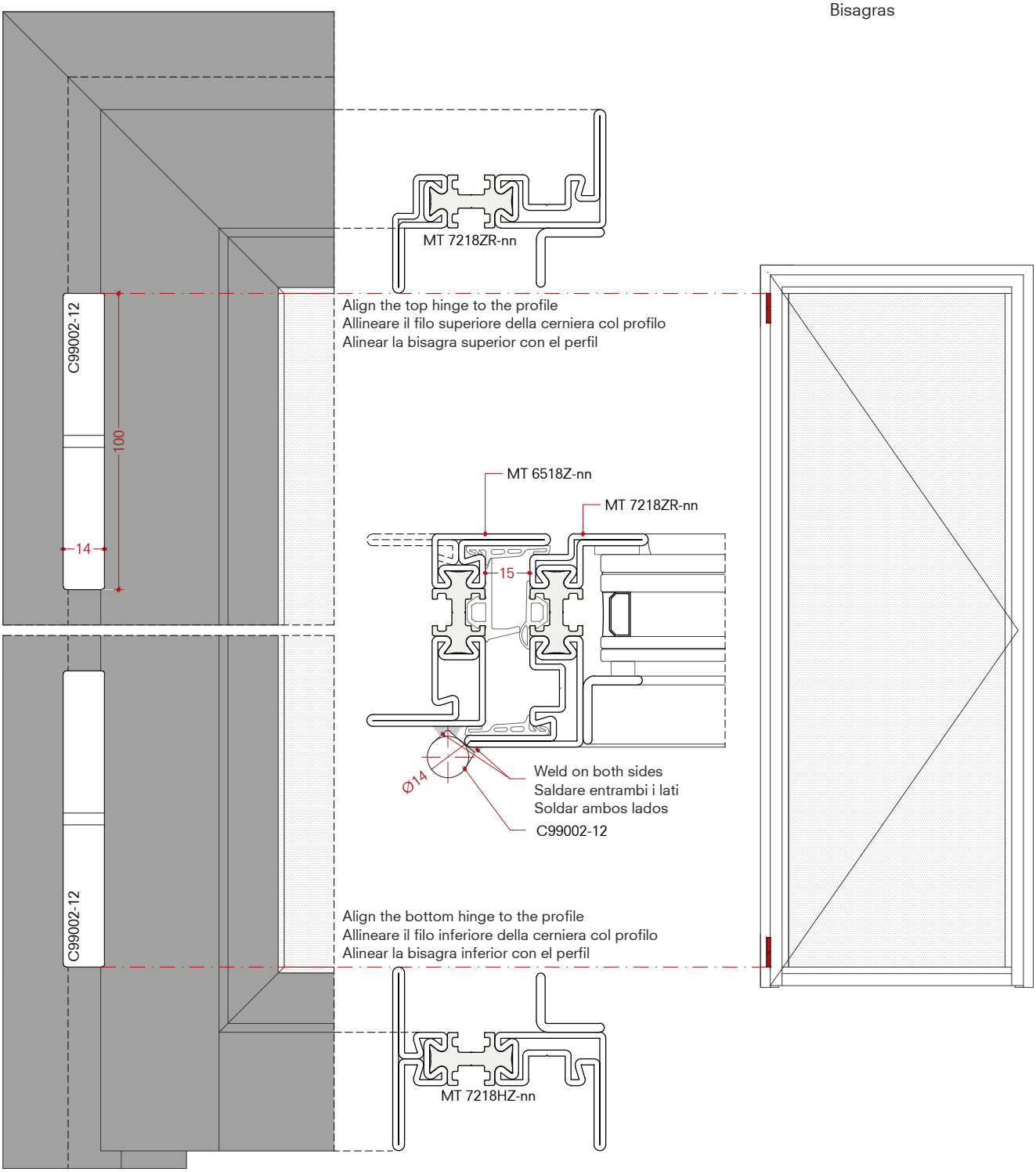


C99003-12



C99004-12





Note

For smaller sash heights two hinges are sufficient. From a sash height ≥ 2200 mm, 3 hinges must be used.

When welding, care must be taken to avoid overheating the profiles. We recommend the use of heat sinks located in close proximity of the welded area, as well as to proceed in small segment, always waiting forthe profile to cool down. The heat generated during welding of profiles and hinges must be dissipated using brass, copper and aluminium welding attachments. Keep minimum 3 mm distance from welding seam to polyamide web.

Nota

Per altezze di anta inferiori sono sufficienti due cerniere. A partire da un'altezza dell'anta ≥ 2200 mm devono essere utilizzate 3 cerniere.

Durante la saldatura occorre prestare attenzione a non surriscaldare eccessivamente i profili. Consigliamo l'utilizzo di dissipatori di calore posizionati nelle immediate vicinanze della zona interessata dalla saldatura, di procedere per tratti e attendere che il profilo si raffreddi prima di terminare l'operazione. Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio. Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

Nota

Para alturas de hoja más pequeñas, dos bisagras son suficientes. A partir de una altura de hoja ≥ 2200 mm, se deben utilizar 3 bisagras.

Durante la soldadura, se debe tener cuidado de no sobrecalentar los perfiles. Recomendamos el uso de disipadores en las inmediaciones del área afectada por la soldadura, proceder por tramos y esperar a que el perfil seenfríe antes de finalizar la operación. El calor generado durante la soldadura de perfiles y bisagras se debe disipar utilizando accesorios de soldadura de latón, cobre y aluminio. Mantenga una distancia mínima de 3 mm desde la costura de soldadura hasta la banda de poliamida.

Load capacity tables
Weld-on hinges

Tabella portate
Cerniere a saldare

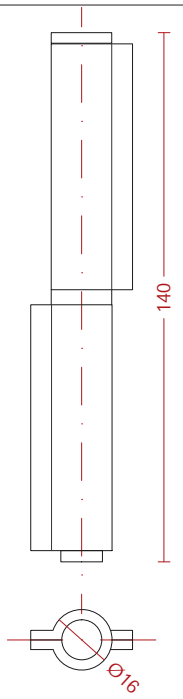
Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99005-02	Galvanized steel Acciaio zincato Acero galvanizado	Ø = 16 mm	140 mm	200 kg
C99006-nn	-02 Galvanized steel -02 Acciaio zincato -02 Acero galvanizado -03 Stainless steel -03 Acciaio inossidabile -03 Acero inoxidable	Ø = 12 mm	83 mm	100 kg
C99007-02	Galvanized steel Acciaio zincato Acero galvanizado	Ø = 16 mm	140 mm	230 kg

C99005-02

H (mm)	1000	950	900	850
2700				
...				
2400	195 kg			200 kg
2350	190 kg			
2300	185 kg			
2250	185 kg	195 kg		
2200	180 kg	190 kg		
2150	180 kg	185 kg		
2100	170 kg	185 kg	195 kg	
2050	165 kg	185 kg	190 kg	
2000	165 kg	170 kg	185 kg	195 kg

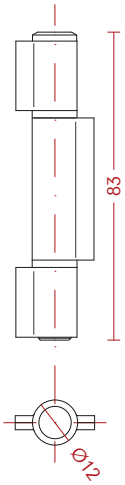
W (mm)



C99006-nn

H (mm)	1000	950	900	850
2700				
...				
2400	95 kg			100 kg
2350	95 kg			
2300	95 kg			
2250	90 kg	95 kg		
2200	90 kg	95 kg		
2150	90 kg	95 kg		
2100	85 kg	90 kg	95 kg	
2050	85 kg	90 kg	95 kg	
2000	80 kg	85 kg	90 kg	95 kg

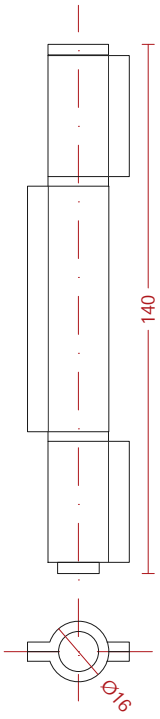
W (mm)

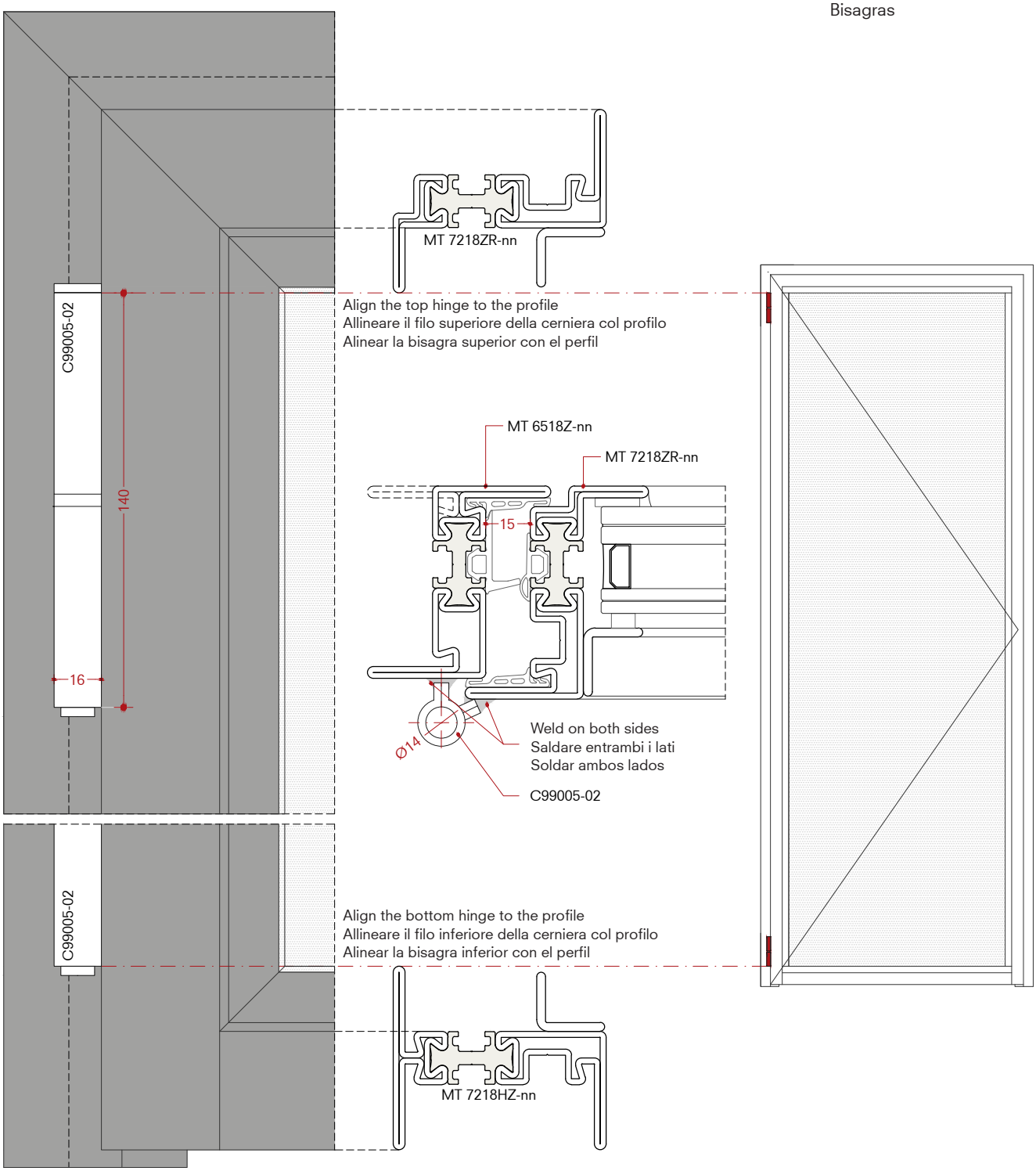


C99007-02

H (mm)	1000	950	900	850
2700				
...				
2450	225 kg			230 kg
2400	225 kg			
2350	220 kg			
2300	215 kg	225 kg		
2250	215 kg	225 kg		
2200	210 kg	220 kg		
2150	210 kg	215 kg	225 kg	
2100	200 kg	215 kg	225 kg	
2050	195 kg	215 kg	220 kg	225 kg
2000	195 kg	200 kg	215 kg	225 kg

W (mm)





Note

For smaller sash heights two hinges are sufficient. From a sash height ≥ 2200 mm, 3 hinges must be used.

When welding, care must be taken to avoid overheating the profiles. We recommend the use of heat sinks located in close proximity of the welded area, as well as to proceed in small segment, always waiting forthe profile to cool down. The heat generated during welding of profiles and hinges must be dissipated using brass, copper and aluminium welding attachments. Keep minimum 3 mm distance from welding seam to polyamide web.

Nota

Per altezze di anta inferiori sono sufficienti due cerniere. A partire da un'altezza dell'anta ≥ 2200 mm devono essere utilizzate 3 cerniere.

Durante la saldatura occorre prestare attenzione a non surriscaldare eccessivamente i profili. Consigliamo l'utilizzo di dissipatori di calore posizionati nelle immediate vicinanze della zona interessata dalla saldatura, di procedere per tratti e attendere che il profilo si raffreddi prima di terminare l'operazione. Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio. Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

Nota

Para alturas de hoja más pequeñas, dos bisagras son suficientes. A partir de una altura de hoja ≥ 2200 mm, se deben utilizar 3 bisagras.

Durante la soldadura, se debe tener cuidado de no sobrecalentar los perfiles. Recomendamos el uso de disipadores en las inmediaciones del área afectada por la soldadura, proceder por tramos y esperar a que el perfil seenfríe antes de finalizar la operación. El calor generado durante la soldadura de perfiles y bisagras se debe disipar utilizando accesorios de soldadura de latón, cobre y aluminio. Mantenga una distancia mínima de 3 mm desde la costura de soldadura hasta la banda de poliamida.

Load capacity tables
Weld-on hinges

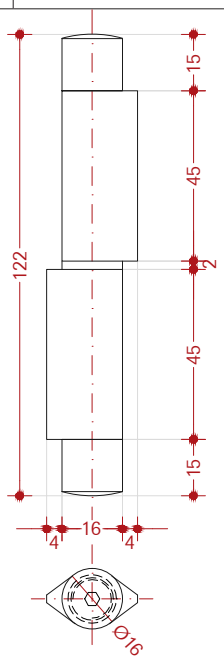
Tabella portate
Cerniere a saldare

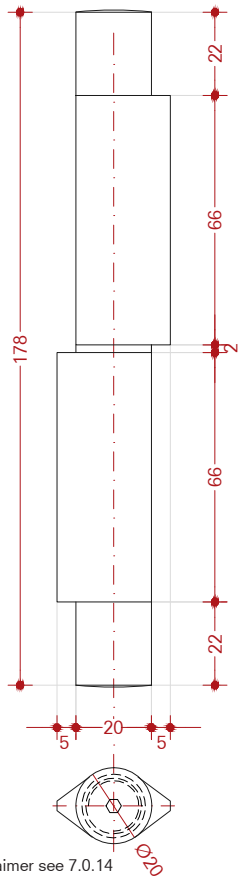
Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99008-04 C99008-12 ADJUSTABLE 3D REGOLABILE 3D 3D AJUSTABLE	-04 Stainless steel -04 Acciaio inox -04 Acero inoxidable -12 Bright steel -12 Acciaio decapato -12 Acero bruto	Ø = 16 mm	122 mm	160 kg
C99009-04 C99009-12 ADJUSTABLE 3D REGOLABILE 3D 3D AJUSTABLE	-04 Stainless steel -04 Acciaio inox -04 Acero inoxidable -12 Bright steel -12 Acciaio decapato -12 Acero bruto	Ø = 20 mm	178 mm	210 kg

C99008-nn

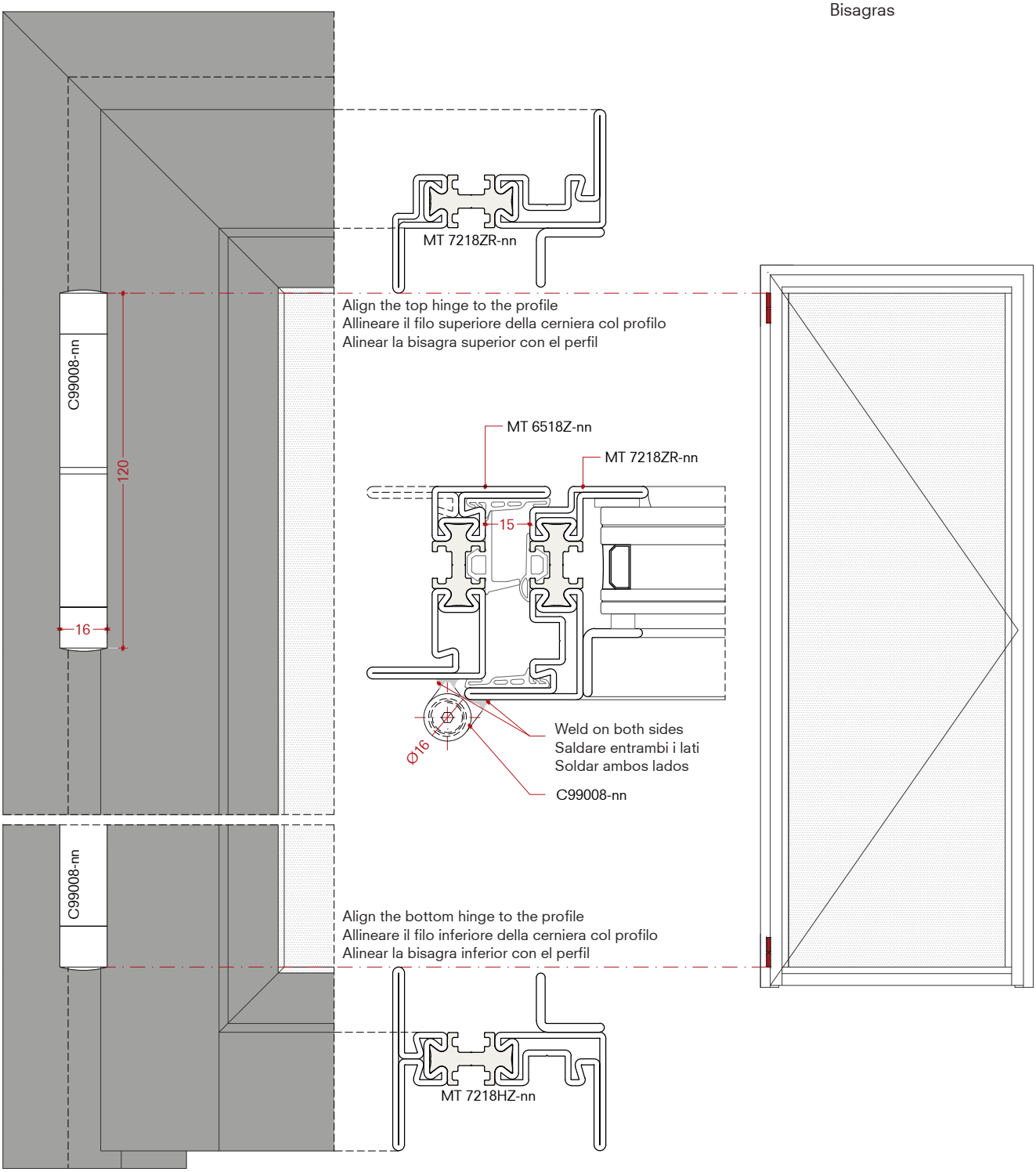
H (mm)	1000	900	800	700	600	W (mm)
2800	155 kg				160 kg	
2700	150 kg					
2600	145 kg	155 kg				
2500	140 kg	150 kg				
2400	135 kg	145 kg	155 kg			
2300	130 kg	140 kg	150 kg			
2200	125 kg	135 kg	145 kg	155 kg		
2100	120 kg	130 kg	140 kg	150 kg		
2000	115 kg	125 kg	135 kg	145 kg	155 kg	
1900	110 kg	120 kg	130 kg	140 kg	150 kg	
1800	100 kg	115 kg	125 kg	135 kg	145 kg	





C99009-nn

H (mm)	1000	900	800	700	600	W (mm)
2800	188 kg				210 kg	
2700	180 kg					
2600	180 kg	188 kg				
2500	173 kg	180 kg				
2400	165 kg	180 kg	188 kg			
2300	158 kg	173 kg	188 kg			
2200	158 kg	165 kg	180 kg	195 kg		
2100	158 kg	165 kg	180 kg	195 kg		
2000	150 kg	158 kg	173 kg	188 kg	210 kg	
1900	143 kg	158 kg	165 kg	180 kg	202 kg	
1800	135 kg	150 kg	158 kg	173 kg	195 kg	



Note

For smaller sash heights two hinges are sufficient. From a sash height ≥ 2200 mm, 3 hinges must be used.

When welding, care must be taken to avoid overheating the profiles. We recommend the use of heat sinks located in close proximity of the welded area, as well as to proceed in small segment, always waiting forthe profile to cool down. The heat generated during welding of profiles and hinges must be dissipated using brass, copper and aluminium welding attachments. Keep minimum 3 mm distance from welding seam to polyamide web.

Nota

Per altezze di anta inferiori sono sufficienti due cerniere. A partire da un'altezza dell'anta ≥ 2200 mm devono essere utilizzate 3 cerniere.

Durante la saldatura occorre prestare attenzione a non surriscaldare eccessivamente i profili. Consigliamo l'utilizzo di dissipatori di calore posizionati nelle immediate vicinanze della zona interessata dalla saldatura, di procedere per tratti e attendere che il profilo si raffreddi prima di terminare l'operazione. Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio. Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

Nota

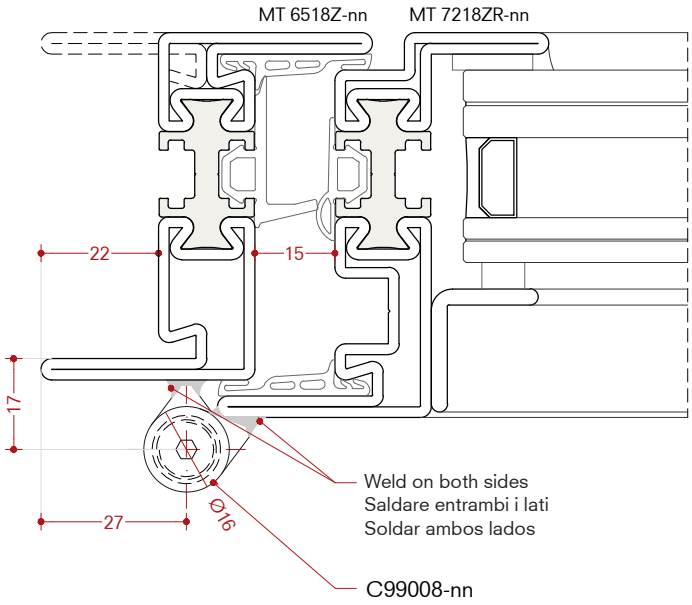
Para alturas de hoja más pequeñas, dos bisagras son suficientes. A partir de una altura de hoja ≥ 2200 mm, se deben utilizar 3 bisagras.

Durante la soldadura, se debe tener cuidado de no sobrecalentar los perfiles. Recomendamos el uso de disipadores en las inmediaciones del área afectada por la soldadura, proceder por tramos y esperar a que el perfil seenfríe antes de finalizar la operación. El calor generado durante la soldadura de perfiles y bisagras se debe disipar utilizando accesorios de soldadura de latón, cobre y aluminio. Mantenga una distancia mínima de 3 mm desde la costura de soldadura hasta la banda de poliamida.

Installation
Adjustable 3D weld-on hinge
C99008-nn

Montaggio
Cerniera 3D regolabile a saldare
C99008-nn

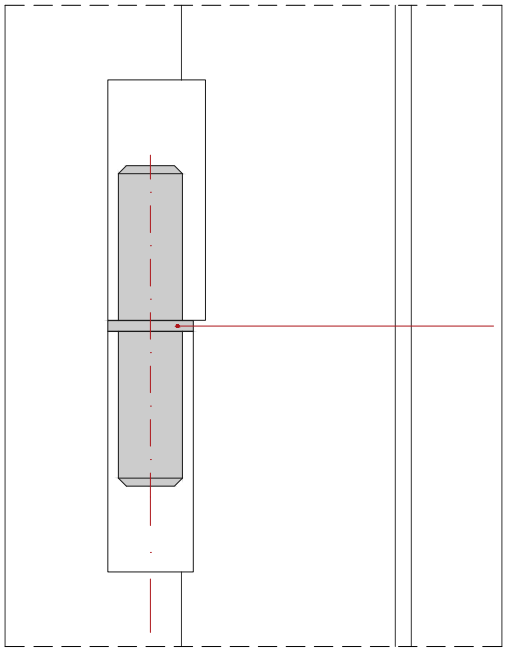
Montaje
Bisagra ajustable 3D para soldar
C99008-nn



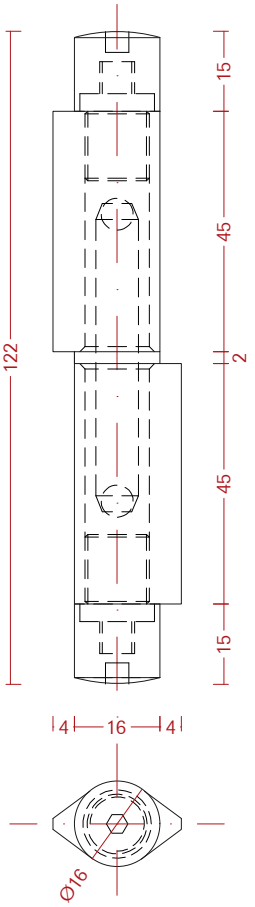
The hinge may only be welded on without brass bushings.

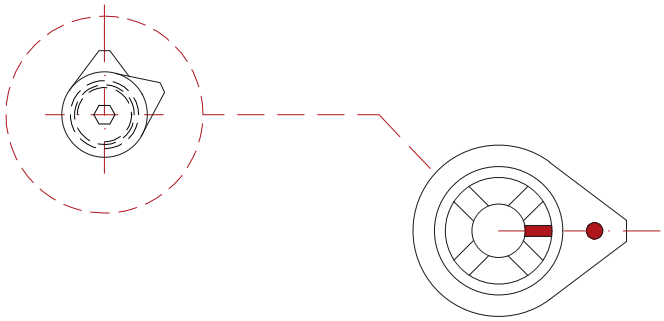
La cerniera deve essere saldata senza boccole in ottone.

la bisagra solo se puede soldar sin casquillos.



Alignment pin for welding
(D99401-03, not included)
Spina di allineamento per saldare
(D99401-03, non incluso)
Perno de alineación para soldadura
(D99401-03, no incluido)





To adjust the brass bushing, use the D99501-03 adjusting tool. Adjust the top and bottom hinge before hooking the sash.

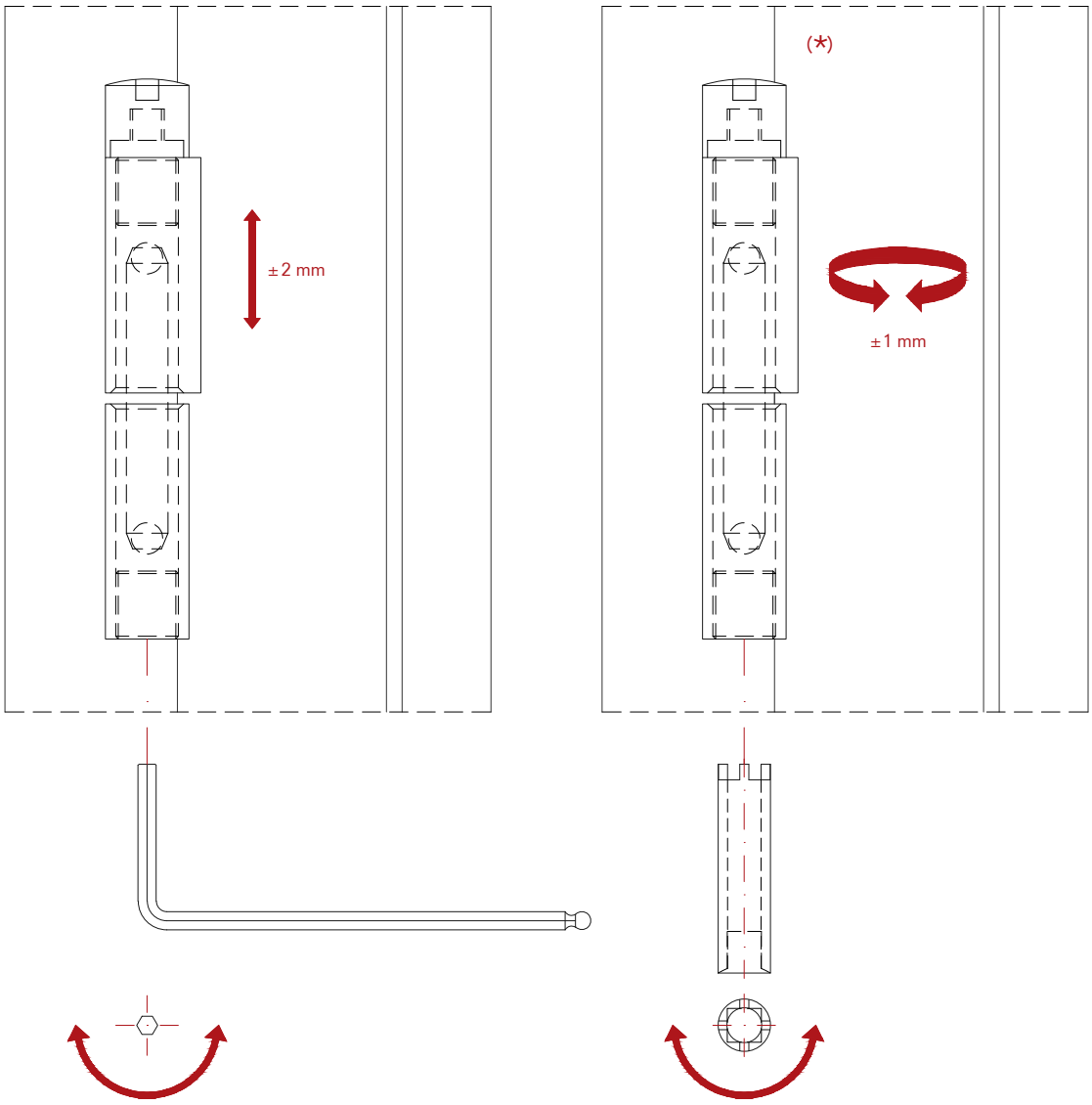
Per regolare la bussola in ottone utilizzare la chiave di regolazione D99501-03. Regolare la cerniera superiore e inferiore prima di agganciare il battente.

Para ajustar el casquillo de bronce, usar la llave de ajuste D99501-03. Ajustar bisagra superior e inferior antes de enganchar la hoja.

Setting on site

Regolazione in cantiere

Ajuste in situ



Use an allen key (4 mm, not included) for the upward and downward setting	Use 1/4" allen key adjusting tool D99501-03 (Not included) for left and right setting
Utilizzare una chiave a brugola (4 mm, non inclusa) per la regolazione verso l'alto e verso il basso	Per la regolazione destra e sinistra utilizzare una chiave da 1/4" su D99501-03 (non inclusa)
Use la llave allen (4 mm, no incluida) para el ajuste hacia arriba y hacia abajo	Para el ajuste a izquierda y a derecha use una llave allen 1/4" en D99501-03 (no incluido)

Note:

(*) After the installation mount all of the parts of the hinges to stop the adjustments and fix the caps.

Nota:

(*) Dopo l'installazione montare tutte le parti delle cerniere, bloccare le regolazioni e fissare i tappi.

Nota:

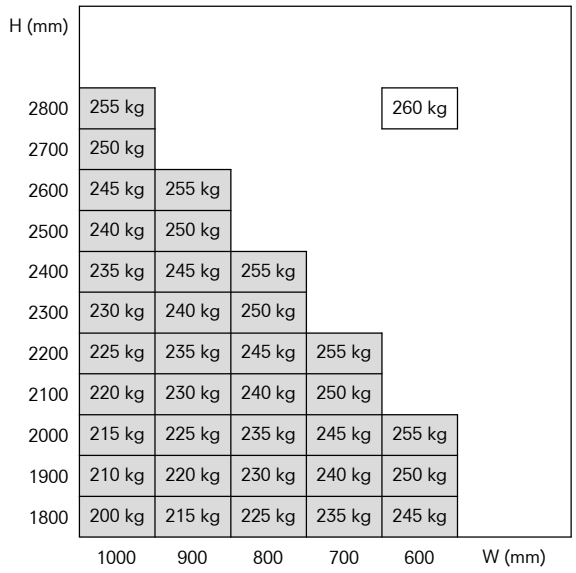
(*) Después de la instalación, monte todas las partes de las bisagras para detener los ajustes y arregla las tapas.

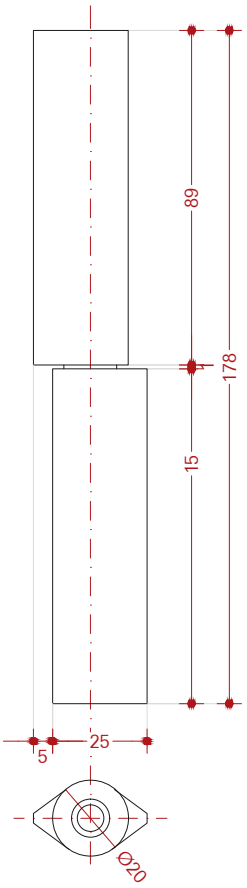
Load capacity tables
Weld-on hinges

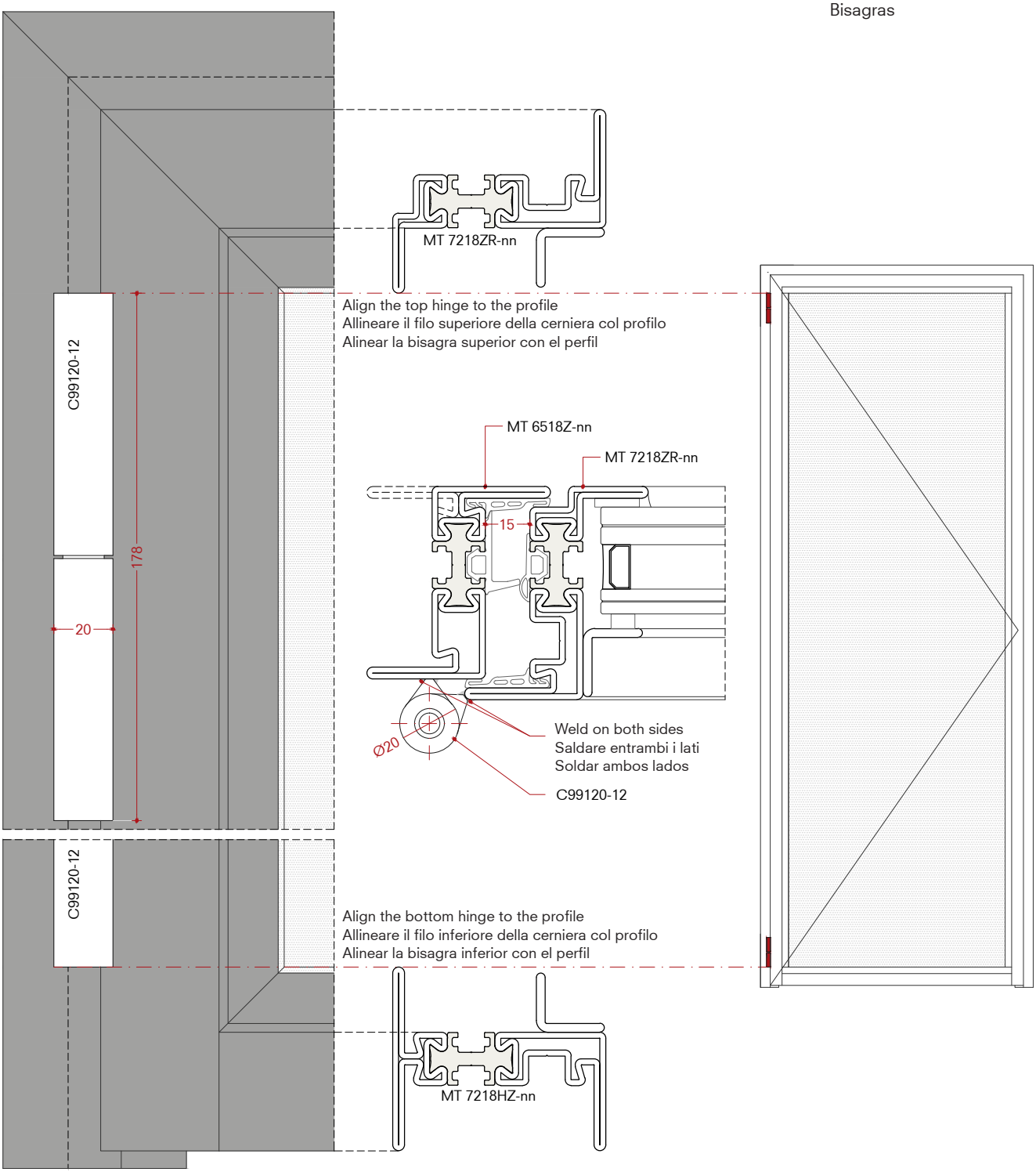
Tabella portate
Cerniere a saldare

Tablas de peso
Bisagras de soldadura

	Material Materiale Material	Diameter Diametro Diámetro	Length Lunghezza Longitud	Capacity (pair) Portata (coppia) Capacidad (par)
C99120-12	-12 Bright steel -12 Acciaio decapato -12 Acero bruto	Ø = 20 mm	178 mm	260 kg







Note

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Nota

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Durante la saldatura occorre prestare attenzione a non surriscaldare eccessivamente i profili. Consigliamo l'utilizzo di dissipatori di calore posizionati nelle immediate vicinanze della zona interessata dalla saldatura, di procedere per tratti e attendere che il profilo si raffreddi prima di terminare l'operazione. Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio. Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

Nota

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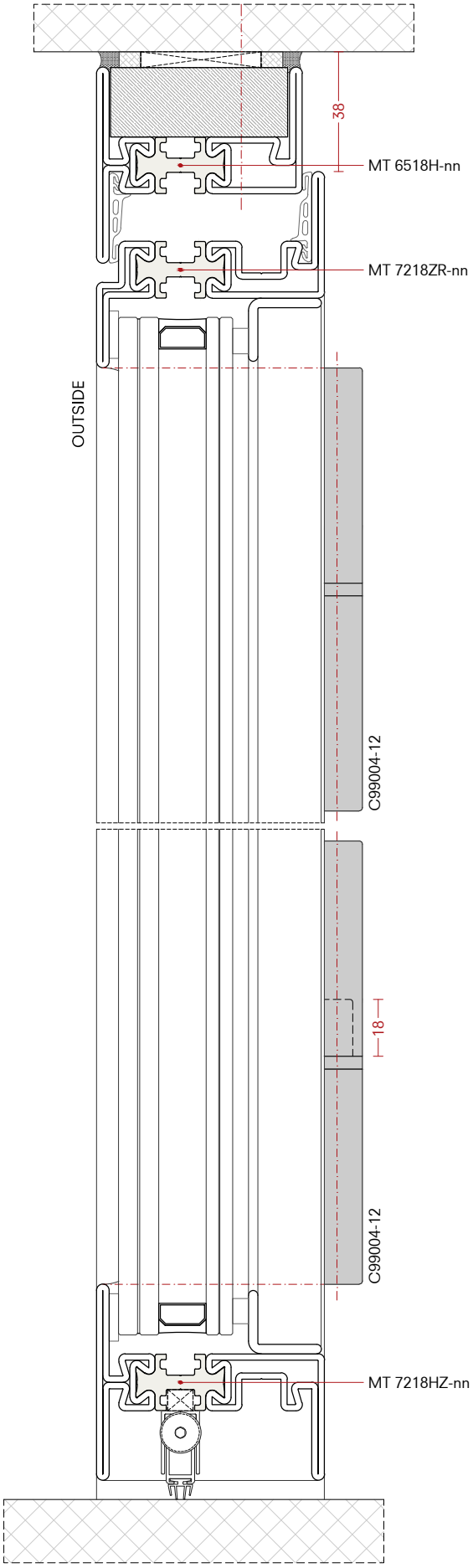
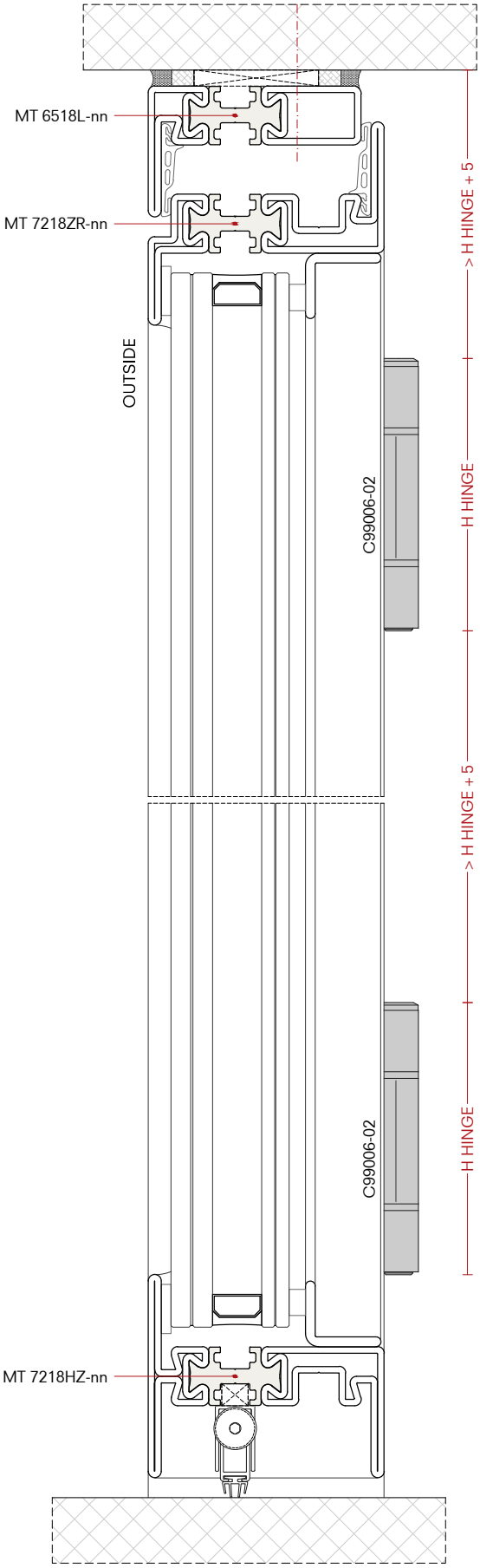


For weld-on hinges C99001-nn,
C99002-12, C99003-12 and C99004-12, please use a frame extension (top)
E.G. MT 6518H-nn to unhook the leaf after installing.

In caso di montaggio "in luce", per cerniere a saldare C99001-nn, C99002-12, C99003-12 e C99004-12, utilizzare un profilo di sezione maggiorata (in alto)
Per esempio MT 6518H-nn per rimuovere l'anta dopo l'installazione.

Para bisagras soldables C99001-nn,
C99002-12, C99003-12 y C99004-12,
use una extensión de marco (arriba)
P.Ej. MT 6518H-nn para desenganchar la hoja después de la instalación.



Leave at least H hinges + 5 mm
on top to remove the pin and the leaf.
Hinges code: C99005-02, C99006-02, C99007-02

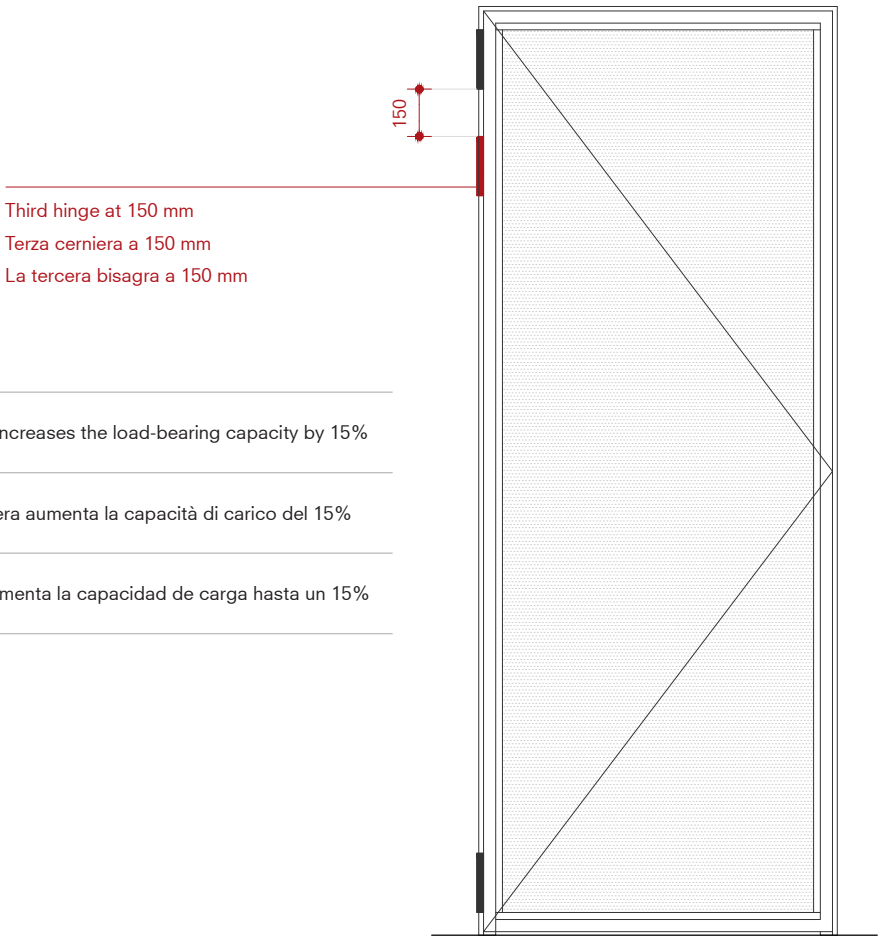
Lasciare almeno 5 mm in più rispetto all'altezza
delle cerniere per poter rimuovere il perno e l'anta.
Codice cerniere: C99005-02, C99006-02, C99007-02

Deje al menos las bisagras + 5 mm
en la parte superior para retirar el pin y la ala.
Código de bisagras: C99005-02, C99006-02, C99007-02

Rules for third hinge

Regole per la terza cerniera

Normas para tercera bisagra



Third hinge at 150 mm
Terza cerniera a 150 mm
La tercera bisagra a 150 mm

The third hinge increases the load-bearing capacity by 15%

La terza cerniera aumenta la capacità di carico del 15%

La 3ª bisagra aumenta la capacidad de carga hasta un 15%

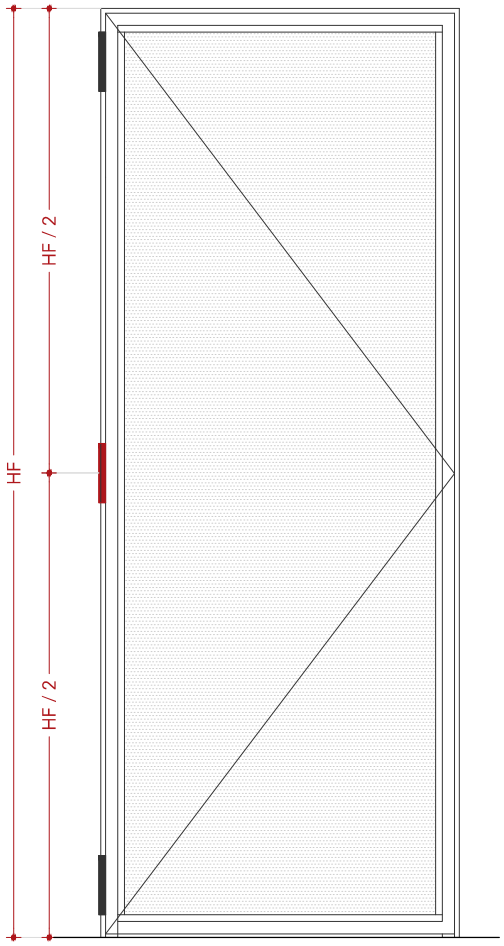
Use the third hinge if:
Terza cerniera consigliata in caso di:
Usar 3ª bisagra en los siguientes casos:

A	Doors equipped with overhead door closer Porte dotate di chiudiporta superiore Puertas equipadas con cierre en parte superior
B	Doors with panic bar (EN1125) Porte con maniglione antipanico (EN1125) Puertas con barra anti pánico (EN1125)
C	Doors for intensive uses (schools, hospitals, ...) Porte ad uso intensivo (scuole, ospedali, ecc.) Puertas de uso intensivo (colegios, hospitales, etc.)

Rules for middle hinge

Regole per la cerniera centrale

Normas para la bisagra central



Middle hinge needed if:
Cerniera centrale necessaria se:
Bisagra media necesaria si:

Doors height is more than 2200 mm
Porte di altezza superiore a 2200 mm
La altura de la puerta es superior a 2200 mm

Note for all hinges:

Please ensure that it is possible to unhinge the door leaf after installation. This should be taken into account during the planning.

HF = Height Frame

Nota per tutte le cerniere:

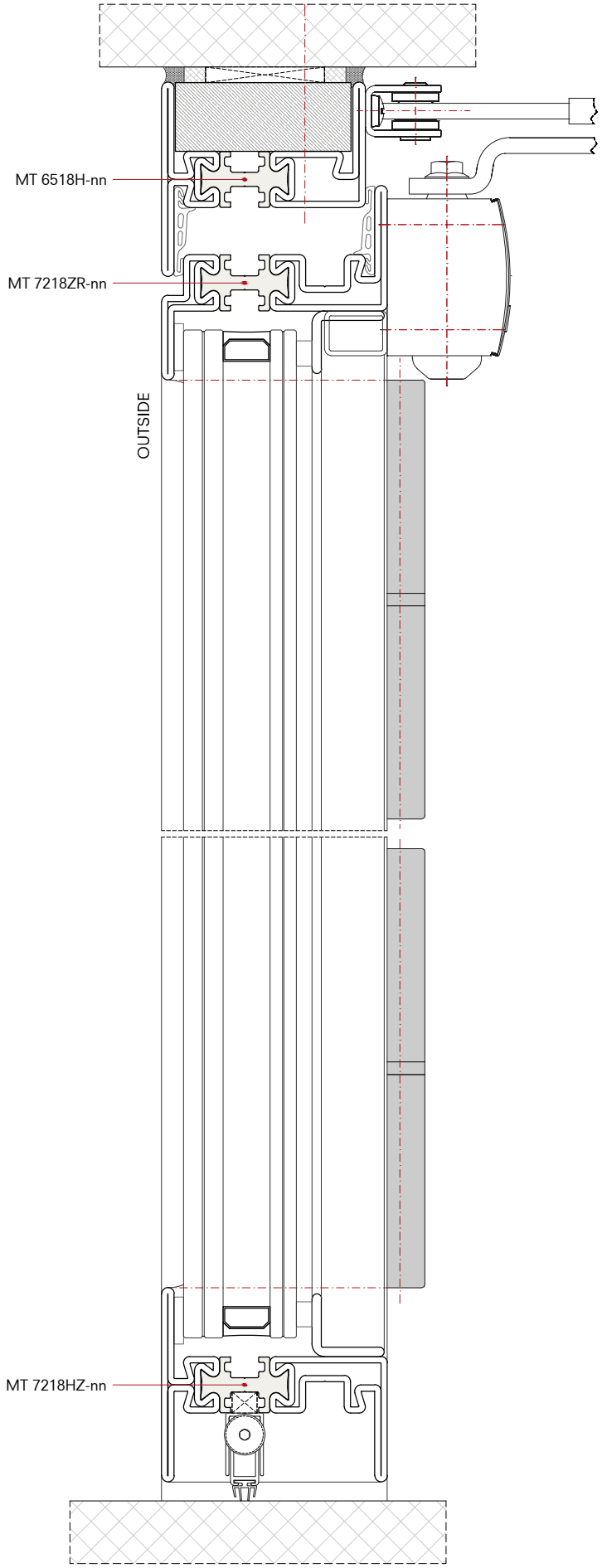
Assicurarsi che sia possibile togliere l'anta dopo l'installazione. Questo dovrebbe essere preso in considerazione durante la progettazione.

HF = Altezza telaio

Nota para todas las bisagras:

Asegúrese de que sea posible desenganchar la puerta después de la instalación. Esto debe tenerse en cuenta durante la planificación.

HF = Altura marco



Use frame MT 6518H-nn on top
to install door closers.

Utilizzare profilo telaio MT 6518H-nn
per installare i chiudiporta.

Utilice el marco MT 6518H-nn en la parte superior
para instalar cerradores de puertas.

Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

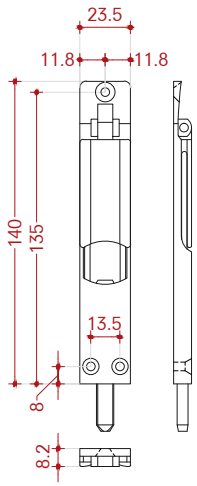
Flush bolts **Catenacci** **Pasador de canto** 5.7

Flush bolt with lever
For doors

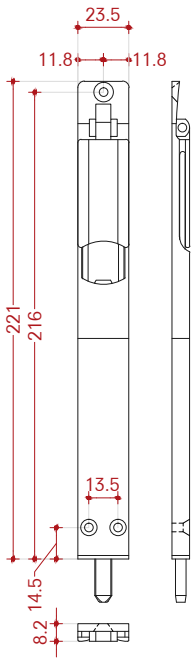
Catenaccio con leva
Per porte

Pasador de canto con palanca
Para puertas

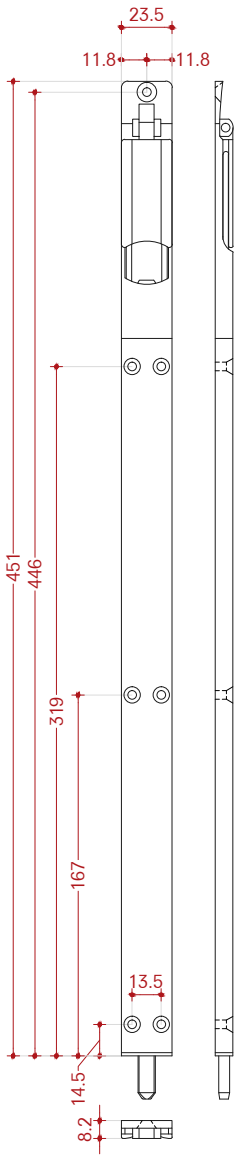
E99021-35



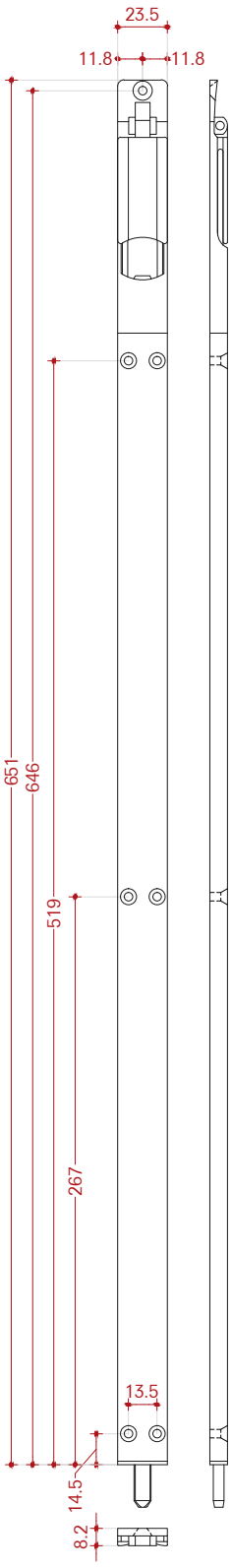
E99022-35



E99023-35



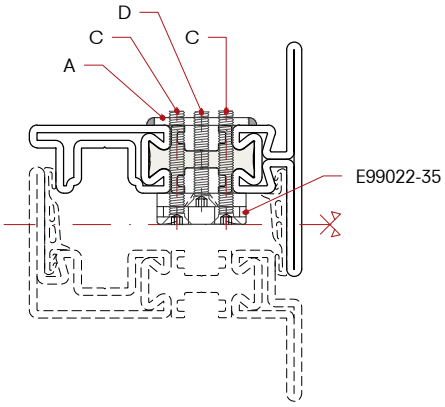
E99024-35

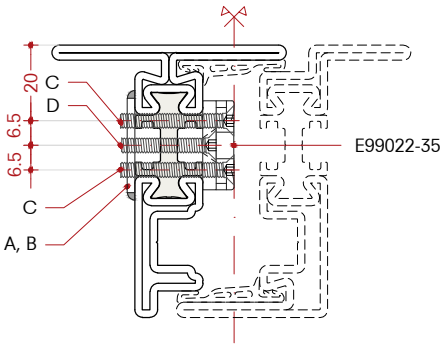


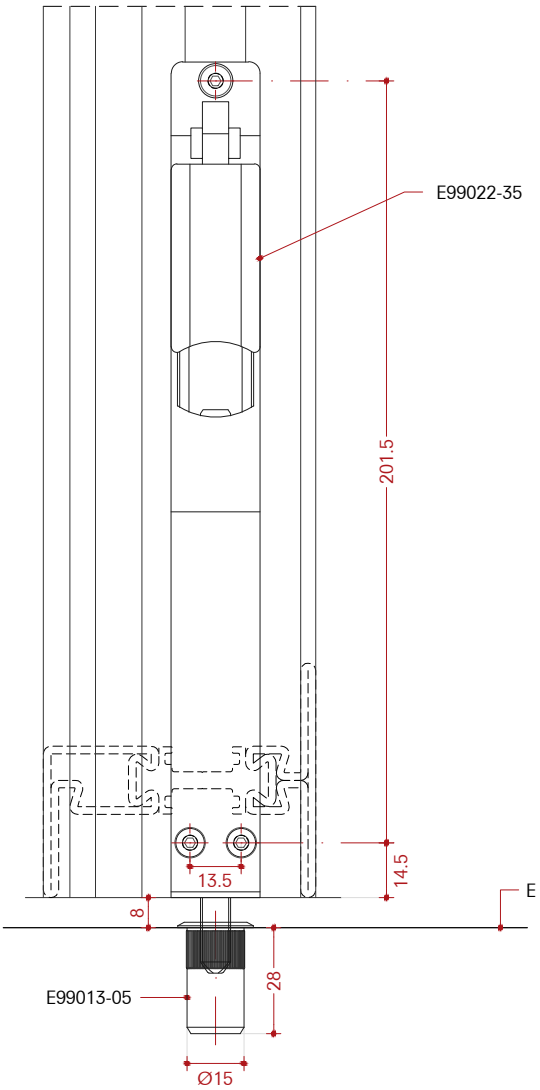
Installation
Flush bolt with lever E99022-35
For doors with single latch lock

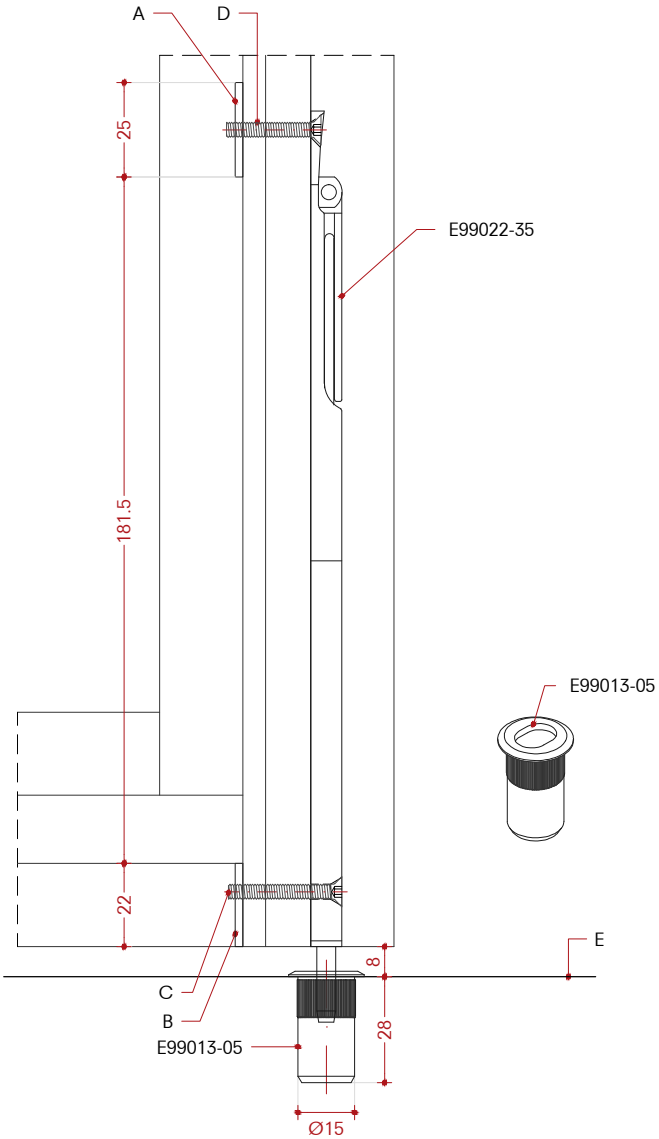
Montaggio
Catenaccio con leva E99022-35
Per porte con serratura singola a scrocco

Montaje
Pasador de canto con palanca E99022-35
Para puertas con cerradura simple pestillo





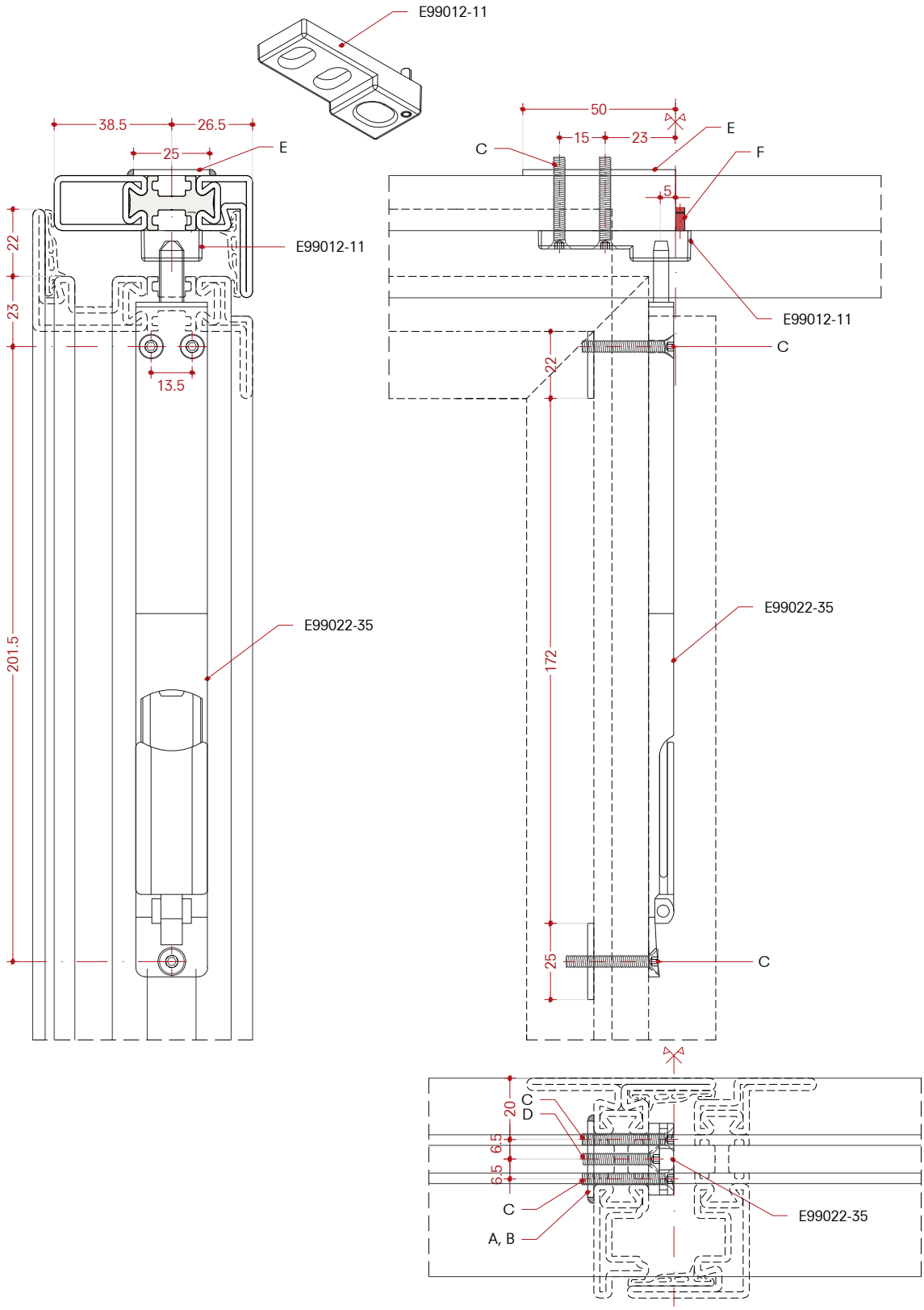




A) Plate 25x25x2 mm welded on profile (not provided)
B) Plate 25x22x2 mm welded on profile (not provided)
C) Fastening with M4x30 ISO10642 screws
D) Fastening with M4x25 ISO10642 screws
E) Finished floor

A) Piastra 25x25x2 mm saldata al profilo (non fornita)
B) Piastra 25x22x2 mm saldata al profilo (non fornita)
C) Fissaggio con viti M4x30 ISO10642
D) Fissaggio con viti M4x25 ISO10642
E) Pavimento finito

A) Placa 25x25x2 mm soldado en perfil (no provisto)
B) Placa 25x22x2 mm soldado en perfil (no provisto)
C) Fijación con tornillos M4x30 ISO10642
D) Fijación con tornillos M4x25 ISO10642
E) Piso acabado



A) Plate 25x25x2 mm welded on profile (not provided)
B) Plate 25x22x2 mm welded on profile (not provided)
C) Fastening with M4x30 ISO10642 screws
D) Fastening with M4x25 ISO10642 screws
E) Plate 50x25x2 mm welded on profile (not provided)
F) Ø3 mm hole on profile

A) Piastra 25x25x2 mm saldata al profilo (non fornita)
B) Piastra 25x22x2 mm saldata al profilo (non fornita)
C) Fissaggio con viti M4x30 ISO10642
D) Fissaggio con viti M4x25 ISO10642
E) Piastra 50x25x2 mm saldata al profilo (non fornita)
F) Foro Ø3 mm sul profilo

A) Placa 25x25x2 mm soldado en perfil (no provisto)
B) Placa 25x22x2 mm soldado en perfil (no provisto)
C) Fijación con tornillos M4x30 ISO10642
D) Fijación con tornillos M4x25 ISO10642
E) Placa 50x25x2 mm soldado en perfil (no provisto)
F) Orificio Ø3 mm en perfil

Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

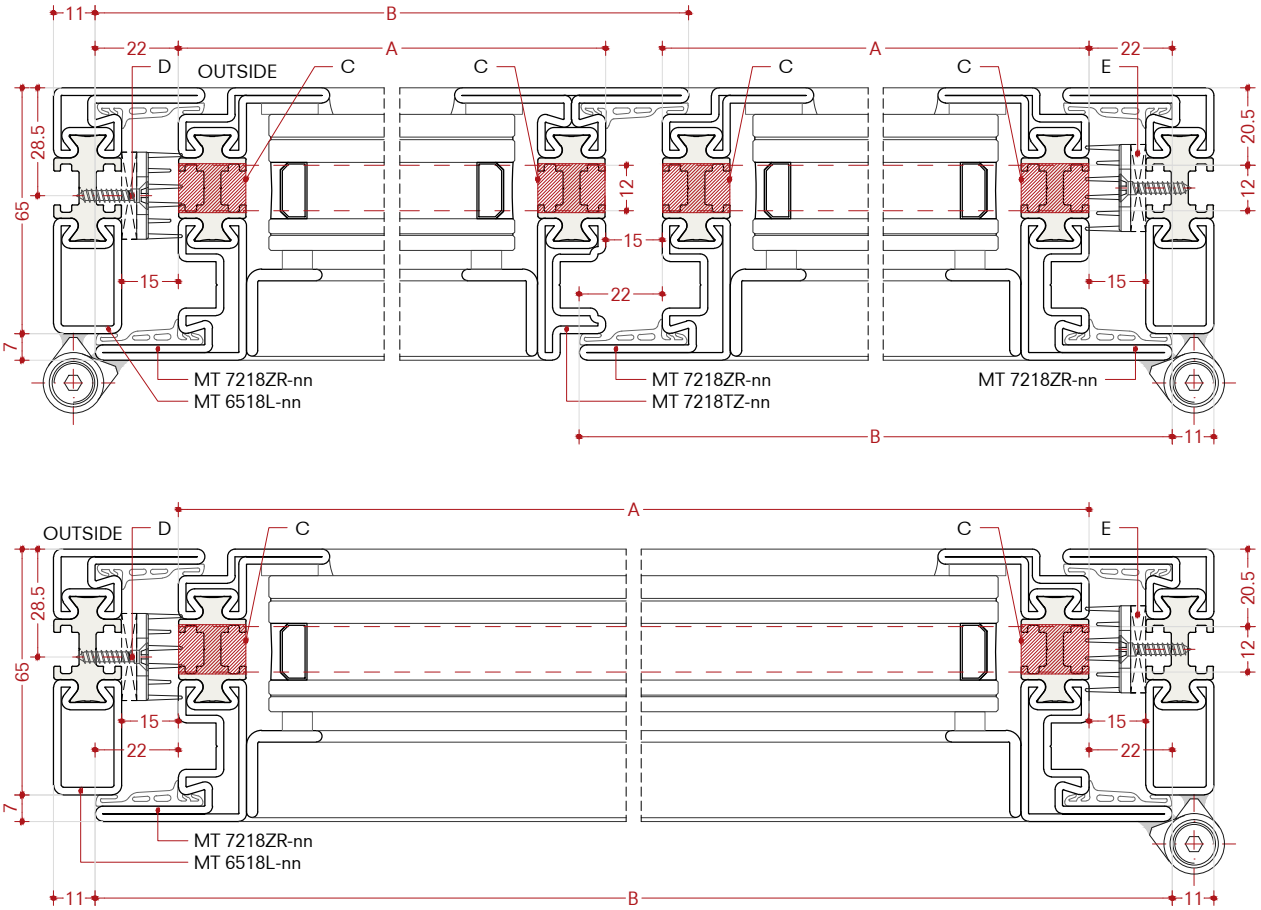
General fittings **Ferramenta generale** **Herrajes generales** 5.8

Installation
Automatic door seal
Single and double leaf door
Open in and open out

Montaggio
Guarnizione a ghigliottina
Porta a uno e due battenti
Apertura interna ed esterna

Montaje
Junta guillotina
Puerta de una e dos hojas
Que se abre hacia dentro y fuera

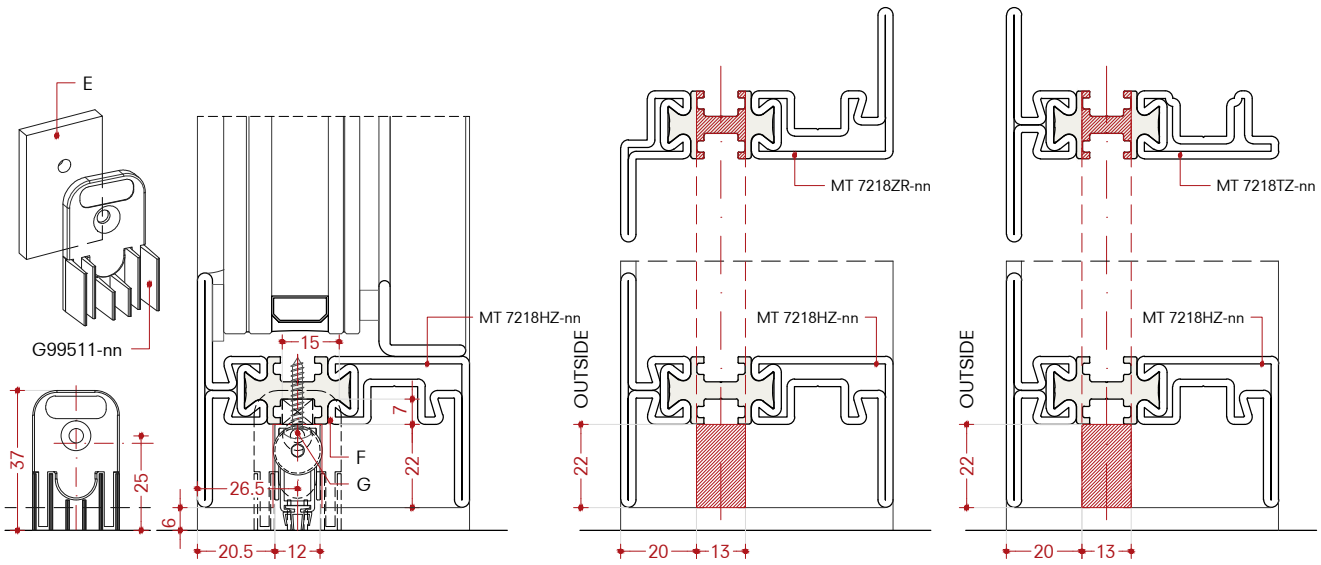
Open in
Apertura interna
Apertura hacia dentro



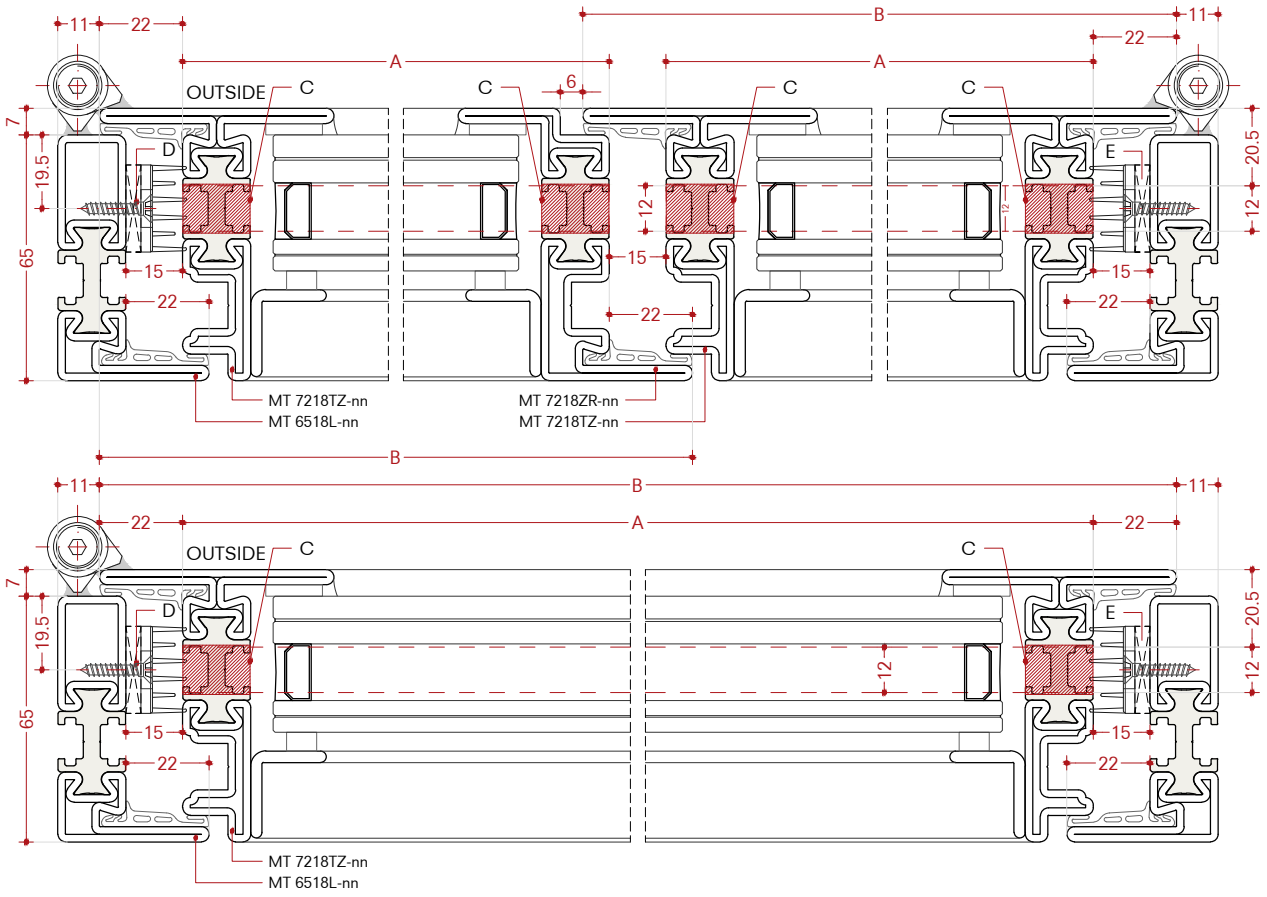
A) Automatic drop seal (aluminium profile)
B) Door leaf
C) 13x20 mm cutout
D) Fastening of G99511-nn with Ø3.5x19 mm ISO7050 screws
E) 23x4 L=37 mm PVC plate (not provided)

A) Guarnizione a ghigliottina automatica (profilo in alluminio)
B) Porta
C) Taglio 13x20 mm
D) Fissaggio G99511-nn con viti Ø3.5x19 mm ISO7050
E) Piastra in PVC 23x4 L=37 mm (non fornita)

A) Junta guillotina automática (perfil de aluminio)
B) Puerta
C) Corte 13x20 mm
D) Fijación G99511-nn con tornillos Ø3.5x19 mm ISO7050
E) Placa en PVC 23x4 L=37 mm (no provisto)



Open out
Apertura esterna
Que se abre hacia fuera



A) Automatic drop seal (aluminium profile)
B) Door leaf
C) 13x20 mm cutout
D) Fastening of G99511-nn with Ø3.5x19 mm ISO7050 screws
E) 23x4 L=37 mm PVC plate (not provided)
F) 15x7 mm L=MT 7218HZ-nn PVC plate (not provided)
G) G995XX-62 bottom profile fastening with Ø3.5x19 mm ISO7049 screws

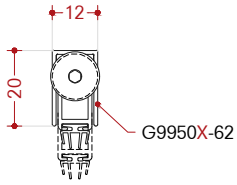
A) Guarnizione a ghigliottina automatica (profilo in alluminio)
B) Porta
C) Taglio 13x20 mm
D) Fissaggio G99511-nn con viti Ø3.5x19 mm ISO7050
E) Piastra in PVC 23x4 L=37 mm (non fornita)
F) Piastra in PVC 15x7 mm L=MT 7218HZ-nn (non fornita)
G) Fissaggio G995XX-62 con viti Ø3.5x19 mm ISO7049

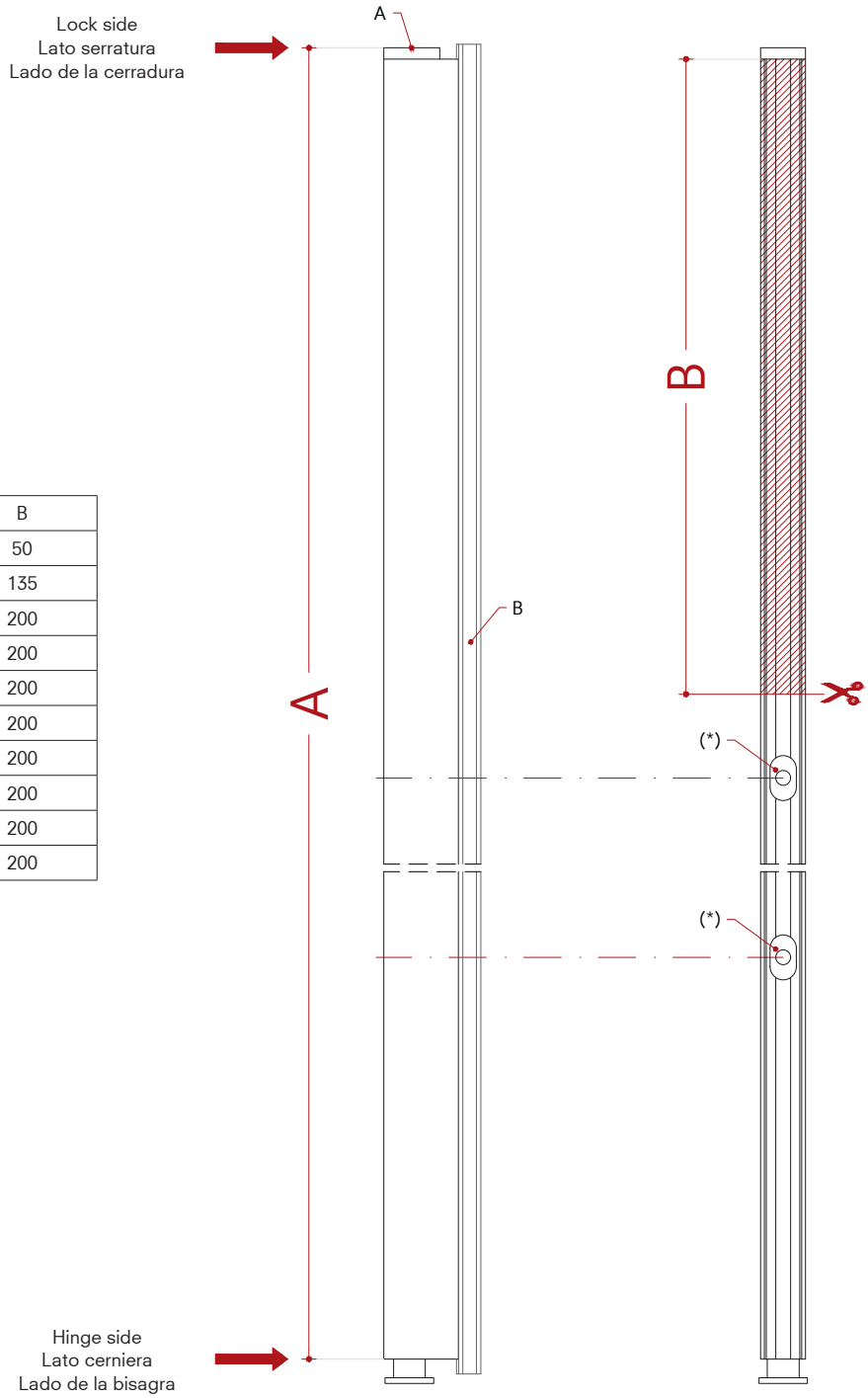
A) Junta guillotina automática (perfil de aluminio)
B) Puerta
C) Corte 13x20 mm
D) Fijación G99511-nn con tornillos Ø3.5x19 mm ISO7050
E) Placa en PVC 23x4 L=37 mm (no provisto)
F) Placa en PVC 15x7 mm L=MT 7218HZ-nn (no provisto)
G) Fijación G995XX-62 con tornillos Ø3.5x19 mm ISO7049

Installation
Automatic door seal
G995XX-62 cut off profile

Montaggio
Guarnizione a ghigliottina
Taglio del profilo G9950X-62

Montaje
Junta guillotina
Fresado de perfil G9950X-62



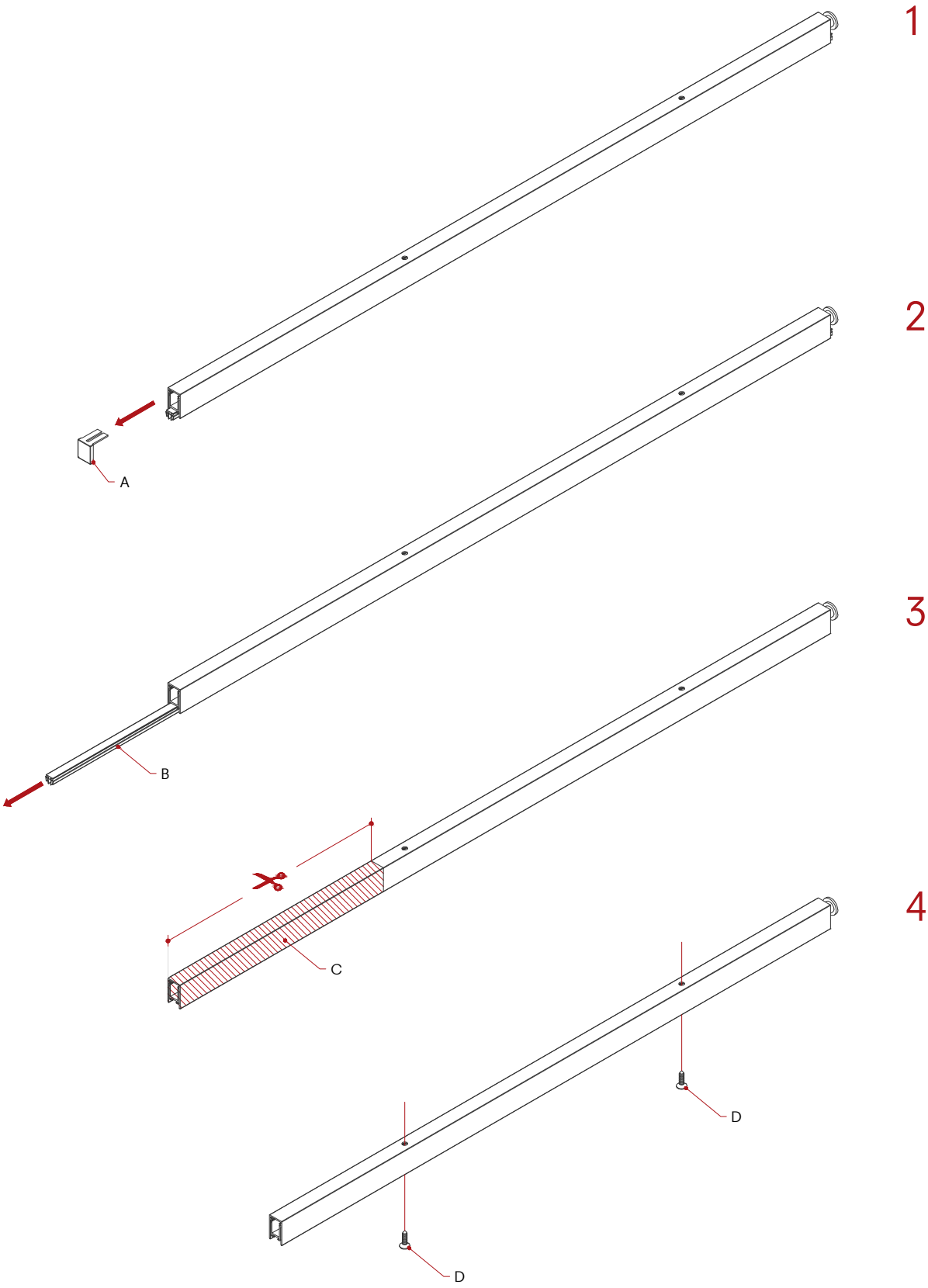


	A	B
G99501-62	330	50
G99502-62	430	135
G99503-62	530	200
G99504-62	630	200
G99505-62	730	200
G99506-62	830	200
G99507-62	930	200
G99508-62	1030	200
G99509-62	1130	200
G99510-62	1230	200

A) Remove the cap
B) Remove the gasket
(*) Existing hole

A) Rimuovere il tappo di chiusura
B) Rimuovere la guarnizione
(*) Foro esistente

A) Quitar la tapa
B) Quitar la junta
(*) Orificio existente



A) Remove the cap
B) Remove the gasket
C) Cut off profile
D) Fastening with selftapping Ø3.2 mm ISO14585 screws

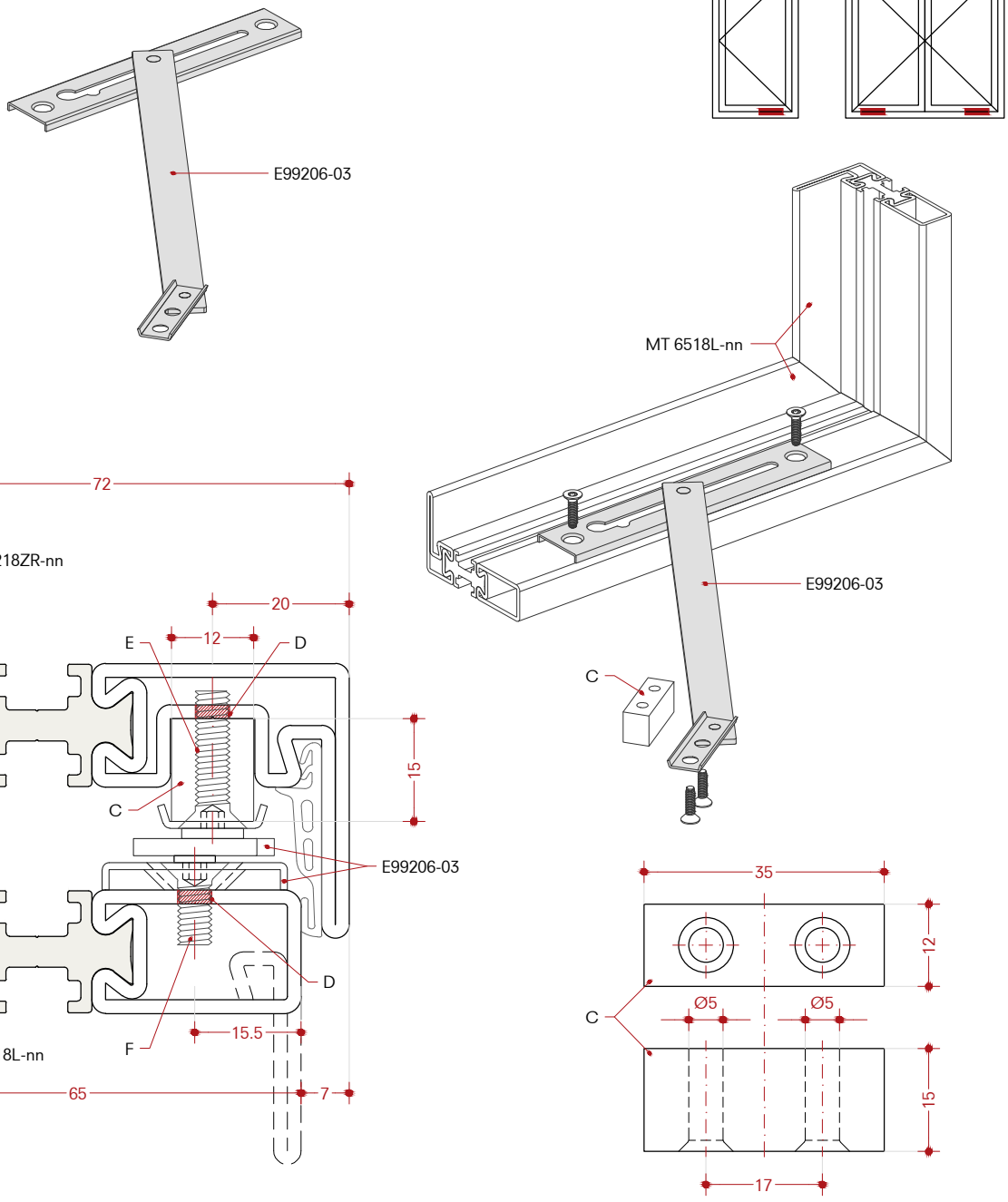
A) Rimuovere il tappo di chiusura
B) Rimuovere la guarnizione
C) Taglio del profilo
D) Fissaggio con viti autofilettanti Ø3.2 mm ISO14585

A) Quitar la tapa
B) Quitar la junta
C) Fresado de perfil
D) Fijación con tornillos autorroscantes Ø3.2 mm ISO14585

Installation
Opening restrictor E99206-03
Open in

Montaggio
Limitatore d'apertura E99206-03
Apertura interna

Montaje
Limitador de apertura E99206-03
Apertura hacia dentro



Drawing represents right opening / Installation below - left opening / Installation top is the mirror image

A) Frame
B) Leaf
C) Plate (not included)
D) M5 hole
E) M5x20 ISO10642 screw
F) M5x12 ISO10642 screw

X) To reduce the opening angle, increase the dimension "Y"
Y) Variable
Z) Position to unlock the restrictors

Il disegno rappresenta l'apertura destra / Installazione in basso a destra - apertura sinistra / L'installazione in alto è l'immagine speculare

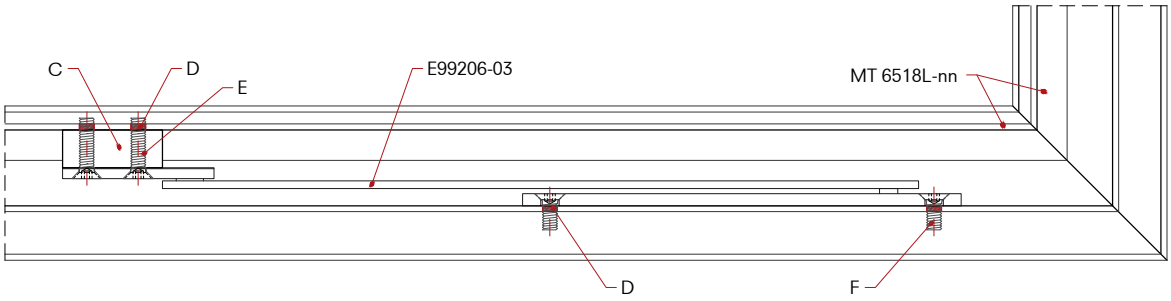
A) Telaio
B) Anta
C) Piastra (non incluso)
D) Foro M5
E) Vite M5x20 ISO10642
F) Vite M5x12 ISO10642

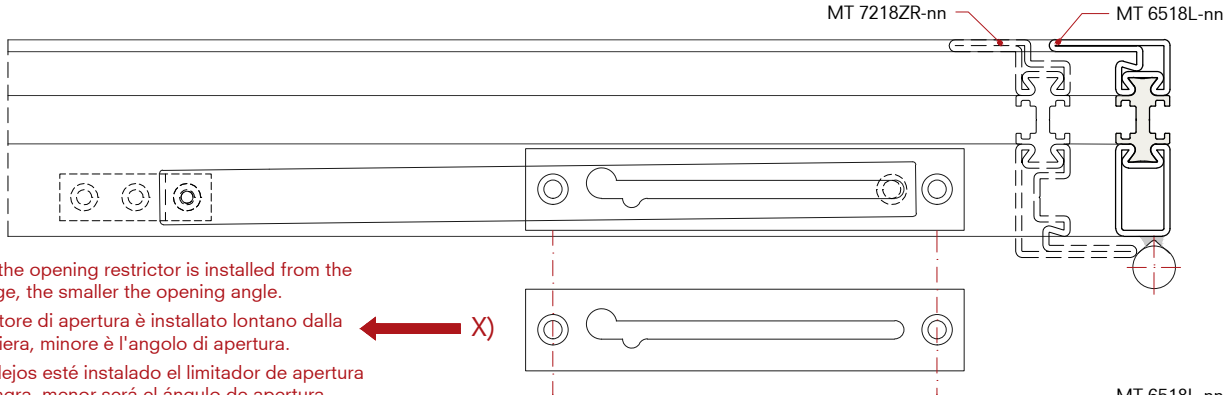
X) Per ridurre l'angolo di apertura aumentare la quota "Y"
Y) Variabile
Z) Posizione per sbloccare i limitatori

El dibujo representa la apertura derecha / Instalación inferior derecha - la apertura izquierda / Instalación superior es la imagen reflejada

A) Marco
B) Hoja
C) Plato (no incluido)
D) Oreficio M5
E) Tornillo M5x20 ISO10642
F) Tornillo M5x12 ISO10642

X) Para reducir el ángulo de apertura, aumente la dimensión "Y"
Y) Variable
Z) Posición para liberar los limitadores

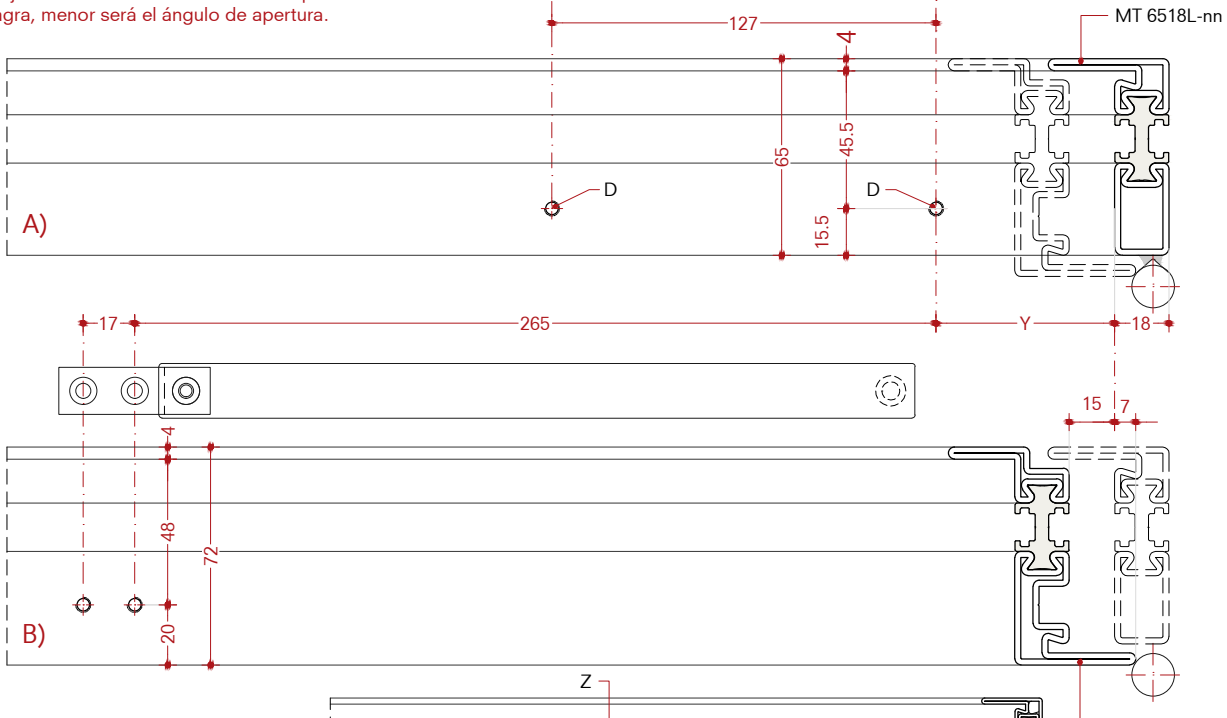


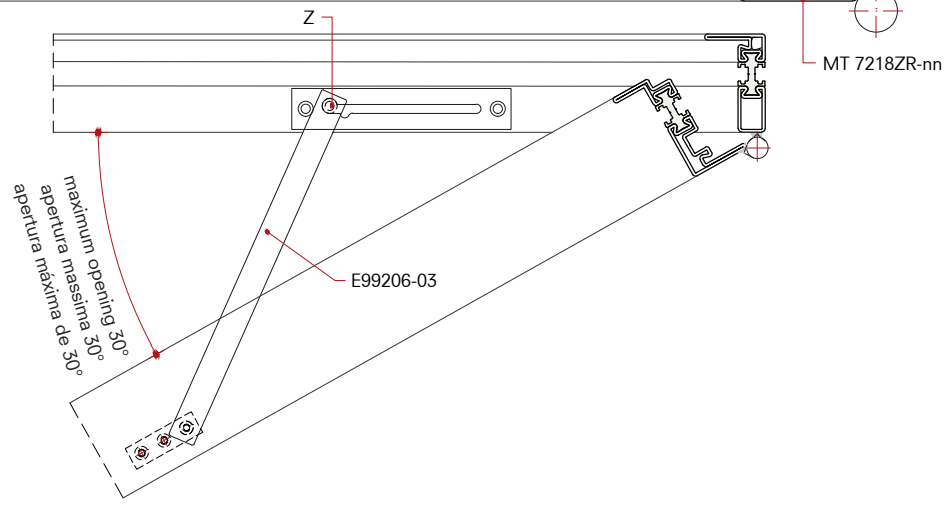


The further the opening restrictor is installed from the hinge, the smaller the opening angle.

Più il limitatore di apertura è installato lontano dalla cerniera, minore è l'angolo di apertura.

Cuanto más lejos esté instalado el limitador de apertura de la bisagra, menor será el ángulo de apertura.

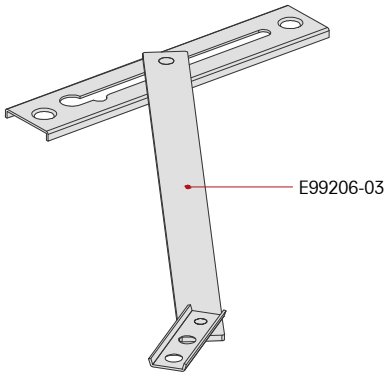


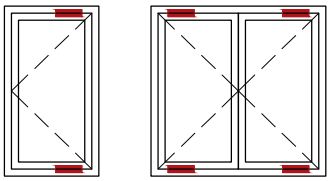


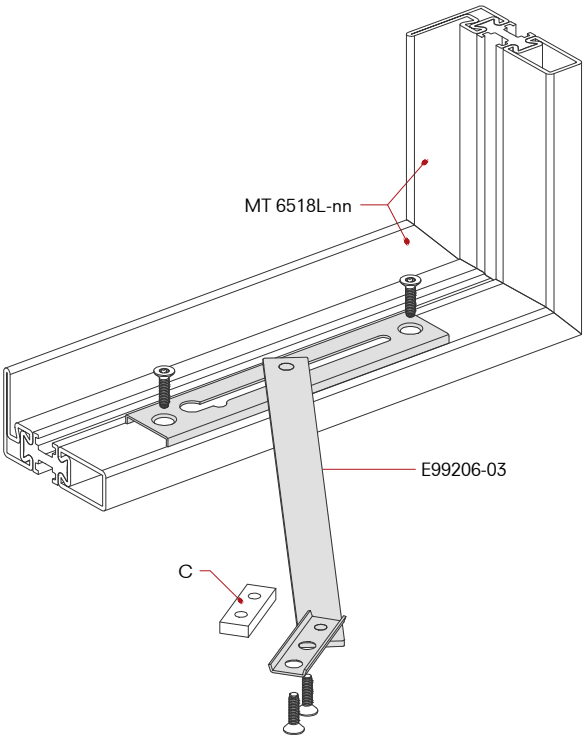
Installation
Opening restrictor E99206-03
Open out

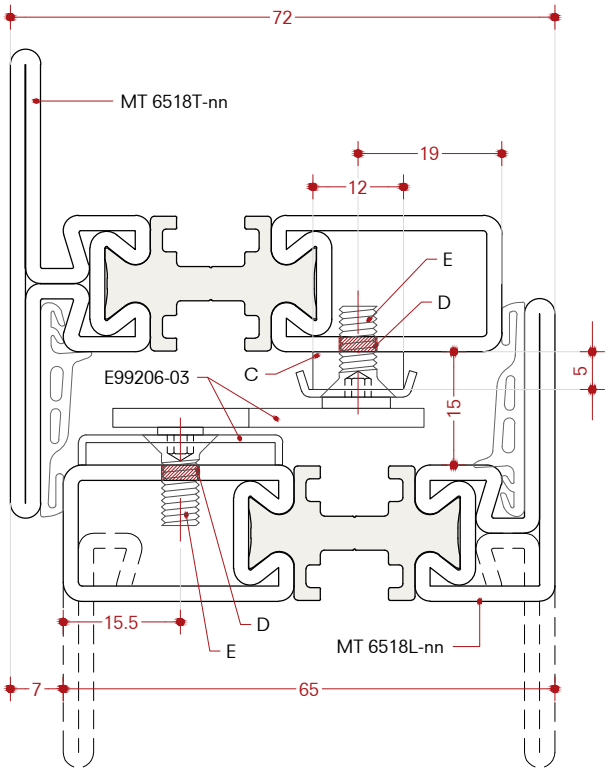
Montaggio
Limitatore d'apertura E99206-03
Apertura esterna

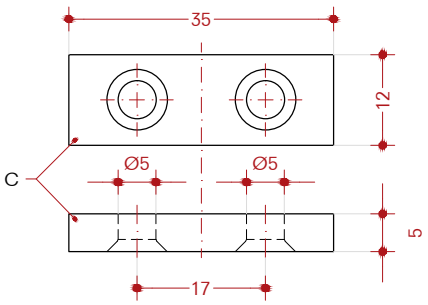
Montaje
Limitador de apertura E99206-03
Apertura hacia fuera











Drawing represents right opening / Installation below - left opening / Installation top is the mirror image

A) Frame
B) Leaf
C) Plate (not included)
D) M5 hole
E) M5x12 ISO10642 screw

X) To reduce the opening angle, increase the dimension "Y"
Y) Variable
Z) Position to unlock the restrictors

Il disegno rappresenta l'apertura destra / Installazione in basso a destra - apertura sinistra / L'installazione in alto è l'immagine speculare

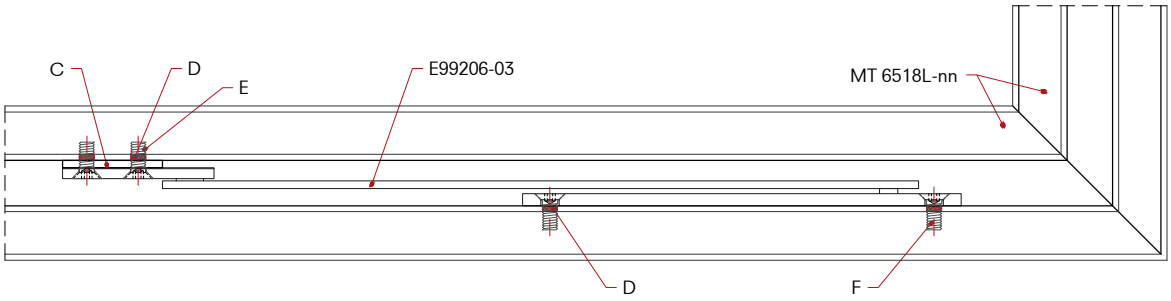
A) Telaio
B) Anta
C) Piastra (non incluso)
D) Foro M5
E) Vite M5x12 ISO10642

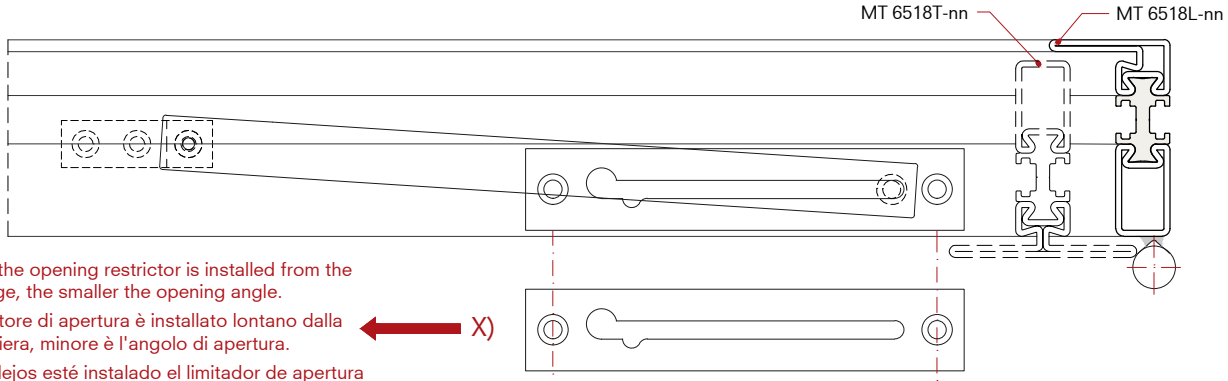
X) Per ridurre l'angolo di apertura aumentare la quota "Y"
Y) Variabile
Z) Posizione per sbloccare i limitatori

El dibujo representa la apertura derecha / Instalación inferior derecha - la apertura izquierda / Instalación superior es la imagen reflejada

A) Marco
B) Hoja
C) Plato (no incluido)
D) Oreficio M5
E) Tornillo M5x12 ISO10642

X) Para reducir el ángulo de apertura, aumente la dimensión "Y"
Y) Variable
Z) Posición para liberar los limitadores

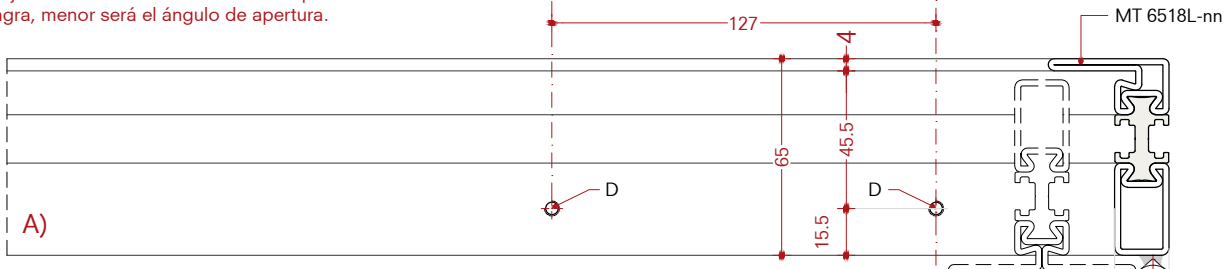


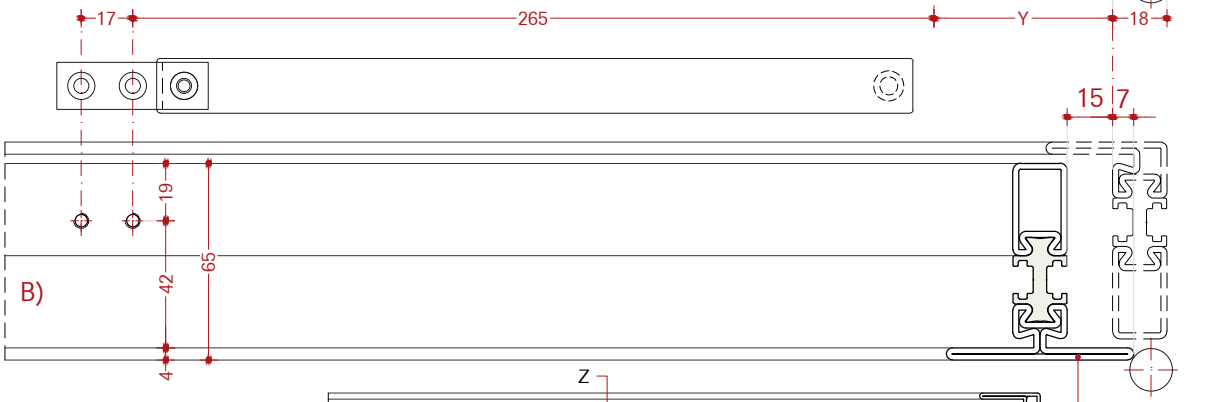


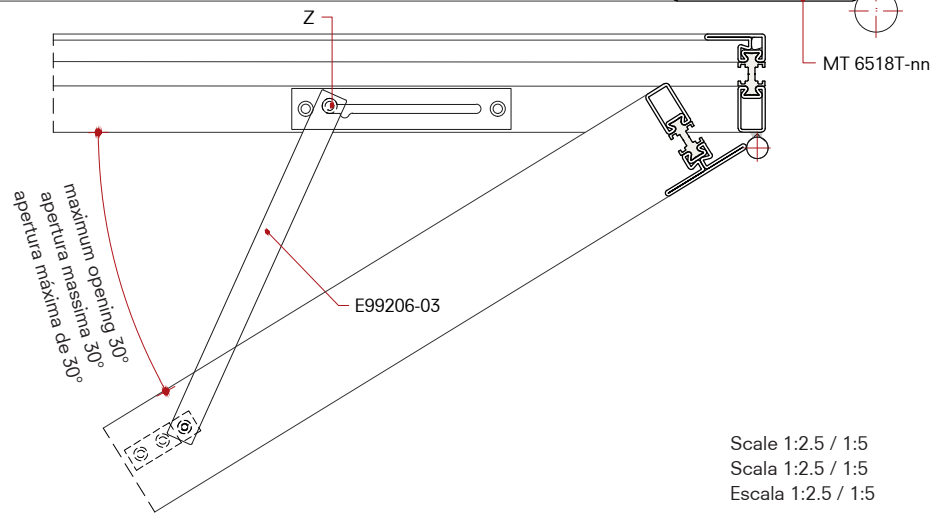
The further the opening restrictor is installed from the hinge, the smaller the opening angle.

Più il limitatore di apertura è installato lontano dalla cerniera, minore è l'angolo di apertura.

Cuanto más lejos esté instalado el limitador de apertura de la bisagra, menor será el ángulo de apertura.







Scale 1:2.5 / 1:5
Scala 1:2.5 / 1:5
Escala 1:2.5 / 1:5

Accessories installation:

Installation Tilt&Turn fittings

Montaggio accessori:

Montaggio accessori finestra anta ribalta

Montaje accesorios:

Montaje accesorios ventana oscilante

5.9

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

Tilt&Turn windows with visible hinge

Basic kits

K88001
Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit base

K88001
Finestre standard

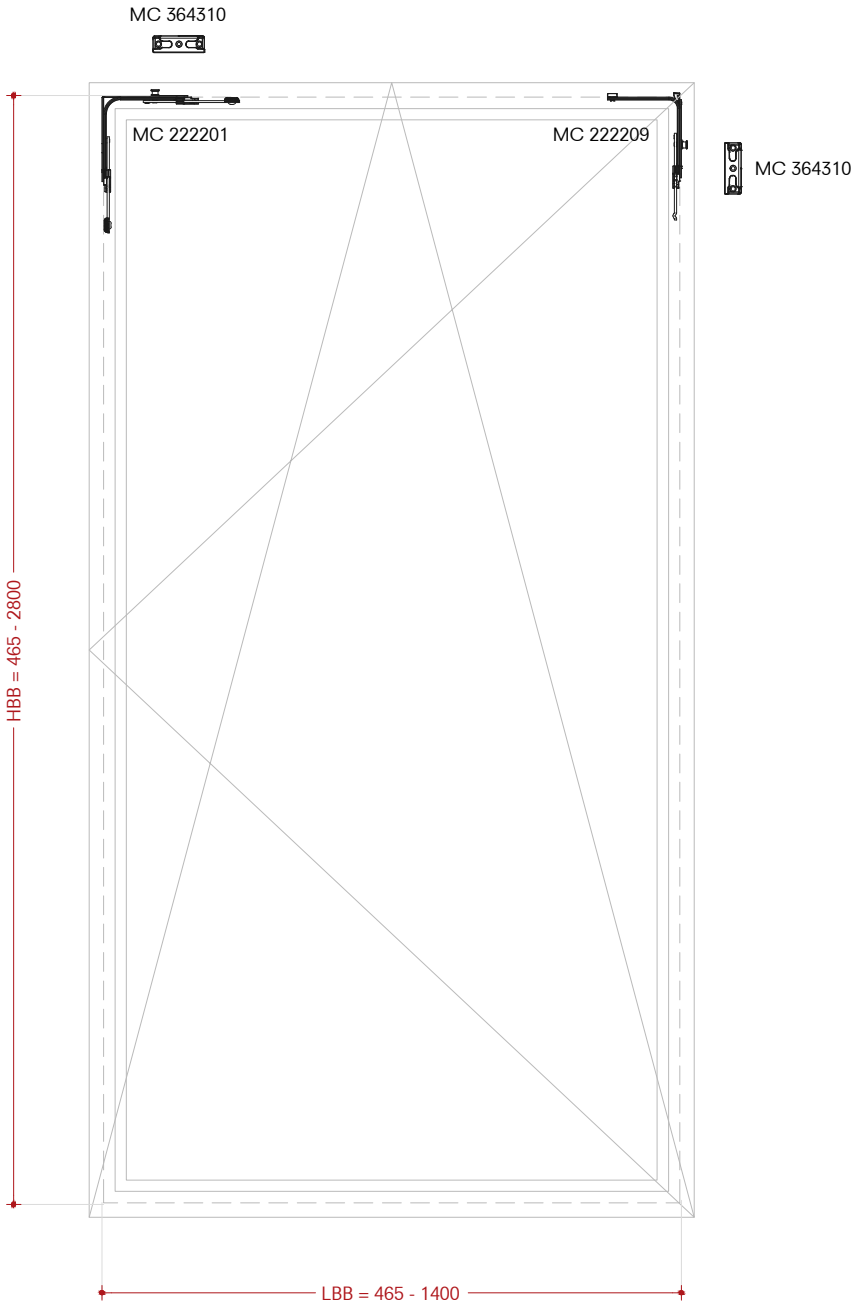
LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

Ventana oscilante con bisagra visible

Kits básicos

K88001
Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm



Tilt&Turn windows with visible hinge

Basic kits

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

MC 222203 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit base

K88002

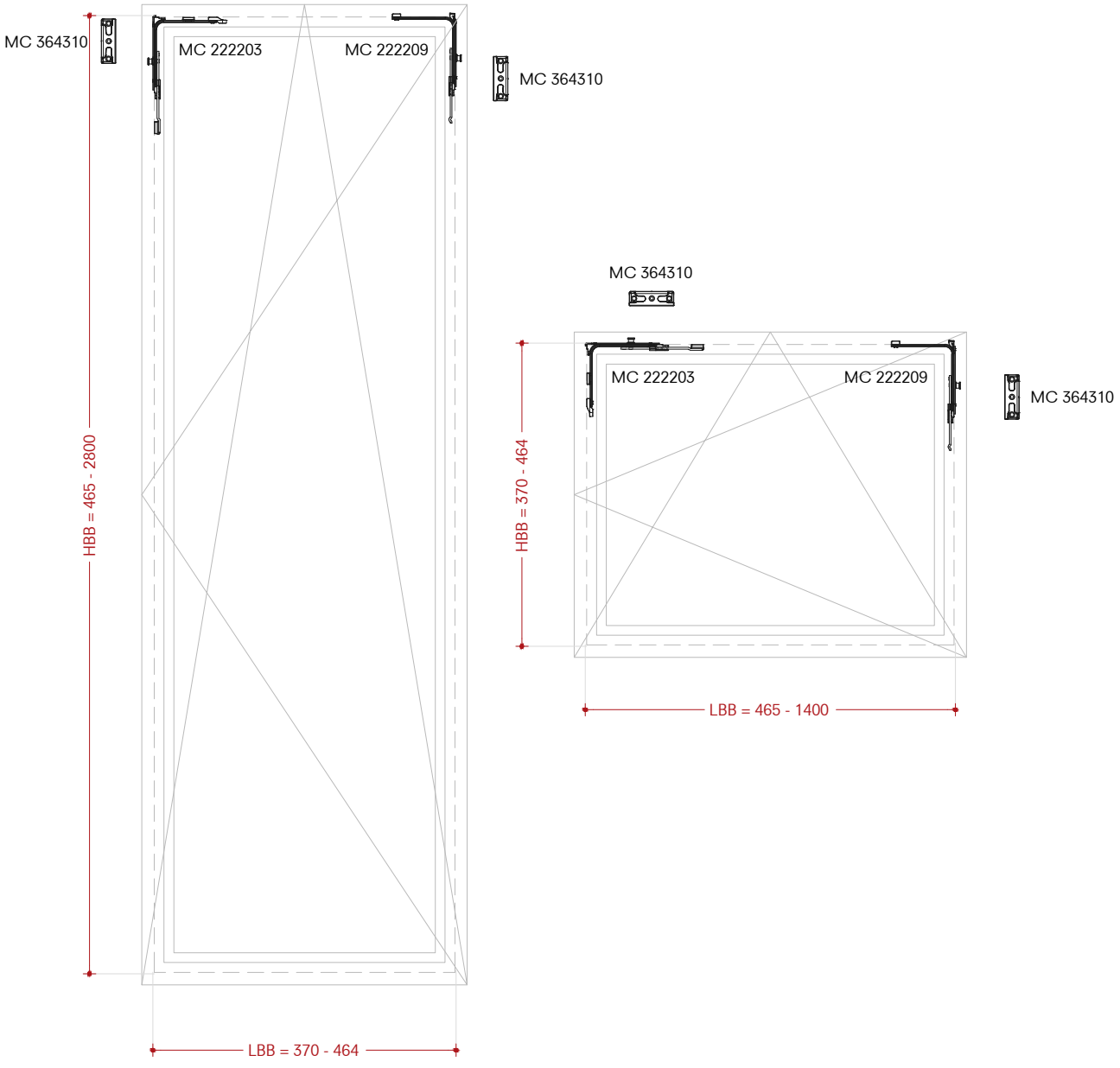
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

Ventana oscilante con bisagra visible

Kits básicos

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm



Tilt&Turn windows with visible hinge

Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

K88004

HH = 300 mm
HBB = 661 - 1790 mm

MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

Finestre anta ribalta con cerniera a vista

Kit cremonese

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Ventana oscilante con bisagra visible

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

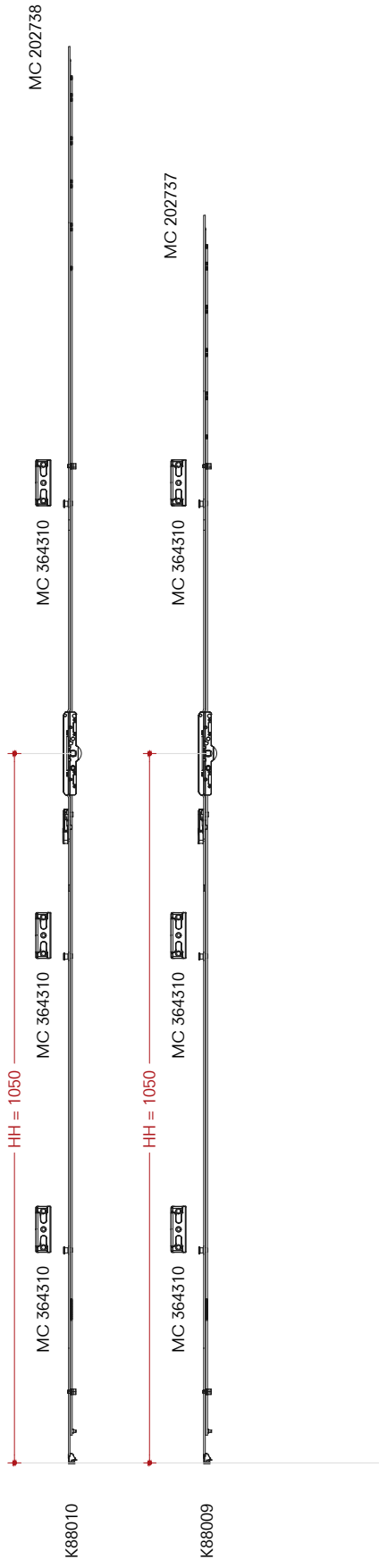
HH = 700 mm
HBB = 1591 - 2650 mm

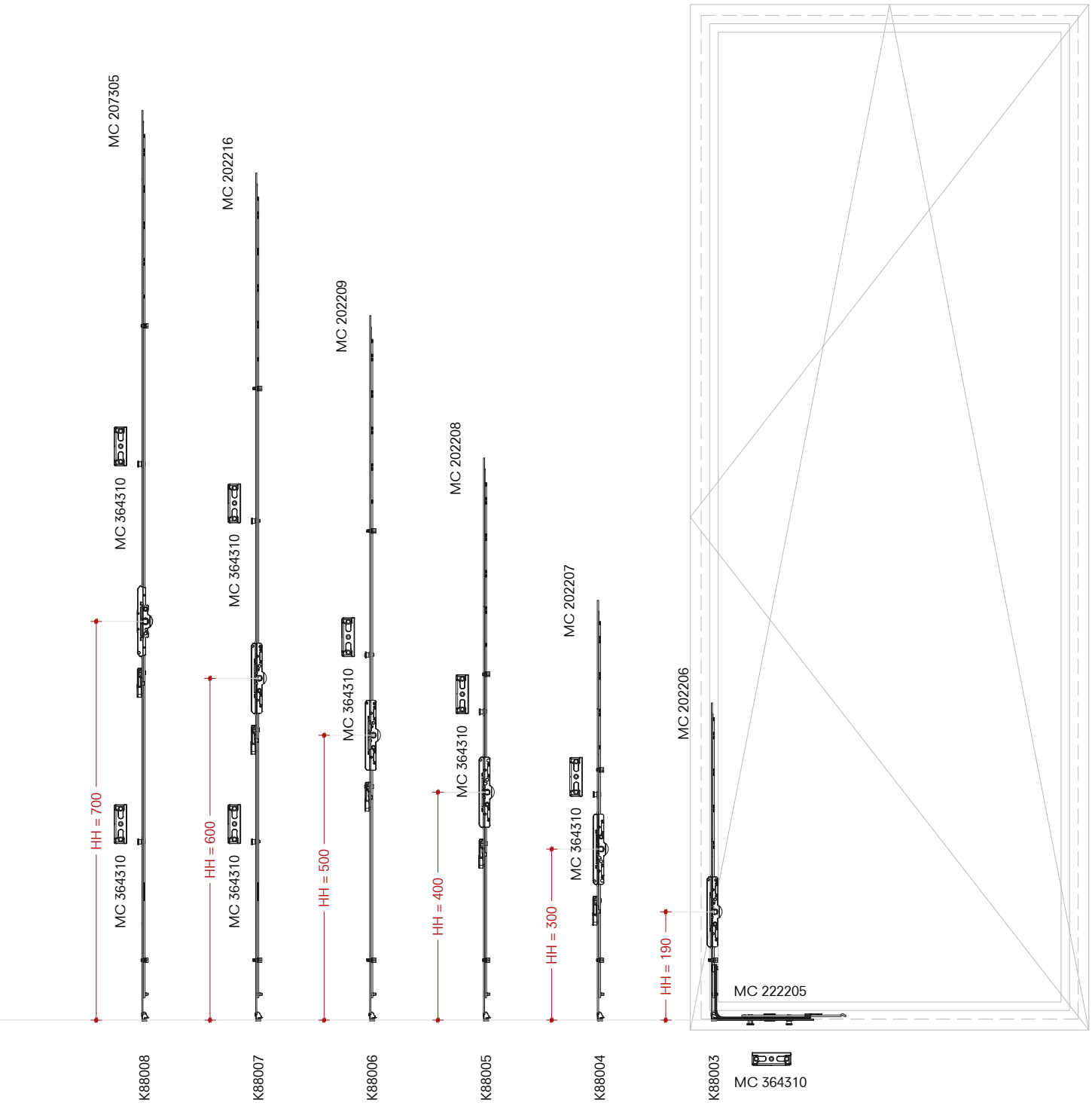
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm




MC 207305
MC 364310
MC 364310
HH = 700
K88008
MC 202216
MC 364310
MC 364310
HH = 600
K88007
MC 202209
MC 364310
HH = 500
K88006
MC 202208
MC 364310
HH = 400
K88005
MC 202207
MC 364310
HH = 300
K88004
MC 202206
HH = 190
K88003
MC 222205
MC 364310

Tilt&Turn windows with visible hinge

Double croppable gear kits

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces

Finestre anta ribalta con cerniera a vista

Kit cremonesi doppiorasabili

K88109

K88110

K88111

K88112

Ventana oscilante con bisagra visible

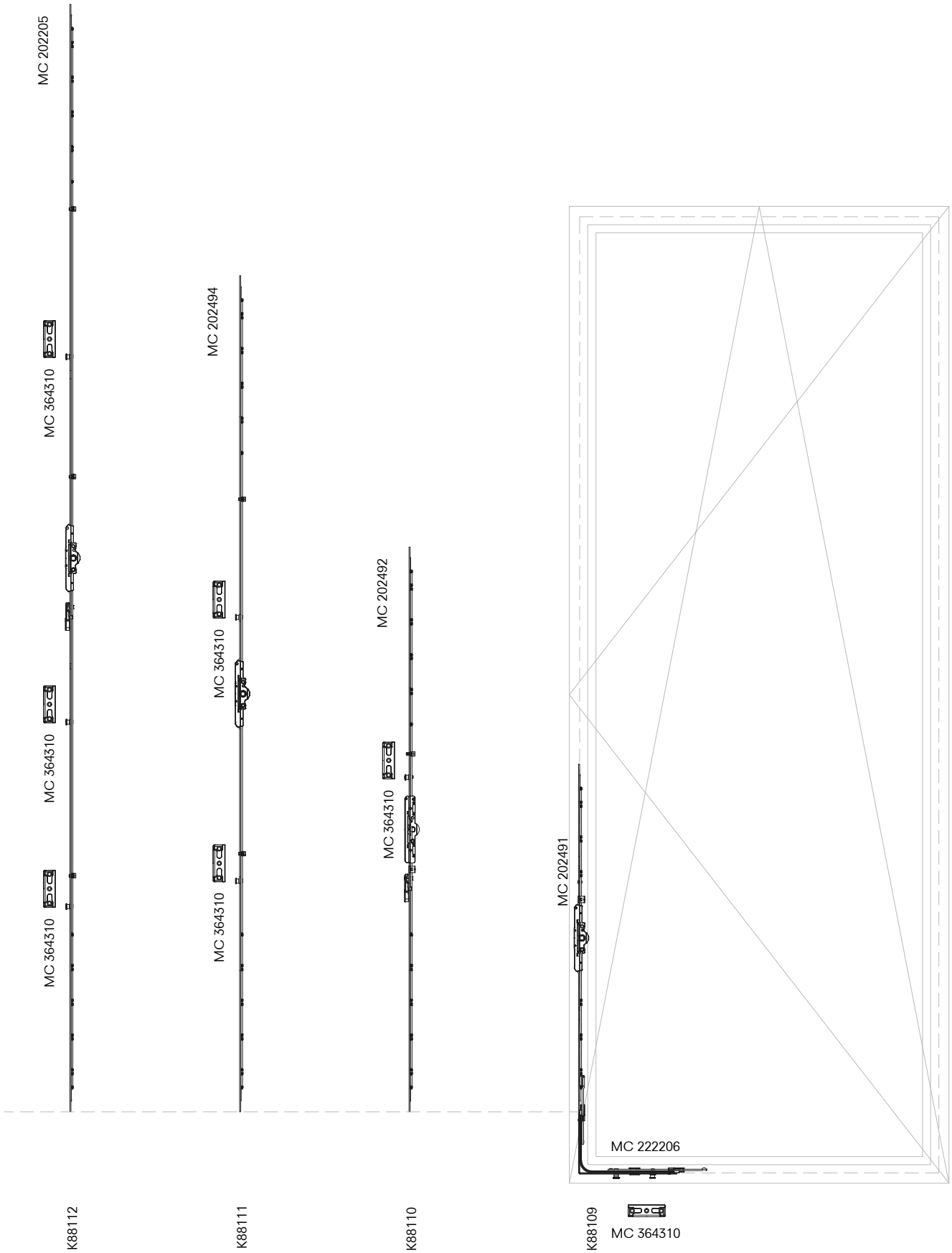
Kits de equipo recortables dobles

K88109

K88110

K88111

K88112


MC 202205
MC 364310
MC 364310
MC 364310
K88112
MC 202494
MC 364310
MC 364310
K88111
MC 202492
MC 364310
K88110
MC 202491
MC 222206
K88109
MC 364310

Tilt&Turn windows with visible hinge

Extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88012

141 - 235 mm

MC 201750 n°01 piece
MC 364310 n°01 piece

K88059

236 - 375 mm

MC 201750 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88013

376 - 470 mm

MC 201840 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit estensione Cremonese

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

Ventana oscilante con bisagra visible

Kits extensión

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

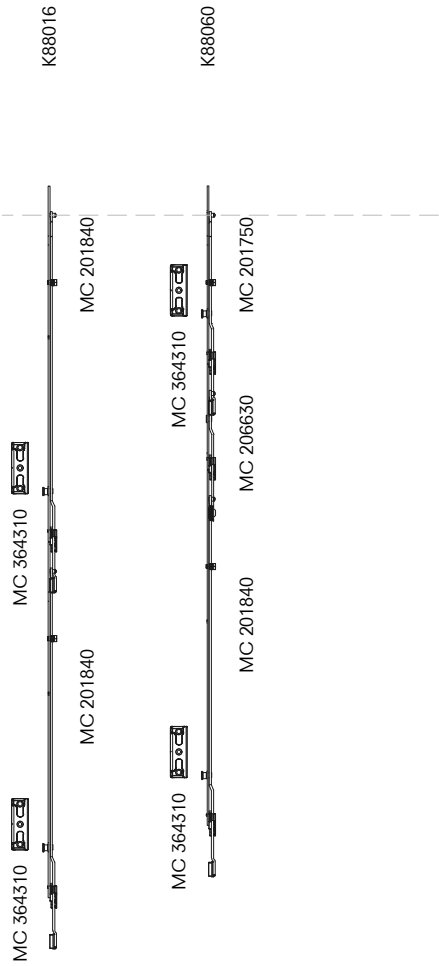
611 - 705 mm

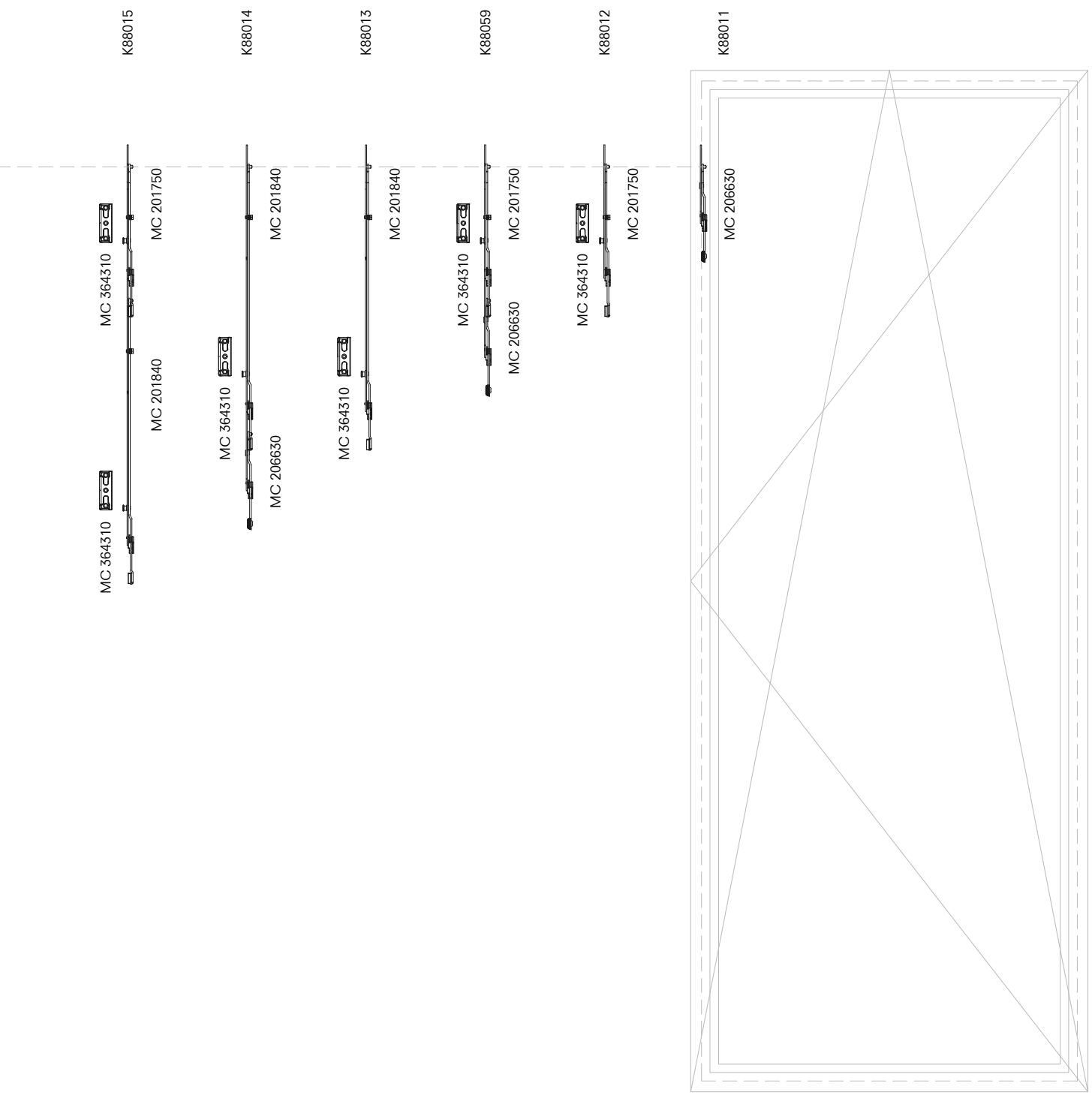
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630

Tilt&Turn windows with visible hinge

Scissors and hinges kits
Right opening

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura destra

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura derecha

K88078

LBB = 370 - 400 mm

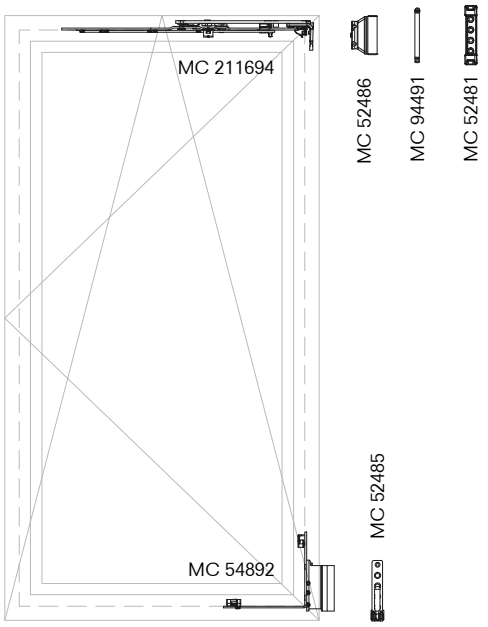
MC 211694 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88078

LBB = 370 - 400 mm

K88078

LBB = 370 - 400 mm



K88079

LBB = 401 - 600 mm

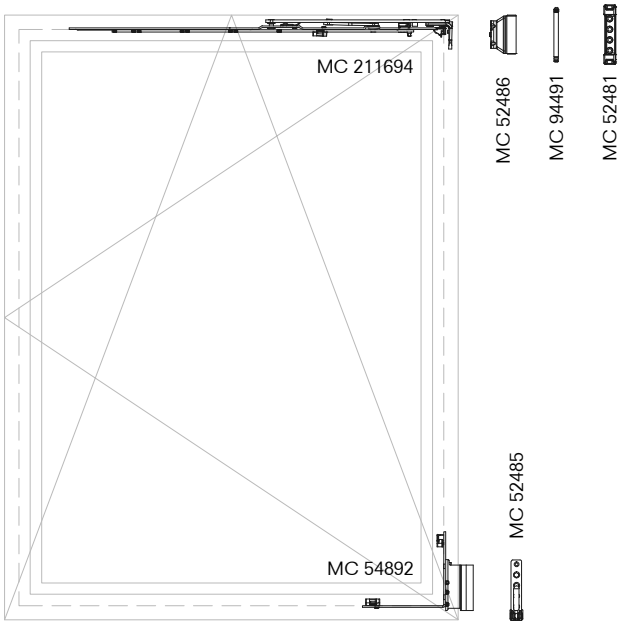
MC 211695 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88079

LBB = 401 - 600 mm

K88079

LBB = 401 - 600 mm



K88080

LBB = 601 - 800 mm

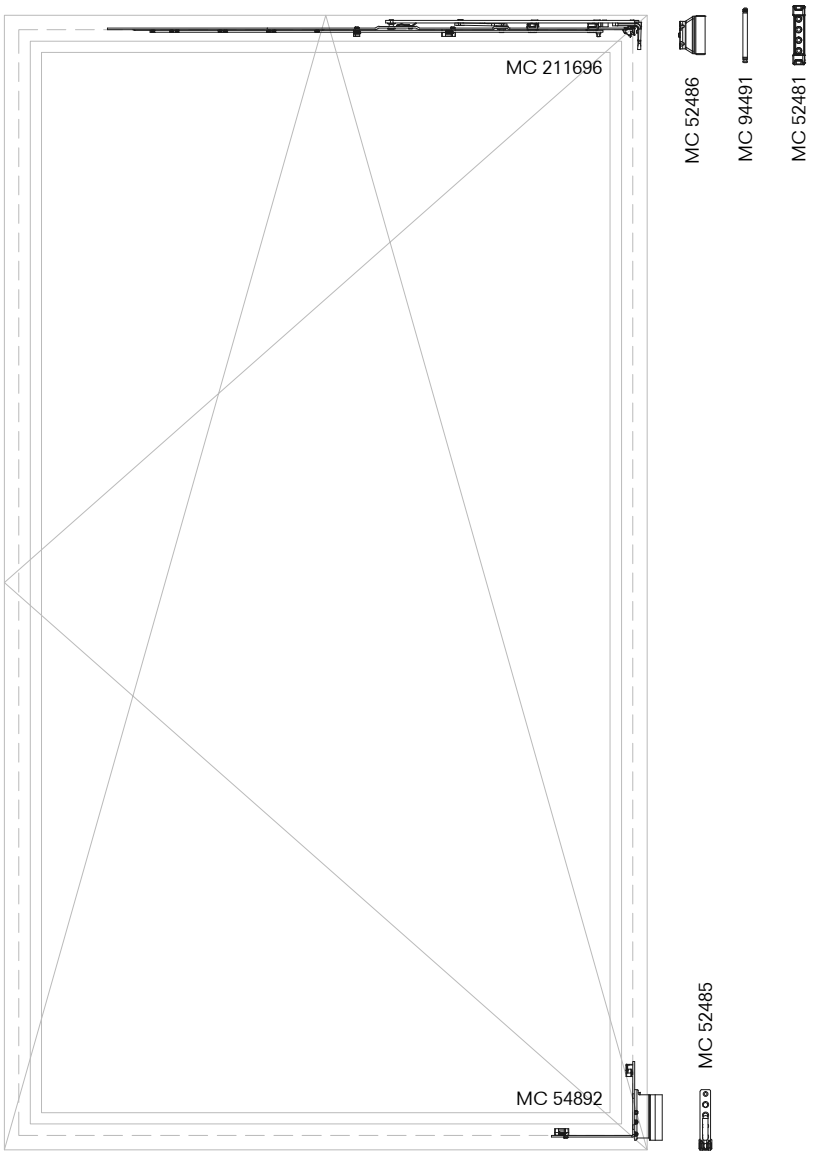
MC 211696 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88080

LBB = 601 - 800 mm

K88080

LBB = 601 - 800 mm



Tilt&Turn windows with visible hinge

Scissors and hinges kits
Right opening

K88081

LBB = 801 - 1050 mm

MC 211905 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura destra

K88081

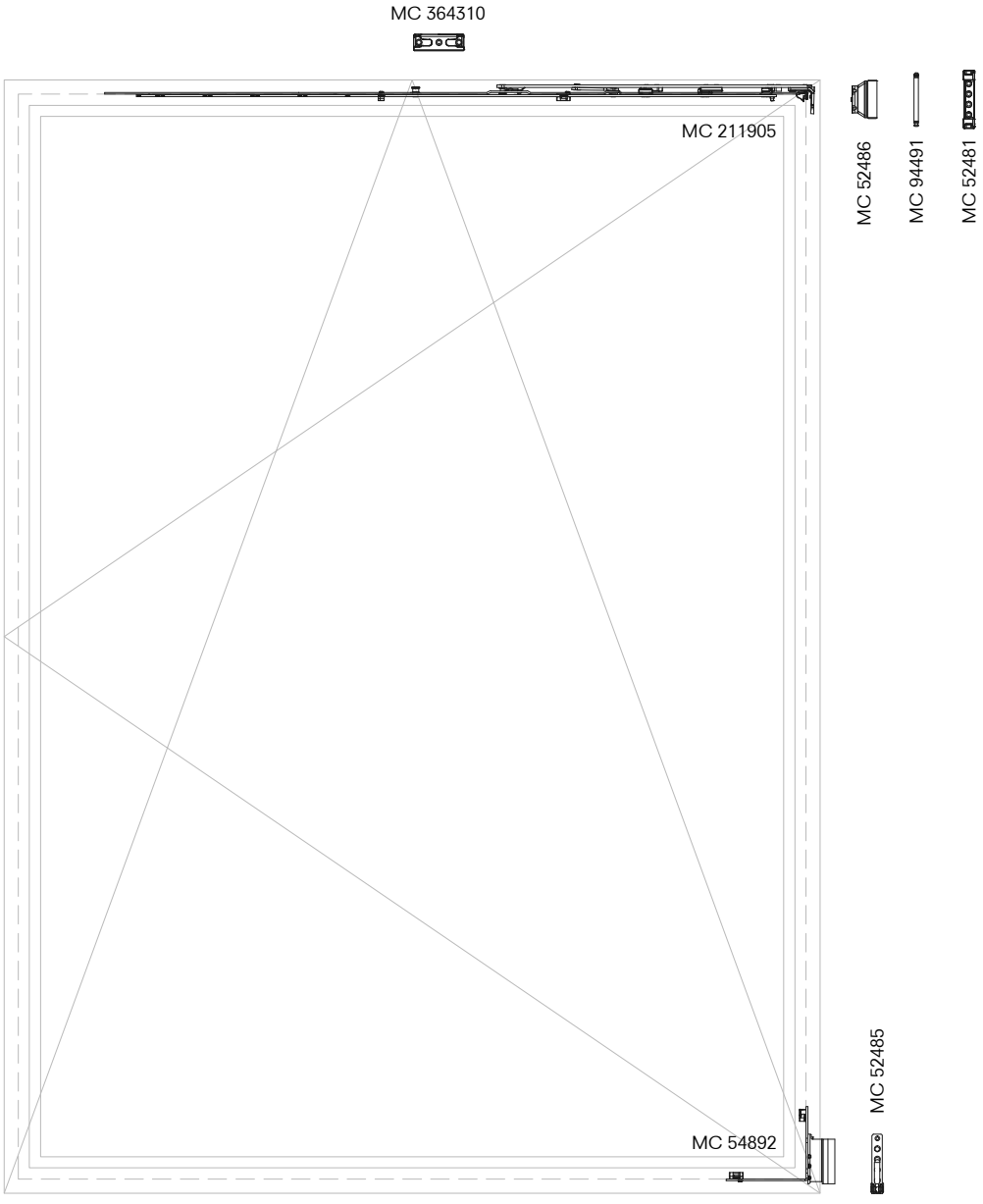
LBB = 801 - 1050 mm

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura derecha

K88081

LBB = 801 - 1050 mm



K88082

LBB = 1051 - 1300 mm

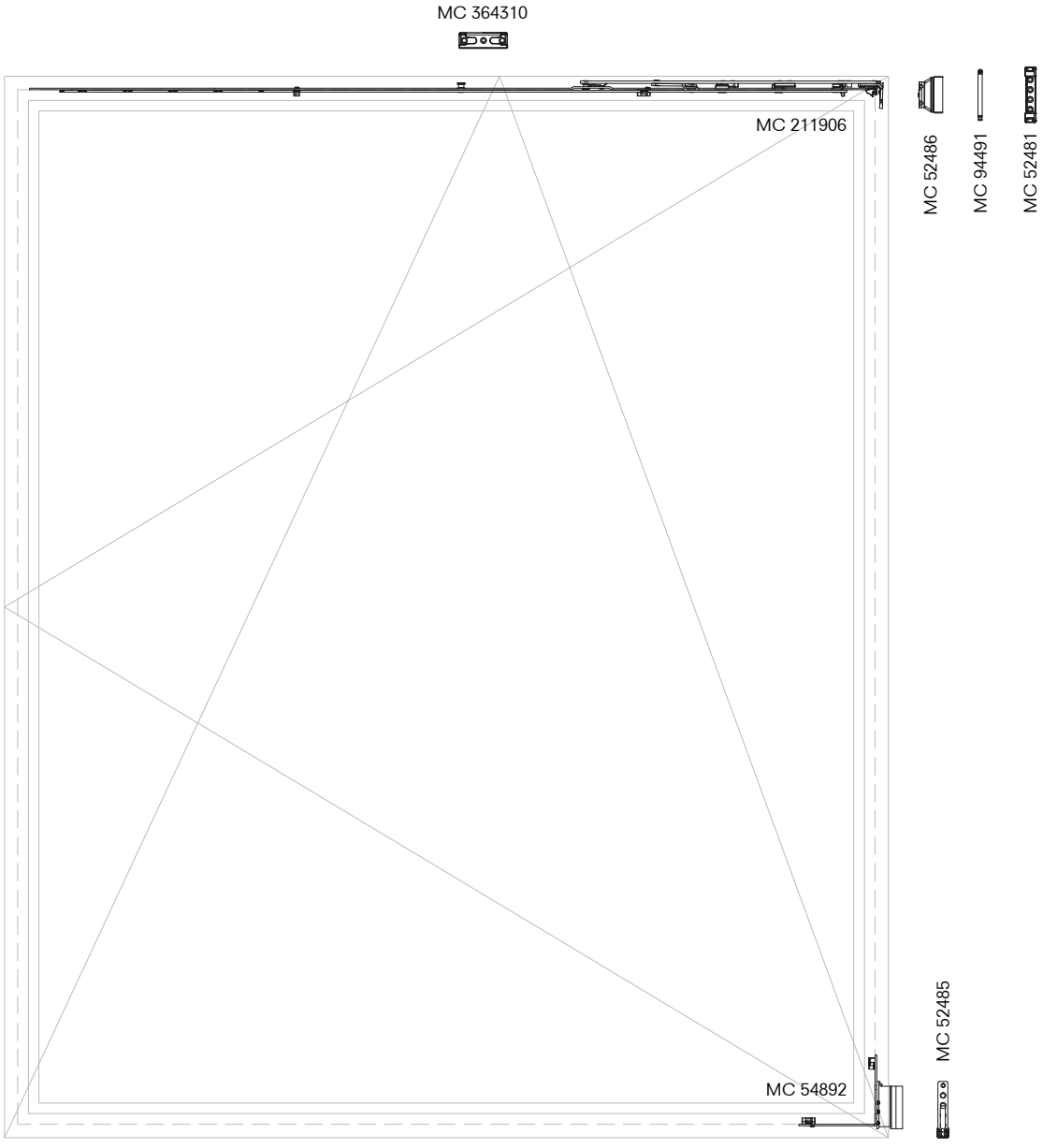
MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 364310 n°01 piece

K88082

LBB = 1051 - 1300 mm

K88082

LBB = 1051 - 1300 mm



Tilt&Turn windows with visible hinge

Scissors and hinges kits
Right opening

K88083

LBB = 1301 - 1400 mm

MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece
MC 52794 n°01 piece
MC 213043 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura destra

K88083

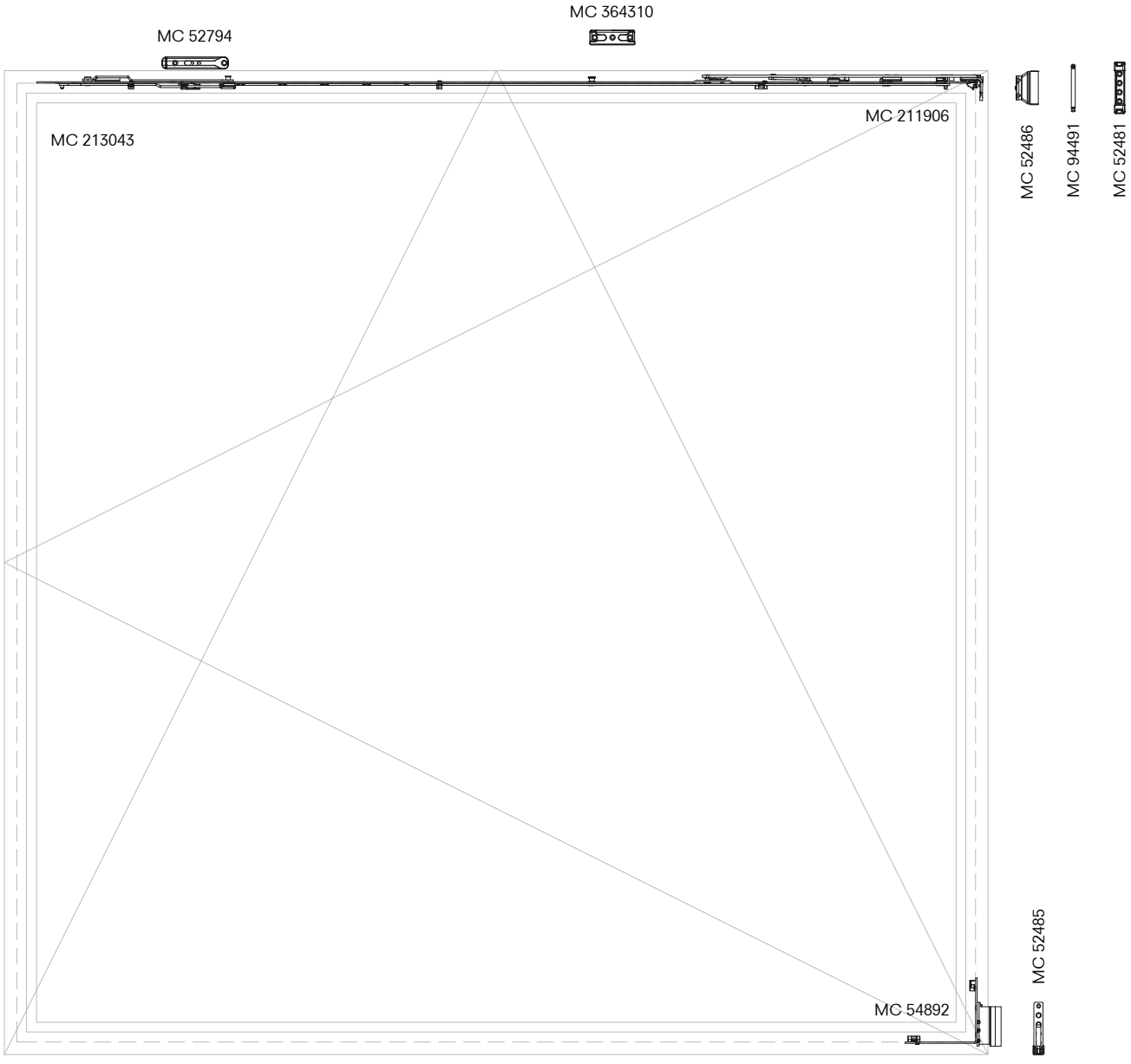
LBB = 1301 - 1400 mm

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura derecha

K88083

LBB = 1301 - 1400 mm



Tilt&Turn windows with visible hinge

Scissors and hinges kits
Left opening

K88084

LBB = 370 - 400 mm

MC 211694 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura sinistra

K88084

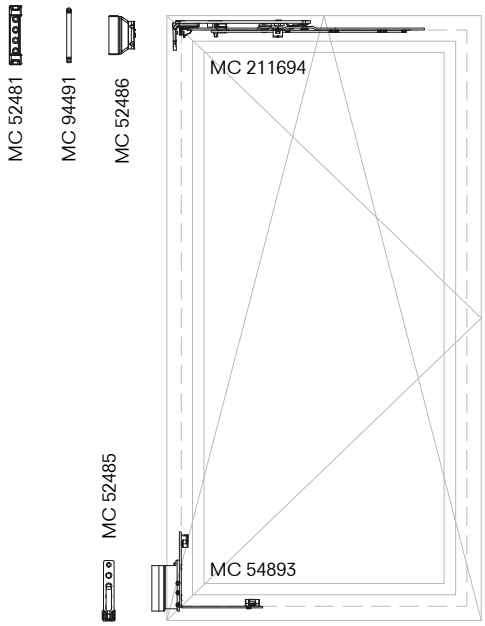
LBB = 370 - 400 mm

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura izquierda

K88084

LBB = 370 - 400 mm



K88085

LBB = 401 - 600 mm

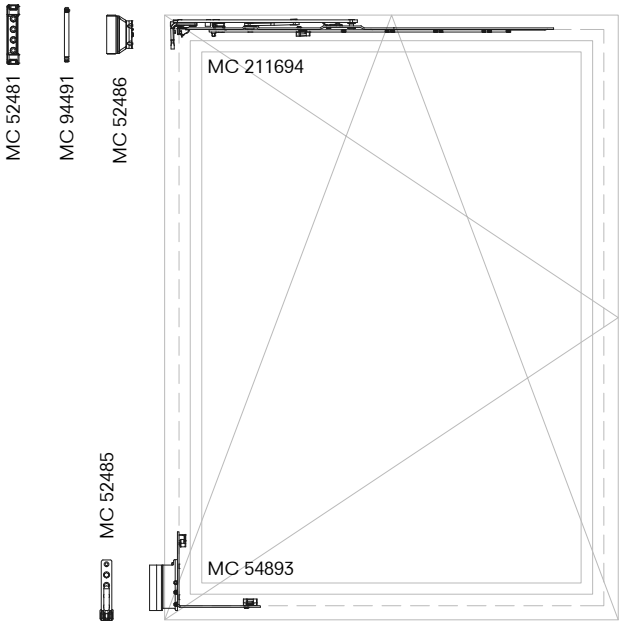
MC 211695 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88085

LBB = 401 - 600 mm

K88085

LBB = 401 - 600 mm



Tilt&Turn windows with visible hinge

Scissors and hinges kits
Left opening

K88086

LBB = 601 - 800 mm

MC 211696 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura sinistra

K88086

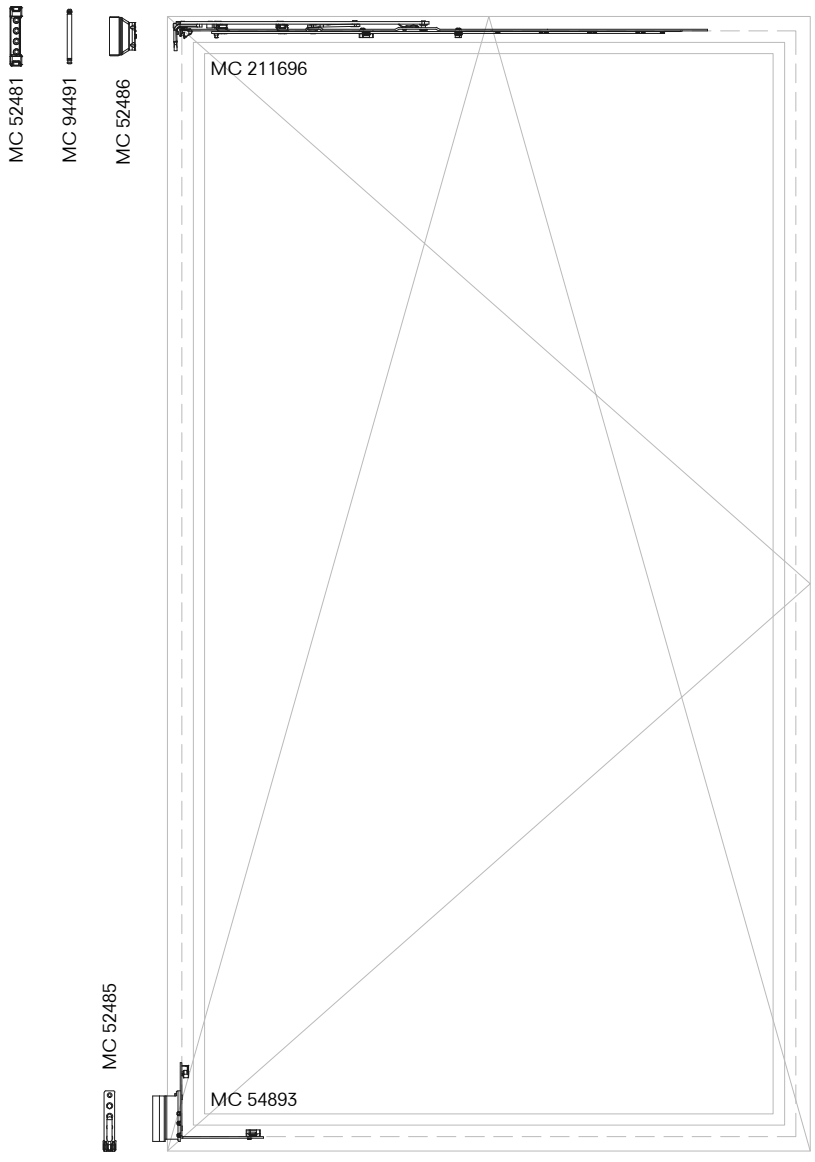
LBB = 601 - 800 mm

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura izquierda

K88086

LBB = 601 - 800 mm



K88087

LBB = 801 - 1050 mm

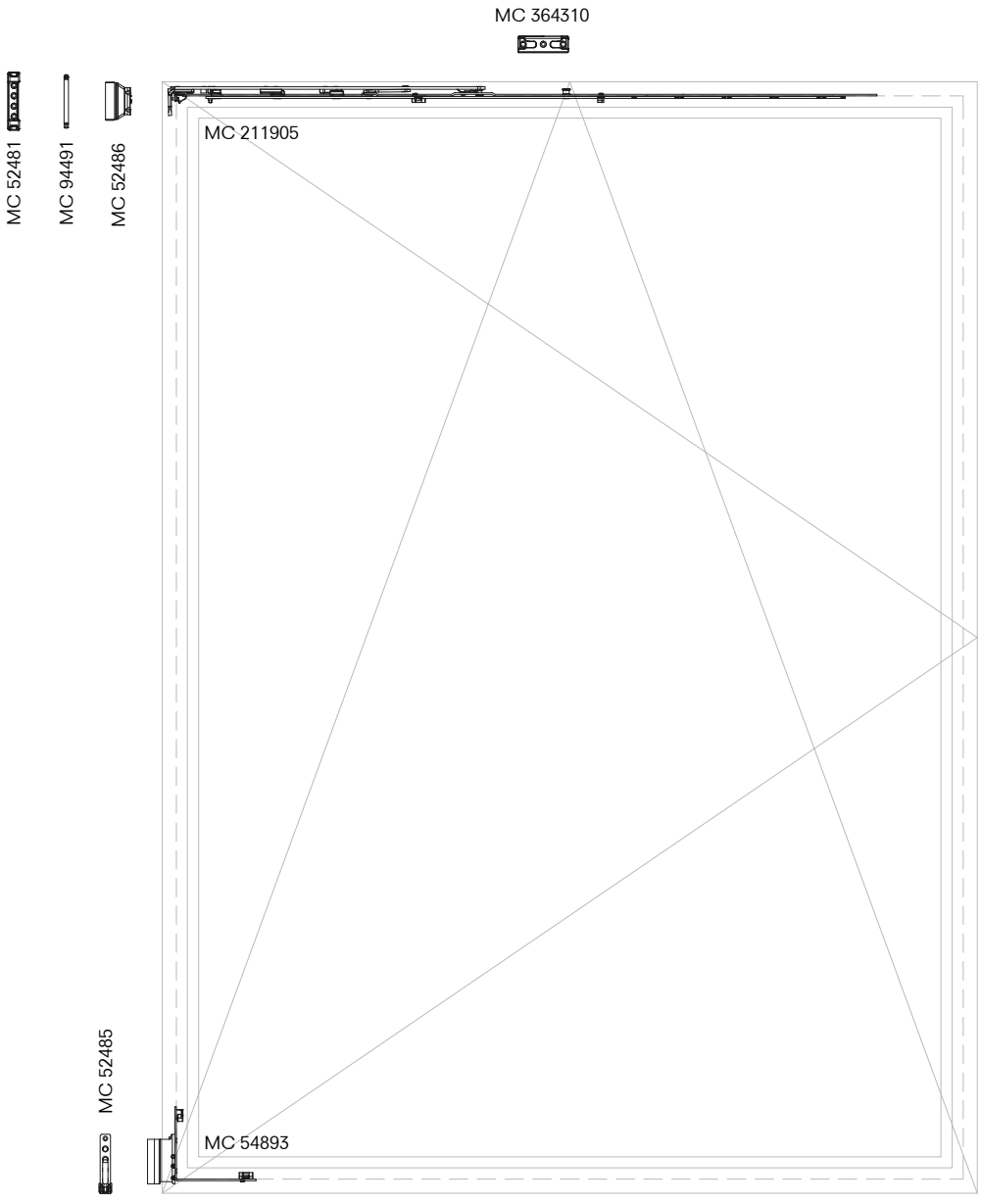
MC 211905 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 364310 n°01 piece

K88087

LBB = 801 - 1050 mm

K88087

LBB = 801 - 1050 mm



Tilt&Turn windows with visible hinge

Scissors and hinges kits
Left opening

K88088

LBB = 1051 - 1300 mm

MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a vista

Kit forbice e cerniere
Apertura sinistra

K88088

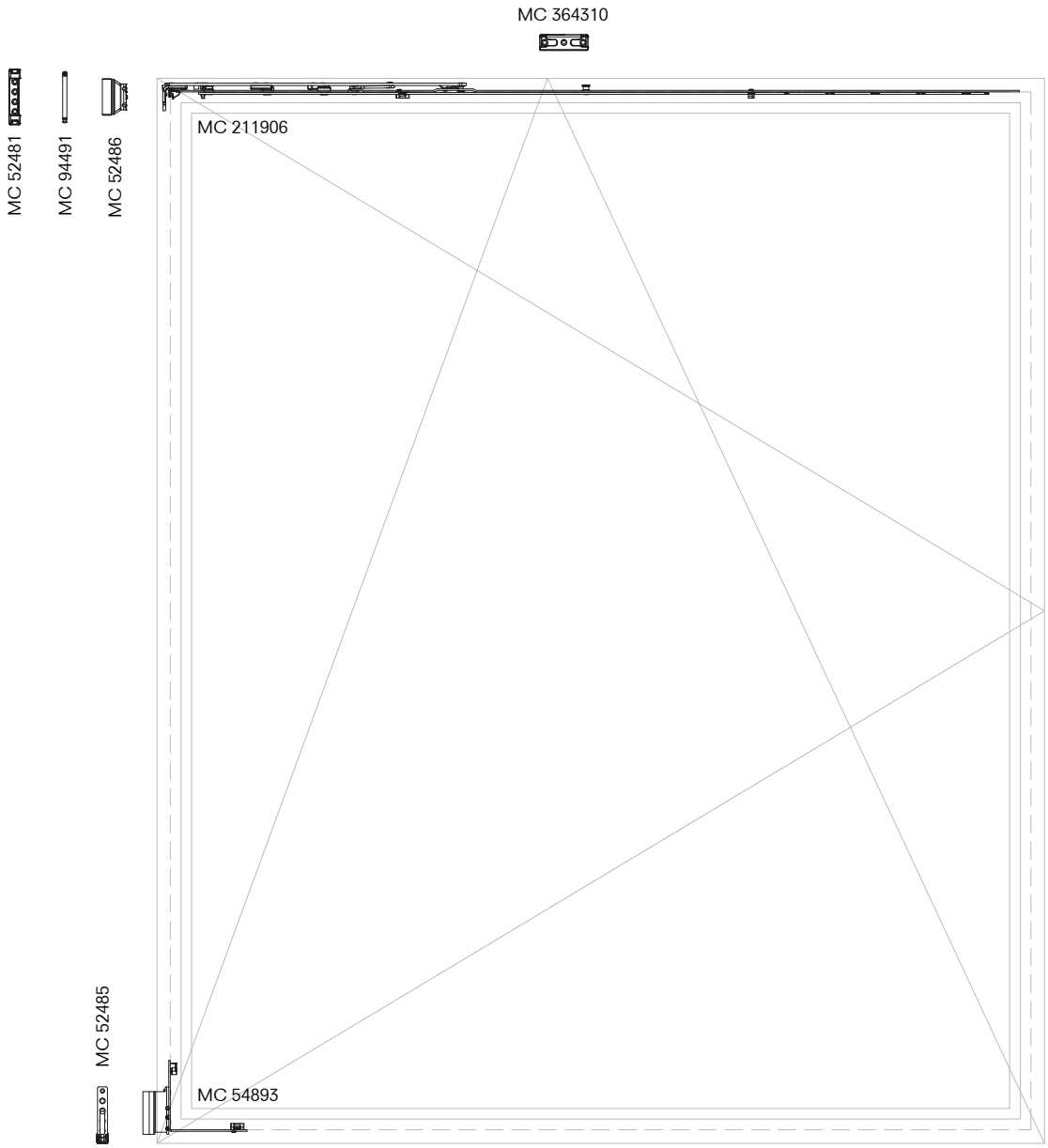
LBB = 1051 - 1300 mm

Ventana oscilante con bisagra visible

Kits de cizallas y bisagras
Apertura izquierda

K88088

LBB = 1051 - 1300 mm



K88089

LBB = 1301 - 1400 mm

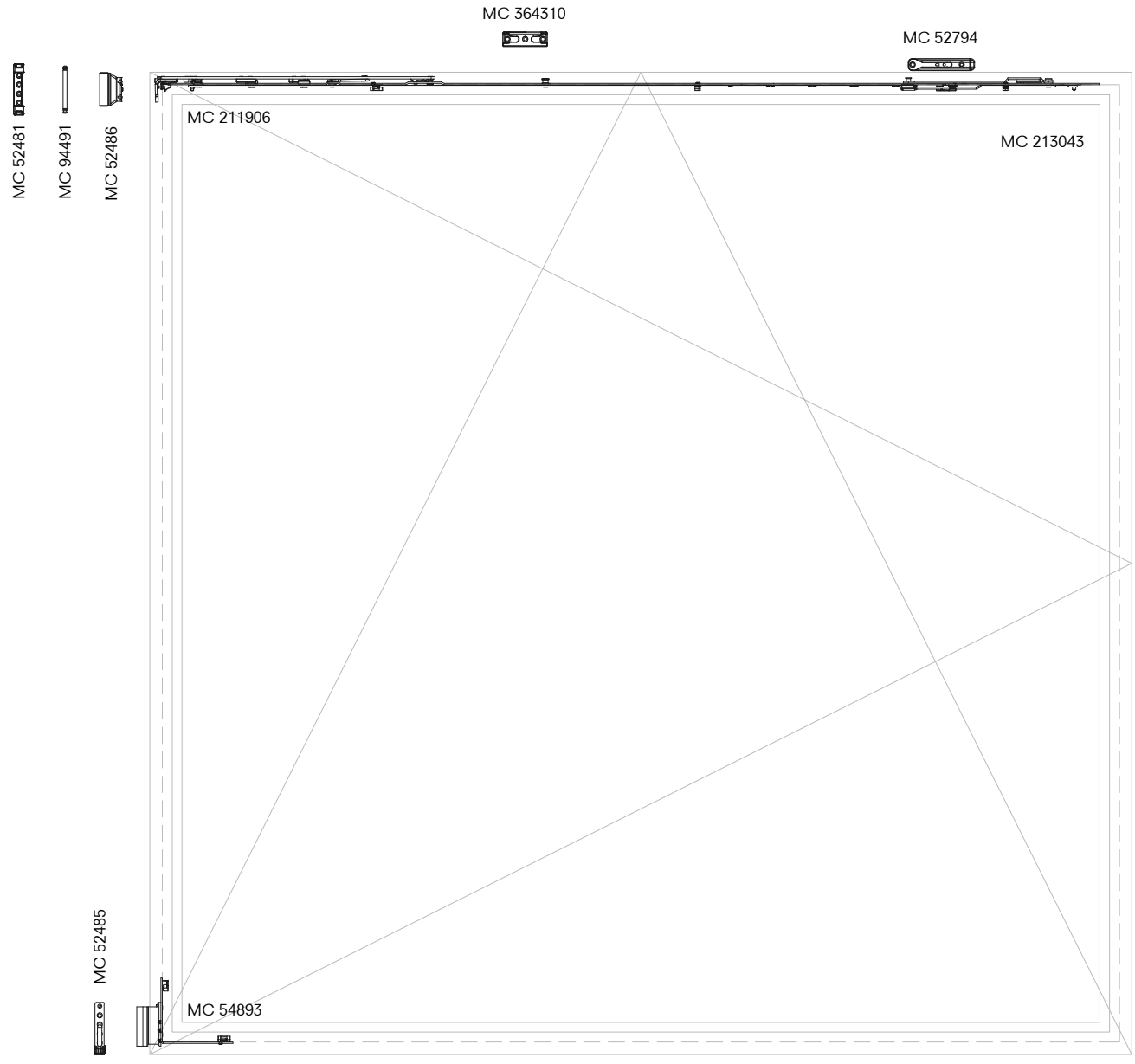
MC 211906 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece
MC 52794 n°01 piece
MC 213043 n°01 piece
MC 364310 n°01 piece

K88089

LBB = 1301 - 1400 mm

K88089

LBB = 1301 - 1400 mm



Tilt&Turn windows with visible hinge

Additional hinge side locking point

K88027

HBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88028

HBB = 1281 - 1500 mm

MC 201752 n°01 piece
MC 364310 n°01 piece

K88029

HBB = 1501 - 1700 mm

MC 201840 n°01 piece
MC 201753 n°01 piece
MC 364310 n°02 pieces

K88030

HBB = 1701 - 2800 mm

MC 201754 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Punto di chiusura aggiuntivo lato cerniera

K88027

HBB = 801 - 1280 mm

K88028

HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm

Ventana oscilante con bisagra visible

Punto de bloqueo adicional lado de la bisagra

K88027

HBB = 801 - 1280 mm

K88028

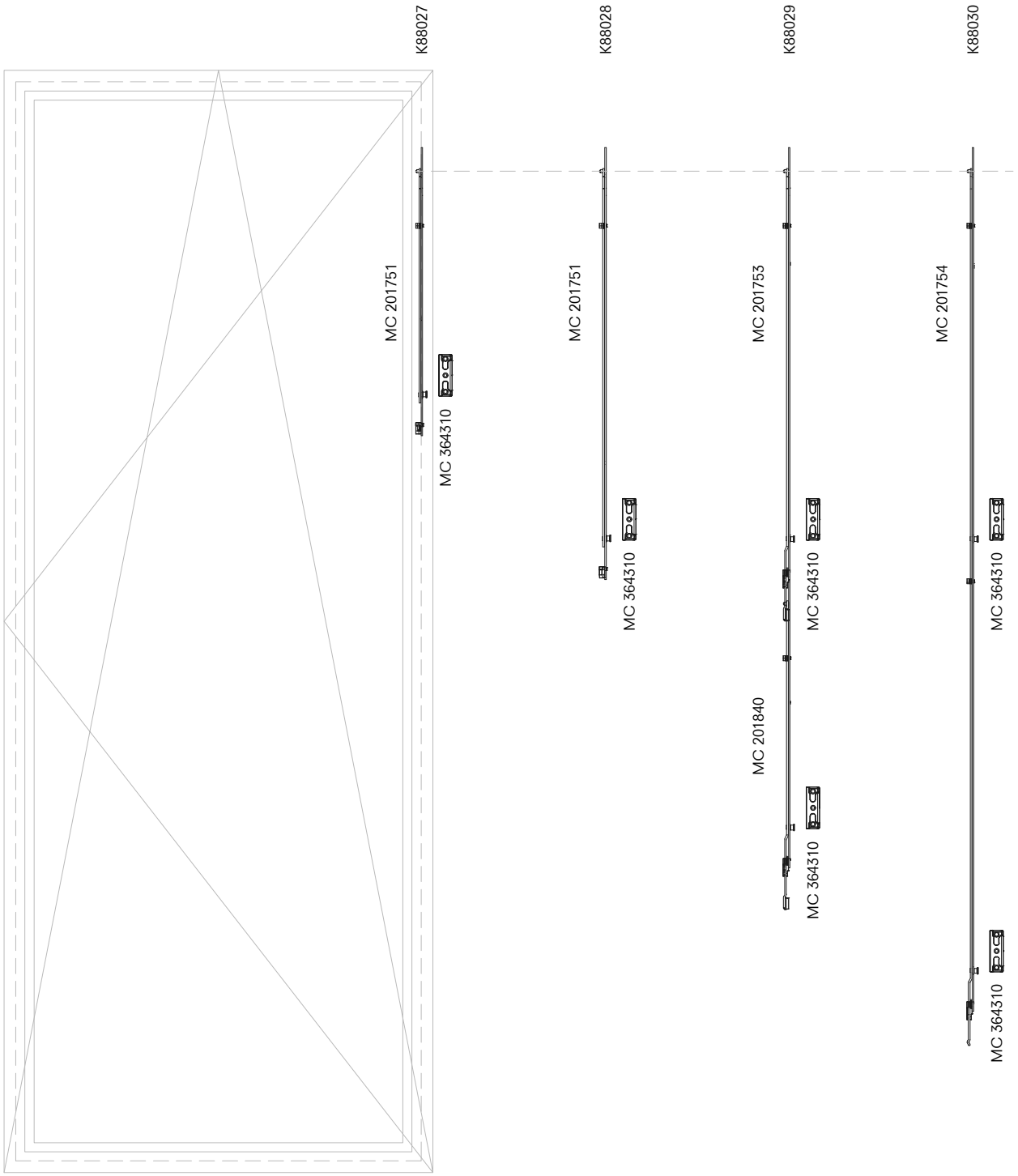
HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm


K88027
K88028
K88029
K88030
MC 201751
MC 364310
MC 201751
MC 364310
MC 201753
MC 364310
MC 201840
MC 364310
MC 201754
MC 364310

Tilt&Turn windows with visible hinge

Finestre anta ribalta con cerniera a vista

Ventana oscilante con bisagra visible

Hinges kits 2nd leaf

Kit cerniere 2a anta

Kits de bisagras 2do hoja

K88090

Right hinges

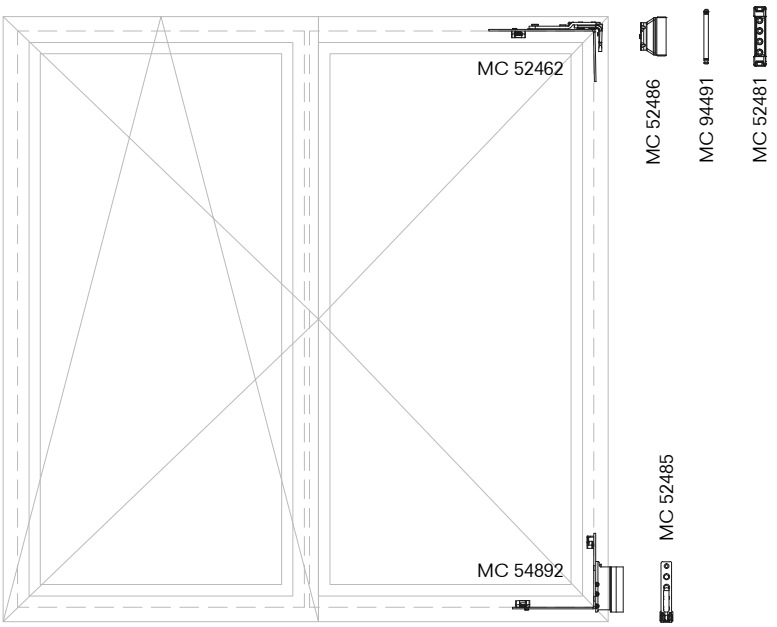
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88090

Cerniere destre

K88090

Derecha bisagras



K88091

Left hinges

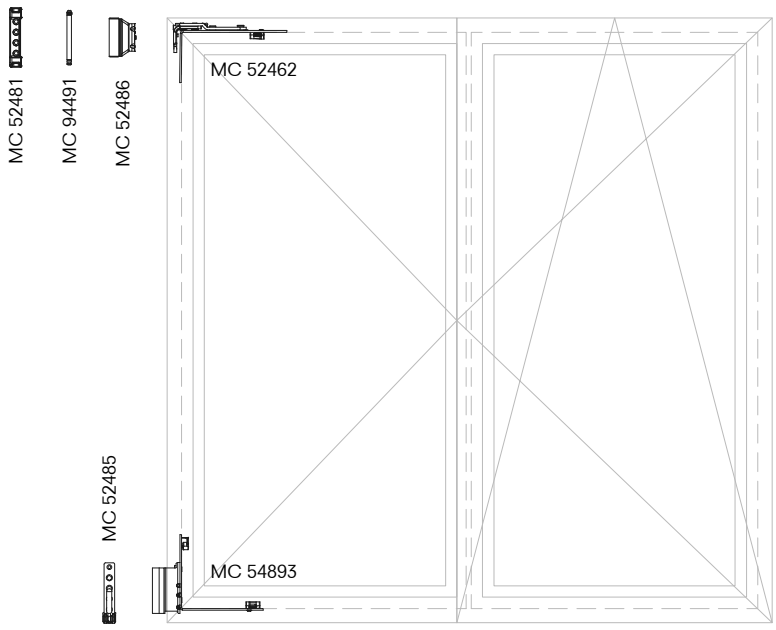
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88091

Cerniere sinistre

K88091

Izquierda bisagras



Tilt&Turn windows with visible hinge

Concealed compression locks kits

Finestre anta ribalta con cerniera a vista

Kit cerniere centrali a scomparsa

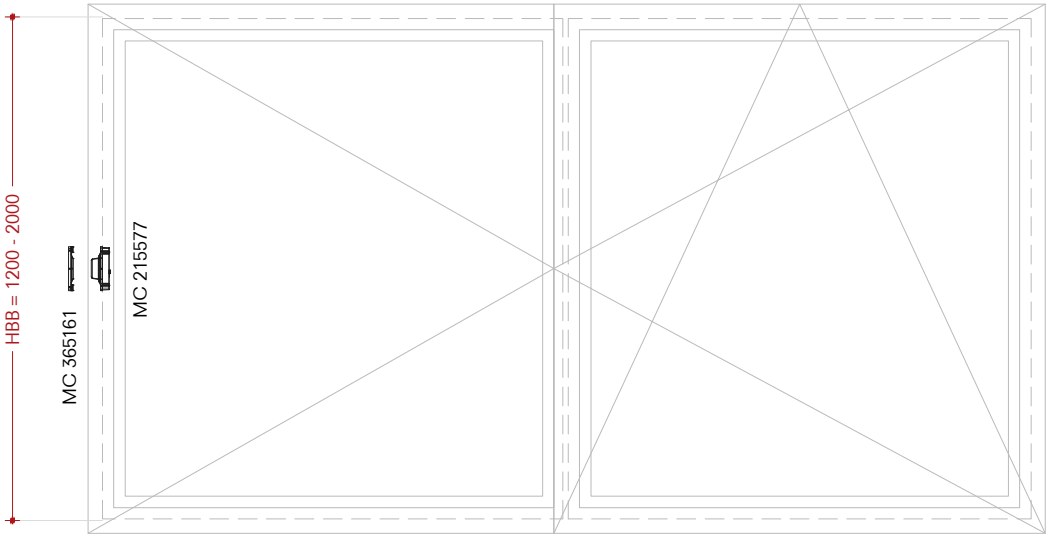
Ventana oscilante con bisagra visible

Kits de bisagras ocultas centrales

K88036

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece



K88036

HBB = 1280 - 2000 mm

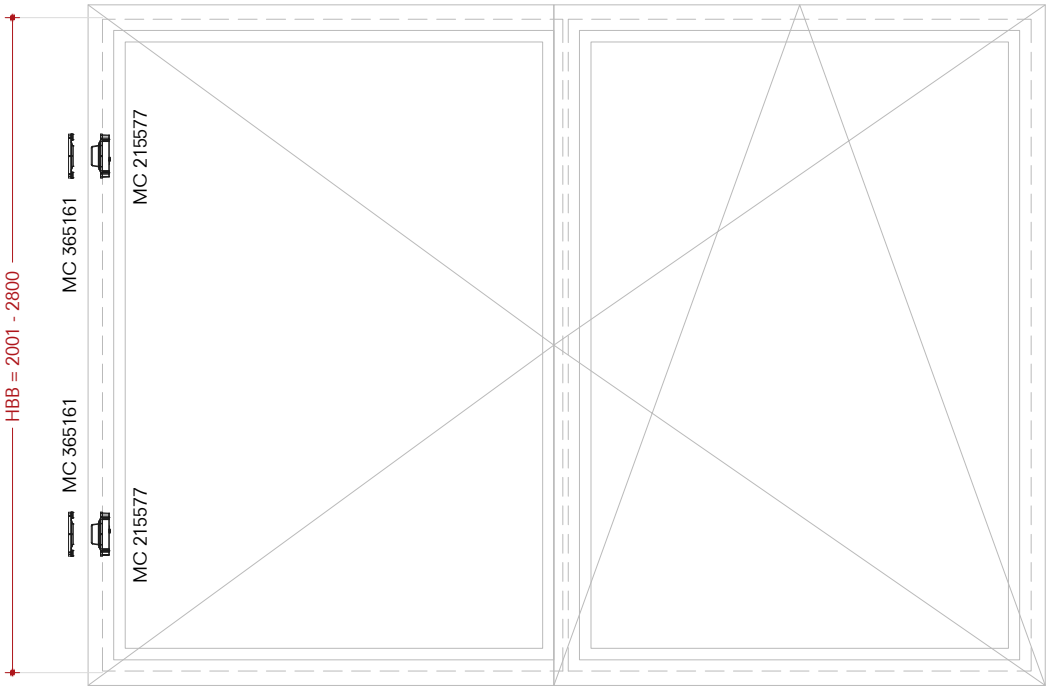
K88036

HBB = 1280 - 2000 mm

K88037

HBB = 2001 - 2800 mm

MC 215577 n°01 piece
MC 365161 n°01 piece



K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm

Tilt&Turn windows with visible hinge

Additional bottom side locking point

Finestre anta ribalta con cerniera a vista

Punto di chiusura aggiuntivo lato inferiore

Ventana oscilante con bisagra visible

Punto de bloqueo adicional lado inferior

K88031

LBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88031

LBB = 801 - 1280 mm

K88031

LBB = 801 - 1280 mm

K88032

LBB = 1281 - 1400 mm

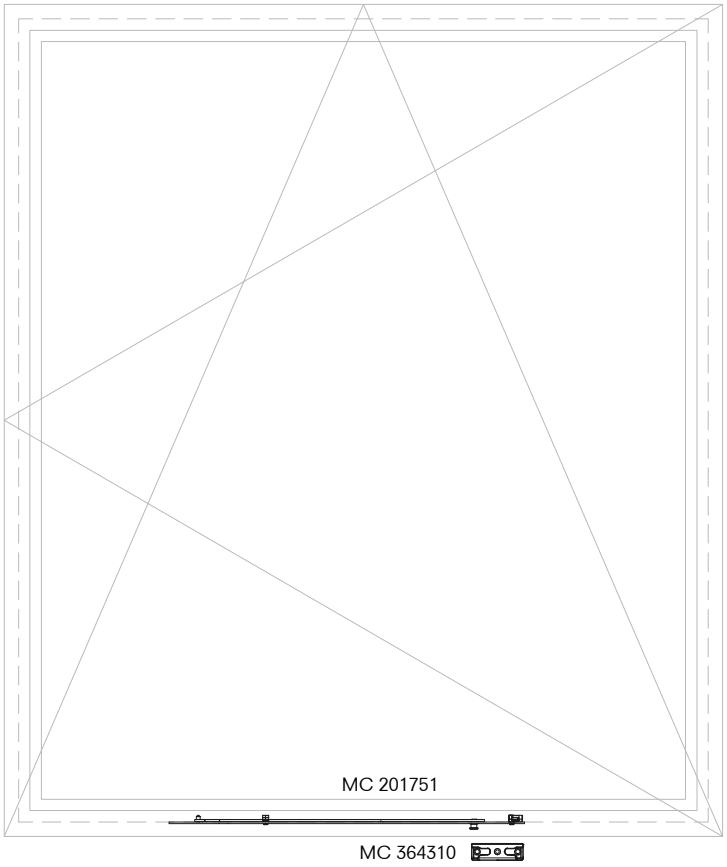
MC 201752 n°01 piece
MC 364310 n°01 piece

K88032

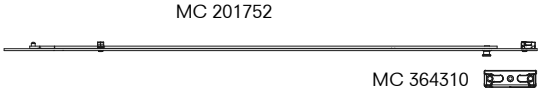
LBB = 1281 - 1400 mm

K88032

LBB = 1281 - 1400 mm



K88031



K88032

Tilt&Turn windows with visible hinge

Lifting component
Only for single leaf window

Finestre anta ribalta con cerniera a vista

Componente di sollevamento
Solo per finestra ad anta singola

Ventana oscilante con bisagra visible

Componente de elevación
Solo para ventana de una hoja

K88047

Right hinges

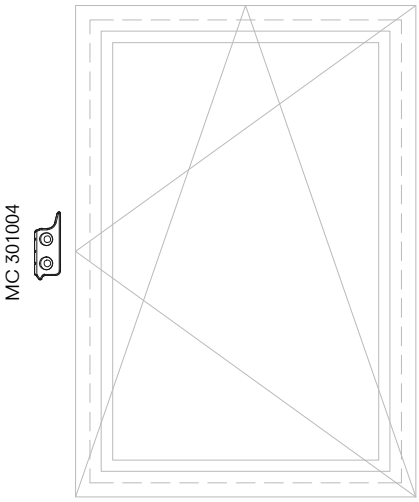
MC 361004 n°01 piece

K88047

Cerniere destre

K88047

Derecha bisagras



K88048

Left hinges

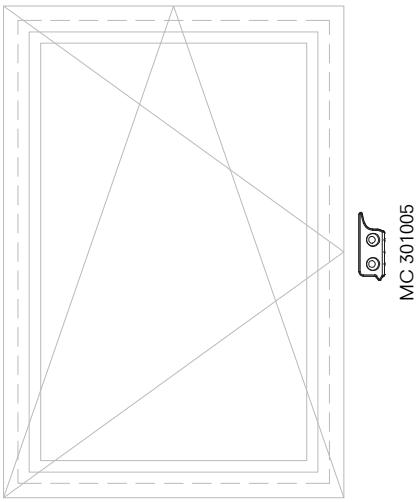
MC 361005 n°01 piece

K88048

Cerniere sinistre

K88048

Izquierda bisagras



Tilt&Turn windows with visible hinge

French casement drive kits

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

MC 221901 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

MC 221902 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

MC 221903 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

MC 221906 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

MC 207242 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

MC 221907 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88069

HH = 1050 mm

MC 221908 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit aste a leva

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

HH = 700 mm

K88068

HH = 1050 mm

K88069

HH = 1050 mm

Ventana oscilante con bisagra visible

Kit Cremona semifija

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

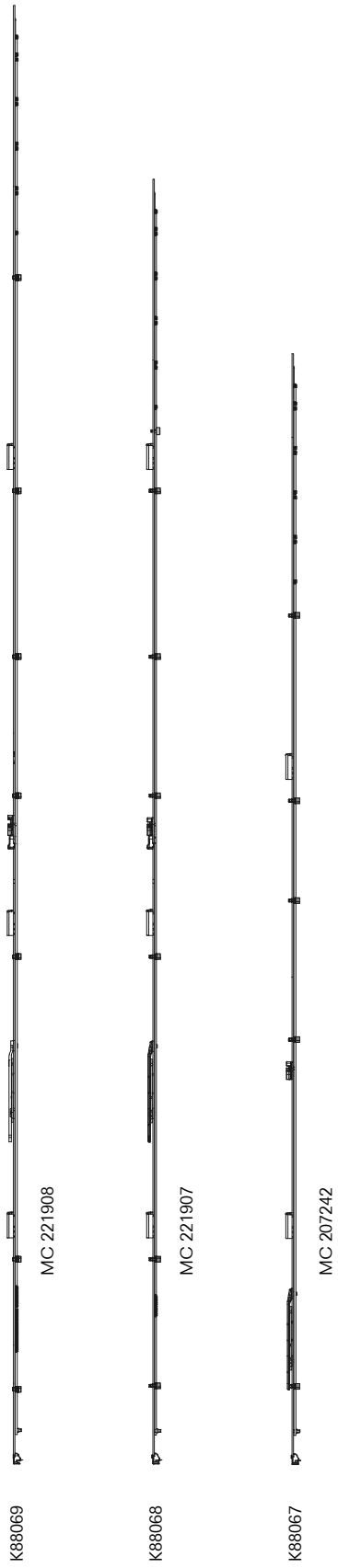
HH = 700 mm

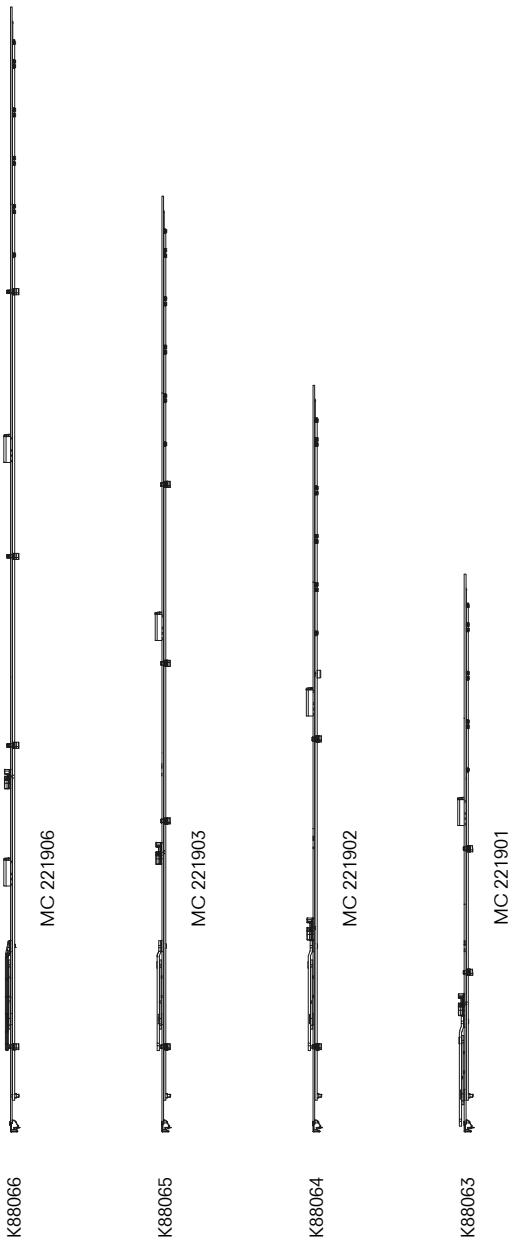
K88068

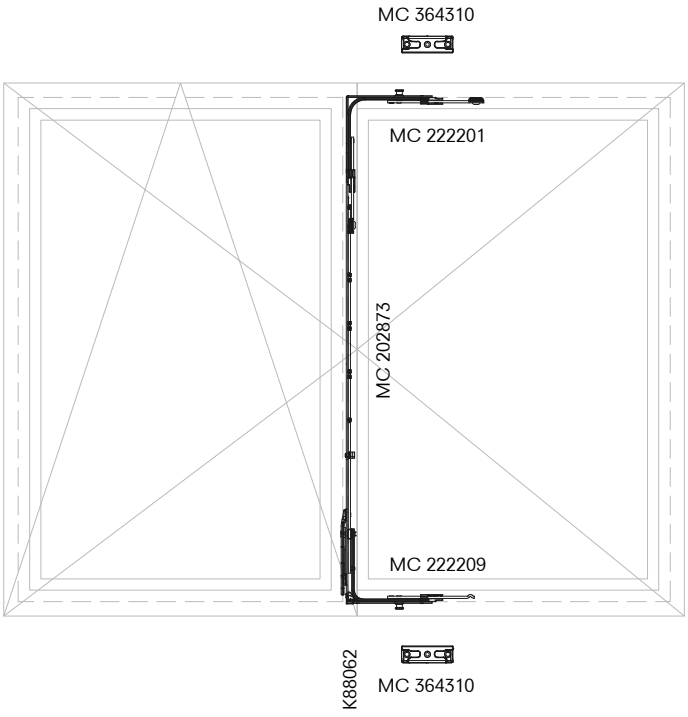
HH = 1050 mm

K88069

HH = 1050 mm




MC 221906
MC 221903
MC 221902
MC 221901
K88066
K88065
K88064
K88063


MC 364310
MC 222201
MC 202873
MC 222209
K88062
MC 364310

Tilt&Turn windows with visible hinge

French casement drive kits

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88115

MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit aste a leva per cremonesi doppiorasabili

K88113

K88114

K88115

K88116

Ventana oscilante con bisagra visible

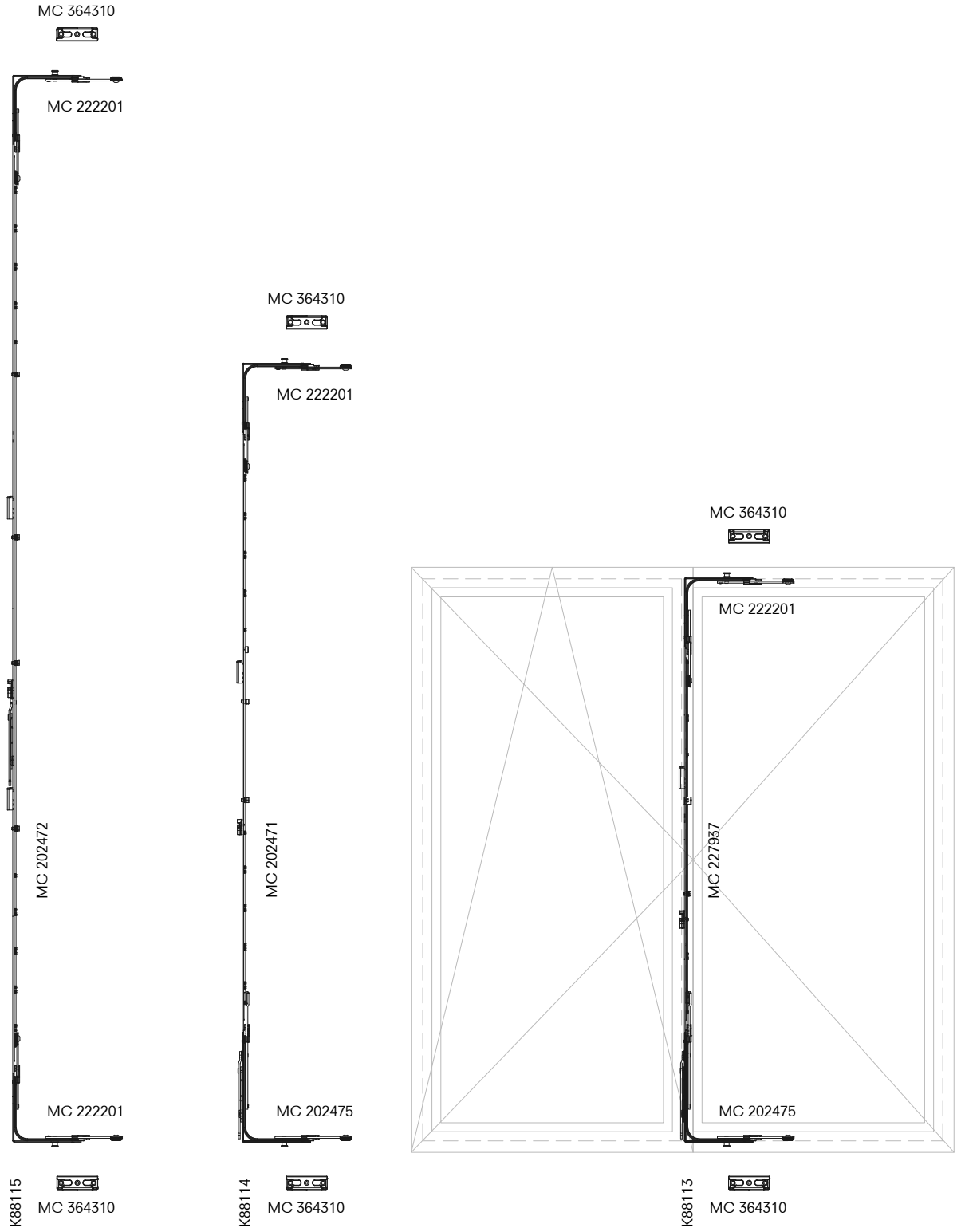
Kit Cremona semifija

K88113

K88114

K88115

K88116


MC 364310
MC 222201
MC 202472
MC 222201
K88115
MC 364310
MC 364310
MC 222201
MC 202471
MC 202475
K88114
MC 364310
MC 364310
MC 222201
MC 227937
MC 202475
K88113
MC 364310

Tilt&Turn windows with visible hinge

French casement drive extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88071

141 - 235 mm

MC 203810 n°01 piece

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88073

376 - 470 mm

MC 208333 n°01 piece

K88074

471 - 610 mm

MC 208333 n°01 piece
MC 206630 n°01 piece

K88075

611 - 705 mm

MC 208333 n°01 piece
MC 203810 n°01 piece

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88077

846 - 940 mm

MC 208333 n°02 pieces

Finestre anta ribalta con cerniera a vista

Kit prolunghe per aste a leva

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

Ventana oscilante con bisagra visible

Kit de extensión Cremona

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

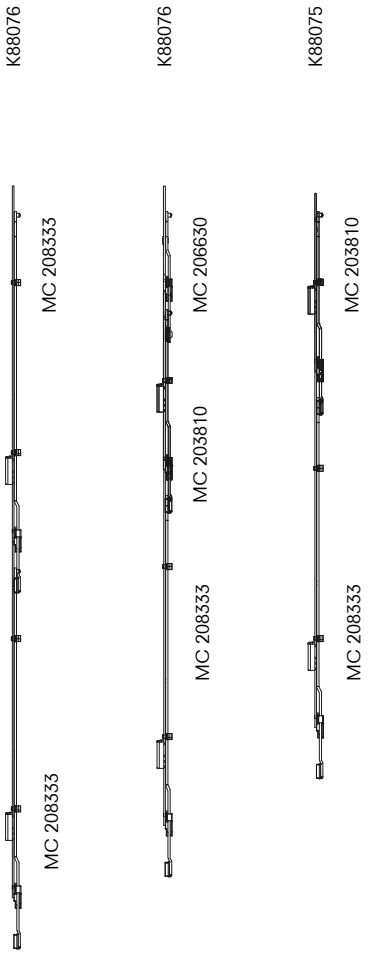
611 - 705 mm

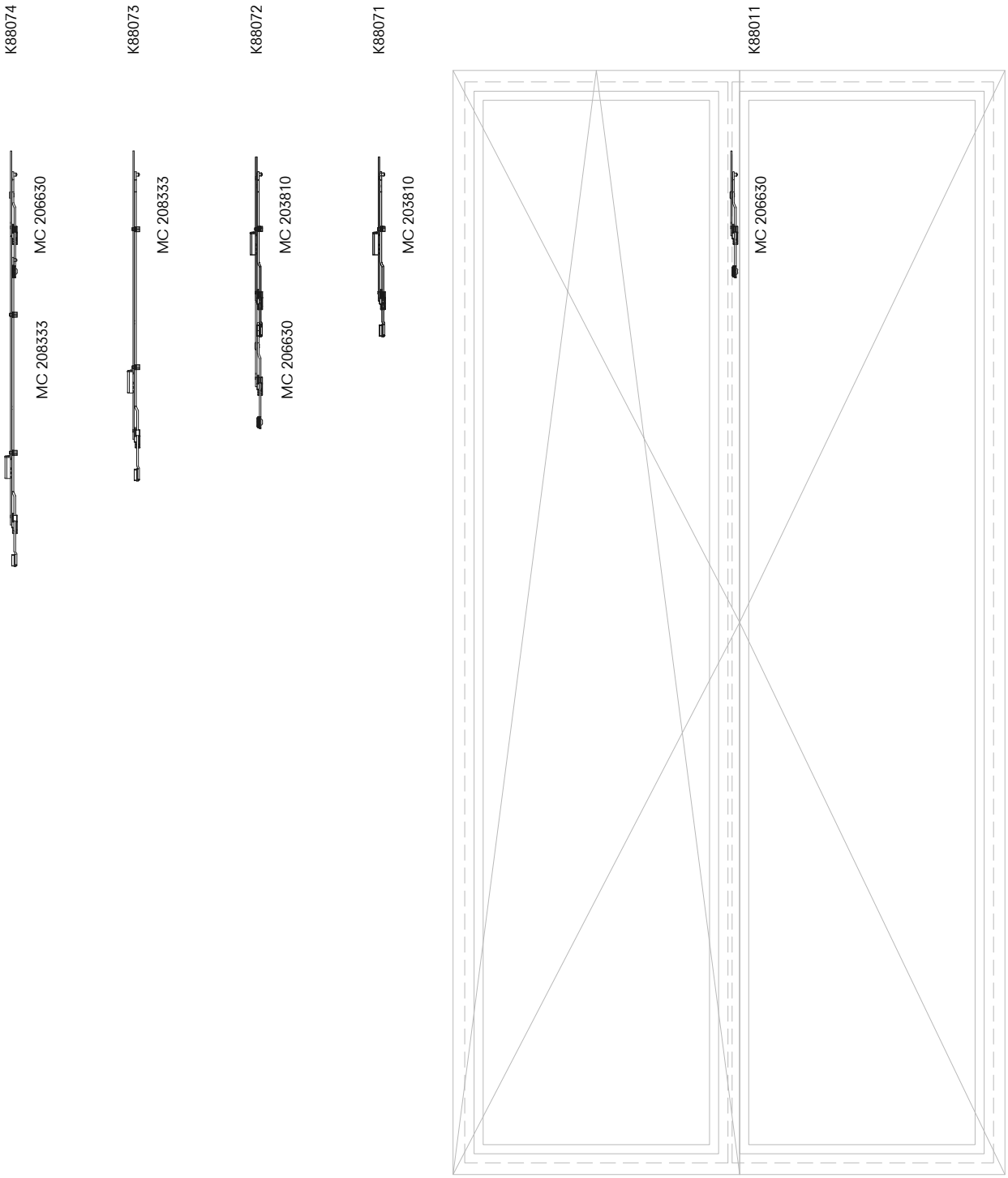
K88076

706 - 845 mm

K88077

846 - 940 mm




K88074
MC 206630
MC 208333
K88073
MC 208333
K88072
MC 203810
MC 206630
K88071
MC 203810
K88011
MC 206630

Tilt&Turn windows with visible hinge

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Finestre anta ribalta con cerniera a vista

Scrocco porta

K88061

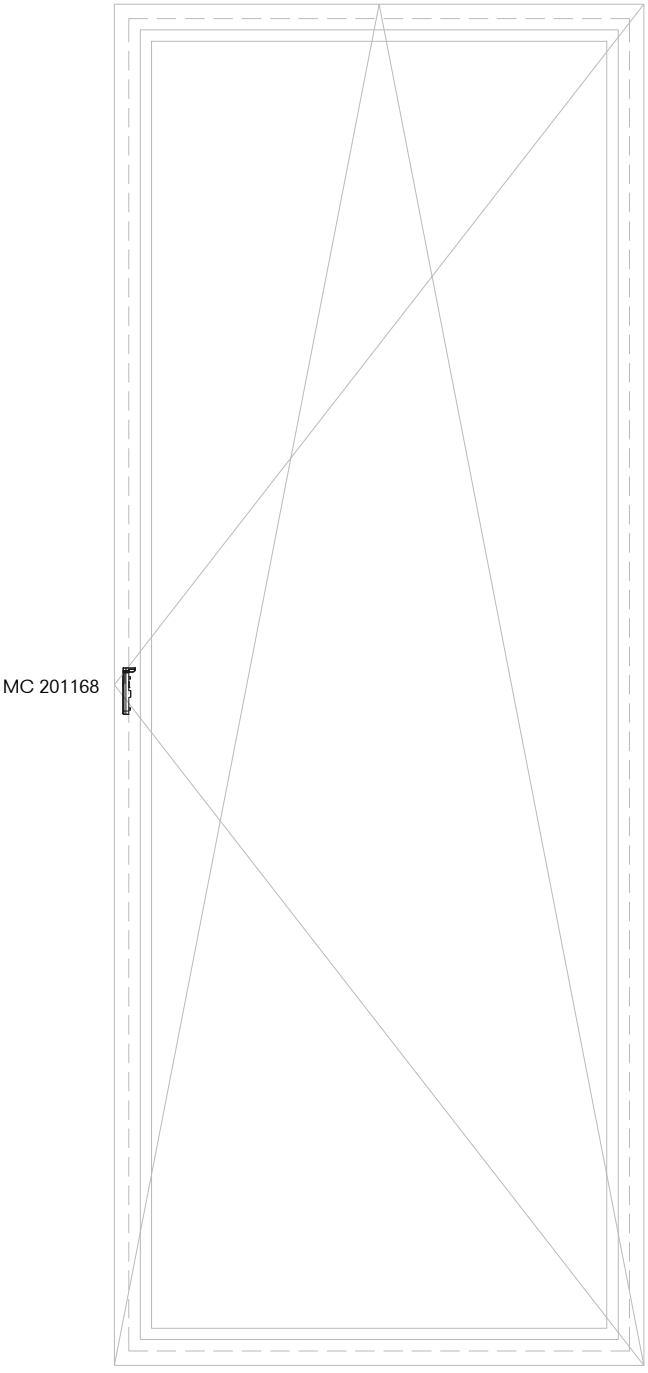
HBB = 661 - 2800 mm

Ventana oscilante con bisagra visible

Pestillo de puerta

K88061

HBB = 661 - 2800 mm



Tilt&Turn windows with visible hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre anta ribalta con cerniera a vista

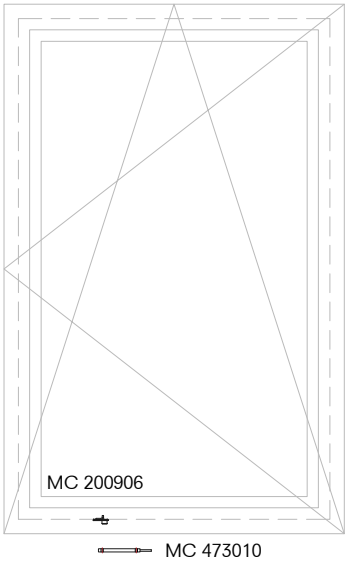
Contatto allarme

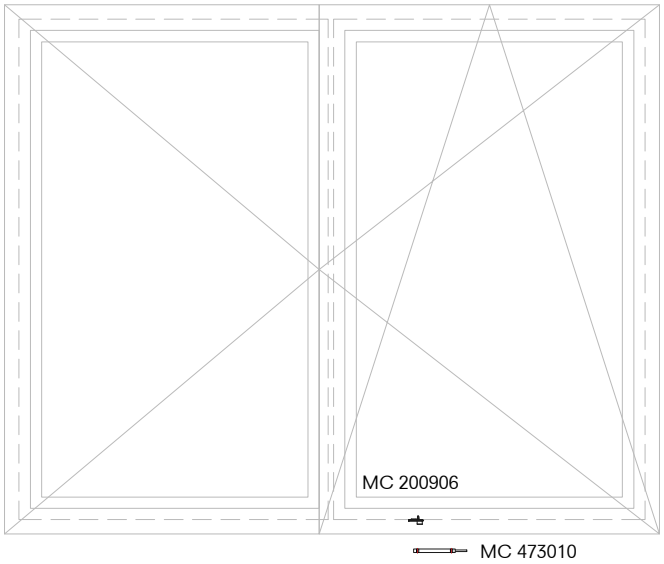
K99062

Ventana oscilante con bisagra visible

Contacto de alarma

K99062





Tilt&Turn windows with visible hinge

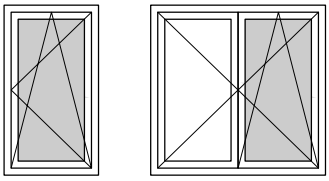
Determination of LBB
(Groove Hardware Lenght)

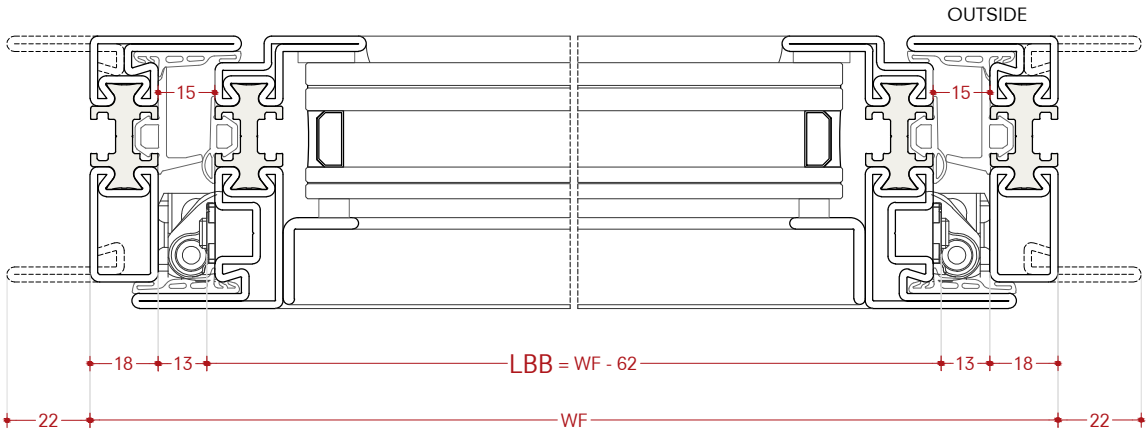
Finestre anta ribalta con cerniera a vista

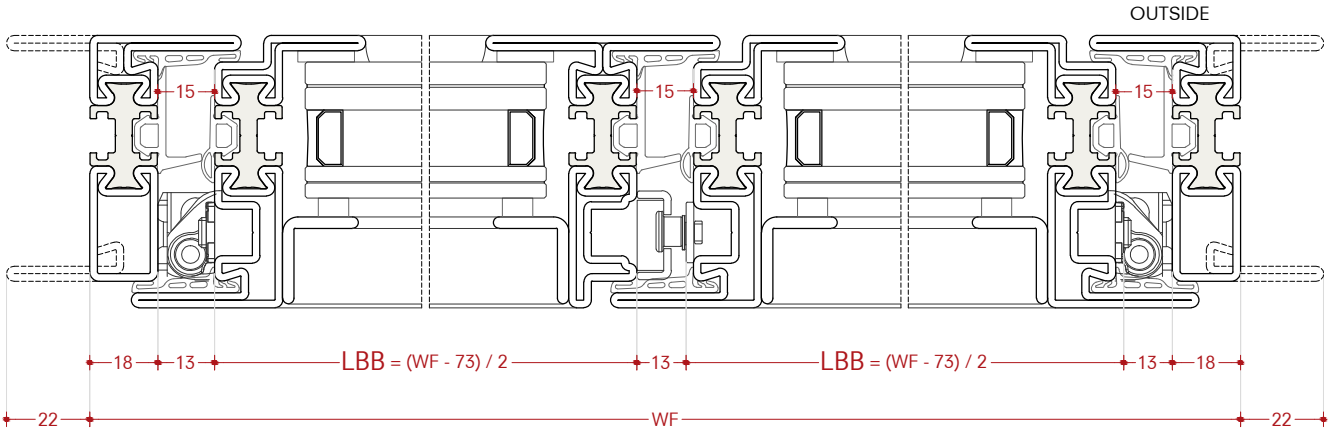
Determinazione di LBB
(Larghezza cava ferramenta)

Ventana oscilante con bisagra visible

Determinación de LBB
(longitud de la ranura del hardware)







Tilt&Turn windows with visible hinge

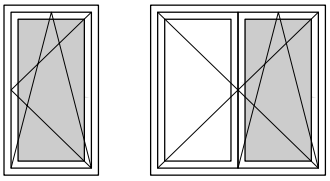
Determination of HBB
(Groove Hardware Height)

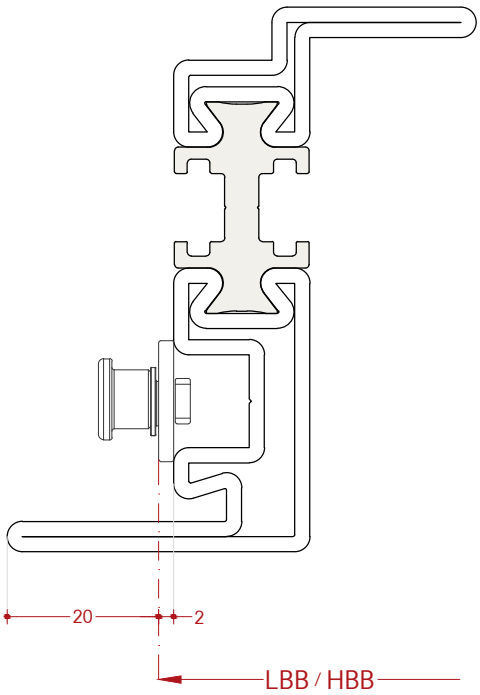
Finestre anta ribalta con cerniera a vista

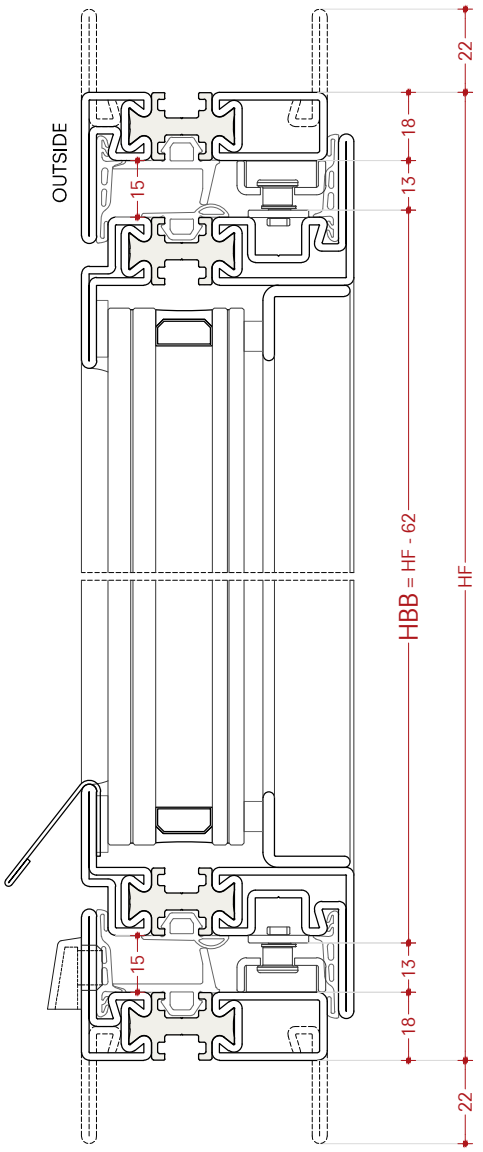
Determinazione di HBB
(altezza cava ferramenta)

Ventana oscilante con bisagra visible

Determinación de HBB
(altura de la ranura del hardware)







Tilt&Turn windows with visible hinge

Finestre anta ribalta con cerniera a vista

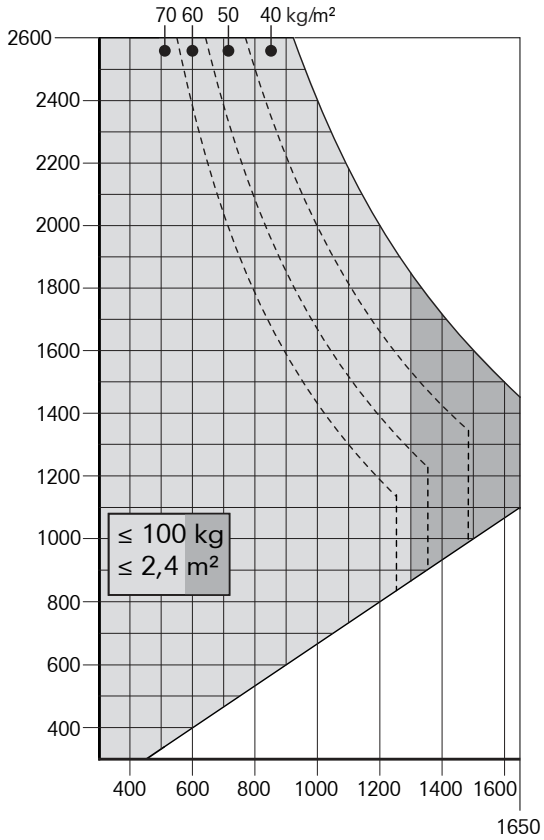
Ventana oscilante con bisagra visible

Load capacity tables

Tabelle portate

Tablas de peso

T&T window visible accessories capacity
Portate ferramenta a vista per finestre anta ribalta
Peso de accesorios vista para ventana arriba



Standard handle height

Altezza maniglia standard

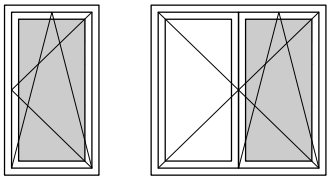
Altura del manilla estándar

	HBB min	HBB max	H handle
K88003	370	660	190
K88004	661	840	300
K88005	841	1090	400
K88006	1091	1340	500
K88007	1341	1590	600
K88008	1591	1700	700
K88009	1701	1950	1050
K88010	1951	2200	1050

Tilt&Turn windows with visible hinge

Step #1 - Basic kit choice

	LBB min	LBB max	HBB min	HBB max
K88001	370	1400	455	2800
K88002	370	815	370	454



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

Step #2 - Gear kit choice

	HH	HDG	CRP	HCRN	HBB min	HBB max (without extension)	HBB max (with extension)
K88003	190	555	220	5	370	454	2335
K88003	190	555	220	113.5	455	660	2540
K88004	300	736.5	190.5	113.5	661	840	2720
K88005	400	986.5	260.5	113.5	841	1090	2970 (*)
K88006	500	1236.5	260.5	113.5	1091	1340	3150 (*)
K88007	600	1486.5	260.5	113.5	1341	1590	3150 (*)
K88008	700	1596.5	260.5	113.5	1591	1700	3150 (*)
K88009	1050	1846.5	260.5	113.5	1701	1950	3150 (*)
K88010	1050	2096.5	260.5	113.5	1951	2200	3150 (*)

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

(*) = Over 2800 mm technical department confirmation needed.

Finestre anta ribalta con cerniera a vista

Passo #1 - Scelta del kit base

LBB = larghezza cava ferramenta
HBB = altezza cava ferramenta

Passo #2 - Scelta del kit Cremonese

HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

(*) = Conferma dell'ufficio tecnico necessaria per dimensioni superiori a 2800 mm

Ventana oscilante con bisagra visible

Paso #1 - Elección de kit básico

LBB = longitud de la ranura del hardware
HBB = altura de la ranura del hardware

Paso #2 - Elección de kit de equipo

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

(*) = Se necesita confirmación del departamento técnico para dimensiones superiores a 2800 mm

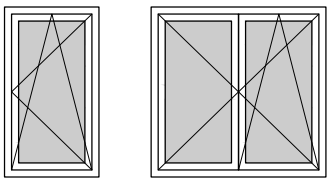
Step #3 - Extension kits choice

Passo #3 - Scelta del kit estensione Cremonese

Paso #3 - Elección de kit extensión

HBB * - HCRN - HDG = Extension kit lenght / larghezza kit prolunga / longitud de kit extensión

	MinL	MaxL
K88011	0	140
K88012	141	235
K88059	236	375
K88013	376	470
K88014	471	610
K88015	611	705
K88060	706	845
K88016	846	940
K88016 / K88011	941	1080
K88016 / K88012	1081	1175
K88016 / K88059	1176	1315
K88016 / K88013	1316	1410
K88016 / K88014	1411	1550
K88016 / K88015	1551	1650
K88016 / K88060	1651	1785
K88016 / K88016	1786	1880



* See HBB information page

MinL = Min Lenght (mm)
MaxL = Max Lenght (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = larghezza minima (mm)
MaxL = larghezza massima (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = longitud mínimo (mm)
MaxL = longitud máximo (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

Step #4 - Scissors and hinges kit choice

Passo #4 - Scelta del kit forbice e cerniere

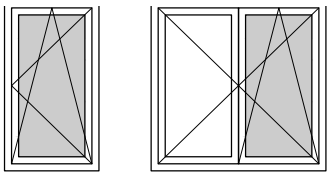
Paso #4 - Elección de kit de cizallas y bisagras

Left / Sinistro / Izquierda

	LBB min	LBB max
K88084	370	400
K88085	401	600
K88086	601	800
K88087	801	1050
K88088	1051	1300
K88089	1301	1400

Right / Destro / Derecha

	LBB min	LBB max
K88078	370	400
K88079	401	600
K88080	601	800
K88081	801	1050
K88082	1051	1300
K88083	1301	1400

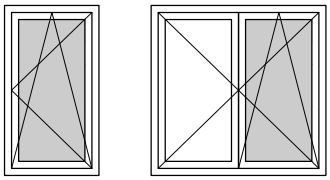


Step #5 - Additional hinge side locking point choice

Passo #5 - Scelta punto di chiusura aggiuntivo lato cerniera

Paso #5 - Elección punto de bloqueo adicional lado de la bisagra

	HBB min	HBB max
K88027	801	1280
K88028	1281	1500
K88029	1501	1700
K88030	1701	2800

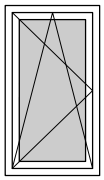


Step #6 - Lifting component Only for single leaf window

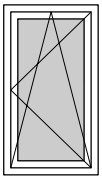
Passo #6 - Componente di sollevamento Solo per finestra ad anta singola

Paso #6 - Componente de elevación Solo para ventana de una hoja

K88048



K88047

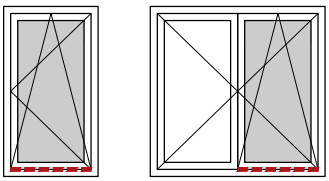


Step #7 - Additional bottom side locking point choice

Passo #7 - Scelta punto di chiusura aggiuntivo lato inferiore

Paso #7 - Elección punto de bloqueo adicional lado inferior

	LBB min	LBB max
K88031	800	1280
K88032	1281	1400



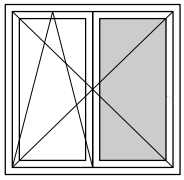
Step #8 - 2nd leaf hinges kit choice

Passo #8 - Scelta kit cerniere 2a anta

Paso #8 - Elección kit de bisagras 2do hoja

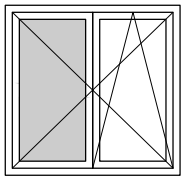
Right / Destro / Derecha

	LBB min	LBB max	HBB min	HBB max
K88090	370	1400	370	2800



Left / Sinistro / Izquierda

	LBB min	LBB max	HBB min	HBB max
K88091	370	1400	370	2800

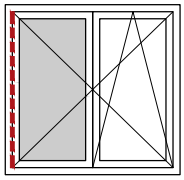


Step #9 - Compression lock kit choice for 2nd leaf

Passo #9 - Scelta kit cerniere centrali per 2a anta

Paso #9 - Elección kit de cerraduras de compresión para 2do hoja

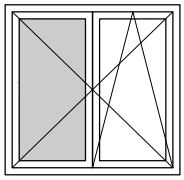
	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800



Step #10 - French casement drive and extension kit choice

Passo #10 - Scelta kit aste a leva e prolunga

Paso #10 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88003	K88062
K88004	K88063
K88005	K88064
K88006	K88065
K88007	K88066
K88008	K88067
K88009	K88068
K88010	K88069

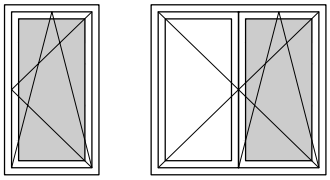
Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Step #11 - Door catch choice

Passo #11 - Scelta scrocco porta

Paso #11 - Elección pestillo de puerta

	HBB min	HBB max
K88061	661	2800

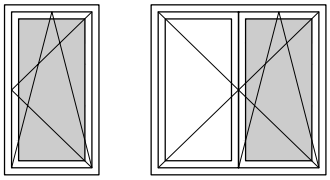


Step #12 - Alarm contact choice

Passo #12 - Scelta contatto allarme

Paso #12 - Elección contacto de alarma

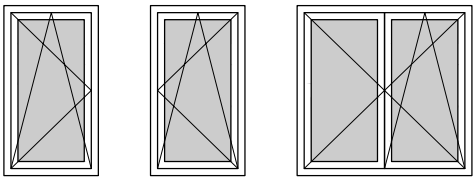
K99062



Step #13 - Hinge cover

Passo #13 - Copricerniera

Paso #13 - Cubierta de bisagra



Right Destro Derecha	Surface finishes Finiture Superficie
K88092	Silver Argento Plata
K88093	White Bianco Blanco
K88094	Black Nero Negro
K88095	Brown Marrone Marrón
K88096 (*)	Titanium Titanio Titanio

Left Sinistro Izquierda	Surface finishes Finiture Superficie
K88097	Silver Argento Plata
K88098	White Bianco Blanco
K88099	Black Nero Negro
K880100	Brown Marrone Marrón
K880101 (*)	Titanium Titanio Titanio

*On request
*Su richiesta
*Por encargo

Step #14 - Double croppable gear kits choice

(Instead of Step #3 and #4)

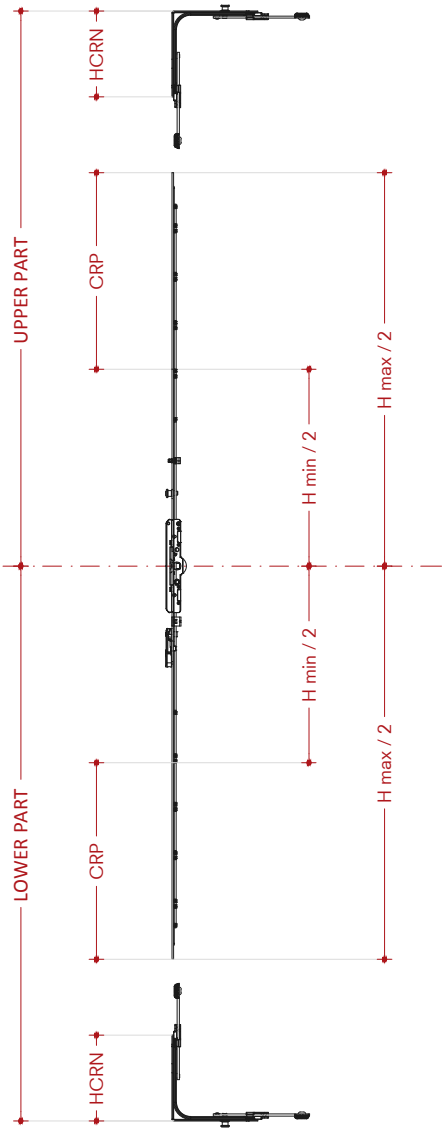
Passo #14 - Scelta Kit cremonesi doppiorasabili

(Invece dei passaggi #3 e #4)

Paso #14 - Elección Kits de equipo recortables dobles

(En lugar de los pasos #3 y #4)

	h min handle	HDG	H min / 2	H max / 2	CRP	HCRN	HBB min
K88109	265	640.5	151	260	170 + 170	113.5	527.5
K88110	375	1040.5	261	510	260 + 260	113.5	747.5
K88111	625	1540.5	511	760	260 + 260	113.5	1247.5
K88112	875	2040.5	761	1020	260 + 260	113.5	1747.5



UPPER PART = HBB - HH - HCRN

LOWER PART = HH - HCRN

Choose the smallest value and find the right gear kit between Hmin/2 and Hmax/2 range columns.

Scegli il valore più piccolo e trova il kit Cremonese giusto tra le colonne dell'intervallo Hmin/2 e Hmax/2

Elija el valor más pequeño y encuentre el kit de equipo adecuado entre las columnas de rango Hmin/2 y Hmax/2

EXTENSION KIT:

UPPER* = HBB - HH - HCRN - H max / 2 →

LOWER* = HH - HCRN - H max / 2 →

CHECK ON THE EXTENSION TABLE (STEP 3)

* with negative value extension are not needed.

* con valore negativo non sono necessarie estensioni.

* con valor negativo no se necesitan extensiones.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

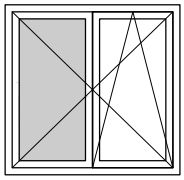
HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

Step #15 - French casement drive and extension kit choice

Passo #15 - Scelta kit aste a leva doppiorasabile e prolunga

Paso #15 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88109	K88113
K88110	K88114
K88111	K88115
K88112	K88116

Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Tilt&Turn windows with concealed hinge

Basic kits

K88001
Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit base

K88001
Finestre standard

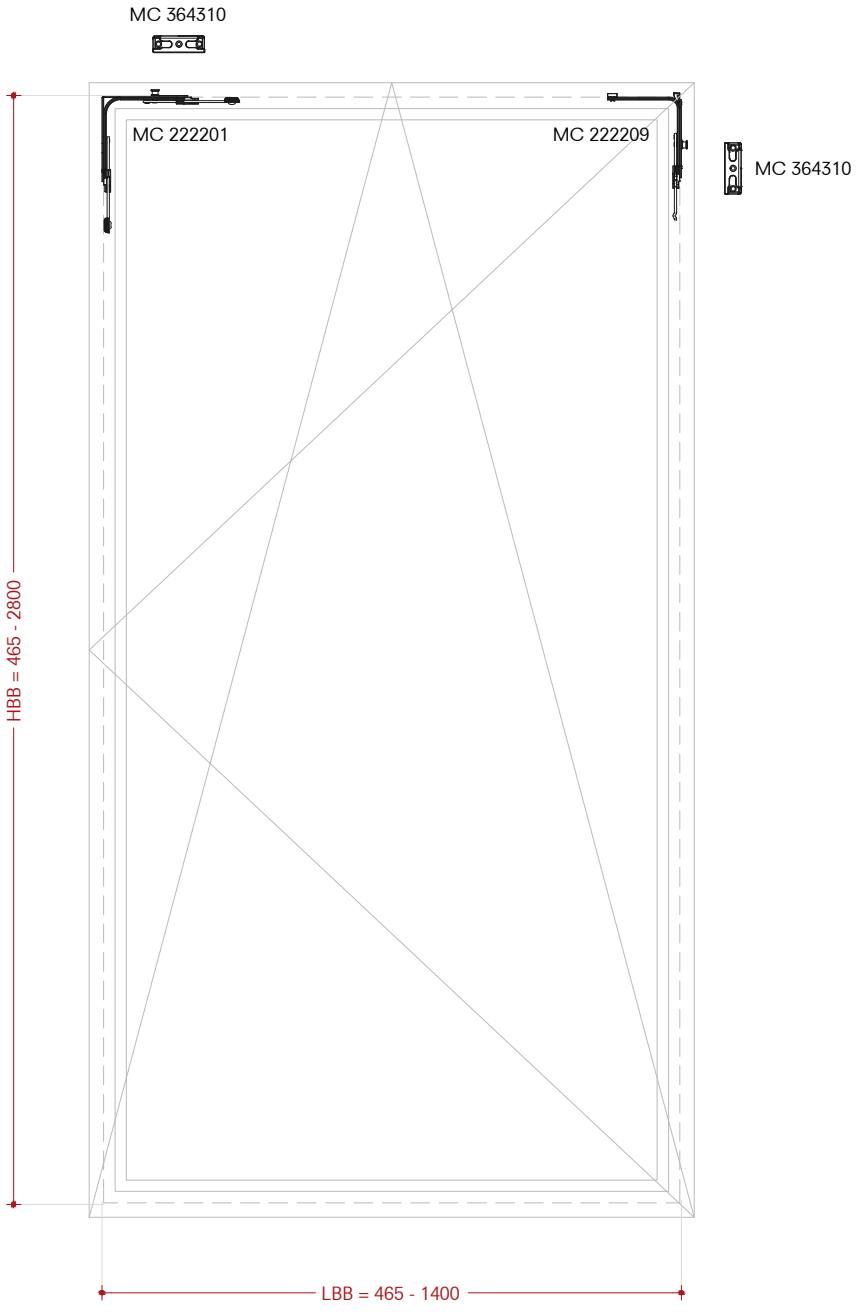
LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

Ventana oscilante con bisagra oculta

Kits básicos

K88001
Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm



Tilt&Turn windows with concealed hinge

Basic kits

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

MC 222203 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit base

K88002

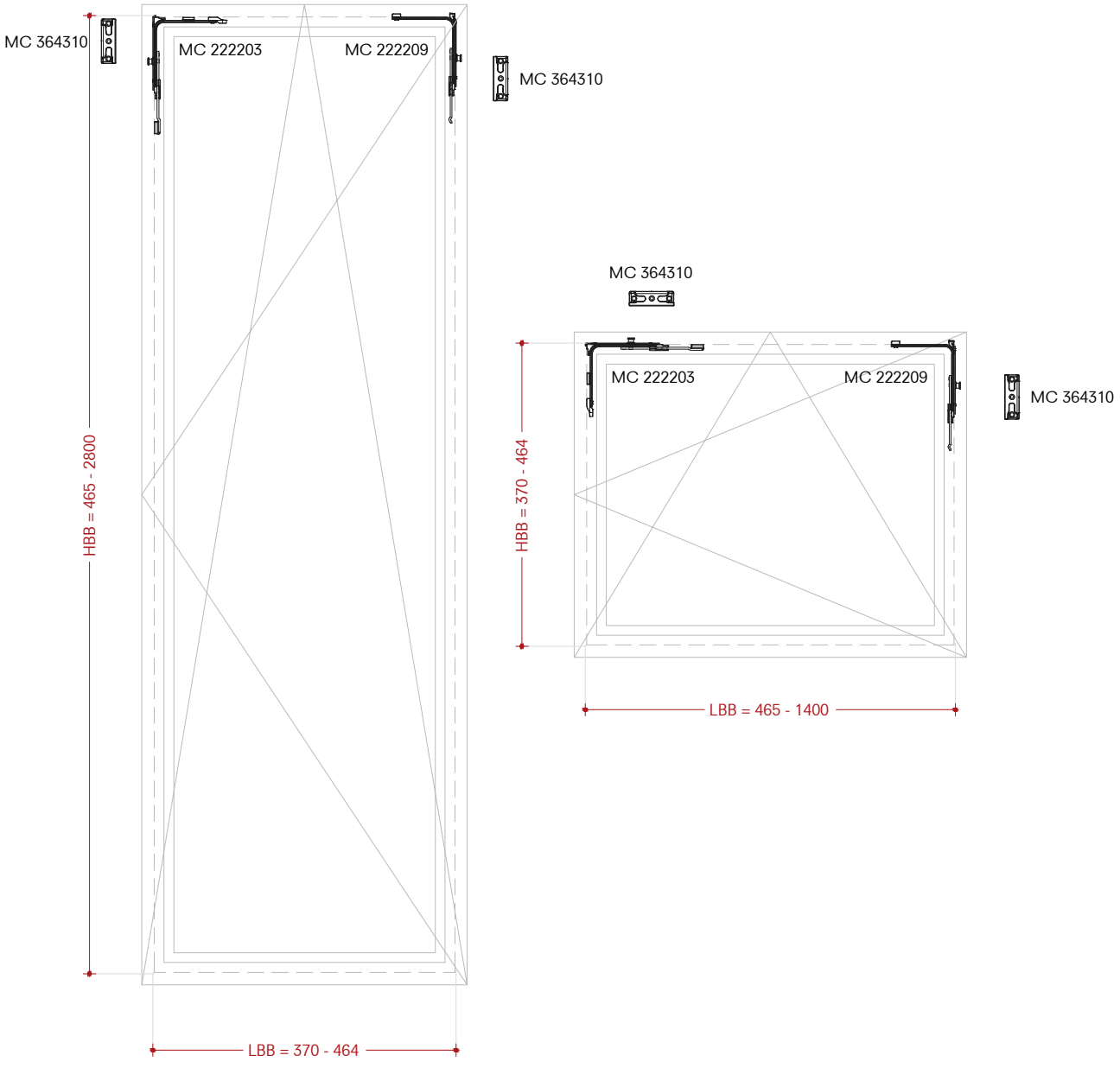
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

Ventana oscilante con bisagra oculta

Kits básicos

K88002

LBB = 370 - 464 mm
HBB = 455 - 2800 mm



Tilt&Turn windows with concealed hinge

Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

K88004

HH = 300 mm
HBB = 661 - 1790 mm

MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit cremonese

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Ventana oscilante con bisagra oculta

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

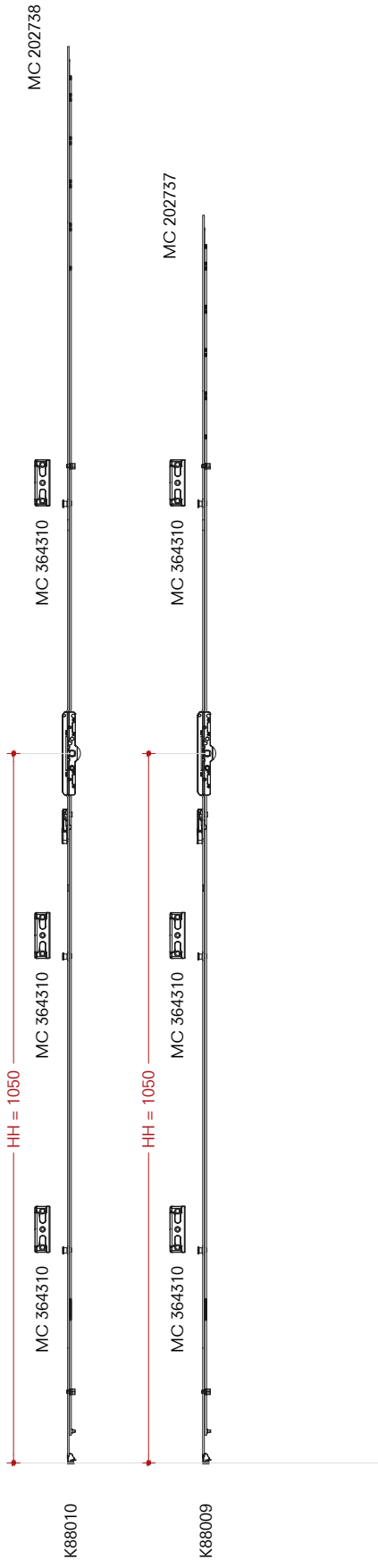
HH = 700 mm
HBB = 1591 - 2650 mm

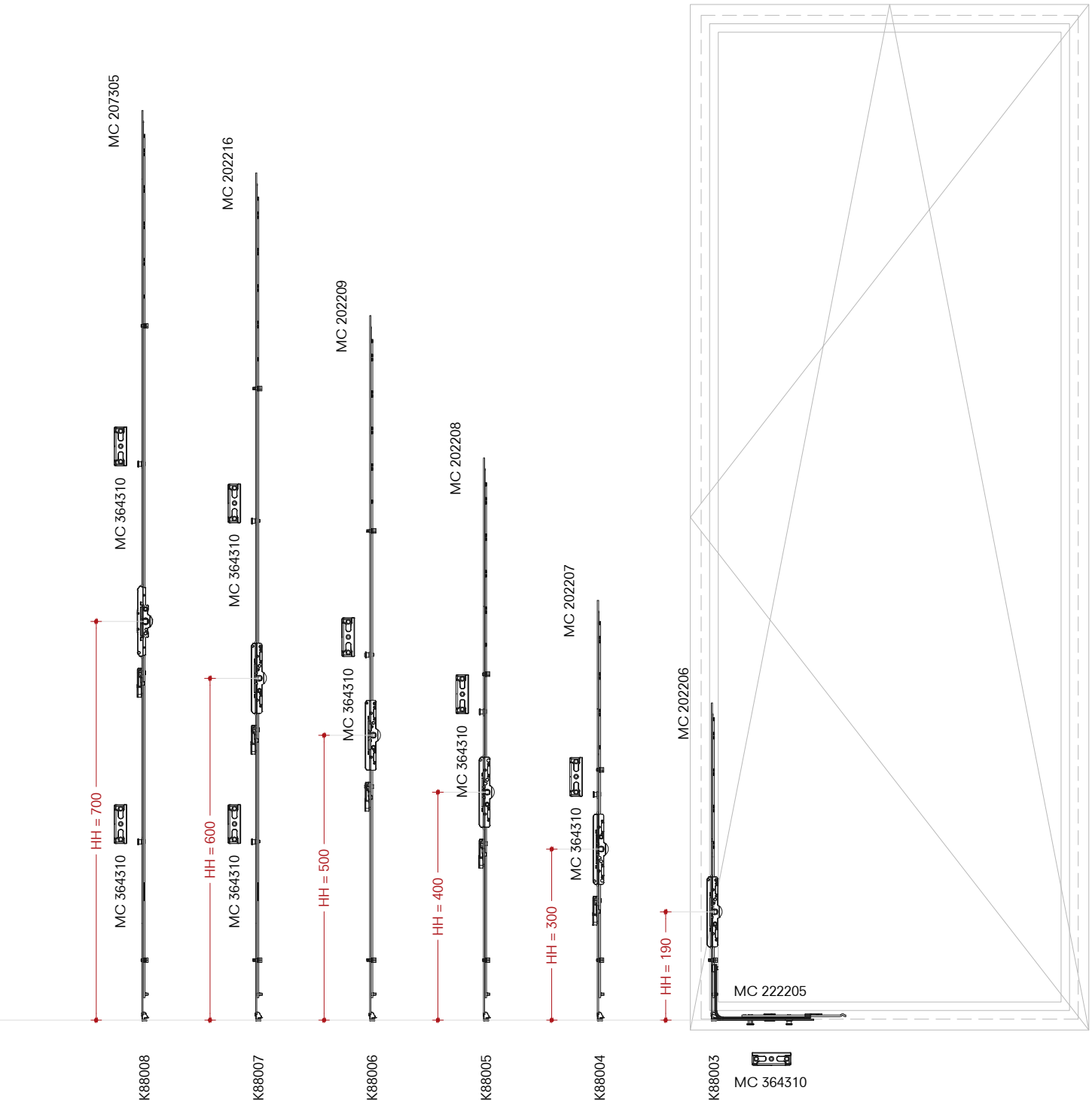
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm




MC 207305
MC 364310
MC 364310
HH = 700
K88008
MC 202216
MC 364310
MC 364310
HH = 600
K88007
MC 202209
MC 364310
HH = 500
K88006
MC 202208
MC 364310
HH = 400
K88005
MC 202207
MC 364310
HH = 300
K88004
MC 202206
HH = 190
K88003
MC 222205
MC 364310

Tilt&Turn windows with concealed hinge

Double croppable gear kits

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit cremonesi doppiorasabili

K88109

K88110

K88111

K88112

Ventana oscilante con bisagra oculta

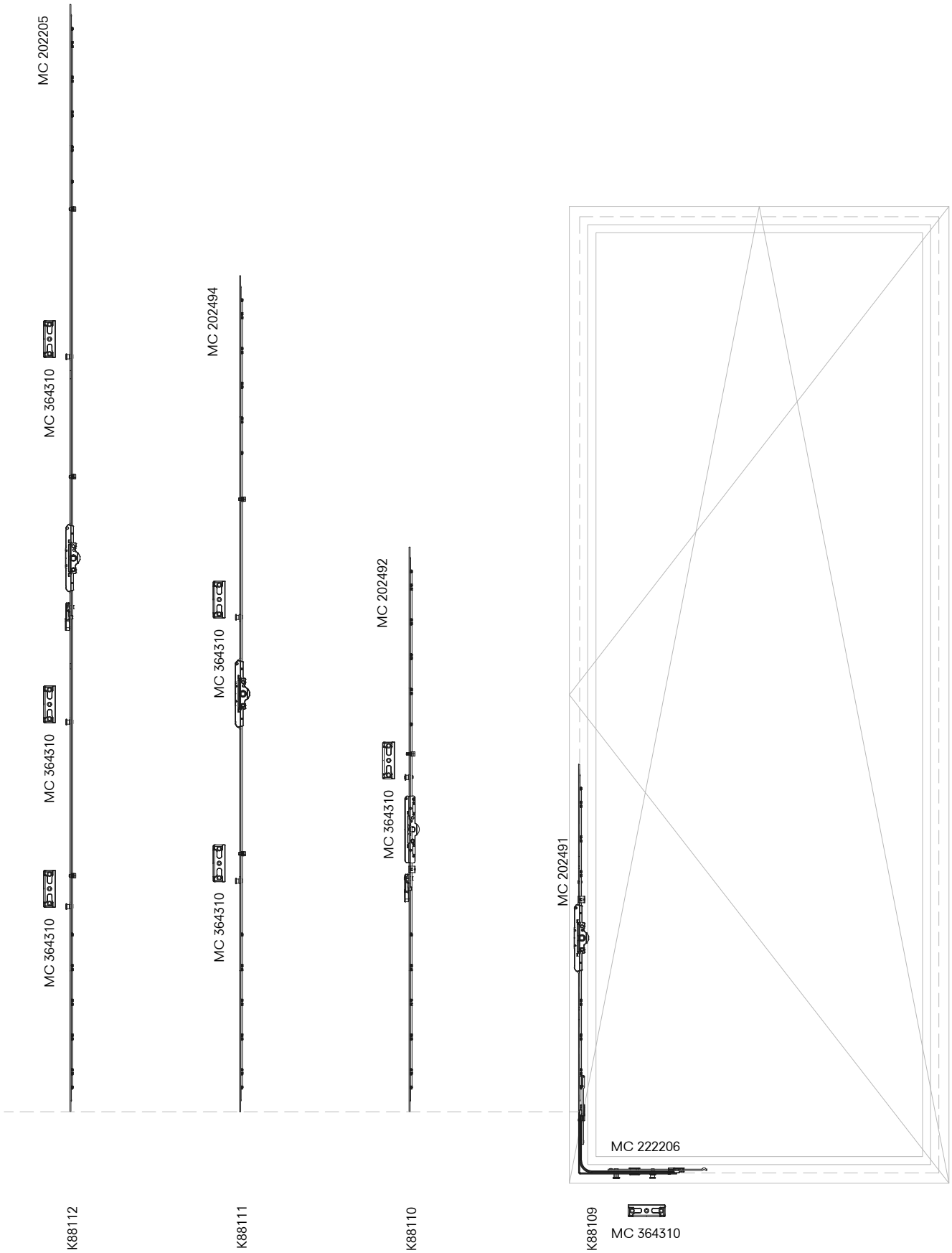
Kits de equipo recortables dobles

K88109

K88110

K88111

K88112


MC 202205
MC 364310
MC 364310
MC 364310
K88112
MC 202494
MC 364310
MC 364310
K88111
MC 202492
MC 364310
K88110
MC 202491
MC 222206
K88109
MC 364310

Tilt&Turn windows with concealed hinge

Extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88012

141 - 235 mm

MC 201750 n°01 piece
MC 364310 n°01 piece

K88059

236 - 375 mm

MC 201750 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88013

376 - 470 mm

MC 201840 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit estensione Cremonese

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

Ventana oscilante con bisagra oculta

Kits extensión

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

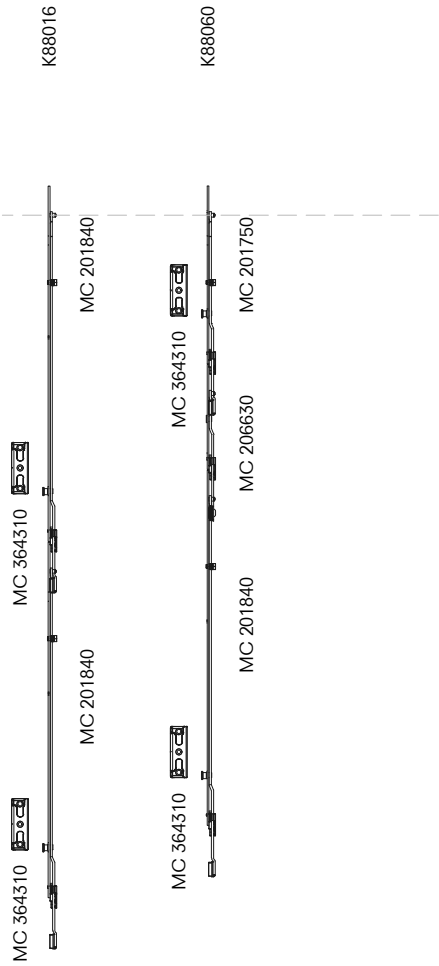
611 - 705 mm

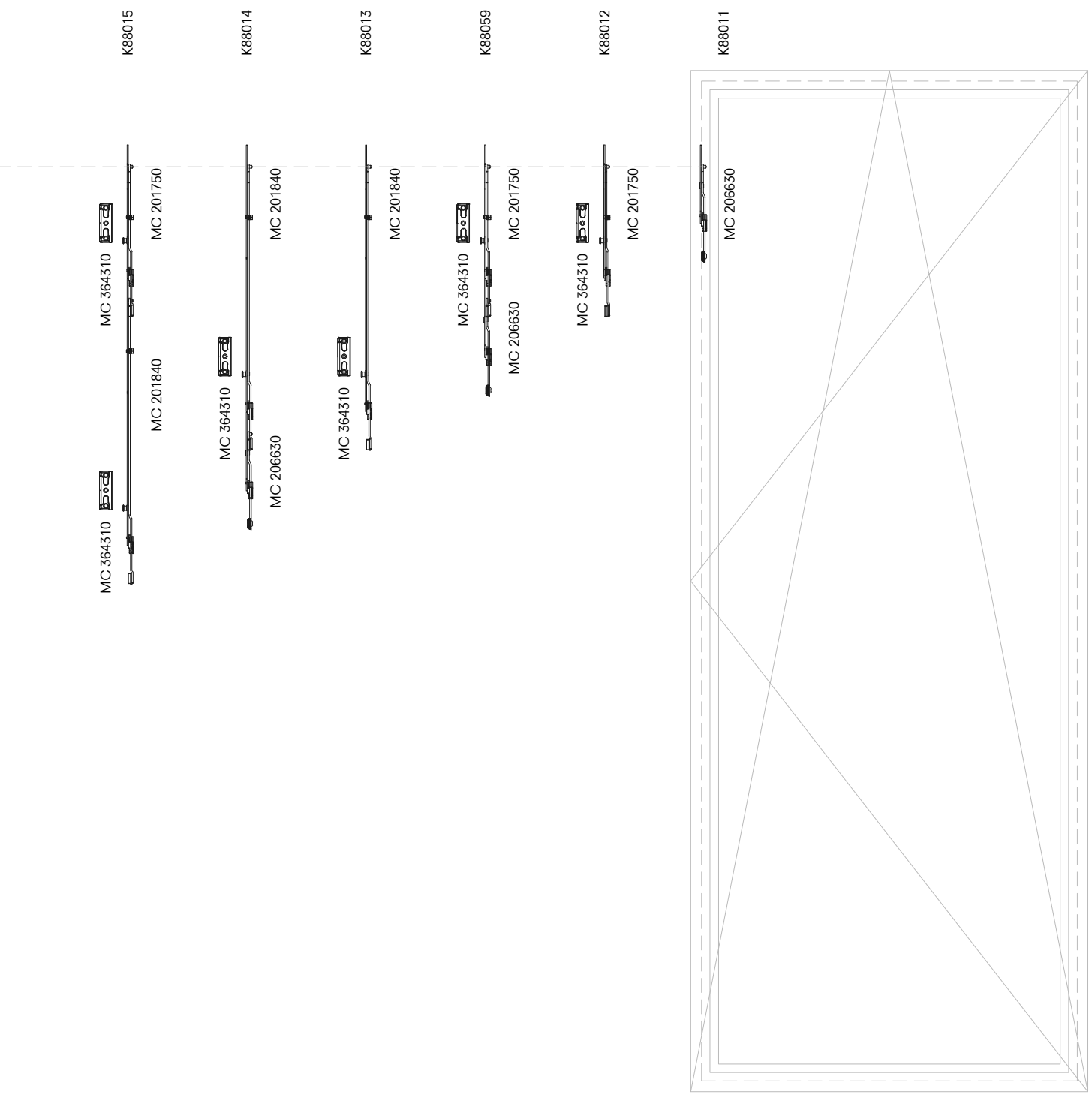
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630

Tilt&Turn windows with concealed hinge

Scissors and hinges kits
Right opening

Finestre anta ribalta con cerniera a scomparsa

Kit forbice e cerniere
Apertura destra

Ventana oscilante con bisagra oculta

Kits de cizallas y bisagras
Apertura derecha

K88017

LBB = 370 - 600 mm

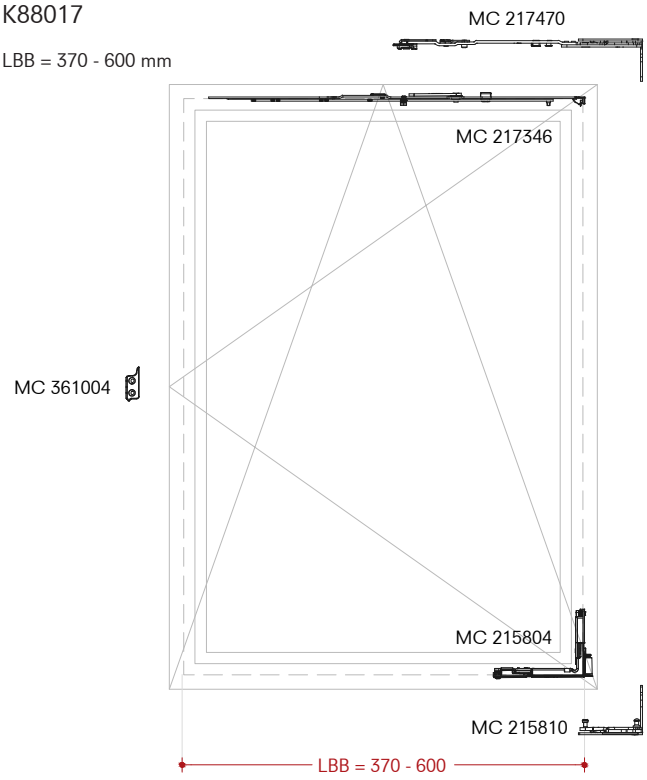
MC 217470 n°01 piece
MC 217346 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88017

LBB = 370 - 600 mm

K88017

LBB = 370 - 600 mm



K88018

LBB = 601 - 800 mm

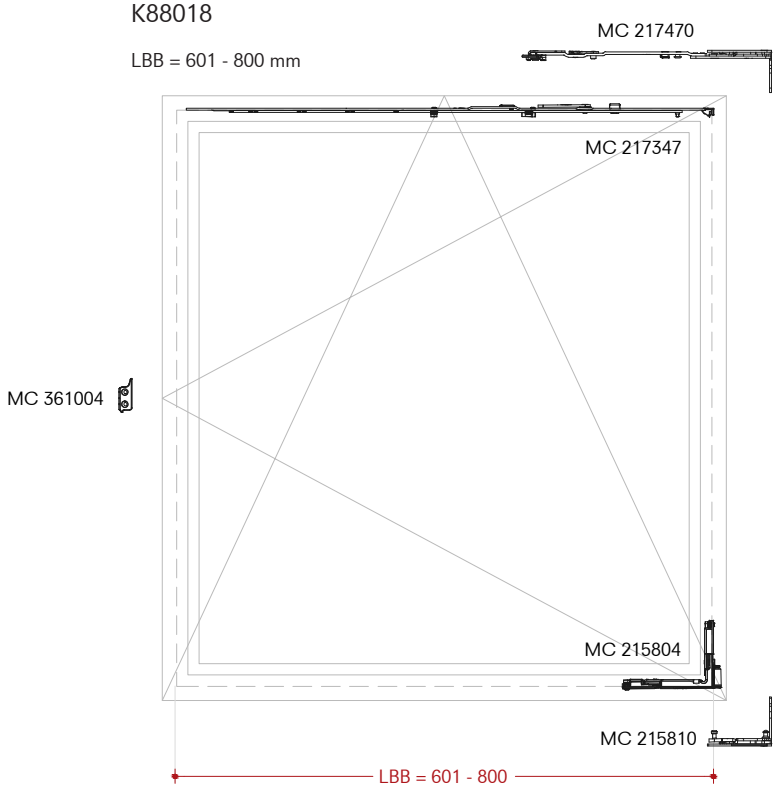
MC 217470 n°01 piece
MC 217347 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88018

LBB = 601 - 800 mm

K88018

LBB = 601 - 800 mm



K88019

LBB = 801 - 1050 mm

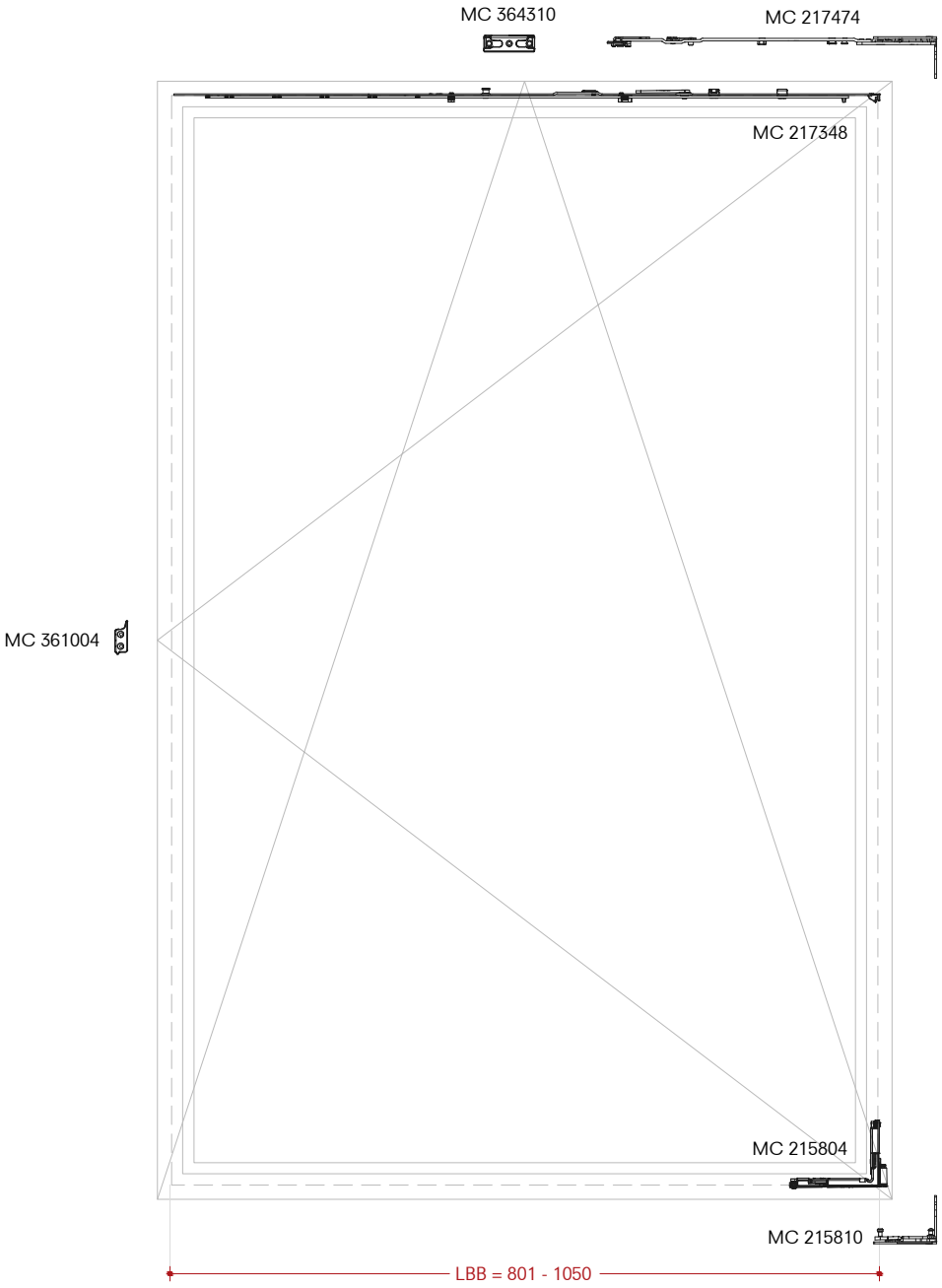
MC 217474 n°01 piece
MC 217348 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88019

LBB = 801 - 1050 mm

K88019

LBB = 801 - 1050 mm



Tilt&Turn windows with concealed hinge

Scissors and hinges kits
Right opening

K88020

LBB = 1051 - 1285 mm

MC 217474 n°01 piece
MC 217348 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Kit forbice e cerniere
Apertura destra

K88020

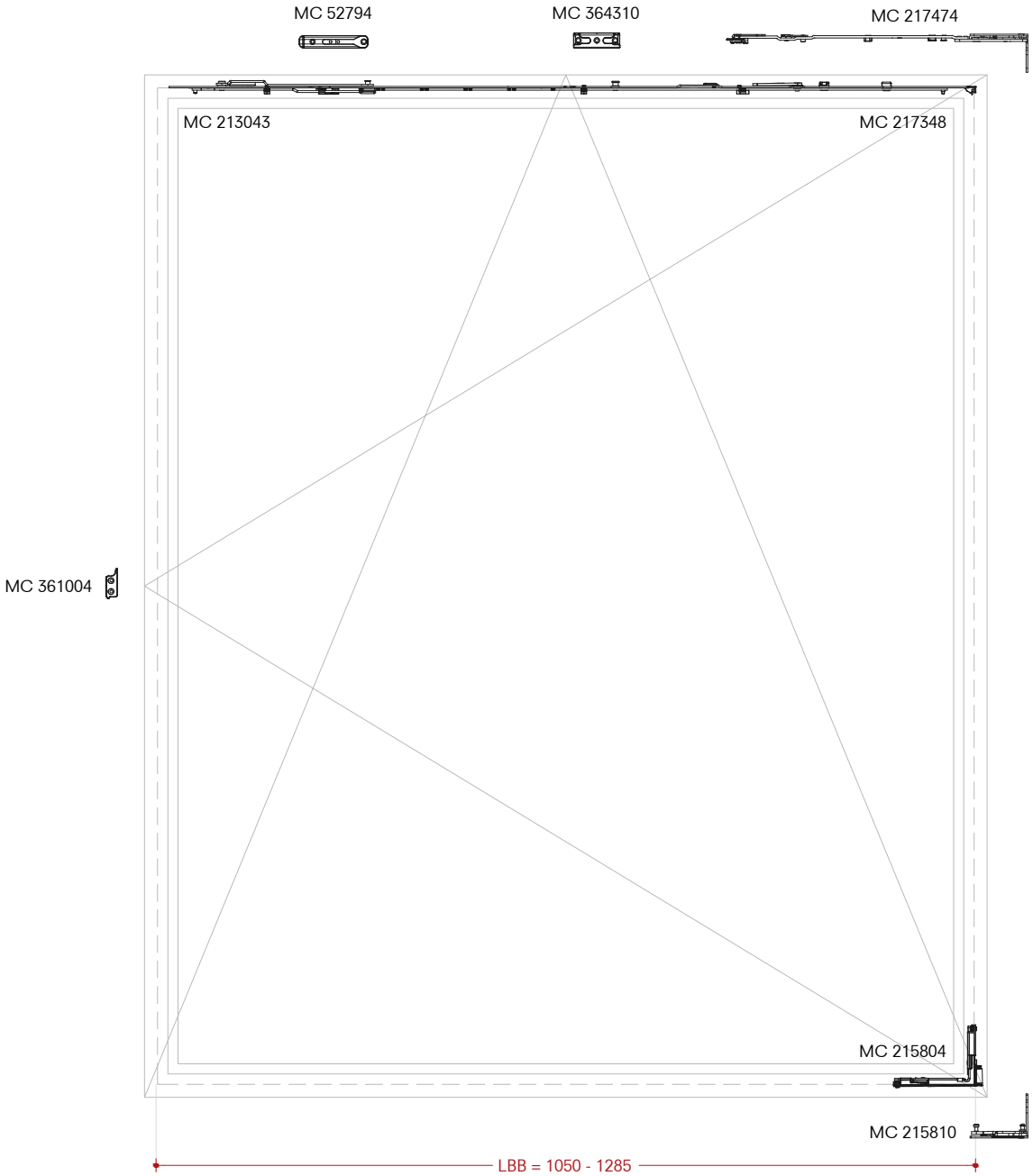
LBB = 1051 - 1285 mm

Ventana oscilante con bisagra oculta

Kits de cizallas y bisagras
Apertura derecha

K88020

LBB = 1051 - 1285 mm



K88021

LBB = 1286 - 1400 mm

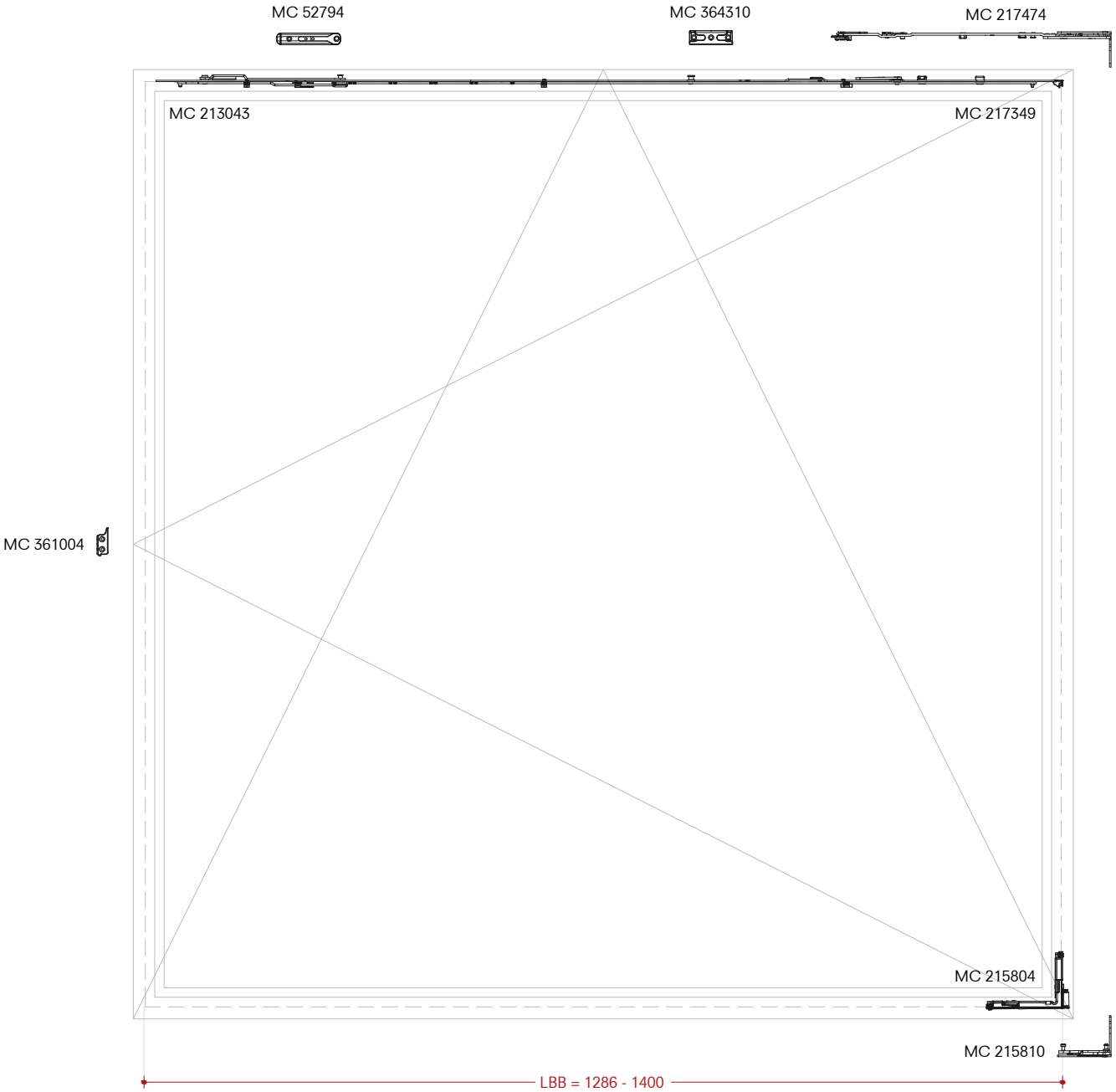
MC 217474 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88021

LBB = 1286 - 1400 mm

K88021

LBB = 1286 - 1400 mm



Tilt&Turn windows with concealed hinge

Scissors and hinges kits
Left opening

Finestre anta ribalta con cerniera a scomparsa

Kit forbice e cerniere
Apertura sinistra

Ventana oscilante con bisagra oculta

Kits de cizallas y bisagras
Apertura izquierda

K88022

LBB = 370 - 600 mm

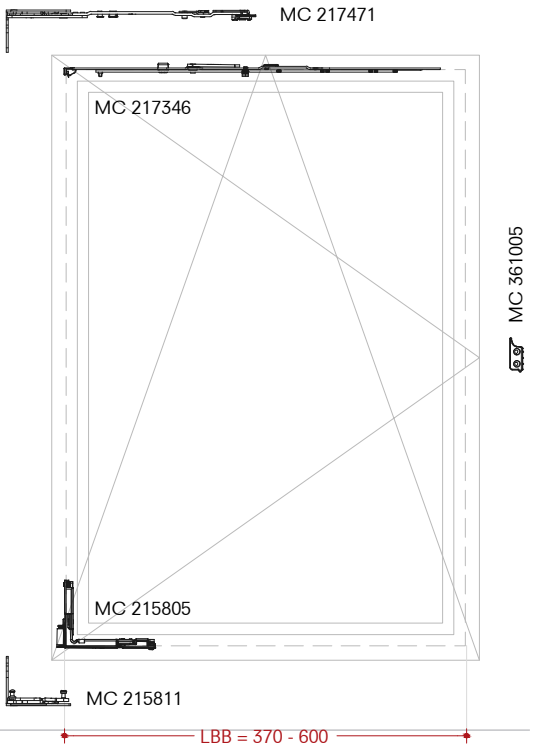
MC 217471 n°01 piece
MC 217346 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88022

LBB = 370 - 600 mm

K88022

LBB = 370 - 600 mm



K88023

LBB = 601 - 800 mm

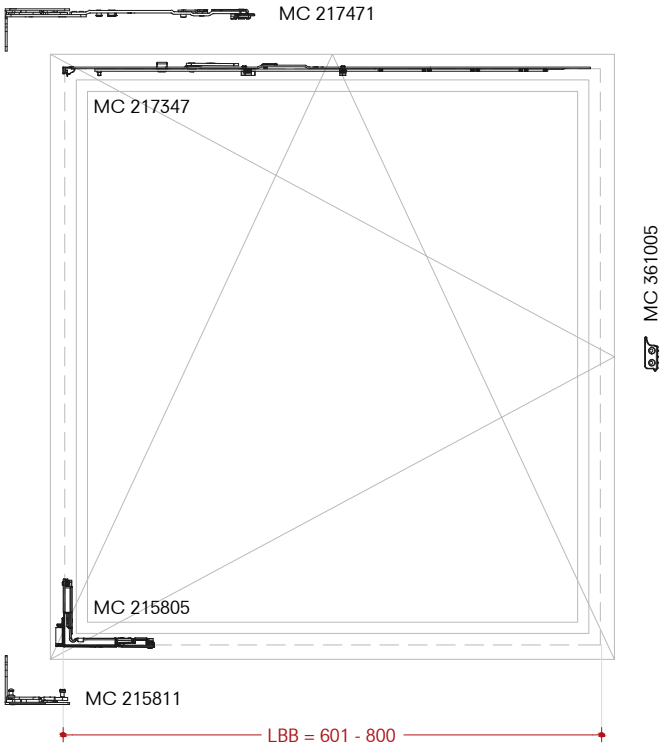
MC 217471 n°01 piece
MC 217347 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88023

LBB = 601 - 800 mm

K88023

LBB = 601 - 800 mm



K88024

LBB = 801 - 1050 mm

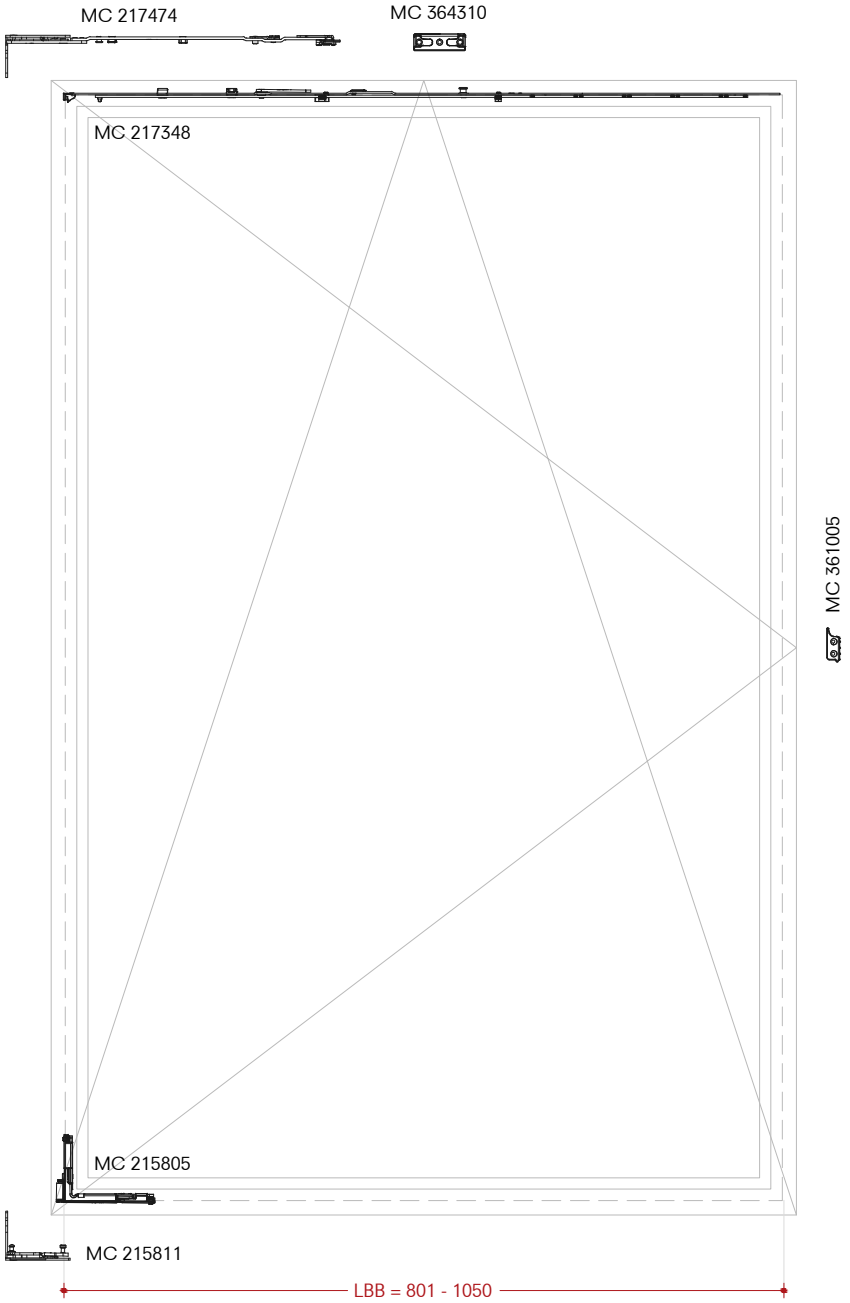
MC 217475 n°01 piece
MC 217348 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88024

LBB = 801 - 1050 mm

K88024

LBB = 801 - 1050 mm



Tilt&Turn windows with concealed hinge

Scissors and hinges kits
Left opening

K88025

LBB = 1051 - 1285 mm

MC 217475 n°01 piece
MC 217348 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Kit forbice e cerniere
Apertura sinistra

K88025

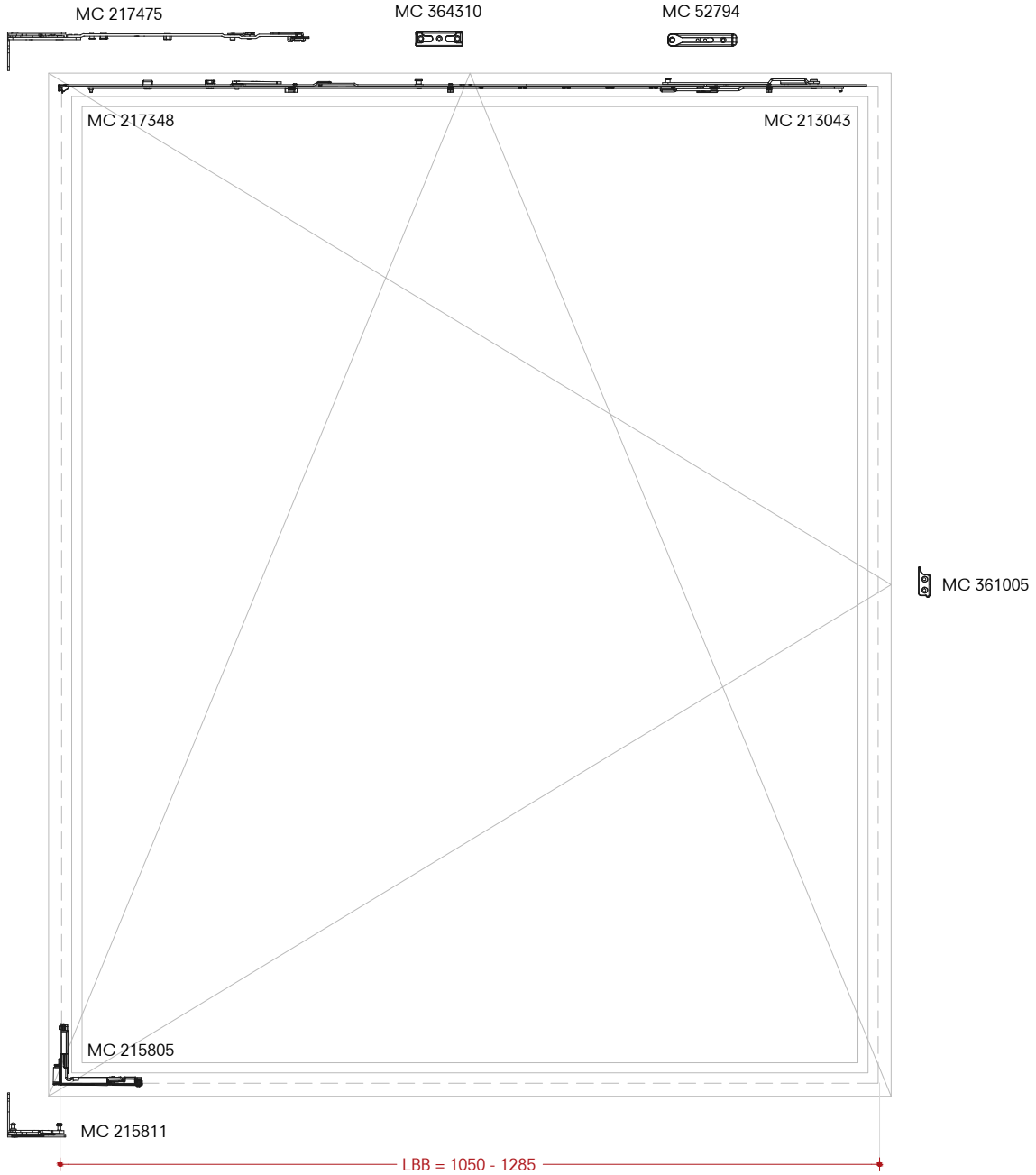
LBB = 1051 - 1285 mm

Ventana oscilante con bisagra oculta

Kits de cizallas y bisagras
Apertura izquierda

K88025

LBB = 1051 - 1285 mm



K88026

LBB = 1286 - 1400 mm

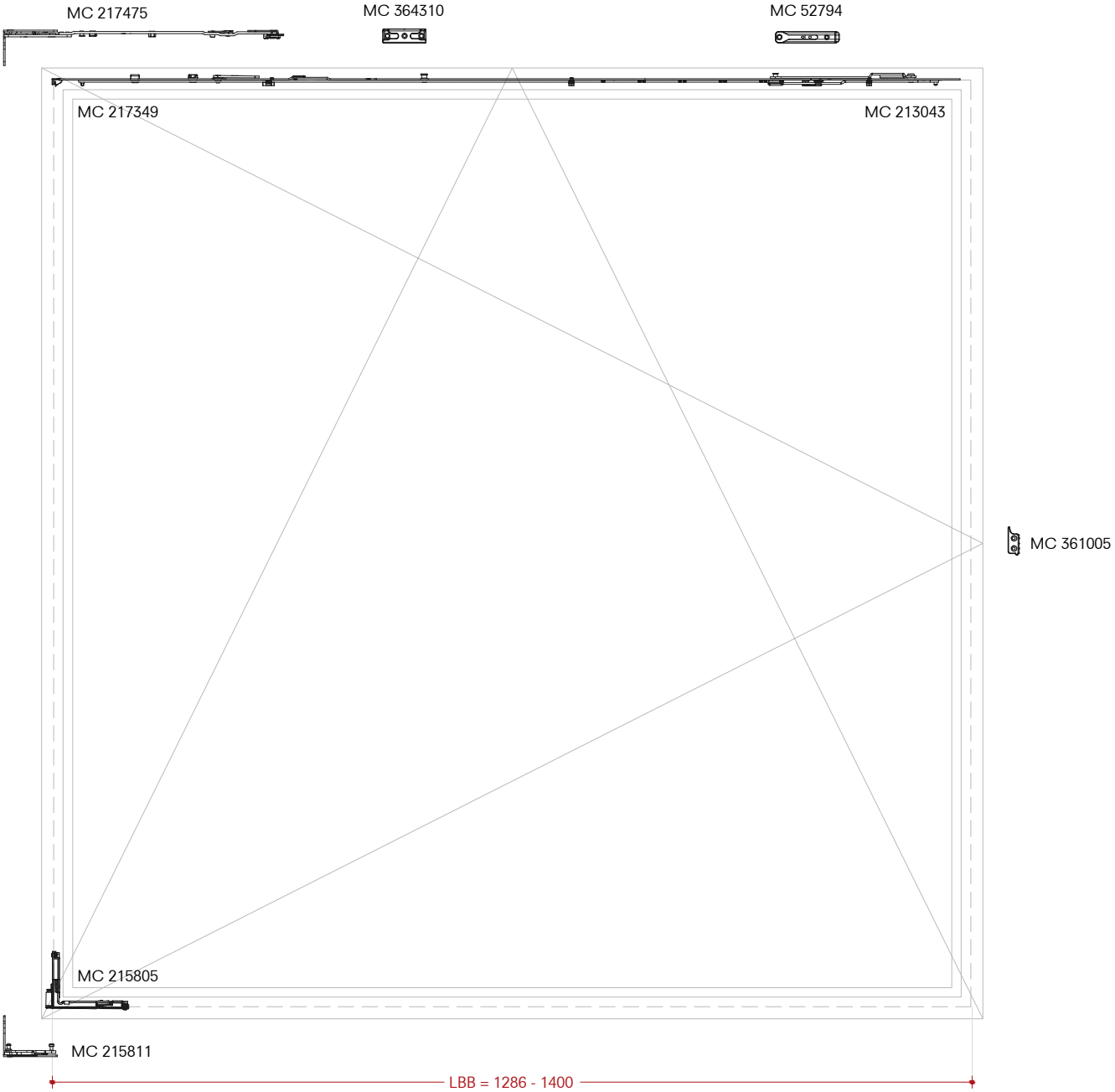
MC 217475 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88026

LBB = 1286 - 1400 mm

K88026

LBB = 1286 - 1400 mm



Tilt&Turn windows with concealed hinge

Additional hinge side locking point

K88027

HBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88028

HBB = 1281 - 1500 mm

MC 201752 n°01 piece
MC 364310 n°01 piece

K88029

HBB = 1501 - 1700 mm

MC 201840 n°01 piece
MC 201753 n°01 piece
MC 364310 n°02 pieces

K88030

HBB = 1701 - 2800 mm

MC 201754 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Punto di chiusura aggiuntivo lato cerniera

K88027

HBB = 801 - 1280 mm

K88028

HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm

Ventana oscilante con bisagra oculta

Punto de bloqueo adicional lado de la bisagra

K88027

HBB = 801 - 1280 mm

K88028

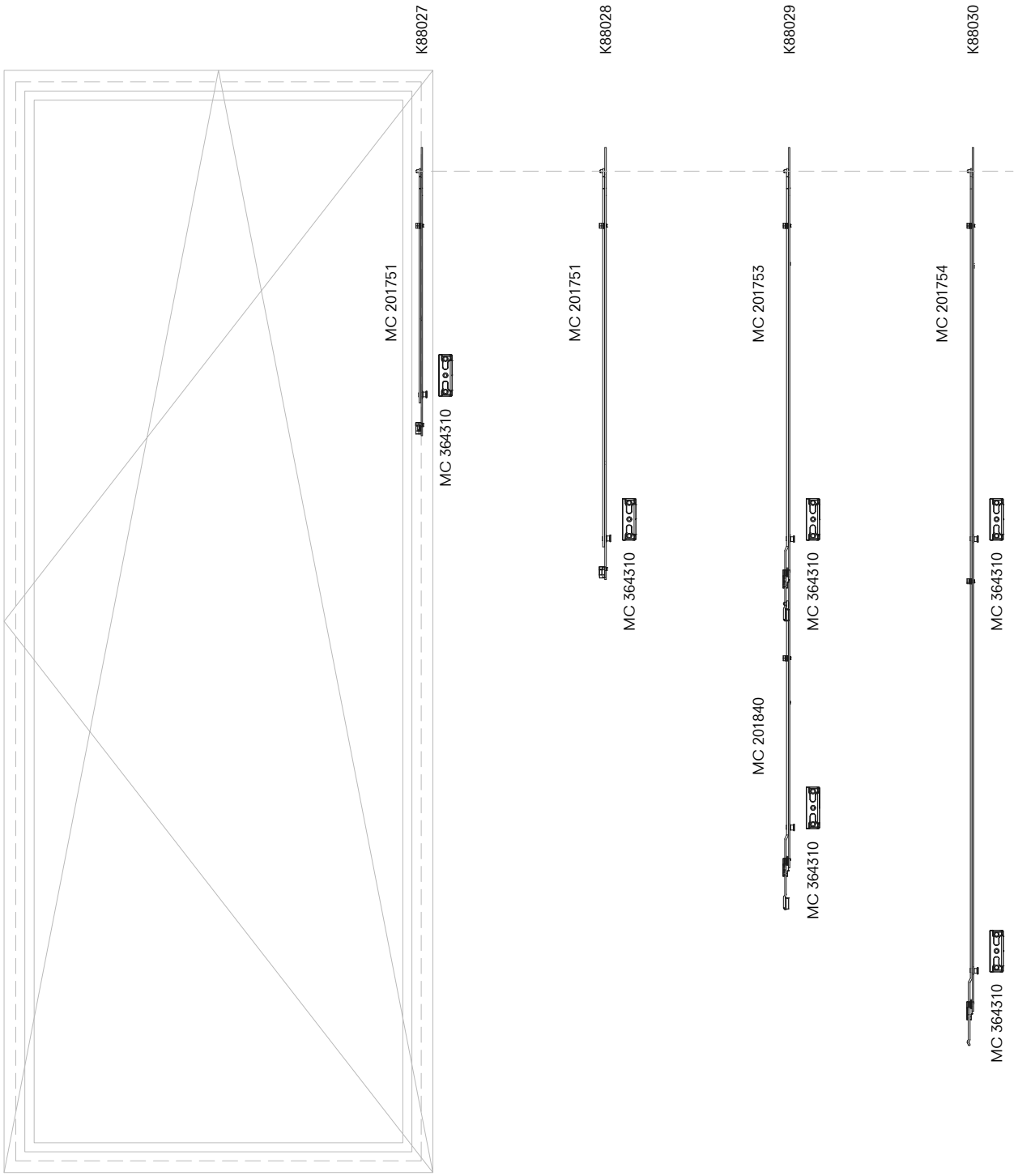
HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm


K88027
K88028
K88029
K88030
MC 201751
MC 364310
MC 201751
MC 364310
MC 201753
MC 364310
MC 201840
MC 364310
MC 201754
MC 364310

Tilt&Turn windows with concealed hinge

Additional bottom side locking point

K88031

LBB = 801 - 1280 mm

MC 201751 n°01 piece
MC 364310 n°01 piece

K88032

LBB = 1281 - 1400 mm

MC 201752 n°01 piece
MC 364310 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Punto di chiusura aggiuntivo lato inferiore

K88031

LBB = 801 - 1280 mm

K88032

LBB = 1281 - 1400 mm

Ventana oscilante con bisagra oculta

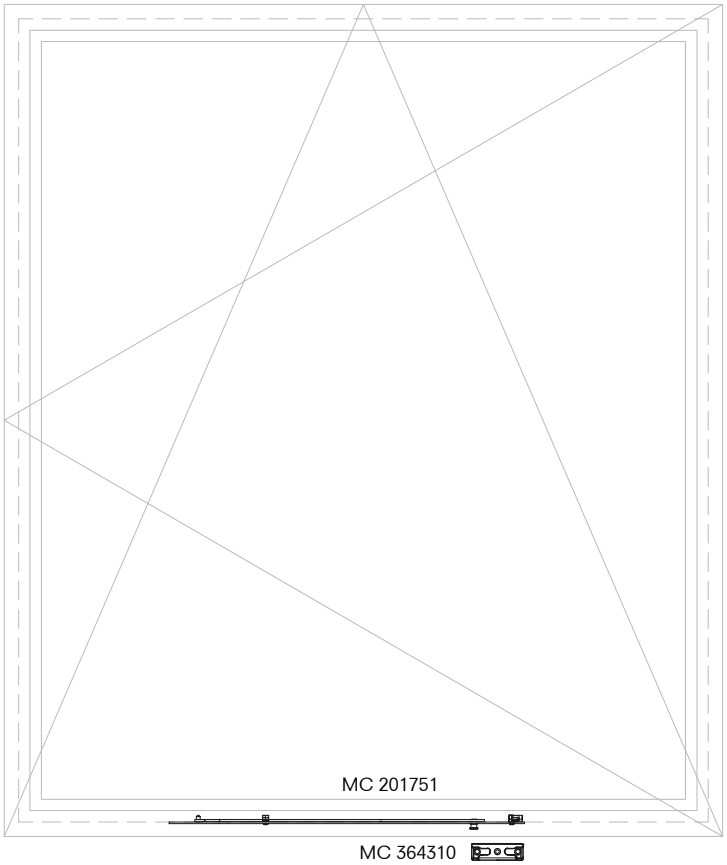
Punto de bloqueo adicional lado inferior

K88031

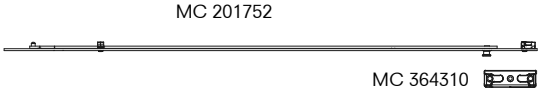
LBB = 801 - 1280 mm

K88032

LBB = 1281 - 1400 mm



K88031



K88032

Tilt&Turn windows with concealed hinge

Hinges kits 2nd leaf

K88034

Right hinges

MC 217691 n°01 piece
MC 217729 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Kit cerniere 2a anta

K88034

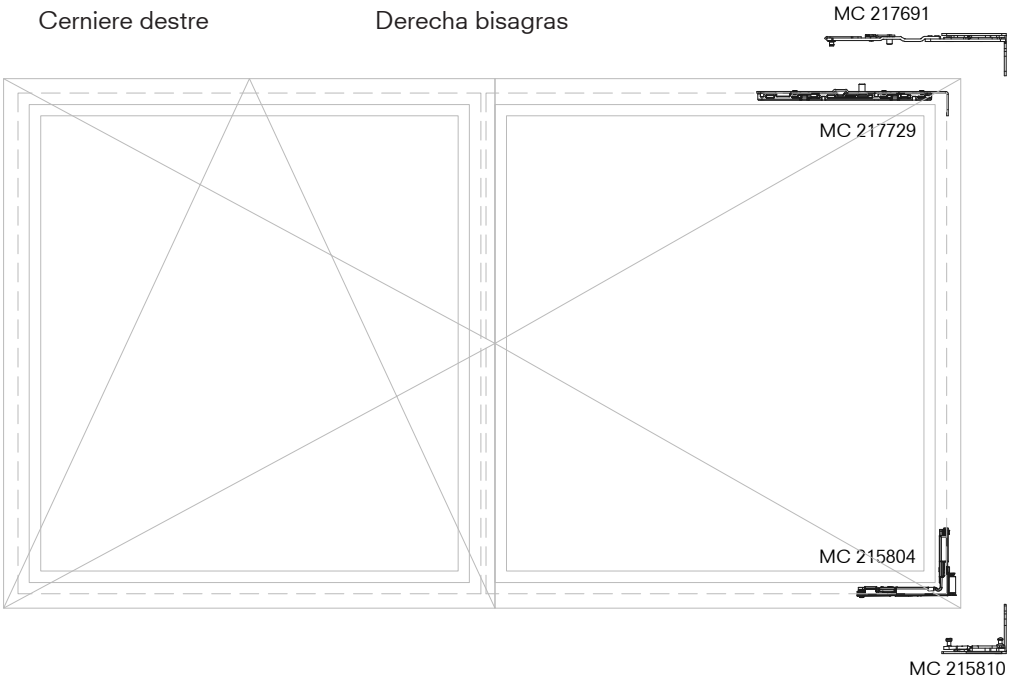
Cerniere destre

Ventana oscilante con bisagra oculta

Kits de bisagras 2do hoja

K88034

Derecha bisagras



K88035

Left hinges

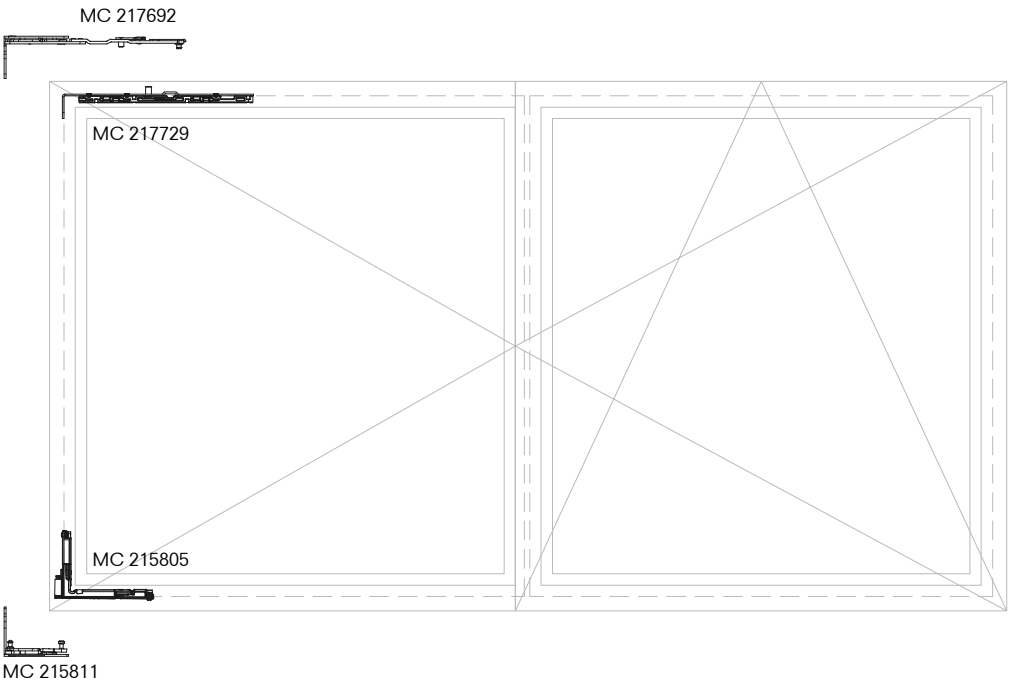
MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece

K88035

Cerniere sinistre

K88035

Izquierda bisagras



Tilt&Turn windows with concealed hinge

Concealed compression locks kits

Finestre anta ribalta con cerniera a scomparsa

Kit cerniere centrali a scomparsa

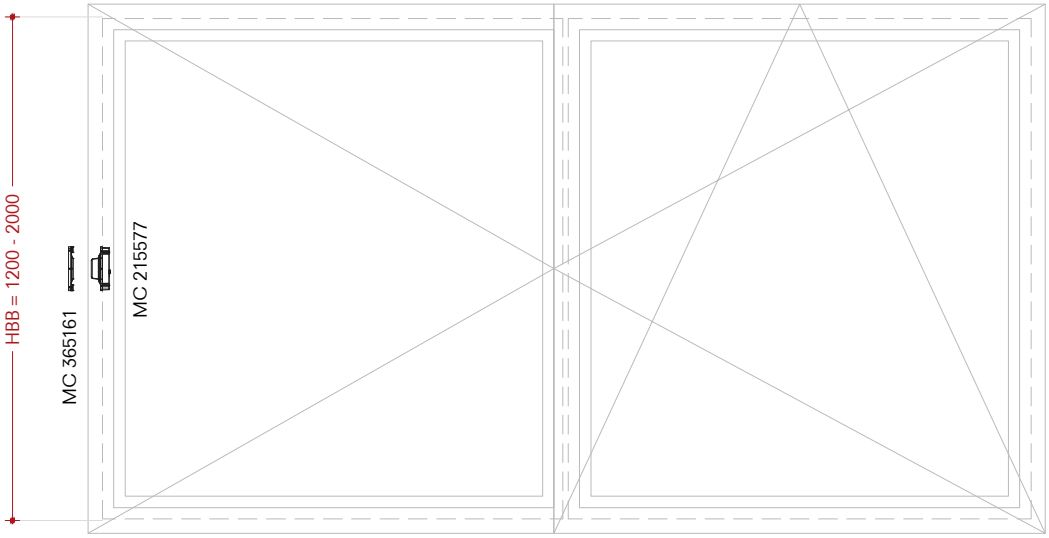
Ventana oscilante con bisagra oculta

Kits de bisagras ocultas centrales

K88036

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece



K88036

HBB = 1280 - 2000 mm

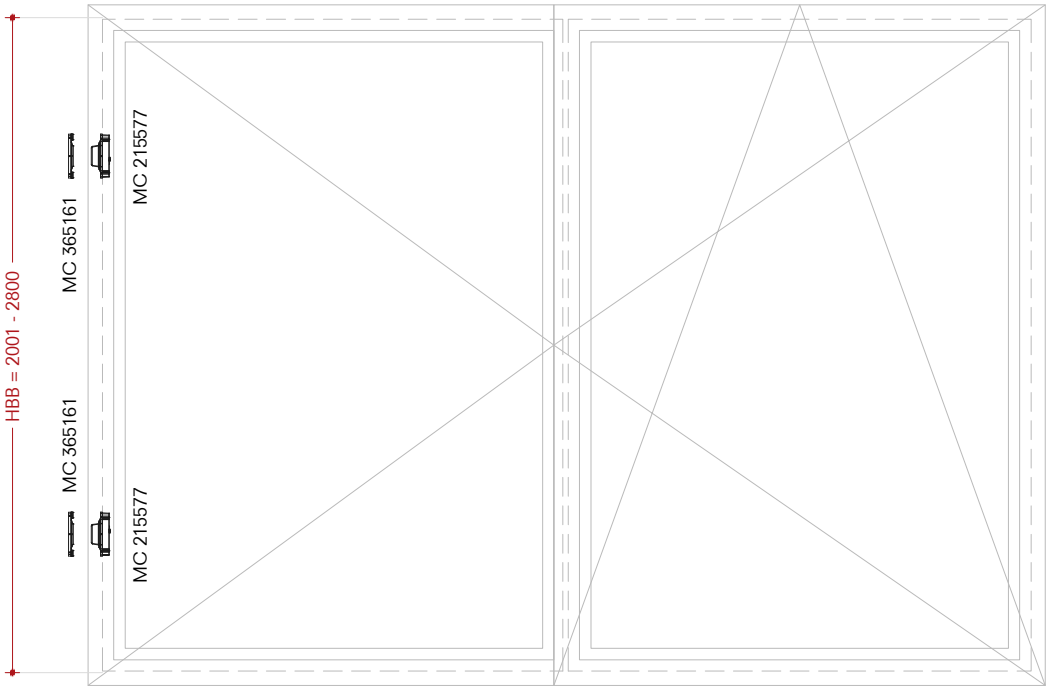
K88036

HBB = 1280 - 2000 mm

K88037

HBB = 2001 - 2800 mm

MC 215577 n°01 piece
MC 365161 n°01 piece



K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm

Tilt&Turn windows with concealed hinge

French casement drive kits

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

MC 221901 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

MC 221902 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

MC 221903 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

MC 221906 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

MC 207242 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

MC 221907 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88069

HH = 1050 mm

MC 221908 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit aste a leva

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

HH = 700 mm

K88068

HH = 1050 mm

K88069

HH = 1050 mm

Ventana oscilante con bisagra oculta

Kit Cremona semifija

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

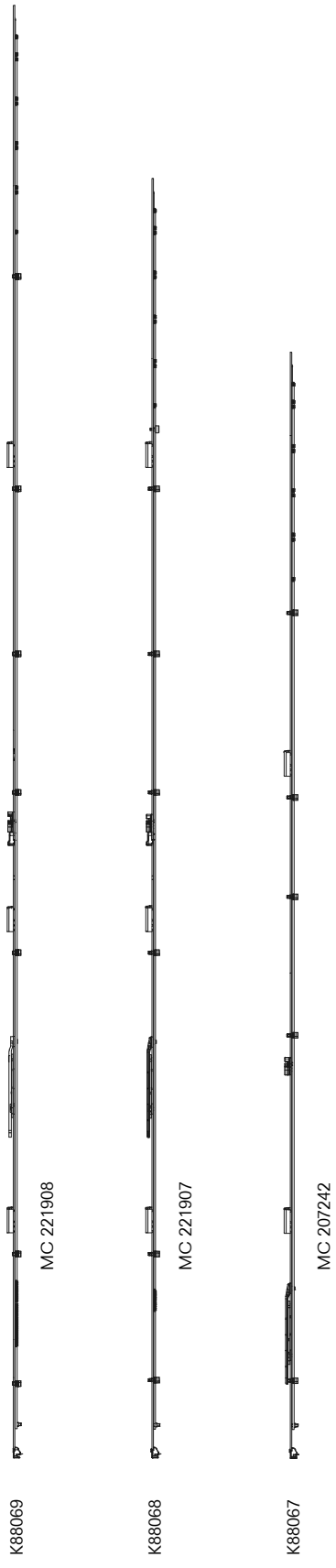
HH = 700 mm

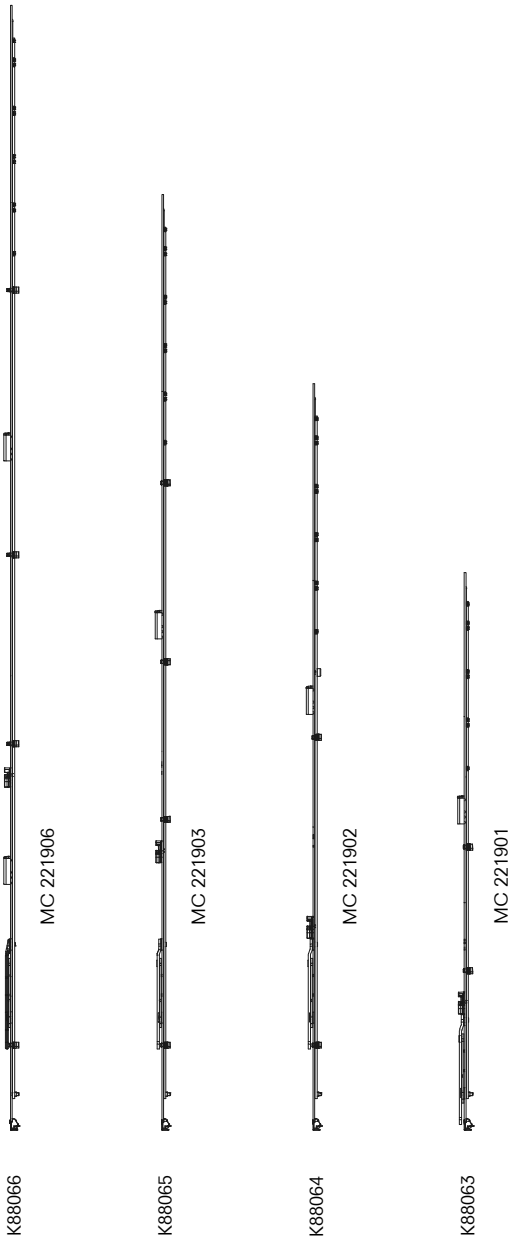
K88068

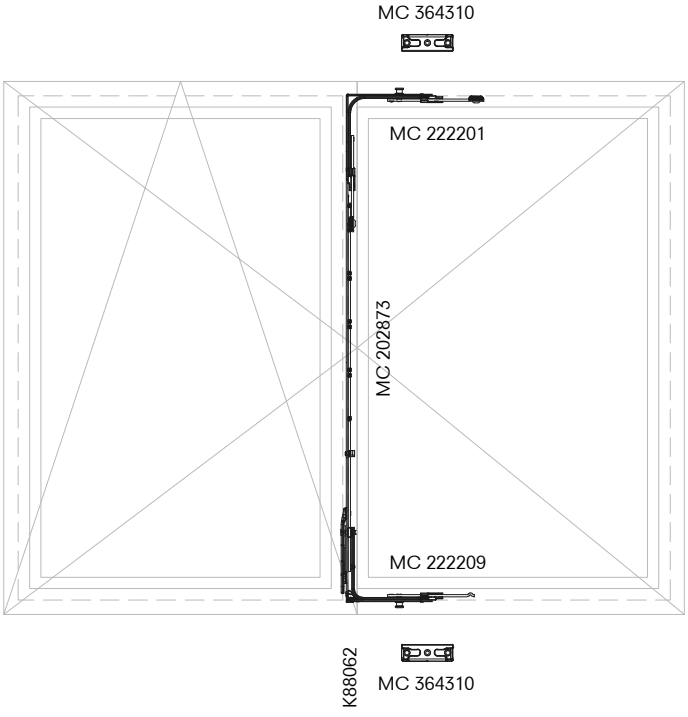
HH = 1050 mm

K88069

HH = 1050 mm




MC 221906
MC 221903
MC 221902
MC 221901
K88066
K88065
K88064
K88063


MC 364310
MC 222201
MC 202873
MC 222209
K88062
MC 364310

Tilt&Turn windows with concealed hinge

French casement drive extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88071

141 - 235 mm

MC 203810 n°01 piece

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88073

376 - 470 mm

MC 208333 n°01 piece

K88074

471 - 610 mm

MC 208333 n°01 piece
MC 206630 n°01 piece

K88075

611 - 705 mm

MC 208333 n°01 piece
MC 203810 n°01 piece

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88077

846 - 940 mm

MC 208333 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit prolunghe per aste a leva

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

Ventana oscilante con bisagra oculta

Kit de extensión Cremona

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

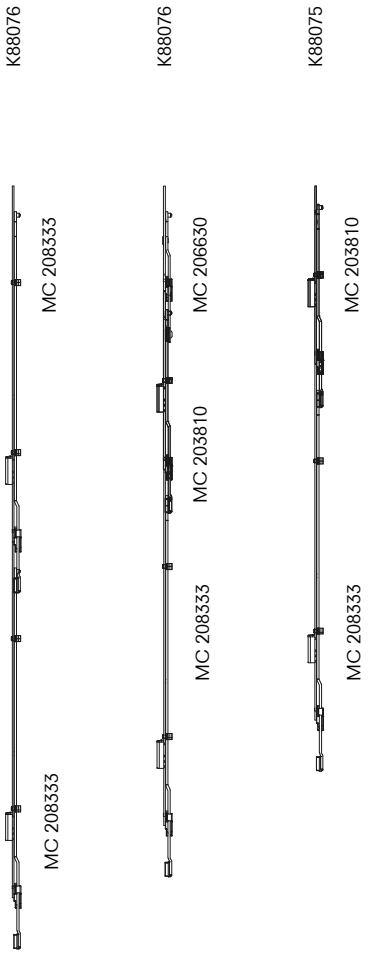
611 - 705 mm

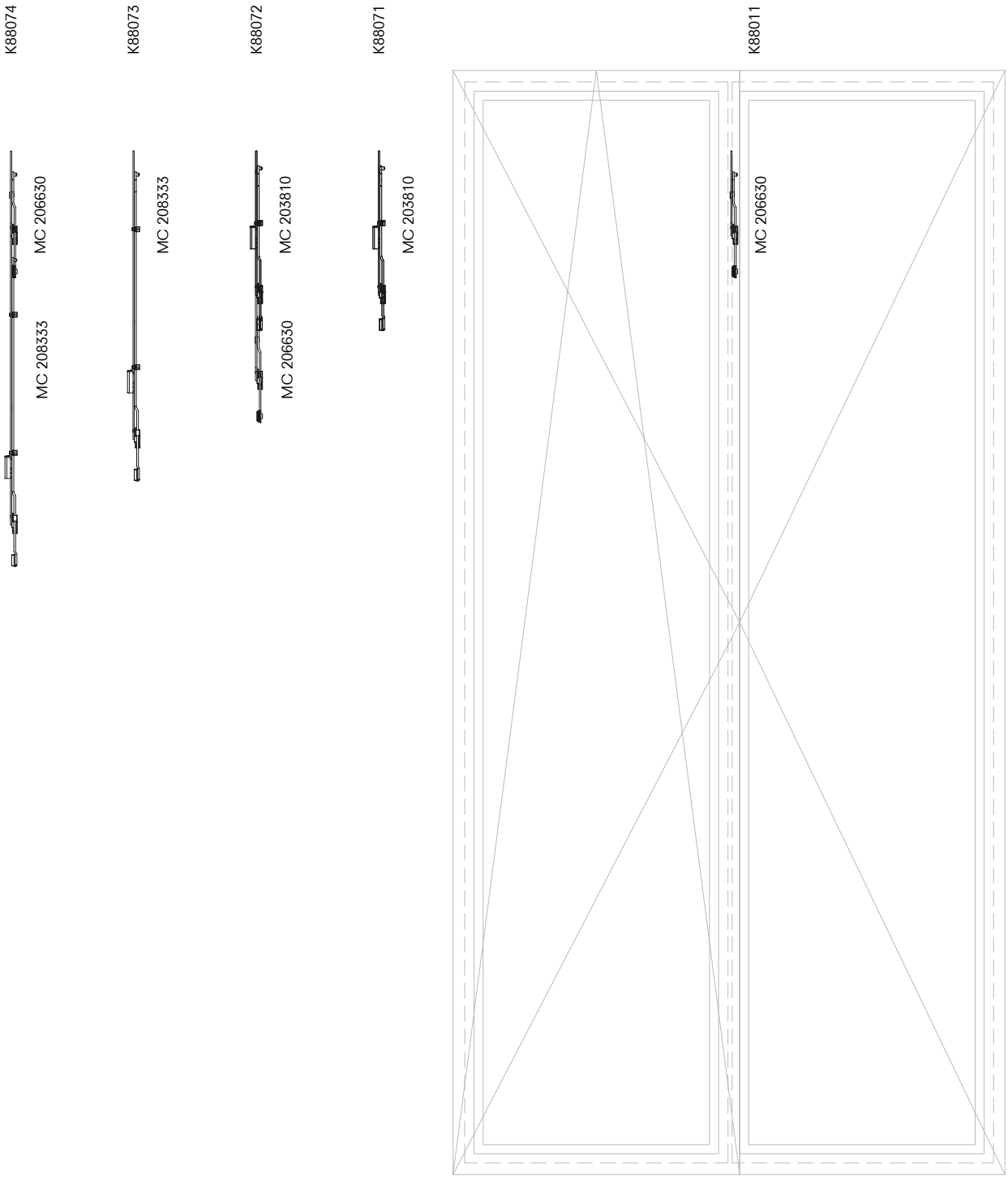
K88076

706 - 845 mm

K88077

846 - 940 mm




K88074
MC 206630
MC 208333
K88073
MC 208333
K88072
MC 203810
MC 206630
K88071
MC 203810
K88011
MC 206630

Tilt&Turn windows with concealed hinge

French casement drive kits

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88115

MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

Finestre anta ribalta con cerniera a scomparsa

Kit aste a leva per cremonesi doppiorasabili

K88113

K88114

K88115

K88116

Ventana oscilante con bisagra oculta

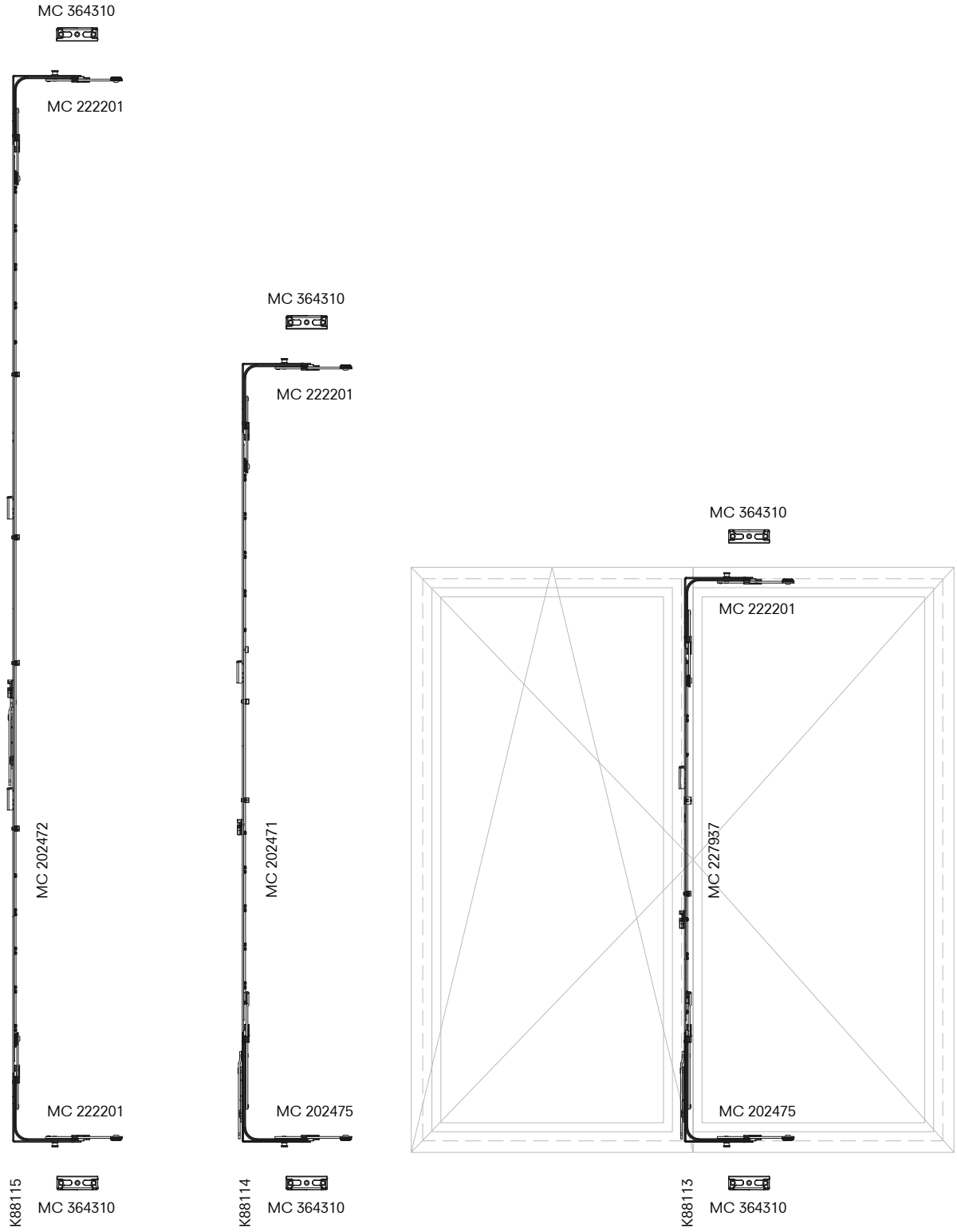
Kit Cremona semifija

K88113

K88114

K88115

K88116


MC 364310
MC 222201
MC 202472
MC 222201
K88115
MC 364310
MC 364310
MC 222201
MC 202471
MC 202475
K88114
MC 364310
MC 364310
MC 222201
MC 227937
MC 202475
K88113
MC 364310

Tilt&Turn windows with concealed hinge

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Scrocco porta

K88061

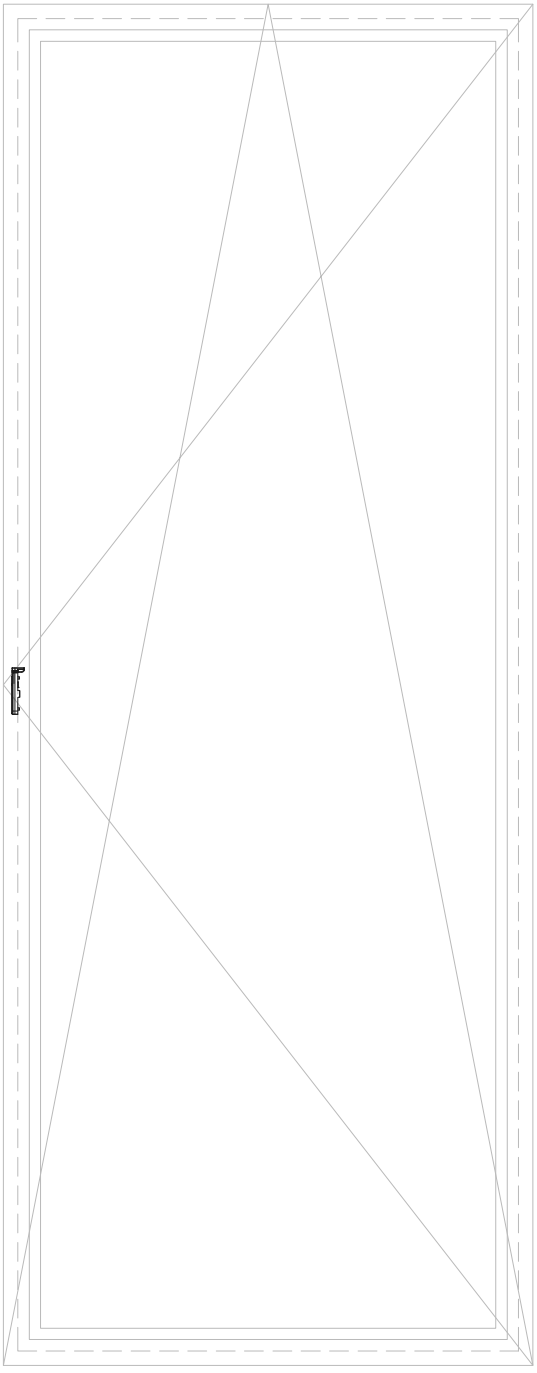
HBB = 661 - 2800 mm

Ventana oscilante con bisagra oculta

Pestillo de puerta

K88061

HBB = 661 - 2800 mm



Tilt&Turn windows with concealed hinge

Opening restrictor

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Limitatore di apertura

K88033

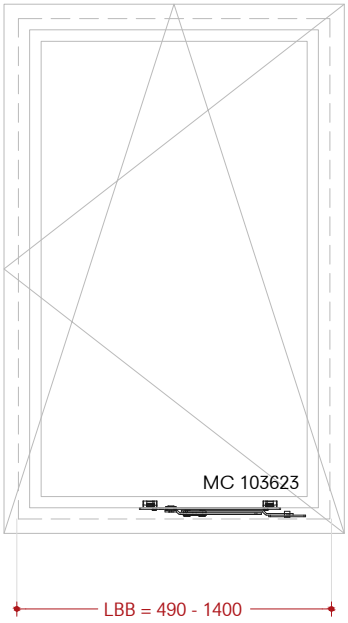
LBB = 490 - 1400 mm

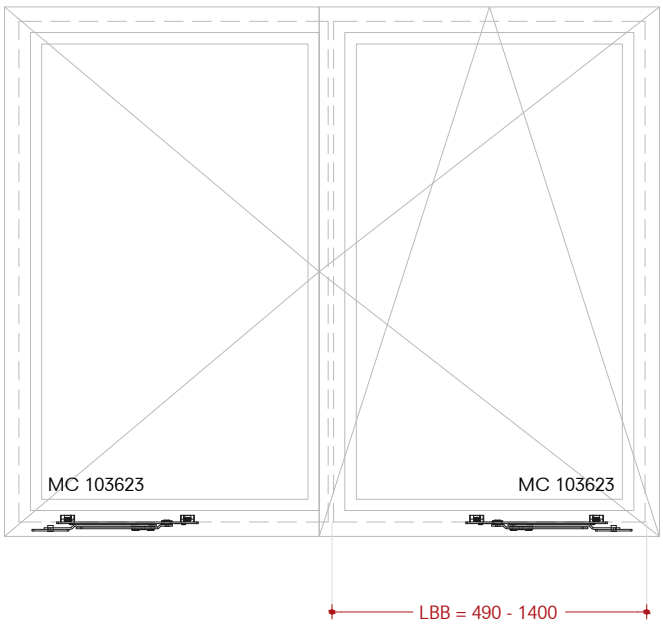
Ventana oscilante con bisagra oculta

Limitador de apertura

K88033

LBB = 490 - 1400 mm





Tilt&Turn windows with concealed hinge

Load transfer 180 kg

E99510-02

Right

MC 105336 n°01 piece

E99511-02

Left

MC 105339 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

Asta di sostegno 180 kg

E99510-02

Destro

E99511-02

Sinistro

Ventana oscilante con bisagra oculta

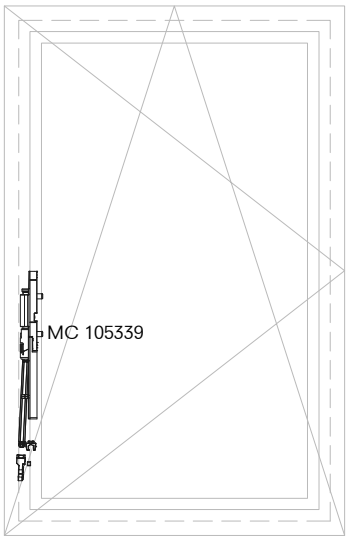
Varilla de soporte 180 kg

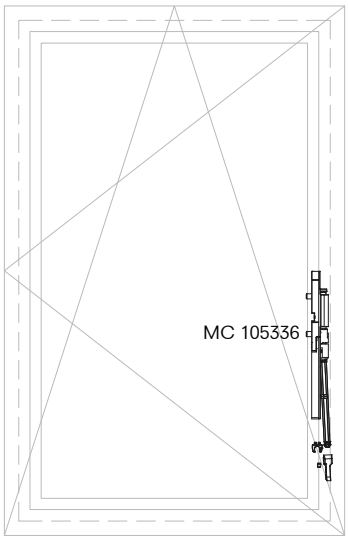
E99510-02

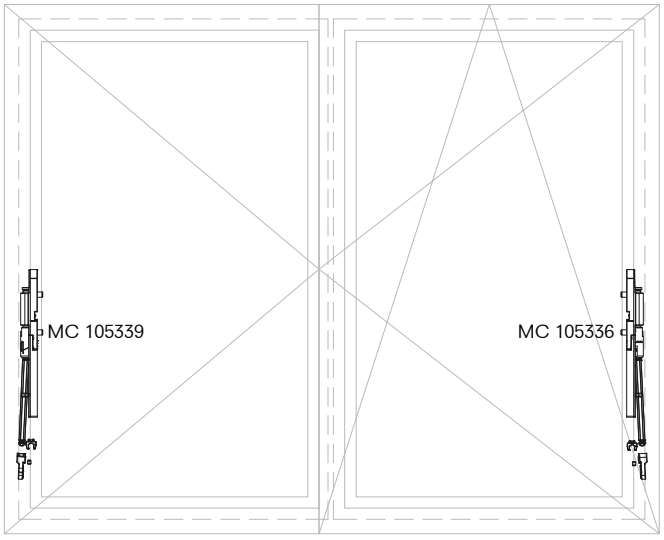
Derecha

E99511-02

Izquierda







Tilt&Turn windows with concealed hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre anta ribalta con cerniera a scomparsa

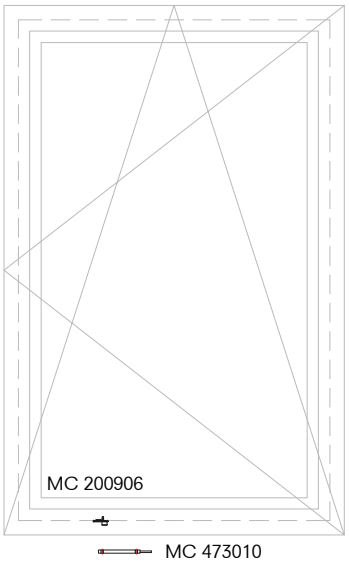
Contatto allarme

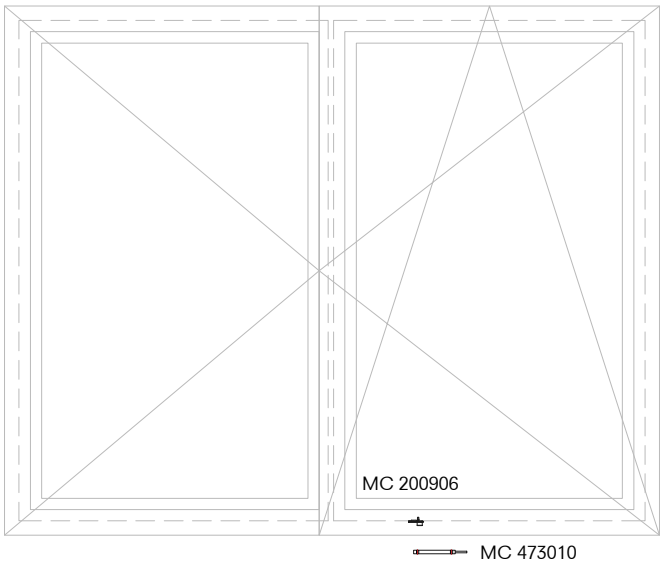
K99062

Ventana oscilante con bisagra oculta

Contacto de alarma

K99062





Tilt&Turn windows with concealed hinge

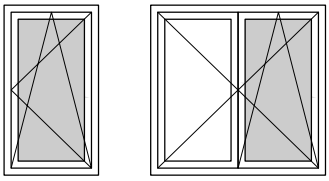
Determination of LBB
(Groove Hardware Lenght)

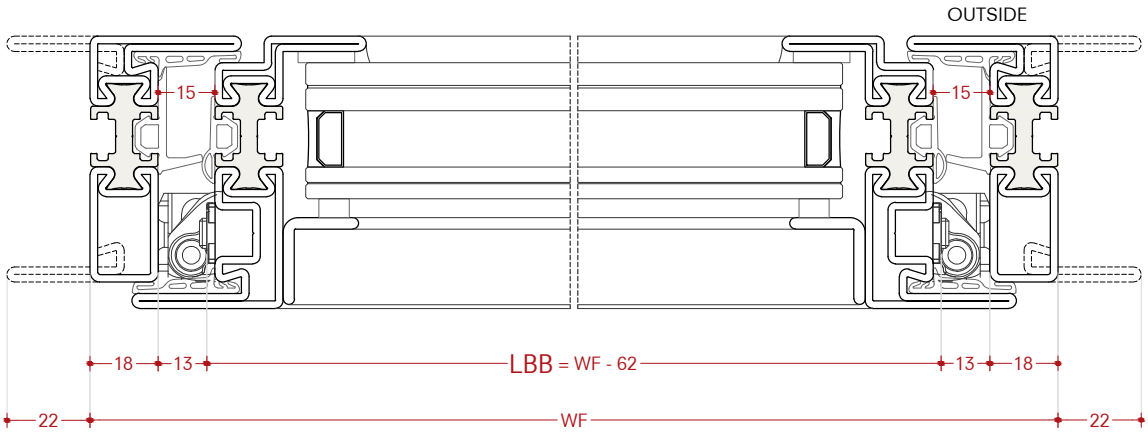
Finestre anta ribalta con cerniera a scomparsa

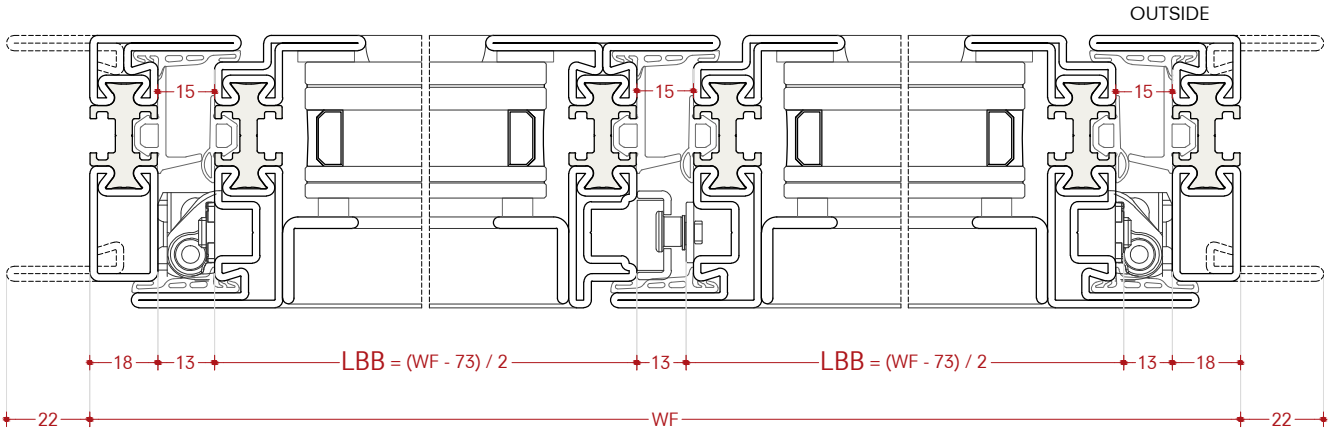
Determinazione di LBB
(Larghezza cava ferramenta)

Ventana oscilante con bisagra oculta

Determinación de LBB
(longitud de la ranura del hardware)







Tilt&Turn windows with concealed hinge

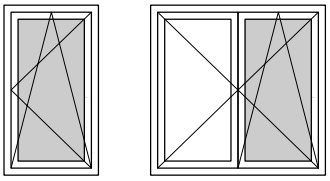
Determination of HBB
(Groove Hardware Height)

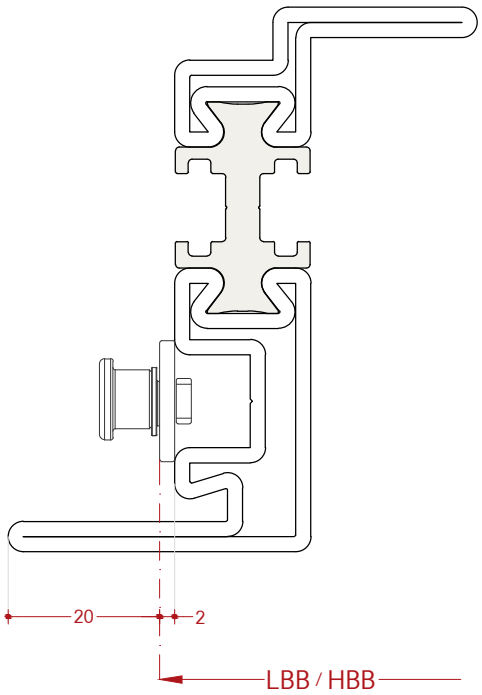
Finestre anta ribalta con cerniera a scomparsa

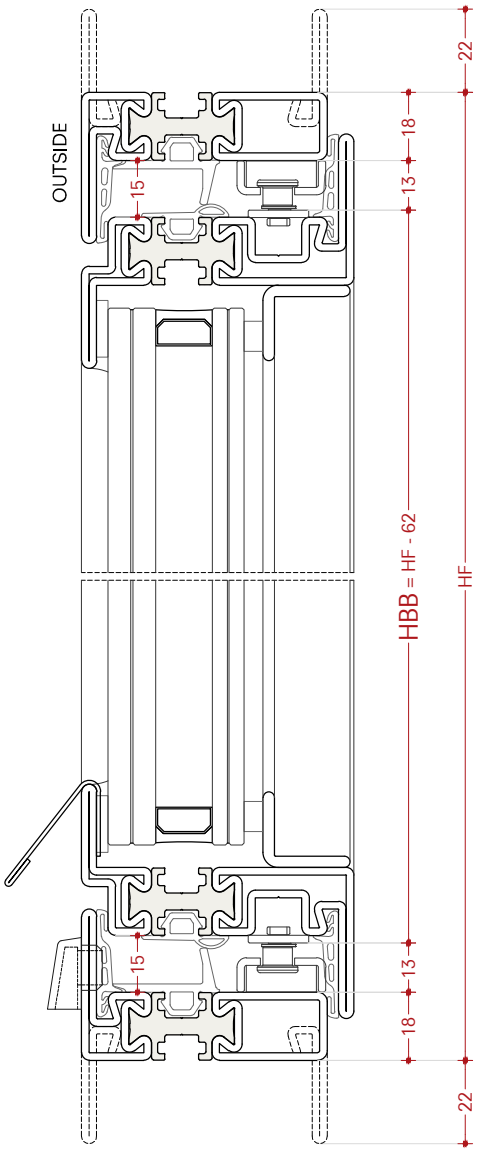
Determinazione di HBB
(altezza cava ferramenta)

Ventana oscilante con bisagra oculta

Determinación de HBB
(altura de la ranura del hardware)







Tilt&Turn windows with concealed hinge

Finestre anta ribalta con cerniera a scomparsa

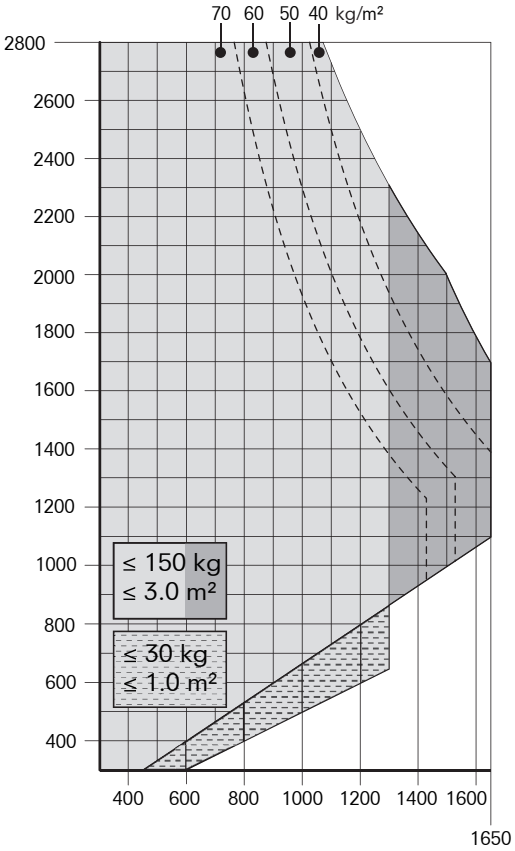
Ventana oscilante con bisagra oculta

Load capacity tables

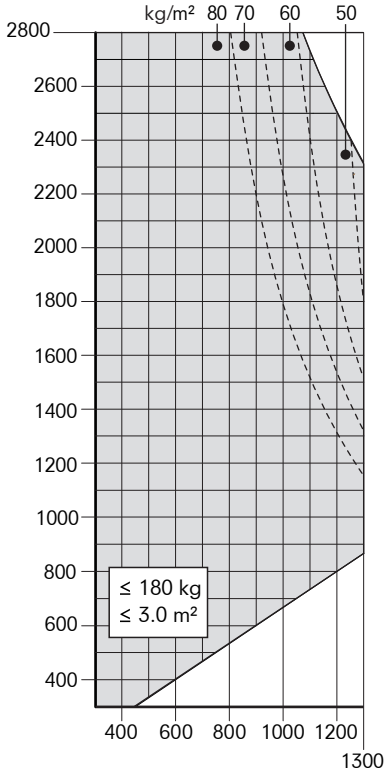
Tabelle portate

Tablas de peso

T&T window concealed accessories capacity
Portate ferramenta a scomparsa per finestre anta ribalta
Peso de accesorios ocultas para ventana arriba



T&T window concealed accessories capacity
with support rod E99510-02 / E99511-02
Portate ferramenta a scomparsa per finestre anta ribalta
con asta di sostegno E99510-02 / E99511-02
Peso de accesorios ocultas para ventana arriba
con varilla de soporte E99510-02 / E99511-02



Standard handle height

Altezza maniglia standard

Altura del manilla estándar

	HBB min	HBB max	H handle
K88003	370	660	190
K88004	661	840	300
K88005	841	1090	400
K88006	1091	1340	500
K88007	1341	1590	600
K88008	1591	1700	700
K88009	1701	1950	1050
K88010	1951	2200	1050

Tilt&Turn windows with concealed hinge

Finestre anta ribalta con cerniera a scomparsa

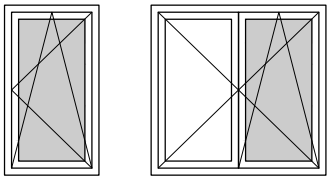
Ventana oscilante con bisagra oculta

Step #1 - Basic kit choice

Passo #1 - Scelta del kit base

Paso #1 - Elección de kit básico

	LBB min	LBB max	HBB min	HBB max
K88001	465	1400	455	2800
K88002	370	464	455	2800
K88002	465	815	370	454



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

LBB = larghezza cava ferramenta
HBB = altezza cava ferramenta

LBB = longitud de la ranura del hardware
HBB = altura de la ranura del hardware

Step #2 - Gear kit choice

Passo #2 - Scelta del kit Cremonese

Paso #2 - Elección de kit de equipo

	HH	HDG	CRP	HCRN	HBB min	HBB max (without extension)	HBB max (with extension)
K88003	190	555	220	5	370	454	2335
K88003	190	555	220	113.5	455	660	2540
K88004	300	736.5	190.5	113.5	661	840	2720
K88005	400	986.5	260.5	113.5	841	1090	2970 (*)
K88006	500	1236.5	260.5	113.5	1091	1340	3150 (*)
K88007	600	1486.5	260.5	113.5	1341	1590	3150 (*)
K88008	700	1596.5	260.5	113.5	1591	1700	3150 (*)
K88009	1050	1846.5	260.5	113.5	1701	1950	3150 (*)
K88010	1050	2096.5	260.5	113.5	1951	2200	3150 (*)

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

(*) = Over 2800 mm technical department confirmation needed.

HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

(*) = Conferma dell'ufficio tecnico necessaria per dimensioni superiori a 2800 mm

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

(*) = Se necesita confirmación del departamento técnico para dimensiones superiores a 2800 mm

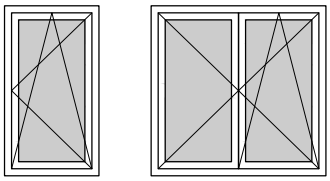
Step #3 - Extension kits choice

Passo #3 - Scelta del kit estensione Cremonese

Paso #3 - Elección de kit extensión

HBB * - HCRN - HDG = Extension kit lenght / larghezza kit prolunga / longitud de kit extensión

	MinL	MaxL
K88011	0	140
K88012	141	235
K88059	236	375
K88013	376	470
K88014	471	610
K88015	611	705
K88060	706	845
K88016	846	940
K88016 / K88011	941	1080
K88016 / K88012	1081	1175
K88016 / K88059	1176	1315
K88016 / K88013	1316	1410
K88016 / K88014	1411	1550
K88016 / K88015	1551	1650
K88016 / K88060	1651	1785
K88016 / K88016	1786	1880



* See HBB information page

MinL = Min Lenght (mm)
MaxL = Max Lenght (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = larghezza minima (mm)
MaxL = larghezza massima (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = longitud mínimo (mm)
MaxL = longitud máximo (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

Step #4 - Scissors and hinges kit choice

Passo #4 - Scelta del kit forbice e cerniere

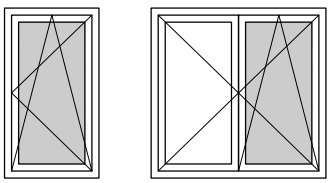
Paso #4 - Elección de kit de cizallas y bisagras

Left / Sinistro / Izquierda

	LBB min	LBB max
K88022	370	600
K88023	601	800
K88024	801	1050
K88025	1051	1285
K88026	1286	1400

Right / Destro / Derecha

	LBB min	LBB max
K88017	370	600
K88018	601	800
K88019	801	1050
K88020	1051	1285
K88021	1286	1400

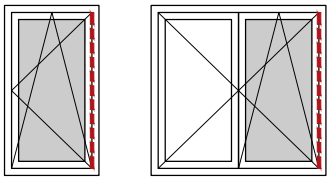


Step #5 - Additional hinge side locking point choice

Passo #5 - Scelta punto di chiusura aggiuntivo lato cerniera

Paso #5 - Elección punto de bloqueo adicional lado de la bisagra

	HBB min	HBB max
K88027	801	1280
K88028	1281	1500
K88029	1501	1700
K88030	1701	2800

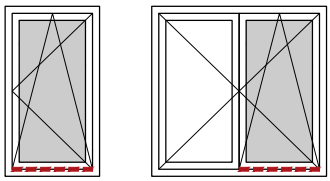


Step #6 - Additional bottom side locking point choice

Passo #6 - Scelta punto di chiusura aggiuntivo lato inferiore

Paso #6 - Elección punto de bloqueo adicional lado inferior

	LBB min	LBB max
K88031	800	1280
K88032	1281	1400



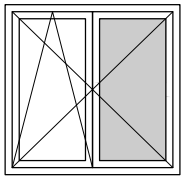
Step #7 - 2nd leaf hinges kit choice

Passo #7 - Scelta kit cerniere 2a anta

Paso #7 - Elección kit de bisagras 2do hoja

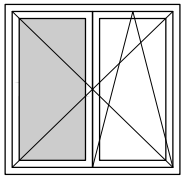
Right / Destro / Derecha

	LBB min	LBB max	HBB min	HBB max
K88034	370	1400	370	2800



Left / Sinistro / Izquierda

	LBB min	LBB max	HBB min	HBB max
K88035	370	1400	370	2800

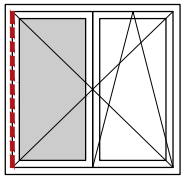


Step #8 - Concealed compression lock kit choice for 2nd leaf

Passo #8 - Scelta kit cerniere centrali a scomparsa per 2a anta

Paso #8 - Elección kit de cerraduras de compresión oculto para 2do hoja

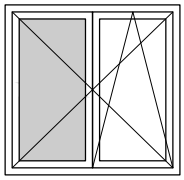
	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800



Step #9 - French casement drive and extension kit choice

Passo #9 - Scelta kit aste a leva e prolunga

Paso #9 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88003	**K88062**
K88004	**K88063**
K88005	**K88064**
K88006	**K88065**
K88007	**K88066**
K88008	**K88067**
K88009	**K88068**
K88010	**K88069**

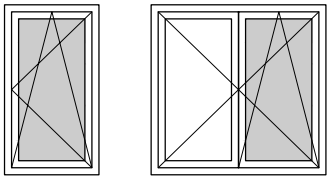
Extension kit for 1st leaf	French casement drive extension kit
K88011	**K88011**
K88012	**K88071**
K88059	**K88072**
K88013	**K88073**
K88014	**K88074**
K88015	**K88075**
K88060	**K88076**
K88016	**K88077**
K88016 **K88011**	**K88077** **K88011**
K88016 **K88012**	**K88077** **K88071**
K88016 **K88059**	**K88077** **K88072**
K88016 **K88013**	**K88077** **K88073**
K88016 **K88014**	**K88077** **K88074**
K88016 **K88015**	**K88077** **K88075**
K88016 **K88060**	**K88077** **K88076**
K88016 **K88016**	**K88077** **K88077**

Step #10 - Door catch choice

Passo #10 - Scelta scrocco porta

Paso #10 - Elección pestillo de puerta

	HBB min	HBB max
K88061	661	2800

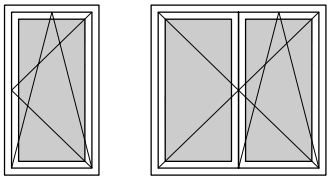


Step #11 - Opening restrictor choice

Passo #11 - Scelta limitatore di apertura

Paso #11 - Elección limitador de apertura

	LBB min	LBB max
K88033	490	1400

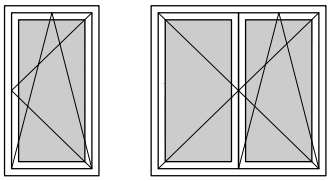


Step #12 - Load transfer 180 kg choice

Passo #12 - Scelta asta di sostegno 180 kg

Paso #12 - Elección varilla de soporte 180 kg

		HBB min	HBB max
E99510-02	**Right**	2000	2800
E99511-02	**Left**	2000	2800

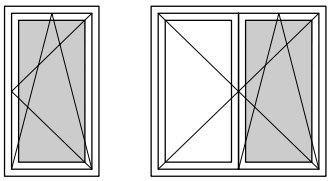


Step #13 - Alarm contact choice

Passo #13 - Scelta contatto allarme

Paso #13 - Elección contacto de alarma

K99062



Step #14 - Double croppable gear kits choice

(Instead of Step #3 and #4)

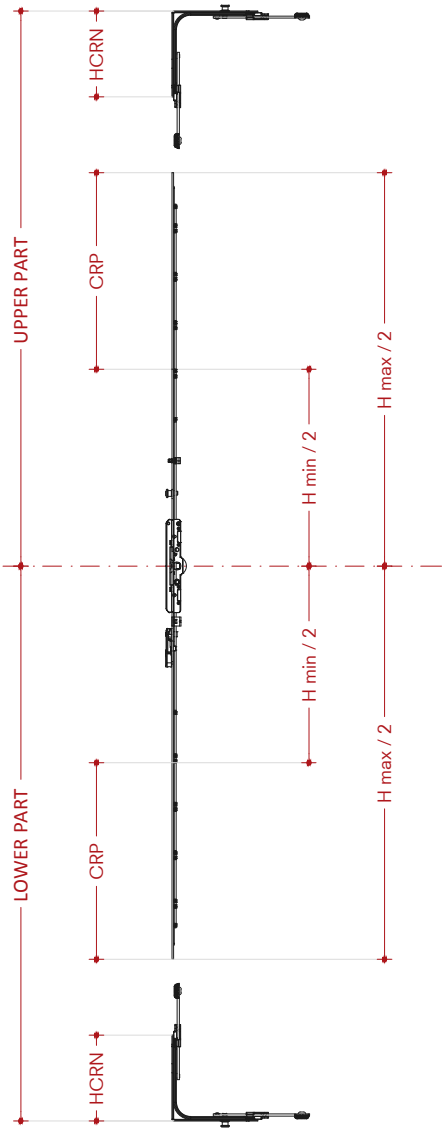
Passo #14 - Scelta Kit cremonesi doppiorasabili

(Invece dei passaggi #3 e #4)

Paso #14 - Elección Kits de equipo recortables dobles

(En lugar de los pasos #3 y #4)

	h min handle	HDG	H min / 2	H max / 2	CRP	HCRN	HBB min
K88109	265	640.5	151	260	170 + 170	113.5	527.5
K88110	375	1040.5	261	510	260 + 260	113.5	747.5
K88111	625	1540.5	511	760	260 + 260	113.5	1247.5
K88112	875	2040.5	761	1020	260 + 260	113.5	1747.5



UPPER PART = HBB - HH - HCRN

LOWER PART = HH - HCRN

Choose the smallest value and find the right gear kit between Hmin/2 and Hmax/2 range columns.

Scegli il valore più piccolo e trova il kit Cremonese giusto tra le colonne dell'intervallo Hmin/2 e Hmax/2

Elija el valor más pequeño y encuentre el kit de equipo adecuado entre las columnas de rango Hmin/2 y Hmax/2

EXTENSION KIT:

UPPER* = HBB - HH - HCRN - H max / 2 →

LOWER* = HH - HCRN - H max / 2 →

CHECK ON THE EXTENSION TABLE (STEP 3)

* with negative value extension are not needed.

* con valore negativo non sono necessarie estensioni.

* con valor negativo no se necesitan extensiones.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

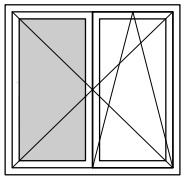
HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

Step #15 - French casement drive and extension kit choice

Passo #15 - Scelta kit aste a leva doppiorasabile e prolunga

Paso #15 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88109	K88113
K88110	K88114
K88111	K88115
K88112	K88116

Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Side hung windows with visible hinge

Basic kits

K88043

Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

Finestre battenti con cerniera a vista

Kit base

K88043

Finestre standard

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

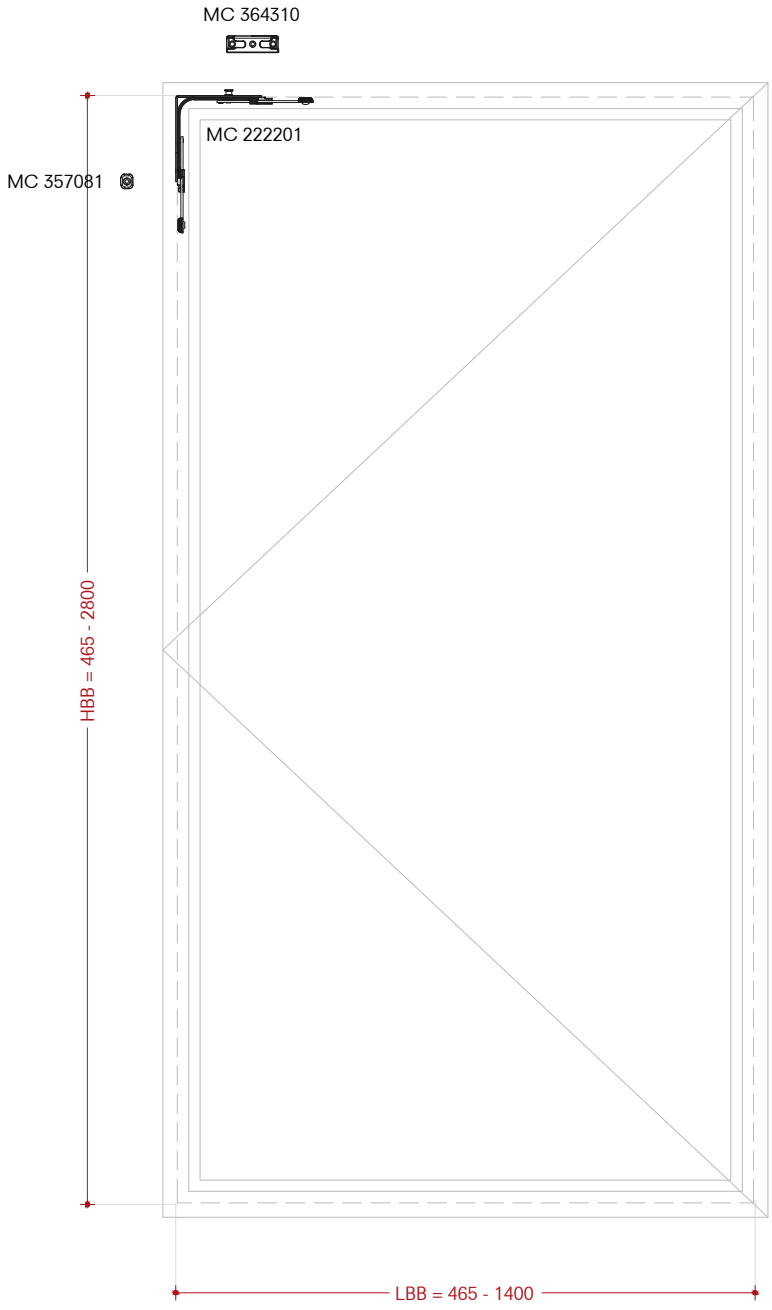
Ventana batiente con bisagra visible

Kits básicos

K88043

Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm



Side hung windows with visible hinge

Basic kits

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

MC 222203 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

Finestre battenti con cerniera a vista

Kit base

K88044

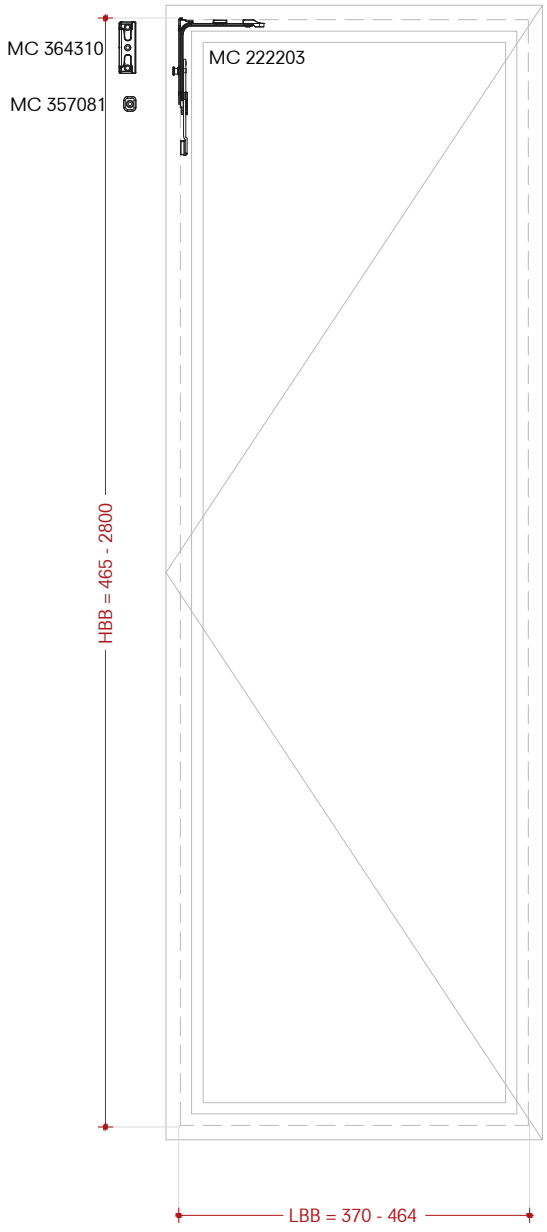
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

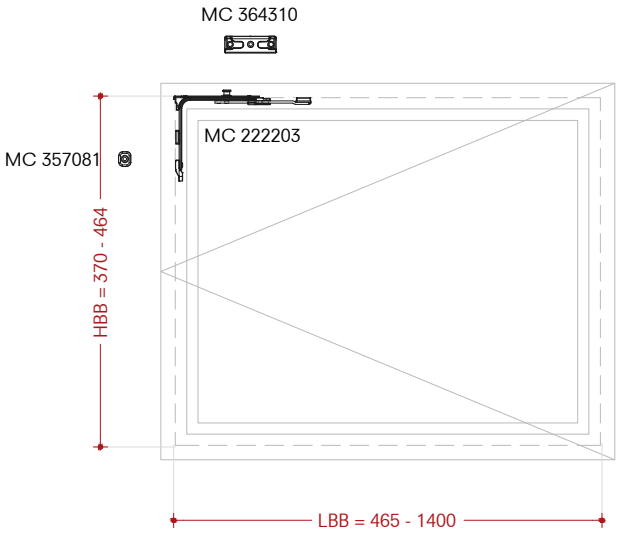
Ventana batiente con bisagra visible

Kits básicos

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm





Side hung windows with visible hinge

Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

K88004

HH = 300 mm
HBB = 661 - 1790 mm

MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

Finestre battenti con cerniera a vista

Kit cremonese

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Ventana batiente con bisagra visible

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

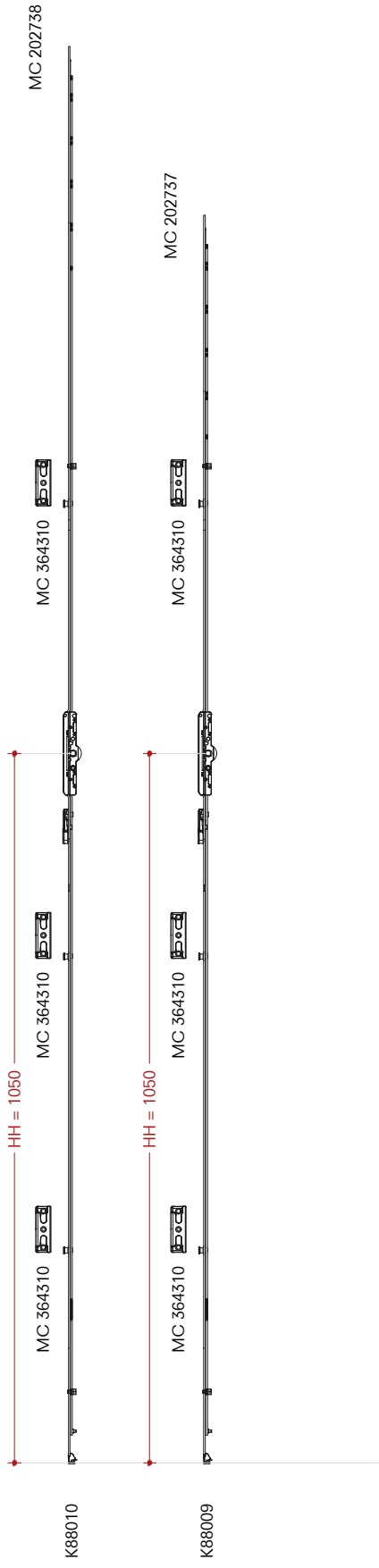
HH = 700 mm
HBB = 1591 - 2650 mm

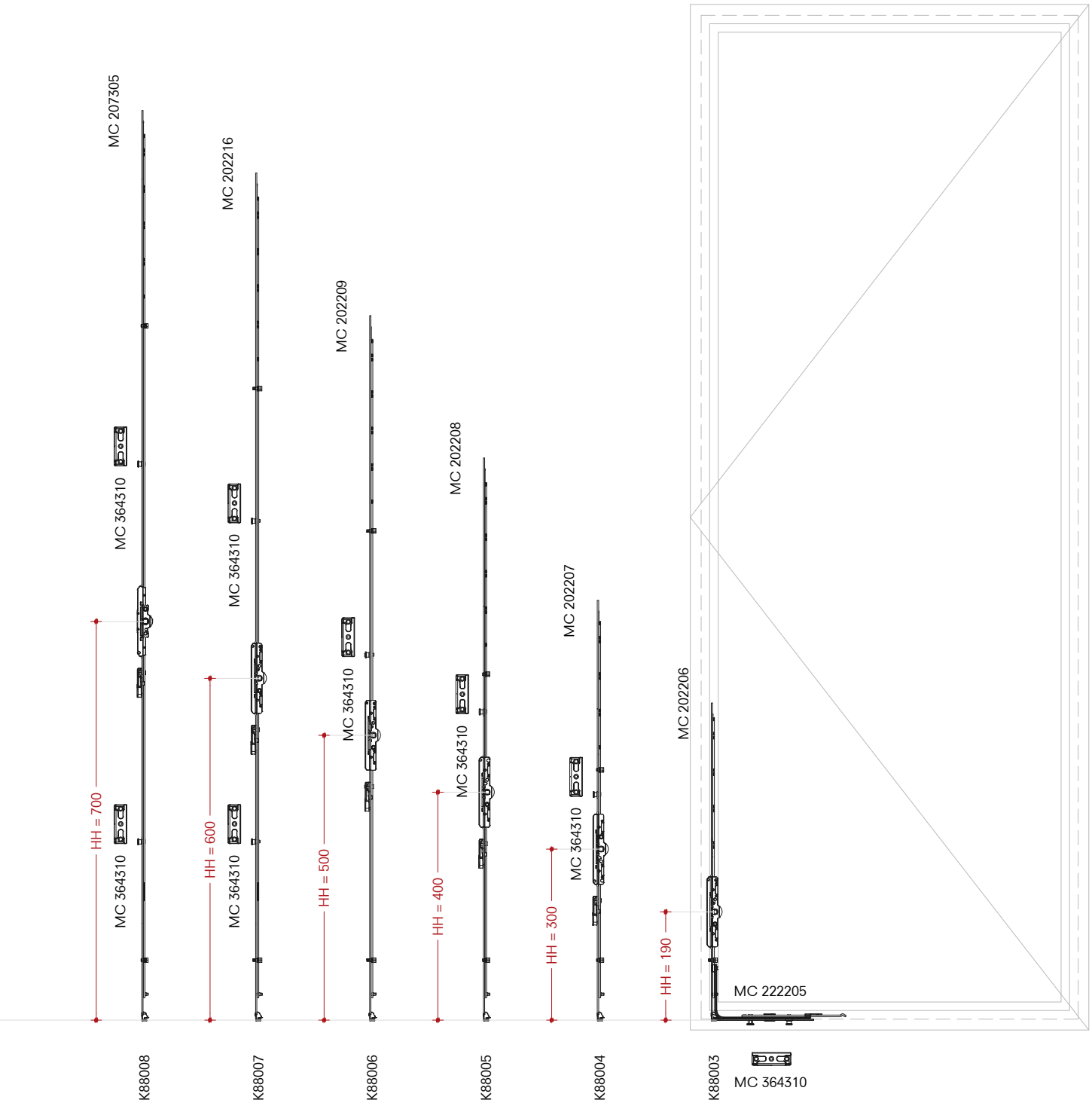
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm




MC 207305
MC 364310
MC 364310
HH = 700
K88008
MC 202216
MC 364310
MC 364310
HH = 600
K88007
MC 202209
MC 364310
HH = 500
K88006
MC 202208
MC 364310
HH = 400
K88005
MC 202207
MC 364310
HH = 300
K88004
MC 202206
HH = 190
K88003
MC 222205
MC 364310

Side hung windows with visible hinge

Double croppable gear kits

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces

Finestre battenti con cerniera a vista

Kit cremonesi doppiorasabili

K88109

K88110

K88111

K88112

Ventana batiente con bisagra visible

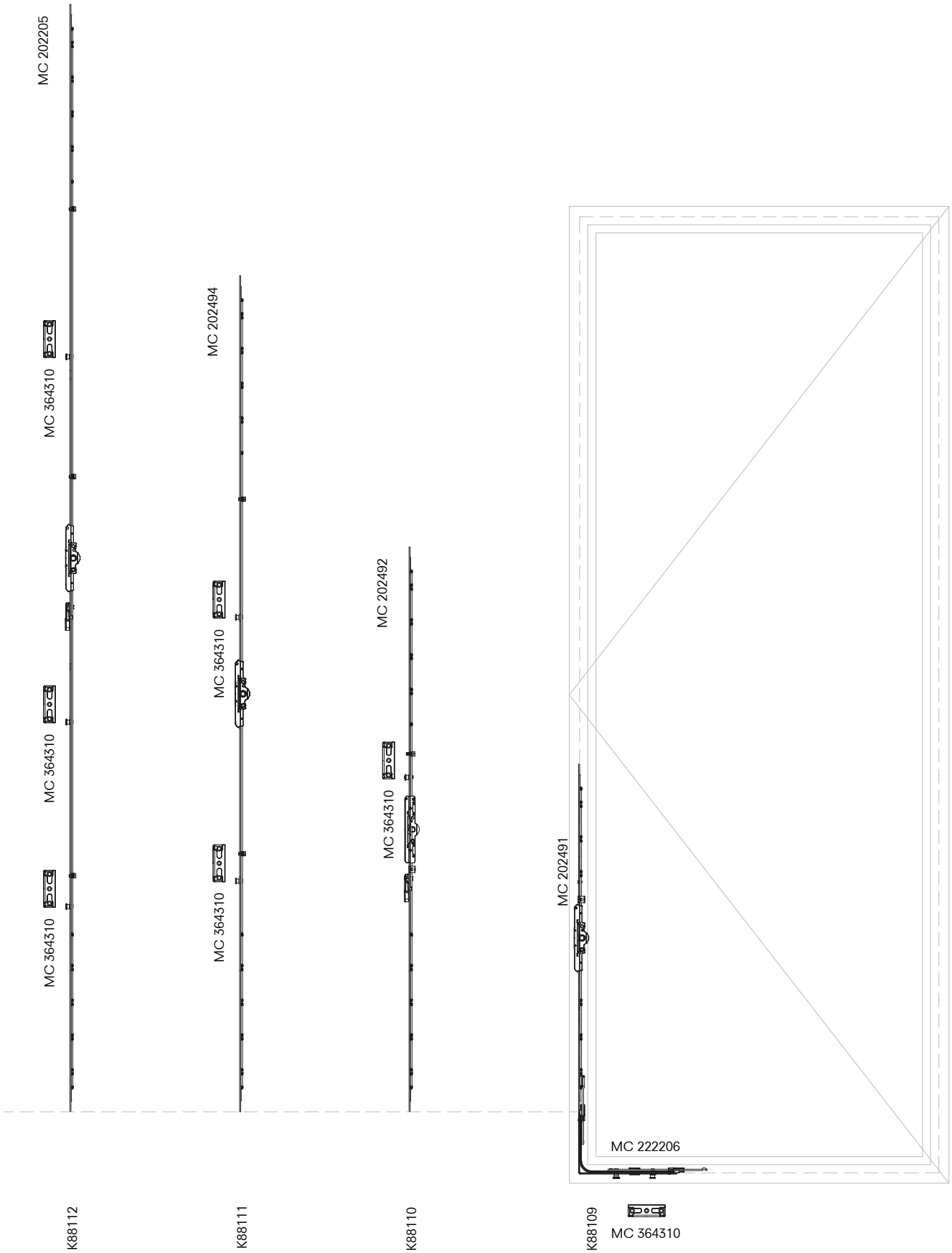
Kits de equipo recortables dobles

K88109

K88110

K88111

K88112


MC 202205
MC 364310
MC 364310
MC 364310
K88112
MC 202494
MC 364310
MC 364310
K88111
MC 202492
MC 364310
K88110
MC 202491
MC 222206
K88109
MC 364310

Side hung windows with visible hinge

Extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88012

141 - 235 mm

MC 201750 n°01 piece
MC 364310 n°01 piece

K88059

236 - 375 mm

MC 201750 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88013

376 - 470 mm

MC 201840 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

Finestre battenti con cerniera a vista

Kit estensione Cremonese

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

Ventana batiente con bisagra visible

Kits extensión

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

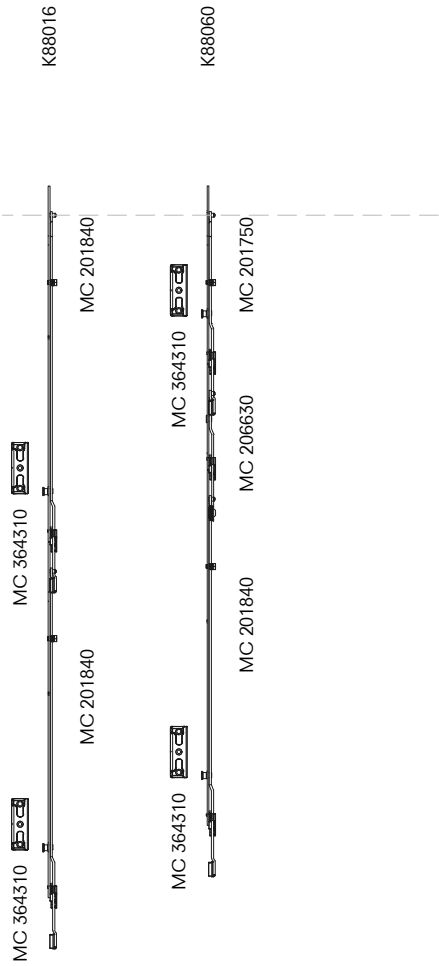
611 - 705 mm

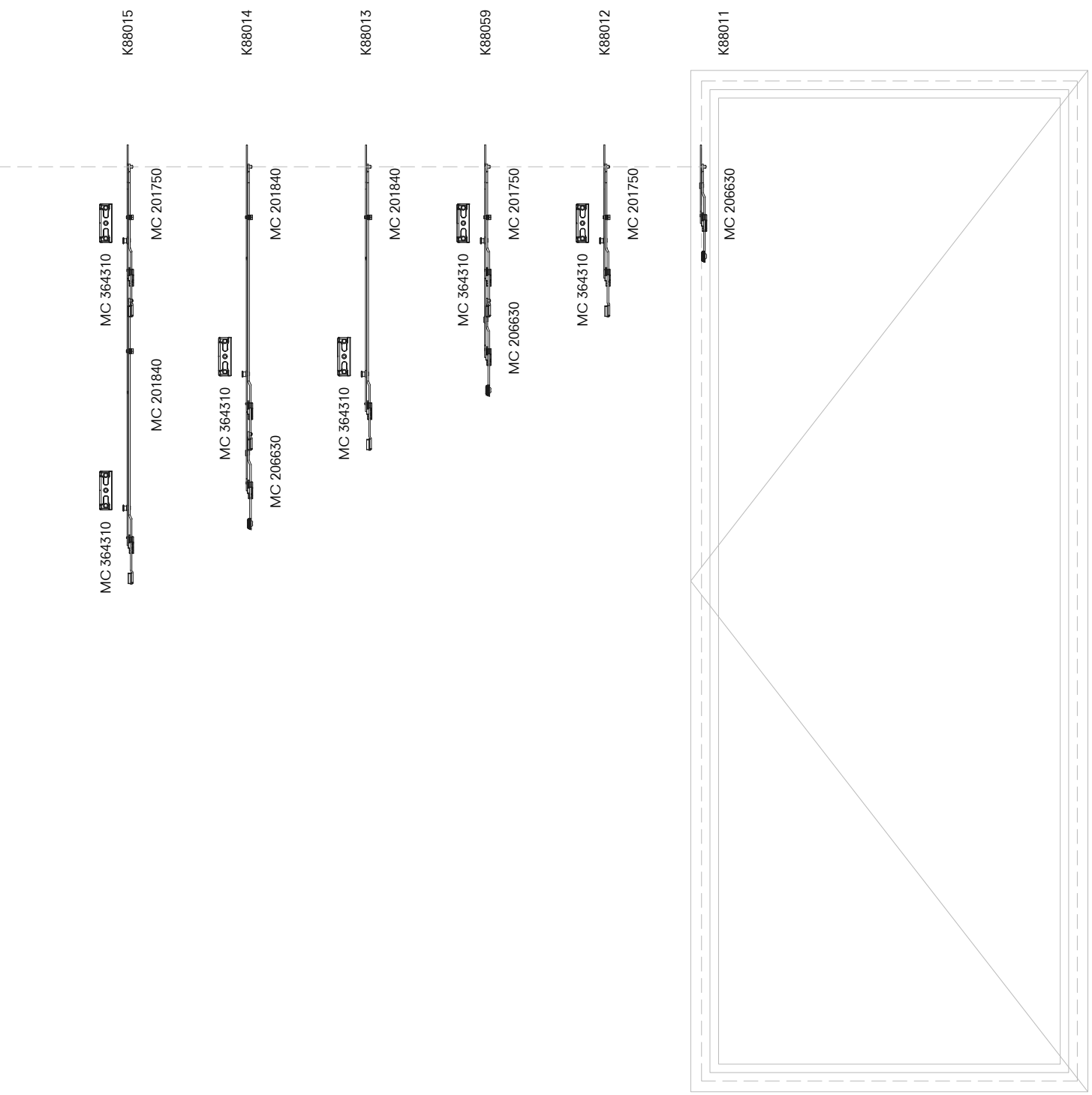
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630
MC 206630

Side hung windows with visible hinge

Hinges kits

Finestre battenti con cerniera a vista

Kit cerniere

Ventana batiente con bisagra visible

Kits de bisagras

K88090

Right hinges

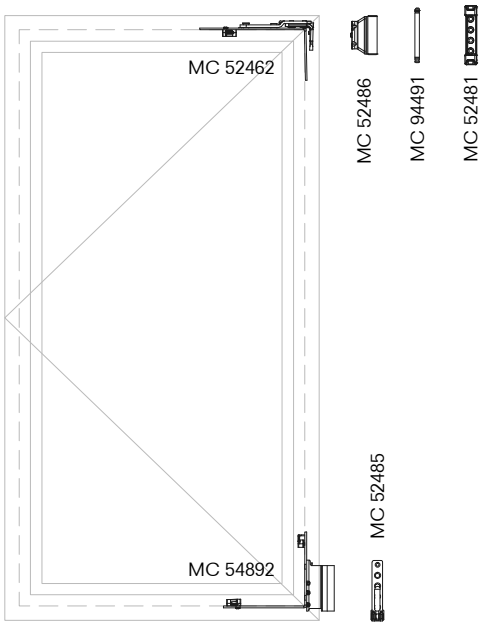
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54892 n°01 piece

K88090

Cerniere destre

K88090

Derecha bisagras



K88091

Left hinges

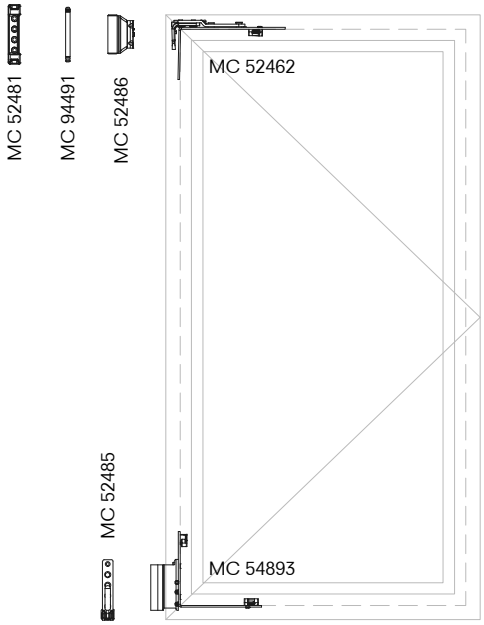
MC 52462 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece
MC 52485 n°01 piece
MC 54893 n°01 piece

K88091

Cerniere sinistre

K88091

Izquierda bisagras



Side hung windows with visible hinge

Lifting component

K88047

Right hinges

MC 361004 n°01 piece

Finestre battenti con cerniera a vista

Componente di sollevamento

K88047

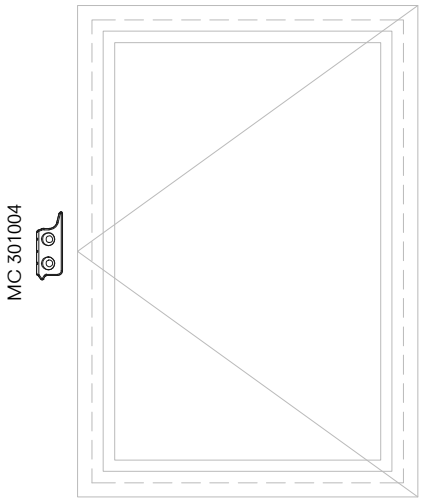
Cerniere destre

Ventana batiente con bisagra visible

Componente de elevación

K88047

Derecha bisagras



K88048

Left hinges

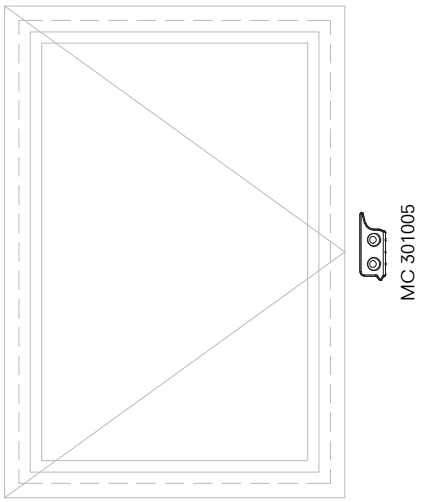
MC 361005 n°01 piece

K88048

Cerniere sinistre

K88048

Izquierda bisagras



Side hung windows with visible hinge

Additional top and bottom locking point

K88045

LBB = 801 - 1280 mm

MC 201751 n°02 pieces
MC 364310 n°02 pieces

Finestre battenti con cerniera a vista

Punto di chiusura aggiuntivo superiore e inferiore

K88045

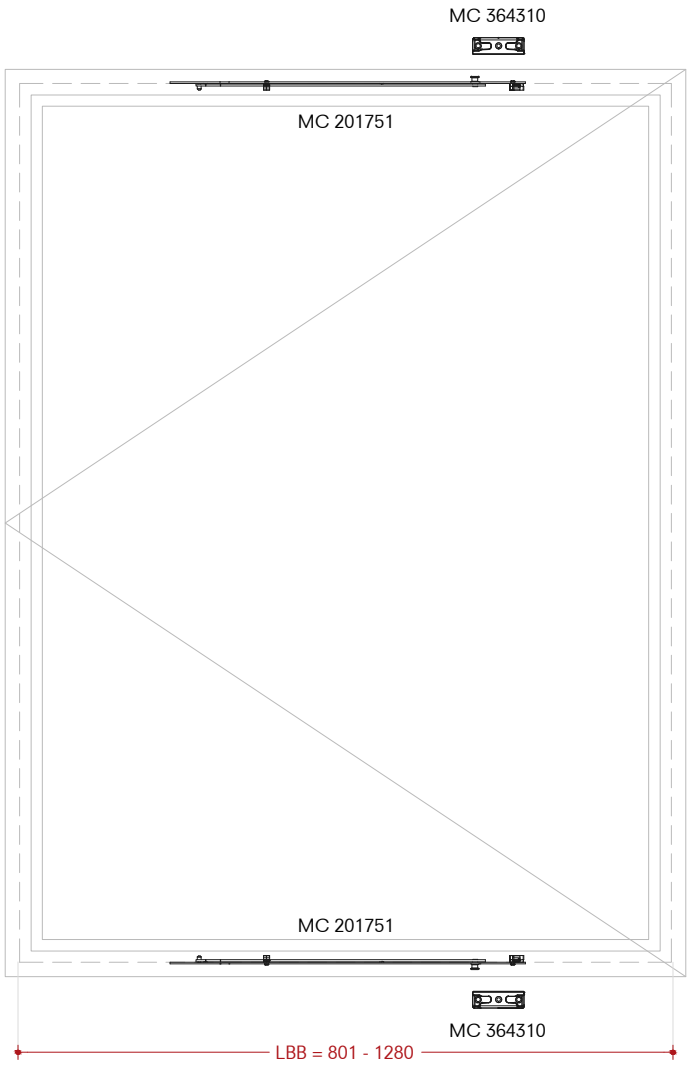
LBB = 801 - 1280 mm

Ventana batiente con bisagra visible

Superior e inferior adicionales punto de bloqueo

K88045

LBB = 801 - 1280 mm



K88046

LBB = 1281 - 1400 mm

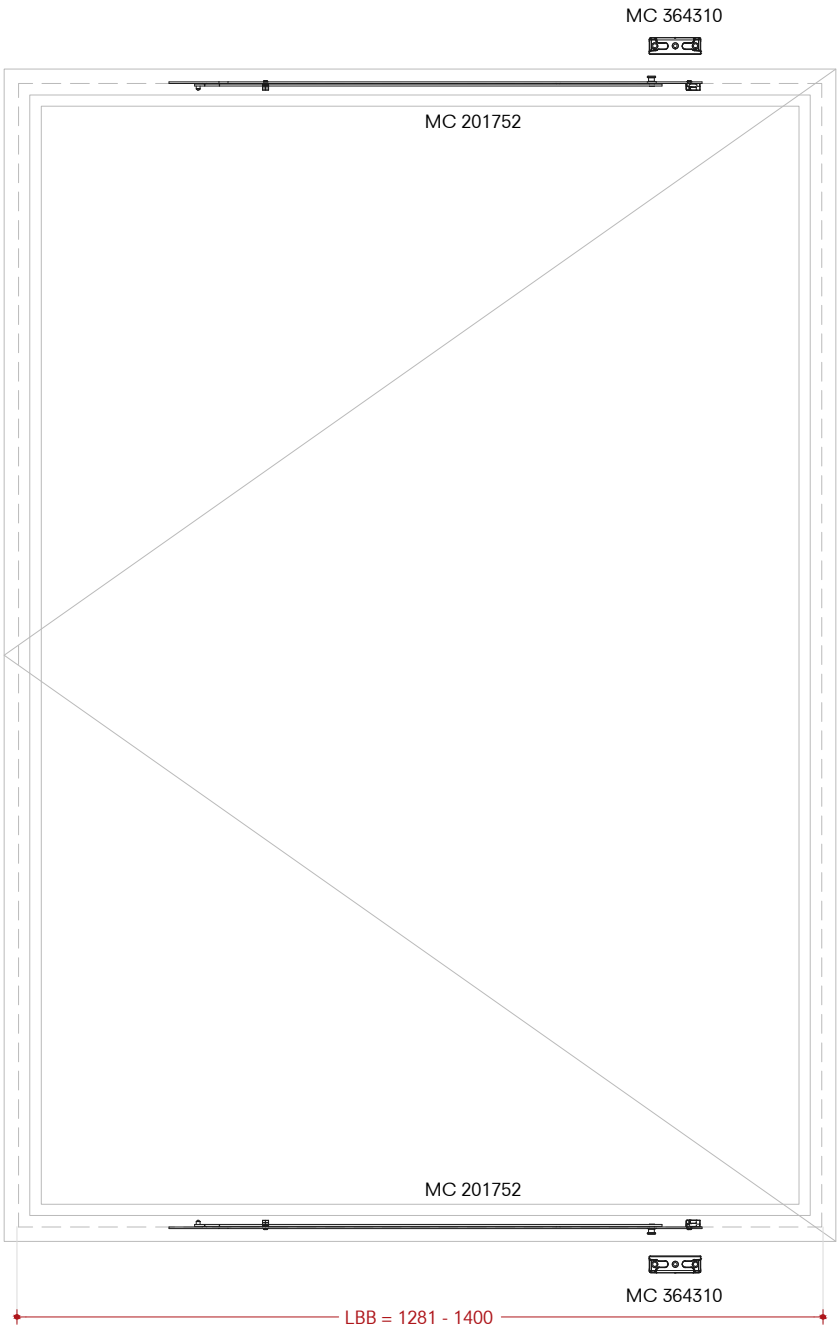
MC 201752 n°02 pieces
MC 364310 n°02 pieces

K88046

LBB = 1281 - 1400 mm

K88046

LBB = 1281 - 1400 mm



Side hung windows with visible hinge

Concealed compression locks kits

K88036
n°1 kit per leaf

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece

Finestre battenti con cerniera a vista

Kit cerniere centrali a scomparsa

K88036
n°1 kit per anta

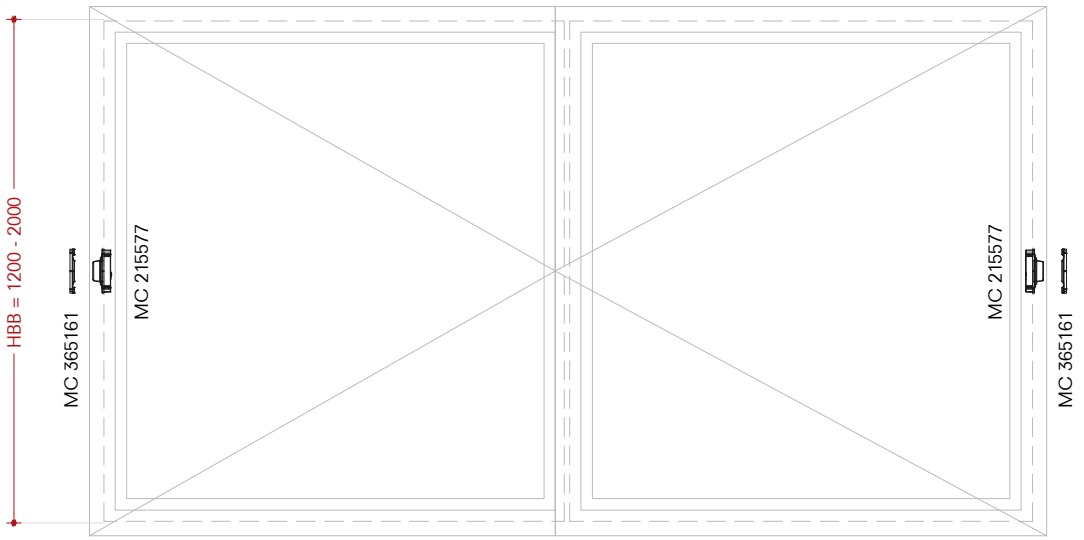
HBB = 1280 - 2000 mm

Ventana batiente con bisagra visible

Kits de bisagras ocultas centrales

K88036
n°1 kit por hoja

HBB = 1280 - 2000 mm



K88037
n°1 kit per leaf

HBB = 2001 - 2800 mm

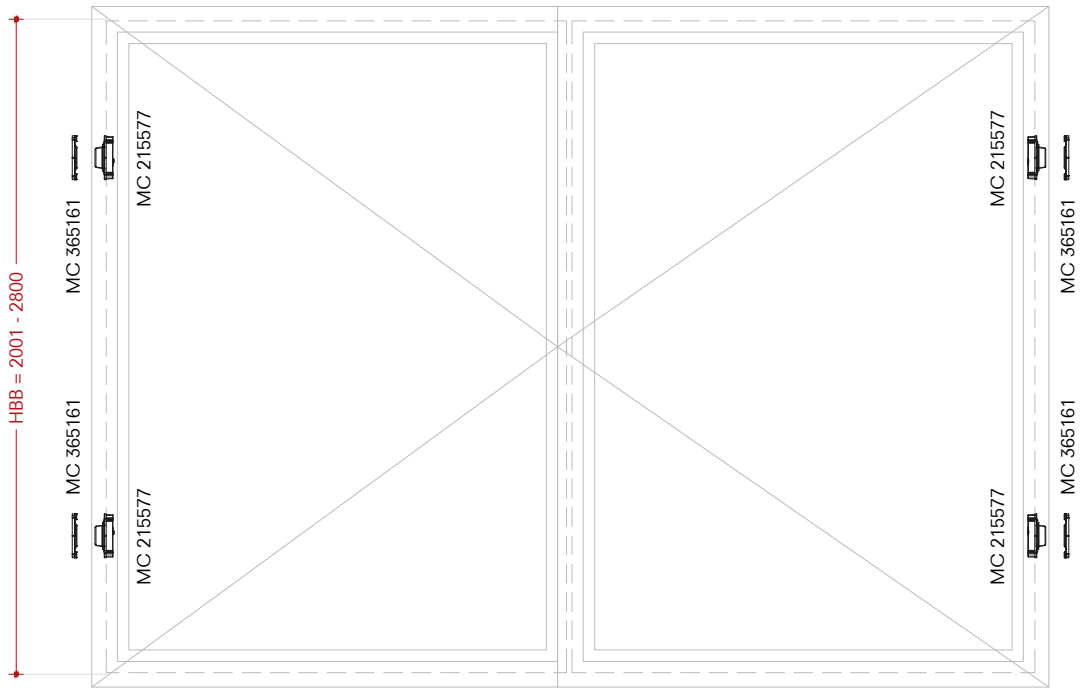
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037
n°1 kit per anta

HBB = 2001 - 2800 mm

K88037
n°1 kit por hoja

HBB = 2001 - 2800 mm



Side hung windows with visible hinge

French casement drive kits

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

MC 221901 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

MC 221902 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

MC 221903 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

MC 221906 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

MC 207242 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

MC 221907 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88069

HH = 1050 mm

MC 221908 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre battenti con cerniera a vista

Kit aste a leva

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

HH = 700 mm

K88068

HH = 1050 mm

K88069

HH = 1050 mm

Ventana batiente con bisagra visible

Kit Cremona semifija

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

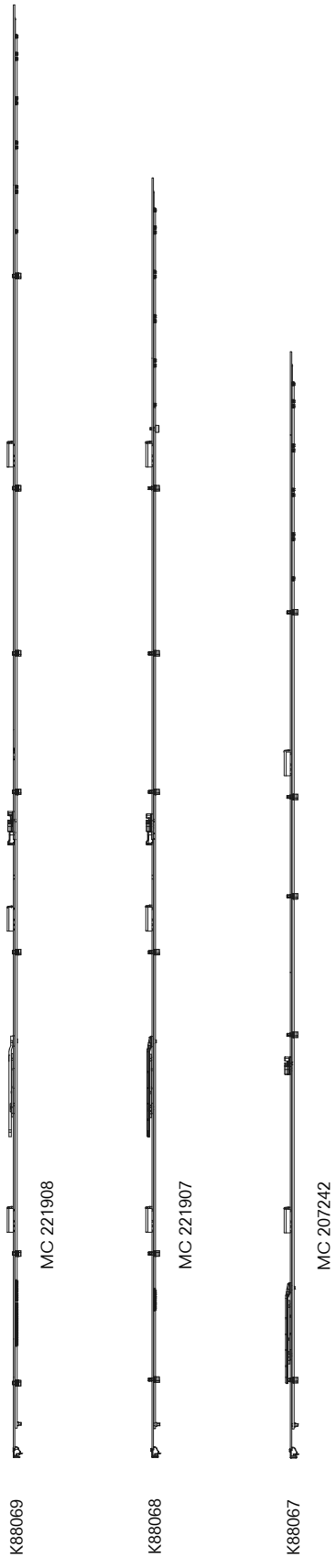
HH = 700 mm

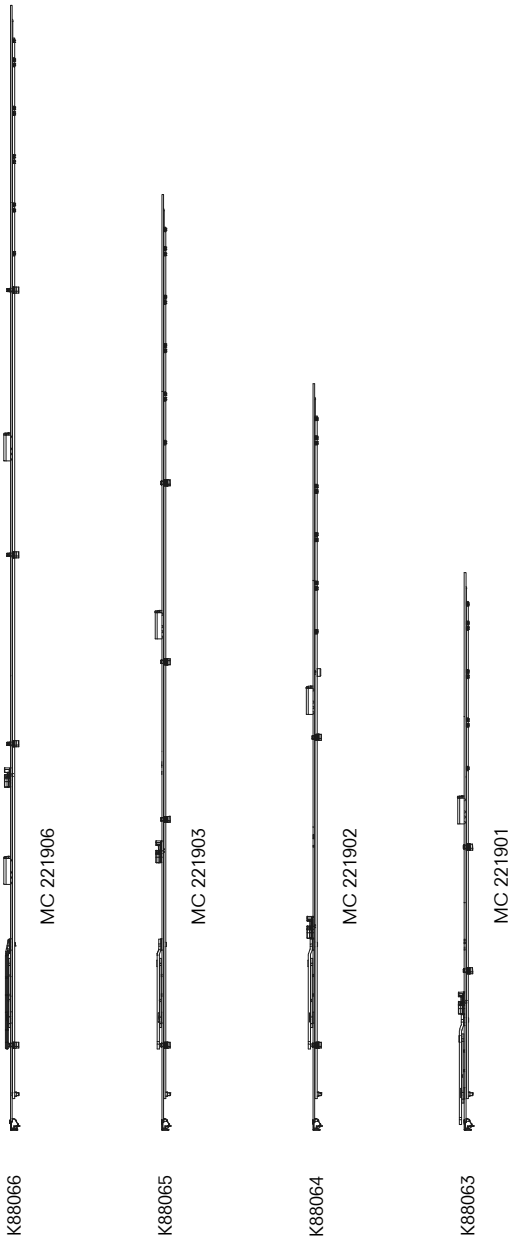
K88068

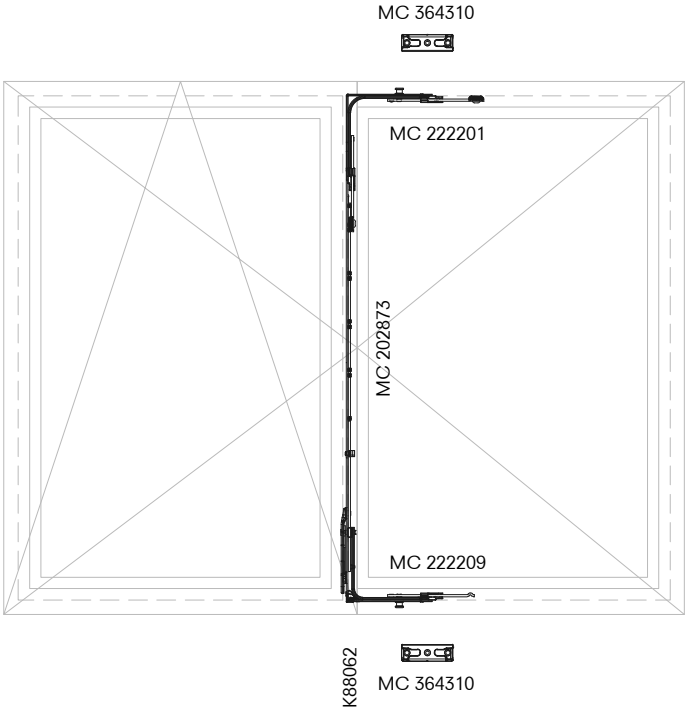
HH = 1050 mm

K88069

HH = 1050 mm




MC 221906
MC 221903
MC 221902
MC 221901
K88066
K88065
K88064
K88063


MC 364310
MC 222201
MC 202873
MC 222209
K88062
MC 364310

Side hung windows with visible hinge

French casement drive kits

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88115

MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

Finestre battenti con cerniera a vista

Kit aste a leva

K88113

K88114

K88115

K88116

Ventana batiente con bisagra visible

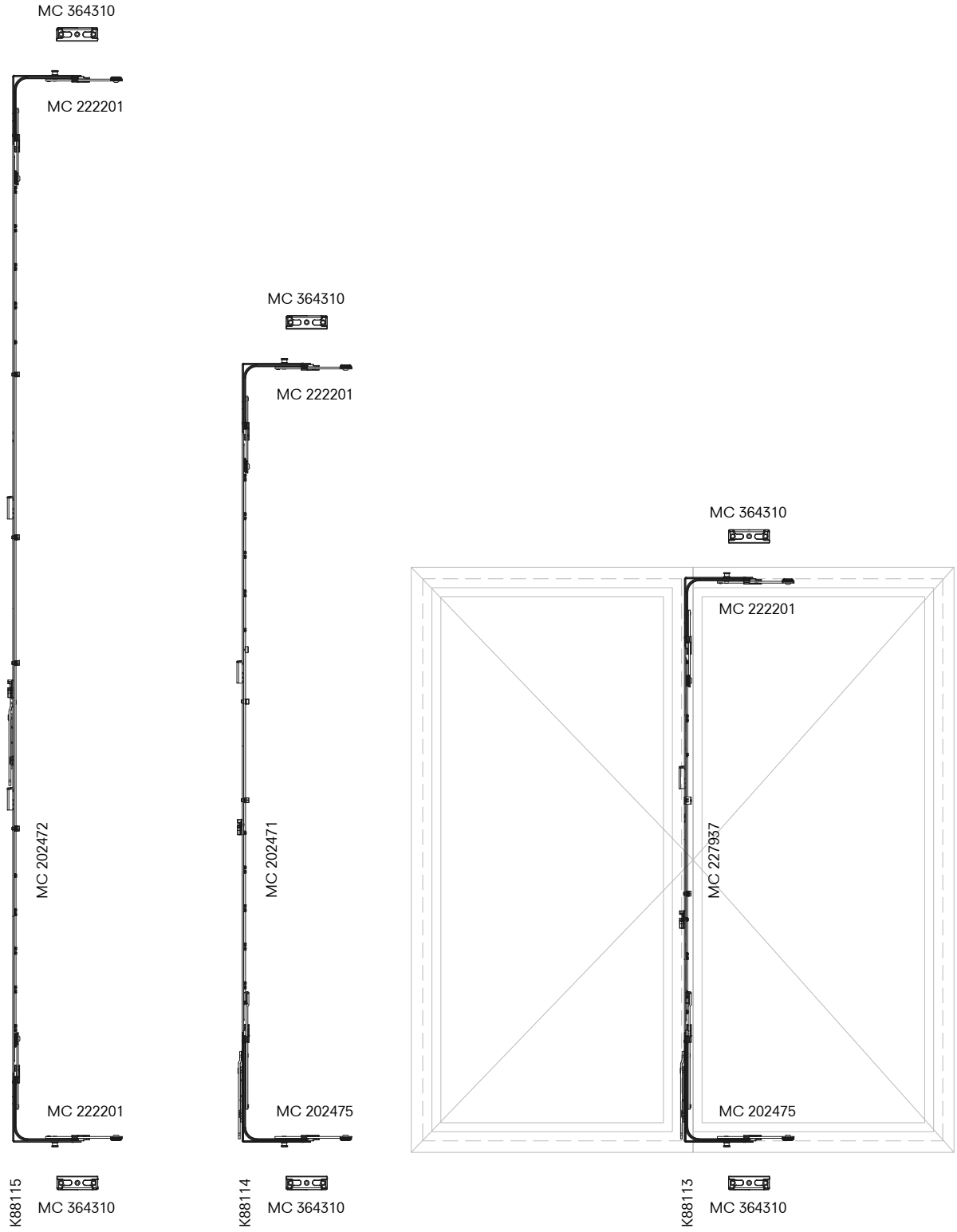
Kit Cremona semifija

K88113

K88114

K88115

K88116


MC 364310
MC 222201
MC 202472
MC 222201
K88115
MC 364310
MC 364310
MC 222201
MC 202471
MC 202475
K88114
MC 364310
MC 364310
MC 222201
MC 227937
MC 202475
K88113
MC 364310

Side hung windows with visible hinge

French casement drive extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88071

141 - 235 mm

MC 203810 n°01 piece

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88073

376 - 470 mm

MC 208333 n°01 piece

K88074

471 - 610 mm

MC 208333 n°01 piece
MC 206630 n°01 piece

K88075

611 - 705 mm

MC 208333 n°01 piece
MC 203810 n°01 piece

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88077

846 - 940 mm

MC 208333 n°02 pieces

Finestre battenti con cerniera a vista

Kit prolunghe per aste a leva

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

Ventana batiente con bisagra visible

Kit de extensión Cremona

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

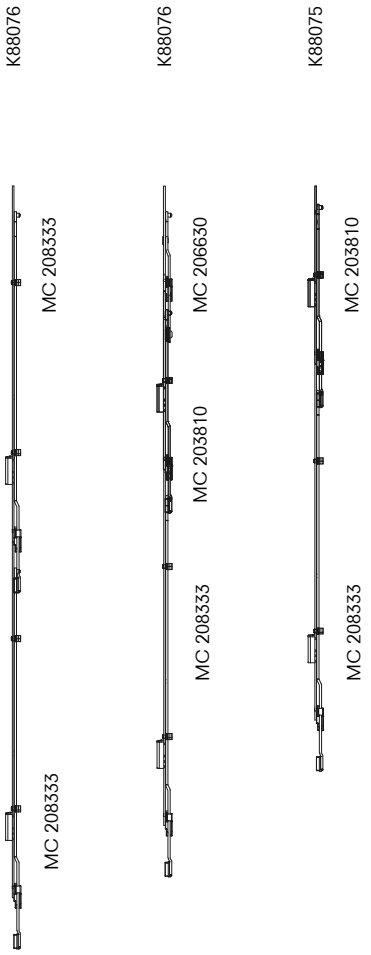
611 - 705 mm

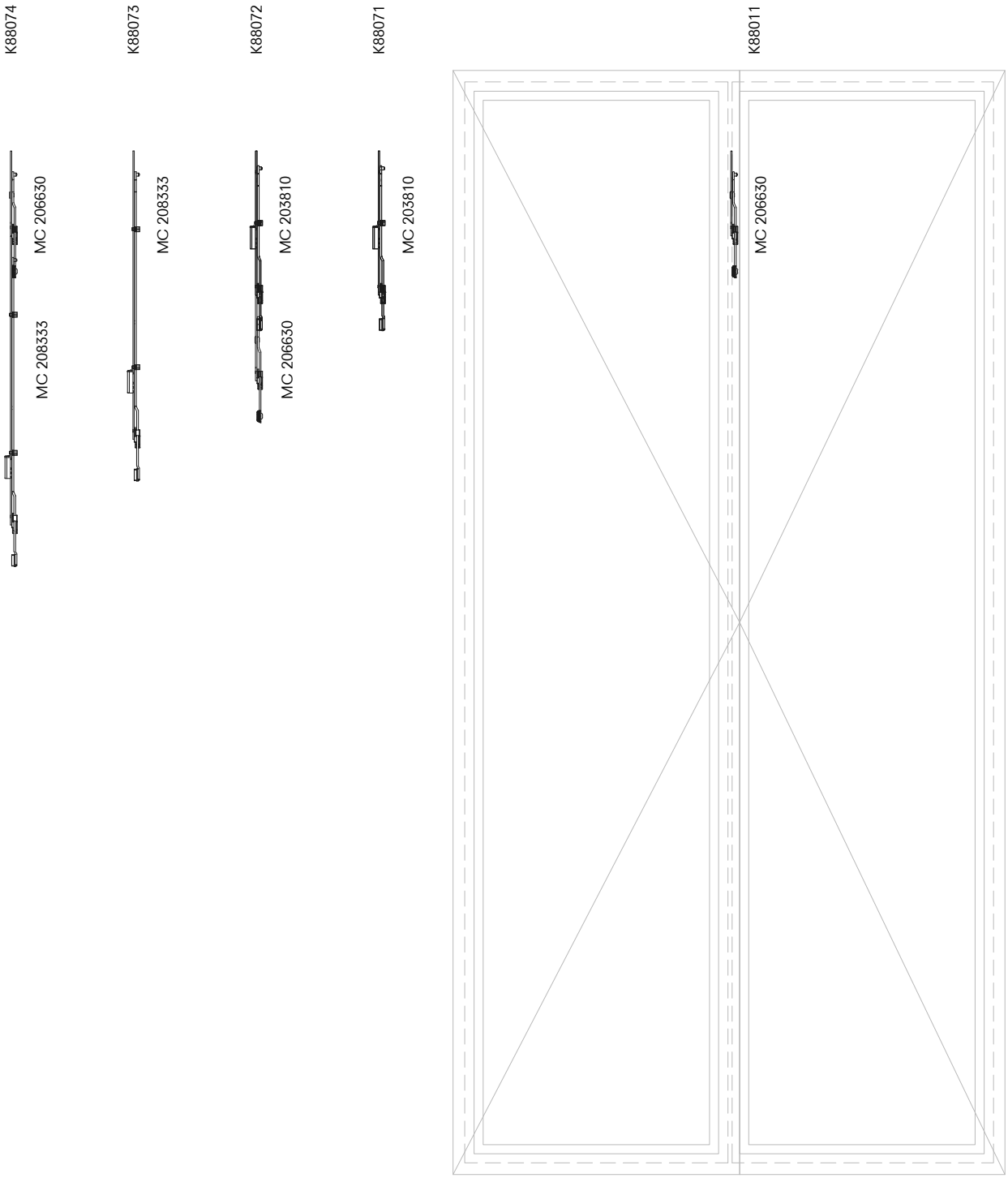
K88076

706 - 845 mm

K88077

846 - 940 mm




K88074
MC 206630
MC 208333
K88073
MC 208333
K88072
MC 203810
MC 206630
K88071
MC 203810
K88011
MC 206630

Side hung windows with visible hinge

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Finestre battenti con cerniera a vista

Scrocco porta

K88061

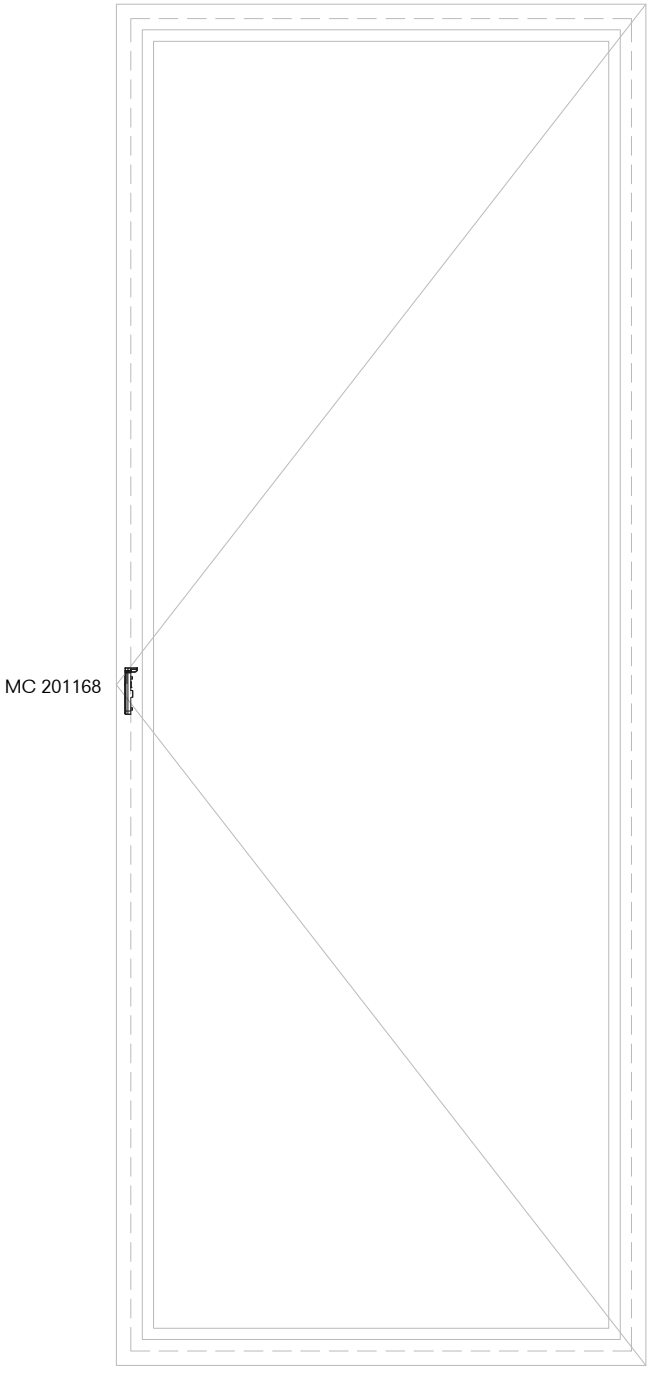
HBB = 661 - 2800 mm

Ventana batiente con bisagra visible

Pestillo de puerta

K88061

HBB = 661 - 2800 mm



Side hung windows with visible hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre battenti con cerniera a vista

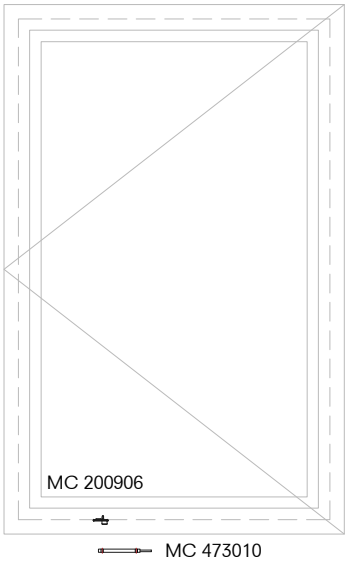
Contatto allarme

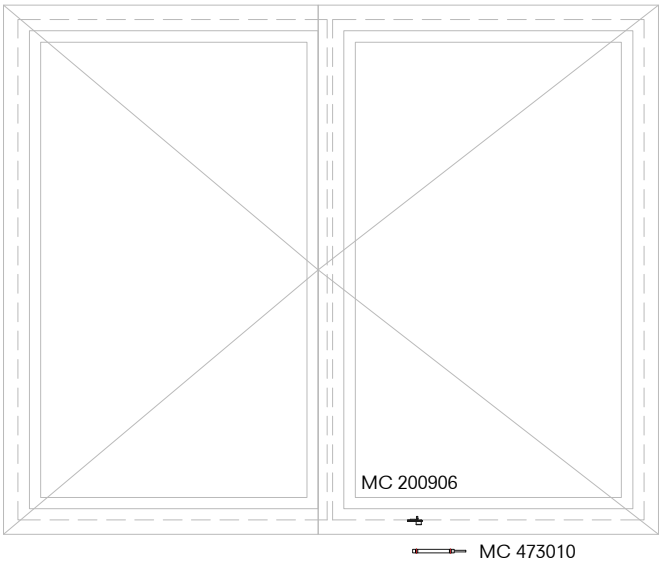
K99062

Ventana batiente con bisagra visible

Contacto de alarma

K99062





Side hung windows with visible hinge

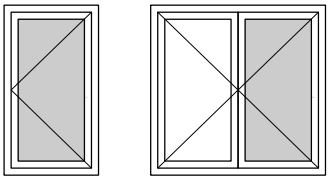
Determination of LBB
(Groove Hardware Lenght)

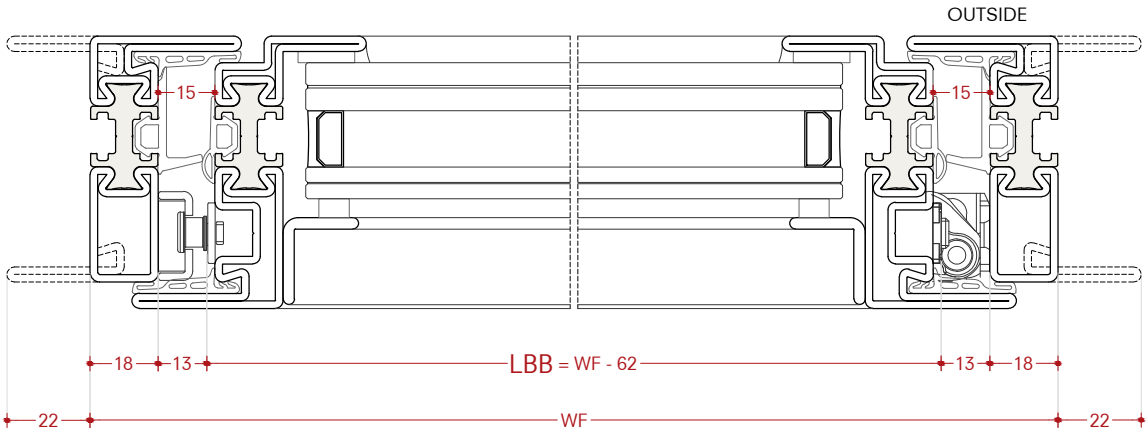
Finestre battenti con cerniera a vista

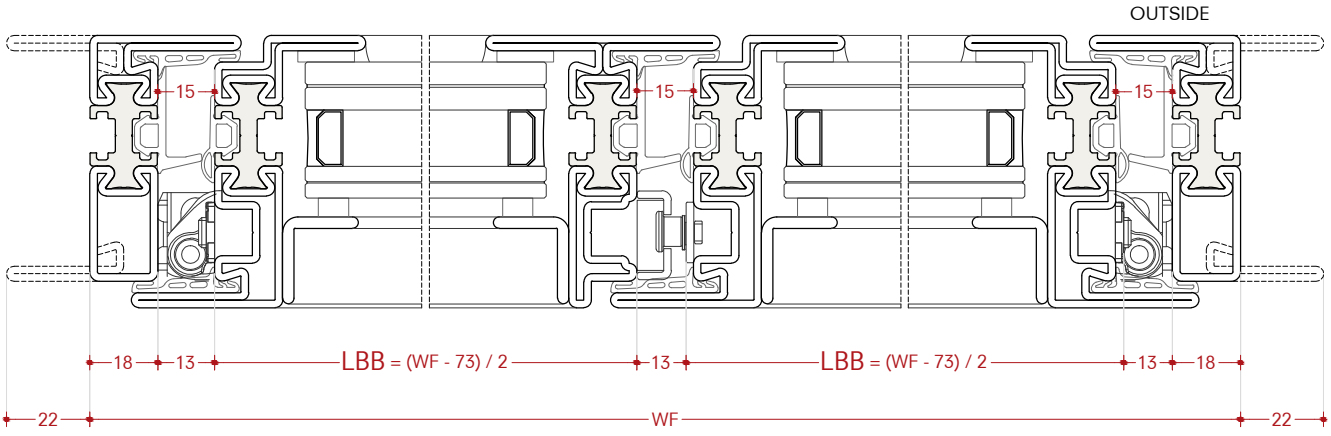
Determinazione di LBB
(Larghezza cava ferramenta)

Ventana batiente con bisagra visible

Determinación de LBB
(longitud de la ranura del hardware)







Side hung windows with visible hinge

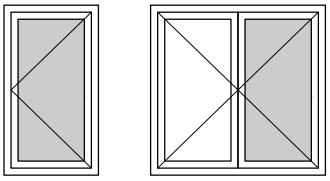
Determination of HBB
(Groove Hardware Height)

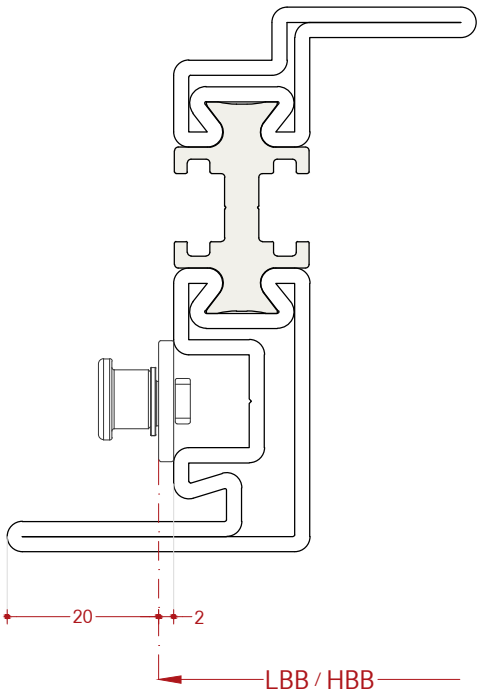
Finestre battenti con cerniera a vista

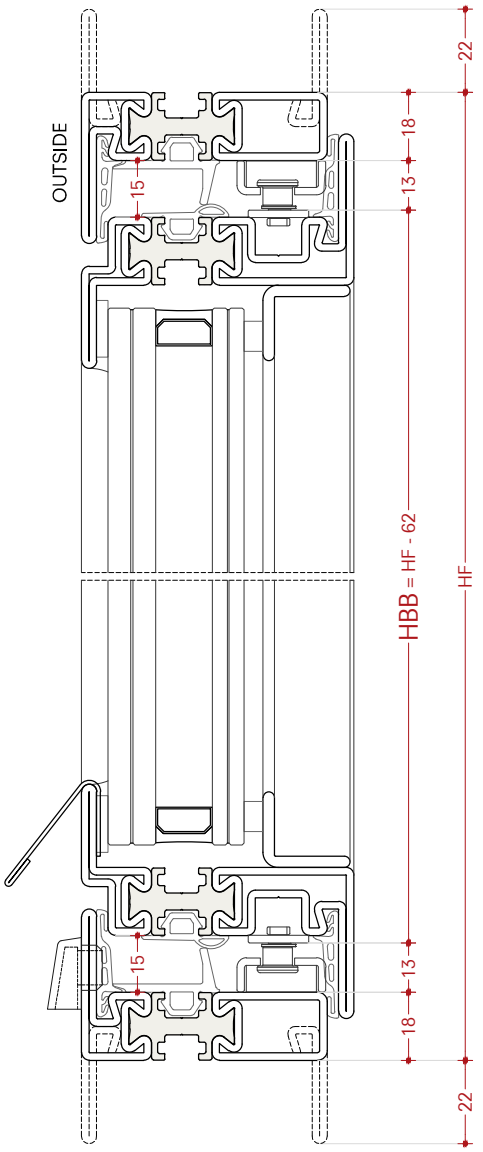
Determinazione di HBB
(altezza cava ferramenta)

Ventana batiente con bisagra visible

Determinación de HBB
(altura de la ranura del hardware)







Side hung windows with visible hinge

Finestre battenti con cerniera a vista

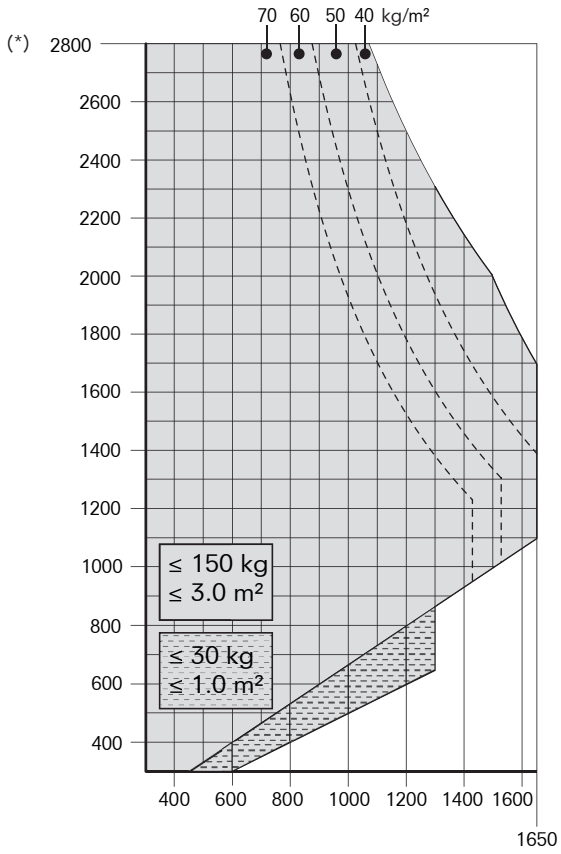
Ventana batiente con bisagra visible

Load capacity tables

Tabelle portate

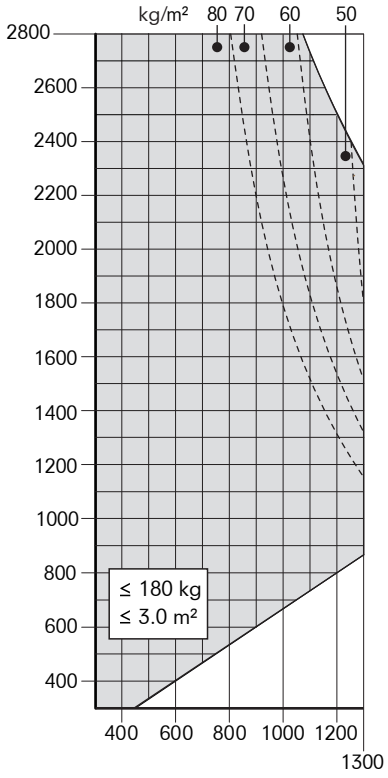
Tablas de peso

Side hung window concealed accessories capacity
Portate ferramenta a scomparsa per finestra a battente
Peso de accesorios ocultas para ventana batiente



(*) Extendable to a height of 3000 mm using weld-on hinges.

Side hung window concealed accessories capacity
with support rod E99510-02 / E99511-02
Portate ferramenta a scomparsa per finestra a battente
con asta di sostegno E99510-02 / E99511-02
Peso de accesorios ocultas para ventana batiente
con varilla de soporte E99510-02 / E99511-02



(*) Estendibile ad altezza 3000 mm con l'uso di cerniere a saldare.

(*) Extensible hasta 3000 mm de altura mediante bisagras de soldadura.

Standard handle height

Altezza maniglia standard

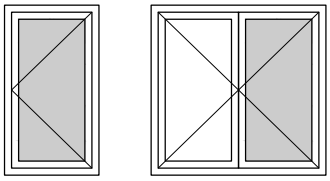
Altura del manilla estándar

	HBB min	HBB max	H handle
K88003	370	660	190
K88004	661	840	300
K88005	841	1090	400
K88006	1091	1340	500
K88007	1341	1590	600
K88008	1591	1700	700
K88009	1701	1950	1050
K88010	1951	2200	1050

Side hung windows with visible hinge

Step #1 - Basic kit choice

	LBB min	LBB max	HBB min	HBB max
K88043	370	1400	455	2800
K88044	370	815	370	454



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

Step #2 - Gear kit choice

	HH	HDG	CRP	HCRN	HBB min	HBB max (without extension)	HBB max (with extension)
K88003	190	555	220	5	370	454	2335
K88003	190	555	220	113.5	455	660	2540
K88004	300	736.5	190.5	113.5	661	840	2720
K88005	400	986.5	260.5	113.5	841	1090	2970 (*)
K88006	500	1236.5	260.5	113.5	1091	1340	3150 (*)
K88007	600	1486.5	260.5	113.5	1341	1590	3150 (*)
K88008	700	1596.5	260.5	113.5	1591	1700	3150 (*)
K88009	1050	1846.5	260.5	113.5	1701	1950	3150 (*)
K88010	1050	2096.5	260.5	113.5	1951	2200	3150 (*)

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

(*) = Over 2800 mm technical department confirmation needed.

Finestre battenti con cerniera a vista

Passo #1 - Scelta del kit base

LBB = larghezza cava ferramenta
HBB = altezza cava ferramenta

Passo #2 - Scelta del kit Cremonese

HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

(*) = Conferma dell'ufficio tecnico necessaria per dimensioni superiori a 2800 mm

Ventana batiente con bisagra visible

Paso #1 - Elección de kit básico

LBB = longitud de la ranura del hardware
HBB = altura de la ranura del hardware

Paso #2 - Elección de kit de equipo

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

(*) = Se necesita confirmación del departamento técnico para dimensiones superiores a 2800 mm

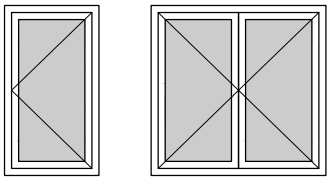
Step #3 - Extension kits choice

Passo #3 - Scelta del kit estensione Cremonese

Paso #3 - Elección de kit extensión

HBB * - HCRN - HDG = Extension kit lenght / larghezza kit prolunga / longitud de kit extensión

	MinL	MaxL
K88011	0	140
K88012	141	235
K88059	236	375
K88013	376	470
K88014	471	610
K88015	611	705
K88060	706	845
K88016	846	940
K88016 / K88011	941	1080
K88016 / K88012	1081	1175
K88016 / K88059	1176	1315
K88016 / K88013	1316	1410
K88016 / K88014	1411	1550
K88016 / K88015	1551	1650
K88016 / K88060	1651	1785
K88016 / K88016	1786	1880



* See HBB information page

MinL = Min Lenght (mm)
MaxL = Max Lenght (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = larghezza minima (mm)
MaxL = larghezza massima (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = longitud mínimo (mm)
MaxL = longitud máximo (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

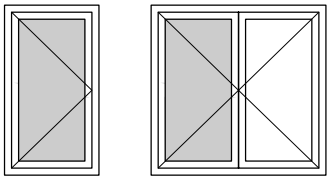
Step #4 - Hinges kit choice
n°1 kit per leaf

Passo #4 - Scelta kit cerniere
n°1 kit per anta

Paso #4 - Elección kit bisagras
n°1 kit por hoja

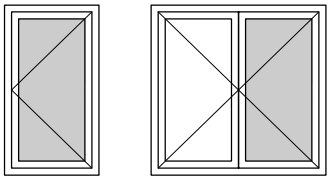
Left / Sinistro / Izquierda

	LBB min	LBB max	HBB min	HBB max
K88091	370	1400	365	2800



Right / Destro / Derecha

	LBB min	LBB max	HBB min	HBB max
K88090	370	1400	365	2800

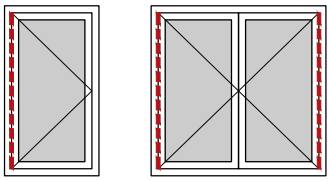


Step #5 - Concealed compression lock kit choice for 2nd leaf
n°1 kit per leaf

Passo #5 - Scelta kit cerniere centrali a scomparsa per 2a anta
n°1 kit per anta

Paso #5 - Elección kit de cerraduras de compresión oculto para 2do hoja
n°1 kit por hoja

	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800

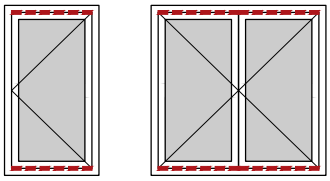


Step #6 - Additional top and bottom locking point choice
n°1 kit per leaf

Passo #6 - Scelta punto di chiusura aggiuntivo superiore e inferiore
n°1 kit per anta

Paso #6 - Elección superior e inferior adicionales punto de bloqueo
n°1 kit por hoja

	LBB min	LBB max
K88045	801	1280
K88046	1281	1400

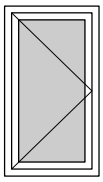


Step #7 - Lifting component
Only for single leaf window

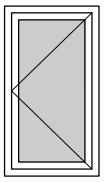
Passo #7 - Componente di sollevamento
Solo per finestra ad anta singola

Paso #7 - Componente de elevación
Solo para ventana de una hoja

K88048



K88047



Step #8 - French casement drive and extension kit choice

Passo #8 - Scelta kit aste a leva e prolunga

Paso #8 - Kit de Cremona y extensión

Drive gear kit	French casement drive kit
K88003	K88062
K88004	K88063
K88005	K88064
K88006	K88065
K88007	K88066
K88008	K88067
K88009	K88068
K88010	K88069

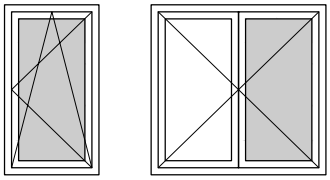
Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Step #9 - Door catch choice

Passo #9 - Scelta scrocco porta

Paso #9 - Elección pestillo de puerta

	HBB min	HBB max
K88061	661	2800

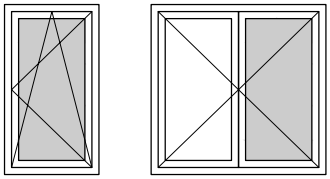


Step #10 - Alarm contact choice

Passo #10 - Scelta contatto allarme

Paso #10 - Elección contacto de alarma

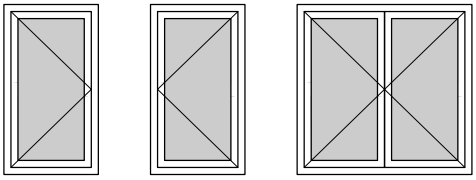
K99062



Step #11 - Hinge cover

Passo #11 - Copricerniera

Paso #11 - Cubierta de bisagra



Right Destro Derecha	Surface finishes Finiture Superficie
K88092	Silver Argento Plata
K88093	White Bianco Blanco
K88094	Black Nero Negro
K88095	Brown Marrone Marrón
K88096 (*)	Titanium Titanio Titanio

Left Sinistro Izquierda	Surface finishes Finiture Superficie
K88097	Silver Argento Plata
K88098	White Bianco Blanco
K88099	Black Nero Negro
K880100	Brown Marrone Marrón
K880101 (*)	Titanium Titanio Titanio

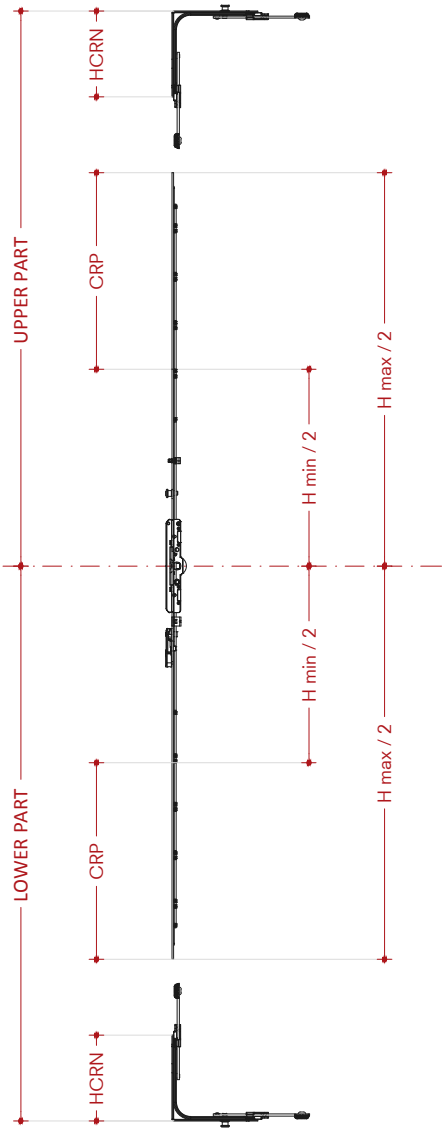
*On request
*Su richiesta
*Por encargo

Step #12 - Double croppable gear kits choice
(Instead of Step #3 and #4)

Passo #12 - Scelta Kit cremonesi doppiorasabili
(Invece dei passaggi #3 e #4)

Paso #12 - Elección Kits de equipo recortables dobles
(En lugar de los pasos #3 y #4)

	h min handle	HDG	H min / 2	H max / 2	CRP	HCRN	HBB min
K88109	265	640.5	151	260	170 + 170	113.5	527.5
K88110	375	1040.5	261	510	260 + 260	113.5	747.5
K88111	625	1540.5	511	760	260 + 260	113.5	1247.5
K88112	875	2040.5	761	1020	260 + 260	113.5	1747.5



UPPER PART = HBB - HH - HCRN

LOWER PART = HH - HCRN

Choose the smallest value and find the right gear kit between Hmin/2 and Hmax/2 range columns.

Scegli il valore più piccolo e trova il kit Cremonese giusto tra le colonne dell'intervallo Hmin/2 e Hmax/2

Elija el valor más pequeño y encuentre el kit de equipo adecuado entre las columnas de rango Hmin/2 y Hmax/2

EXTENSION KIT:

UPPER* = HBB - HH - HCRN - H max / 2 →

LOWER* = HH - HCRN - H max / 2 →

CHECK ON THE EXTENSION TABLE (STEP 3)

* with negative value extension are not needed.

* con valore negativo non sono necessarie estensioni.

* con valor negativo no se necesitan extensiones.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

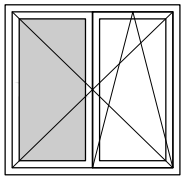
HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

Step #13 - French casement drive and extension kit choice

Passo #13 - Scelta kit aste a leva doppiorasabile e prolunga

Paso #13 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88109	K88113
K88110	K88114
K88111	K88115
K88112	K88116

Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Side hung windows with concealed hinge

Basic kits

K88043

Standard windows

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

MC 222201 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

Finestre battenti con cerniera a scomparsa

Kit base

K88043

Finestre standard

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm

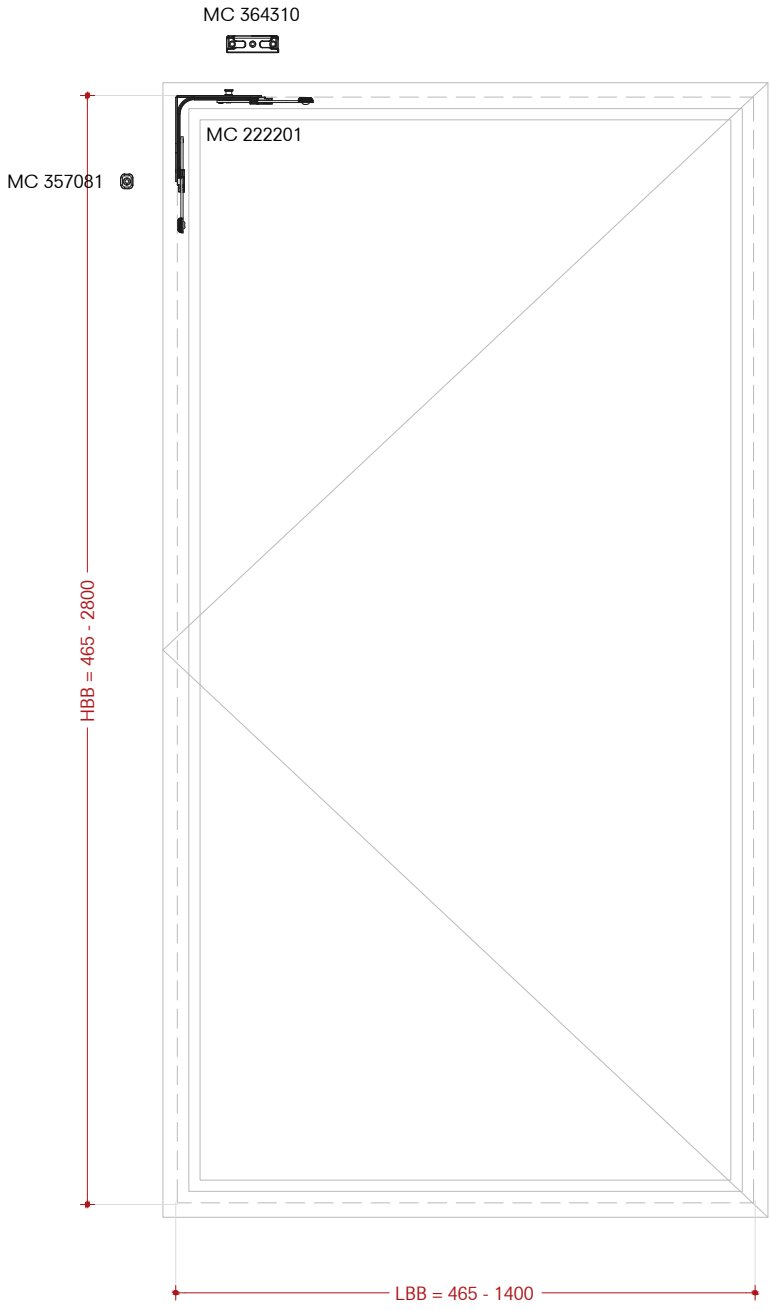
Ventana batiente con bisagra oculta

Kits básicos

K88043

Ventanas estándar

LBB = 465 - 1400 mm
HBB = 455 - 2800 mm



Side hung windows with concealed hinge

Basic kits

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm

MC 222203 n°01 piece
MC 357081 n°01 piece
MC 364310 n°01 piece

Finestre battenti con cerniera a scomparsa

Kit base

K88044

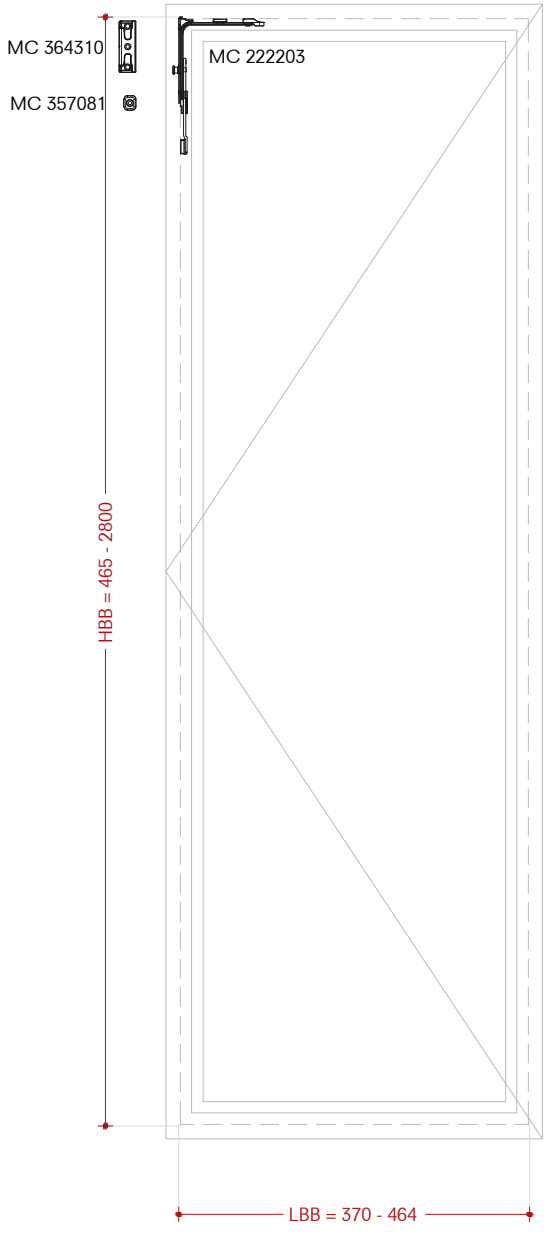
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

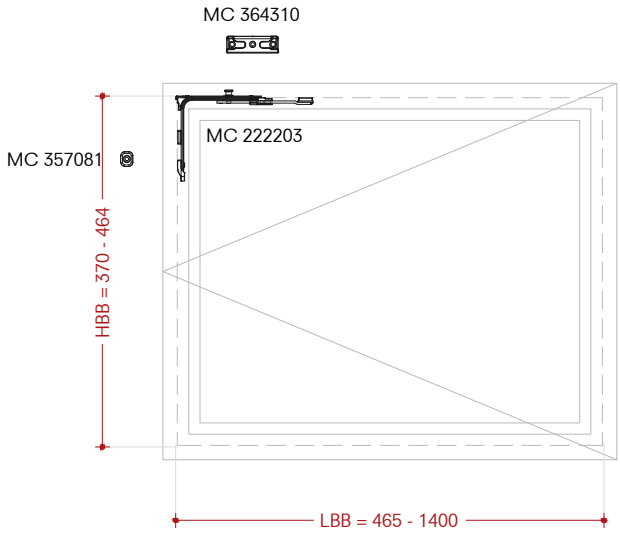
Ventana batiente con bisagra oculta

Kits básicos

K88044

LBB = 370 - 464 mm
HBB = 455 - 2800 mm





Side hung windows with concealed hinge

Gear kits

K88003

HH = 190 mm
HBB = 340 - 1608 mm

MC 202206 n°01 piece
MC 222205 n°01 piece
MC 364310 n°01 piece

K88004

HH = 300 mm
HBB = 661 - 1790 mm

MC 202207 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88005

HH = 400 mm
HBB = 841 - 2040 mm

MC 202208 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

MC 202209 n°01 piece
MC 222205 n°01 piece
MC 364310 n°02 pieces

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

MC 202216 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

MC 207305 n°01 piece
MC 222205 n°01 piece
MC 364310 n°03 pieces

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

MC 202737 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

MC 202738 n°01 piece
MC 222205 n°01 piece
MC 364310 n°04 pieces

Finestre battenti con cerniera a scomparsa

Kit cremonese

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

HH = 700 mm
HBB = 1591 - 2650 mm

K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm

Ventana batiente con bisagra oculta

Kits de equipo

K88003

HH = 190 mm
HBB = 340 - 1608 mm

K88004

HH = 300 mm
HBB = 661 - 1790 mm

K88005

HH = 400 mm
HBB = 841 - 2040 mm

K88006

HH = 500 mm
HBB = 1091 - 2290 mm

K88007

HH = 600 mm
HBB = 1341 - 2540 mm

K88008

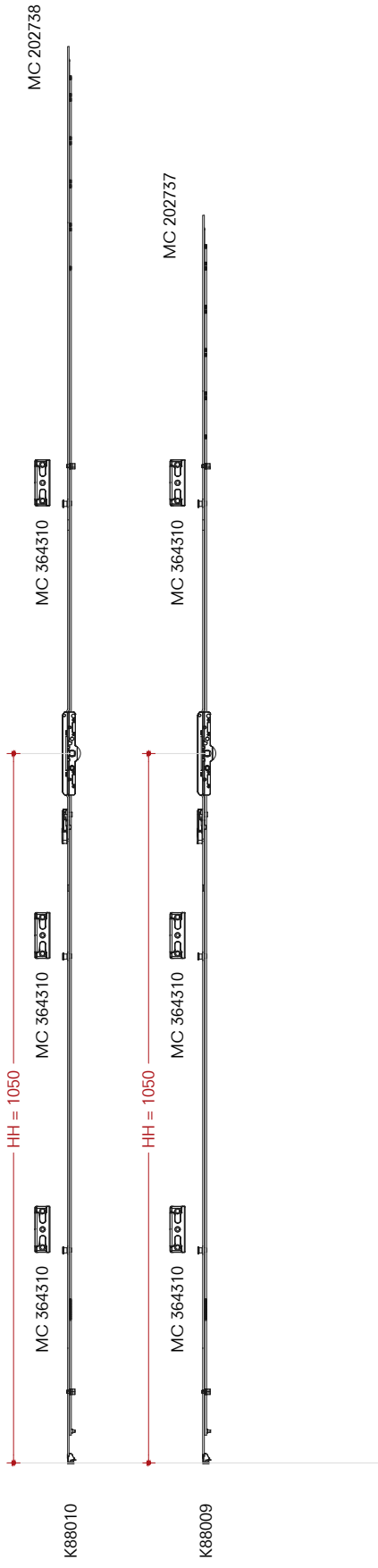
HH = 700 mm
HBB = 1591 - 2650 mm

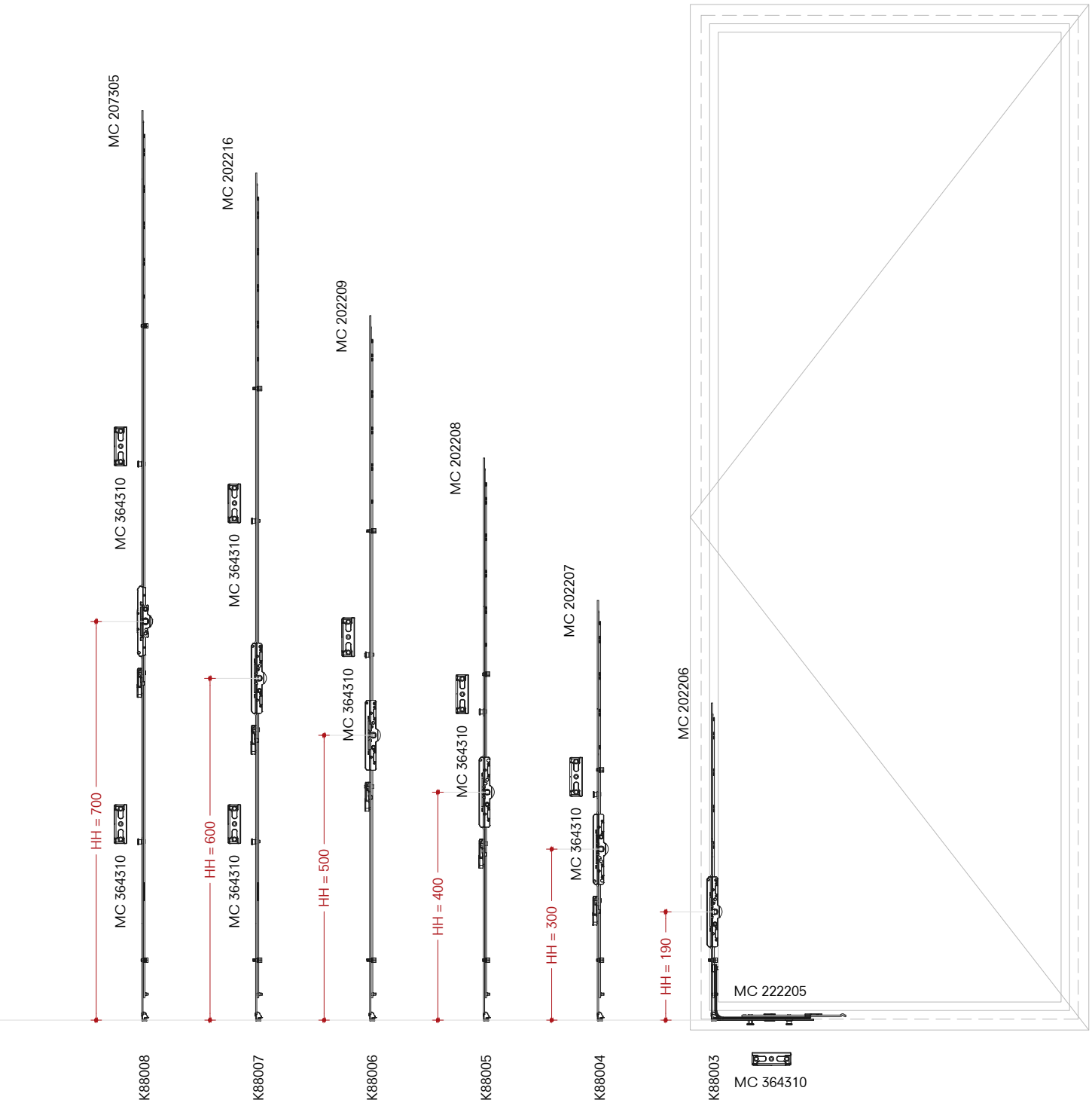
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

K88010

HH = 1050 mm
HBB = 1951 - 3150 mm




MC 207305
MC 364310
MC 364310
HH = 700
K88008
MC 202216
MC 364310
MC 364310
HH = 600
K88007
MC 202209
MC 364310
HH = 500
K88006
MC 202208
MC 364310
HH = 400
K88005
MC 202207
MC 364310
HH = 300
K88004
MC 202206
HH = 190
MC 222205
K88003
MC 364310

Side hung windows with concealed hinge

Double croppable gear kits

K88109

MC 202491 n°01 piece
MC 222206 n°01 piece
MC 364310 n°01 piece

K88110

MC 202492 n°01 piece
MC 222206 n°01 piece
MC 364310 n°02 pieces

K88111

MC 202494 n°01 piece
MC 222206 n°01 piece
MC 364310 n°03 pieces

K88112

MC 202205 n°01 piece
MC 222206 n°01 piece
MC 364310 n°04 pieces

Finestre battenti con cerniera a scomparsa

Kit cremonesi doppiorasabili

K88109

K88110

K88111

K88112

Ventana batiente con bisagra oculta

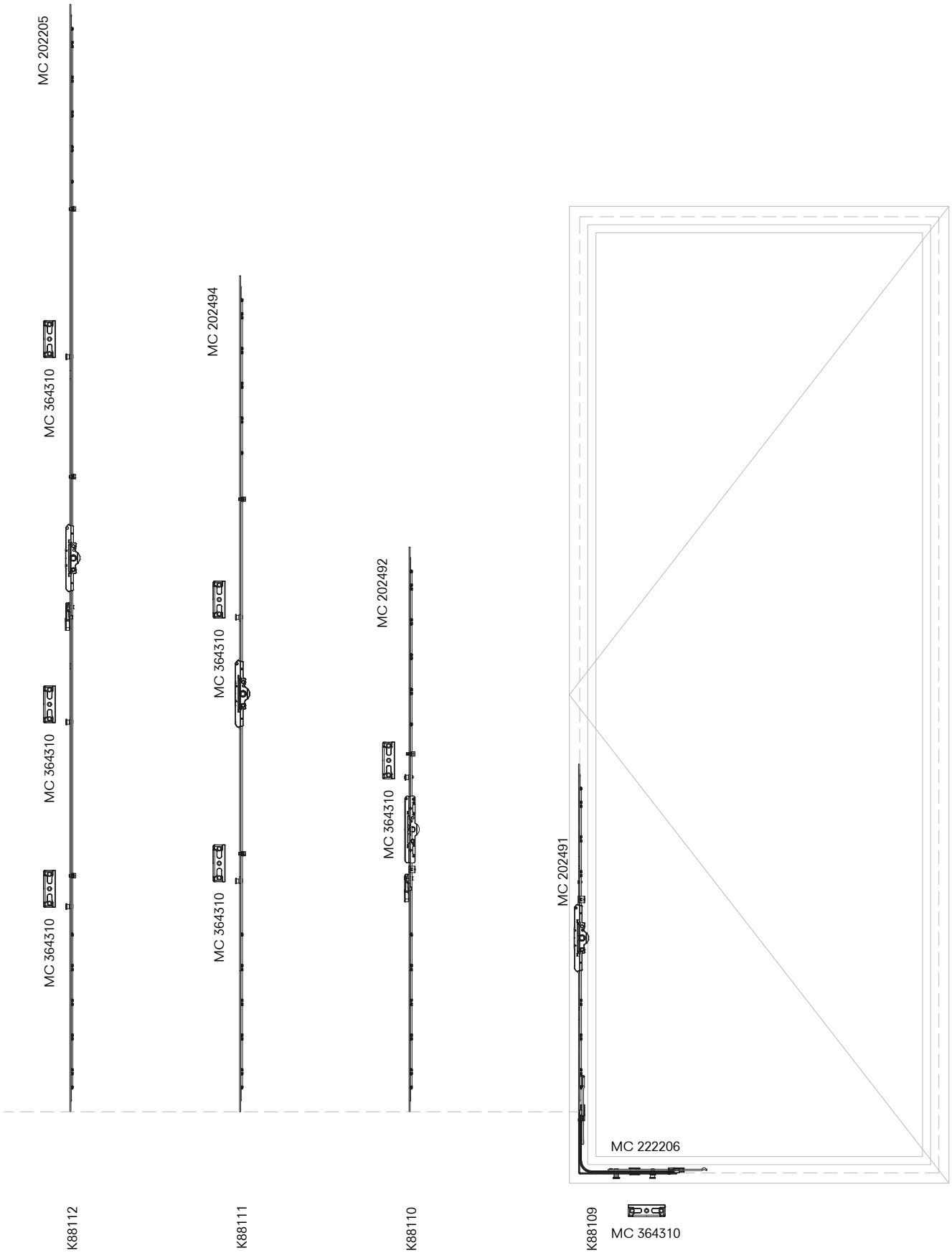
Kits de equipo recortables dobles

K88109

K88110

K88111

K88112


MC 202205
MC 364310
MC 364310
MC 364310
K88112
MC 202494
MC 364310
MC 364310
K88111
MC 202492
MC 364310
K88110
MC 202491
MC 222206
K88109
MC 364310

Side hung windows with concealed hinge

Extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88012

141 - 235 mm

MC 201750 n°01 piece
MC 364310 n°01 piece

K88059

236 - 375 mm

MC 201750 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88013

376 - 470 mm

MC 201840 n°01 piece
MC 364310 n°01 piece

K88014

471 - 610 mm

MC 201840 n°01 piece
MC 206630 n°01 piece
MC 364310 n°01 piece

K88015

611 - 705 mm

MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88060

706 - 845 mm

MC 206630 n°01 piece
MC 201750 n°01 piece
MC 201840 n°01 piece
MC 364310 n°02 pieces

K88016

846 - 940 mm

MC 201840 n°02 pieces
MC 364310 n°02 pieces

Finestre battenti con cerniera a scomparsa

Kit estensione Cremonese

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

611 - 705 mm

K88060

706 - 845 mm

K88016

846 - 940 mm

Ventana batiente con bisagra oculta

Kits extensión

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

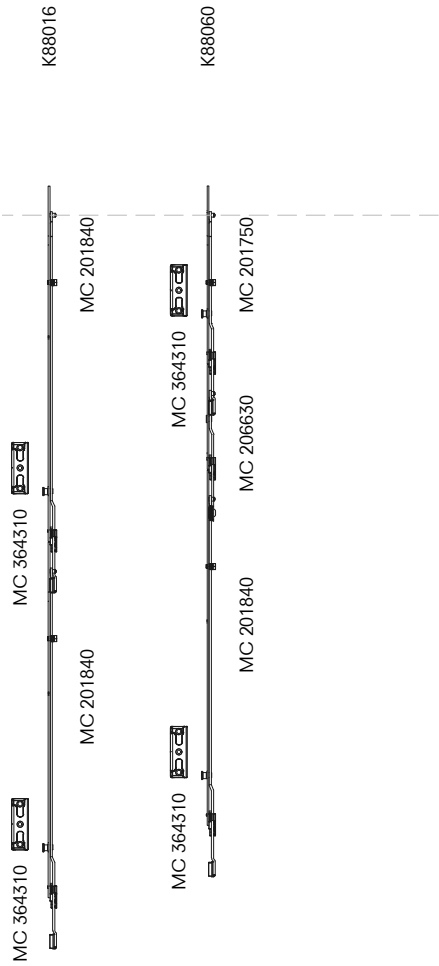
611 - 705 mm

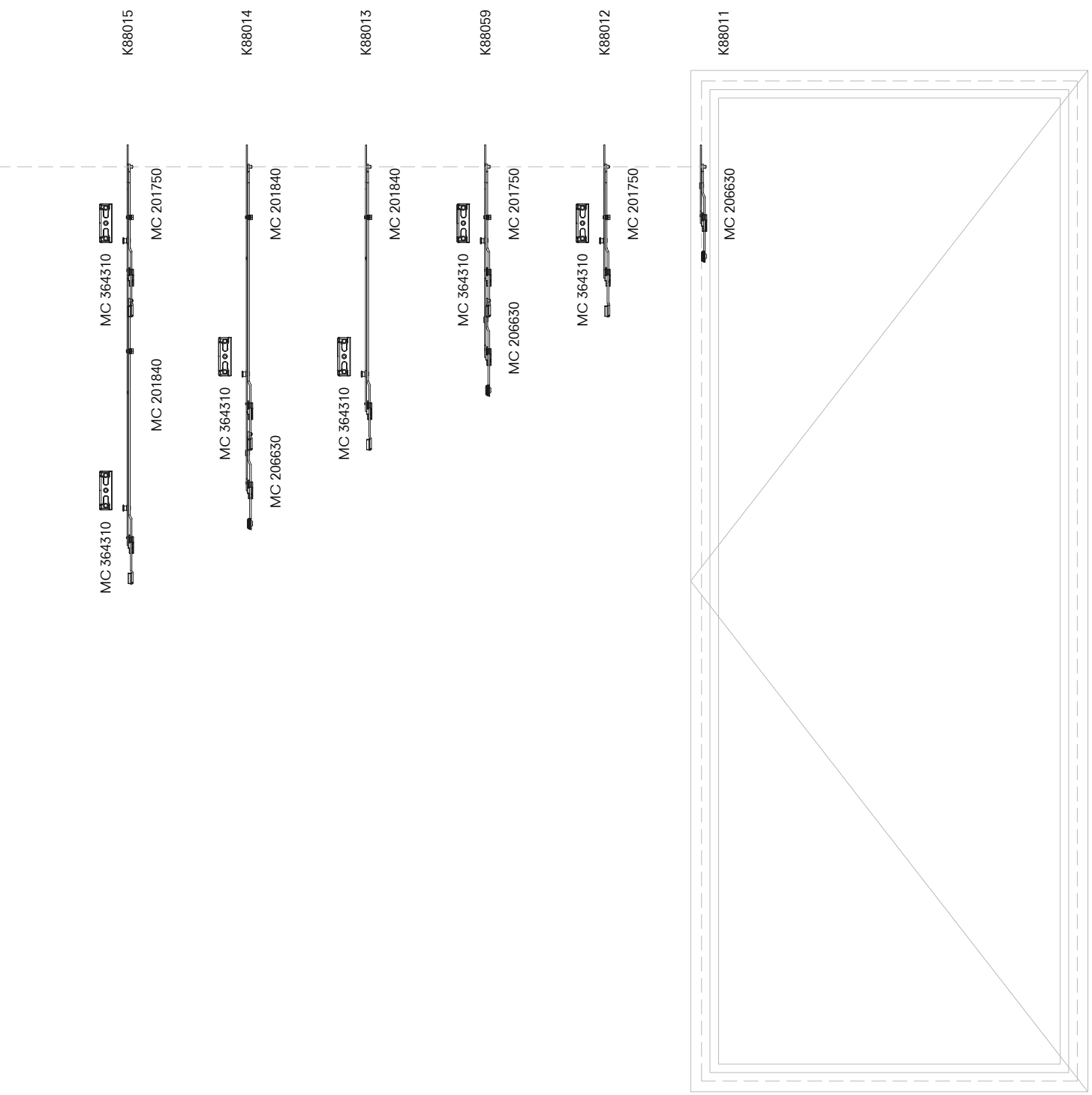
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630
MC 206630

Side hung windows with concealed hinge

Hinges kits

Finestre battenti con cerniera a scomparsa

Kit cerniere

Ventana batiente con bisagra oculta

Kits de bisagras

K88034

Right hinges

K88034

Cerniere destre

K88034

Derecha bisagras

MC 217691 n°01 piece
MC 217729 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece

K88035

Left hinges

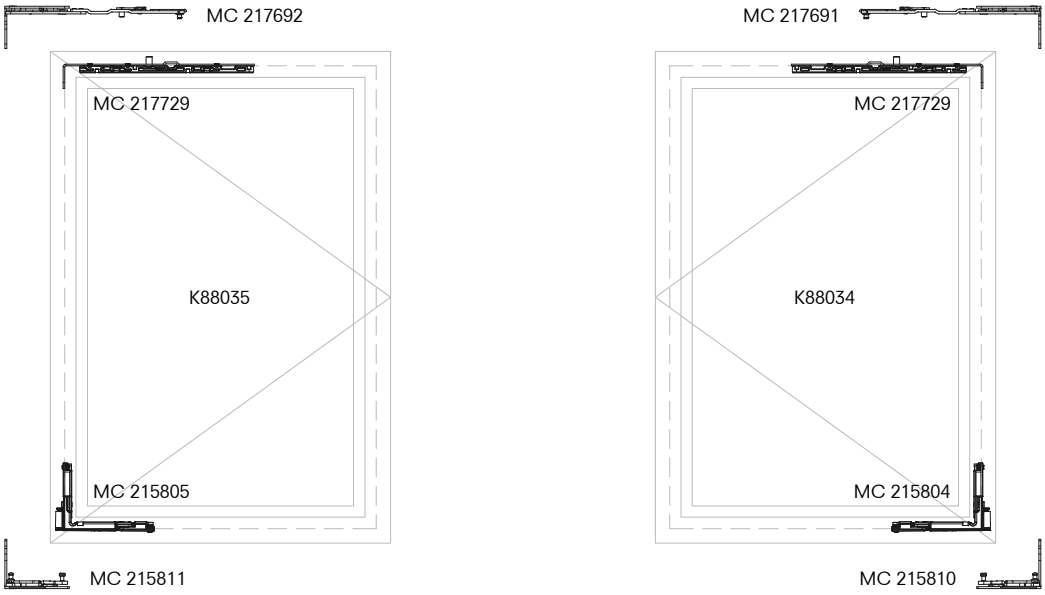
K88035

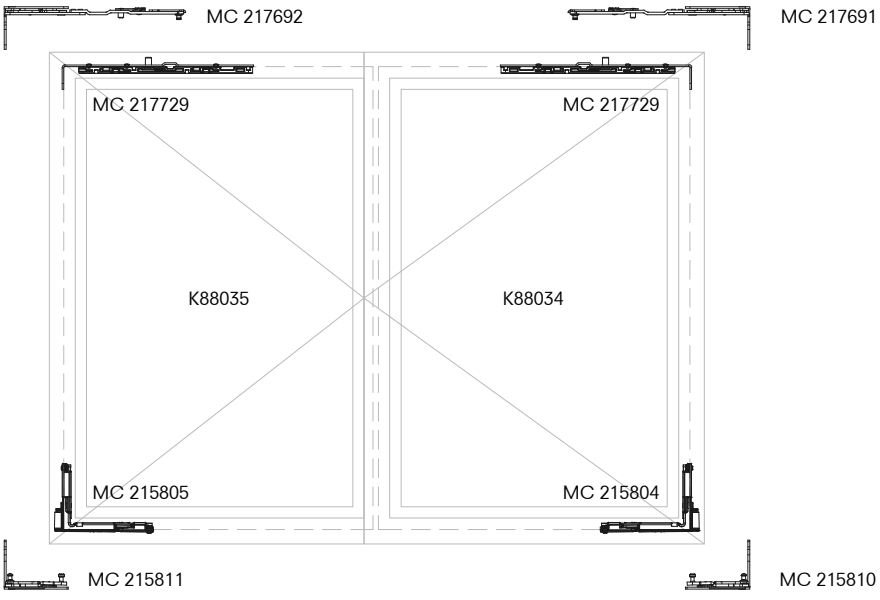
Cerniere sinistre

K88035

Izquierda bisagras

MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece





Side hung windows with concealed hinge

Lifting component

K88047

Right hinges

MC 361004 n°01 piece

Finestre battenti con cerniera a scomparsa

Componente di sollevamento

K88047

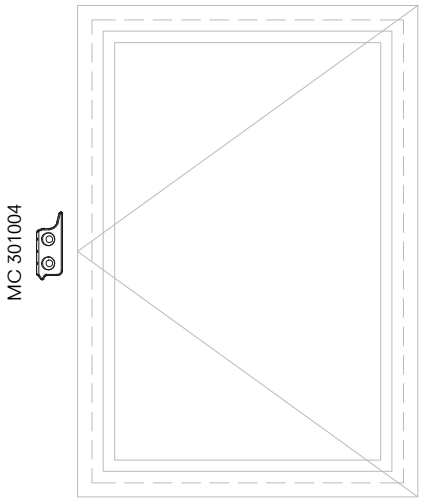
Cerniere destre

Ventana batiente con bisagra oculta

Componente de elevación

K88047

Derecha bisagras



K88048

Left hinges

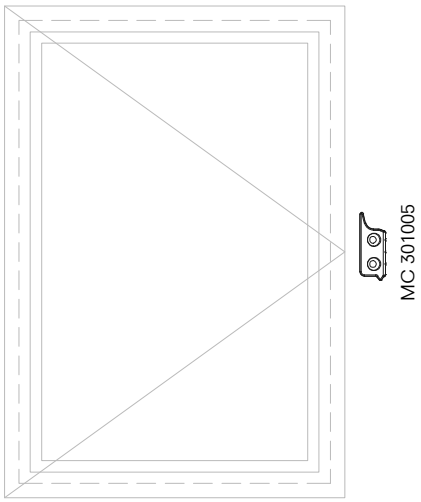
MC 361005 n°01 piece

K88048

Cerniere sinistre

K88048

Izquierda bisagras



Side hung windows with concealed hinge

Additional top and bottom locking point

K88045

LBB = 801 - 1280 mm

MC 201751 n°02 pieces
MC 364310 n°02 pieces

Finestre battenti con cerniera a scomparsa

Punto di chiusura aggiuntivo superiore e inferiore

K88045

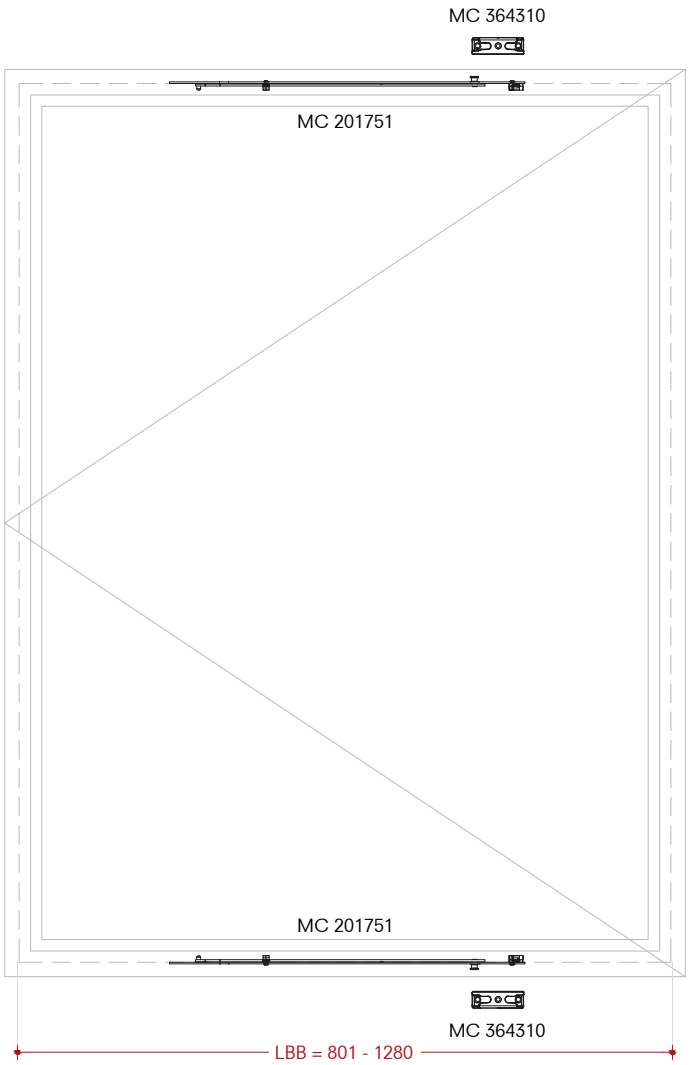
LBB = 801 - 1280 mm

Ventana batiente con bisagra oculta

Superior e inferior adicionales punto de bloqueo

K88045

LBB = 801 - 1280 mm



K88046

LBB = 1281 - 1400 mm

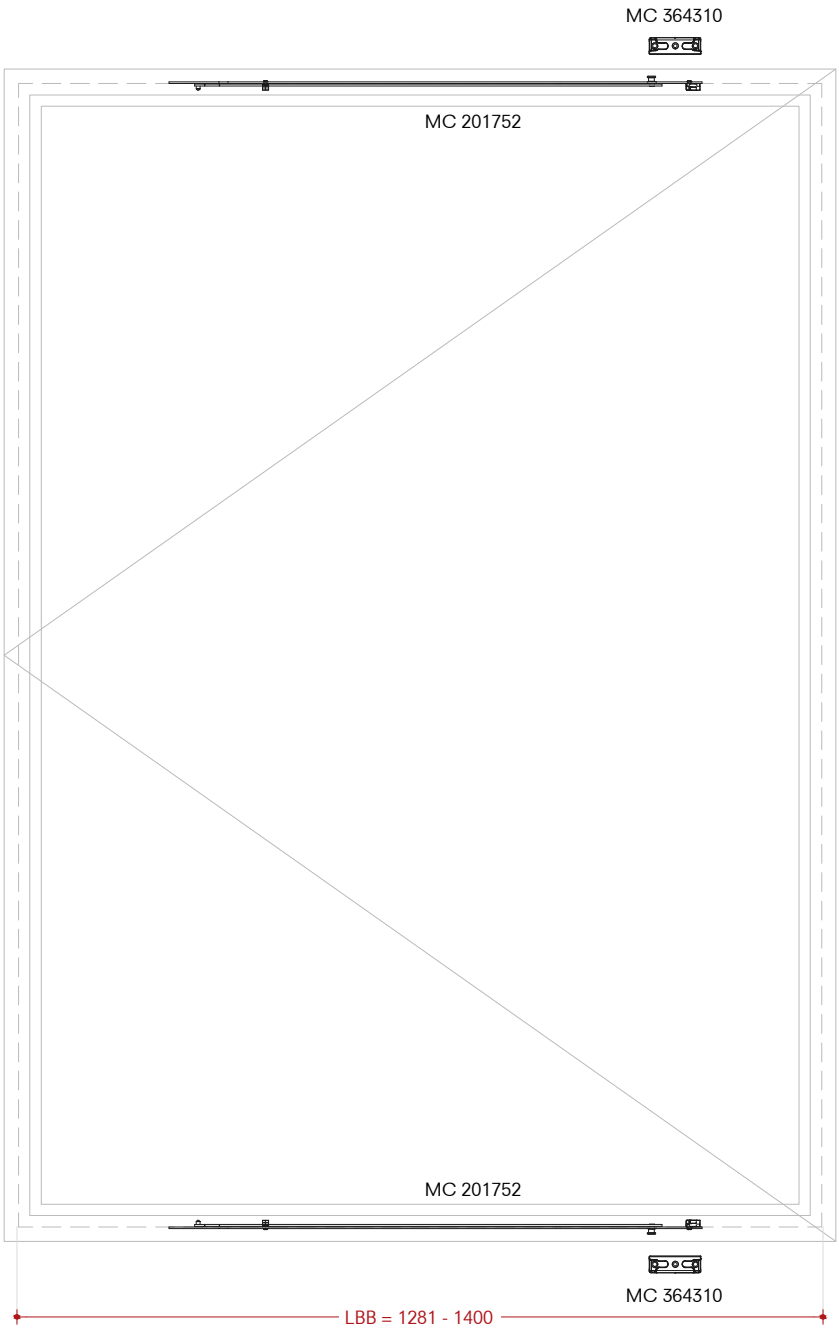
MC 201752 n°02 pieces
MC 364310 n°02 pieces

K88046

LBB = 1281 - 1400 mm

K88046

LBB = 1281 - 1400 mm



Side hung windows with concealed hinge

Concealed compression locks kits

K88036
n°1 kit per leaf

HBB = 1280 - 2000 mm

MC 215577 n°01 piece
MC 365161 n°01 piece

Finestre battenti con cerniera a scomparsa

Kit cerniere centrali a scomparsa

K88036
n°1 kit per anta

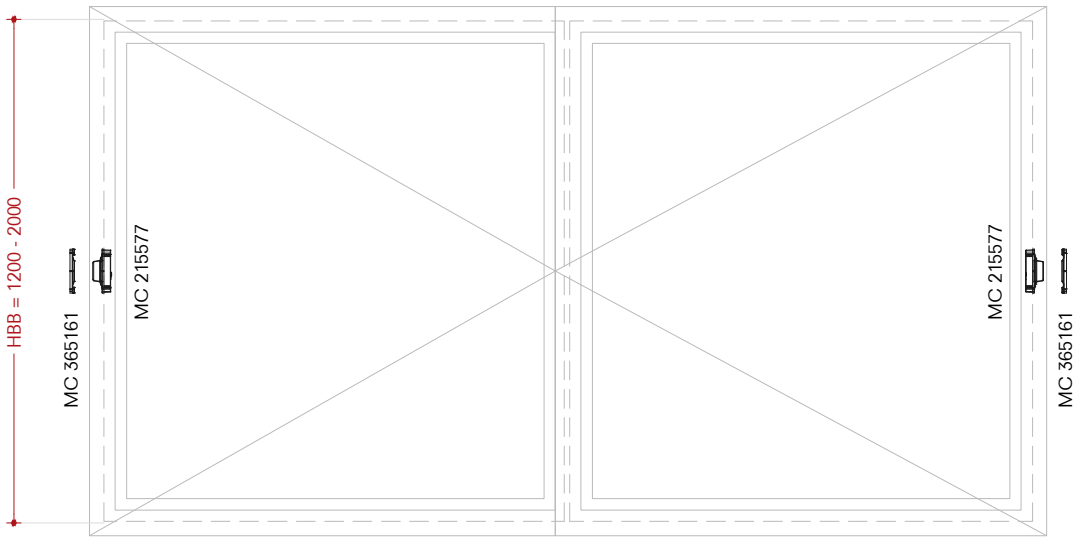
HBB = 1280 - 2000 mm

Ventana batiente con bisagra oculta

Kits de bisagras ocultas centrales

K88036
n°1 kit por hoja

HBB = 1280 - 2000 mm



K88037
n°1 kit per leaf

HBB = 2001 - 2800 mm

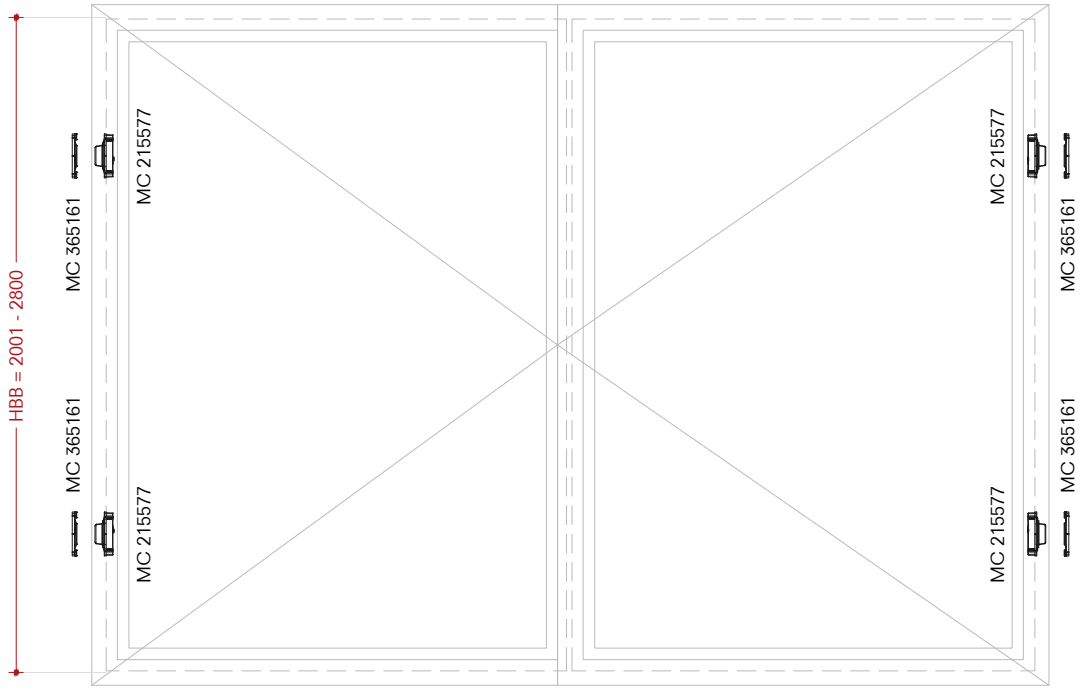
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037
n°1 kit per anta

HBB = 2001 - 2800 mm

K88037
n°1 kit por hoja

HBB = 2001 - 2800 mm



Side hung windows with concealed hinge

French casement drive kits

K88062

HH = 190 mm

MC 202873 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88063

HH = 300 mm

MC 221901 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88064

HH = 400 mm

MC 221902 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88065

HH = 500 mm

MC 221903 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88066

HH = 600 mm

MC 221906 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88067

HH = 700 mm

MC 207242 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88068

HH = 1050 mm

MC 221907 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88069

HH = 1050 mm

MC 221908 n°01 piece
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

Finestre battenti con cerniera a scomparsa

Kit aste a leva

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

HH = 700 mm

K88068

HH = 1050 mm

K88069

HH = 1050 mm

Ventana batiente con bisagra oculta

Kit Cremona semifija

K88062

HH = 190 mm

K88063

HH = 300 mm

K88064

HH = 400 mm

K88065

HH = 500 mm

K88066

HH = 600 mm

K88067

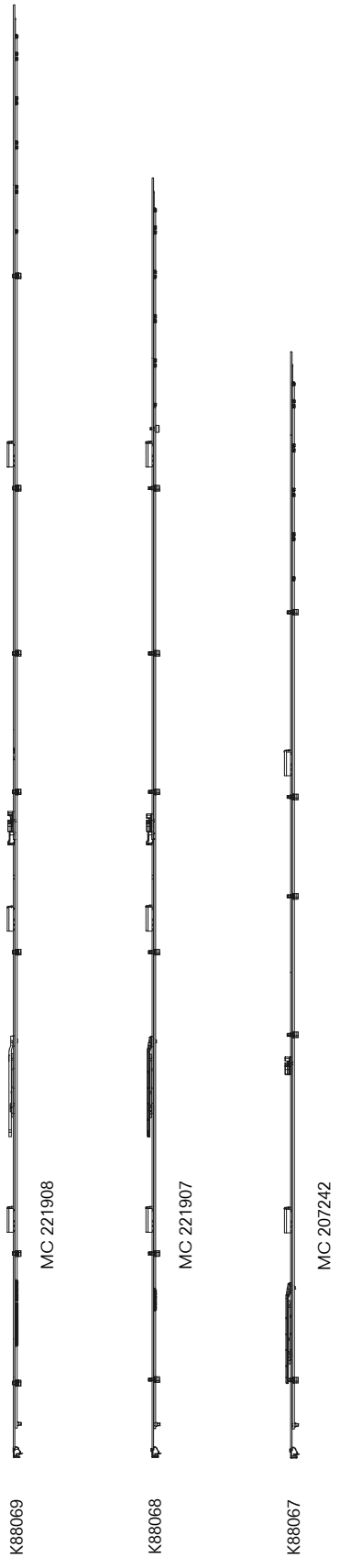
HH = 700 mm

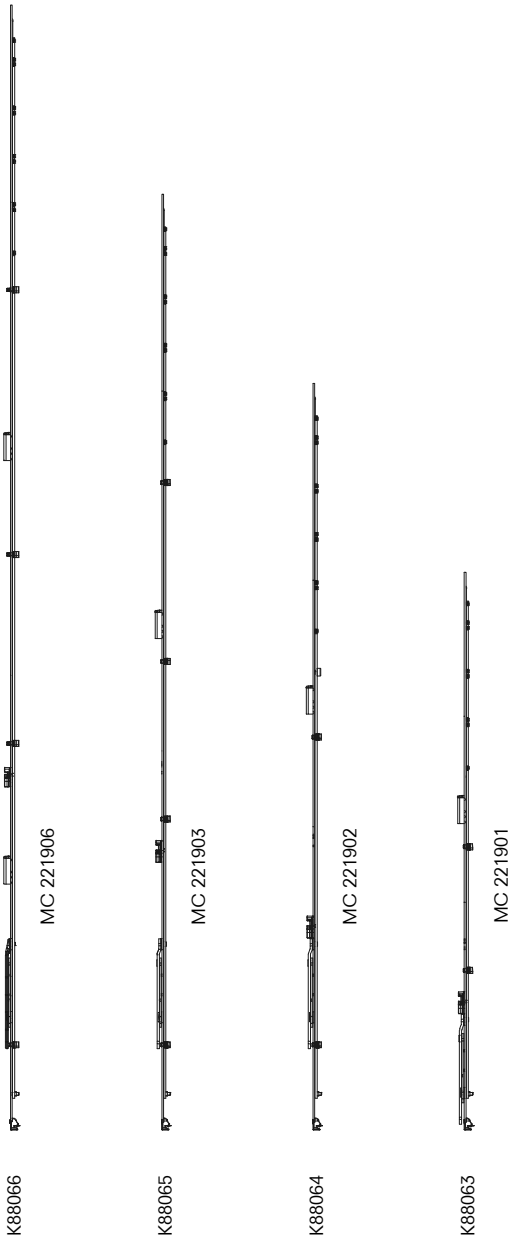
K88068

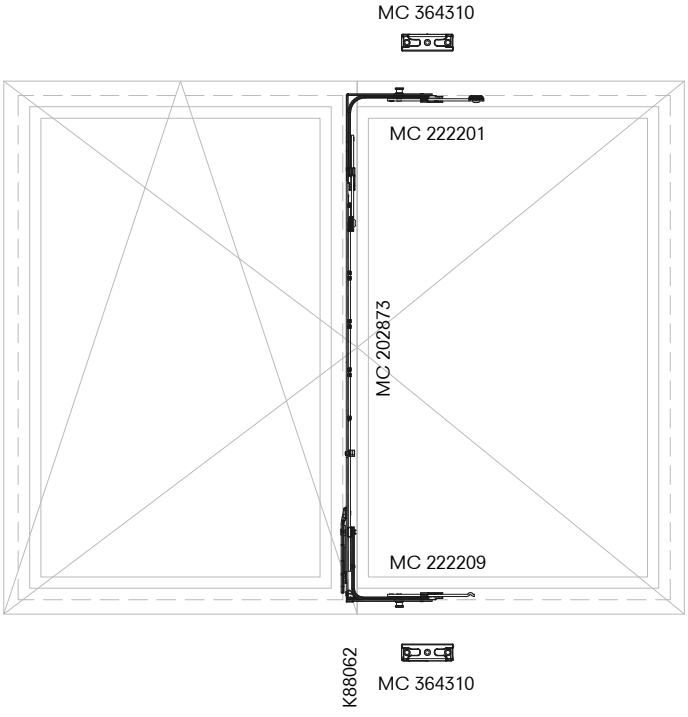
HH = 1050 mm

K88069

HH = 1050 mm




MC 221906
MC 221903
MC 221902
MC 221901
K88066
K88065
K88064
K88063


MC 364310
MC 222201
MC 202873
MC 222209
K88062
MC 364310

Side hung windows with concealed hinge

French casement drive kits

K88113

MC 227937 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88114

MC 202471 n°01 piece
MC 202475 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88115

MC 202472 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

K88116

MC 202473 n°01 piece
MC 222201 n°01 piece
MC 364310 n°02 pieces

Finestre battenti con cerniera a scomparsa

Kit aste a leva

K88113

K88114

K88115

K88116

Ventana batiente con bisagra oculta

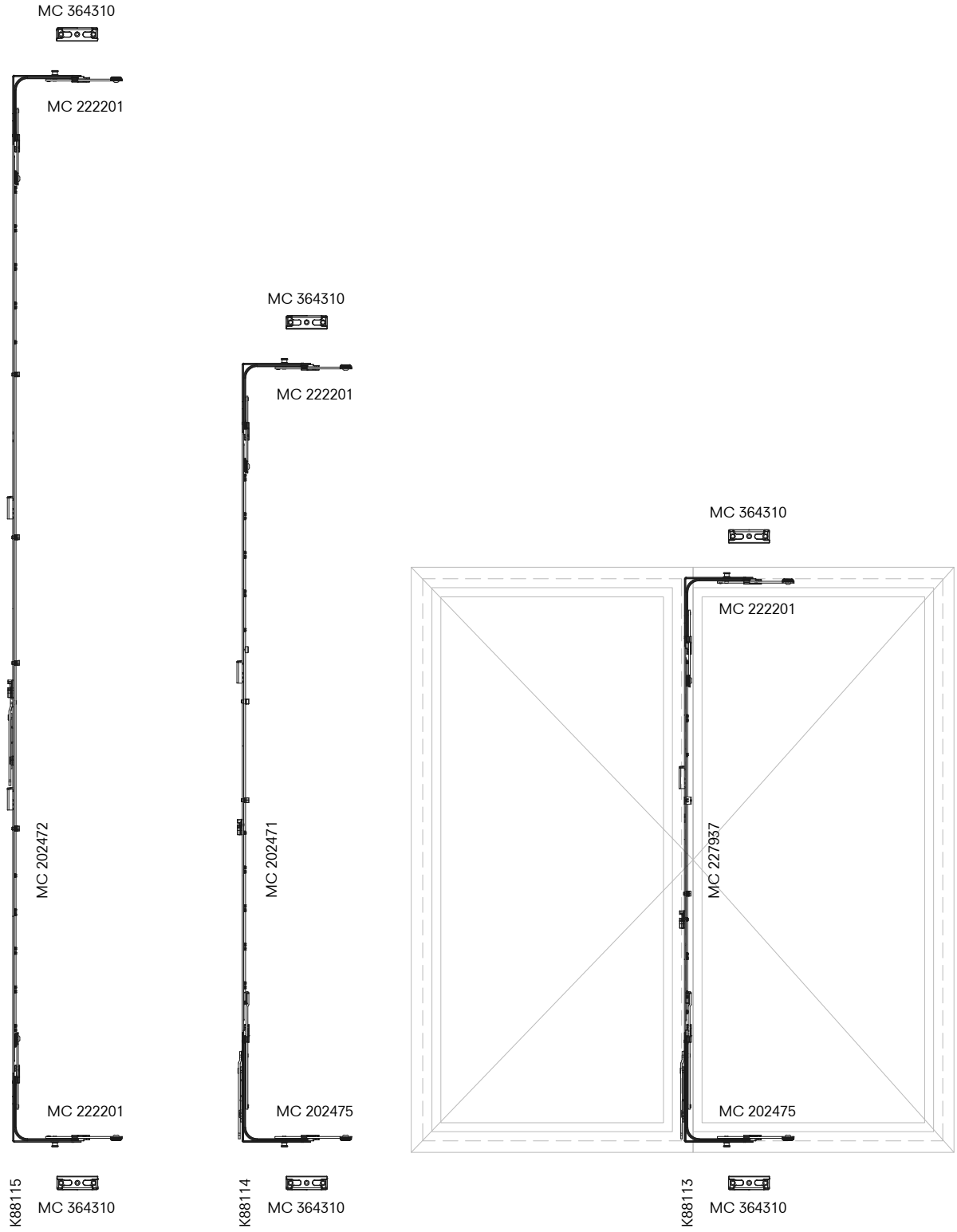
Kit Cremona semifija

K88113

K88114

K88115

K88116


MC 364310
MC 222201
MC 202472
MC 222201
K88115
MC 364310
MC 364310
MC 222201
MC 202471
MC 202475
K88114
MC 364310
MC 364310
MC 222201
MC 227937
MC 202475
K88113
MC 364310

Side hung windows with concealed hinge

French casement drive extension kits

K88011

0 - 140 mm

MC 206630 n°01 piece

K88071

141 - 235 mm

MC 203810 n°01 piece

K88072

236 - 375 mm

MC 203810 n°01 piece
MC 206630 n°01 piece

K88073

376 - 470 mm

MC 208333 n°01 piece

K88074

471 - 610 mm

MC 208333 n°01 piece
MC 206630 n°01 piece

K88075

611 - 705 mm

MC 208333 n°01 piece
MC 203810 n°01 piece

K88076

706 - 845 mm

MC 206630 n°01 piece
MC 203810 n°01 piece
MC 208333 n°01 piece

K88077

846 - 940 mm

MC 208333 n°02 pieces

Finestre battenti con cerniera a scomparsa

Kit prolunghe per aste a leva

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

611 - 705 mm

K88076

706 - 845 mm

K88077

846 - 940 mm

Ventana batiente con bisagra oculta

Kit de extensión Cremona

K88011

0 - 140 mm

K88071

141 - 235 mm

K88072

236 - 375 mm

K88073

376 - 470 mm

K88074

471 - 610 mm

K88075

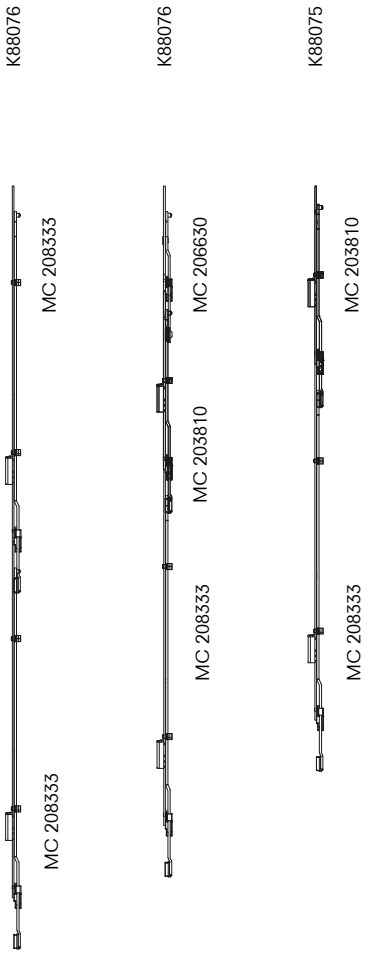
611 - 705 mm

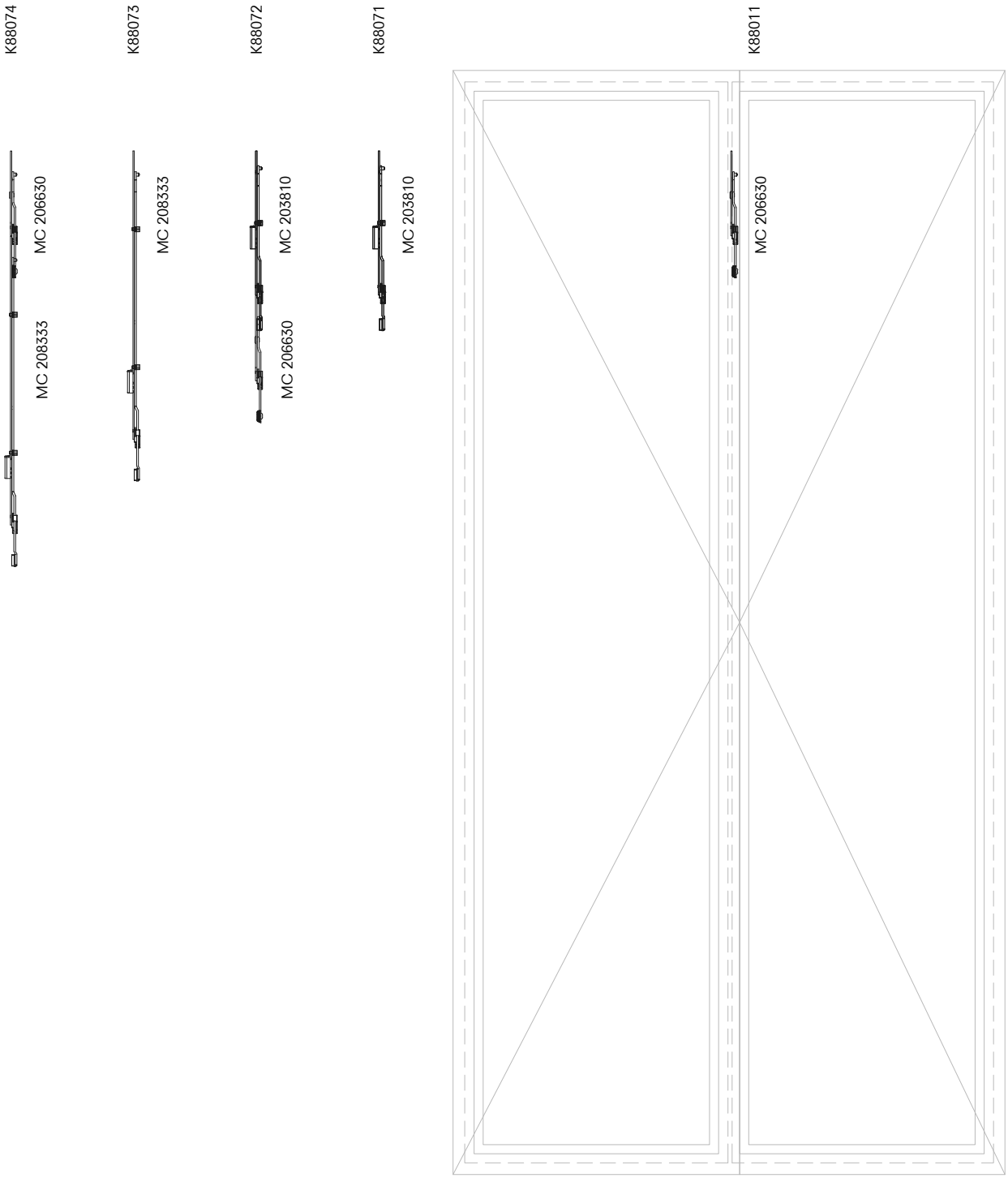
K88076

706 - 845 mm

K88077

846 - 940 mm




K88074
MC 206630
MC 208333
K88073
MC 208333
K88072
MC 203810
MC 206630
K88071
MC 203810
K88011
MC 206630

Side hung windows with concealed hinge

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Finestre battenti con cerniera a scomparsa

Scrocco porta

K88061

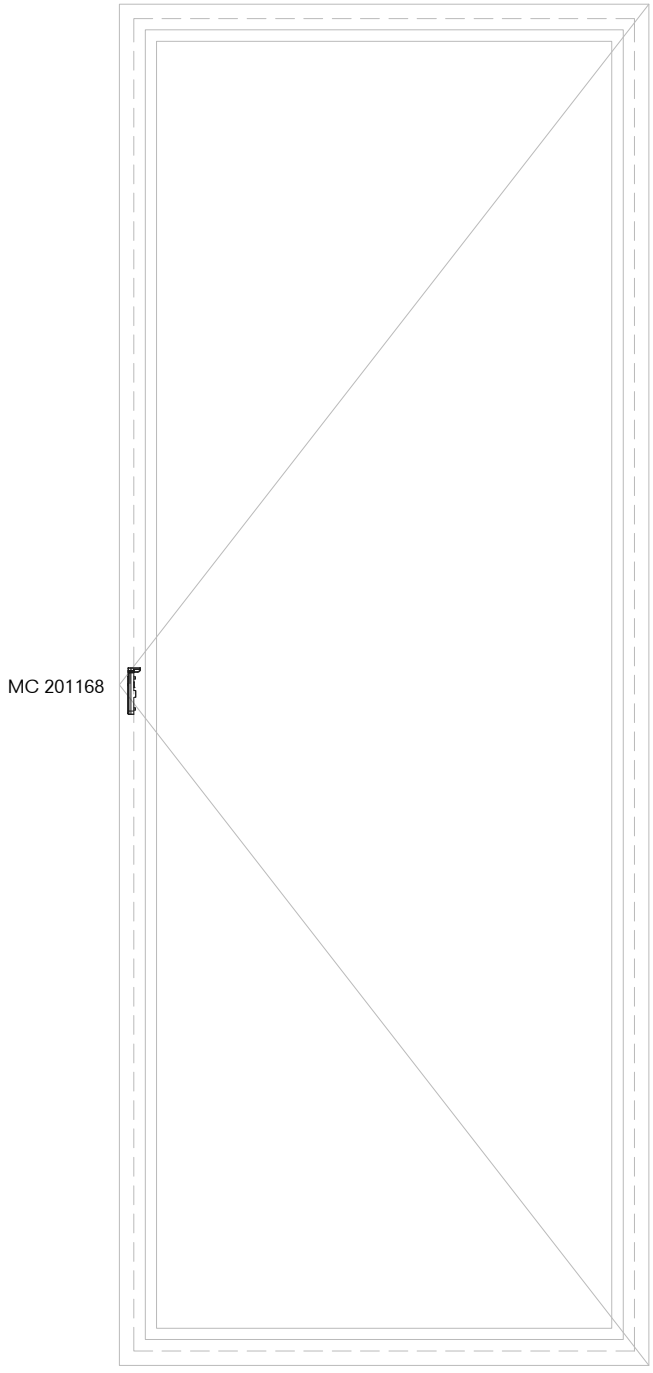
HBB = 661 - 2800 mm

Ventana batiente con bisagra oculta

Pestillo de puerta

K88061

HBB = 661 - 2800 mm



Side hung windows with concealed hinge

Opening restrictor

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

Finestre battenti con cerniera a scomparsa

Limitatore di apertura

K88033

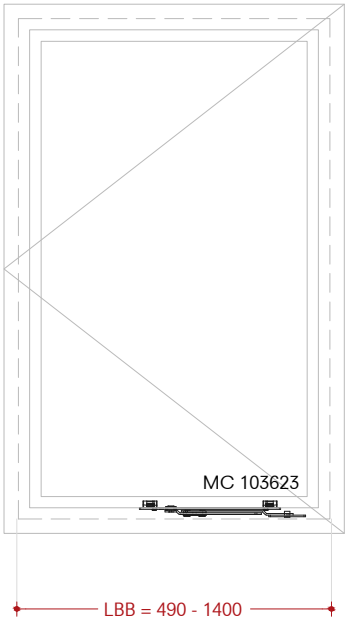
LBB = 490 - 1400 mm

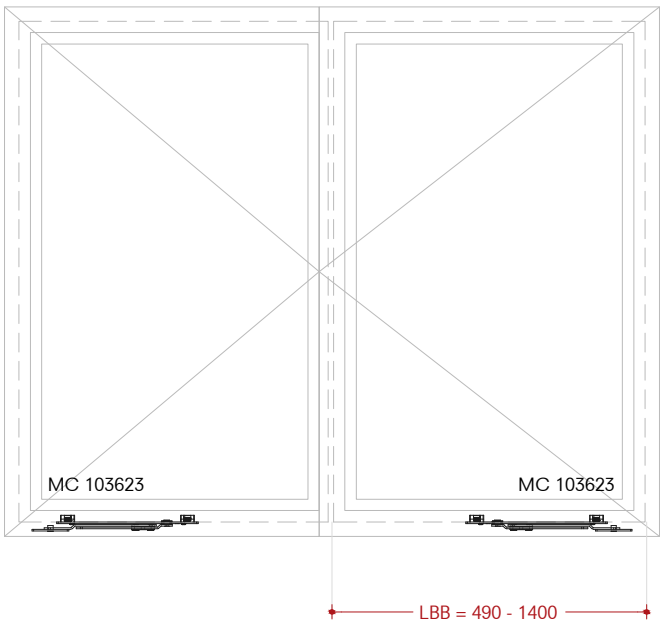
Ventana batiente con bisagra oculta

Limitador de apertura

K88033

LBB = 490 - 1400 mm





Side hung windows with concealed hinge

Load transfer 180 kg

E99510-02

Right

MC 105336 n°01 piece

E99511-02

Left

MC 105339 n°01 piece

Finestre battenti con cerniera a scomparsa

Asta di sostegno 180 kg

E99510-02

Destro

E99511-02

Sinistro

Ventana batiente con bisagra oculta

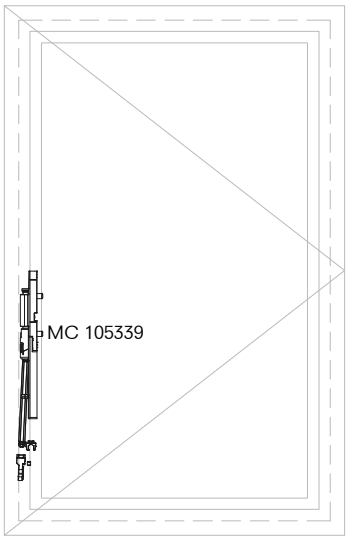
Varilla de soporte 180 kg

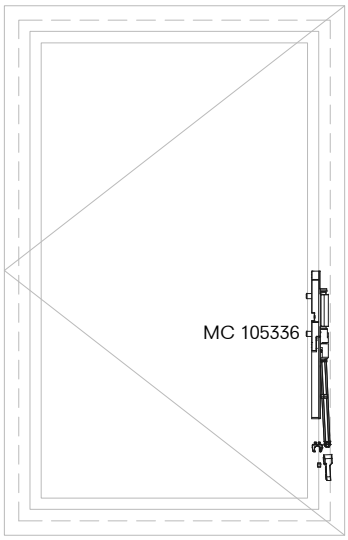
E99510-02

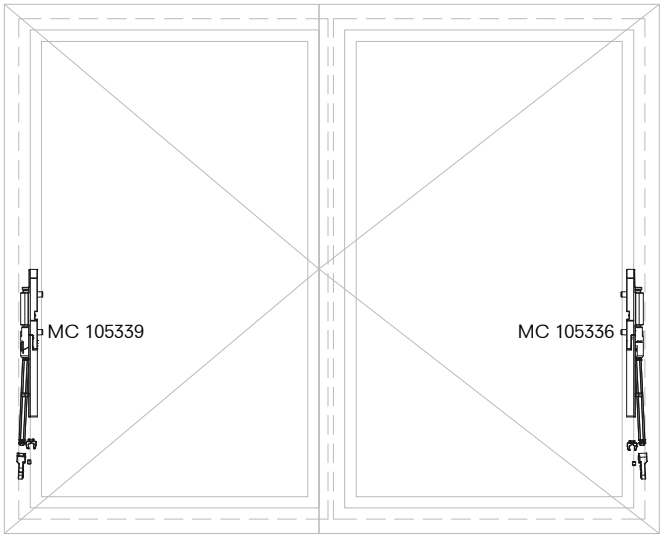
Derecha

E99511-02

Izquierda







Side hung windows with concealed hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre battenti con cerniera a scomparsa

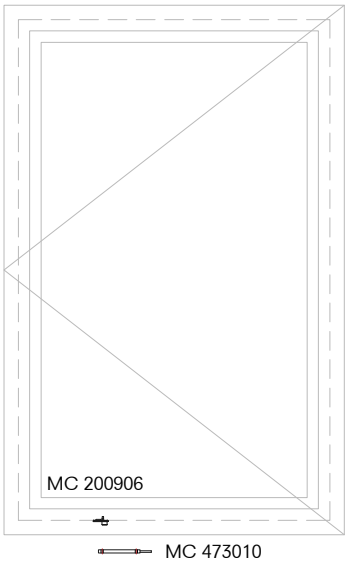
Contatto allarme

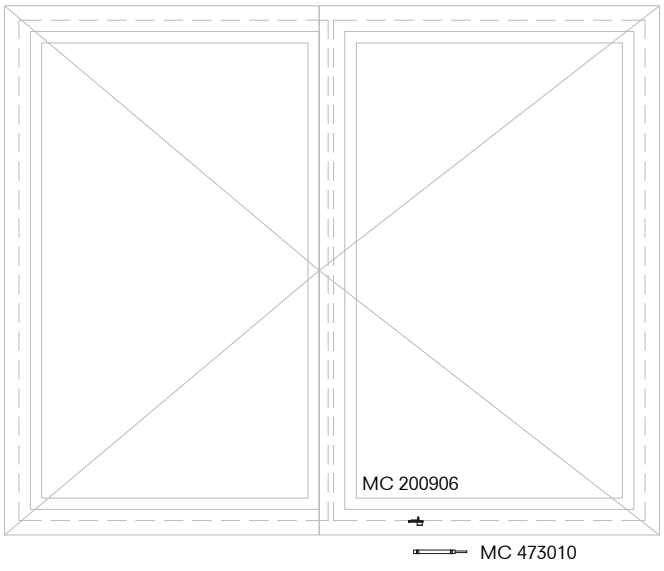
K99062

Ventana batiente con bisagra oculta

Contacto de alarma

K99062





Side hung windows with concealed hinge

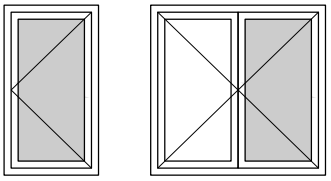
Determination of LBB
(Groove Hardware Lenght)

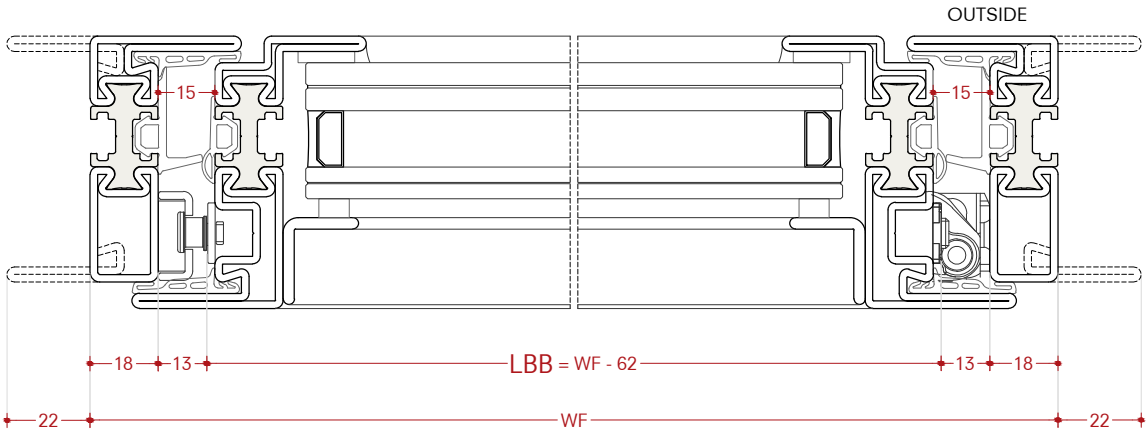
Finestre battenti con cerniera a scomparsa

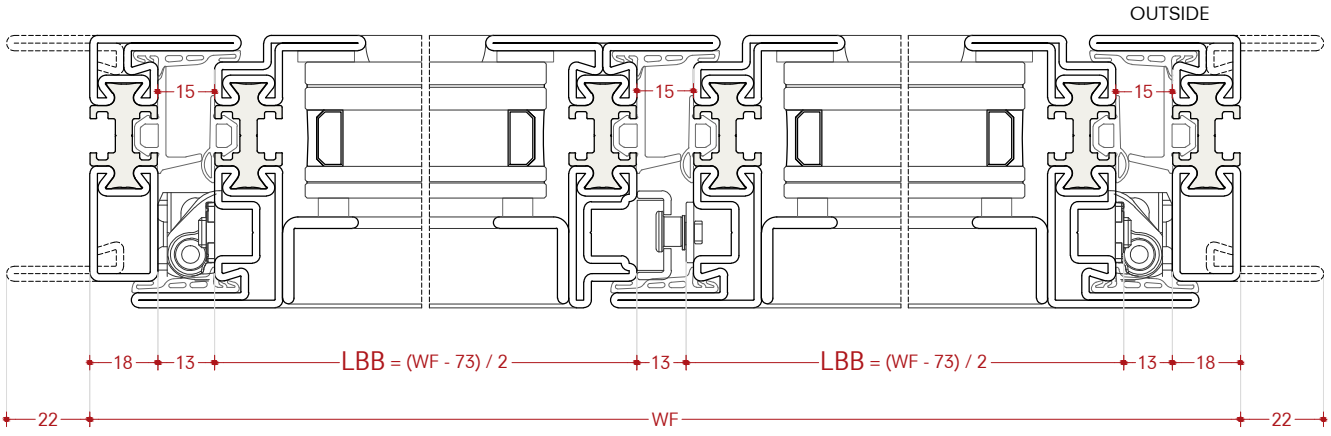
Determinazione di LBB
(Larghezza cava ferramenta)

Ventana batiente con bisagra oculta

Determinación de LBB
(longitud de la ranura del hardware)







Side hung windows with concealed hinge

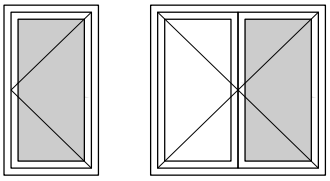
Determination of HBB
(Groove Hardware Height)

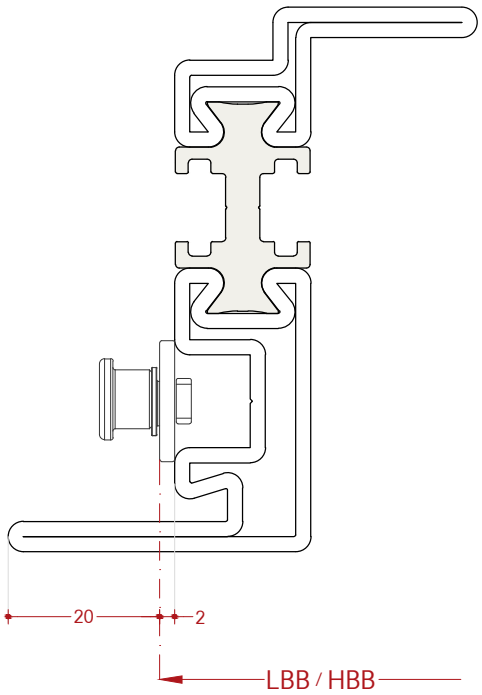
Finestre battenti con cerniera a scomparsa

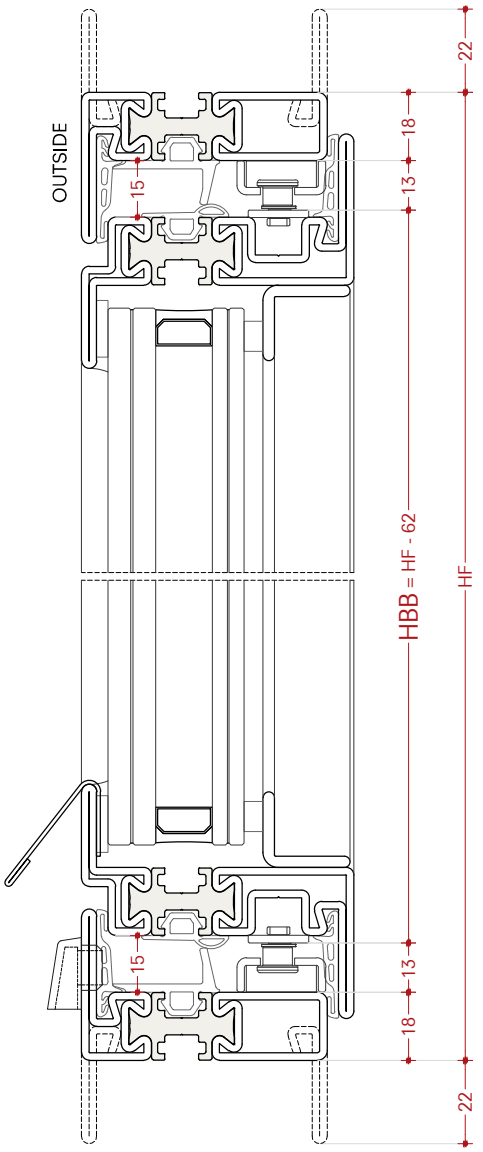
Determinazione di HBB
(altezza cava ferramenta)

Ventana batiente con bisagra oculta

Determinación de HBB
(altura de la ranura del hardware)







Side hung windows with concealed hinge

Finestre battenti con cerniera a scomparsa

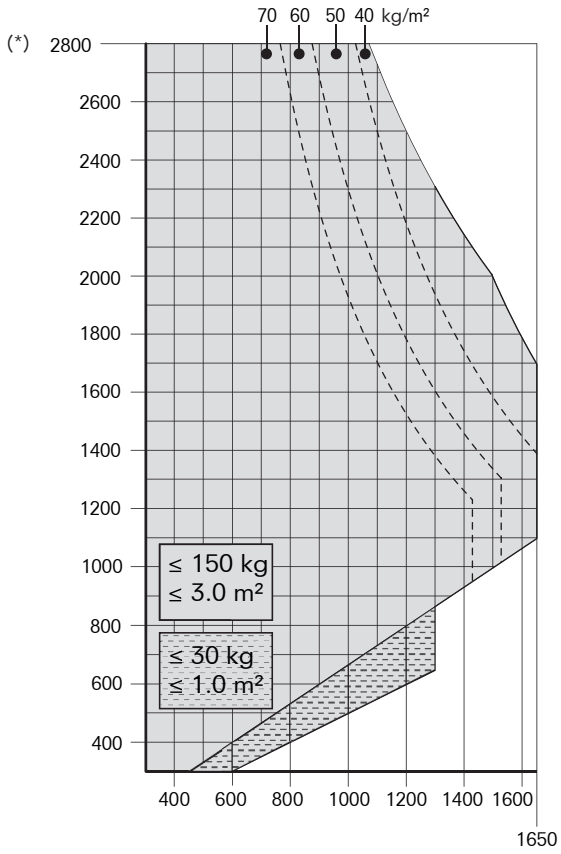
Ventana batiente con bisagra oculta

Load capacity tables

Tabelle portate

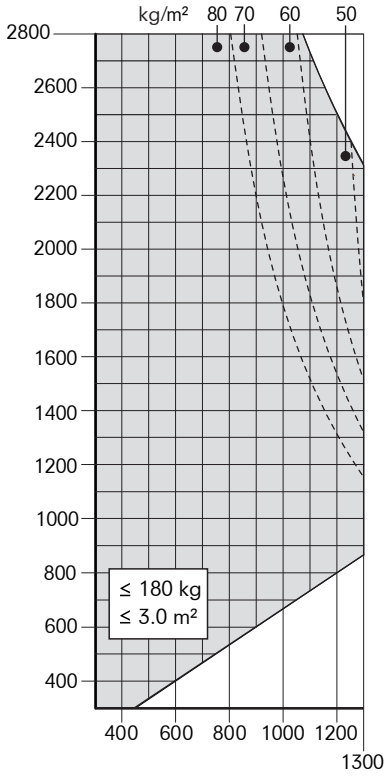
Tablas de peso

Side hung window concealed accessories capacity
Portate ferramenta a scomparsa per finestra a battente
Peso de accesorios ocultas para ventana batiente



(*) Extendable to a height of 3000 mm using weld-on hinges.

Side hung window concealed accessories capacity
with support rod E99510-02 / E99511-02
Portate ferramenta a scomparsa per finestra a battente
con asta di sostegno E99510-02 / E99511-02
Peso de accesorios ocultas para ventana batiente
con varilla de soporte E99510-02 / E99511-02



(*) Estendibile ad altezza 3000 mm con l'uso di cerniere a saldare.

(*) Extensible hasta 3000 mm de altura mediante bisagras de soldadura.

Standard handle height

Altezza maniglia standard

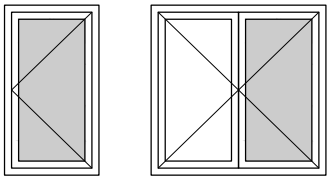
Altura del manilla estándar

	HBB min	HBB max	H handle
K88003	370	660	190
K88004	661	840	300
K88005	841	1090	400
K88006	1091	1340	500
K88007	1341	1590	600
K88008	1591	1700	700
K88009	1701	1950	1050
K88010	1951	2200	1050

Side hung windows with concealed hinge

Step #1 - Basic kit choice

	LBB min	LBB max	HBB min	HBB max
K88043	465	1400	455	2800
K88044	370	464	455	2800
K88044	465	815	370	454



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

Step #2 - Gear kit choice

	HH	HDG	CRP	HCRN	HBB min	HBB max (without extension)	HBB max (with extension)
K88003	190	555	220	5	370	454	2335
K88003	190	555	220	113.5	455	660	2540
K88004	300	736.5	190.5	113.5	661	840	2720
K88005	400	986.5	260.5	113.5	841	1090	2970 (*)
K88006	500	1236.5	260.5	113.5	1091	1340	3150 (*)
K88007	600	1486.5	260.5	113.5	1341	1590	3150 (*)
K88008	700	1596.5	260.5	113.5	1591	1700	3150 (*)
K88009	1050	1846.5	260.5	113.5	1701	1950	3150 (*)
K88010	1050	2096.5	260.5	113.5	1951	2200	3150 (*)

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

(*) = Over 2800 mm technical department confirmation needed.

Finestre battenti con cerniera a scomparsa

Passo #1 - Scelta del kit base

LBB = larghezza cava ferramenta
HBB = altezza cava ferramenta

Passo #2 - Scelta del kit Cremonese

HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

(*) = Conferma dell'ufficio tecnico necessaria per dimensioni superiori a 2800 mm

Ventana batiente con bisagra oculta

Paso #1 - Elección de kit básico

LBB = longitud de la ranura del hardware
HBB = altura de la ranura del hardware

Paso #2 - Elección de kit de equipo

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

(*) = Se necesita confirmación del departamento técnico para dimensiones superiores a 2800 mm

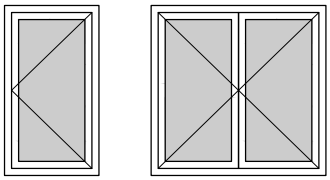
Step #3 - Extension kits choice

Passo #3 - Scelta del kit estensione Cremonese

Paso #3 - Elección de kit extensión

HBB * - HCRN - HDG = Extension kit lenght / larghezza kit prolunga / longitud de kit extensión

	MinL	MaxL
K88011	0	140
K88012	141	235
K88059	236	375
K88013	376	470
K88014	471	610
K88015	611	705
K88060	706	845
K88016	846	940
K88016 / K88011	941	1080
K88016 / K88012	1081	1175
K88016 / K88059	1176	1315
K88016 / K88013	1316	1410
K88016 / K88014	1411	1550
K88016 / K88015	1551	1650
K88016 / K88060	1651	1785
K88016 / K88016	1786	1880



* See HBB information page

MinL = Min Lenght (mm)
MaxL = Max Lenght (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = larghezza minima (mm)
MaxL = larghezza massima (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

MinL = longitud mínimo (mm)
MaxL = longitud máximo (mm)

Example:
HBB = 1780 mm; HM = 300 mm
1780 - 113.5 - 736.5 = 930 mm ---> K88016

HBB = 2700 mm; HM = 1050 mm
2700 - 113.5 - 2096.5 = 490 mm ---> K88014

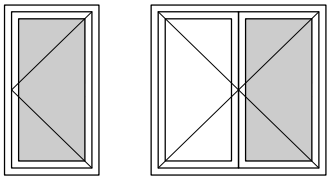
Step #4 - Hinges kit choice
n°1 kit per leaf

Passo #4 - Scelta kit cerniere
n°1 kit per anta

Paso #4 - Elección kit bisagras
n°1 kit por hoja

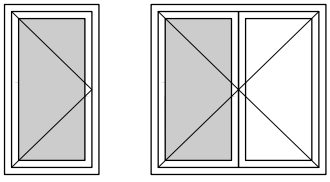
Left / Sinistro / Izquierda

	LBB min	LBB max	HBB min	HBB max
K88035	370	1400	365	2800



Right / Destro / Derecha

	LBB min	LBB max	HBB min	HBB max
K88034	370	1400	365	2800

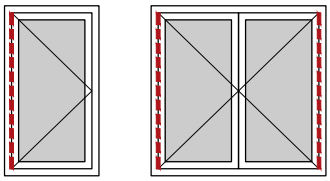


Step #5 - Concealed compression lock kit choice for 2nd leaf
n°1 kit per leaf

Passo #5 - Scelta kit cerniere centrali a scomparsa per 2a anta
n°1 kit per anta

Paso #5 - Elección kit de cerraduras de compresión oculto para 2do hoja
n°1 kit por hoja

	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800

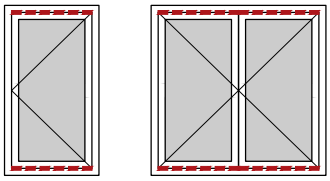


Step #6 - Additional top and bottom locking point choice
n°1 kit per leaf

Passo #6 - Scelta punto di chiusura aggiuntivo superiore e inferiore
n°1 kit per anta

Paso #6 - Elección superior e inferior adicionales punto de bloqueo
n°1 kit por hoja

	LBB min	LBB max
K88045	801	1280
K88046	1281	1400

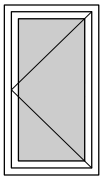


Step #7 - Lifting component
Only for single leaf window

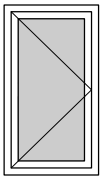
Passo #7 - Componente di sollevamento
Solo per finestra ad anta singola

Paso #7 - Componente de elevación
Solo para ventana de una hoja

K88047



K88048



Step #8 - French casement drive and extension kit choice

Passo #8 - Scelta kit aste a leva e prolunga

Paso #8 - Kit de Cremona y extensión

Drive gear kit	French casement drive kit
K88003	K88062
K88004	K88063
K88005	K88064
K88006	K88065
K88007	K88066
K88008	K88067
K88009	K88068
K88010	K88069

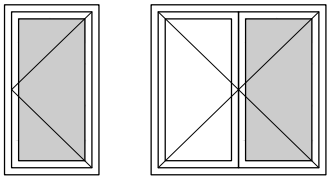
Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Step #9 - Door catch choice

Passo #9 - Scelta scrocco porta

Paso #9 - Elección pestillo de puerta

	HBB min	HBB max
K88061	661	2800

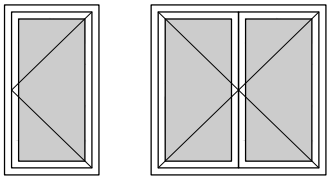


Step #10 - Opening restrictor choice

Passo #10 - Scelta limitatore di apertura

Paso #10 - Elección limitador de apertura

	LBB min	LBB max
K88033	490	1400

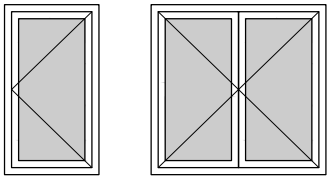


Step #11 - Load transfer 180 kg choice

Passo #11 - Scelta asta di sostegno 180 kg

Paso #11 - Elección varilla de soporte 180 kg

		HBB min	HBB max
E99510-02	**Right**	2000	2800
E99511-02	**Left**	2000	2800

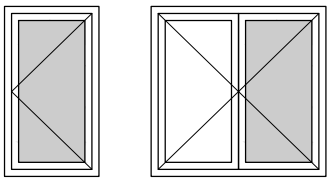


Step #12 - Alarm contact choice

Passo #12 - Scelta contatto allarme

Paso #12 - Elección contacto de alarma

K99062

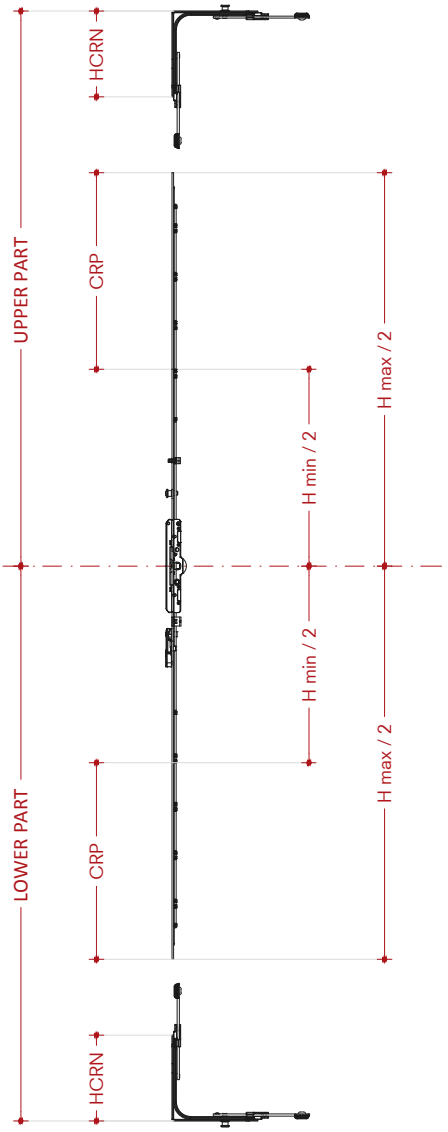


Step #12 - Double croppable gear kits choice
(Instead of Step #3 and #4)

Passo #12 - Scelta Kit cremonesi doppiorasabili
(Invece dei passaggi #3 e #4)

Paso #12 - Elección Kits de equipo recortables dobles
(En lugar de los pasos #3 y #4)

	h min handle	HDG	H min / 2	H max / 2	CRP	HCRN	HBB min
K88109	265	640.5	151	260	170 + 170	113.5	527.5
K88110	375	1040.5	261	510	260 + 260	113.5	747.5
K88111	625	1540.5	511	760	260 + 260	113.5	1247.5
K88112	875	2040.5	761	1020	260 + 260	113.5	1747.5



UPPER PART = HBB - HH - HCRN

LOWER PART = HH - HCRN

Choose the smallest value and find the right gear kit between Hmin/2 and Hmax/2 range columns.

Scegli il valore più piccolo e trova il kit Cremonese giusto tra le colonne dell'intervallo Hmin/2 e Hmax/2

Elija el valor más pequeño y encuentre el kit de equipo adecuado entre las columnas de rango Hmin/2 y Hmax/2

EXTENSION KIT:

UPPER* = HBB - HH - HCRN - H max / 2 →

LOWER* = HH - HCRN - H max / 2 →

CHECK ON THE EXTENSION TABLE (STEP 3)

* with negative value extension are not needed.

* con valore negativo non sono necessarie estensioni.

* con valor negativo no se necesitan extensiones.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

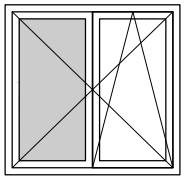
HH = altezza maniglia
HDG = altezza guida cremonese
CRP = misura di taglio
HCRN = altezza dell'angolo
HBB = altezza cava ferramenta

HH = altura manilla
HDG = altura de la guía de equipo
CRP = medida de corte
HCRN = altura de la esquina
HBB = altura de la ranura del hardware

Step #13 - French casement drive and extension kit choice

Passo #13 - Scelta kit aste a leva doppiorasabile e prolunga

Paso #13 - Kit de Cremona y extensión



Drive gear kit	French casement drive kit
K88109	K88113
K88110	K88114
K88111	K88115
K88112	K88116

Extension kit for 1st leaf	French casement drive extension kit
K88011	K88011
K88012	K88071
K88059	K88072
K88013	K88073
K88014	K88074
K88015	K88075
K88060	K88076
K88016	K88077
K88016 K88011	K88077 K88011
K88016 K88012	K88077 K88071
K88016 K88059	K88077 K88072
K88016 K88013	K88077 K88073
K88016 K88014	K88077 K88074
K88016 K88015	K88077 K88075
K88016 K88060	K88077 K88076
K88016 K88016	K88077 K88077

Bottom hung windows with visible hinge

Gear kits

K88049

LBB = 390 - 500 mm

MC 208323 n°01 piece
MC 364310 n°02 pieces

K88050

LBB = 501 - 700 mm

MC 208324 n°01 piece
MC 364310 n°02 pieces

K88051

LBB = 701 - 1000 mm

MC 208325 n°01 piece
MC 364310 n°02 pieces

K88052

LBB = 1001 - 1400 mm

MC 208326 n°01 piece
MC 364310 n°03 pieces

K88053

LBB = 1401 - 1800 mm

MC 208327 n°01 piece
MC 364310 n°03 pieces

K88054

LBB = 1801 - 2250 mm

MC 202497 n°01 piece
MC 212211 n°02 pieces
MC 364310 n°05 pieces

Finestre vasistas con cerniera a vista

Kit cremonese

K88049

LBB = 390 - 500 mm

K88050

LBB = 501 - 700 mm

K88051

LBB = 701 - 1000 mm

K88052

LBB = 1001 - 1400 mm

K88053

LBB = 1401 - 1800 mm

K88054

LBB = 1801 - 2250 mm

Ventana oscillante con bisagra visible

Kits de equipo

K88049

LBB = 390 - 500 mm

K88050

LBB = 501 - 700 mm

K88051

LBB = 701 - 1000 mm

K88052

LBB = 1001 - 1400 mm

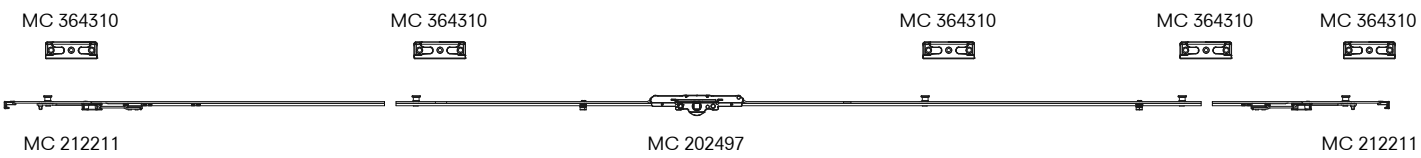
K88053

LBB = 1401 - 1800 mm

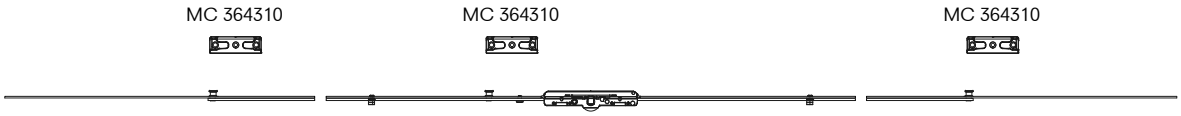
K88054

LBB = 1801 - 2250 mm

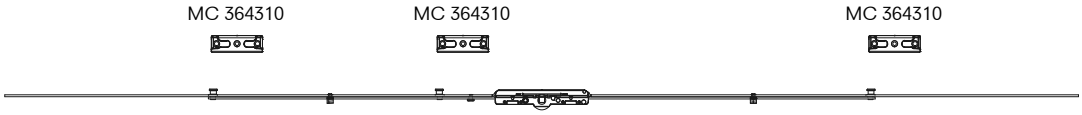
K88054



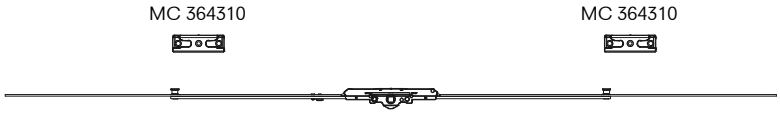
K88053



K88052

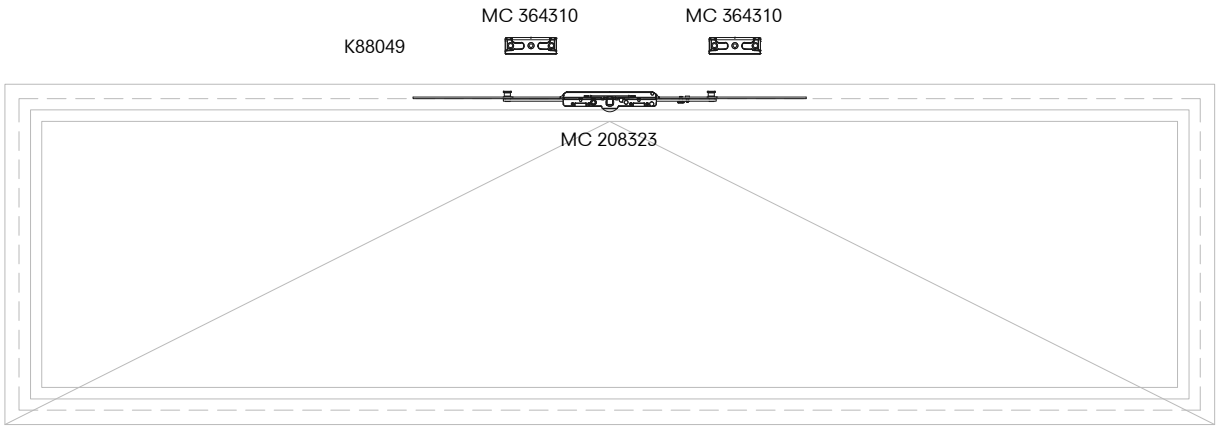


K88051



K88050

K88049



Bottom hung windows with visible hinge

Hinges kits

K88040
n°1 kit per hinge

MC 52321 n°01 piece
MC 52481 n°01 piece
MC 52486 n°01 piece
MC 94491 n°01 piece

Finestre vasistas con cerniera a vista

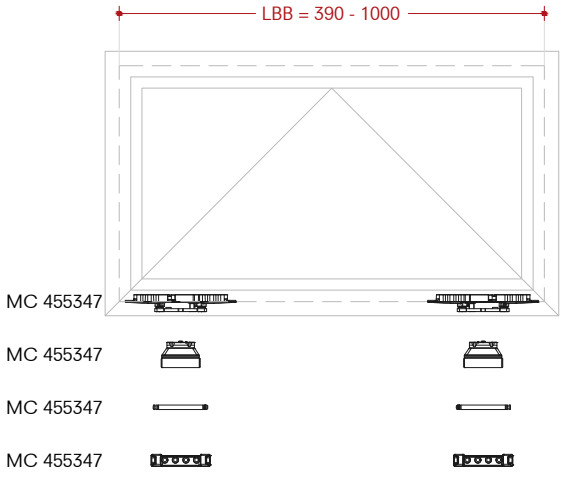
Kit cerniere

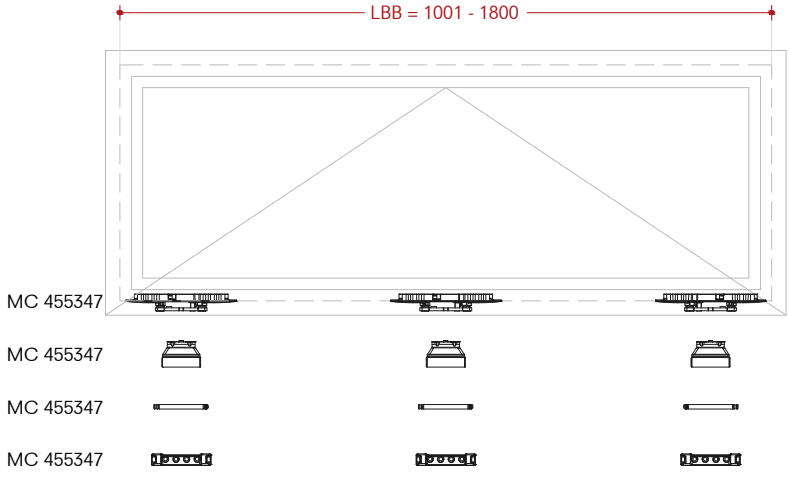
K88040
n°1 kit per cerniera

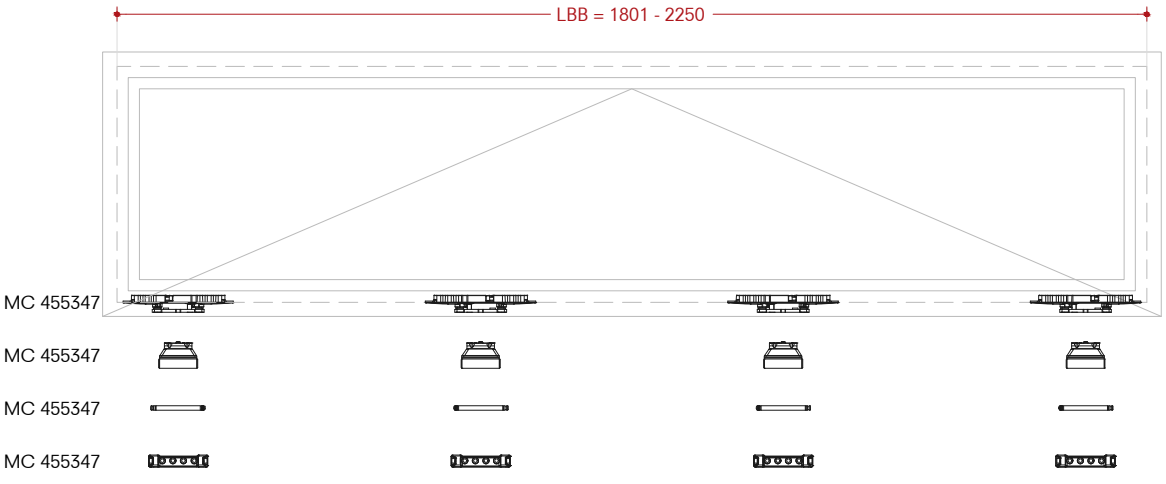
Ventana oscillante con bisagra visible

Kits de bisagras

K88040
n°1 kit por bisagra







Bottom hung windows with visible hinge

Opening restrictor

E99205-05

With clicks.
HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

Finestre vasistas con cerniera a vista

Limitatore di apertura

E99205-05

Con scatti.
HBB = 400 - 1200 mm

n°02 pezzi

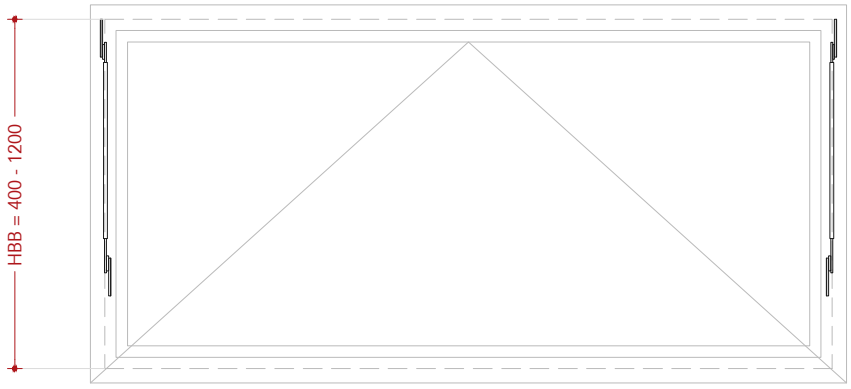
Ventana oscillante con bisagra visible

Limitador de apertura

E99205-05

Con clics.
HBB = 400 - 1200 mm

n°02 unidades



E99206-03

HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

E99206-03

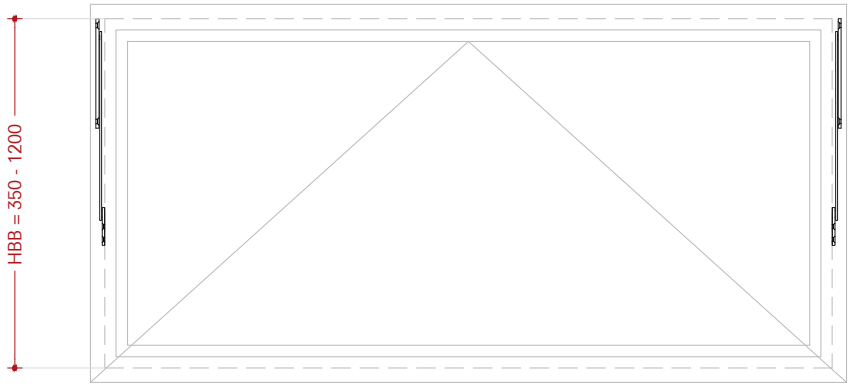
HBB = 400 - 1200 mm

n°02 pezzi

E99206-03

HBB = 400 - 1200 mm

n°02 unidades



Bottom hung windows with visible hinge

Opening restrictor

K88107

HBB = 300 - 500 mm

MC 455347 n°02 pieces

Finestre vasistas con cerniera a vista

Limitatore di apertura

K88107

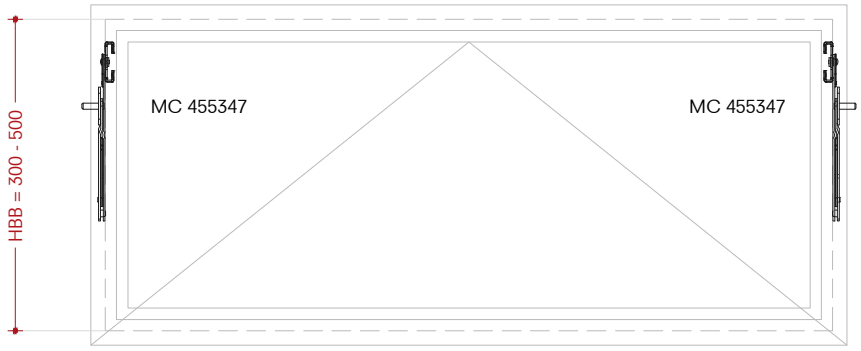
HBB = 300 - 500 mm

Ventana oscillante con bisagra visible

Limitador de apertura

K88107

HBB = 300 - 500 mm



K88108

HBB = 501 - 1200 mm

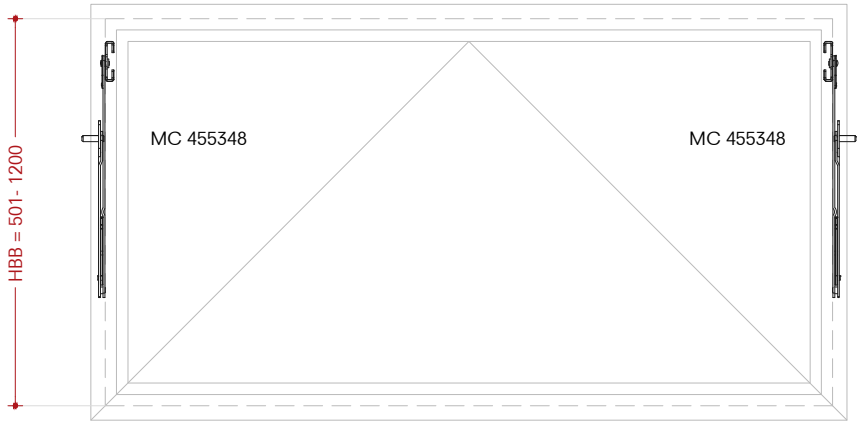
MC 455348 n°02 pieces

K88108

HBB = 501 - 1200 mm

K88108

HBB = 501 - 1200 mm



Bottom hung windows with visible hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre vasistas con cerniera a vista

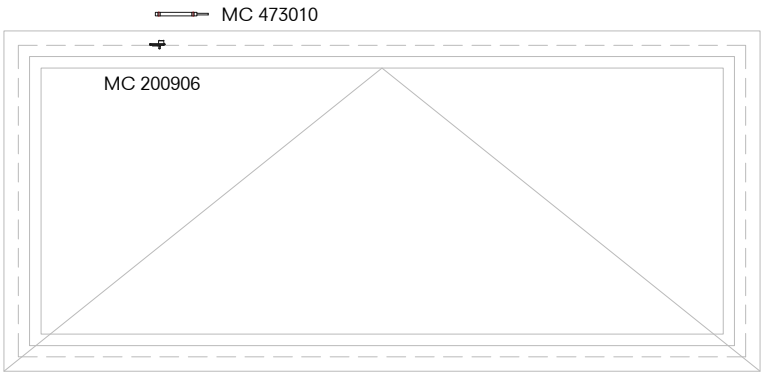
Contatto allarme

K99062

Ventana oscillante con bisagra visible

Contacto de alarma

K99062



Bottom hung windows with visible hinge

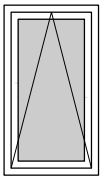
Determination of LBB
(Groove Hardware Lenght)

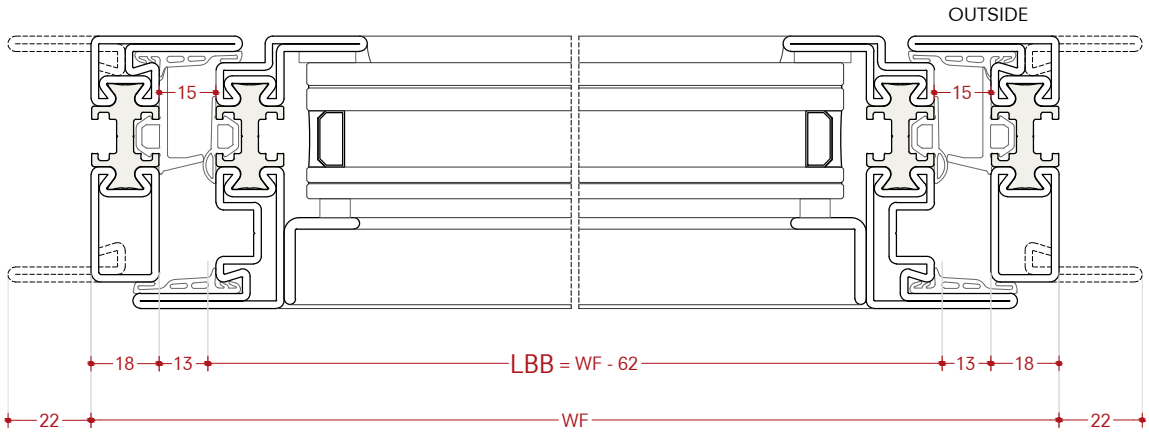
Finestre vasistas con cerniera a vista

Determinazione di LBB
(Larghezza cava ferramenta)

Ventana oscillante con bisagra visible

Determinación de LBB
(longitud de la ranura del hardware)





Bottom hung windows with visible hinge

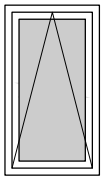
Determination of HBB
(Groove Hardware Height)

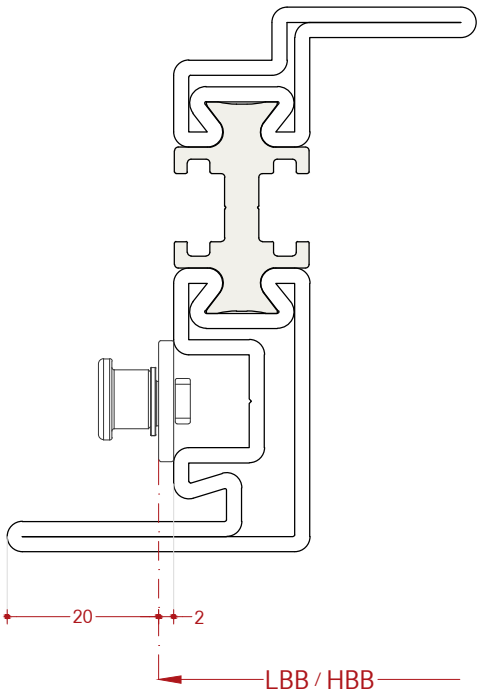
Finestre vasistas con cerniera a vista

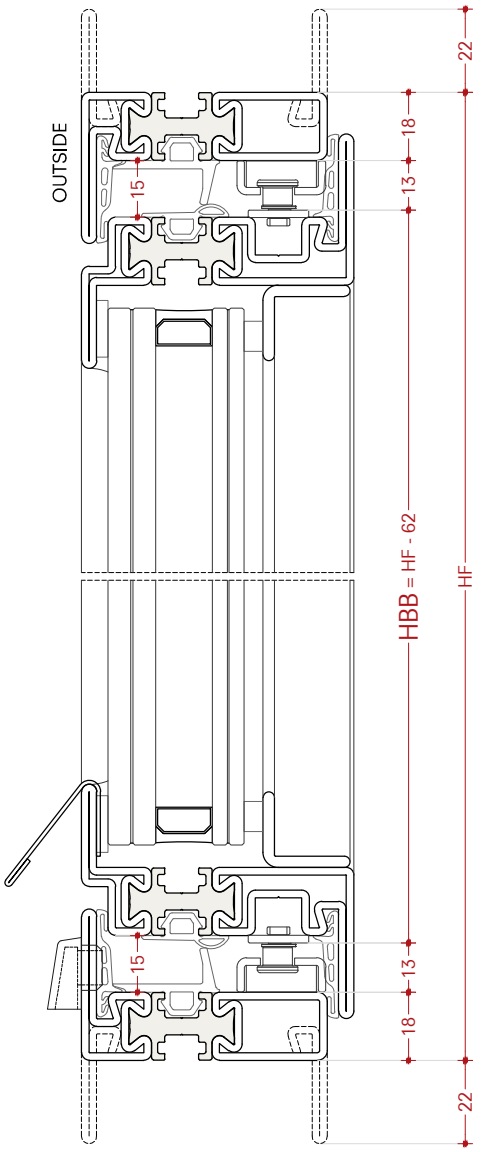
Determinazione di HBB
(altezza cava ferramenta)

Ventana oscillante con bisagra visible

Determinación de HBB
(altura de la ranura del hardware)







Bottom hung windows with visible hinge

Load capacity tables

Capacity of bottom hung window with visible compression locks

Finestre vasistas con cerniera a vista

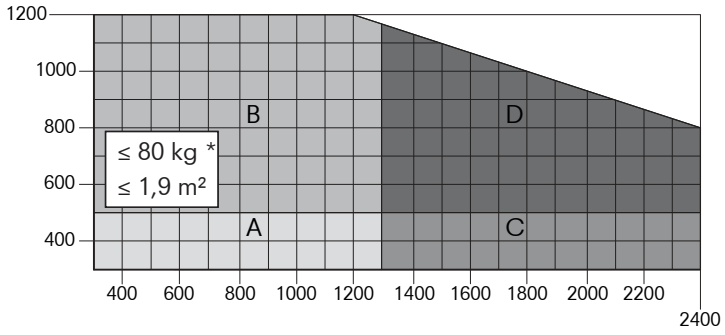
Tabelle portate

Portate vasistas con cerniere a vista

Ventana oscillante con bisagra visible

Tablas de peso

Capacidad de la ventana oscilante con bisagras vista



Bottom hung windows with visible hinge

Finestre vasistas con cerniera a vista

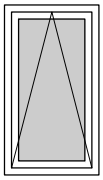
Ventana oscillante con bisagra visible

Step #1 - Gear kit choice

Passo #1 - Scelta del kit cremonese

Paso #1 - Elección de kit de equipo

	LBB min	LBB max
K88049	390	500
K88050	501	700
K88051	701	1000
K88052	1001	1400
K88053	1401	1800
K88054	1801	2250



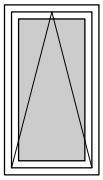
Step #2 - Hinges kit choice

Passo #2 - Scelta kit cerniere

Paso #2 - Elección kit bisagras

Right / Destro / Derecha

	LBB min	LBB max
K88040 x 2	390	1000
K88040 x 3	1001	1800
K88040 x 4	1801	2250

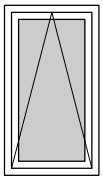


Step #3 - Opening restrictor choice

Passo #3 - Scelta limitatore di apertura

Paso #3 - Elección limitador de apertura

	HBB min	HBB max	
E99205-05	400	1200	adjustable opening
E99206-05	400	1200	releasable
K88107 (*)	300	500	installation in groove
K88108 (*)	501	1200	installation in groove



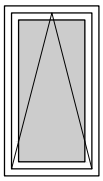
*Recommended
*Raccomandato
*Recomendado

Step #4 - Alarm contact choice

Passo #4 - Scelta contatto allarme

Paso #4 - Elección contacto de alarma

K99062

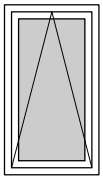


Step #5 - Hinge cover n°1 kit per hinge

Passo #5 - Copricerniera n°1 kit per cerniera

Paso #5 - Cubierta de bisagra n°1 kit por bisagra

	Surface finishes Finiture Superficie
K99102	Silver Argento Plata
K99103	White Bianco Blanco
K99104	Black Nero Negro
K99105	Brown Marrone Marrón
K99106 (*)	Titanium Titanio Titanio



*On request
*Su richiesta
*Por encargo

Bottom hung windows with concealed hinge

Gear kits

K88049

LBB = 390 - 500 mm

MC 208323 n°01 piece
MC 364310 n°02 pieces

K88050

LBB = 501 - 700 mm

MC 208324 n°01 piece
MC 364310 n°02 pieces

K88051

LBB = 701 - 1000 mm

MC 208325 n°01 piece
MC 364310 n°02 pieces

K88052

LBB = 1001 - 1400 mm

MC 208326 n°01 piece
MC 364310 n°03 pieces

K88053

LBB = 1401 - 1800 mm

MC 208327 n°01 piece
MC 364310 n°03 pieces

K88054

LBB = 1801 - 2250 mm

MC 202497 n°01 piece
MC 212211 n°02 pieces
MC 364310 n°05 pieces

Finestre vasistas con cerniera a scomparsa

Kit cremonese

K88049

LBB = 390 - 500 mm

K88050

LBB = 501 - 700 mm

K88051

LBB = 701 - 1000 mm

K88052

LBB = 1001 - 1400 mm

K88053

LBB = 1401 - 1800 mm

K88054

LBB = 1801 - 2250 mm

Ventana oscillante con bisagra oculta

Kits de equipo

K88049

LBB = 390 - 500 mm

K88050

LBB = 501 - 700 mm

K88051

LBB = 701 - 1000 mm

K88052

LBB = 1001 - 1400 mm

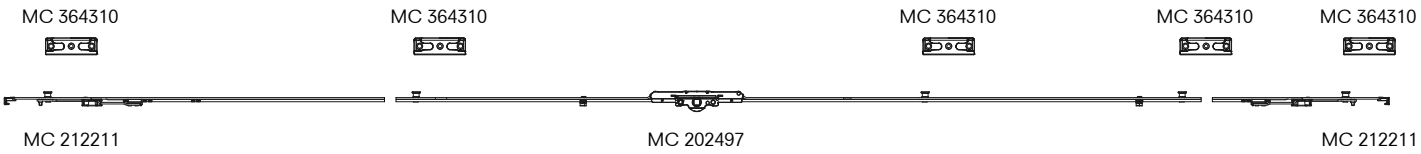
K88053

LBB = 1401 - 1800 mm

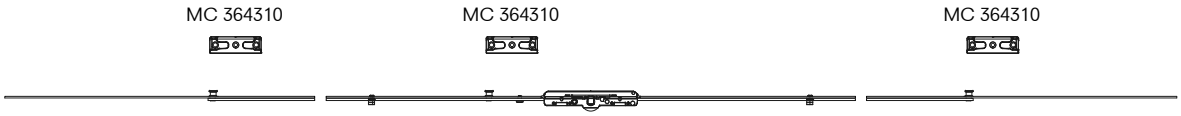
K88054

LBB = 1801 - 2250 mm

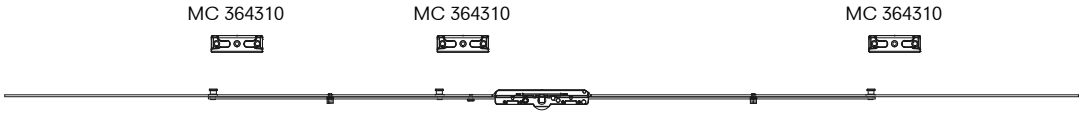
K88054



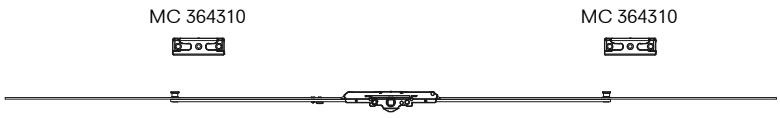
K88053



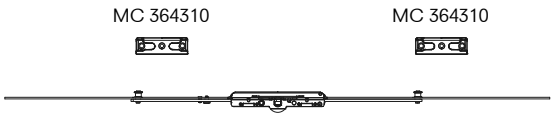
K88052



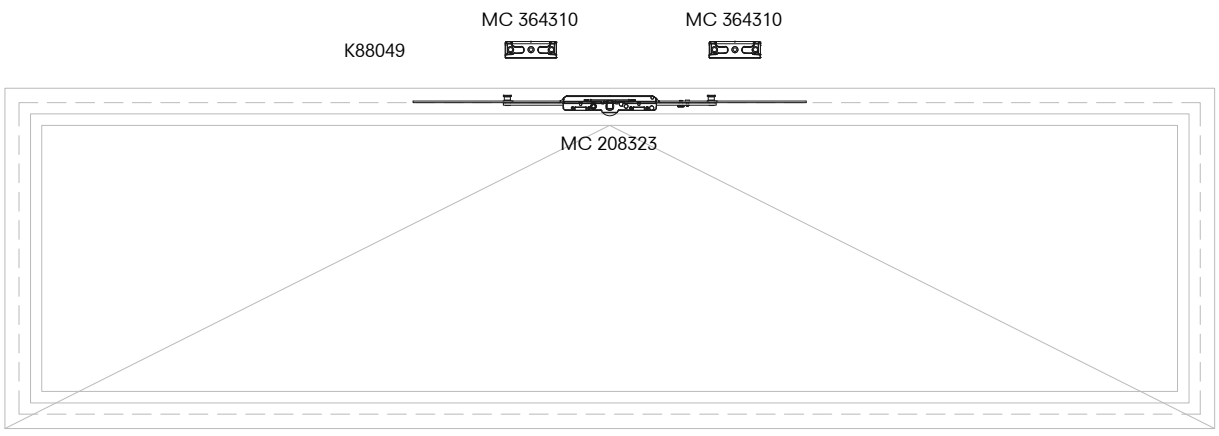
K88051



K88050



K88049



Bottom hung windows with concealed hinge

Gear kits

Finestre vasistas con cerniera a scomparsa

Kit cremonese

Ventana oscillante con bisagra oculta

Kits de equipo

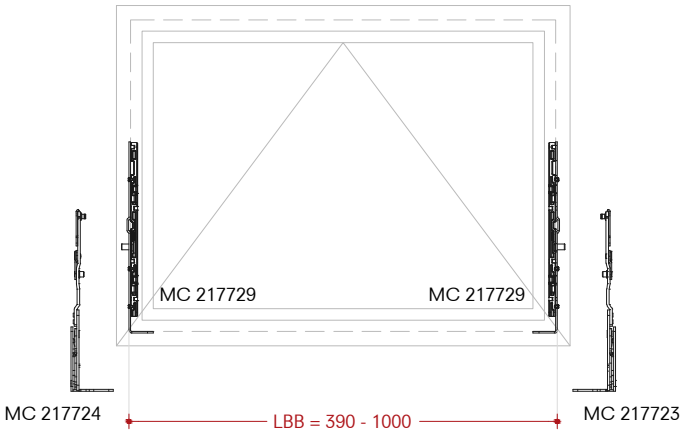
K88055

LBB = 390 - 1000 mm

MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88055

LBB = 390 - 1000 mm



K88055

LBB = 390 - 1000 mm

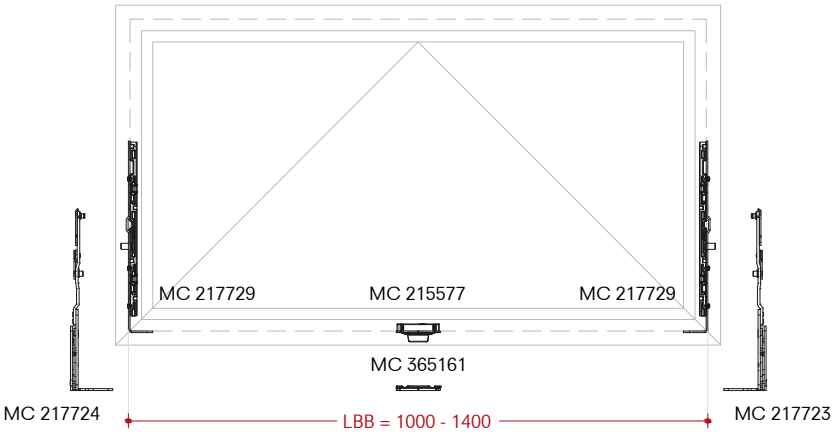
K88056

LBB = 1001 - 1400 mm

MC 215577 n°01 piece
MC 365161 n°01 piece
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88056

LBB = 1001 - 1400 mm



K88056

LBB = 1001 - 1400 mm

K88057

LBB = 1401 - 1800 mm

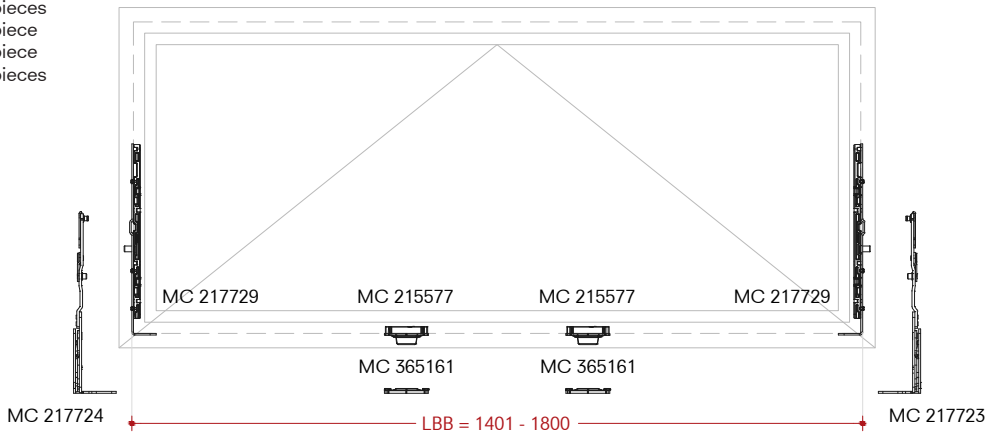
MC 215577 n°02 pieces
MC 365161 n°02 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88057

LBB = 1401 - 1800 mm

K88057

LBB = 1401 - 1800 mm



K88058

LBB = 1801 - 2250 mm

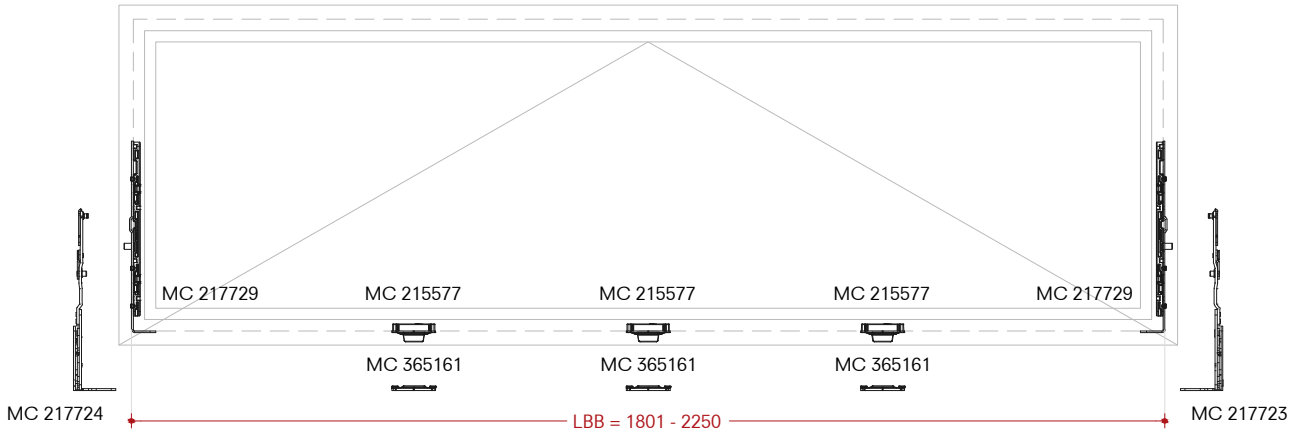
MC 215577 n°03 pieces
MC 365161 n°03 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88058

LBB = 1801 - 2250 mm

K88058

LBB = 1801 - 2250 mm



Bottom hung windows with concealed hinge

Opening restrictor

E99205-05

With clicks.
HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

Finestre vasistas con cerniera a scomparsa

Limitatore di apertura

E99205-05

Con scatti.
HBB = 400 - 1200 mm

n°02 pezzi

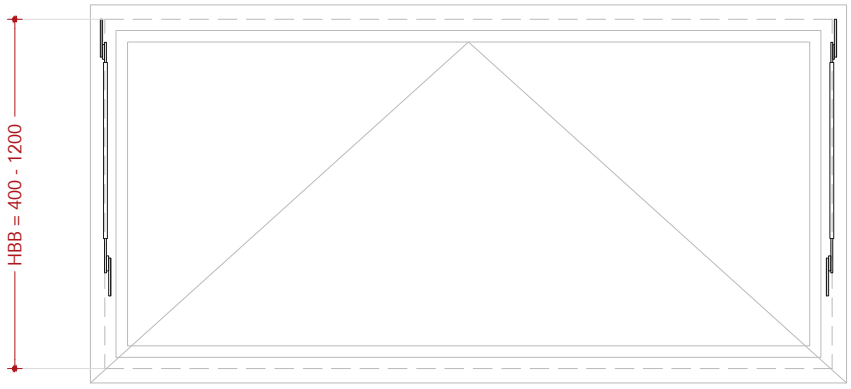
Ventana oscillante con bisagra oculta

Limitador de apertura

E99205-05

Con clics.
HBB = 400 - 1200 mm

n°02 unidades



E99206-03

HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

E99206-03

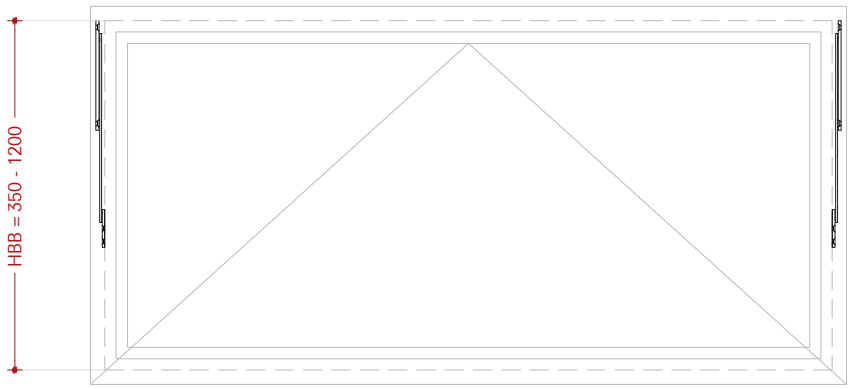
HBB = 400 - 1200 mm

n°02 pezzi

E99206-03

HBB = 400 - 1200 mm

n°02 unidades



K88107

HBB = 520 - 620 mm

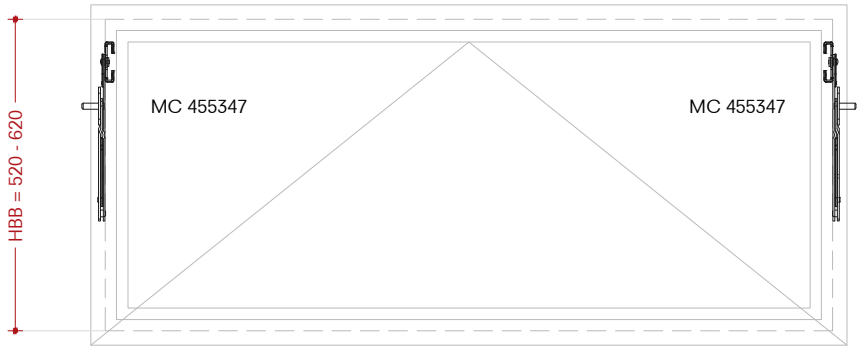
MC 455347 n°02 pieces

K88107

HBB = 520 - 620 mm

K88107

HBB = 520 - 620 mm



K88108

HBB = 621 - 1200 mm

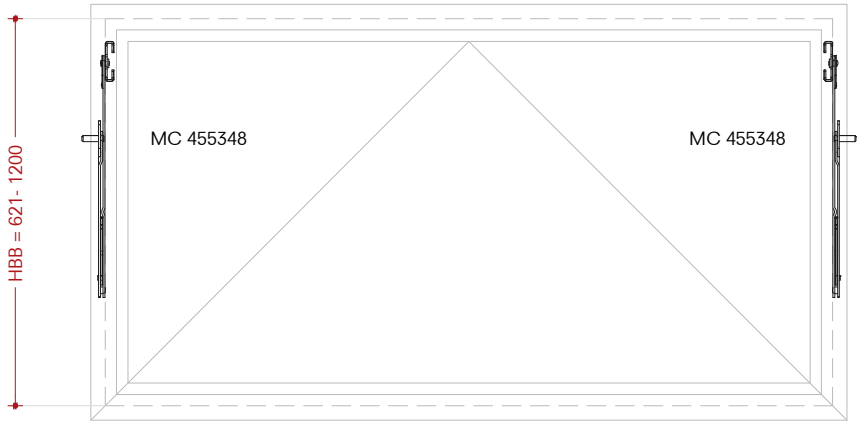
MC 455348 n°02 pieces

K88108

HBB = 621 - 1200 mm

K88108

HBB = 621 - 1200 mm



Bottom hung windows with concealed hinge

Alarm contact

K99062

MC 200906 n°01 piece
MC 473010 n°01 piece

Finestre vasistas con cerniera a scomparsa

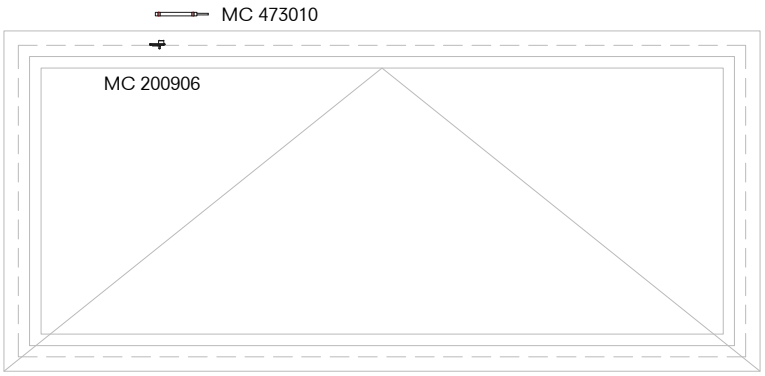
Contatto allarme

K99062

Ventana oscillante con bisagra oculta

Contacto de alarma

K99062



Bottom hung windows with concealed hinge

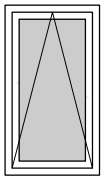
Determination of LBB
(Groove Hardware Lenght)

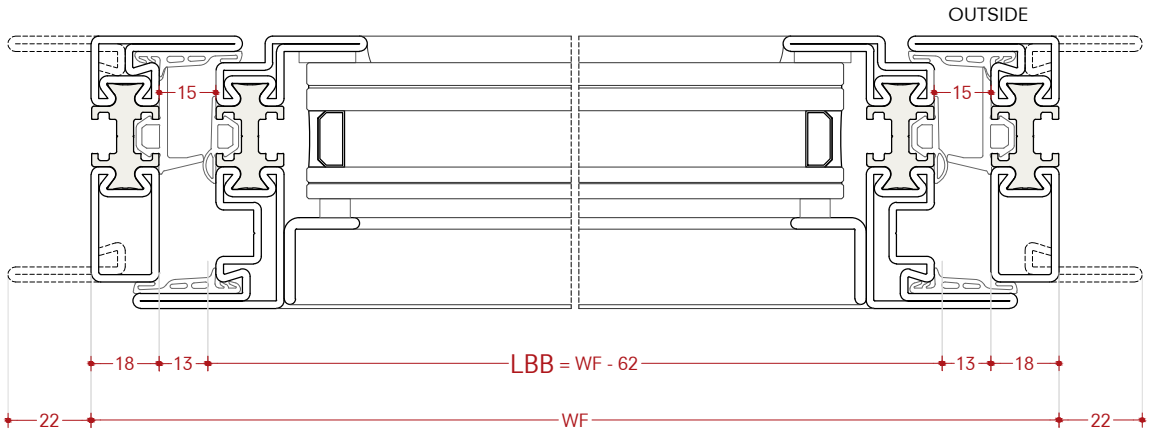
Finestre vasistas con cerniera a scomparsa

Determinazione di LBB
(Larghezza cava ferramenta)

Ventana oscillante con bisagra oculta

Determinación de LBB
(longitud de la ranura del hardware)





Bottom hung windows with concealed hinge

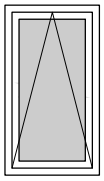
Determination of HBB
(Groove Hardware Height)

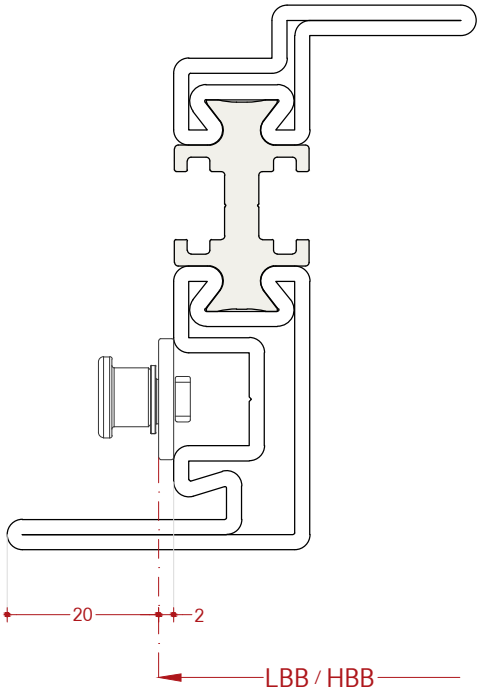
Finestre vasistas con cerniera a scomparsa

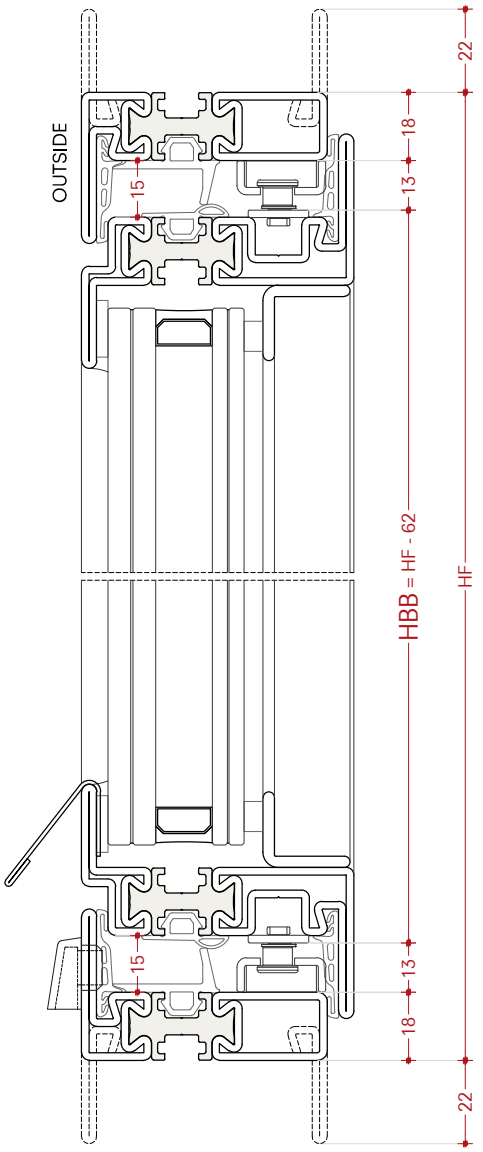
Determinazione di HBB
(altezza cava ferramenta)

Ventana oscillante con bisagra oculta

Determinación de HBB
(altura de la ranura del hardware)







Bottom hung windows with concealed hinge

Load capacity tables

Capacity of bottom hung window with concealed compression locks

Finestre vasistas con cerniera a scomparsa

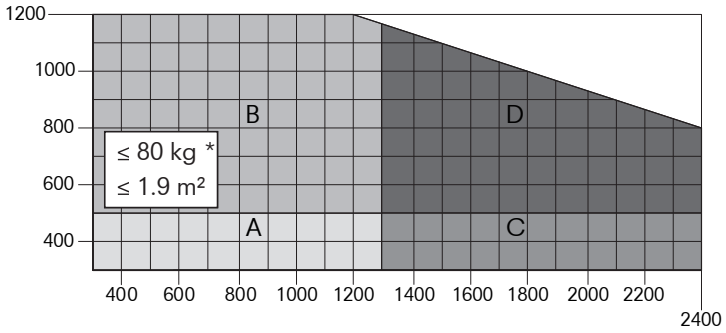
Tabelle portate

Portate vasistas con cerniere a scomparsa

Ventana oscillante con bisagra oculta

Tablas de peso

Capacidad de la ventana oscilante con bisagras ocultas



Bottom hung windows with concealed hinge

Finestre vasistas con cerniera a scomparsa

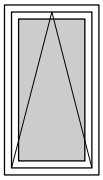
Ventana oscillante con bisagra oculta

Step #1 - Gear kit choice

Passo #1 - Scelta del kit cremonese

Paso #1 - Elección de kit de equipo

	LBB min	LBB max
K88049	390	500
K88050	501	700
K88051	701	1000
K88052	1001	1400
K88053	1401	1800
K88054	1801	2250



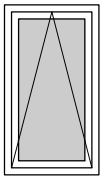
Step #2 - Hinges kit choice

Passo #2 - Scelta kit cerniere

Paso #2 - Elección kit bisagras

Right / Destro / Derecha

	LBB min	LBB max
K88055	390	1000
K88056	1001	1400
K88057	1401	1800
K88058	1801	2250

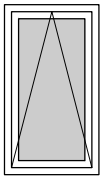


Step #3 - Opening restrictor choice

Passo #3 - Scelta limitatore di apertura

Paso #3 - Elección limitador de apertura

	HBB min	HBB max	
E99205-05	400	1200	adjustable opening
E99206-05	400	1200	releasable
K88107 (*)	520	620	installation in groove
K88108 (*)	621	1200	installation in groove



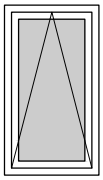
*Recommended
*Raccomandato
*Recomendado

Step #4 - Alarm contact choice

Passo #4 - Scelta contatto allarme

Paso #4 - Elección contacto de alarma

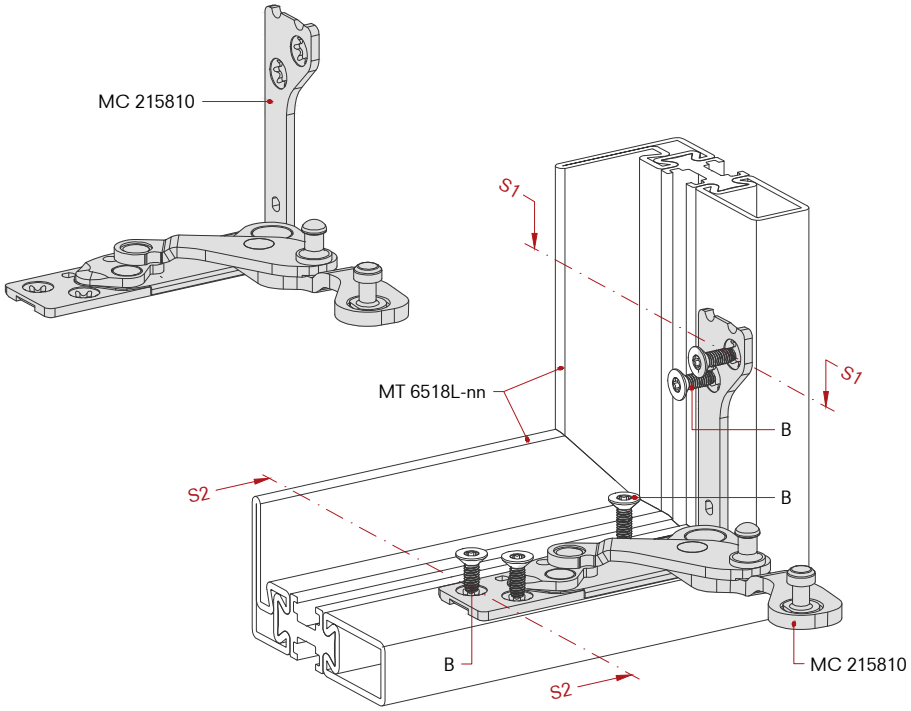
K99062

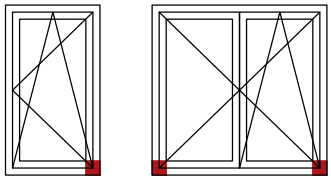


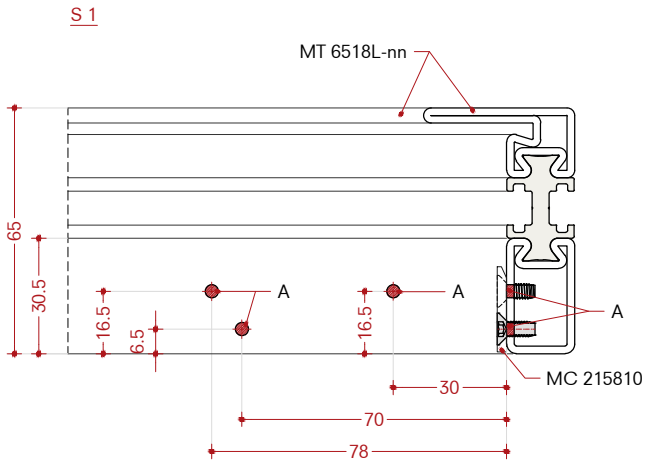
Pivot post
MC 215810 R
MC 215811 L
Leaf weight ≤ 150 kg
Installation on frame

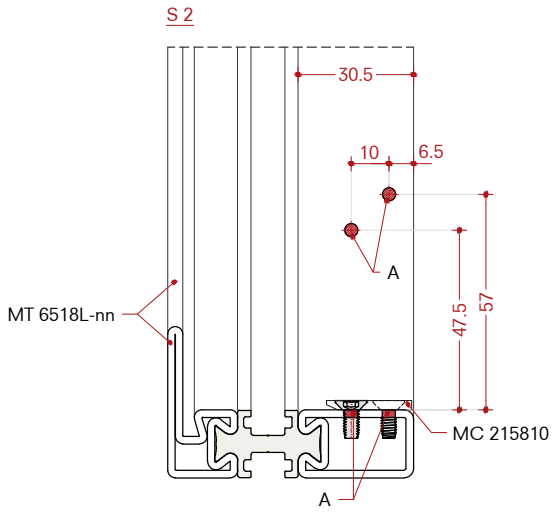
Cerniera a scomparsa inferiore
MC 215810 R
MC 215811 L
Peso anta ≤ 150 kg
Installazione sul telaio

Cojinete de esquina
MC 215810 R
MC 215811 L
Peso de la hoja ≤ 150 kg
Instalación en el marco









M65TB - 0001 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x10

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x10

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

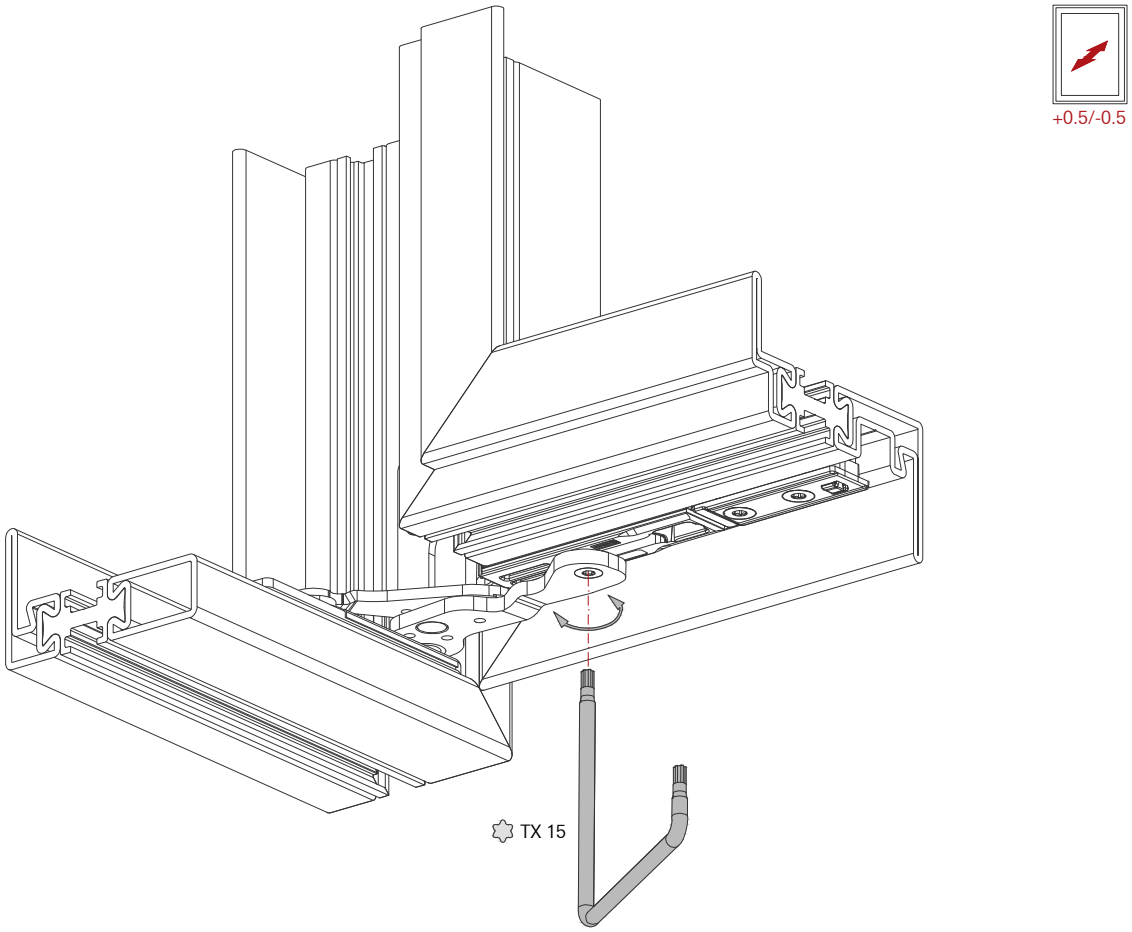
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x10

L = Apertura izquierda
R = Apertura derecha

Pressure adjustment

Regolazione pressione di contatto

Ajuste de presión de contacto



Adjustment range ± 0.5 mm with TX 15

L = Left opening
R = Right opening

Regolazione ± 0.5 mm con TX 15

L = Apertura sinistra
R = Apertura destra

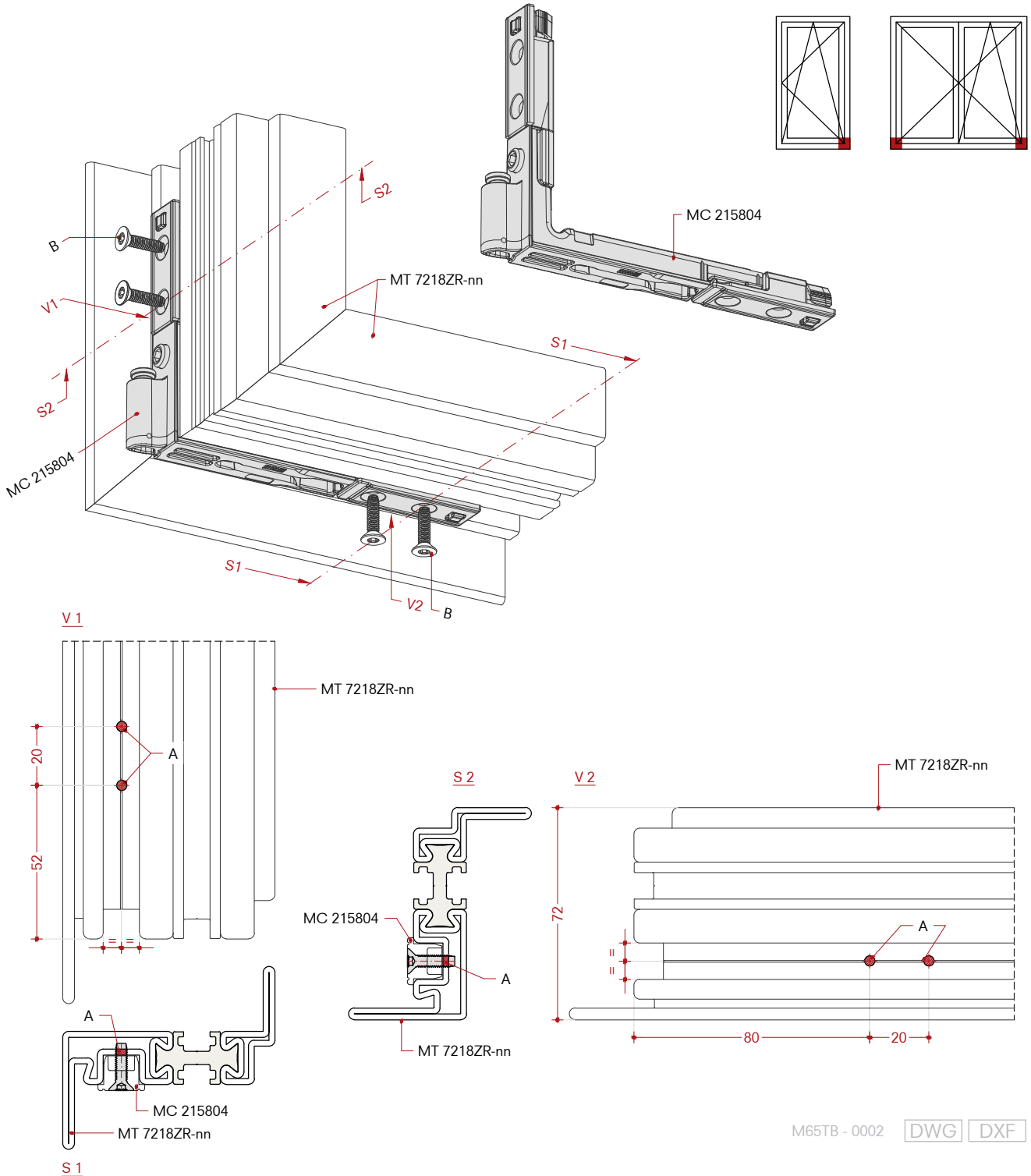
Ajuste ± 0.5 mm con TX 15

L = Apertura izquierda
R = Apertura derecha

Corner support
MC 215804 R
MC 215805 L
Leaf weight ≤ 150 kg
Installation on leaf

Supporto angolare
MC 215804 R
MC 215805 L
Peso anta ≤ 150 kg
Installazione sull'anta

Soporte angular
MC 215804 R
MC 215805 L
Peso de la hoja ≤ 150 kg
Instalación en la hoja



M65TB - 0002 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

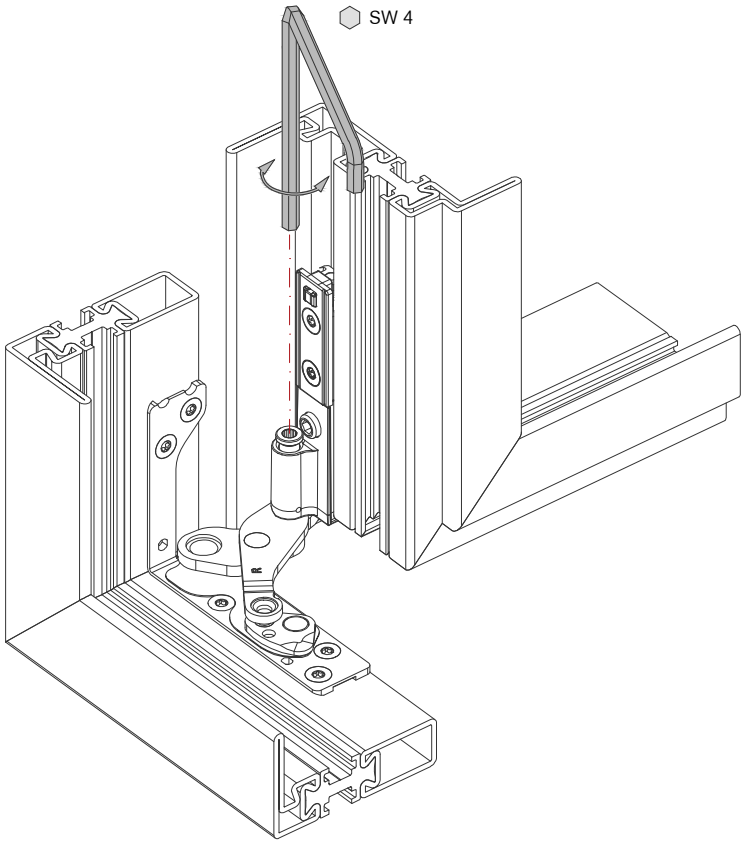
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

L = Apertura izquierda
R = Apertura derecha

Height adjustment

Regolazione verticale

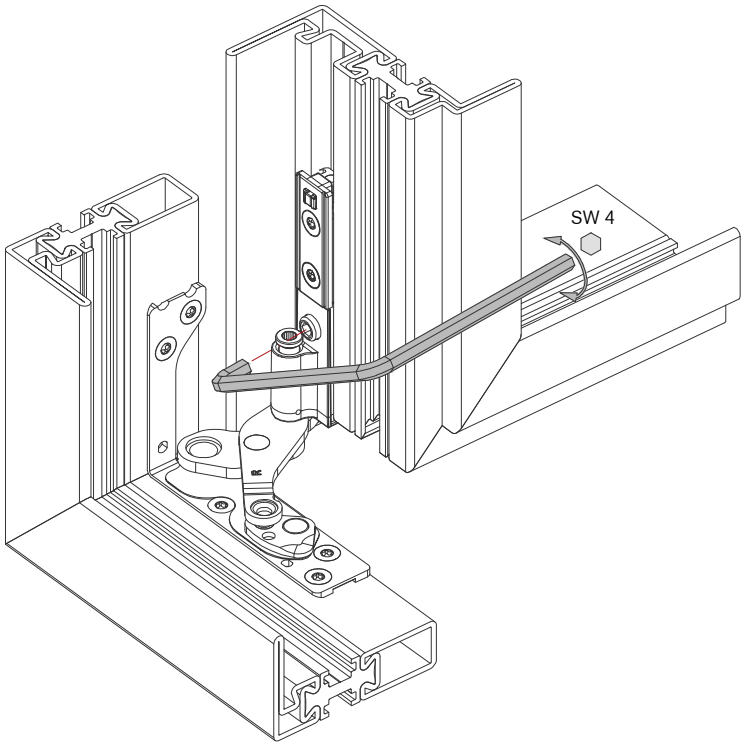
Ajuste vertical

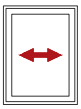


Side adjustment

Regolazione orizzontale

Ajuste horizontal





⬡ Adjustment range -1/+2 mm with SW 4

L = Left opening
R = Right opening

⬡ Regolazione -1/+2 mm con SW 4

L = Apertura sinistra
R = Apertura destra

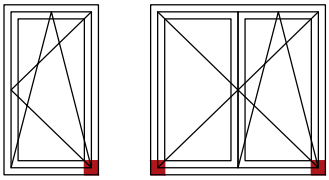
⬡ Ajuste -1/+2 mm con SW 4

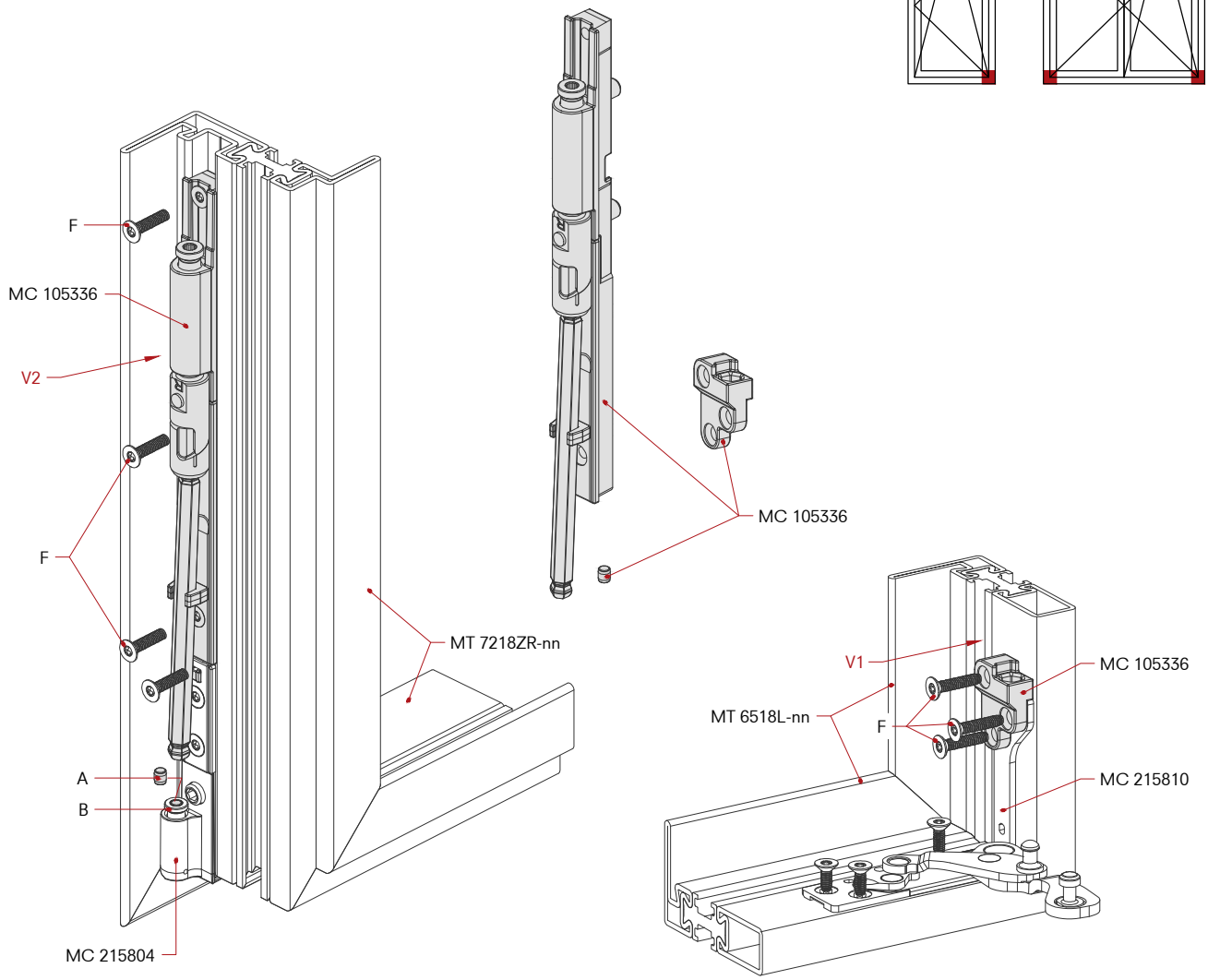
L = Apertura izquierda
R = Apertura derecha

Load transfer MULTI POWER
MC 105336 R
MC 105339 L
Leaf weight ≤ 180 kg
Installation frame and leaf

Asta di sostegno MULTI POWER
MC 105336 R
MC 105339 L
Peso anta ≤ 180 kg
Installazione su telaio e anta

Varilla de soporte MULTI POWER
MC 105336 R
MC 105339 L
Peso de la hoja ≤ 180 kg
Instalación en marco y hoja





M65TB - 0003 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Press the seal into the height adjustment screw of the corner bearing band completely
B) The height adjusting screw must be in the "neutral position" (delivery condition)
C) Hole Ø3.3 mm
D) Hole Ø7 mm
E) Cut off protruding bolts (MC 105336 / MC 105339 Ø7 mm)
F) Cut the screw
G) Countersunk screw M4x16

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Inserire completamente la guarnizione nella vite di regolazione dell'altezza della cerniera angolare
B) La vite di regolazione dell'altezza deve essere in "posizione neutra" (condizione di consegna)
C) Foro Ø3.3 mm
D) Foro Ø7 mm
E) Tagliare i bulloni sporgenti (MC 105336 / MC 105339 Ø7 mm)
F) Accorciare la vite
G) Vite testa svasata M4x16

L = Apertura sinistra
R = Apertura destra

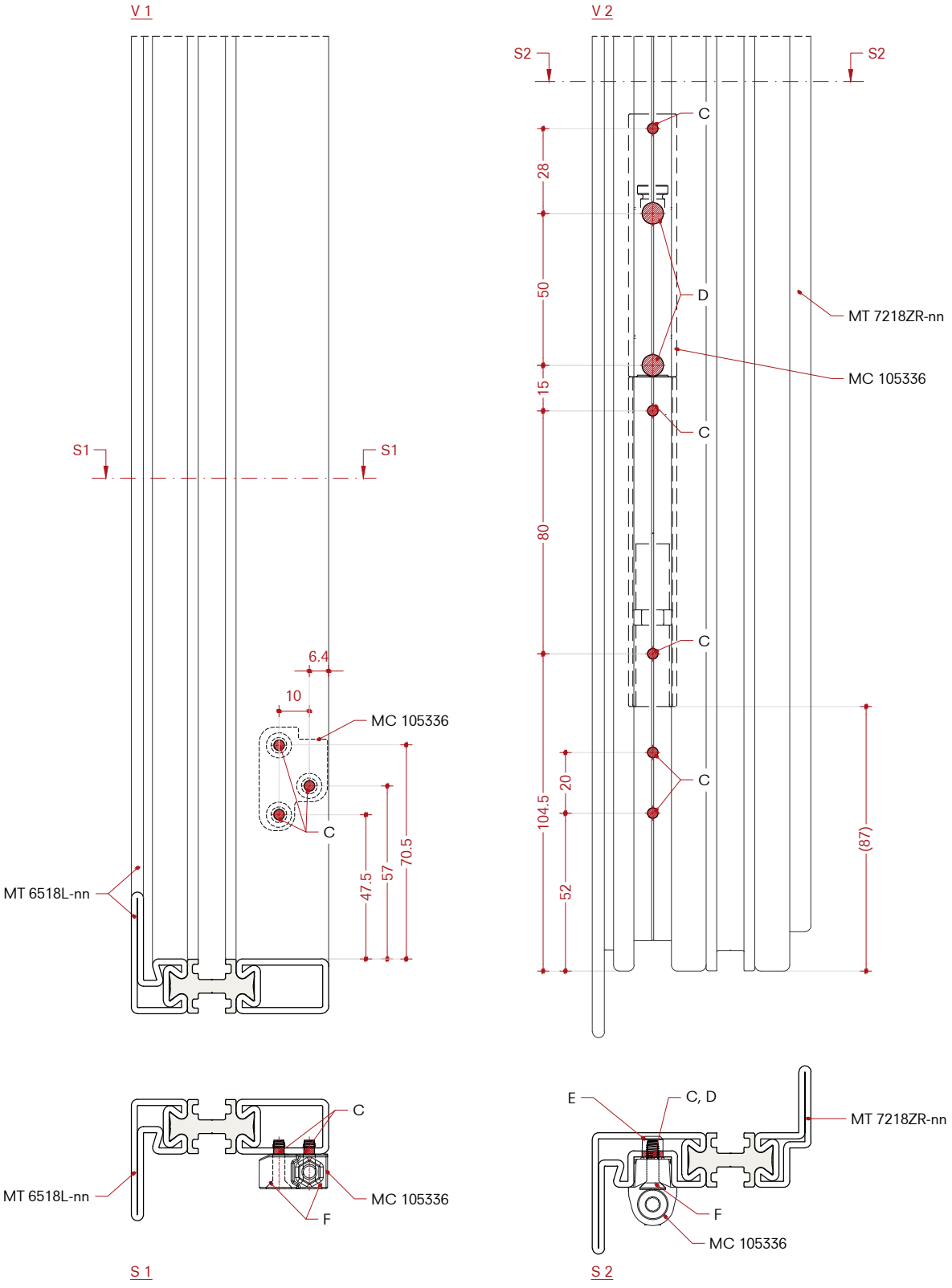
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Inserte la junta completamente en el tornillo de ajuste de altura de la bisagra de esquina
B) El tornillo de ajuste de altura debe estar en "posición neutra" (condición de entrega)
C) Oreficio Ø3.3 mm
D) Oreficio Ø7 mm
E) Cortar los tornillos que sobresalen (MC 105336 / MC 105339 Ø7 mm)
F) Recortar tornillo
G) Tornillo avellanado M4x16

L = Apertura izquierda
R = Apertura derecha

Frame
Telaio
Marco

Leaf
Anta
Hoja

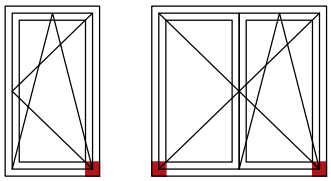


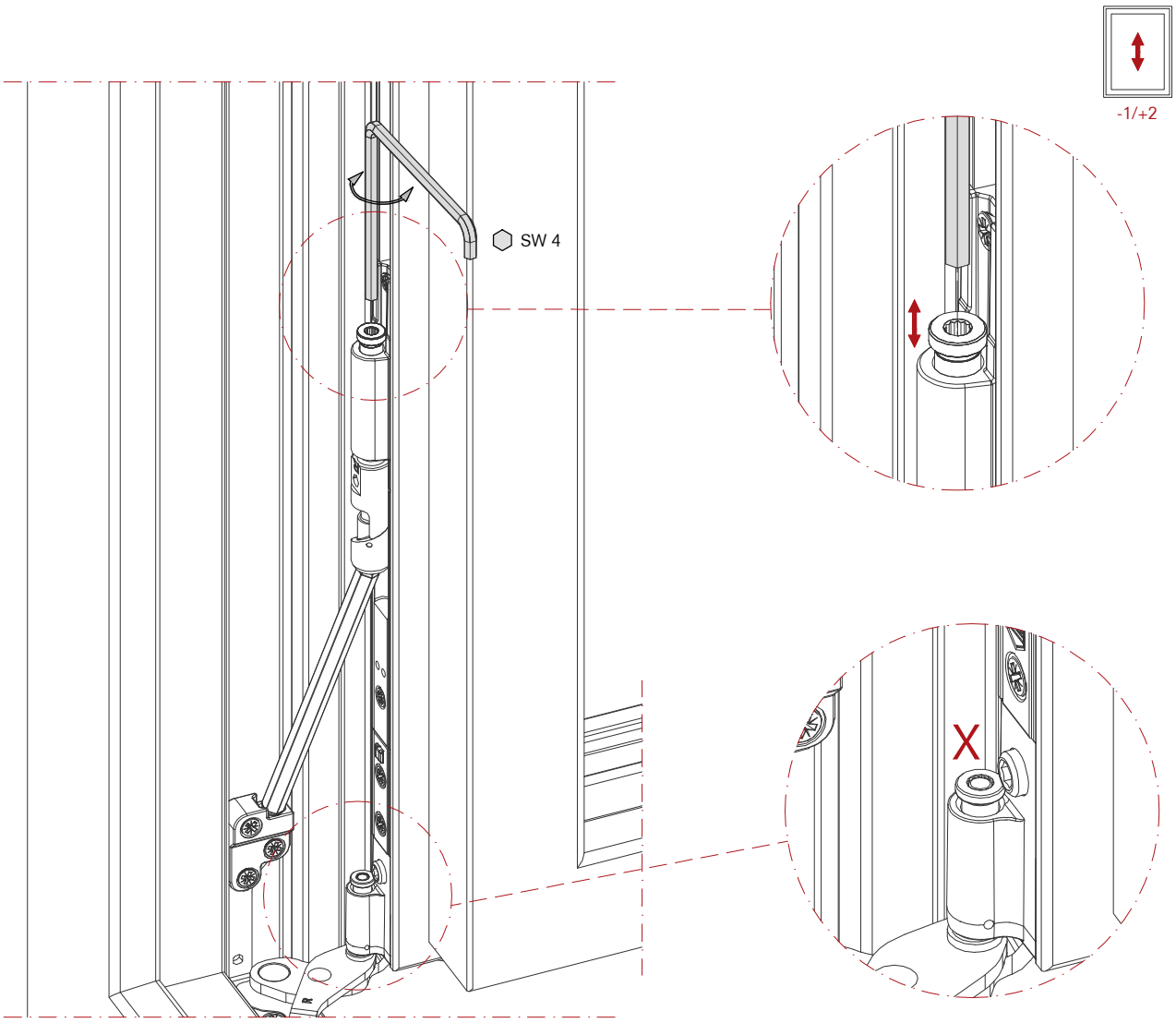
M65TB - 0003 DWG DXF

Height adjustment

Regolazione verticale

Ajuste vertical





⬡ Adjustment range -1/+2 mm with SW 4

X = No adjustment allowed here

L = Left opening
R = Right opening

⬡ Regolazione -1/+2 mm con SW 4

X = Nessuna regolazione consentita

L = Apertura sinistra
R = Apertura destra

⬡ Ajuste -1/+2 mm con SW 4

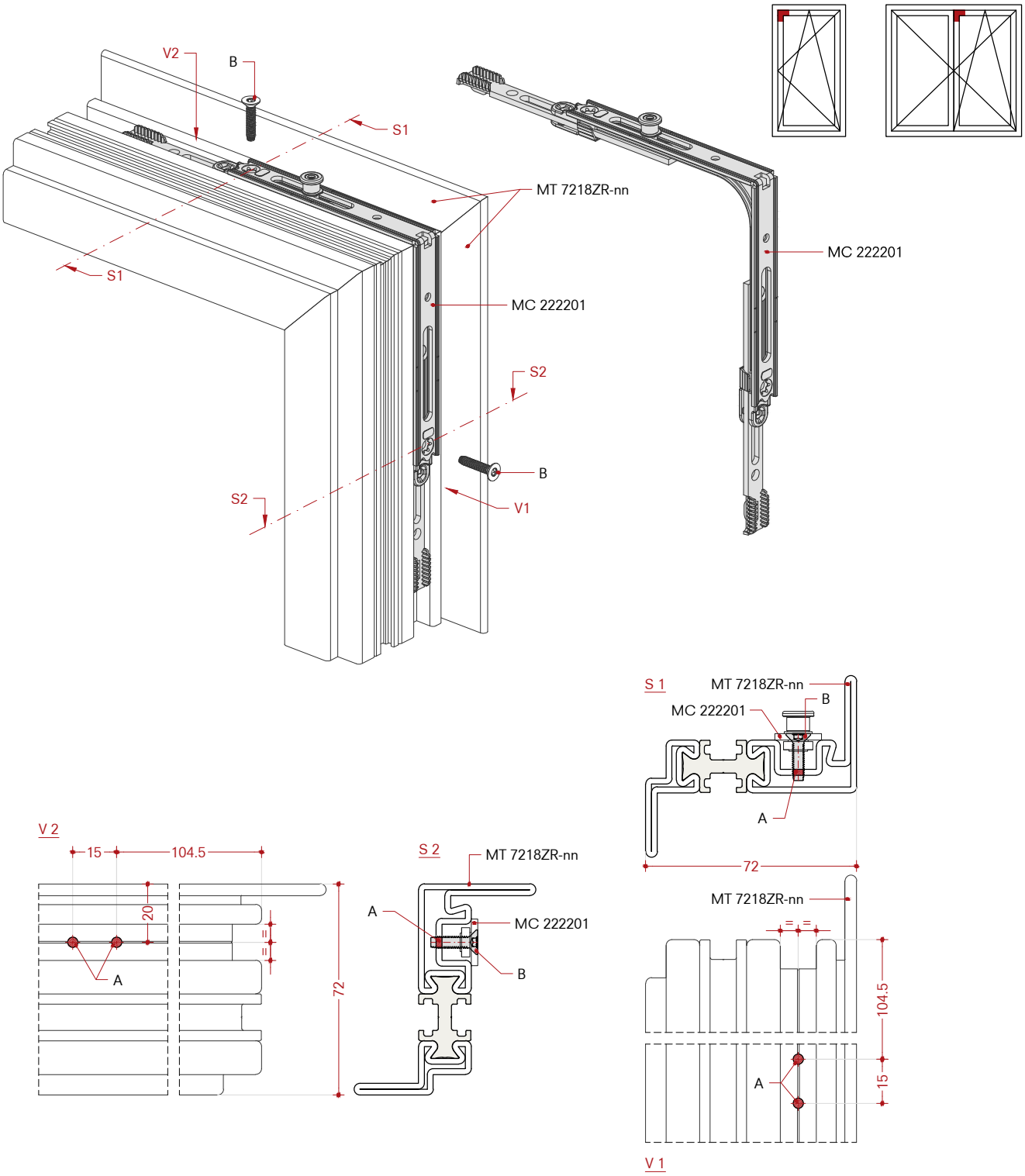
X = No se permiten ajustes

L = Apertura izquierda
R = Apertura derecha

Corner element standard with 1 locking cam
MC 222201

Azionamento angolare standard con 1 nottolino di bloccaggio
MC 222201

Accionamiento de esquina estándar con 1 rodillo de bloqueo
MC 222201



M65TB - 0005 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

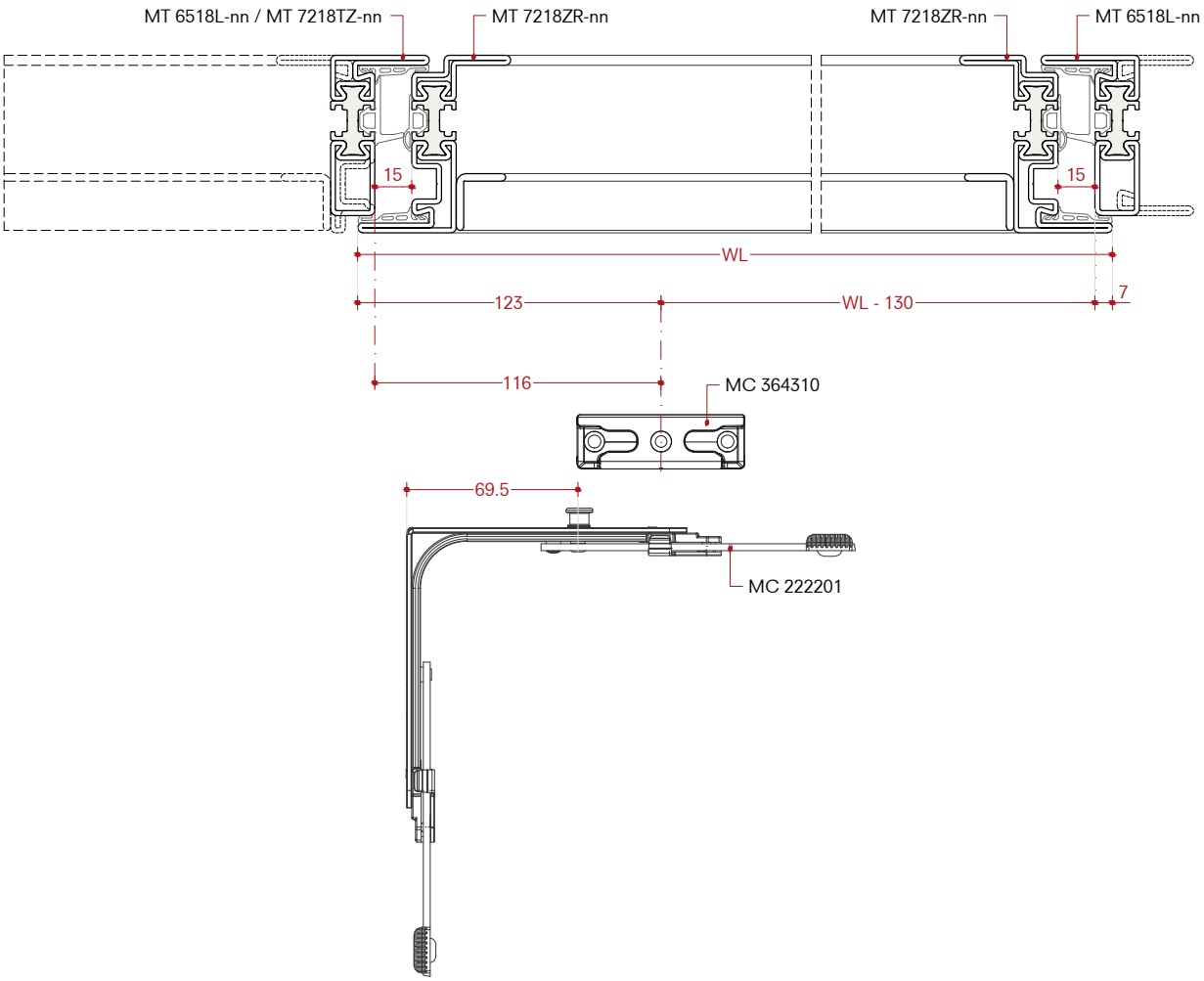
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

WL = Larghezza anta

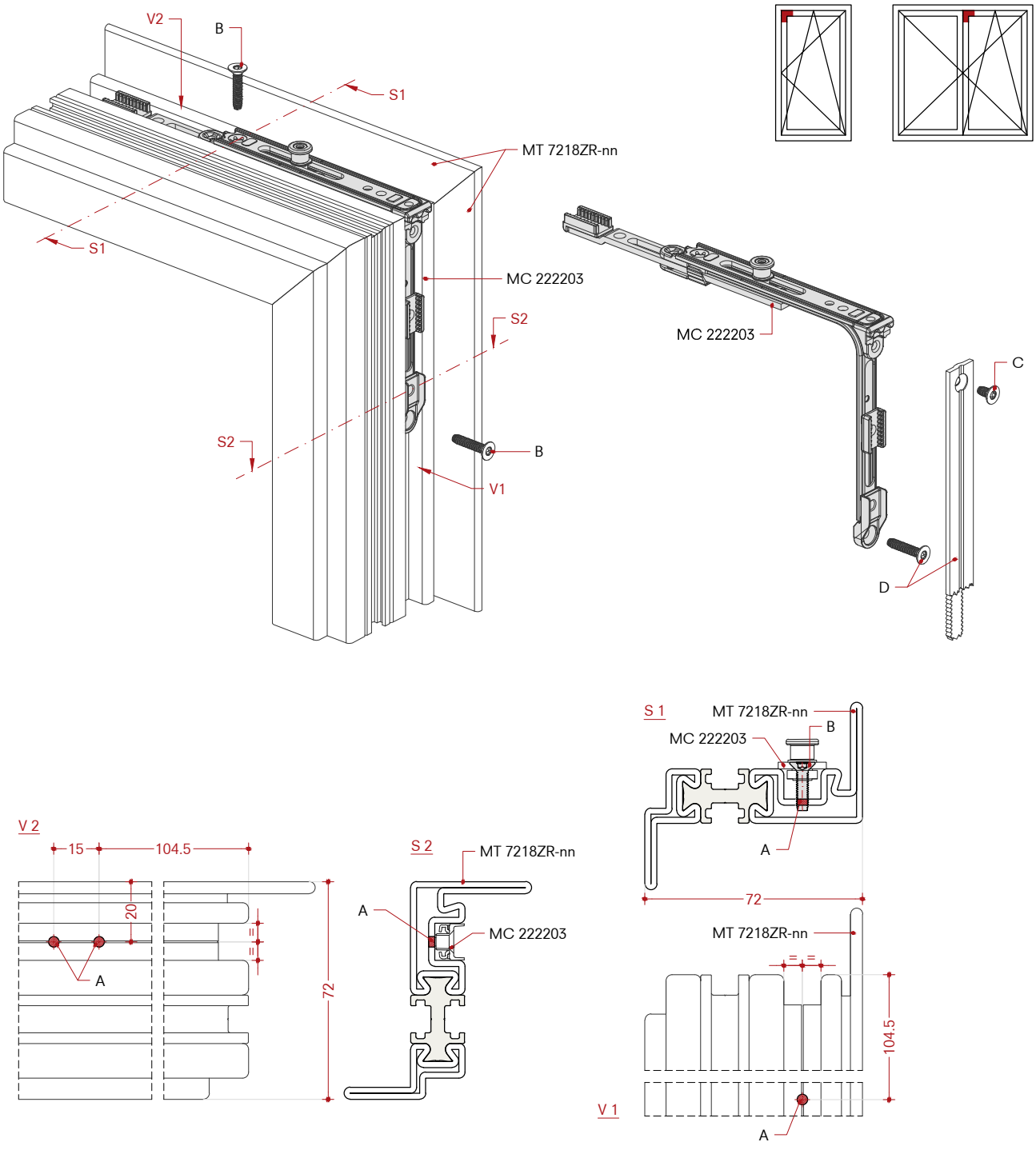
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

WL = Longitud hoja

Corner element short with 1 locking cams
MC 222203

Azionamento angolare corto con 1 nottolino di bloccaggio
MC 222203

Accionamiento de esquina corta con 1 rodillo de bloqueo
MC 222203



M65TB - 0007 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Countersunk head screw included (M4x8)
D) Please note: fasten groove base before support block

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Vite a testa svasata inclusa (M4x8)
D) Nota: fissare la base della scanalatura prima del blocco di supporto

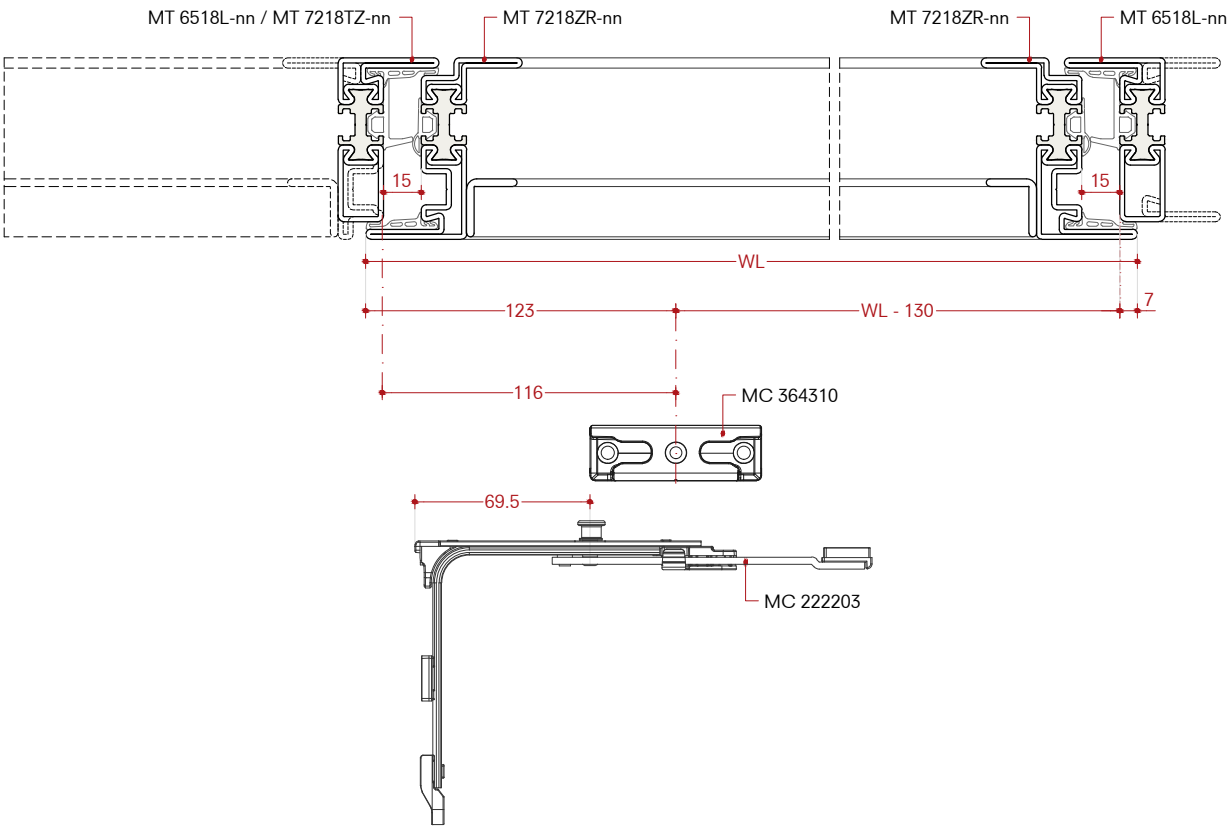
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Tornillo avellanado incluido (M4x8)
D) Nota: Fije la base de la ranura antes del bloque de soporte

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

WL = Larghezza anta

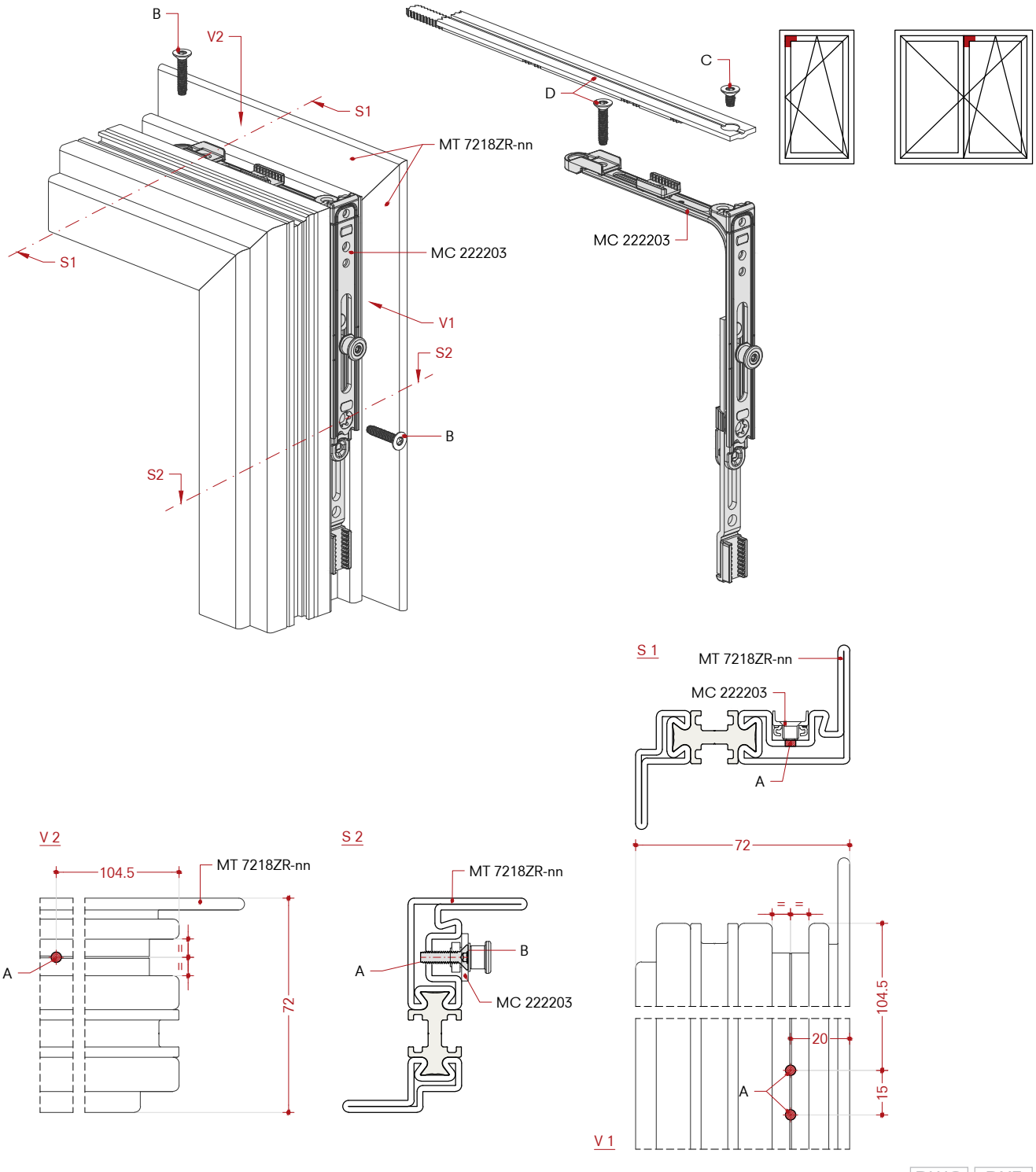
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

WL = Longitud hoja

Corner element short with 1 locking cams
MC 222203

Azionamento angolare corto con 1 nottolino di bloccaggio
MC 222203

Accionamiento de esquina corta con 1 rodillo de bloqueo
MC 222203



M65TB - 0008 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Countersunk head screw included (M4x8)
D) Please note: fasten groove base before support block

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Vite a testa svasata inclusa (M4x8)
D) Nota: fissare la base della scanalatura prima del blocco di supporto

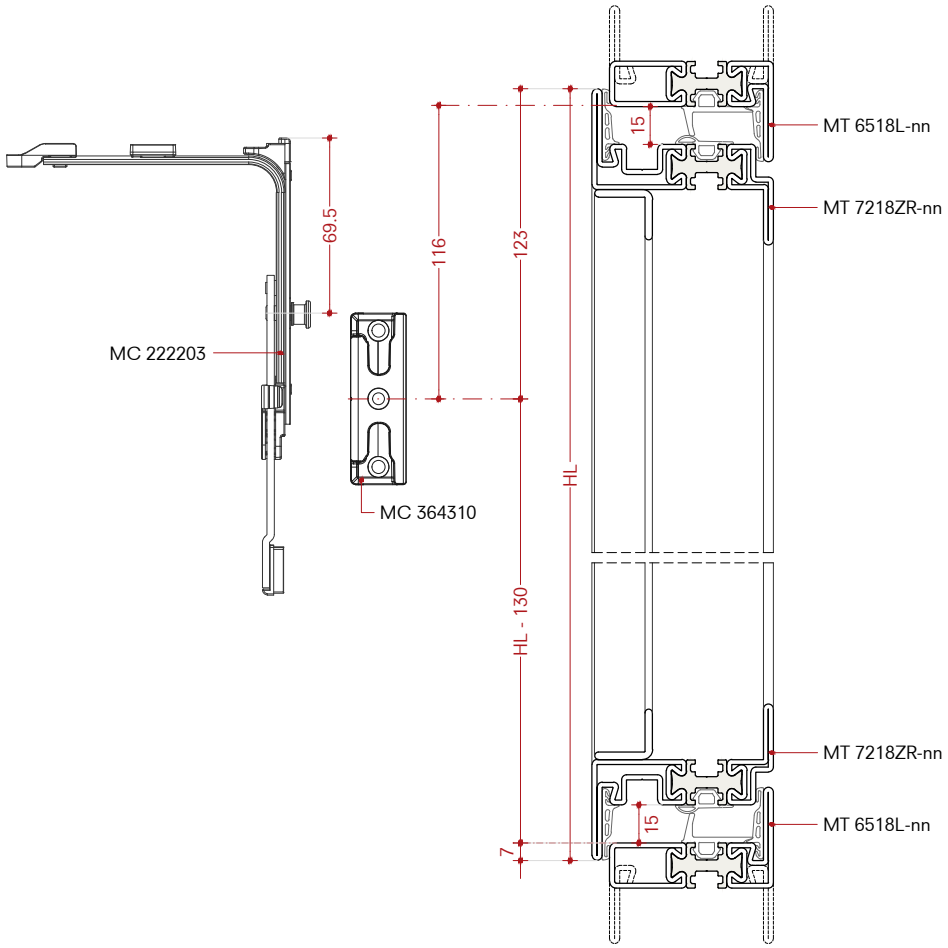
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Tornillo avellanado incluido (M4x8)
D) Nota: Fije la base de la ranura antes del bloque de soporte

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

WL = Larghezza anta

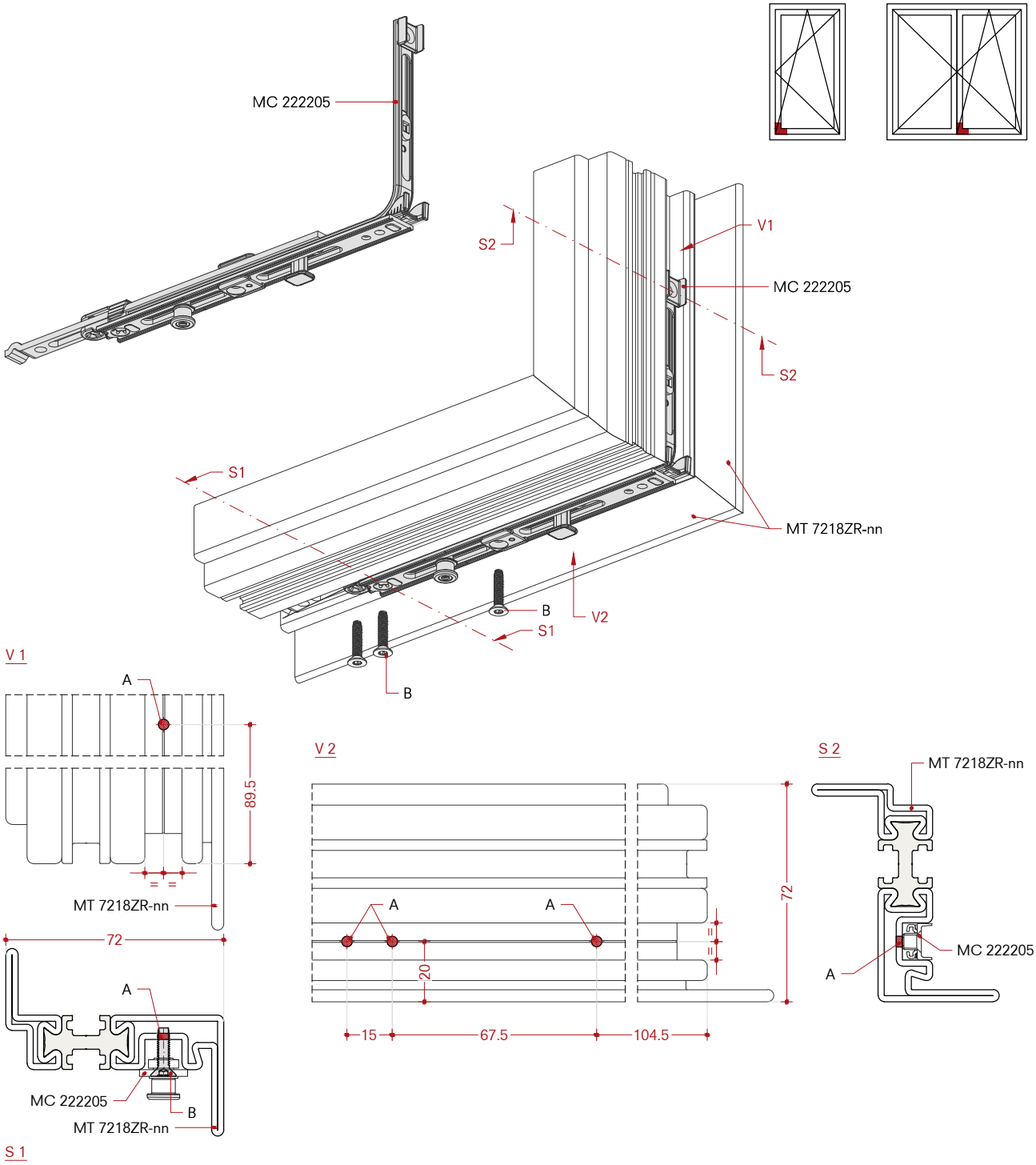
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

WL = Longitud hoja

Corner element horizontally extendable for fixed drive gear with 1 locking cam
MC 222205

Elemento angolare estensibile orizzontalmente per cremonese fisso con 1 nottolino di bloccaggio
MC 222205

Elemento de esquina extensible horizontalmente para piñón fijo con 1 rodillo de bloqueo
MC 222205



M65TB - 0009 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

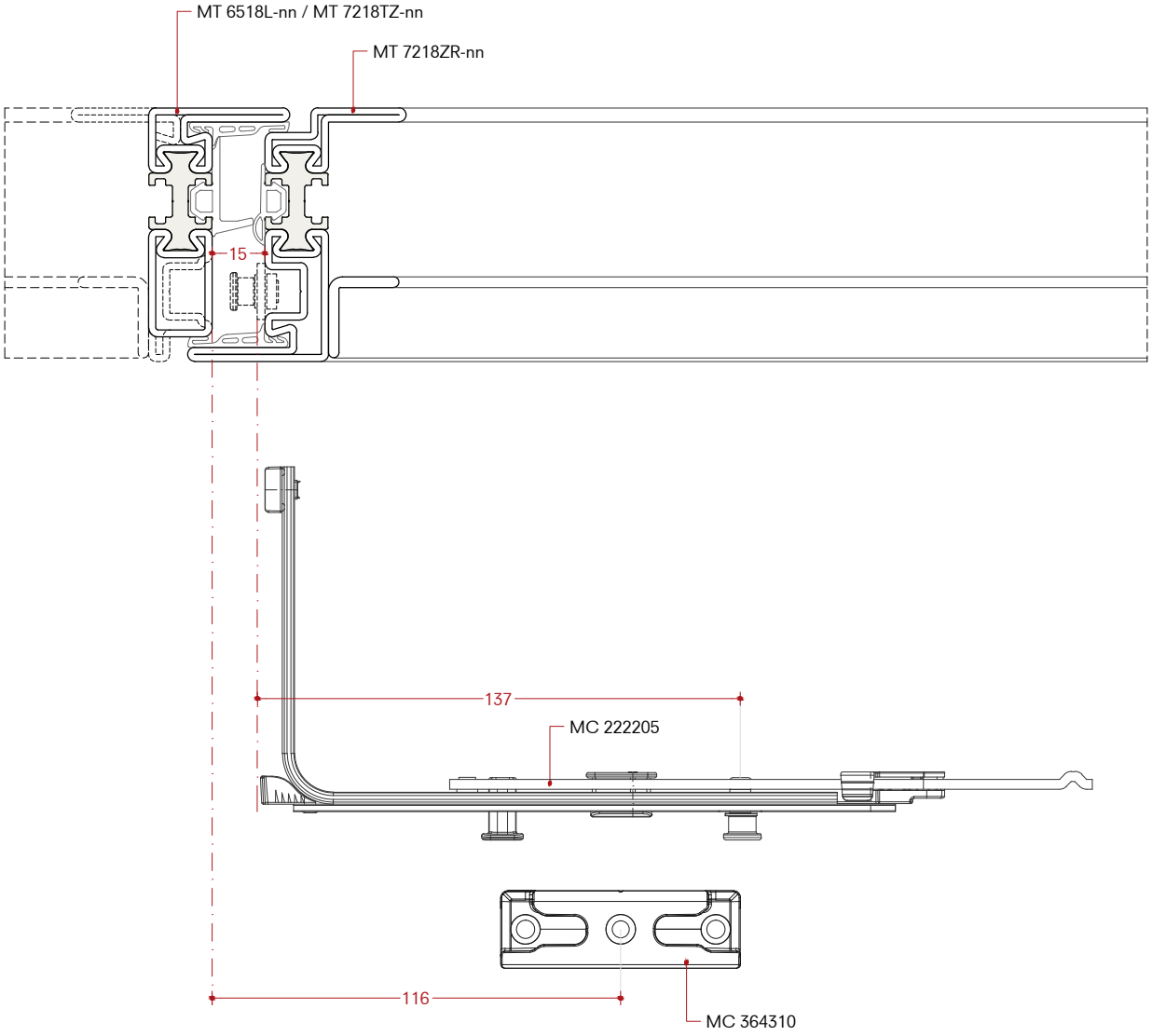
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

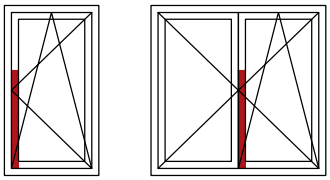
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

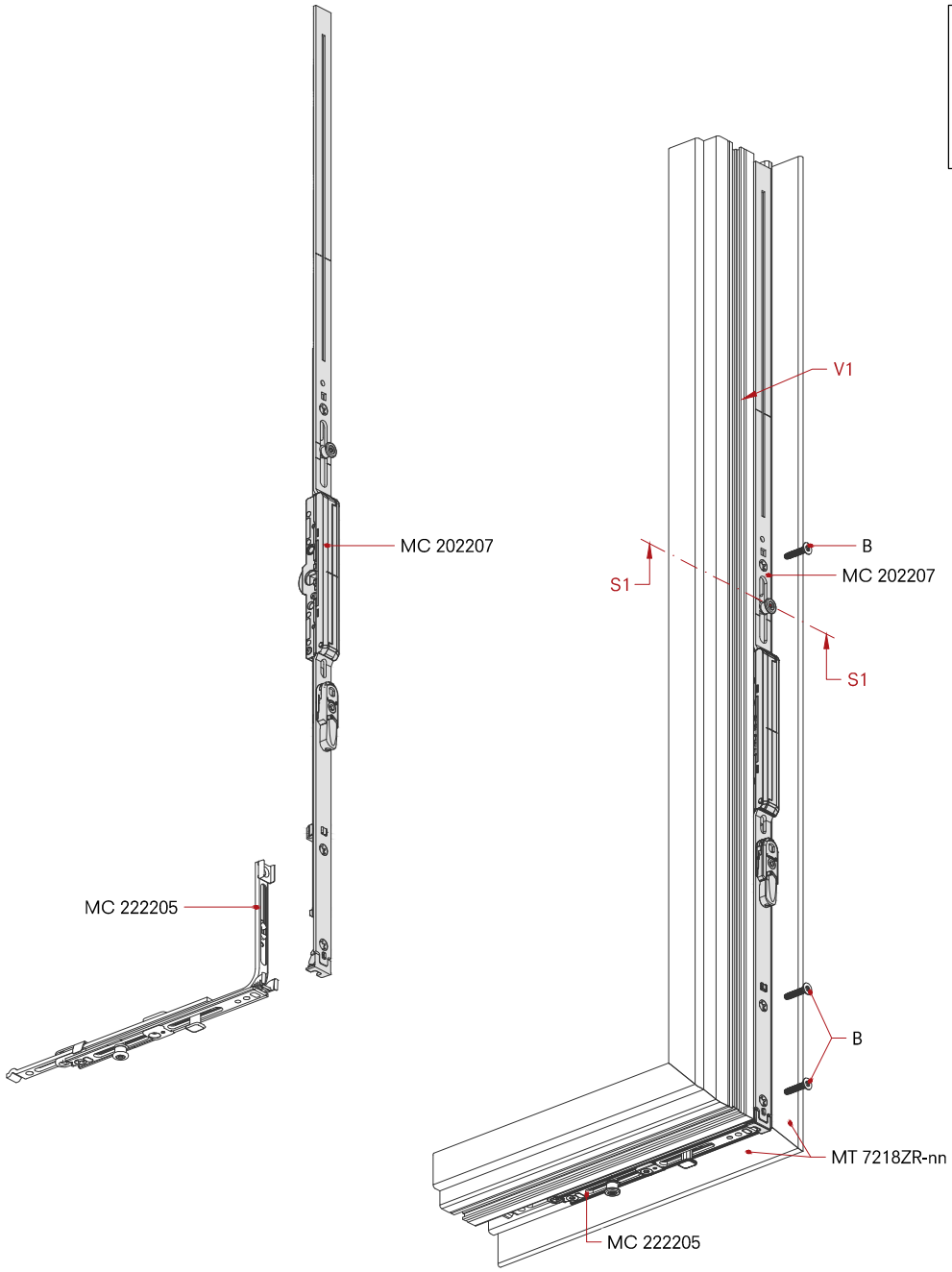
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

Tilt&Turn drive gear
Backset 6.5 mm
Fixed handle height
MC 202206 - MC 202207
MC 202208 - MC 202209
MC 202216 - MC 202737
MC 202738 - MC 207305

Cremonese
Entrata 6.5 mm
Altezza maniglia fissa
MC 202206 - MC 202207
MC 202208 - MC 202209
MC 202216 - MC 202737
MC 202738 - MC 207305

Falleba OB
Entrada 6.5 mm
Altura de la manija fija
MC 202206 - MC 202207
MC 202208 - MC 202209
MC 202216 - MC 202737
MC 202738 - MC 207305





M65TB - 0010 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

X = Position screw connection drive gear

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

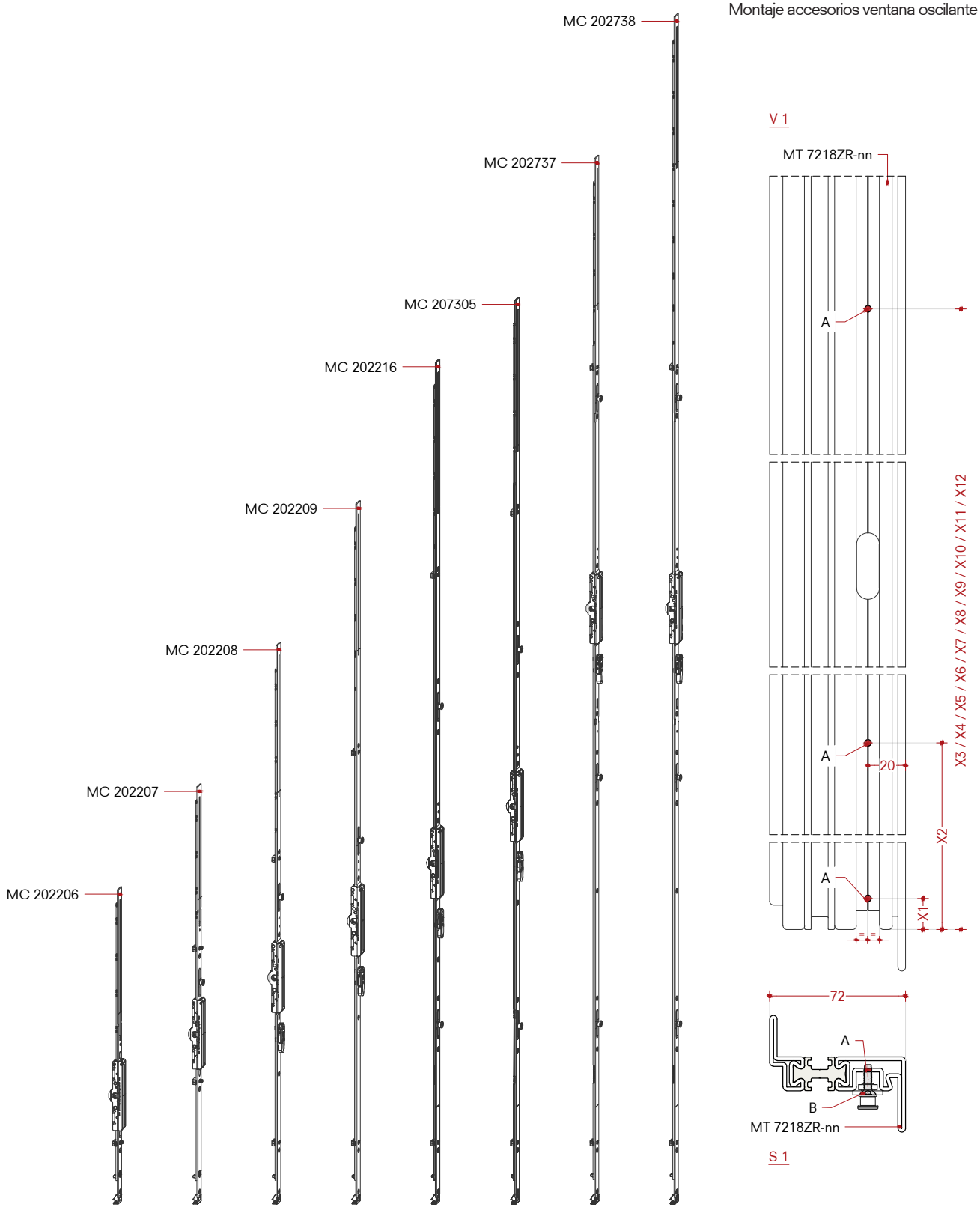
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

X = Posizione vite di fissaggio del cremonese

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

X = Posición del tornillo de fijación del engranaje

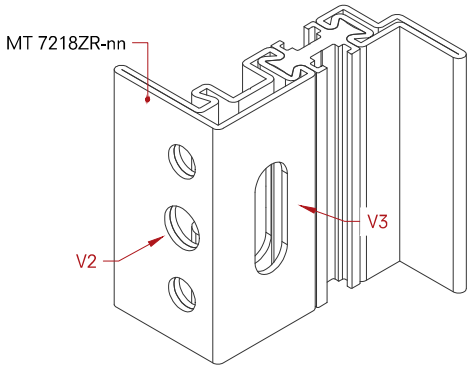


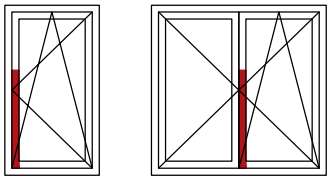
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
MC 202206	16.5	89.5	-	-	-	-	-	-	-	-	-	-
MC 202207	16.5	89.5	427	-	-	-	-	-	-	-	-	-
MC 202208	16.5	89.5	226.5	472	615	-	-	-	-	-	-	-
MC 202209	16.5	89.5	326.5	572	683	866.5	-	-	-	-	-	-
MC 202216	16.5	89.5	268	358	426.5	672	828	918	1117	-	-	-
MC 207305	16.5	89.5	268	358	526.5	772	928	1018	2227	-	-	-
MC 202737	16.5	89.5	268	358	548	703	793	861.5	1122	1386	1463	-
MC 202738	16.5	89.5	268	358	548	703	793	861.5	1122	1386	1463	1727

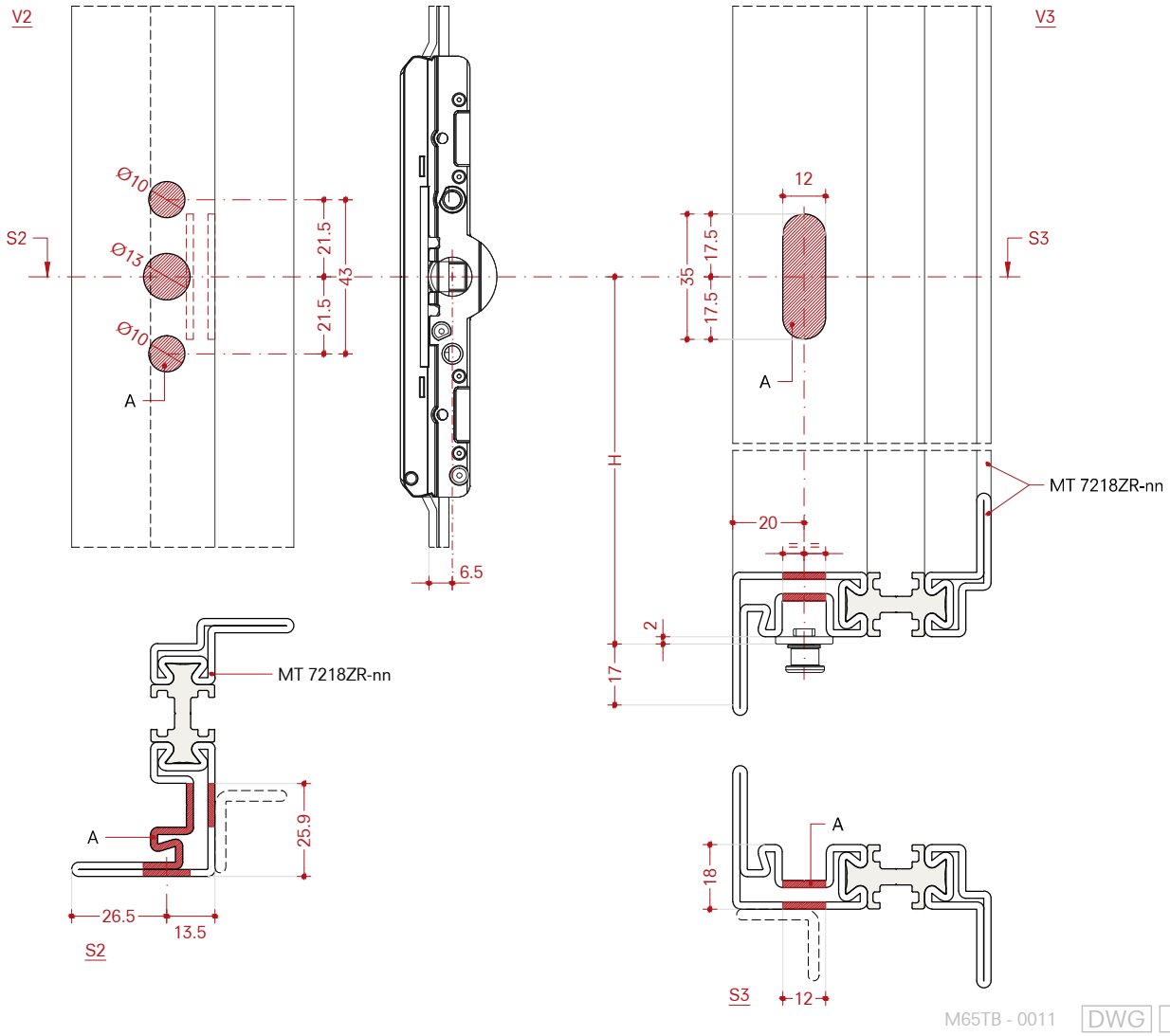
Handle position
Tilt&Turn window
Hardware 6.5 mm backset
Fixed handle height

Posizione maniglia
Finestra anta ribalta
Entrata 6.5 mm
Altezza maniglia fissa

Posición de la manija
ventana oscilante
Entrada 6.5 mm
Altura de la manija fija







M65TB - 0011 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Cut off profile
H) Fixed handle height H ≥ 1/3 leaf height
L) Length drive gear
T) Maximum cut drive gear
Z) Position locking cam

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Taglio del profilo
H) Altezza maniglia fissa H ≥ 1/3 altezza anta
L) Lunghezza cremonese
T) Massimo taglio del cremonese
Z) Posizione della camma di bloccaggio

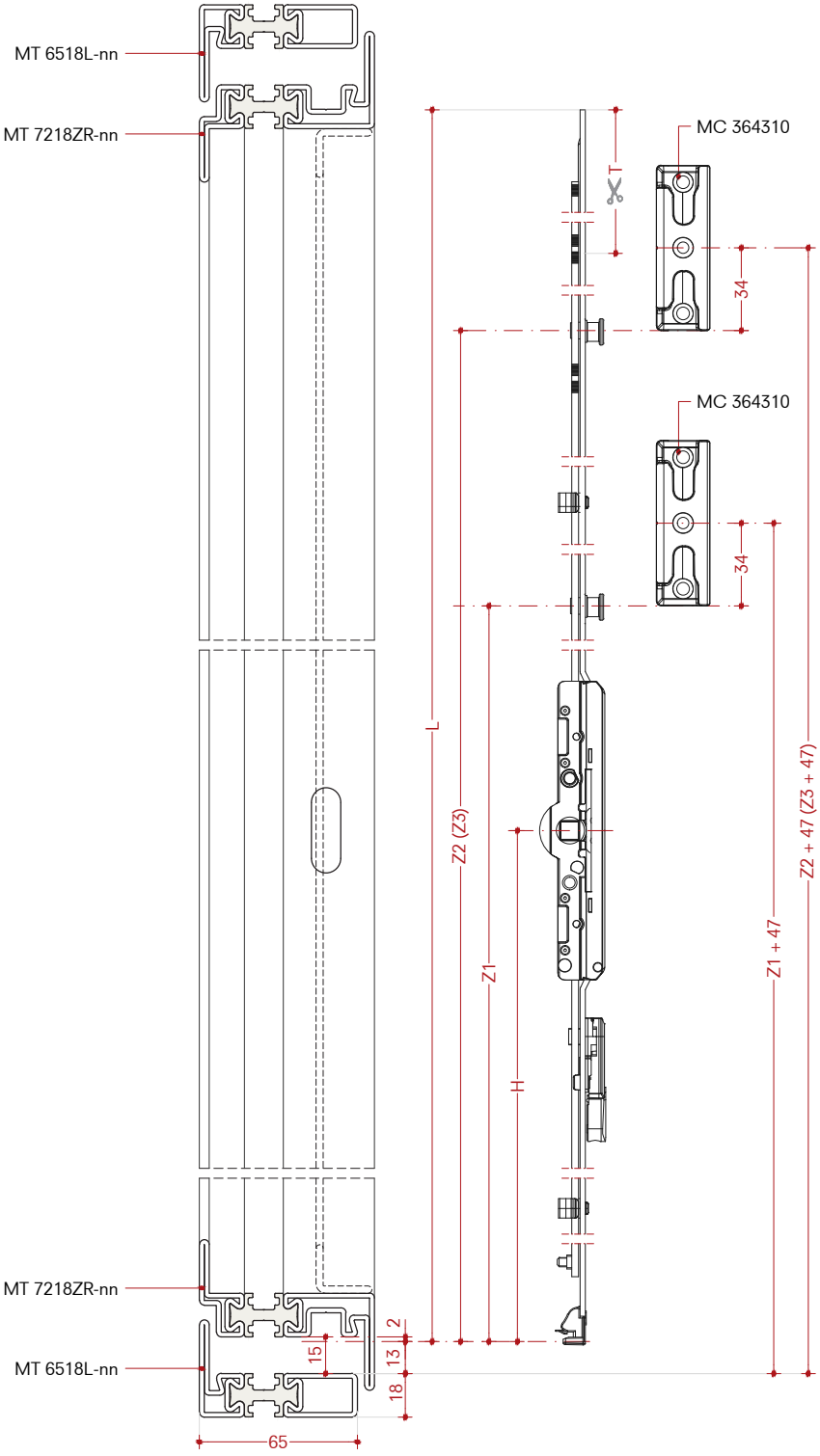
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Fresado de perfil
H) Altura de la manija fija
H ≥ 1/3 de la altura de la hoja
L) Longitud del engranaje
T) Corte de engranaje máximo
Z) Posición de la leva de bloqueo

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo

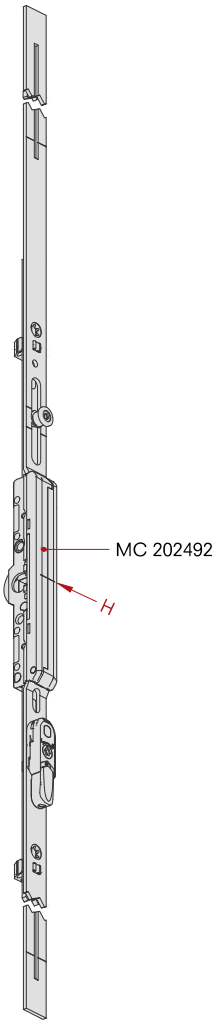


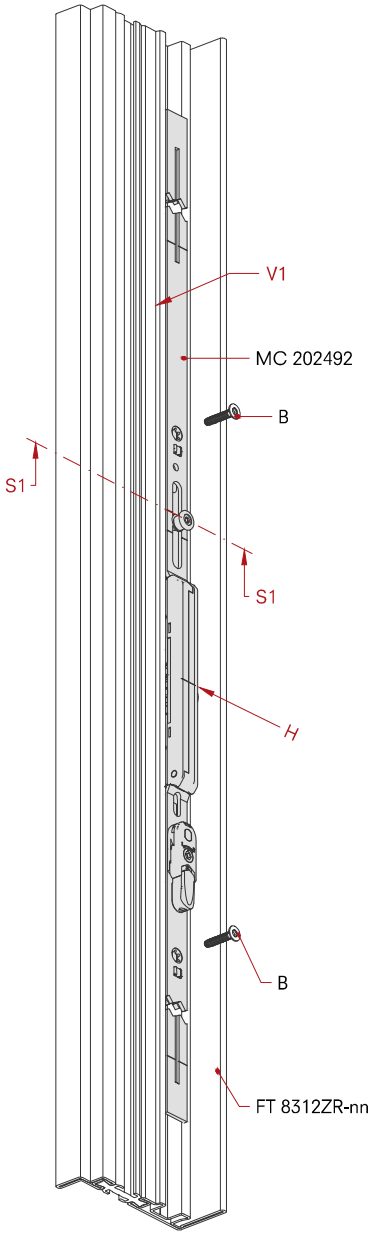
	H	L	T	Z1	Z2	Z3
MC 202206	190	555	220	-	-	-
MC 202207	300	736.5	190.5	395	-	-
MC 202208	400	986.5	260.5	540	-	-
MC 202209	500	1236.5	260.5	640	-	-
MC 202216	600	1486.5	260.5	315	875	-
MC 207305	700	1596.5	260.5	315	975	-
MC 202737	1050	1846.5	260.5	315	750	1420
MC 202738	1050	2096.5	260.5	315	750	1420

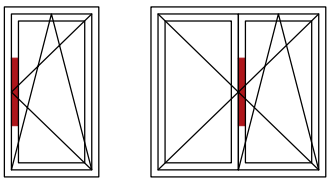
Tilt&Turn drive gear
Backset 6.5 mm
Variable handle height
MC 202491 - MC 202492
MC 202494 - MC 202205

Cremonese
Entrata 6.5 mm
Altezza maniglia variabile
MC 202491 - MC 202492
MC 202494 - MC 202205

Falleba OB
Entrada 6.5 mm
Altura de la manija variable
MC 202491 - MC 202492
MC 202494 - MC 202205







M65TB - 0012 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
H) Variable handle height H ≥ 1/3 leaf height
T) Maximum cut drive gear

X = Position screw connection drive gear

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

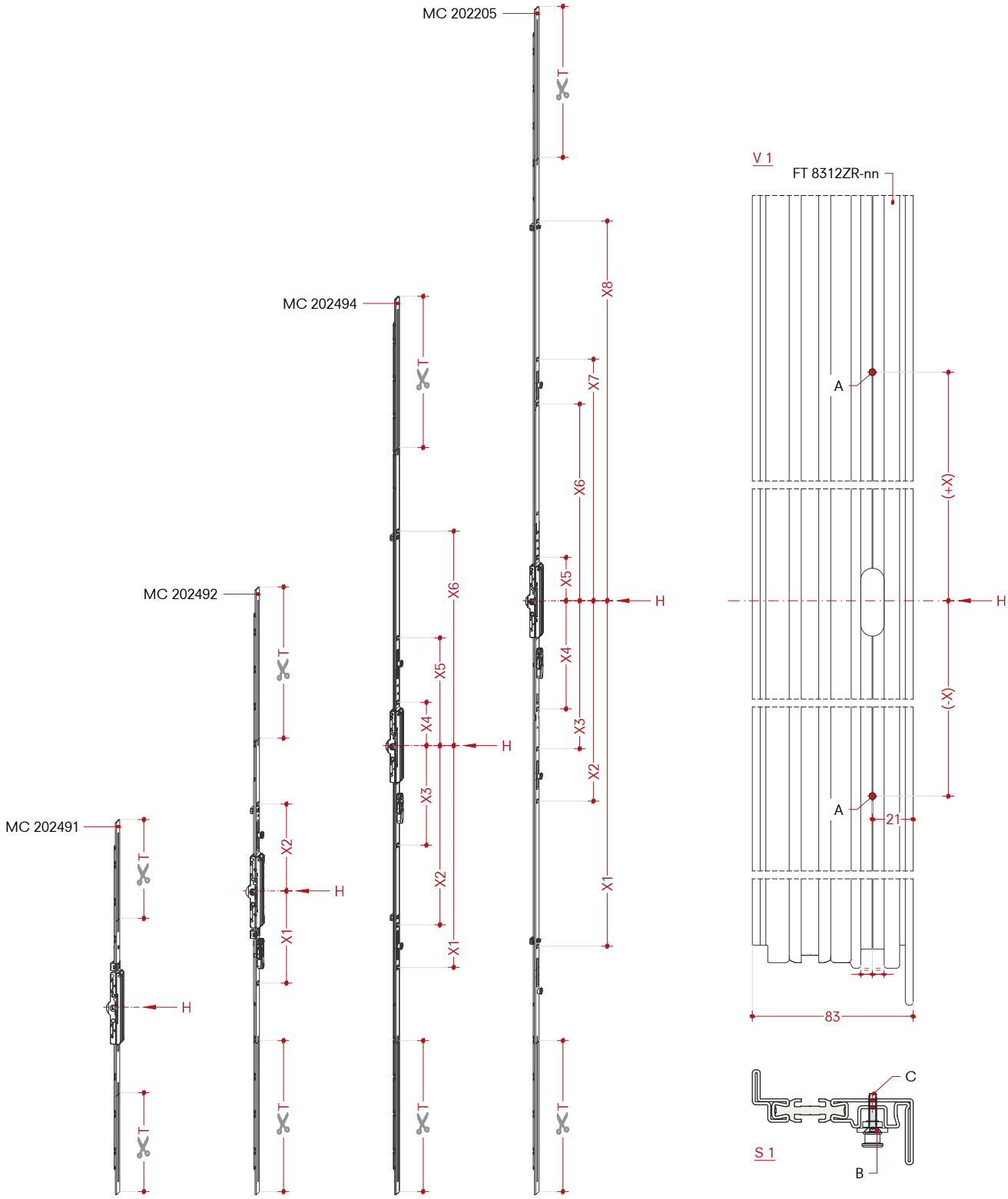
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
H) Altezza maniglia variabile H ≥ 1/3 altezza anta
T) Massimo taglio del cremonese

X = Posizione vite di fissaggio del cremonese

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
H) Altura de la manija variable
H ≥ 1/3 de la altura de la hoja
T) Corte de engranaje máximo

X = Posición del tornillo de fijación del engranaje



	T	X1	X2	X3	X4	X5	X6	X7	X8
MC 202491	170	-	-	-	-	-	-	-	-
MC 202492	260	-158.5	149	-	-	-	-	-	-
MC 202494	260	-381.5	-308.5	-171.5	74	185	368.5	-	-
MC 202205	260	-595	-345	-255	-186.5	74	338	415	653

Templates for Tilt&Turn fittings

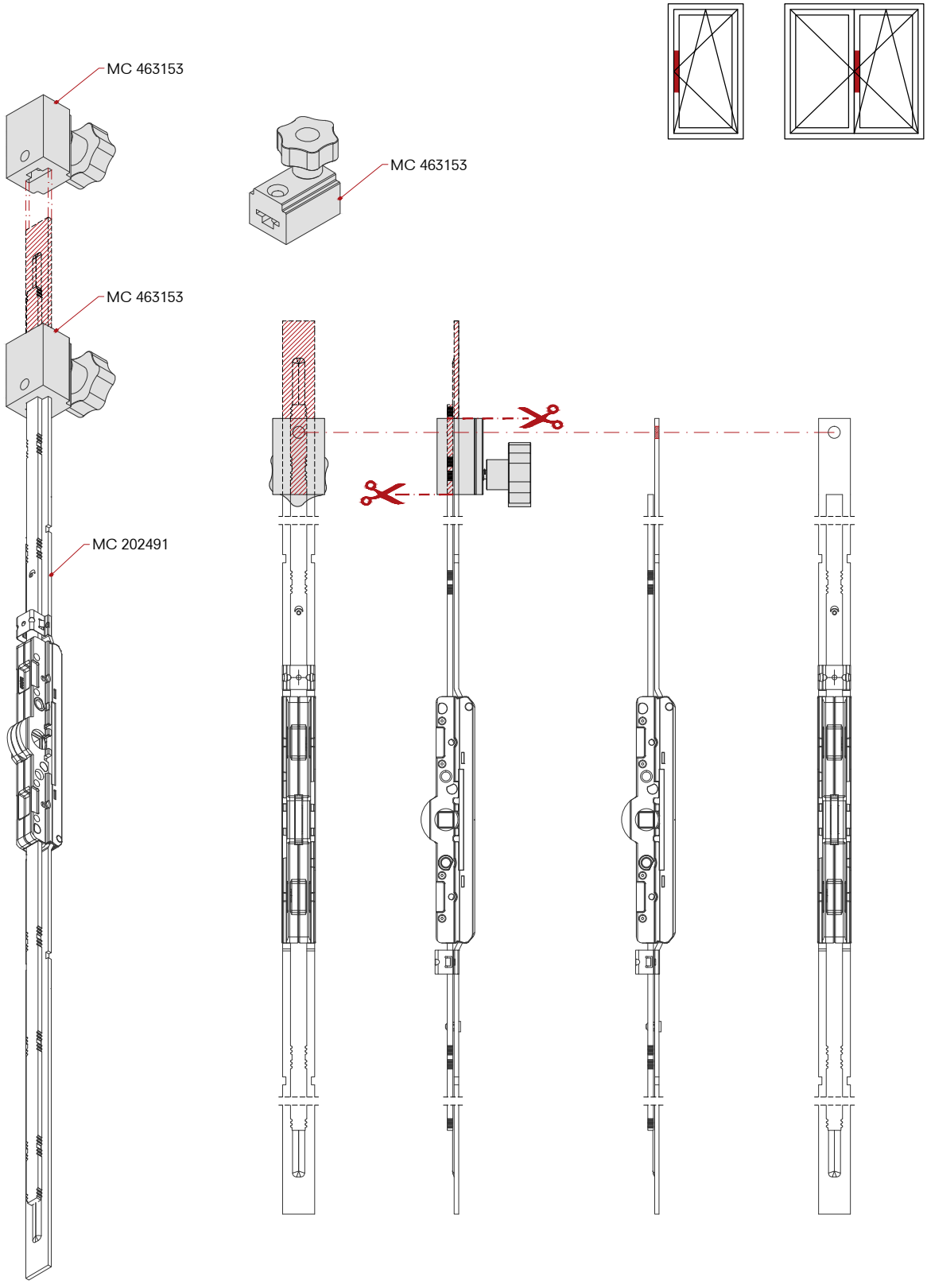
MC 463153

Dime per ferramenta anta ribalta

MC 463153

Plantilla para herrajes para ventana oscilante

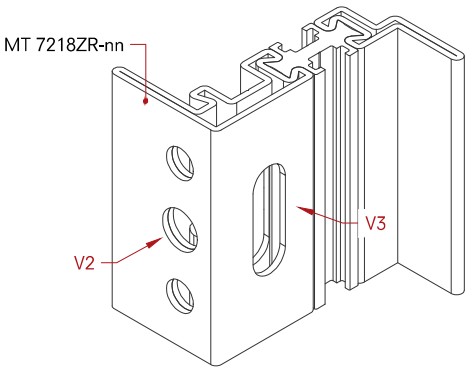
MC 463153

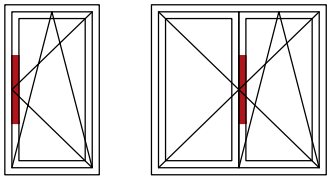


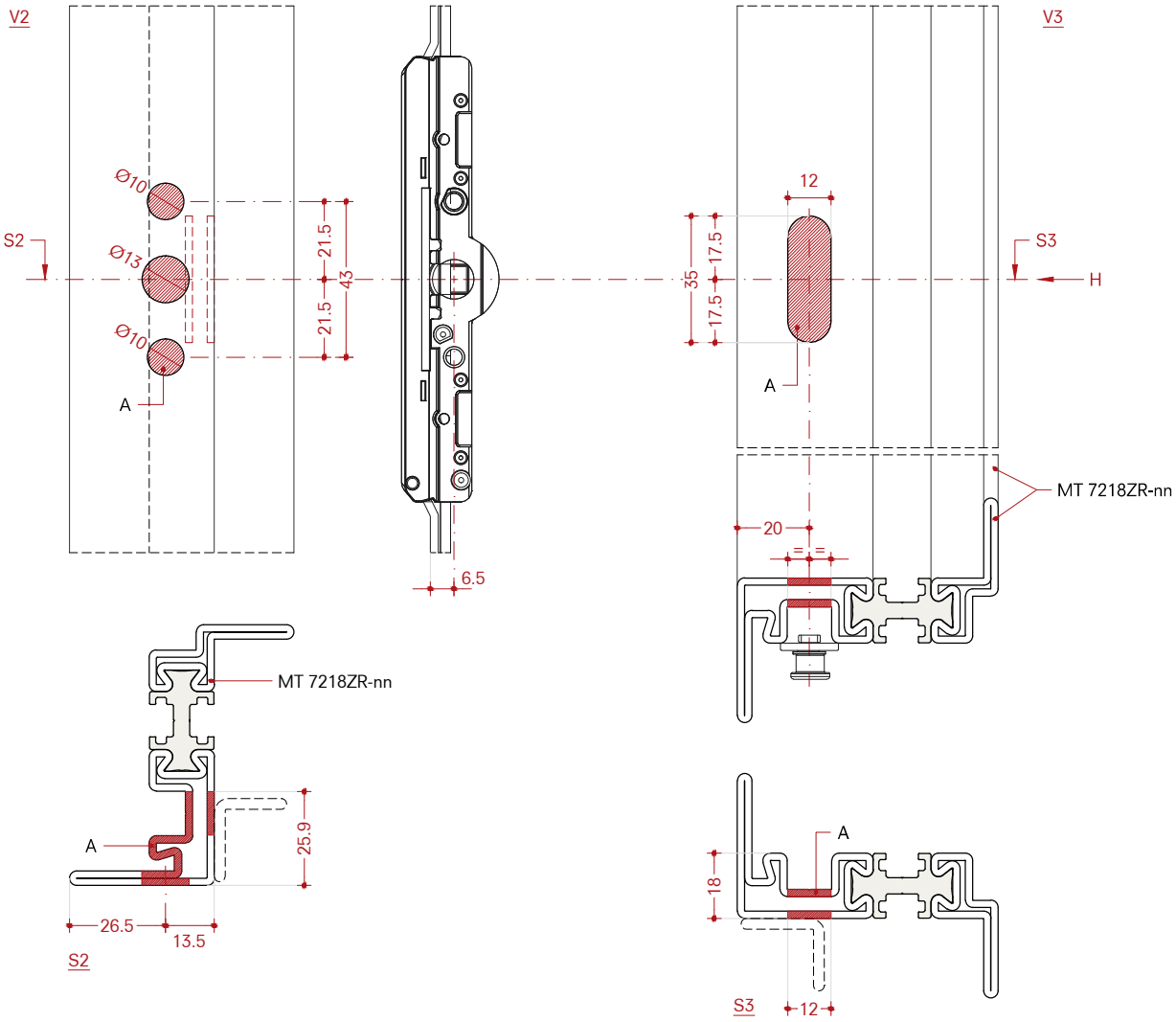
Handle position
Tilt&Turn window
Hardware 6.5 mm backset
Variable handle height

Posizione maniglia
Finestra anta ribalta
Entrata 6.5 mm
Altezza maniglia variabile

Posición de la manija
ventana oscilante
Entrada 6.5 mm
Altura de la manija variable







M65TB - 0013 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Cut off profile
H) Variable handle height H ≥ 1/3 leaf height
L) Length drive gear
Z) Position locking cam

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Taglio del profilo
H) Altezza maniglia variabile H ≥ 1/3 altezza anta
L) Lunghezza cremonese
Z) Posizione della camma di bloccaggio

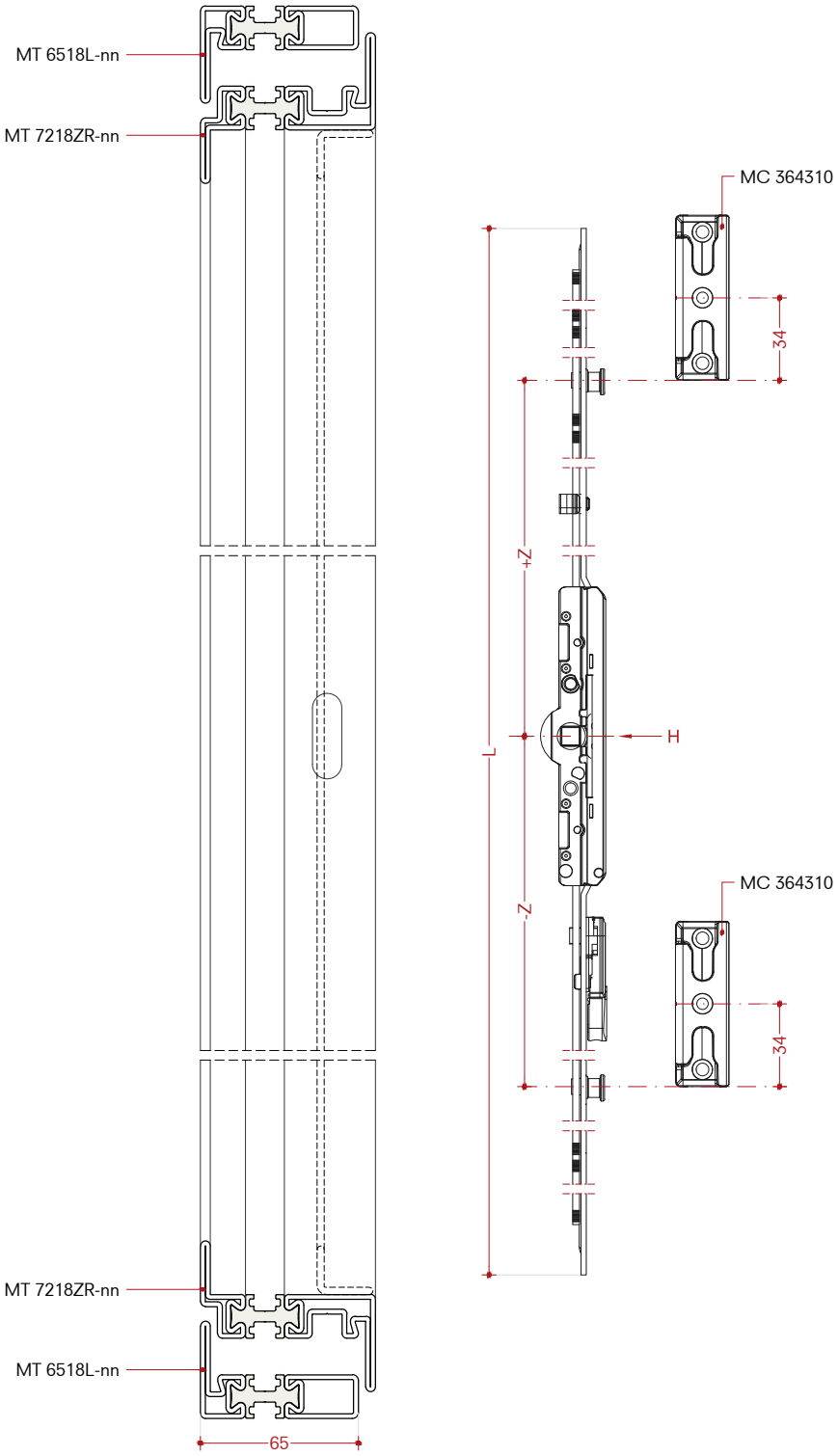
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Fresado de perfil
H) Altura de la manija variable
H ≥ 1/3 de la altura de la hoja
L) Longitud del engranaje
Z) Posición de la leva de bloqueo

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo

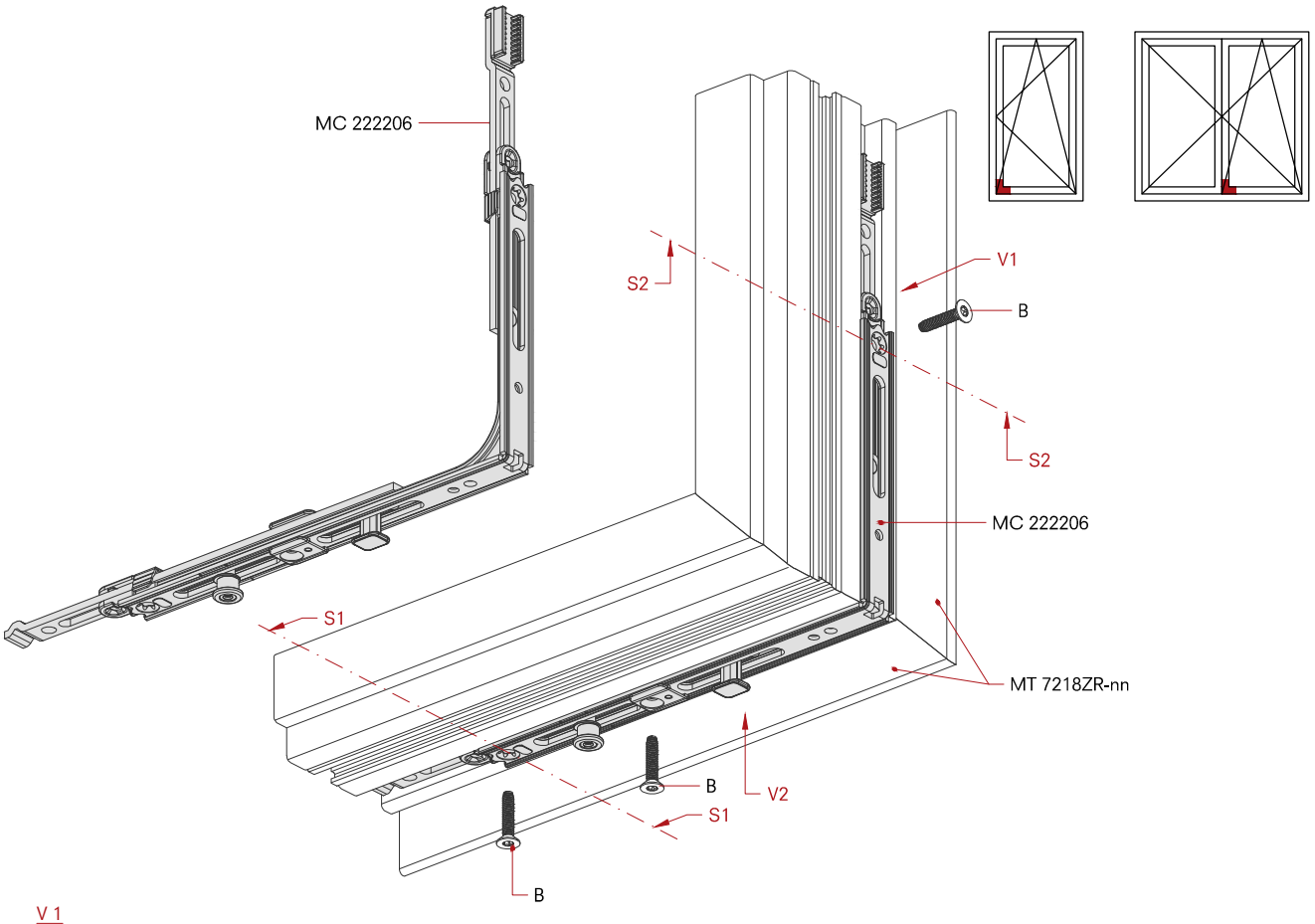


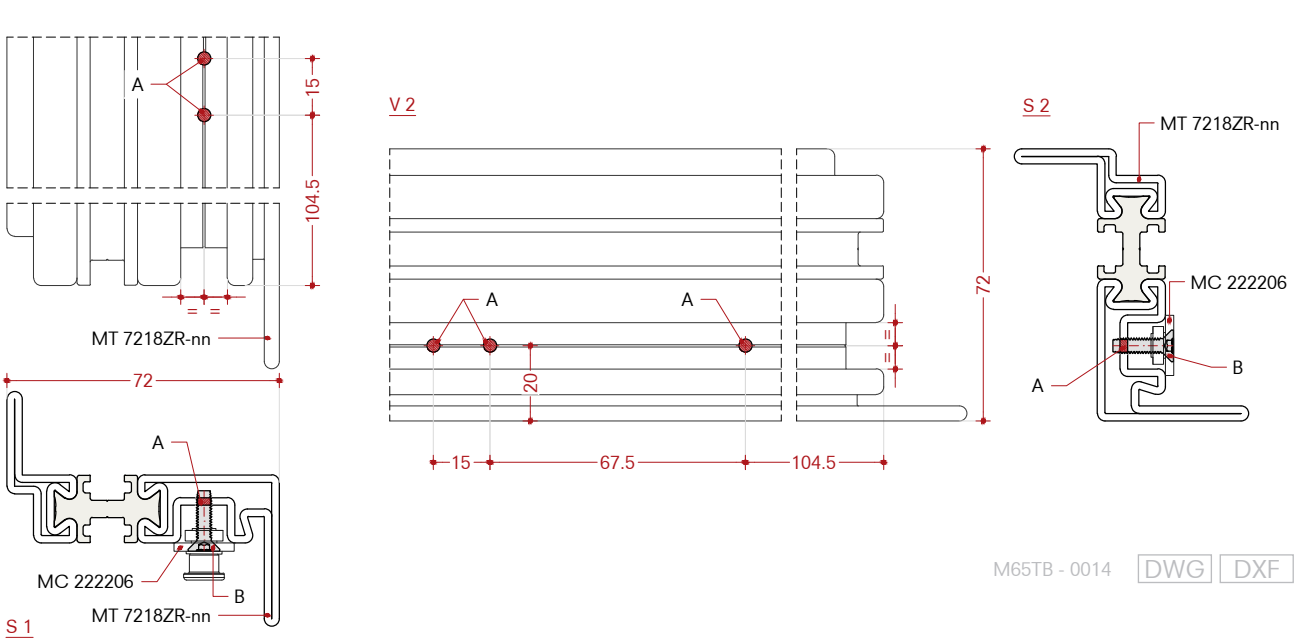
	L	Z1	Z2	Z3
MC 202491	640	-	-	-
MC 202492	1040	95	-	-
MC 202494	1540	-343	140	-
MC 202205	2040	-640	-300	370

Corner element horizontally extendable for variable drive gear with 1 locking cam
MC 222206

Elemento angolare estensibile orizzontalmente per cremonese variabile con 1 nottolino di bloccaggio
MC 222206

Elemento de esquina extensible horizontalmente para piñón variable con 1 rodillo de bloqueo
MC 222206





M65TB - 0014 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

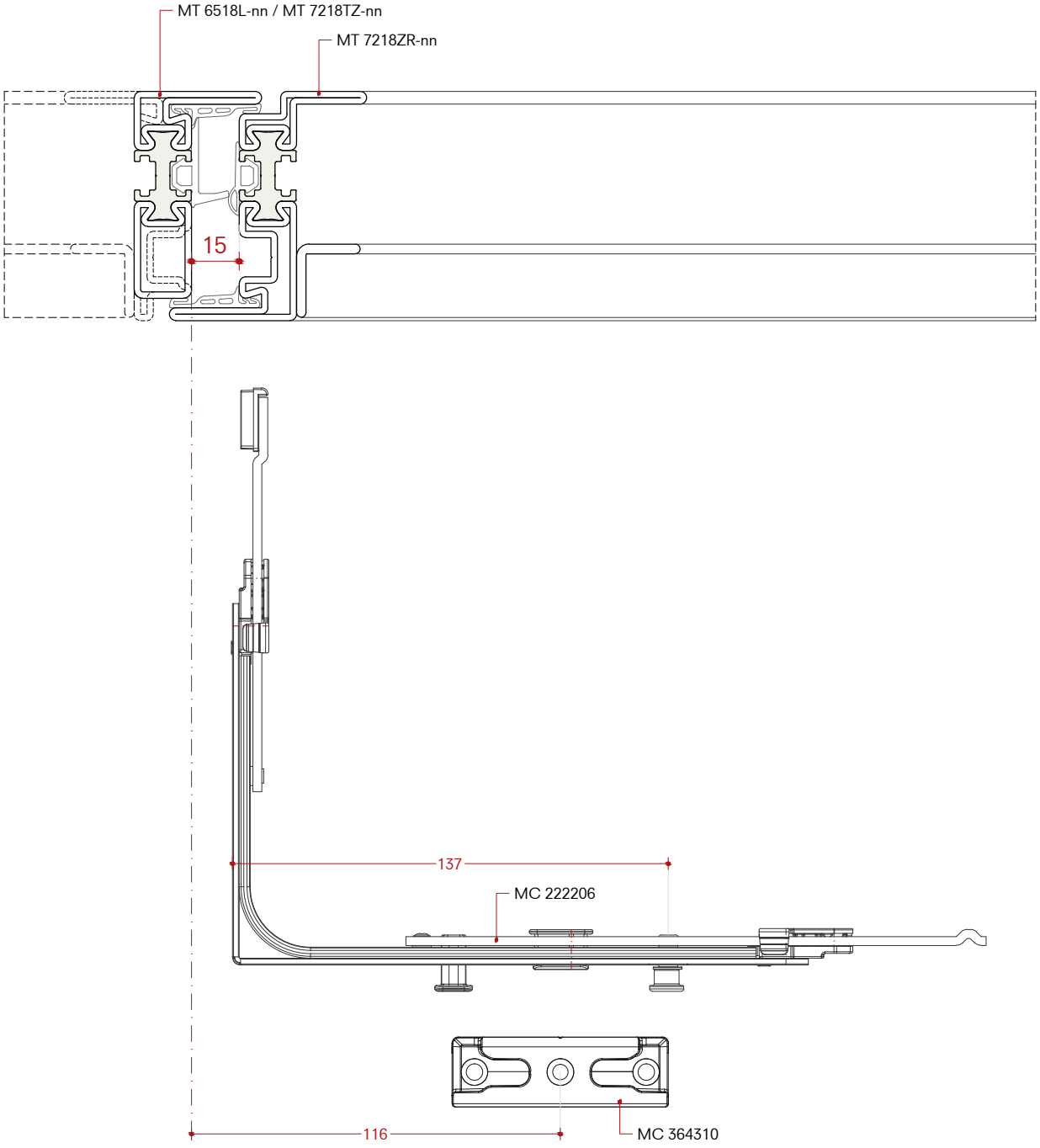
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

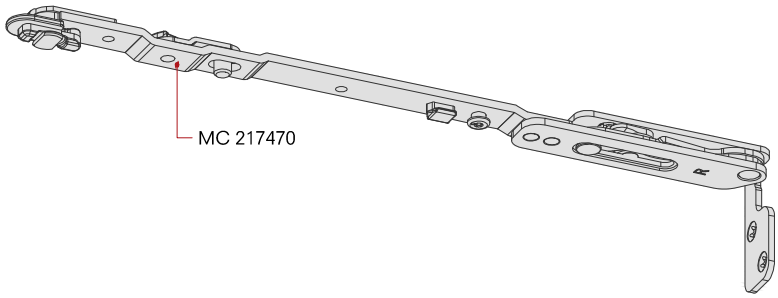
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

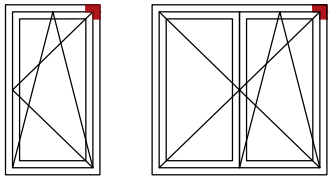
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

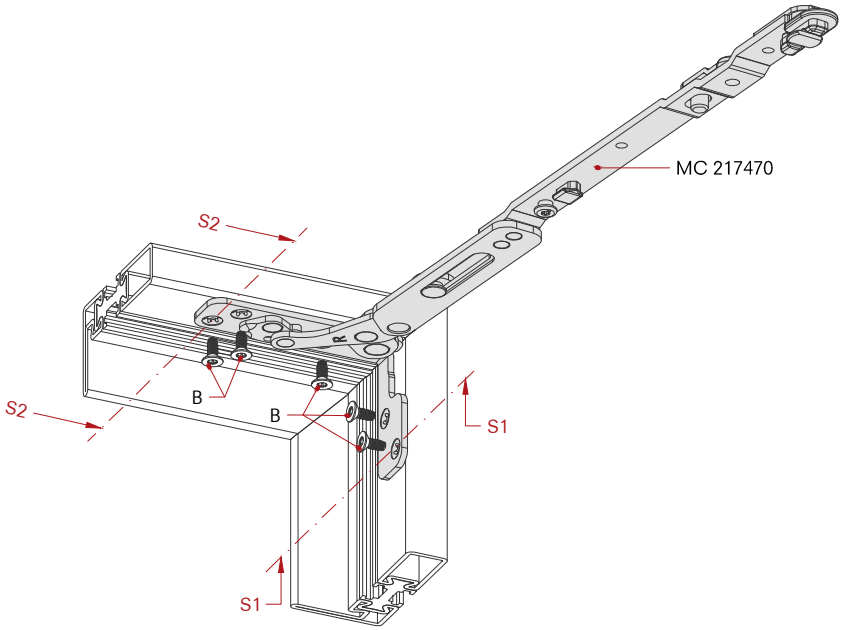
Tilt&Turn scissor stay arm with bearing
Sash rebate width ≤ 800 mm
MC 217470 R
MC 217471 L

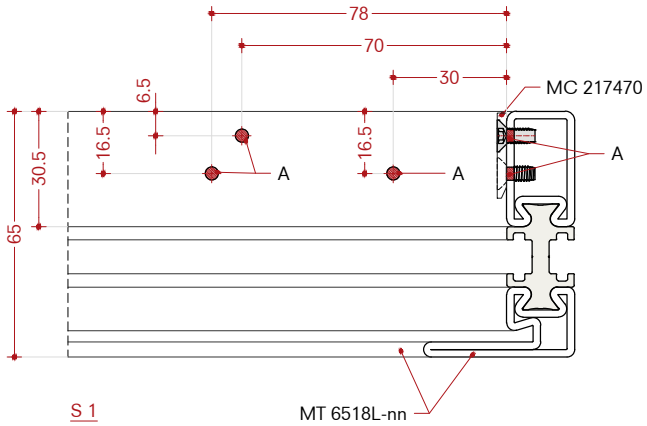
Braccio di supporto a forbice inclinabile e girevole con cuscinetto
Larghezza battuta anta ≤ 800 mm
MC 217470 R
MC 217471 L

Brazo de soporte de tijera inclinable y giratorio con rodamiento
Ancho de rebaje de puerta ≤ 800 mm
MC 217470 R
MC 217471 L

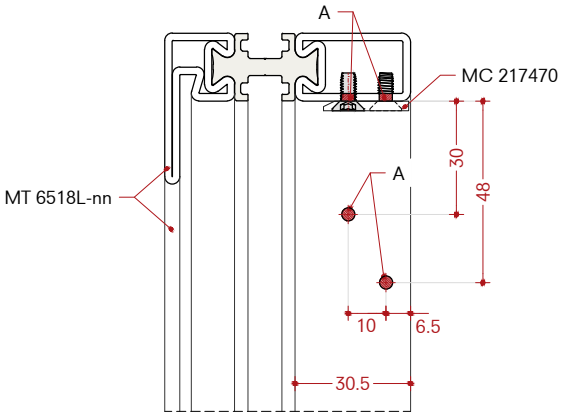








S 1



S 2

M65TB - 0016 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x10
C) Cut the screw

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x10
C) Accorciare la vite

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x10
C) Recortar tornillo

L = Apertura izquierda
R = Apertura derecha

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Regolazione orizzontale

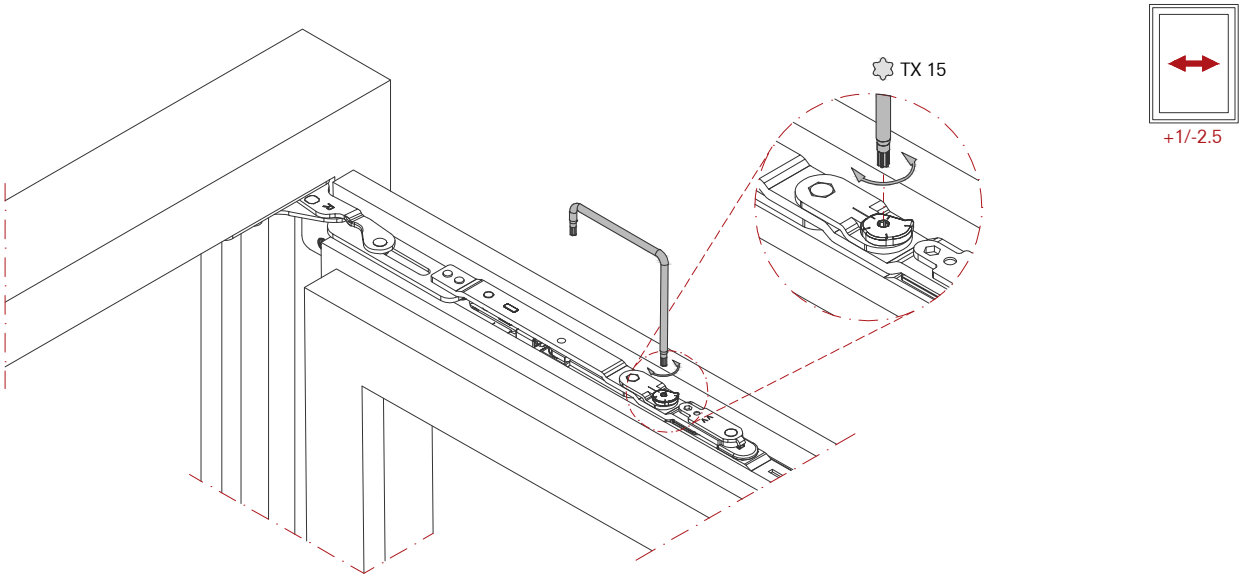
Regolazione +1/-2.5 mm con TX 15

L = Apertura sinistra
R = Apertura destra

Ajuste horizontal

Ajuste +1/-2.5 mm con TX 15

L = Apertura izquierda
R = Apertura derecha



Pressure adjustment

Adjustment range ±0.7 mm with TX 15

L = Left opening
R = Right opening

Regolazione pressione di contatto

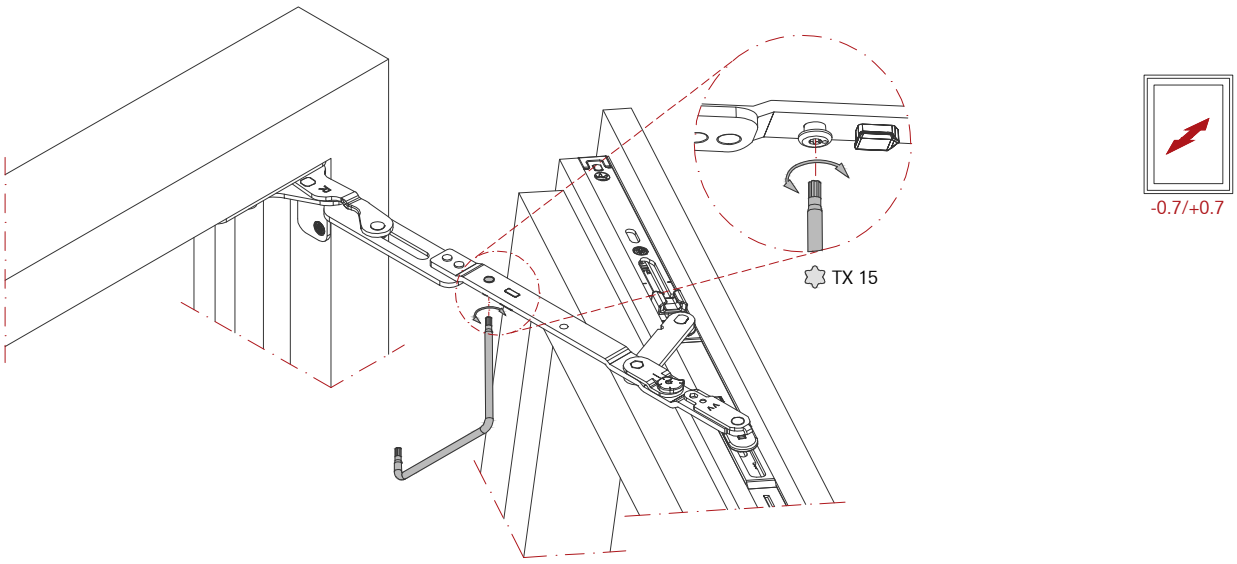
Regolazione ±0.7 mm con TX 15

L = Apertura sinistra
R = Apertura destra

Ajuste de presión de contacto

Ajuste ±0.7 mm con TX 15

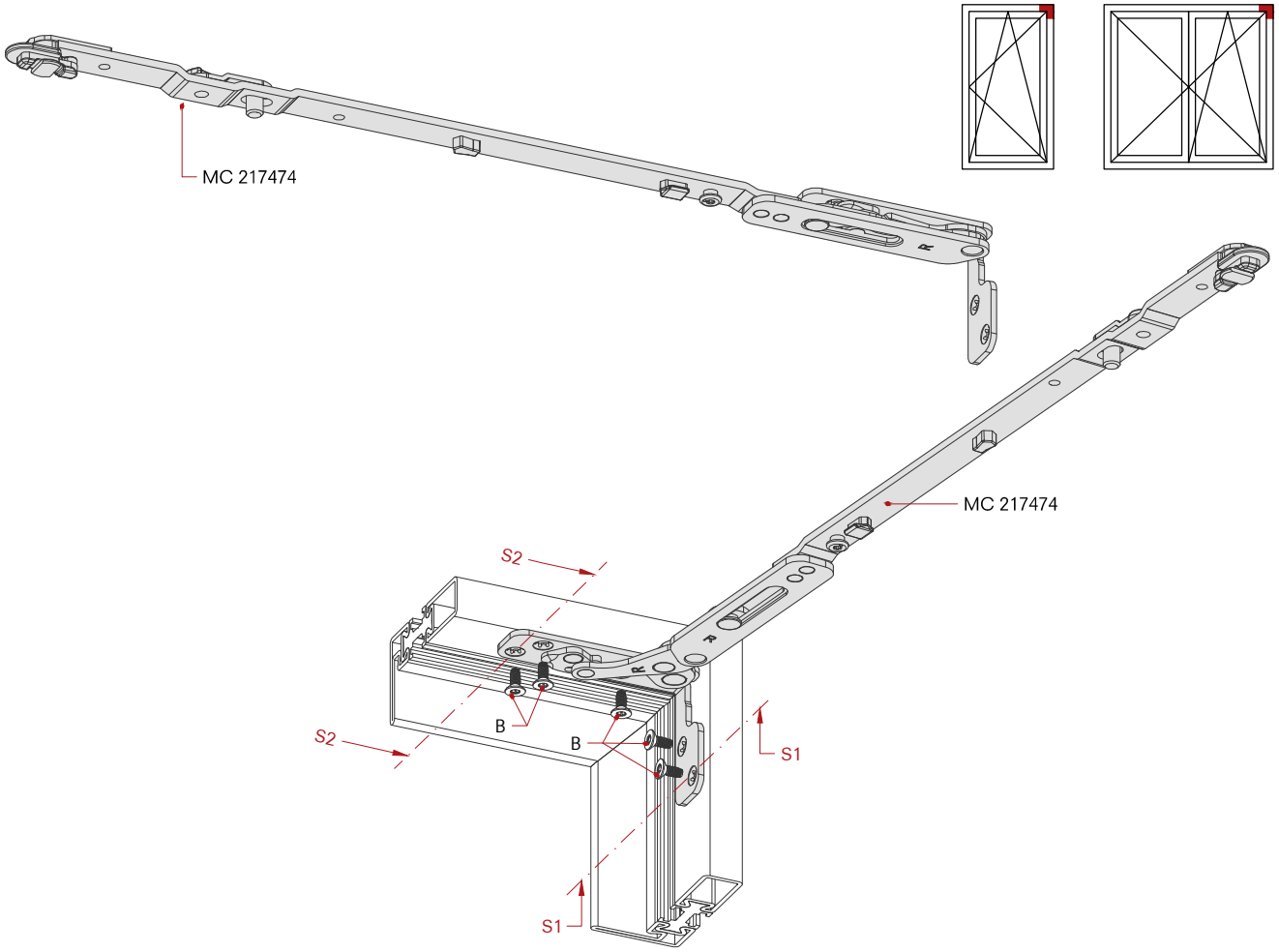
L = Apertura izquierda
R = Apertura derecha

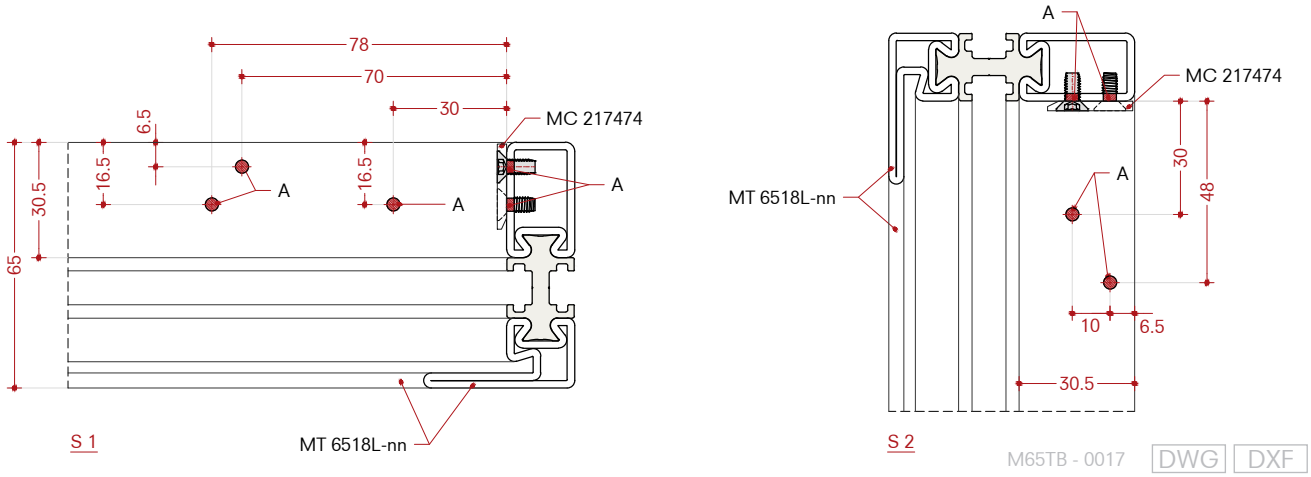


Tilt&Turn scissor stay arm with bearing
Sash rebate width > 800 mm
MC 217474 R
MC 217475 L

Braccio di supporto a forbice inclinabile e girevole con cuscinetto
Larghezza battuta anta > 800 mm
MC 217474 R
MC 217475 L

Brazo de soporte de tijera inclinable y giratorio con rodamiento
Ancho de rebaje de puerta > 800 mm
MC 217474 R
MC 217475 L





Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x10

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x10

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x10

L = Apertura izquierda
R = Apertura derecha

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Regolazione orizzontale

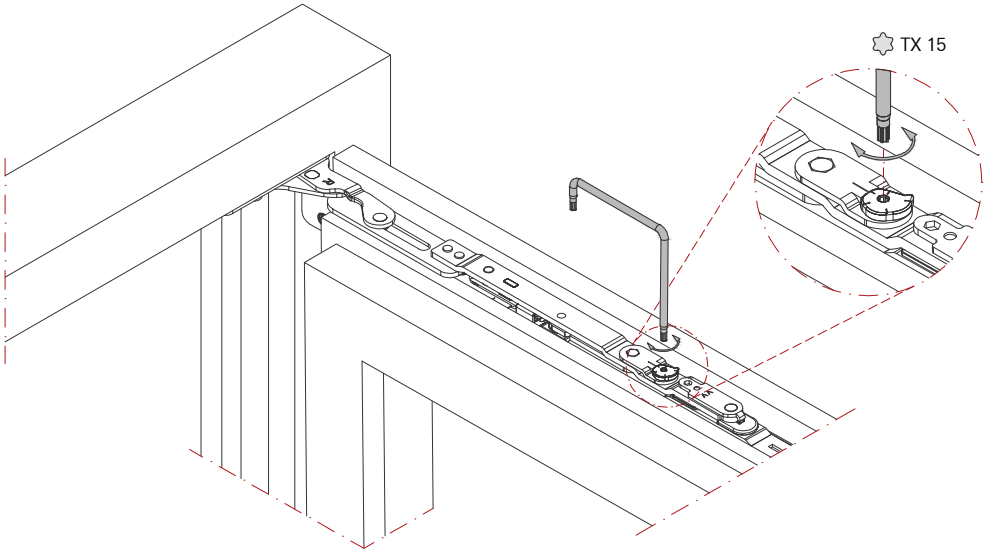
Regolazione +1/-2.5 mm con TX 15

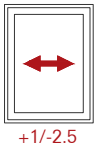
L = Apertura sinistra
R = Apertura destra

Ajuste horizontal

Ajuste +1/-2.5 mm con TX 15

L = Apertura izquierda
R = Apertura derecha





Pressure adjustment

Adjustment range ±0.7 mm with TX 15

L = Left opening
R = Right opening

Regolazione pressione di contatto

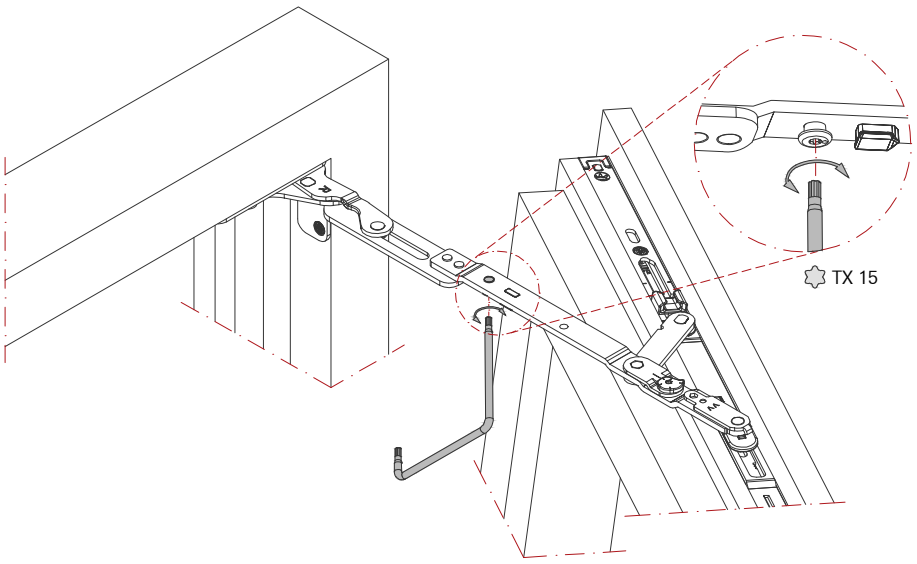
Regolazione ±0.7 mm con TX 15

L = Apertura sinistra
R = Apertura destra

Ajuste de presión de contacto

Ajuste ±0.7 mm con TX 15

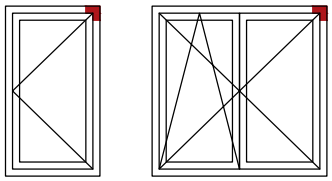
L = Apertura izquierda
R = Apertura derecha

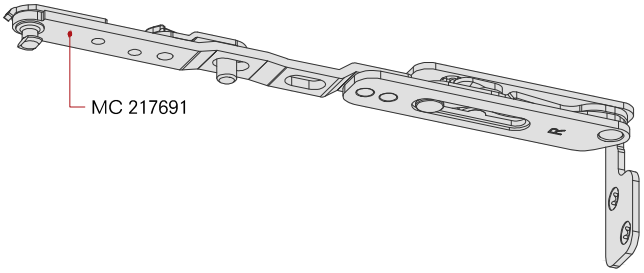


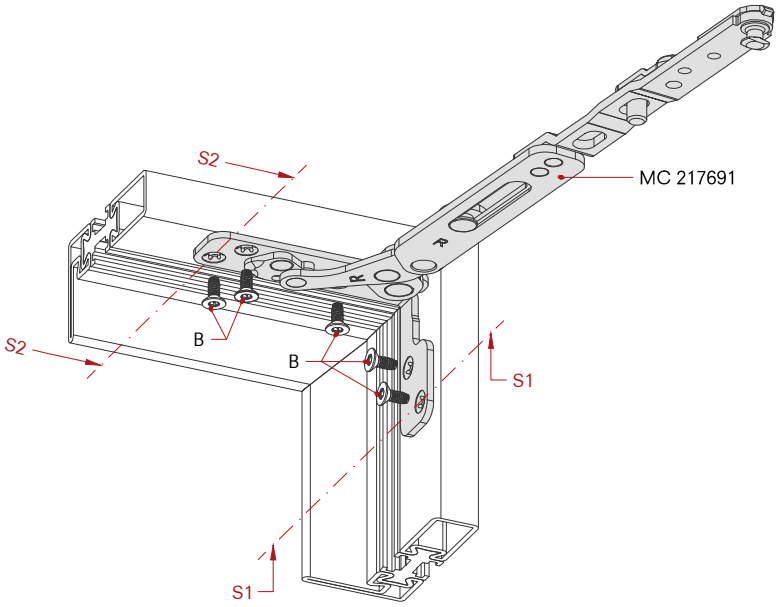
Turn-only hinge arm with hinge
MC 217691 R
MC 217692 L

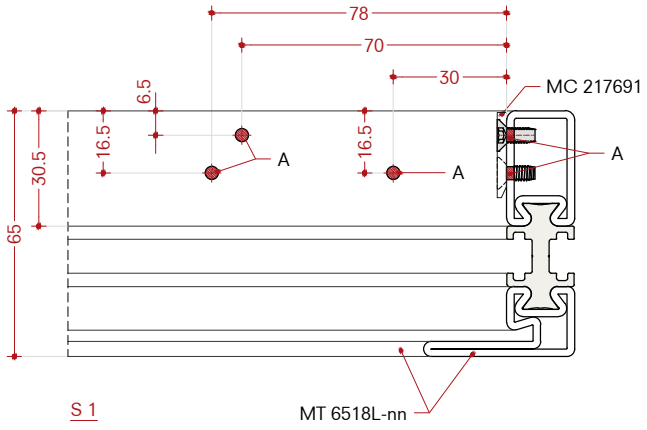
Braccio solo girevole con cerniera
MC 217691 R
MC 217692 L

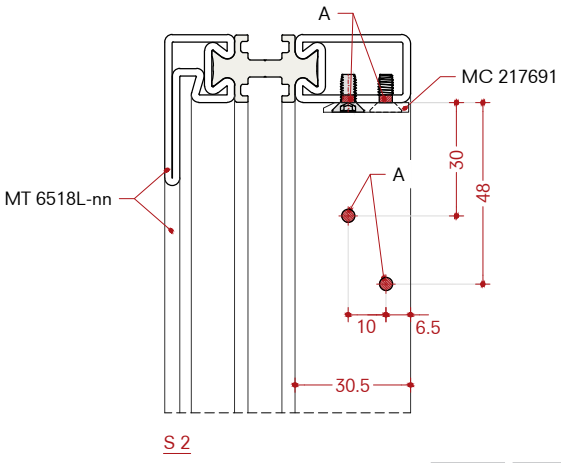
Brazo giratorio con bisagra
MC 217691 R
MC 217692 L











M65TB - 0018 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x10

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x10

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x10

L = Apertura izquierda
R = Apertura derecha

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Regolazione orizzontale

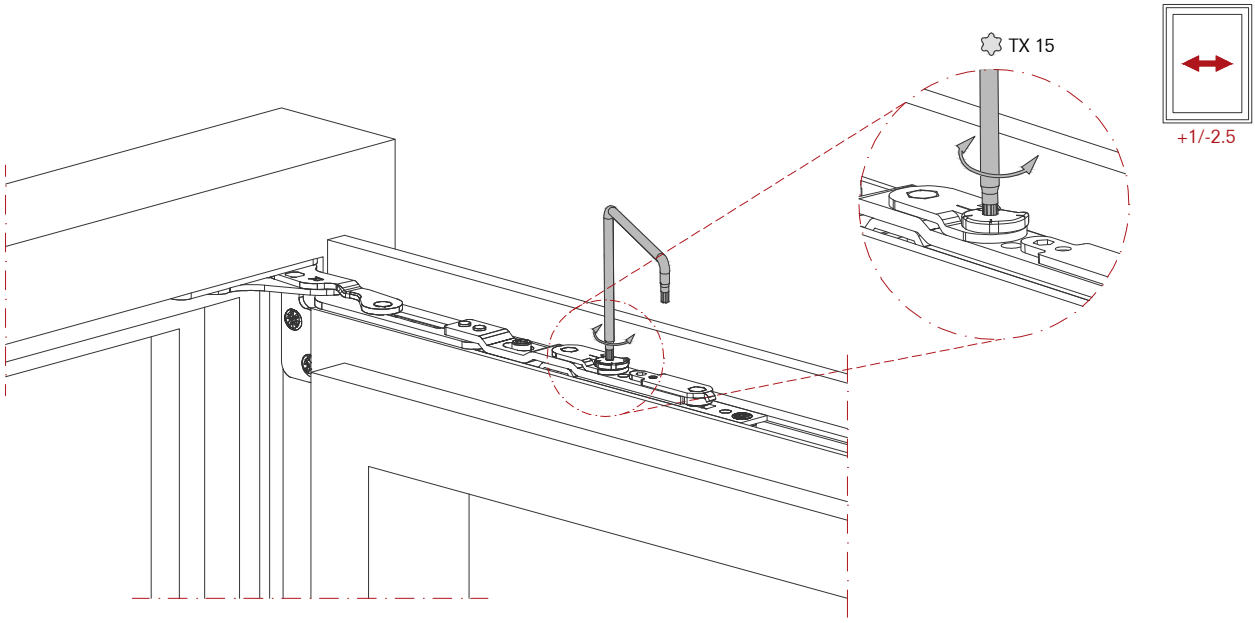
Regolazione +1/-2.5 mm con TX 15

L = Apertura sinistra
R = Apertura destra

Ajuste horizontal

Ajuste +1/-2.5 mm con TX 15

L = Apertura izquierda
R = Apertura derecha



Pressure adjustment

Adjustment range +1 mm with SW 4

L = Left opening
R = Right opening

Regolazione pressione di contatto

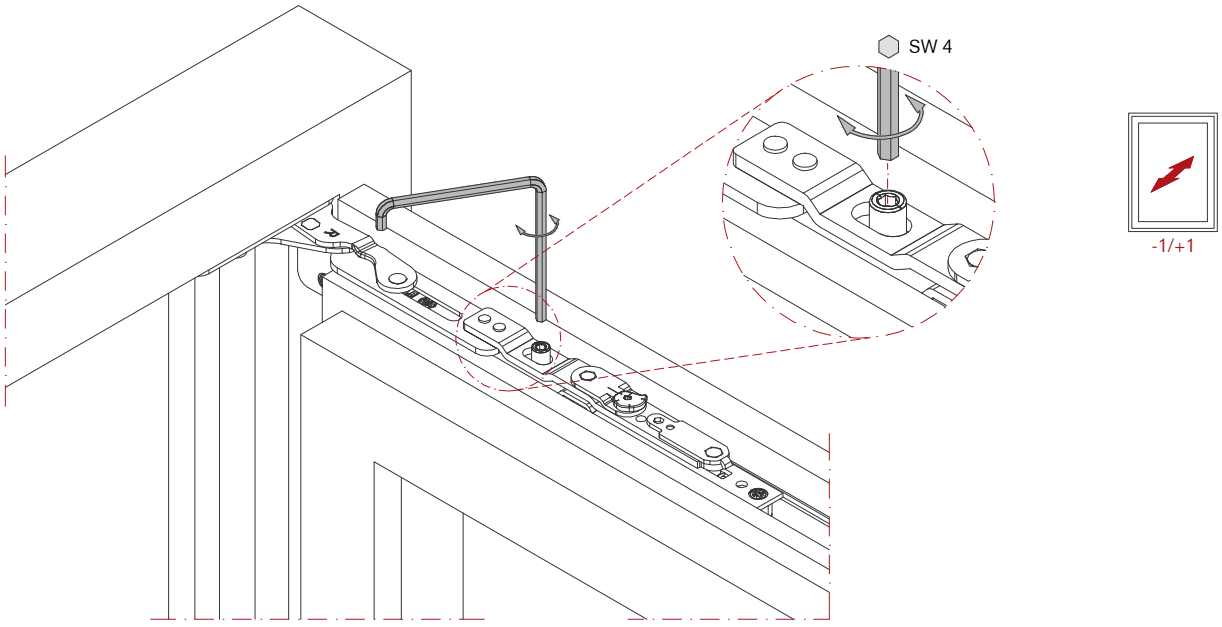
Regolazione +1 mm con SW 4

L = Apertura sinistra
R = Apertura destra

Ajuste de presión de contacto

Ajuste +1 mm con SW 4

L = Apertura izquierda
R = Apertura derecha



Templates for Tilt&Turn fittings

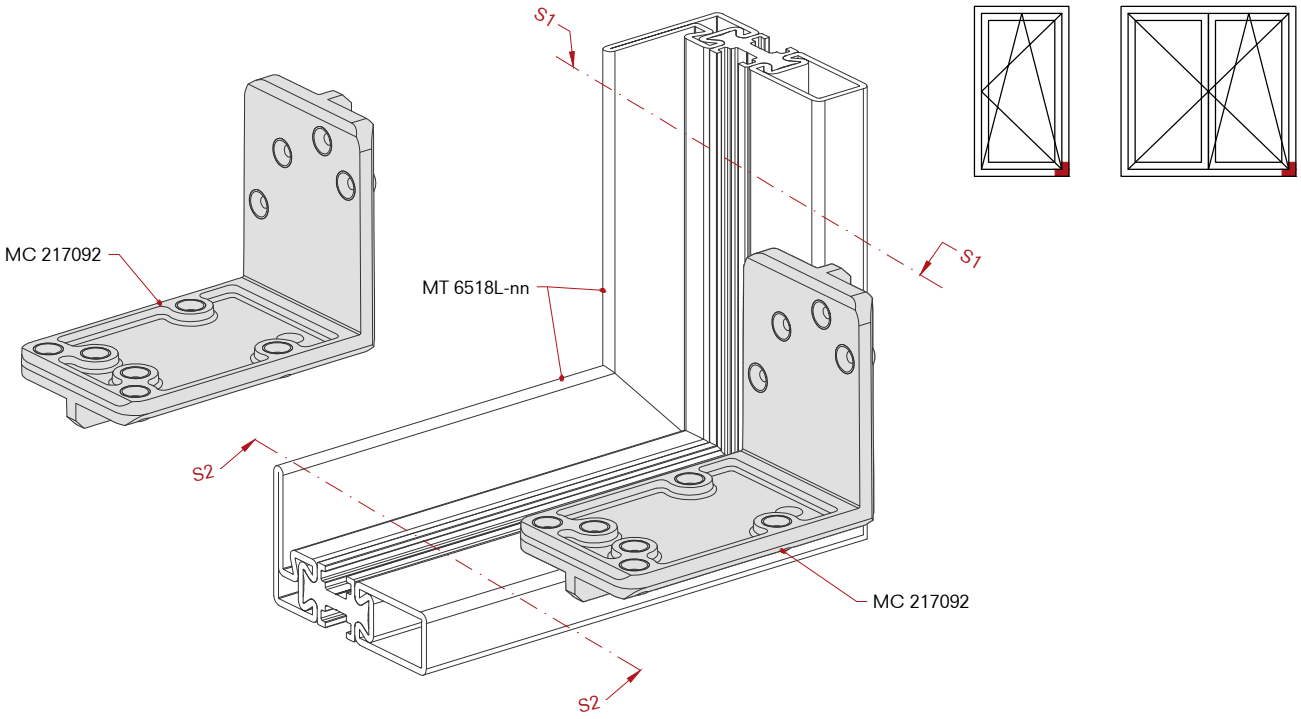
MC 217092
Bottom angle

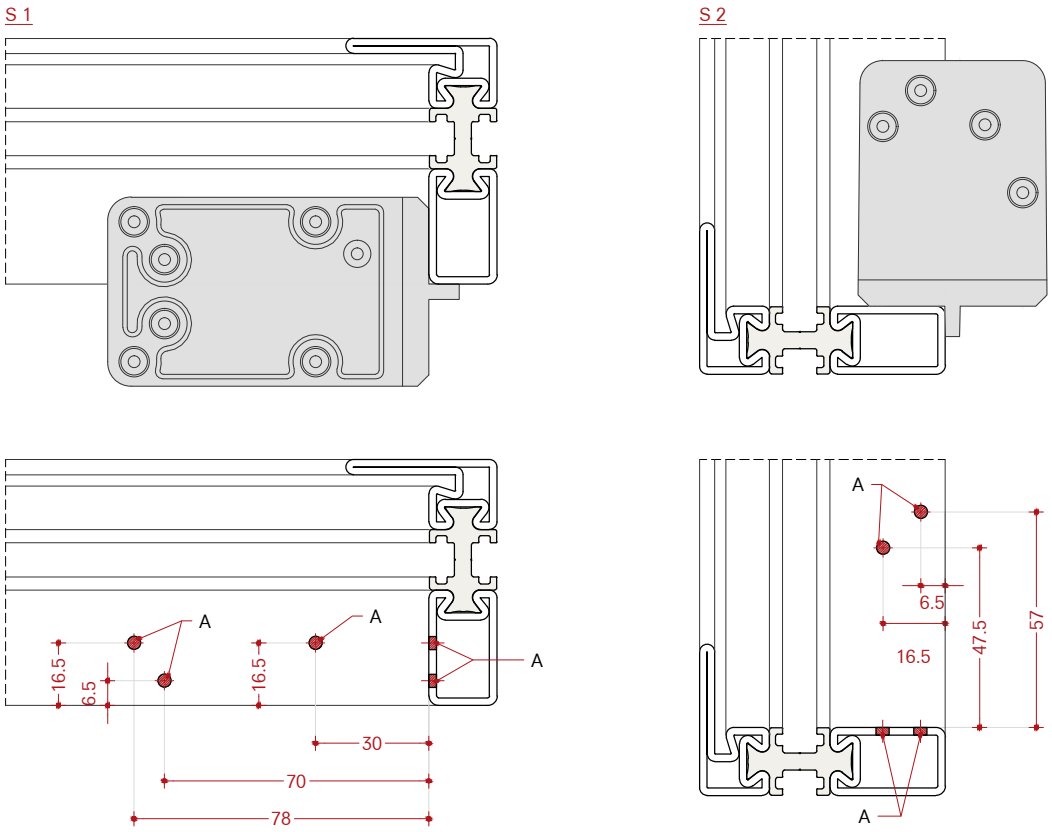
Dime per ferramenta anta ribalta

MC 217092
Angoo inferiore

Plantilla para herrajes para ventana oscilante

MC 217092
Ángulo inferior





Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.5 mm

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.5 mm

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.5 mm

Templates for Tilt&Turn fittings

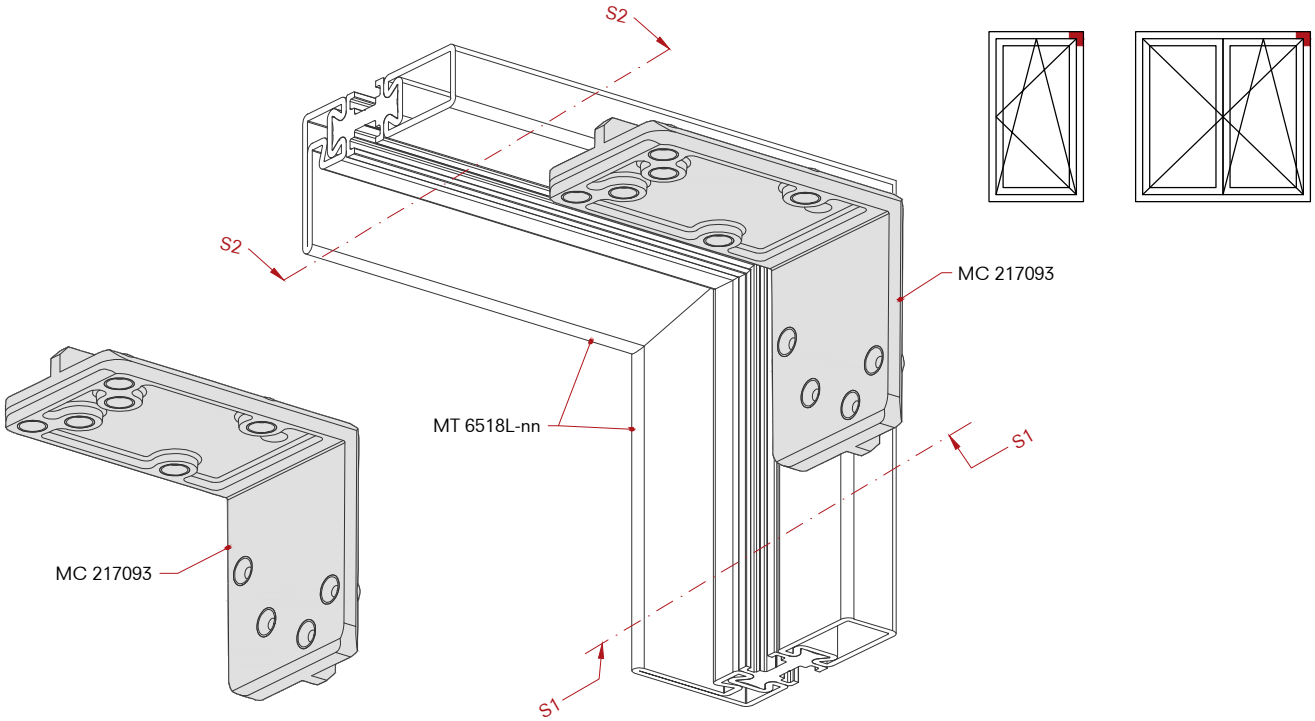
MC 217093
Top angle

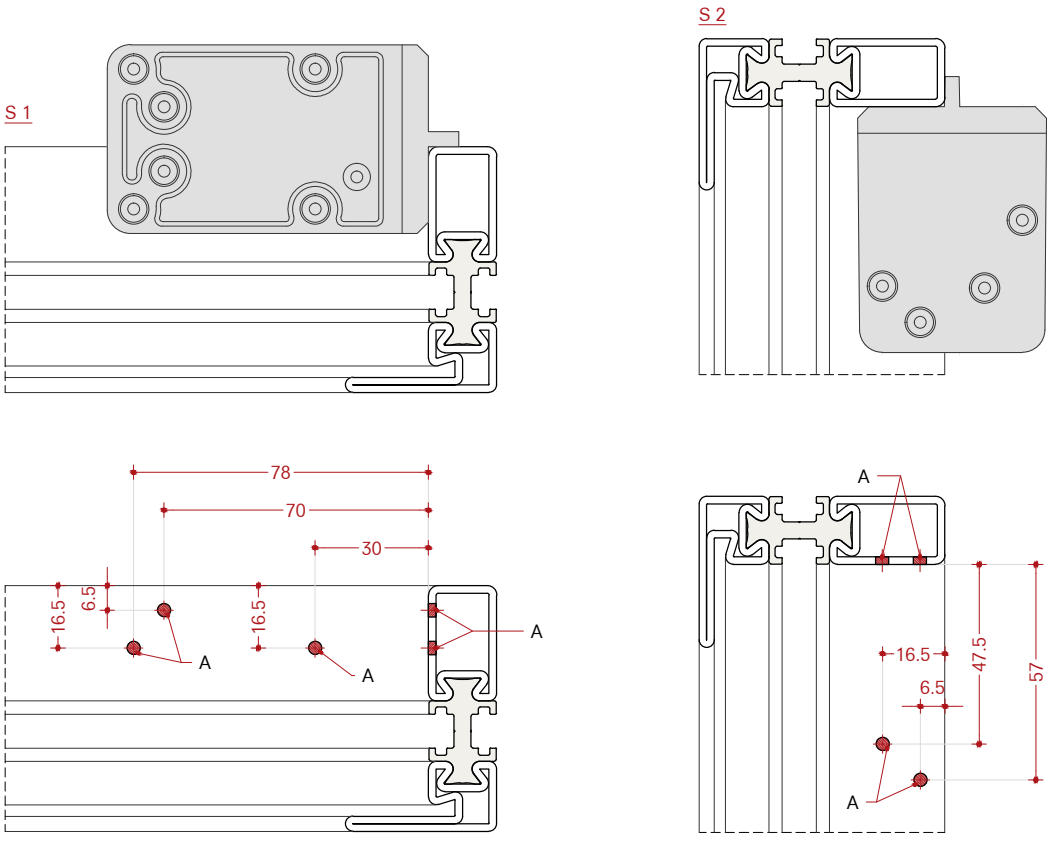
Dime per ferramenta anta ribalta

MC 217093
Angoo superiore

Plantilla para herrajes para ventana oscilante

MC 217093
Ángulo superior





Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.5 mm

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.5 mm

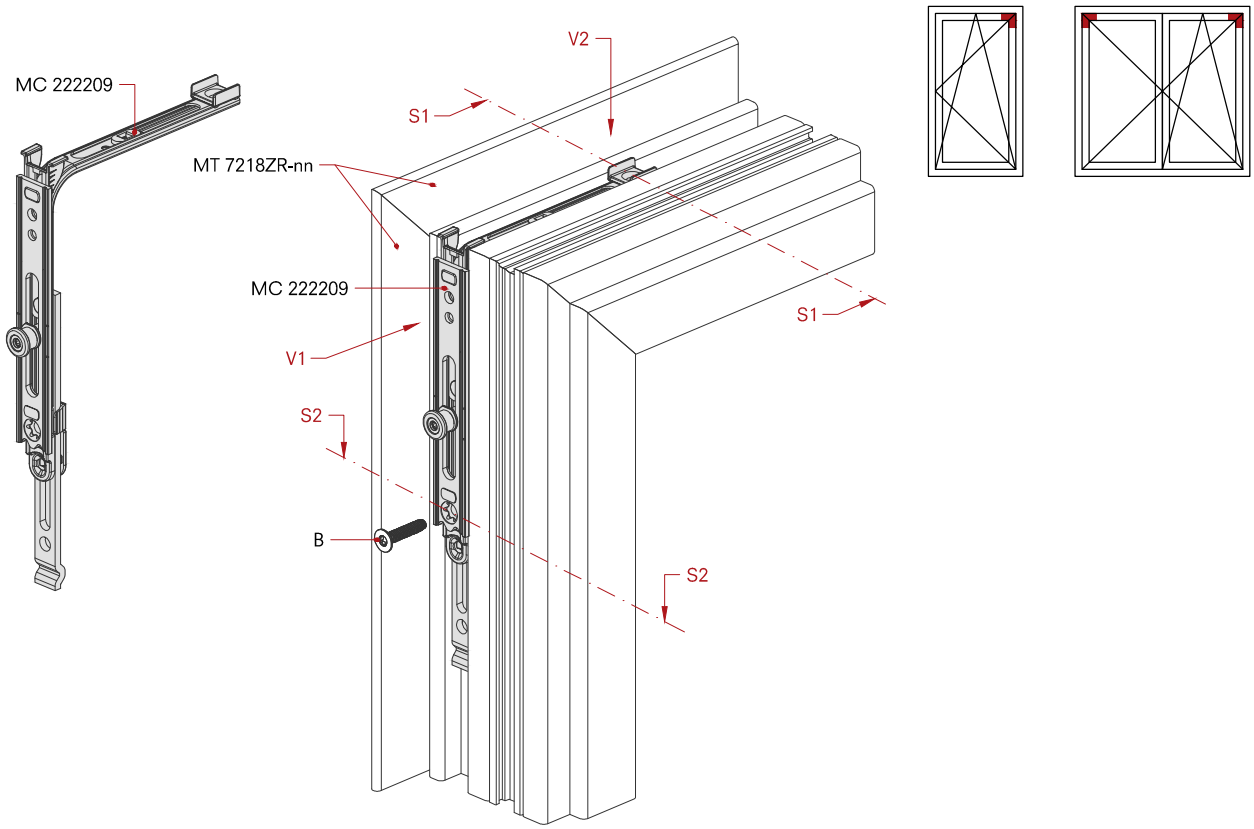
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

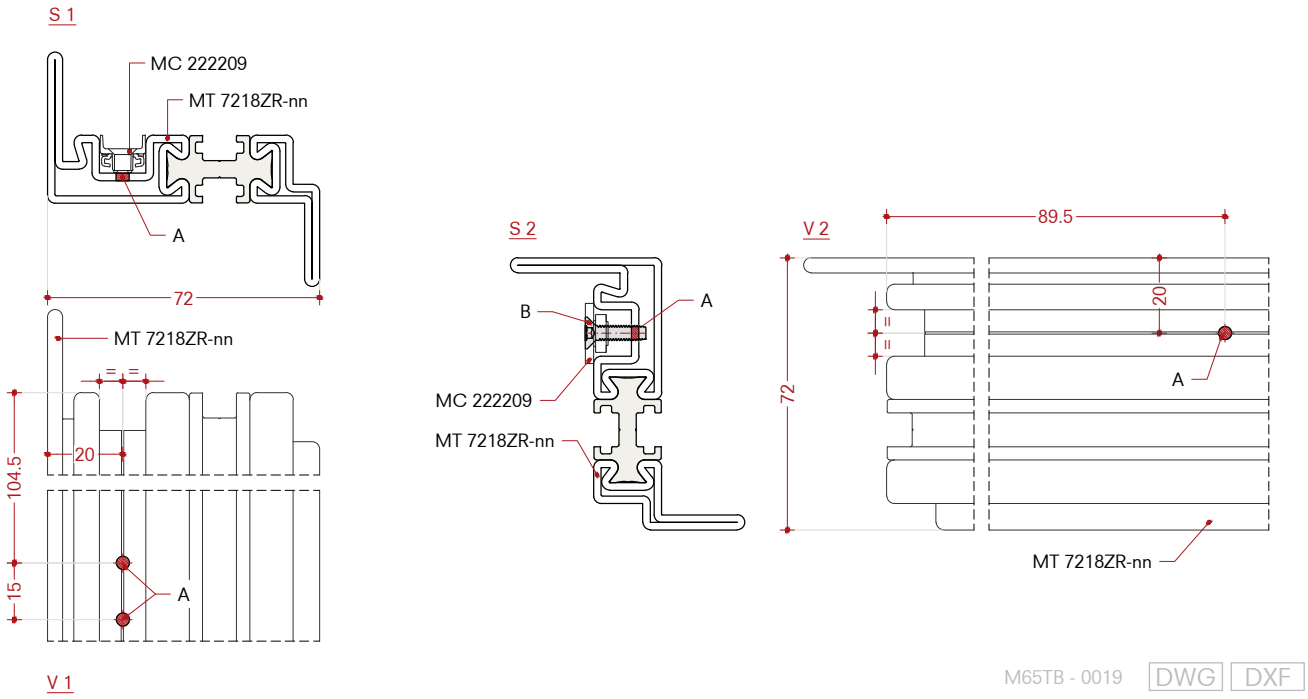
A) Oreficio Ø3.5 mm

Corner element vertically extendable with 1 locking cam
MC 222209

Elemento angolare estensibile verticalmente con 1 nottolino di bloccaggio
MC 222209

Elemento de esquina extensible verticalmente con 1 rodillo de bloqueo
MC 222209





M65TB - 0019 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

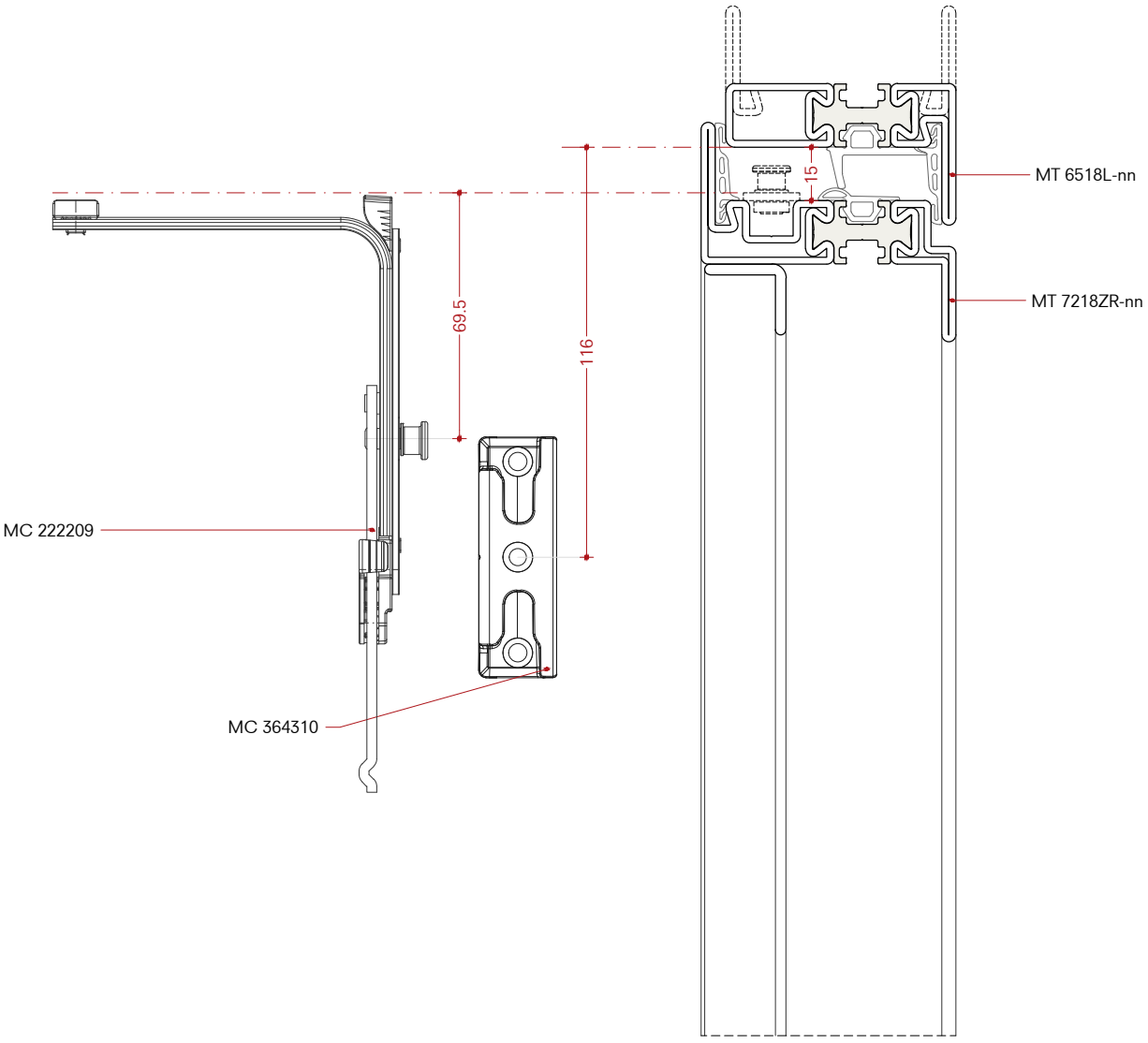
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

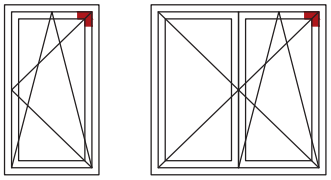
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

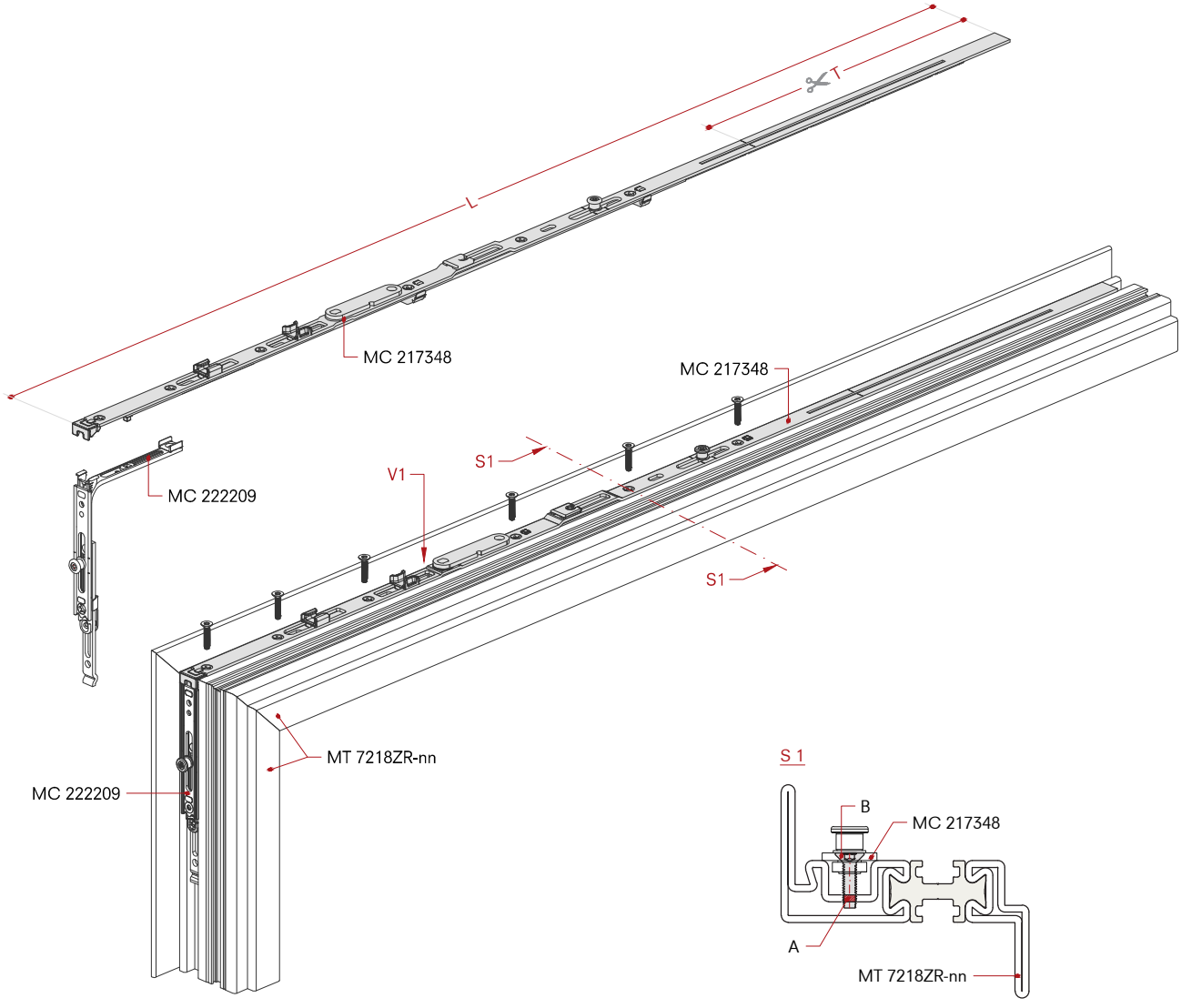
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

Tilt&Turn/tilt-first scissor stay
MC 217346 - MC 217347
MC 217348 - MC 217349

Frontale a forbice
MC 217346 - MC 217347
MC 217348 - MC 217349

Frontal compás
MC 217346 - MC 217347
MC 217348 - MC 217349





M65TB - 0020 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

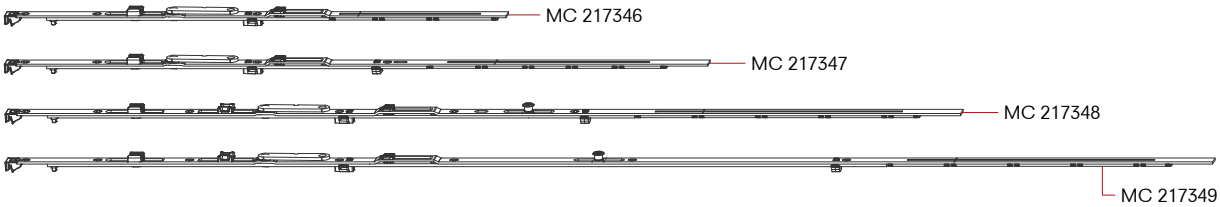
A) Hole Ø3.3 mm
B) Countersunk screw M4x16
L) Length scissor stay
T) Maximum cut scissor stay
X) Position screw connection scissor stay
Z) Position locking cam

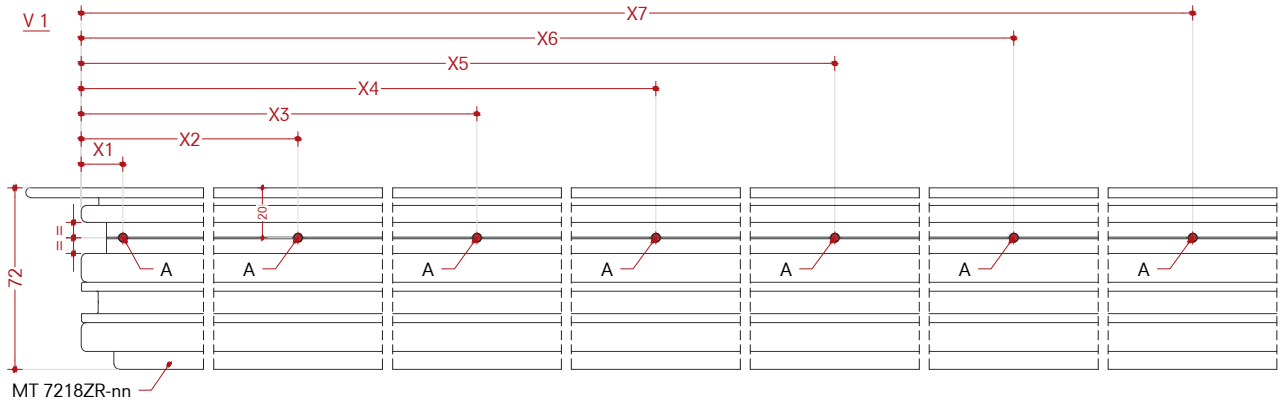
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
L) Lunghezza forbice
T) Massimo taglio forbice
X) Posizionamento vite di fissaggio forbice
Z) Posizione della camma di bloccaggio

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
L) Longitud de la tijera
T) Corte máximo en tijera
X) Colocación del tornillo de fijación de la tijera
Z) Posición de la leva de bloqueo

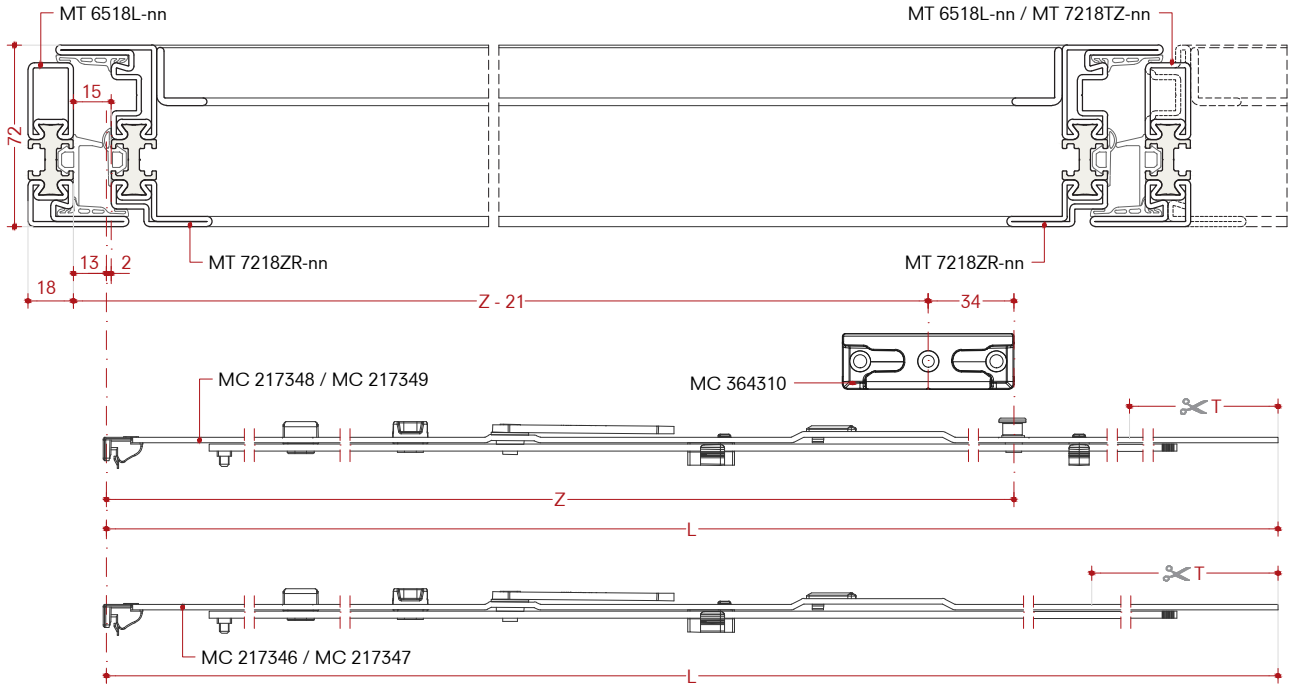




Positioning striker plate
(only for MC 217348 / MC 217349)

Posizionamento del riscontro
(solo per MC 217348 / MC 217349)

Posicionamiento del pieza de bloqueo
(solo para MC 217348 / MC 217349)

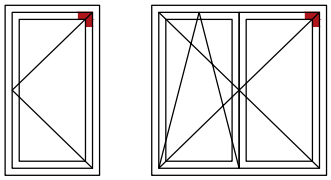


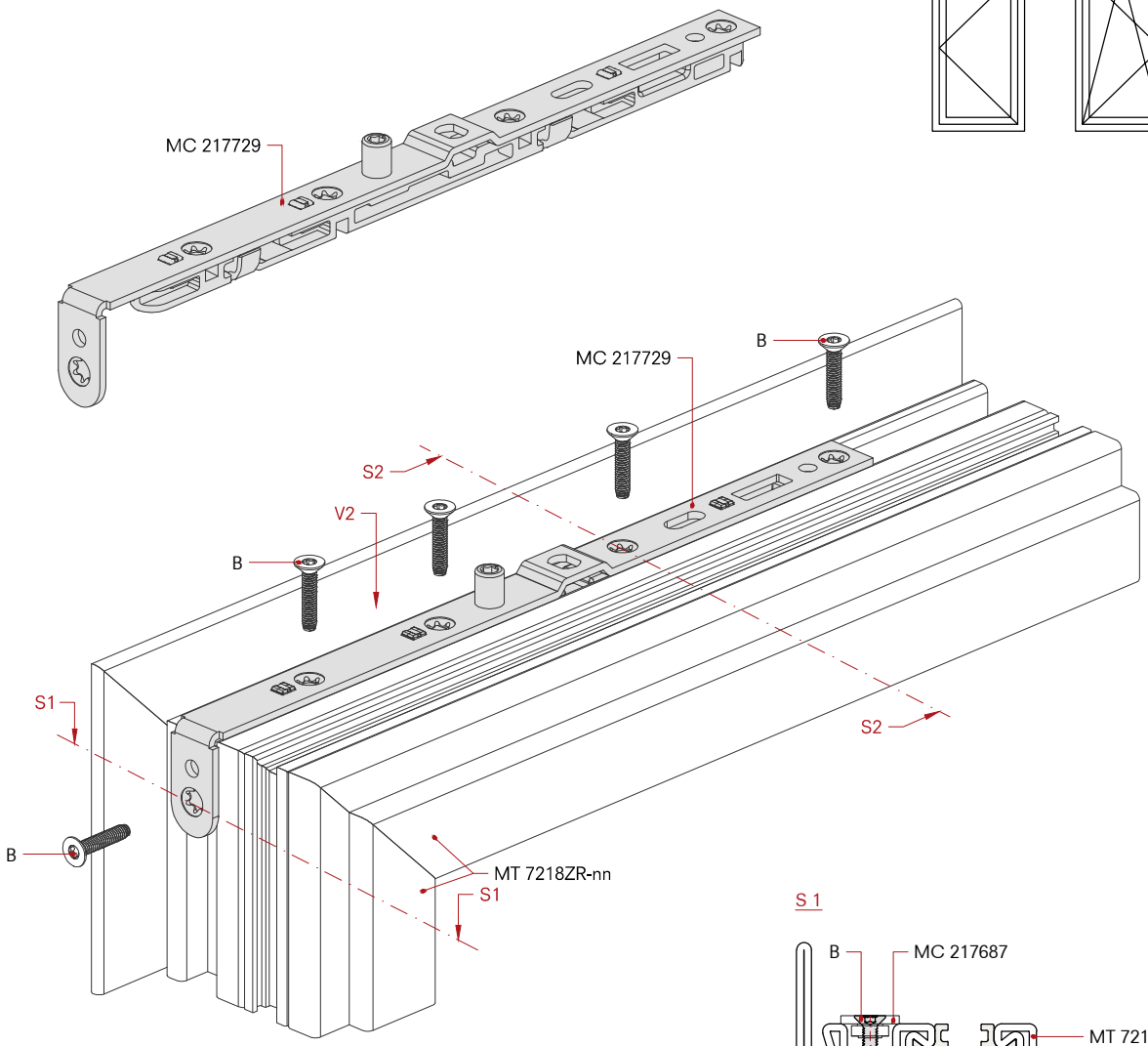
	L	T	X1	X2	X3	X4	X5	X6	X7	Z
MC 217346	497	147	16.5	89.5	247	-	-	-	-	-
MC 217347	697	212	16.5	89.5	247	281	377	-	-	-
MC 217348	947	262	16.5	89.5	182	281	450	562	-	528
MC 217349	1197	262	16.5	89.5	182	281	450	621	827	587

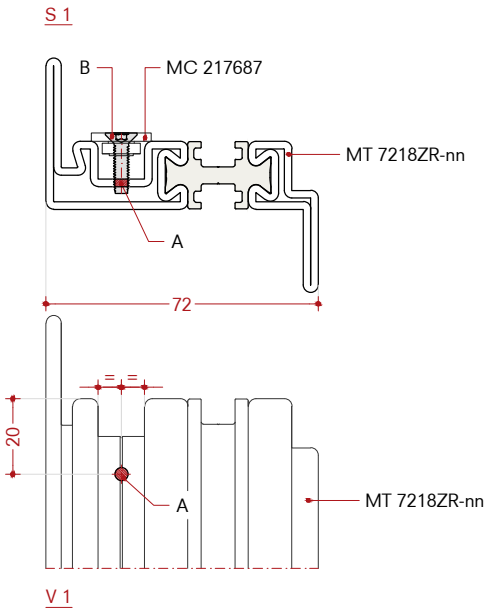
Turn-only and tilt-only faceplate
MC 217729

Frontale di sola rotazione e solo inclinazione
MC 217729

Solo frente de rotación y solo inclinacion
MC 217729







M65TB - 0022 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

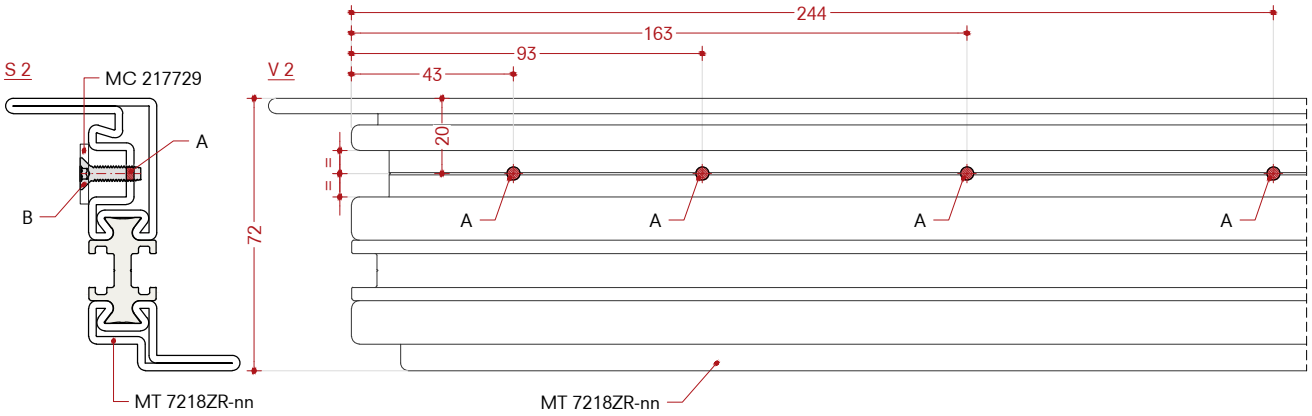
A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

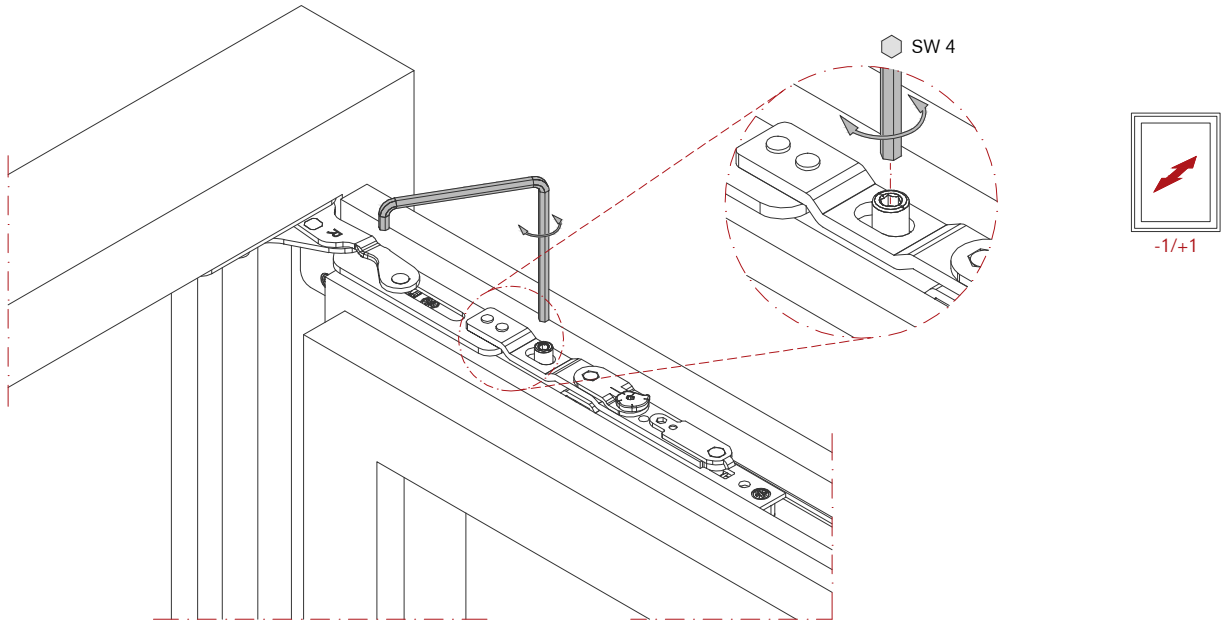
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16



Pressure adjustment **Regolazione pressione di contatto** **Ajuste de presión de contacto**

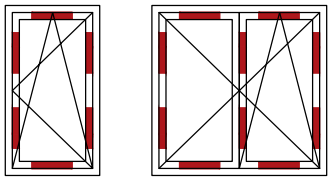


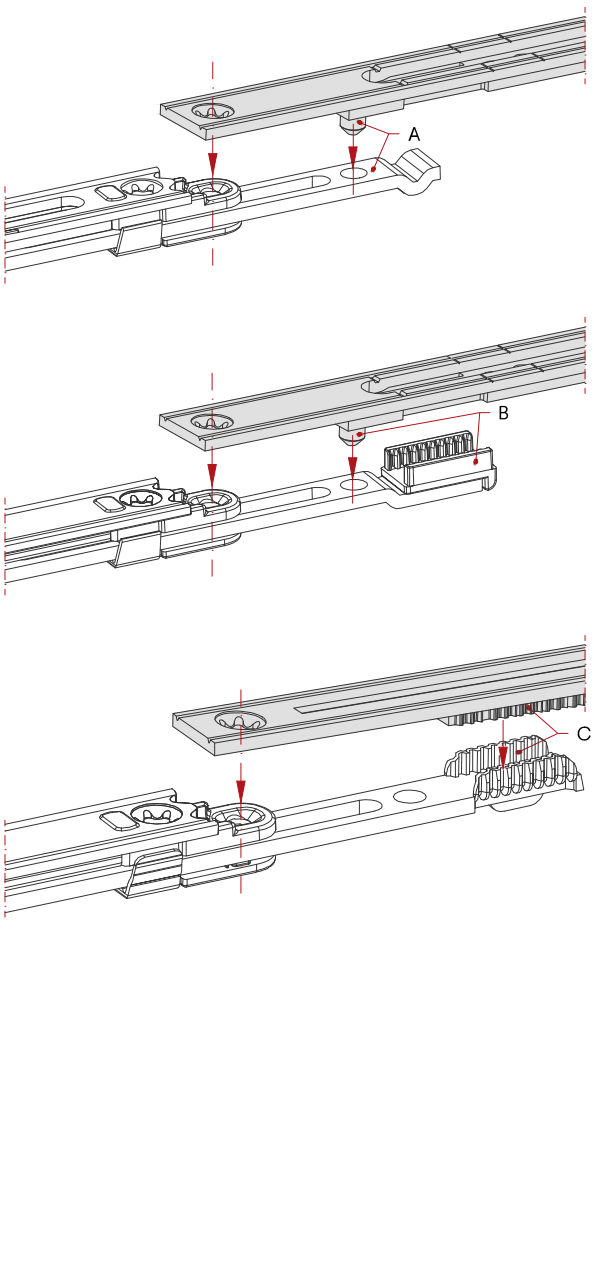
Adjustment range +1 mm with SW 4 Regolazione +1 mm con SW 4 Ajuste +1 mm con SW 4

Faceplate extensions extendable
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 206630

Prolunga frontalino
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 206630

Extensión frontal
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 206630





M65TB - 0023 DWG DXF

(*) Faceplate extension MC 201754 can only be used vertically

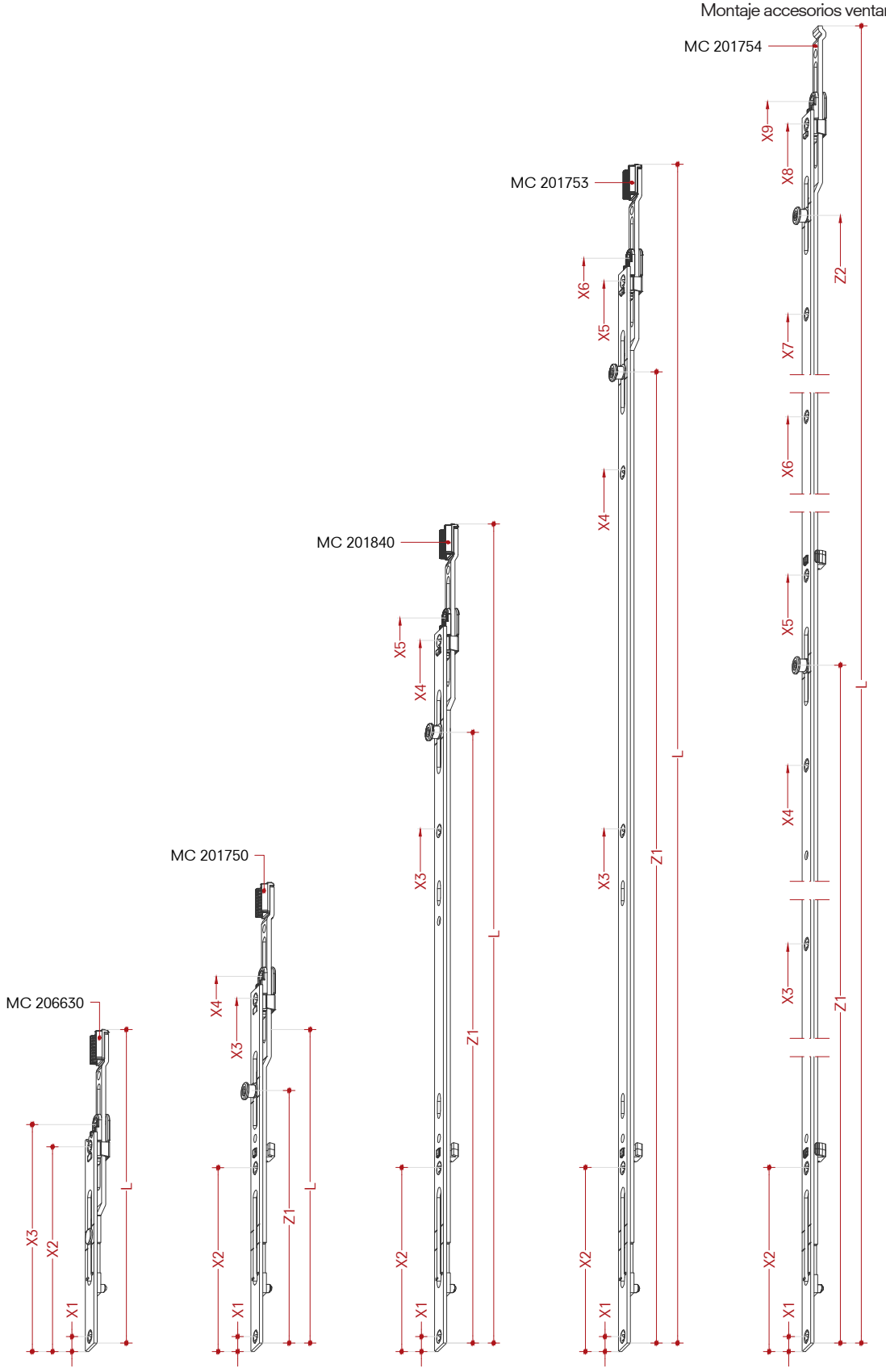
A) Coupling with hole-pin connection
B) Coupling with hole-pin connection with serrated carrier
C) Coupling with serrated carrier connection
D) Countersunk screw M4x16
L) Length faceplate extension
X) Position screw connection faceplate extension
Z) Position locking cam

(*) La prolunga del frontalino MC 201754 può essere utilizzata solo in verticale

A) Accoppiamento foro-perno
B) Accoppiamento foro-perno con supporto dentellato
C) Accoppiamento dentellato
D) Vite autofilettante a testa svasata M4x16
L) Lughezza della prolunga
X) Posizionamento vite di fissaggio prolunga
Z) Posizione della camma di bloccaggio

(*) La extensión del panel frontal del MC 201754 solo se puede utilizar verticalmente

A) Acoplamiento oreficio-alfiler
B) Acoplamiento oreficio-alfiler con soporte dentado
C) Acoplamiento con dentado
D) Tornillo avellanado M4x16
L) Longitud de la extensión
X) Posicionamiento del tornillo de fijación
Z) Posición de la leva de bloqueo

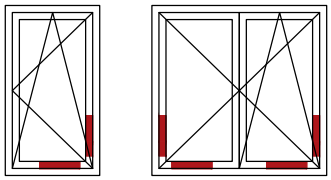


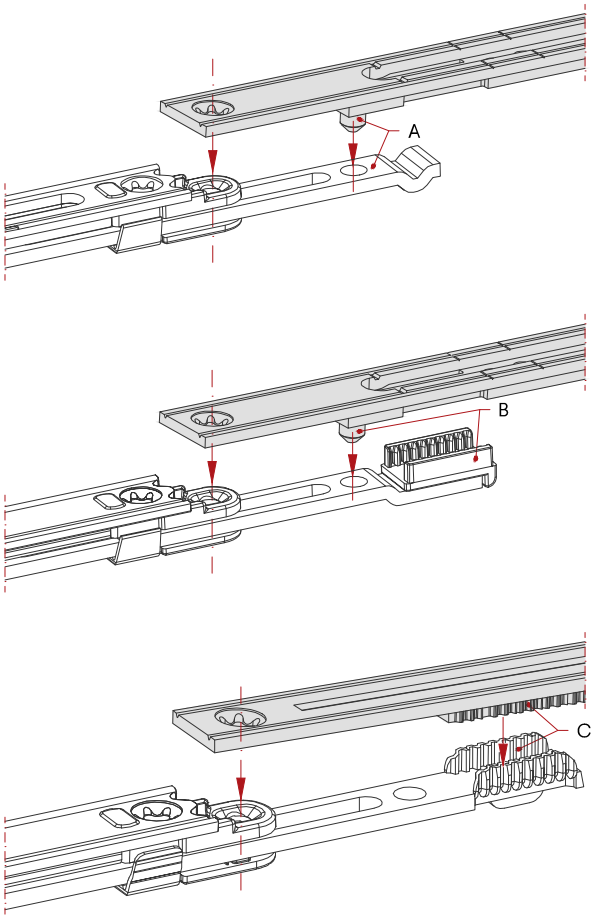
	L	X1	X2	X3	X4	X5	X6	X7	X8	X9	Z1	Z2
MC 206630	138.5	7	131.5	146.5	-	-	-	-	-	-	-	-
MC 201750	235	7	117.5	228	243	-	-	-	-	-	168.5	-
MC 201840	470	7	117.5	338.5	463	478	-	-	-	-	403.5	-
MC 201753	705	7	117.5	338.5	573.5	698	713	-	-	-	638.5	-
MC 201754 (*)	1410	7	117.5	338.5	573.5	698	1044	1279	1403	1408	638.5	1344

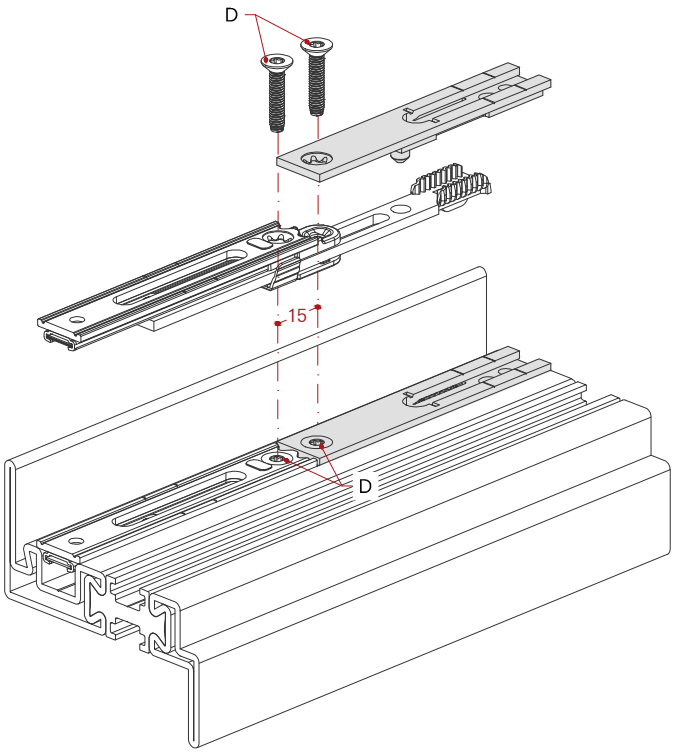
Faceplate extensions fixed
MC 201751
MC 201752

Prolunga frontalino fissa
MC 201751
MC 201752

Extensión frontal fijo
MC 201751
MC 201752





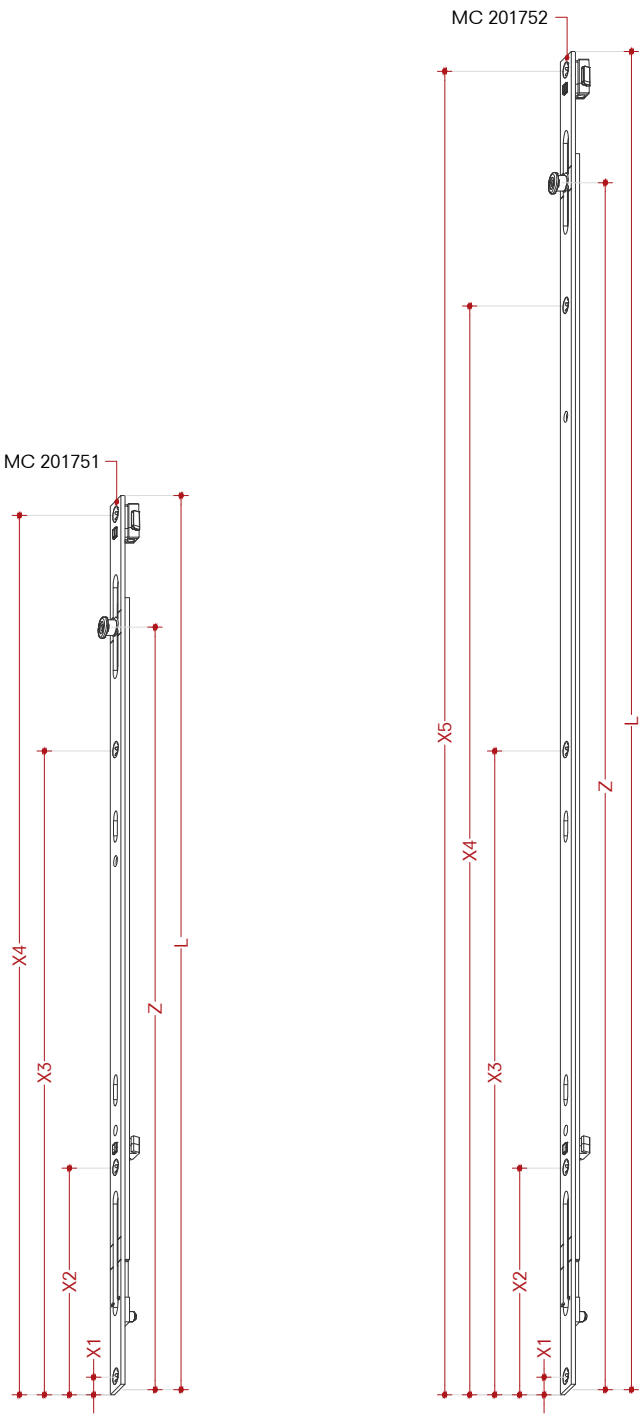


M65TB - 0025 DWG DXF

A) Coupling with hole-pin connection
B) Coupling with hole-pin connection with serrated carrier
C) Coupling with serrated carrier connection
D) Countersunk screw M4x16
L) Length faceplate extension
X) Position screw connection faceplate extension
Z) Position locking cam

A) Accoppiamento foro-perno
B) Accoppiamento foro-perno con supporto dentellato
C) Accoppiamento dentellato
D) Vite autofilettante a testa svasata M4x16
L) Lughezza della prolunga
X) Posizionamento vite di fissaggio prolunga
Z) Posizione della camma di bloccaggio

A) Acoplamiento oreficio-alfiler
B) Acoplamiento oreficio-alfiler con soporte dentado
C) Acoplamiento con dentado
D) Tornillo avellanado M4x16
L) Longitud de la extensión
X) Posicionamiento del tornillo de fijación
Z) Posición de la leva de bloqueo

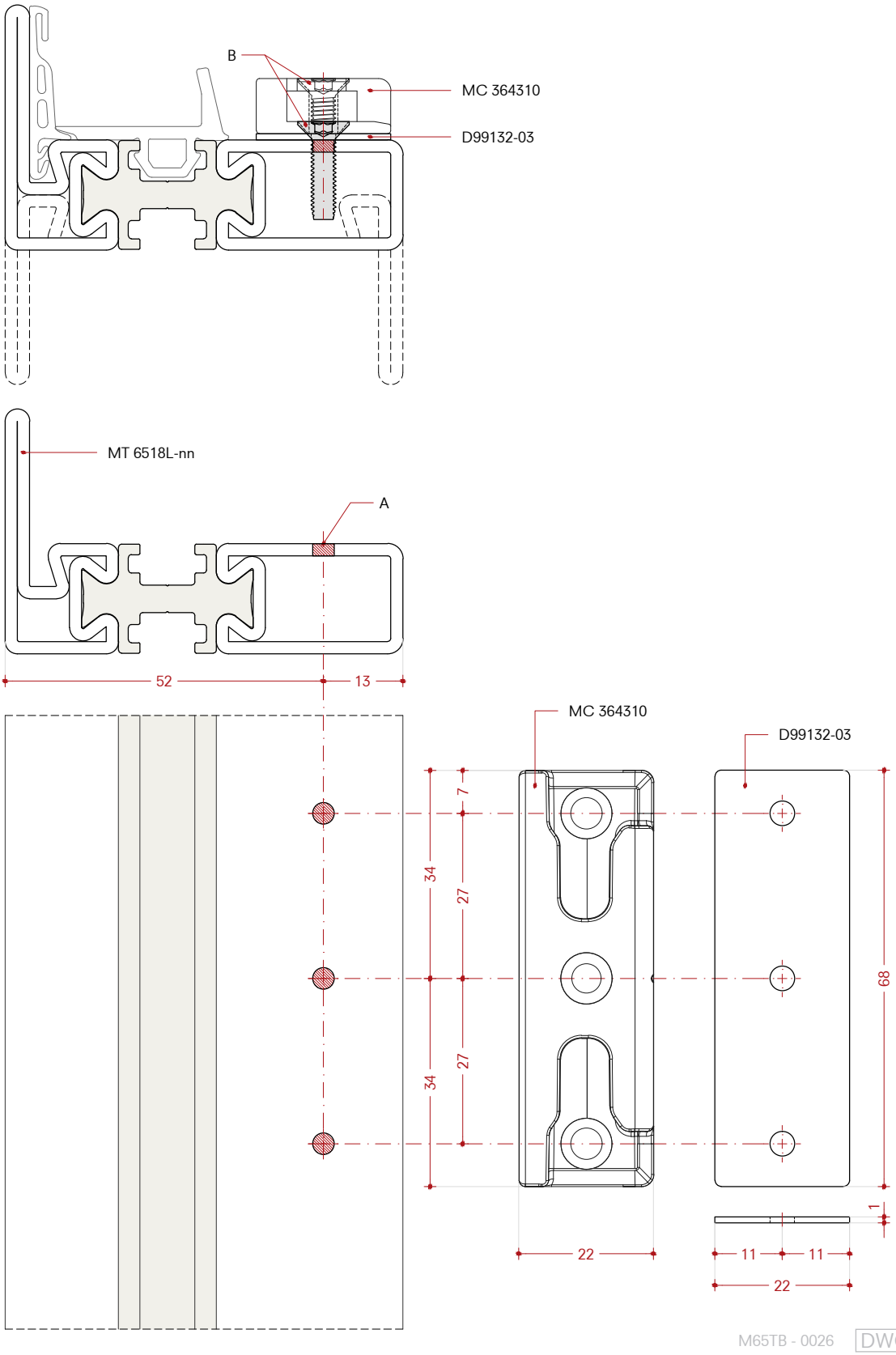


	L	X1	X2	X3	X4	X5	Z
MC 201751	470	7	117.5	338.5	463	-	403.5
MC 201752	705	7	117.5	338.5	573.5	698	638.5

Striker plate position
MC 364310

Posizione riscontro
MC 364310

Posicion del pieza de bloqueo
MC 364310



A) Hole Ø3.3 mm
B) Countersunk screw M4x16 (3 pieces each)

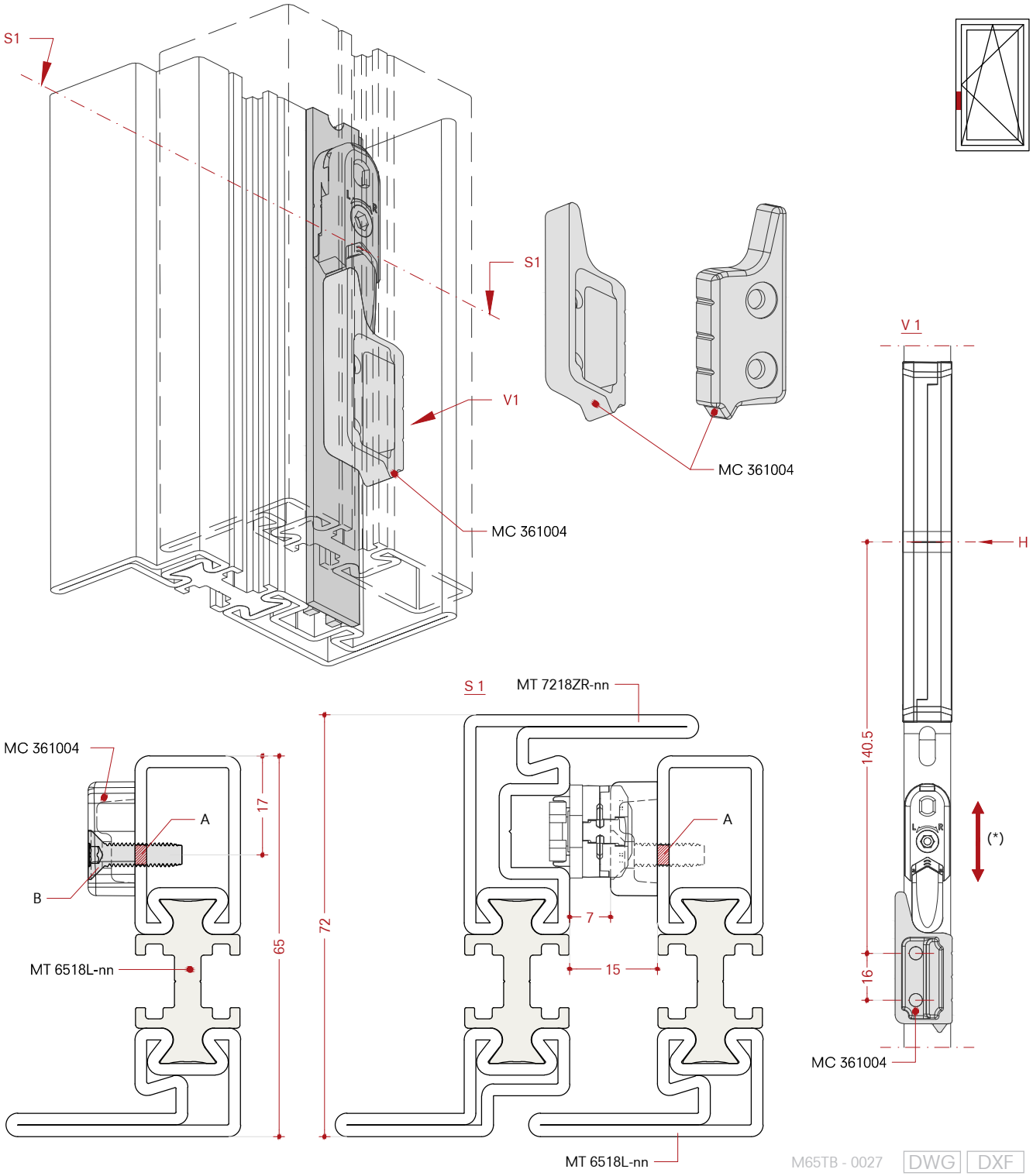
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16 (3 pezzi ciascuno)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16 (3 piezas cada uno)

Sash lifter
MC 361004 R
MC 361005 L

Scontro alza anta
MC 361004 R
MC 361005 L

Cerradero elevador
MC 361004 R
MC 361005 L



M65TB - 0027 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
H) Handle height
(*) Adjustable

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
H) Altezza maniglia
(*) Regolabile

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

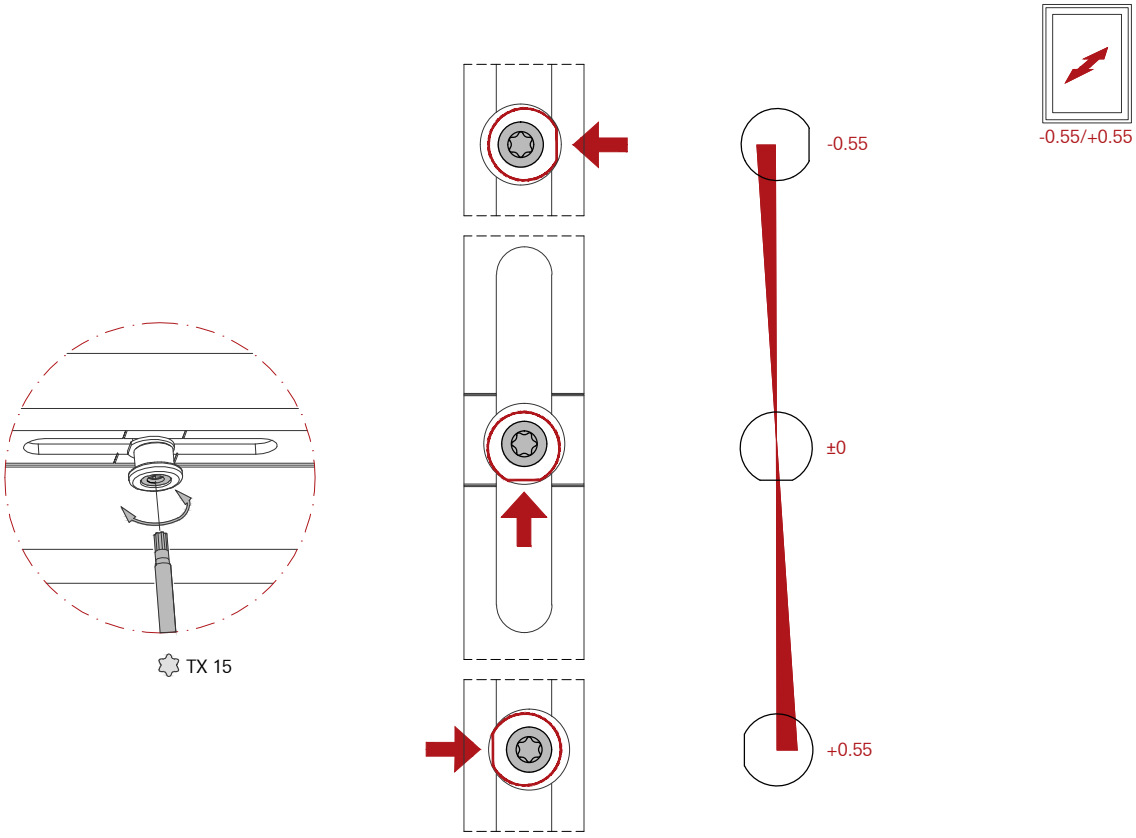
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
H) Altura manija
(*) Ajustable

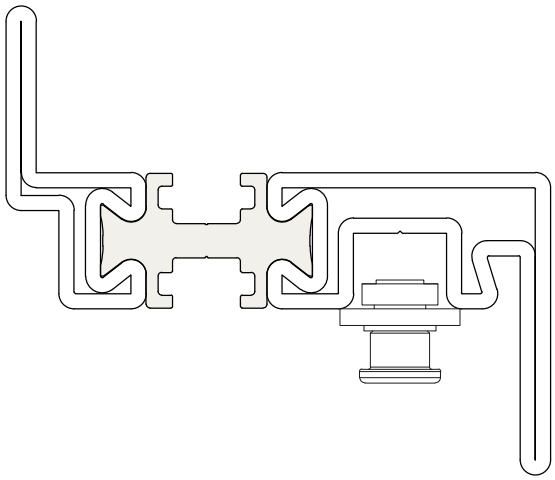
L = Apertura izquierda
R = Apertura derecha

Pressure adjustment

Regolazione pressione di contatto

Ajuste de presión de contacto





Adjustment range ± 0.5 mm with TX 15

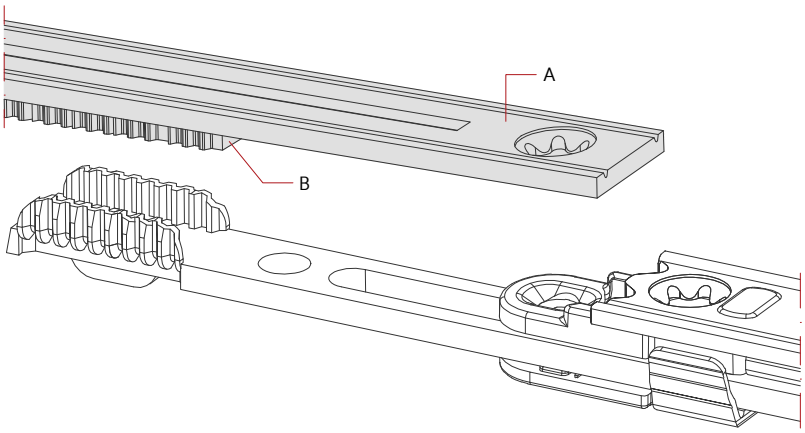
Regolazione ± 0.5 mm con TX 15

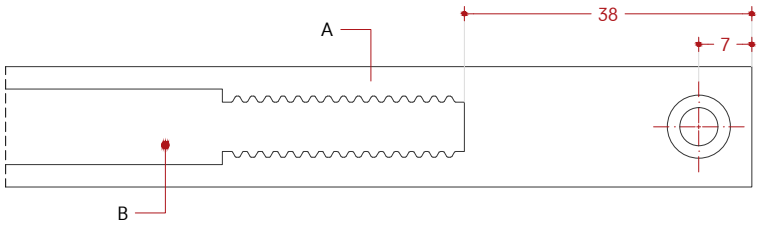
Ajuste ± 0.5 mm con TX 15

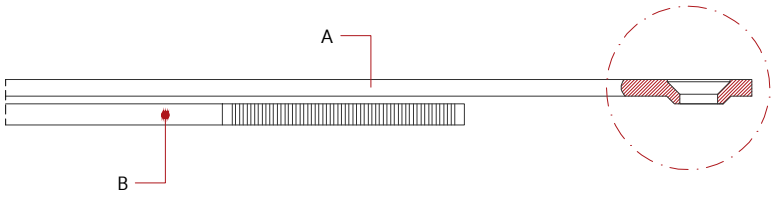
Punch pattern for cut-to-length faceplates

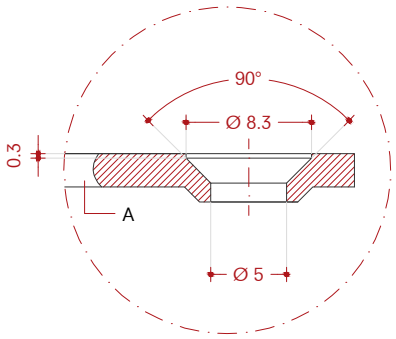
Schema di taglio per frontalini tagliati a misura

Diagrama de corte para placas frontales cortadas a medida









NOTE:
We recommend re-treating the cropped edges of fittings with a suitable touch-up paint.

A) Faceplate
B) Drive track

NOTA:
Suggeriamo di fissare le boccole sul lato superiore e sul lato destro dopo l'installazione del vetro.

A) Frontalino
B) Guida

NOTA:
Sugerimos fijar los arbustos en la parte superior y en el lado derecho después de la instalación del vidrio.

A) Frontal
B) Guía

Templates for Tilt&Turn fittings

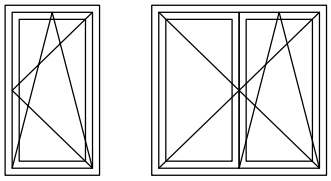
MC 229643

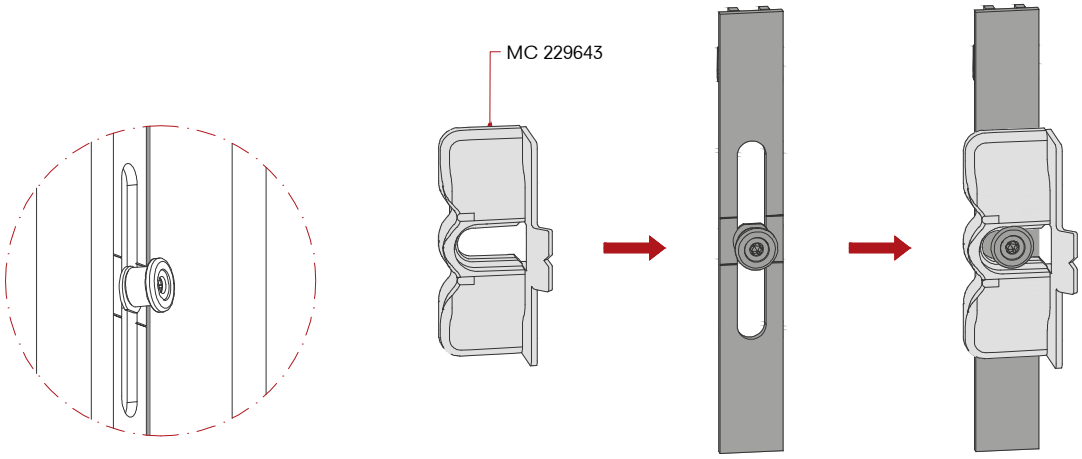
Dime per ferramenta anta ribalta

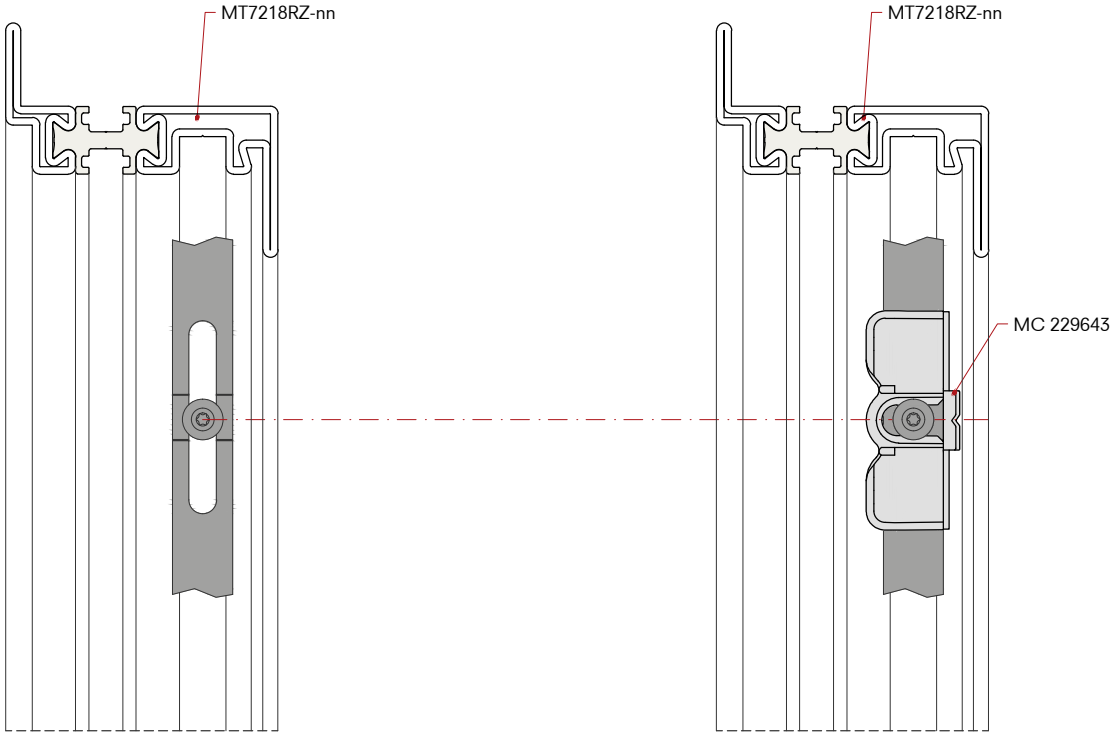
MC 229643

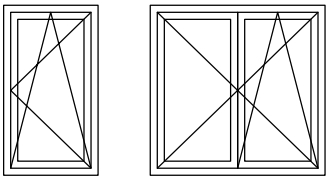
Plantilla para herrajes para ventana oscilante

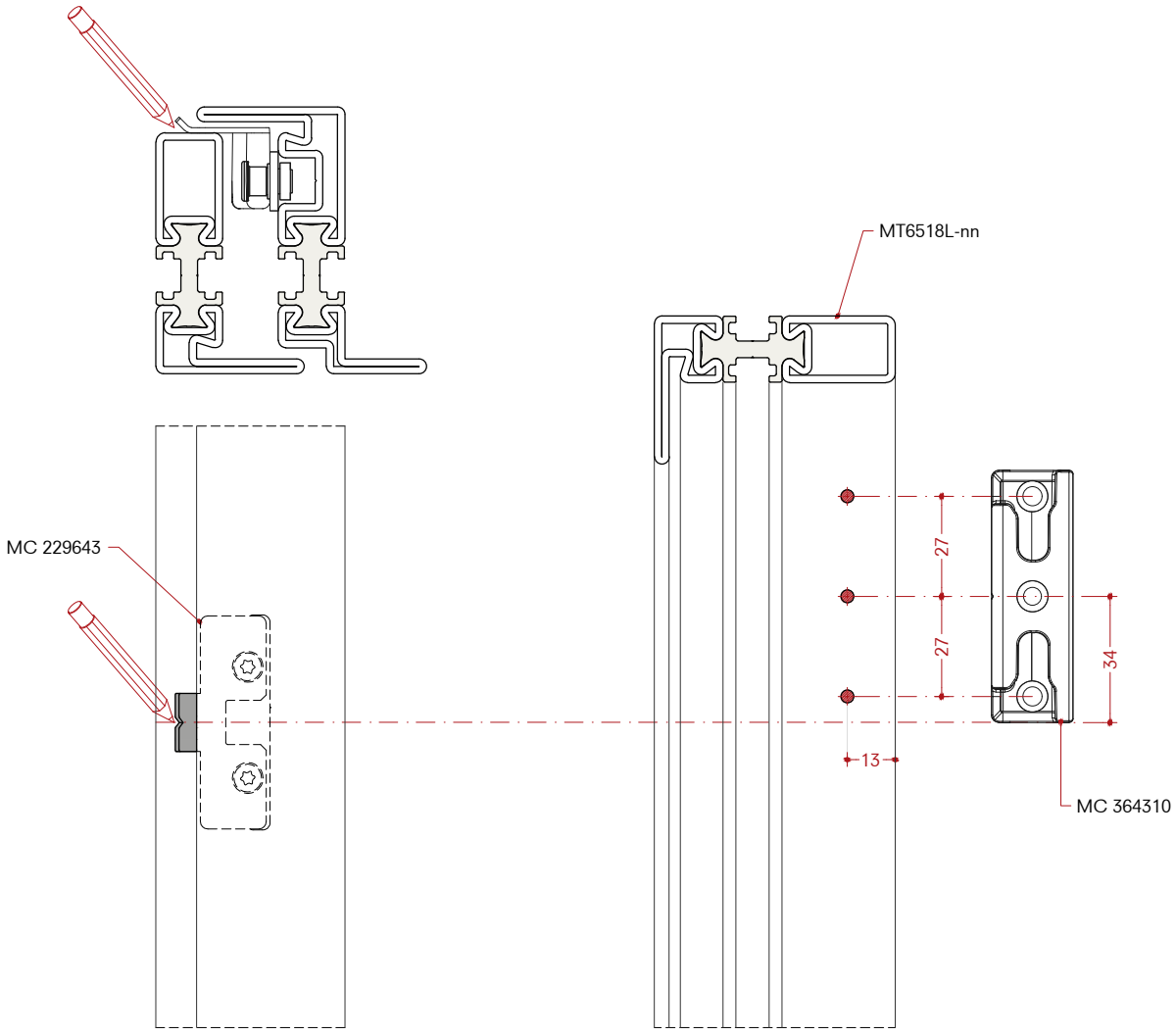
MC 229643







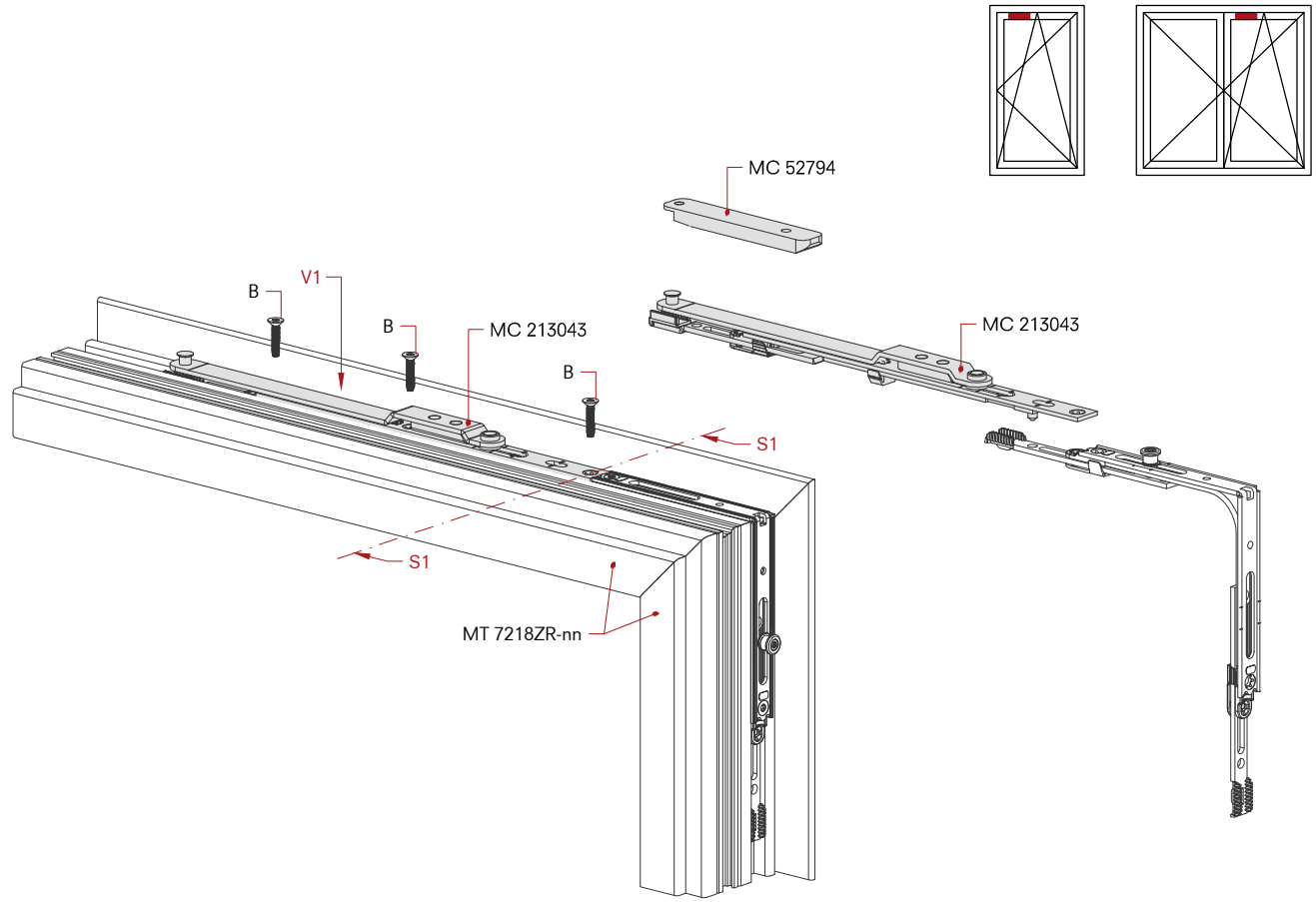


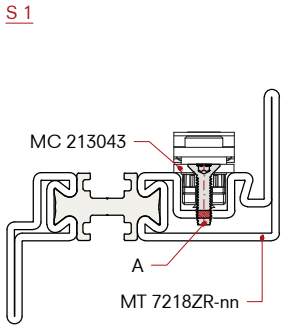

MT6518L-nn
MC 229643
27
27
34
13
MC 364310

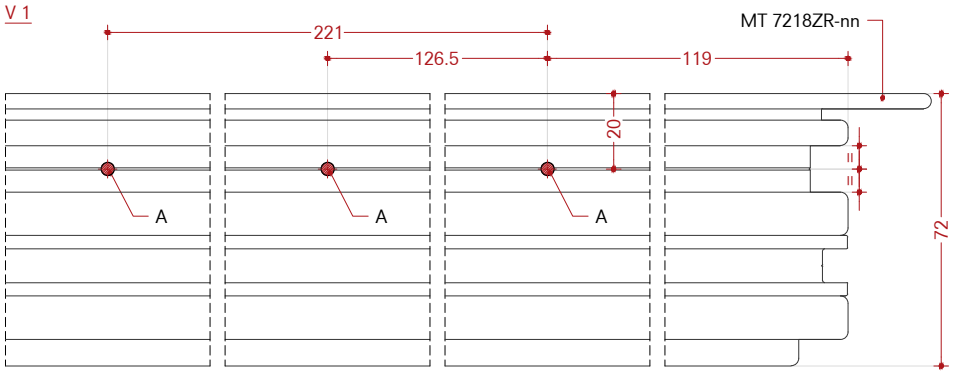
Stabilizing scissor stay without night-vent
MC 213043
and stabilising scissor stay case
MC 52794

Bussola aggiuntiva senza funzione di blocco
MC 213043
e scatola per bussola aggiuntiva
MC 52794

Brújula adicional sin función de bloqueo
MC 213043
y guardián para brújula adicional
MC 52794







M65TB - 0028 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

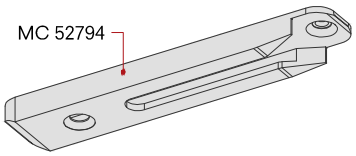
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

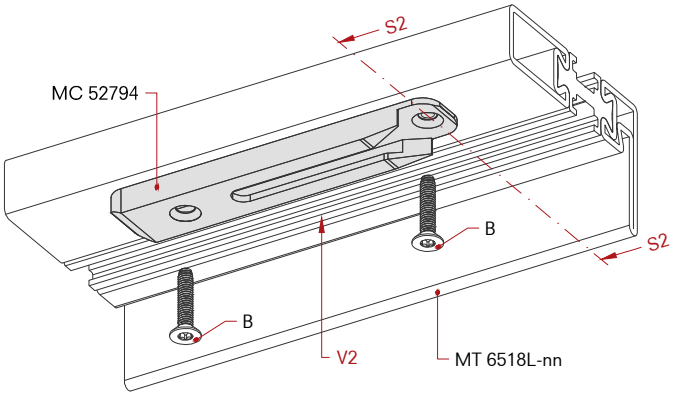
WL = Larghezza anta

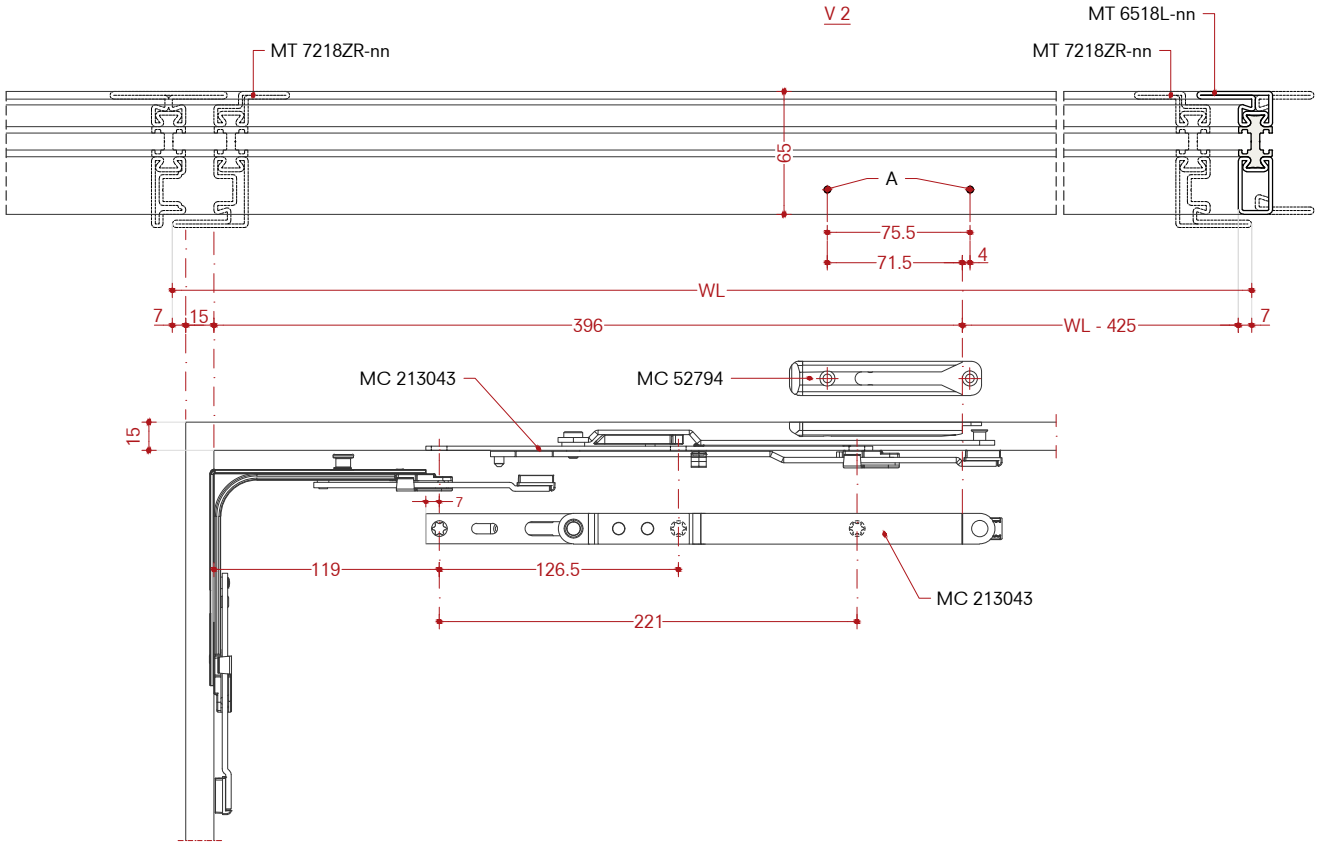
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

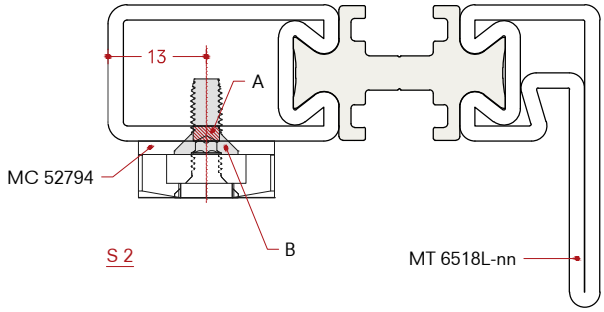
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

WL = Longitud hoja


MC 52794


S2
MC 52794
B
S2
B
V2
MT 6518L-nn

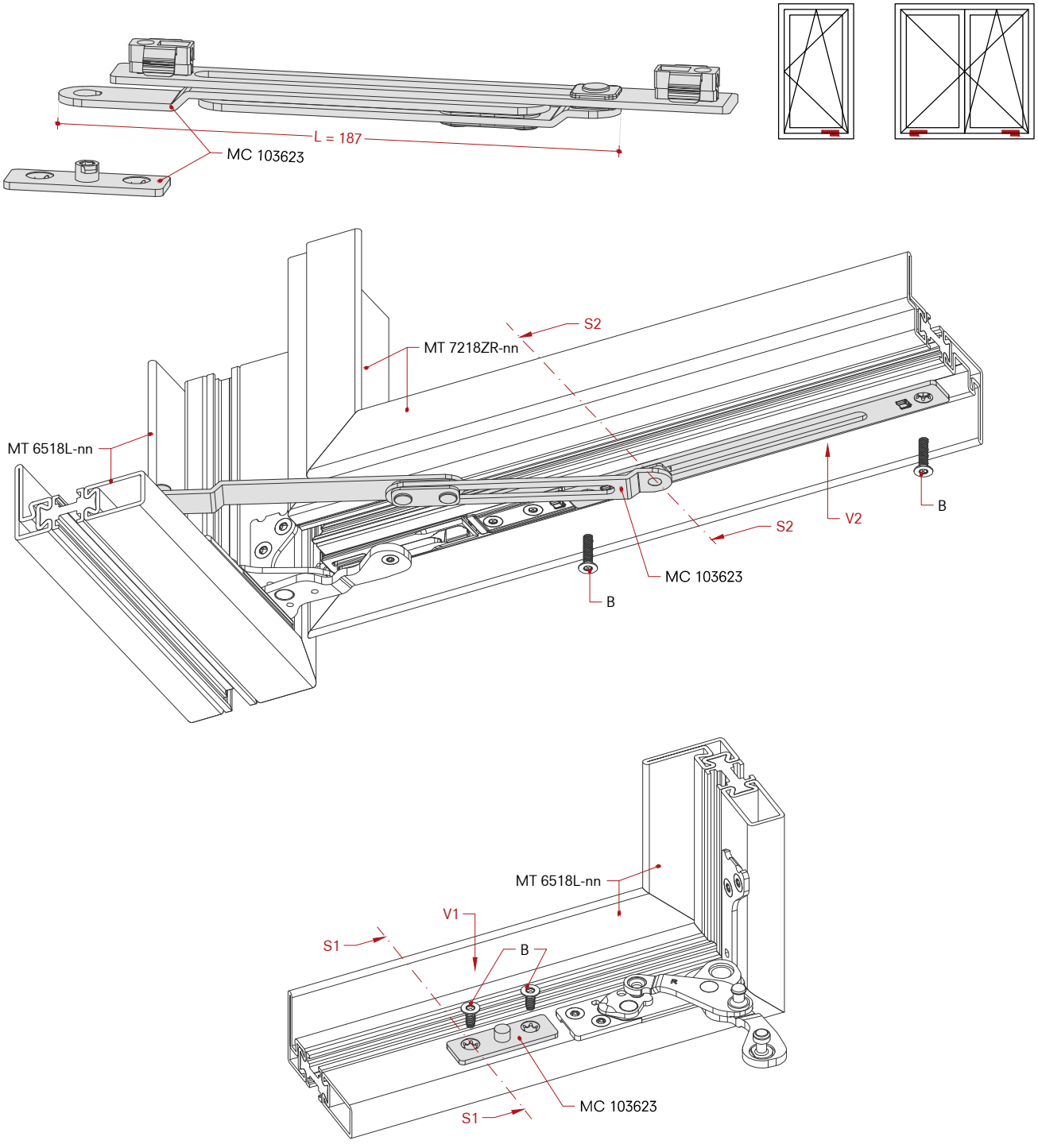

V 2
MT 6518L-nn
MT 7218ZR-nn
MT 7218ZR-nn
65
A
75.5
71.5
4
WL
7
15
396
WL - 425
7
MC 213043
MC 52794
15
7
119
126.5
MC 213043
221


13
A
MC 52794
S 2
B
MT 6518L-nn

Opening restrictor
L = 187 mm
MC 103623

Limitatore di apertura
L = 187 mm
MC 103623

Limitador de apertura
L = 187 mm
MC 103623



M65TB - 0029 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Countersunk screw M4x10

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Vite testa svasata M4x10

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Tornillo avellanado M4x10

Please note minimum sash rebate widths:

For Turn&Tilt and Turn-only window with vertical tilt lock bolt, the sash rebate width is ≥ 490 mm

For Turn&Tilt window with horizontal tilt lock bolt, the sash rebate width is ≥ 560 mm

Si prega di notare le larghezze minime di battuta dell'anta:

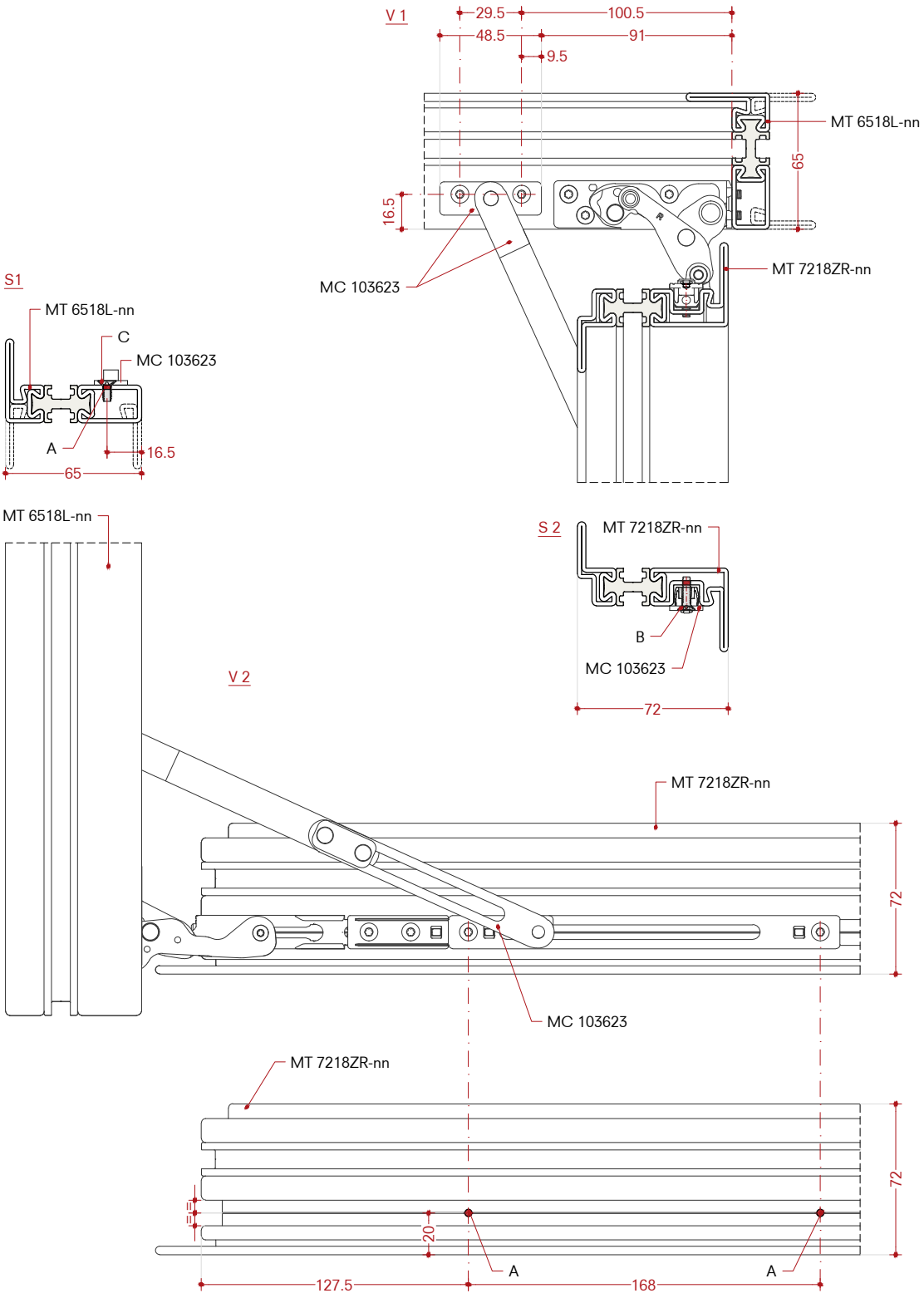
Per la finestra ad anta e ribalta e solo anta con chiavistello ad inclinazione verticale, la larghezza della battuta dell'anta è ≥ 490 mm

Per la finestra ad anta e ribalta con chiavistello di blocco dell'inclinazione orizzontale, la larghezza della battuta dell'anta è ≥ 560 mm

Tenga en cuenta los anchos mínimos de los rebordes de las hojas:

Para ventanas oscilobatientes y solo hoja con pestillo inclinado verticalmente, el ancho del rebaje de hoja es ≥ 490 mm

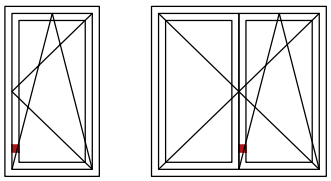
Para ventanas oscilobatientes con pestillo de bloqueo de inclinación horizontal, el ancho de la ranura de la hoja es ≥ 560 mm

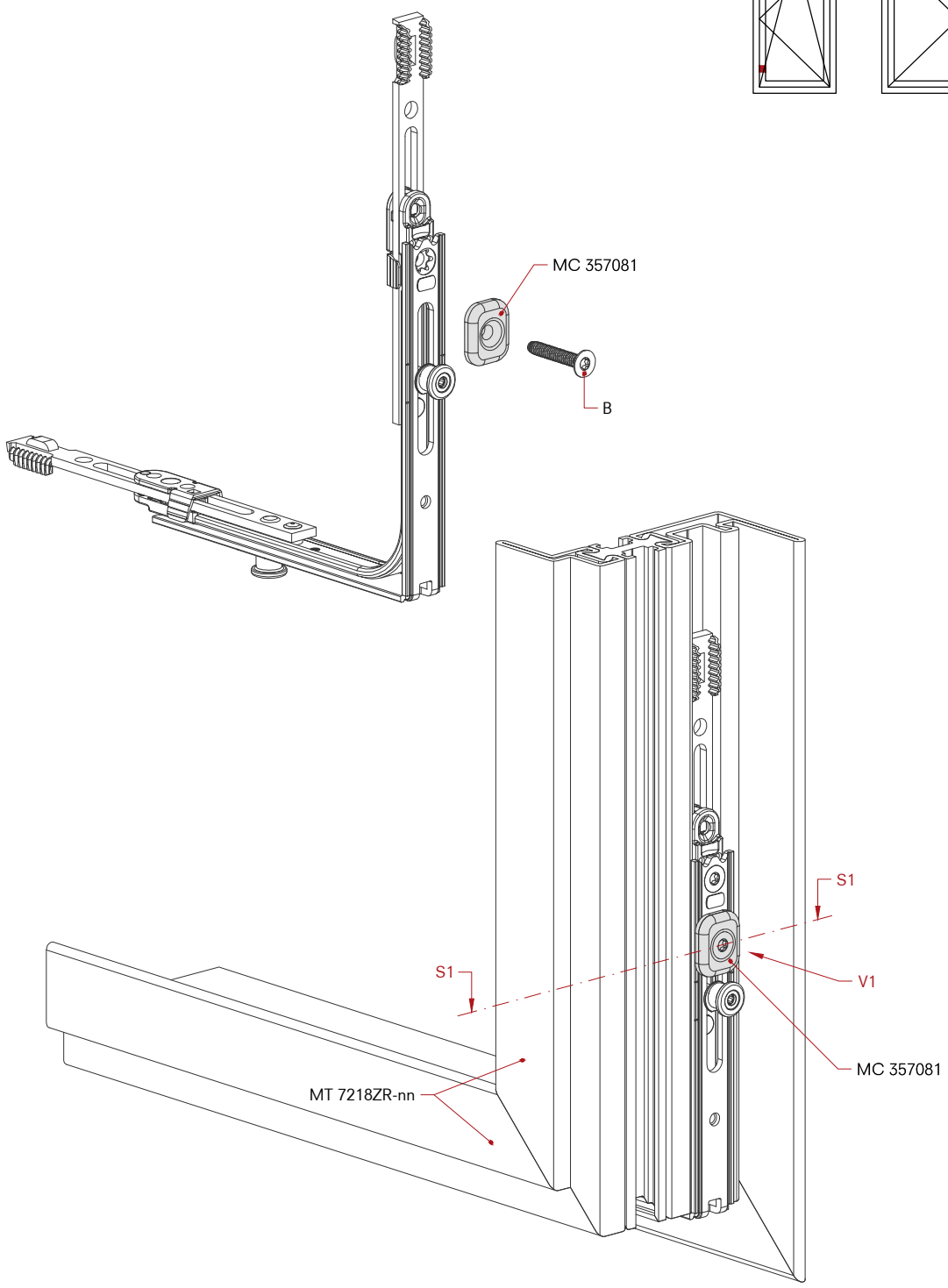


Travel restriction 90°
MC 357081
surface-mounted on corner elements

Limitatore di apertura 90°
MC 357081
su elementi angolari

Limitador de apertura 90°
MC 357081
en elementos de esquina





M65TB - 0030 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20

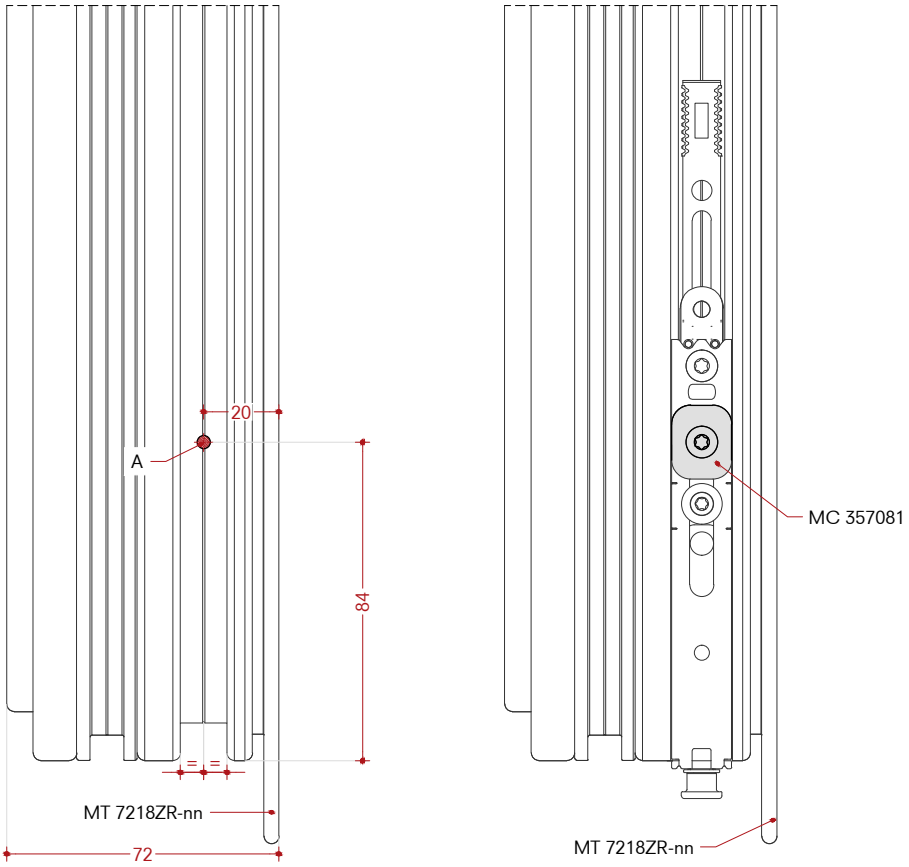
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

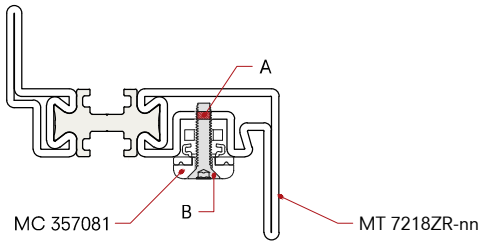
A) Foro Ø3.3 mm
B) Vite testa svasata M4x20

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x20

V 1


20
A
84
MT 7218ZR-nn
72
MC 357081
MT 7218ZR-nn

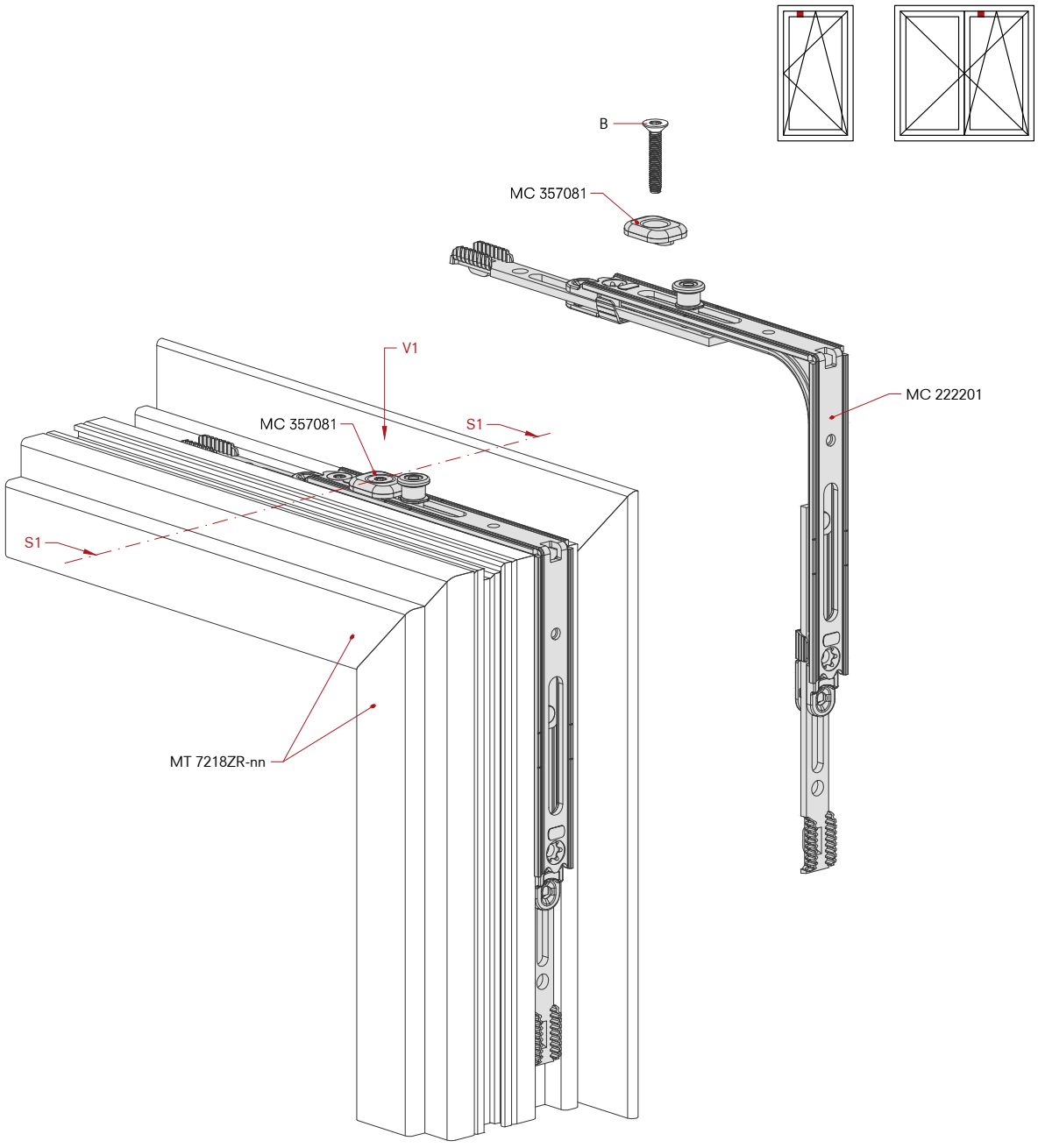

A
B
MC 357081
MT 7218ZR-nn

S 1

Travel restriction 90°
MC 357081
surface-mounted on corner elements

Limitatore di apertura 90°
MC 357081
su elementi angolari

Limitador de apertura 90°
MC 357081
en elementos de esquina



M65TB - 0030 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20

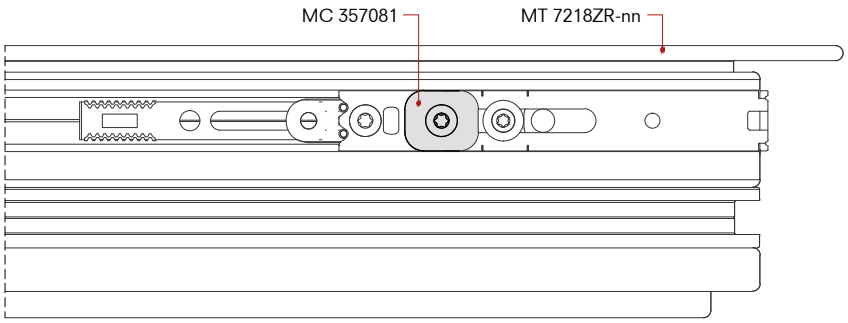
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

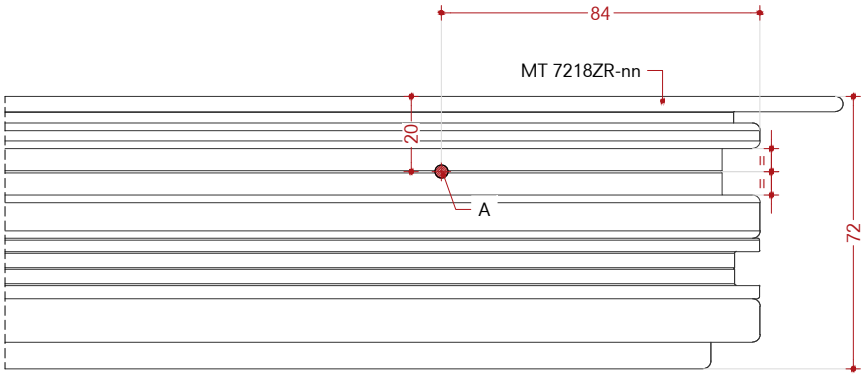
A) Foro Ø3.3 mm
B) Vite testa svasata M4x20

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

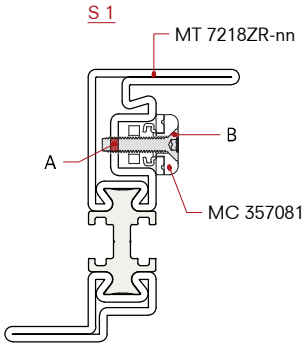
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x20

V 1


MC 357081
MT 7218ZR-nn


84
MT 7218ZR-nn
20
A
72

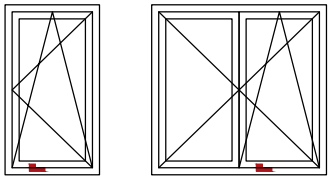
S 1

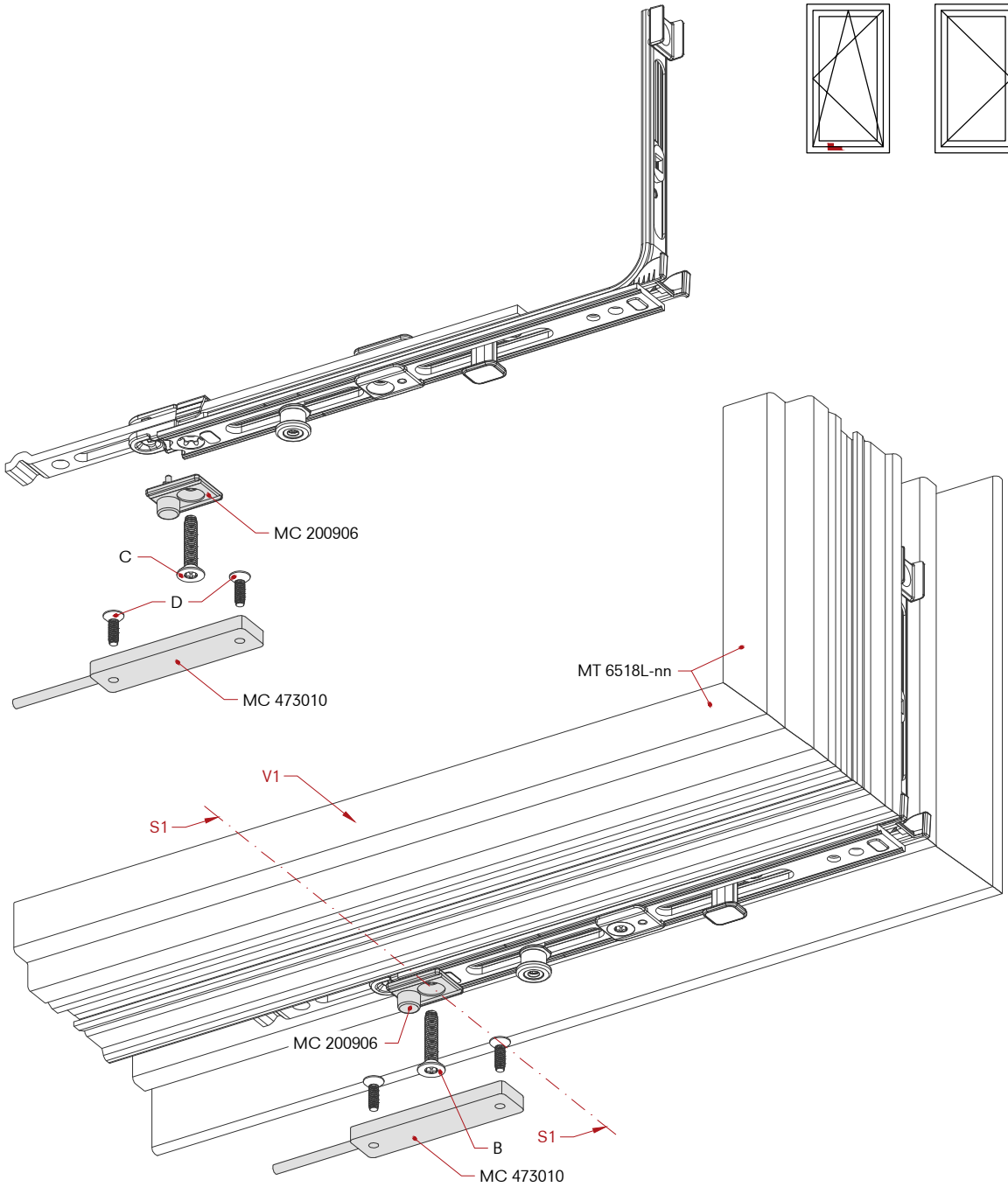

MT 7218ZR-nn
B
A
MC 357081

Adaptor with contact sensor KVS
MC 200906
Flat magnet contact safety class 2
MC 473010

Adattatore con contatto KVS
MC 200906
Contatto magnetico piatto classe di protezione 2
MC 473010

Adaptador con contacto KVS
MC 200906
Protección de contacto magnético plano clase 2
MC 473010





M65TB - 0031 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

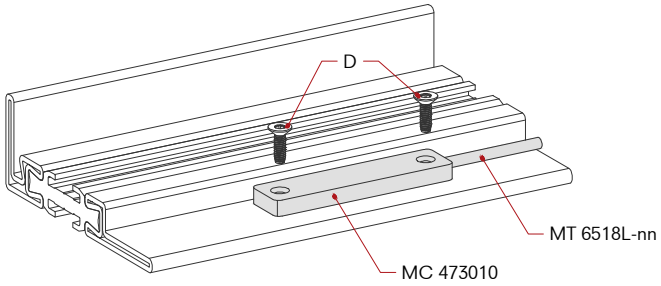
A) Hole Ø3.3 mm
B) Hole Ø2.5 mm
C) Countersunk screw M4x16
D) Countersunk screw M3x10
E) Cut the screw

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

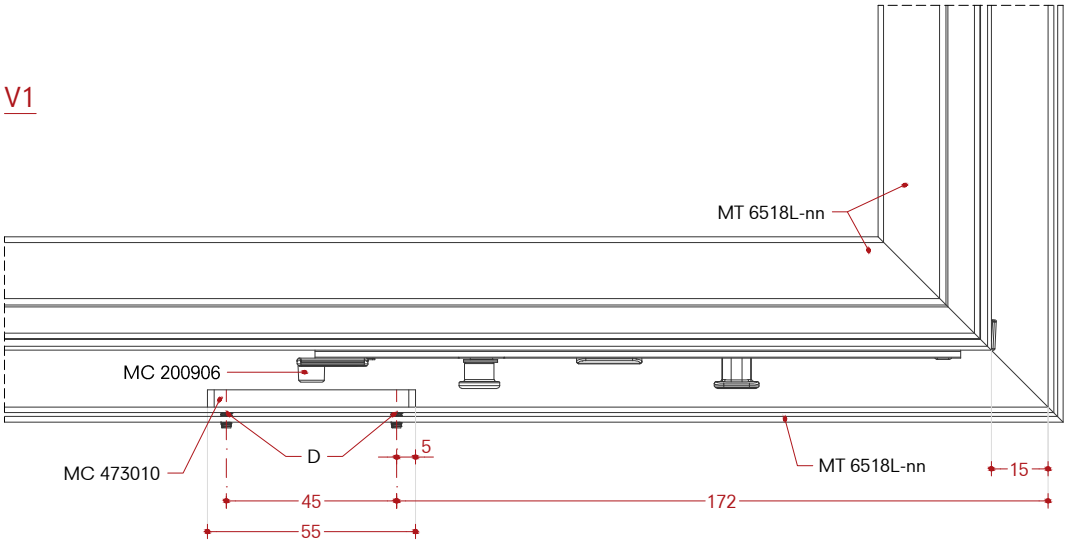
A) Foro Ø3.3 mm
B) Foro Ø2.5 mm
C) Vite testa svasata M4x16
D) Vite testa svasata M3x10
E) Accorciare la vite

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

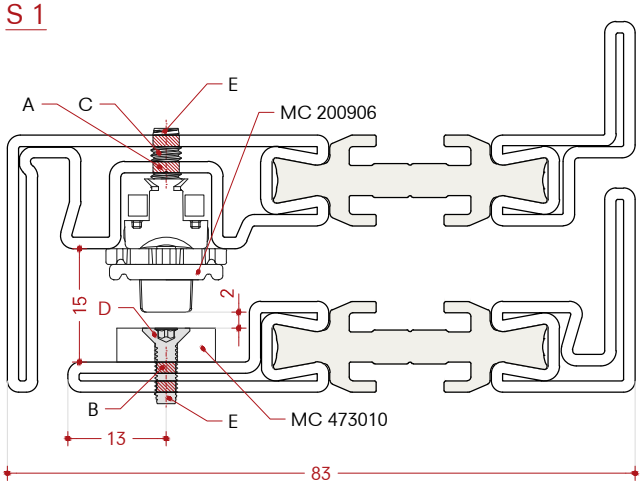
A) Oreficio Ø3.3 mm
B) Oreficio Ø2.5 mm
C) Tornillo avellanado M4x16
D) Tornillo avellanado M3x10
E) Recortar tornillo


D
MT 6518L-nn
MC 473010

V1


MT 6518L-nn
MC 200906
MC 473010
D
5
MT 6518L-nn
15
45
172
55

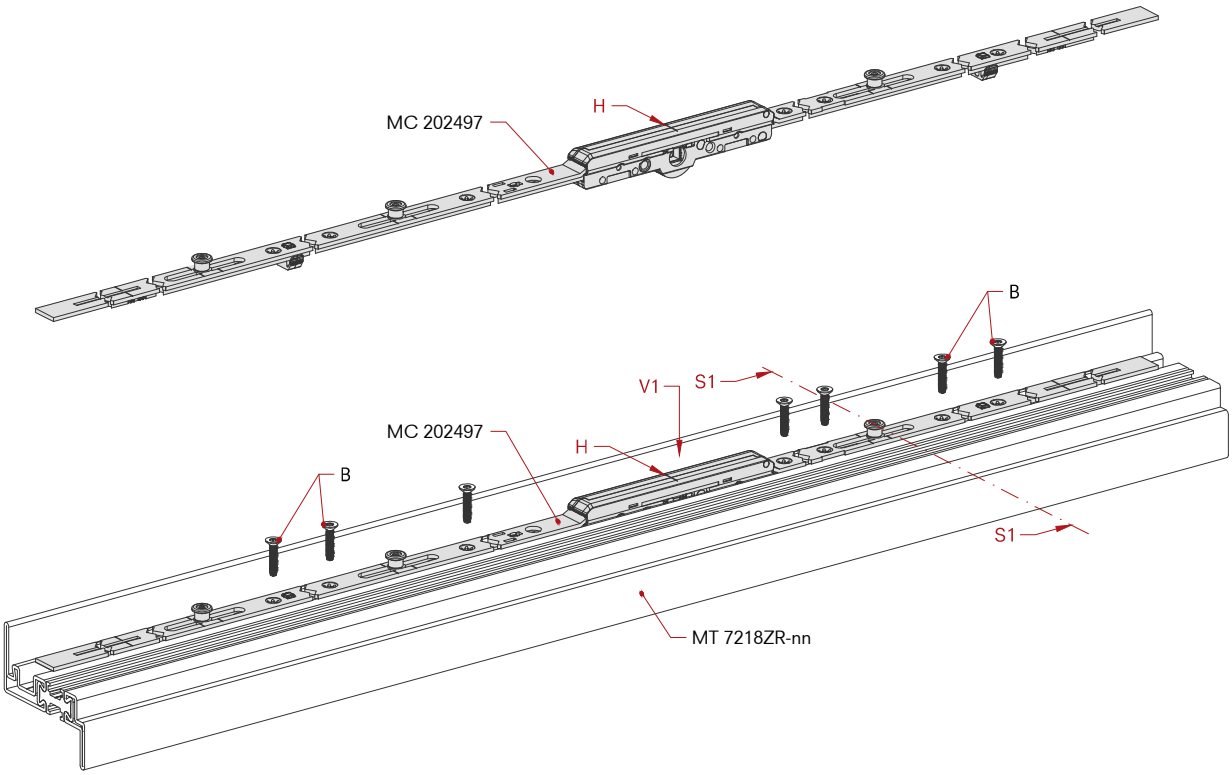
S 1


A
C
E
MC 200906
15
D
2
B
E
MC 473010
13
83

Turn-only drive gear variable
Bottom-hung window
Backset 6.5 mm
MC 202497

Cremonese sola rotazione variabile
Finestra anta ribalta
Entrata 6.5 mm
MC 202497

Engranaje de rotación variable
Ventana oscilante
Entrada 6.5 mm
MC 202497

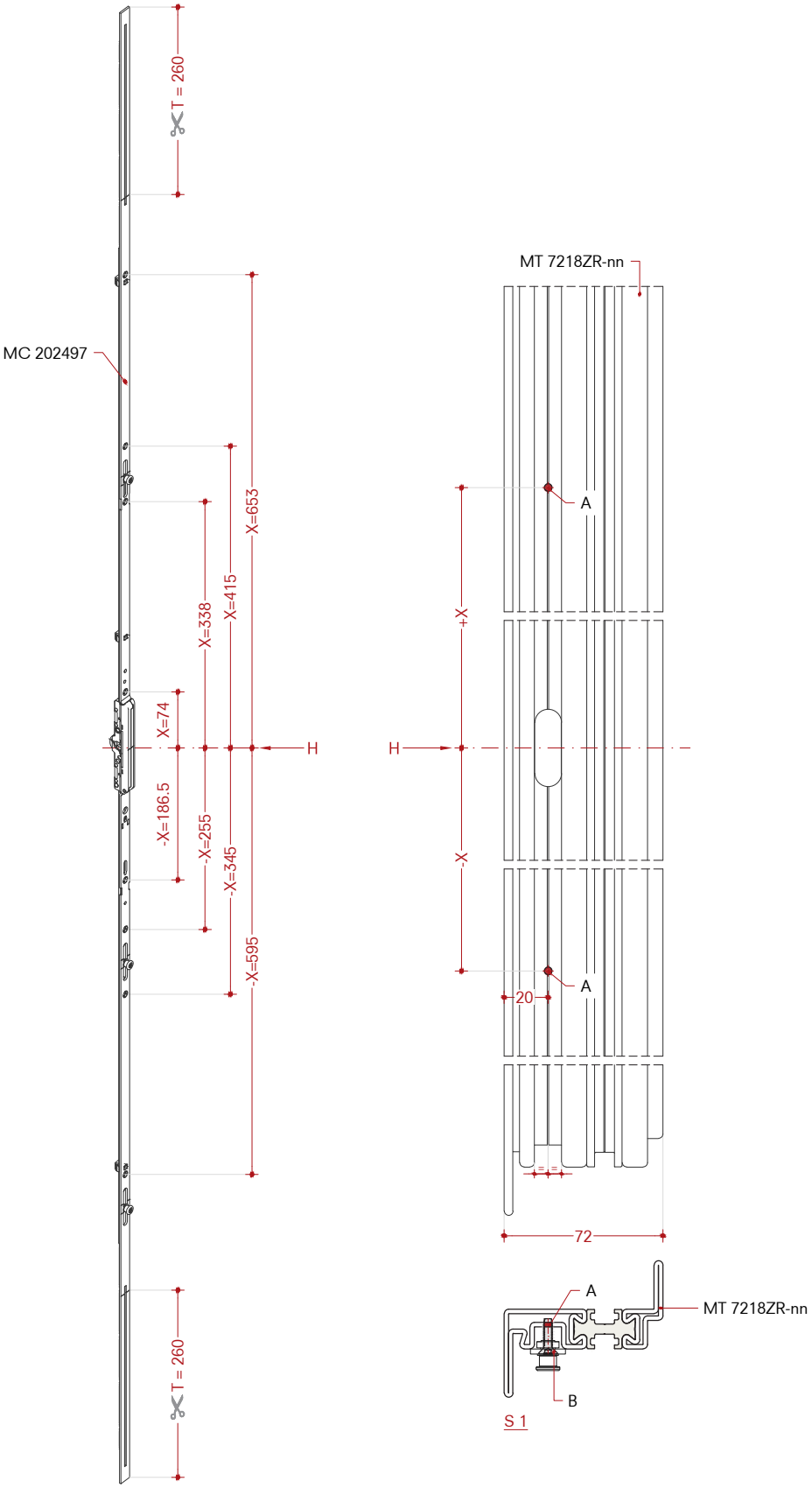


M65TB - 0032 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
H) Handle centre
T) Maximum cut drive gear
X) Position screw connection drive gear

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
H) Centro maniglia
T) Taglio massimo cremonese
X) Posizionamento vite cremonese

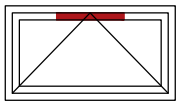
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
H) Centro de la manija
T) Corte de engranaje máximo
X) Posicionamiento del tornillo de engranaje

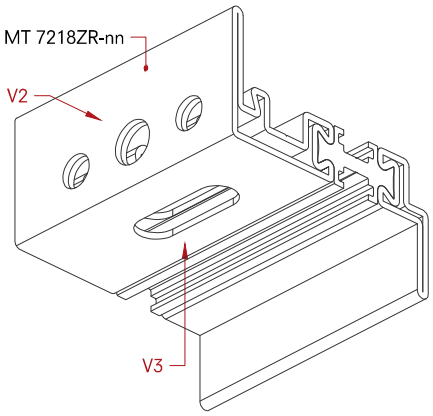

T = 260
MC 202497
X=653
X=415
X=338
X=74
H
-X=186.5
-X=255
-X=345
-X=595
T = 260
MT 7218ZR-nn
A
+X
H
-X
A
20
72
A
MT 7218ZR-nn
B
S 1

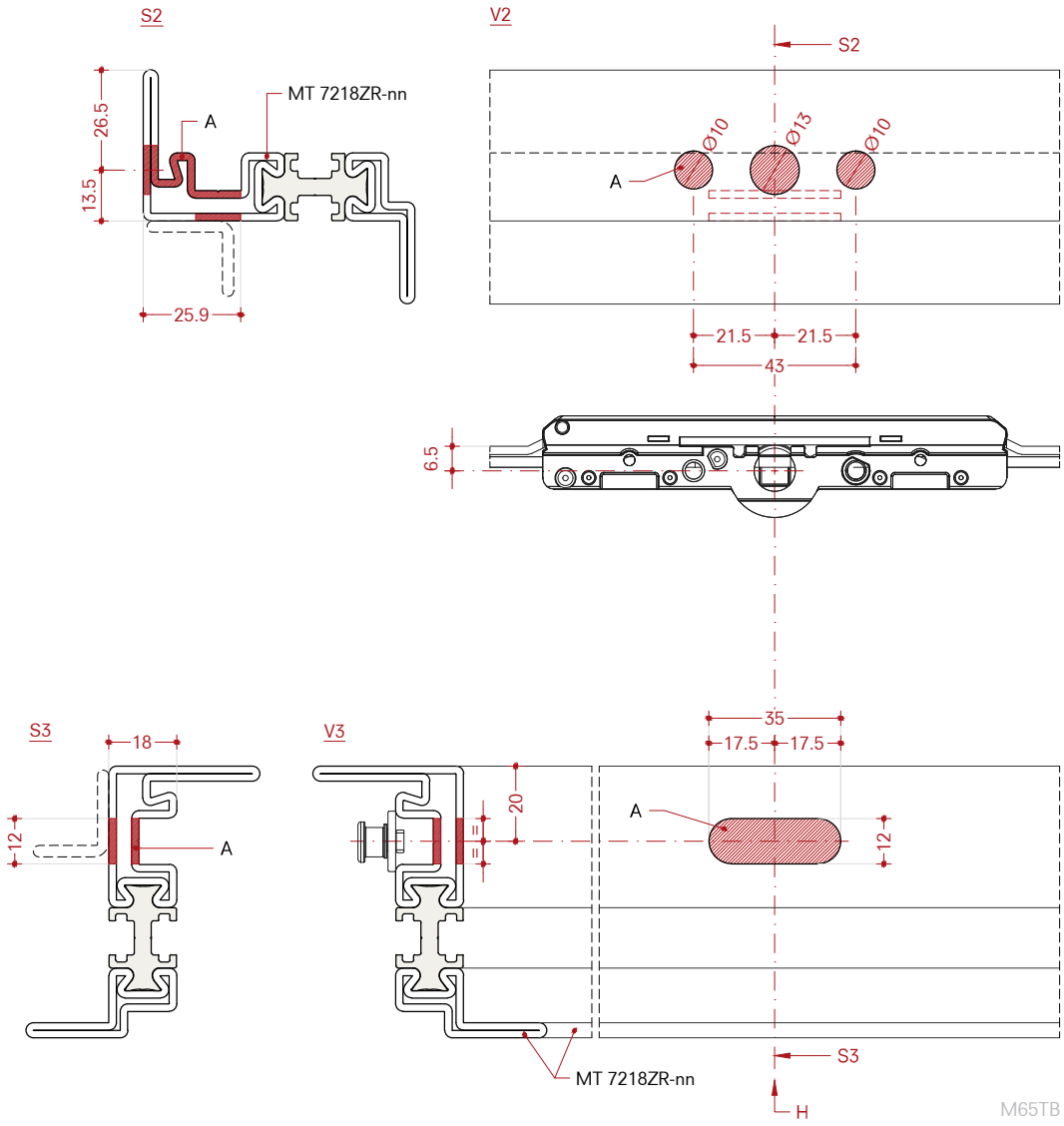
Handle position
Bottom-hung window
Hardware 6.5 mm backset
Drive gear variable

Posizione maniglia
Finestra anta ribalta
Entrata 6.5 mm
Cremonese variabile

Posición de la manija
Ventana oscilante
Entrada 6.5 mm
Engranaje variable





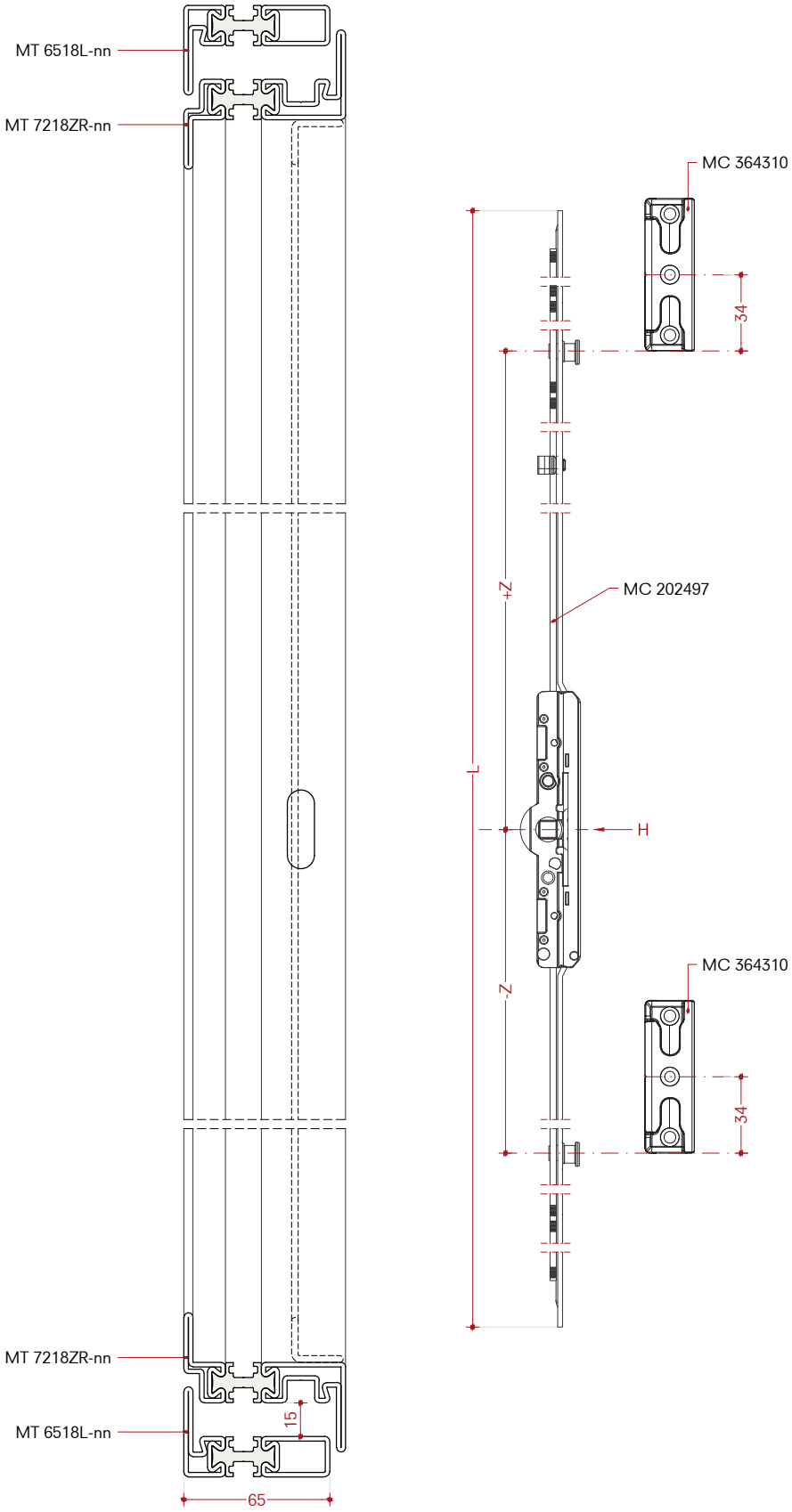


M65TB - 0033 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Taglio profilo
H) Centro maniglia
L) Lunghezza massima cremonese
X) Posizionamento camma di bloccaggio

A) Corte de perfil
H) Centro de la manija
L) Longitud máxima del engranaje
X) Posicionamiento de la leva de bloqueo

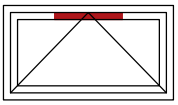


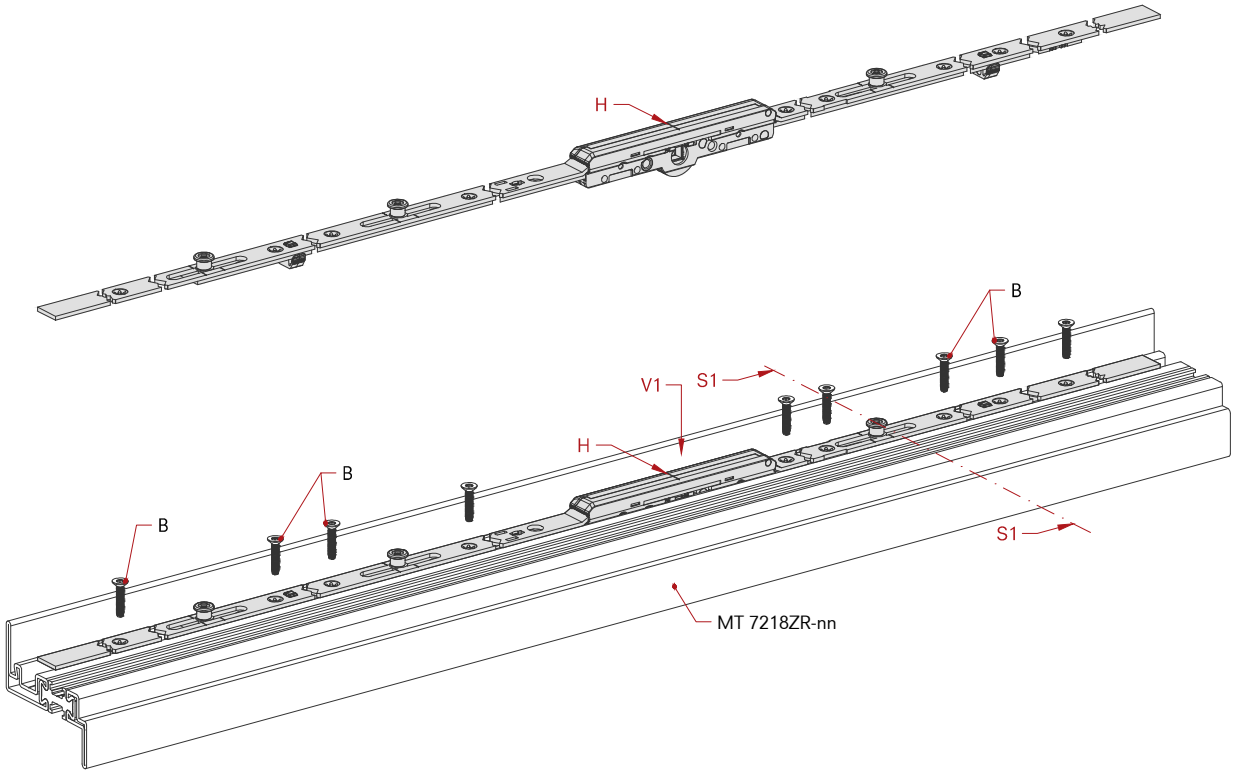
	L	Z1	Z2	Z3
MC 202497	2040	-640	-300	370

Espagnolette - centred handle
Bottom-hung window
Backset 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327

Posizione maniglia centrata
Finestra anta ribalta
Entrata 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327

Posición de la manija centrada
Ventana oscilante
Entrada 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327



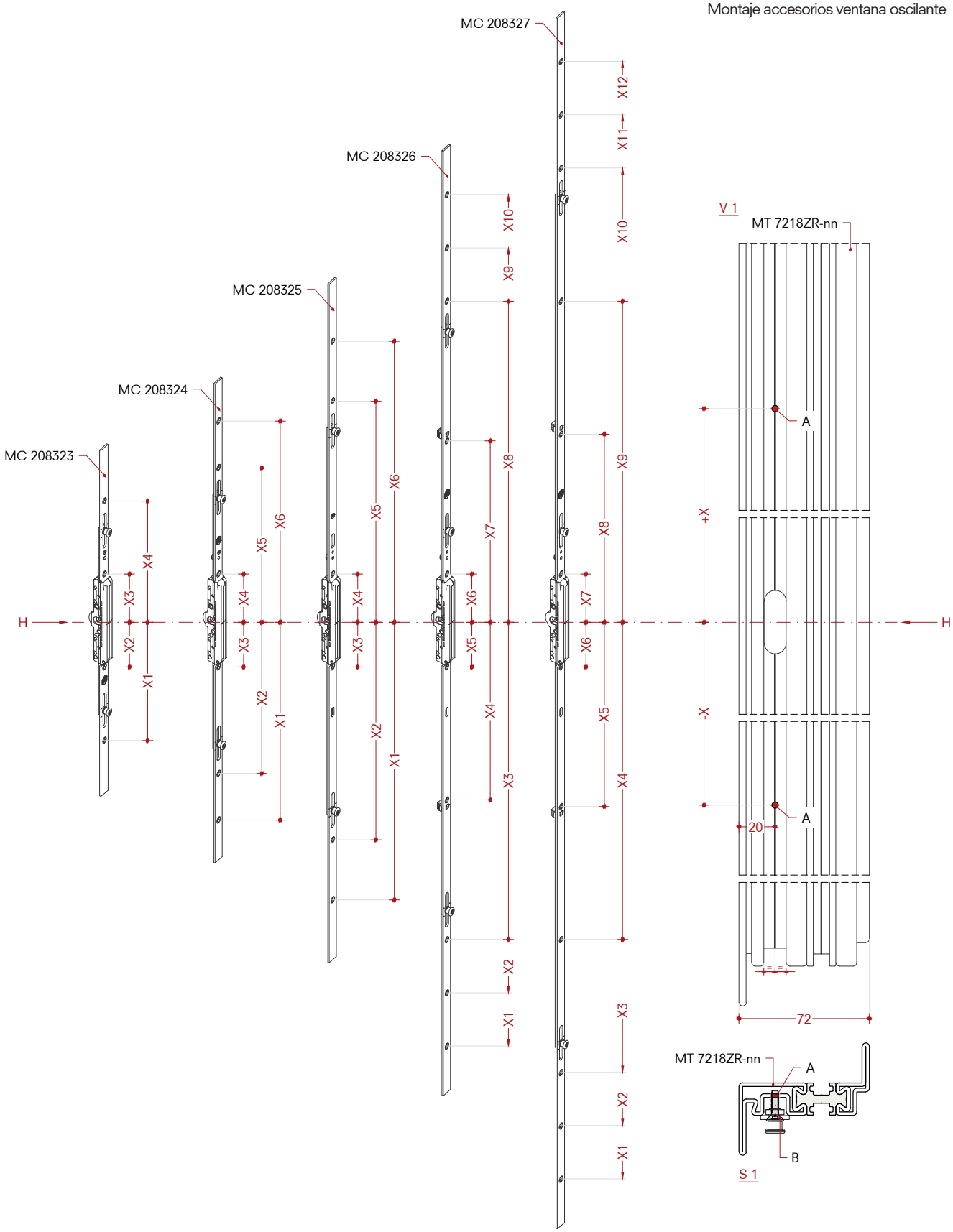


M65TB - 0034 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
H) Handle centre
X) Position screw connection drive gear

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
H) Centro maniglia
X) Posizionamento vite cremonese

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
H) Centro de la manija
X) Posicionamiento del tornillo de engranaje

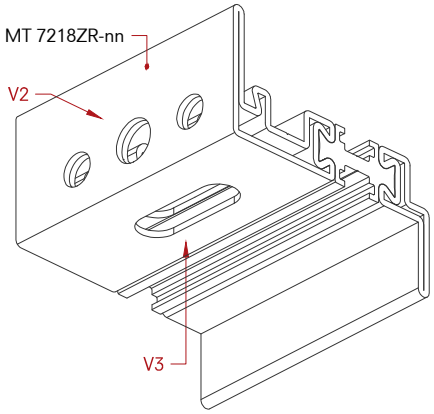


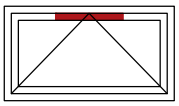
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
MC 208323	-180	-70	70	180	-	-	-	-	-	-	-	-
MC 208324	-300	-230	-70	70	230	300	-	-	-	-	-	-
MC 208325	-420	-330	-70	70	330	420	-	-	-	-	-	-
MC 208326	-640	-560	-480	-270	-70	70	270	480	560	640	-	-
MC 208327	-840	-760	-680	-480	-280	-70	70	280	480	680	760	840

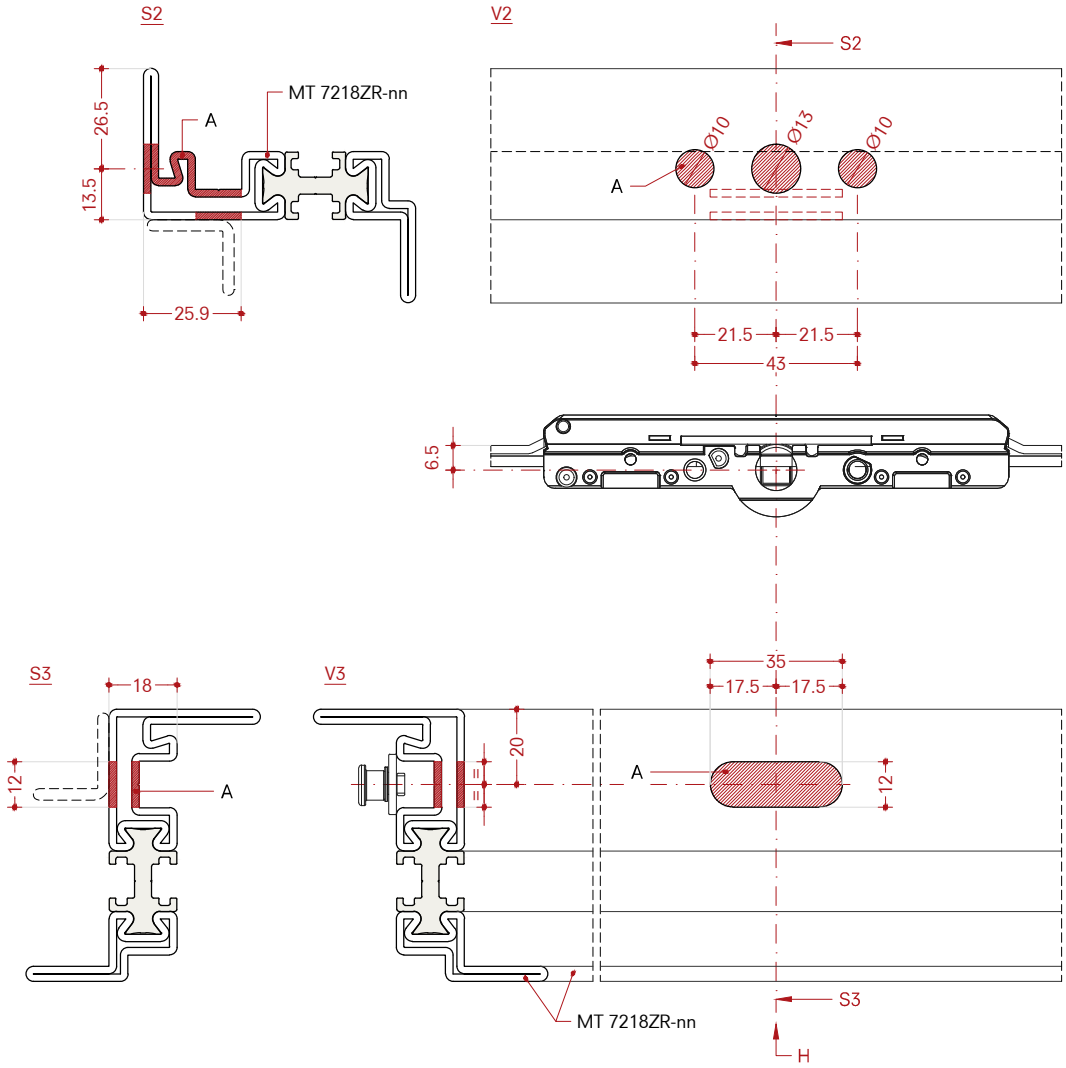
Handle position
Bottom-hung window
Hardware 6.5 mm backset
Drive gear fixed

Posizione maniglia
Finestra anta ribalta
Entrata 6.5 mm
Cremonese fisso

Posición de la manija
Ventana oscilante
Entrada 6.5 mm
Engranaje fijo





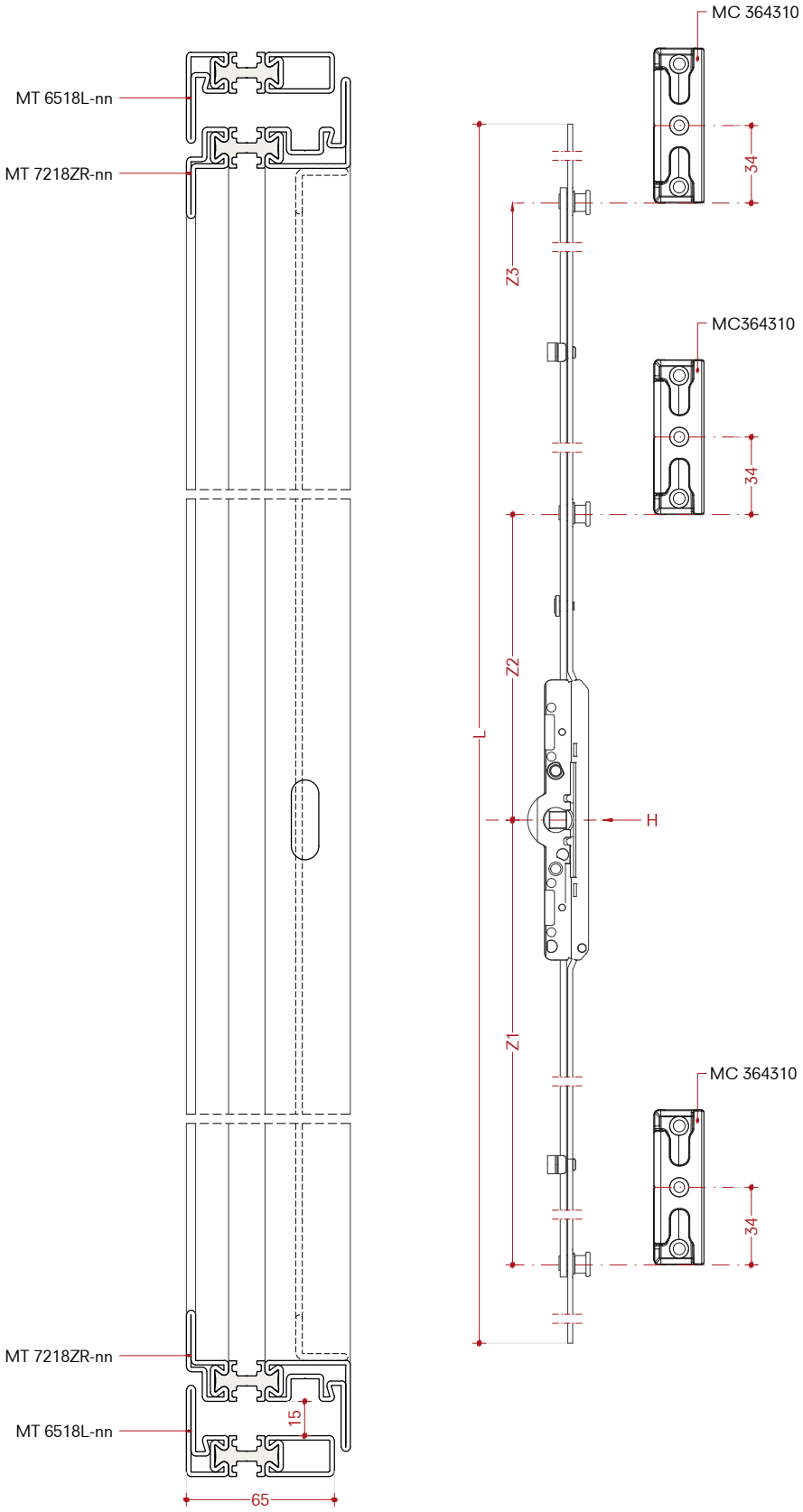


M65TB - 0035 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Taglio profilo
H) Centro maniglia
L) Lunghezza massima cremonese
X) Posizionamento camma di bloccaggio

A) Corte de perfil
H) Centro de la manija
L) Longitud máxima del engranaje
X) Posicionamiento de la leva de bloqueo

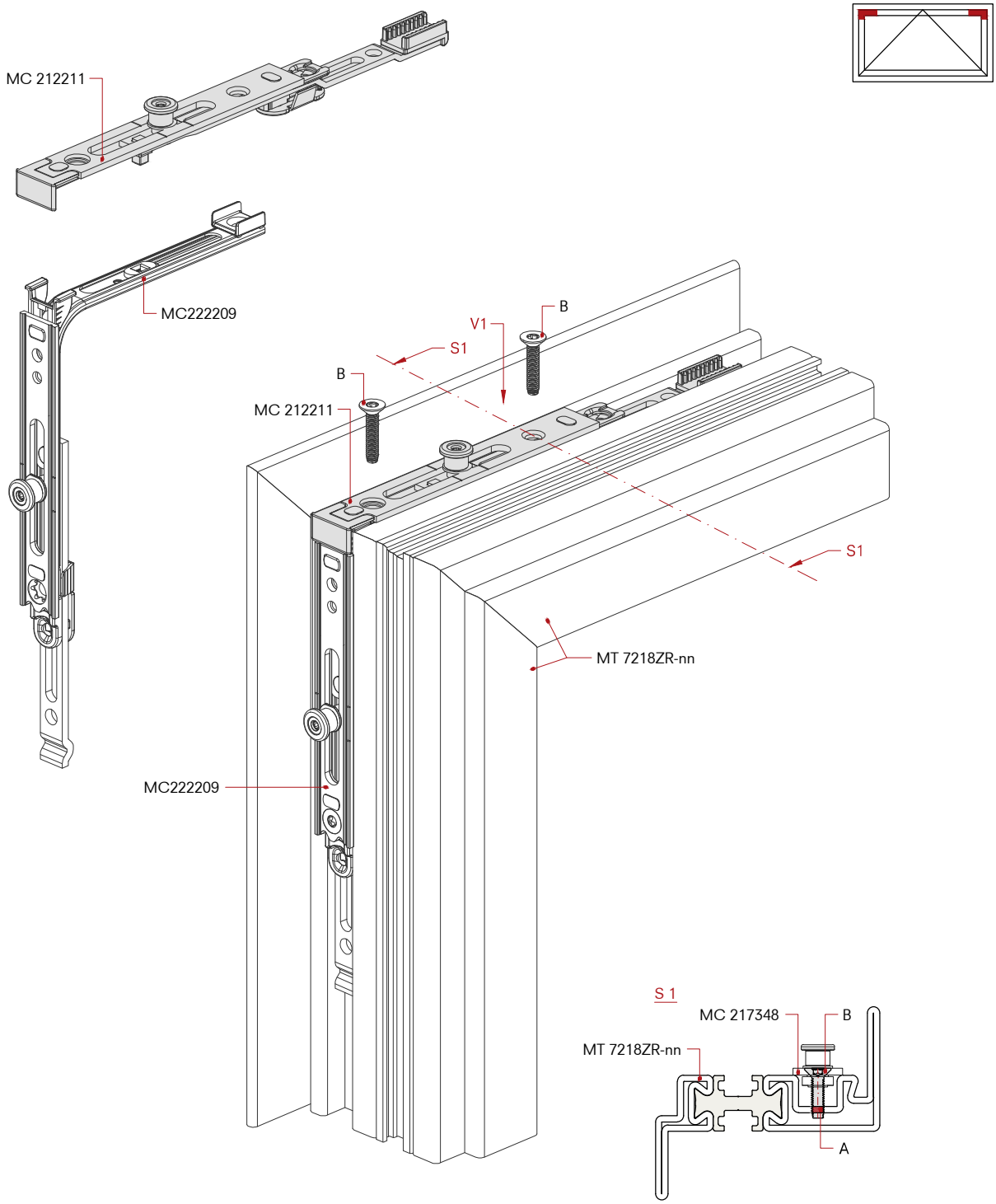


	L	Z1	Z2	Z3
MC 208323	520	-135	135	-
MC 208324	720	-185	185	-
MC 208325	1020	-285	285	-
MC 208326	1420	-435	135	435
MC 208327	1820	-635	135	635

End piece top 180°
with 1 locking cam
Bottom-hung window
MC 212211

Terminale superiore 180°
con 1 camma di bloccaggio
Finestra anta ribalta
MC 212211

Pieza final superior 180 °
con 1 leva de bloqueo
Ventana oscilante
MC 212211

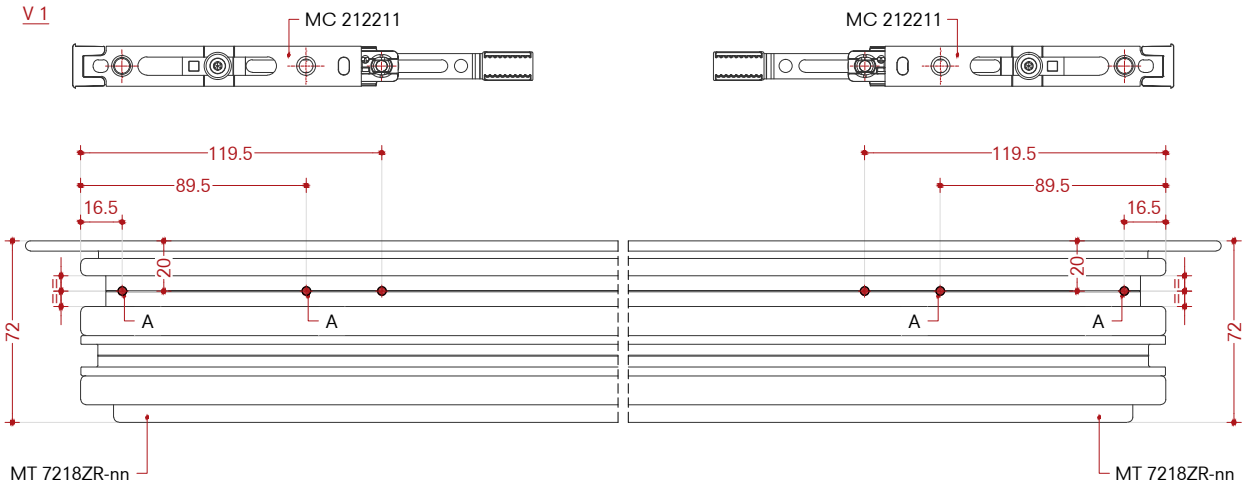


M65TB - 0036 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Taglio profilo
H) Centro maniglia
L) Lunghezza massima cremonese
X) Posizionamento camma di bloccaggio

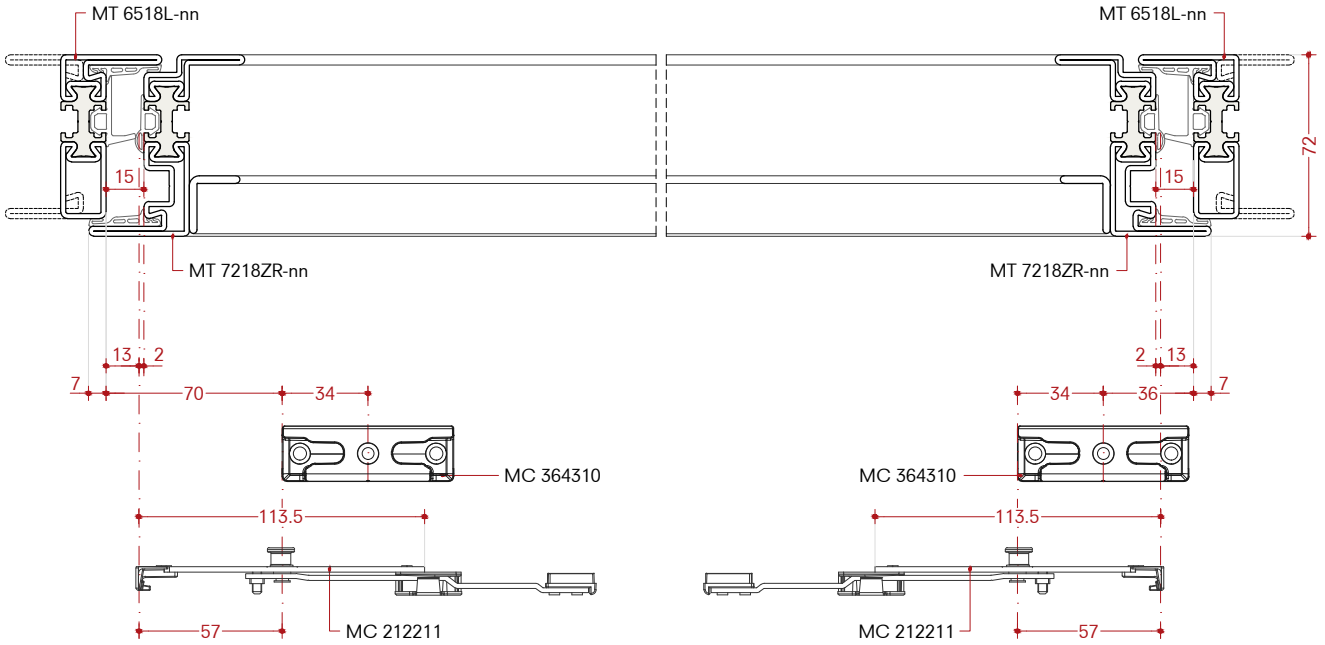
A) Corte de perfil
H) Centro de la manija
L) Longitud máxima del engranaje
X) Posicionamiento de la leva de bloqueo



Positioning striker plate
(only for MC 217348 / MC 217349)

Posizionamento del riscontro
(solo per MC 217348 / MC 217349)

Posicionamiento del pieza de bloqueo
(solo para MC 217348 / MC 217349)



Tilt-only hinge arm with hinge
MC 217723 R
MC 217724 L

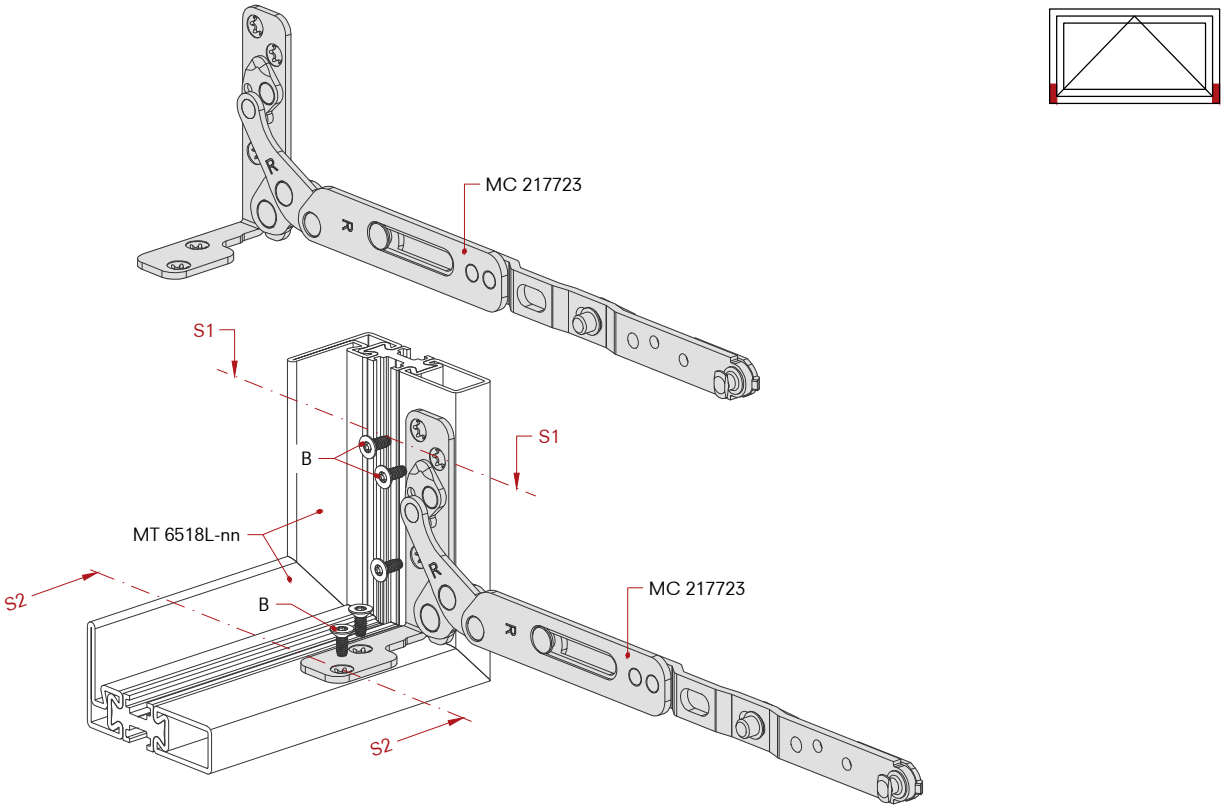
Leaf weight ≤ 80 kg
Leaf size ≤ 1.9 m²

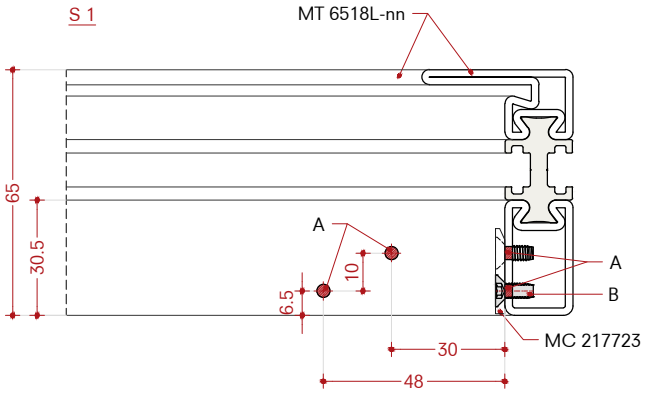
Braccio solo inclinabile con cerniera
MC 217723 R
MC 217724 L

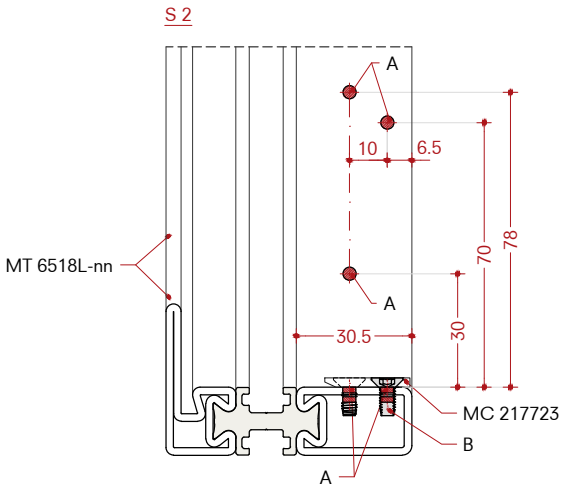
Peso anta ≤ 80 kg
Dimensioni anta ≤ 1.9 m²

Brazo solo inclinable con bisagra
MC 217723 R
MC 217724 L

Peso de la hoja ≤ 80 kg
Dimensiones de la hoja ≤ 1.9 m²







M65TB - 0037 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x10

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x10

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x10

L = Apertura izquierda
R = Apertura derecha

Please note:

- Observe guidline "Restrictor and cleaning stays for tilt-only sashes and tilt-only fanlights".
- The maximum sash weight must not be exceeded.
- Fasten according to: TBDK guideline Gütegemeinschaft Schlösser und Beschläge (Locks and Fittings Quality Association - www.schlossindustrie.de).

Nota:

- Rispettare la guida "Sostegno di limitazione e di pulizia per ante solo anta e sopraluce solo ribalta".
- Il peso massimo dell'anta non deve essere superato.
- Fissare secondo la linea guida TBDK Gütegemeinschaft Schlösser und Beschläge (Associazione per la qualità delle serrature e dei raccordi - www.schlossindustrie.de).

Nota:

- Observe la guía "Limitación y soporte de limpieza para puertas de guillotina y ventanas de popa basculantes".
- No se debe exceder el peso máximo de la puerta.
- Fije según la directriz TBDK Gütegemeinschaft Schlösser und Beschläge (Asociación para la calidad de cerraduras y herrajes - www.schlossindustrie.de).

Height adjustment

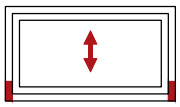
Adjustment range +1/-2.5 mm with SW 4

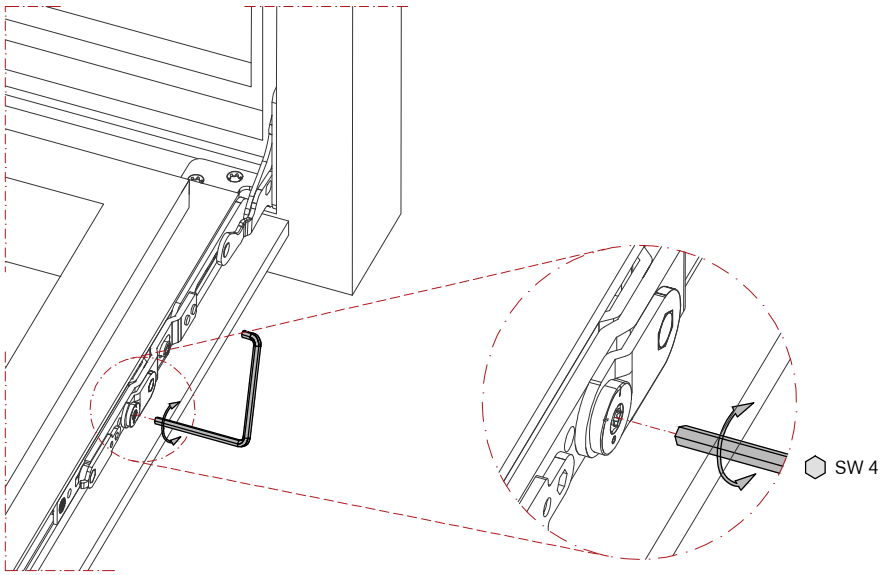
Regolazione verticale

Regolazione +1/-2.5 mm con SW 4

Ajuste vertical

Ajuste +1/-2.5 mm con SW 4





Pressure adjustment

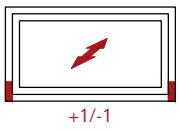
Adjustment range +1 mm with SW 4

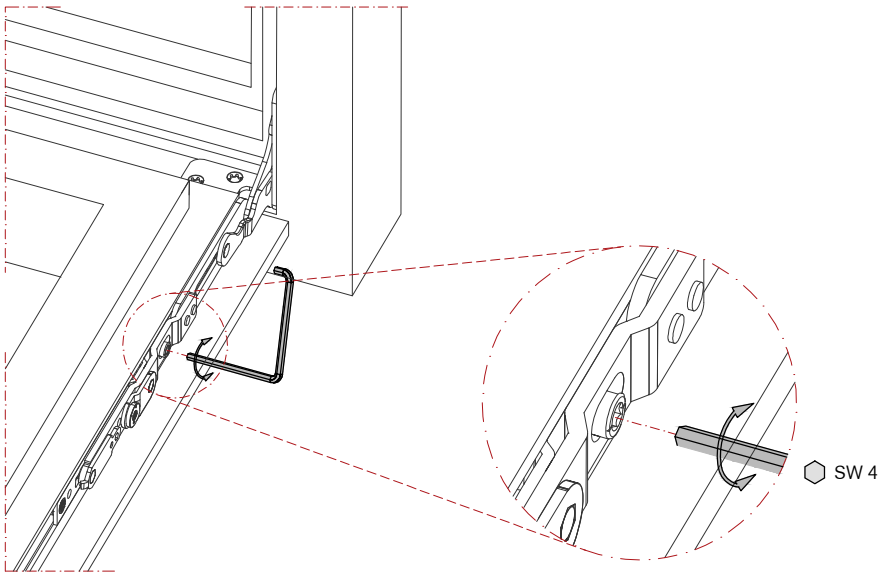
Regolazione pressione di contatto

Regolazione +1 mm con SW 4

Ajuste de presión de contacto

Ajuste +1 mm con SW 4

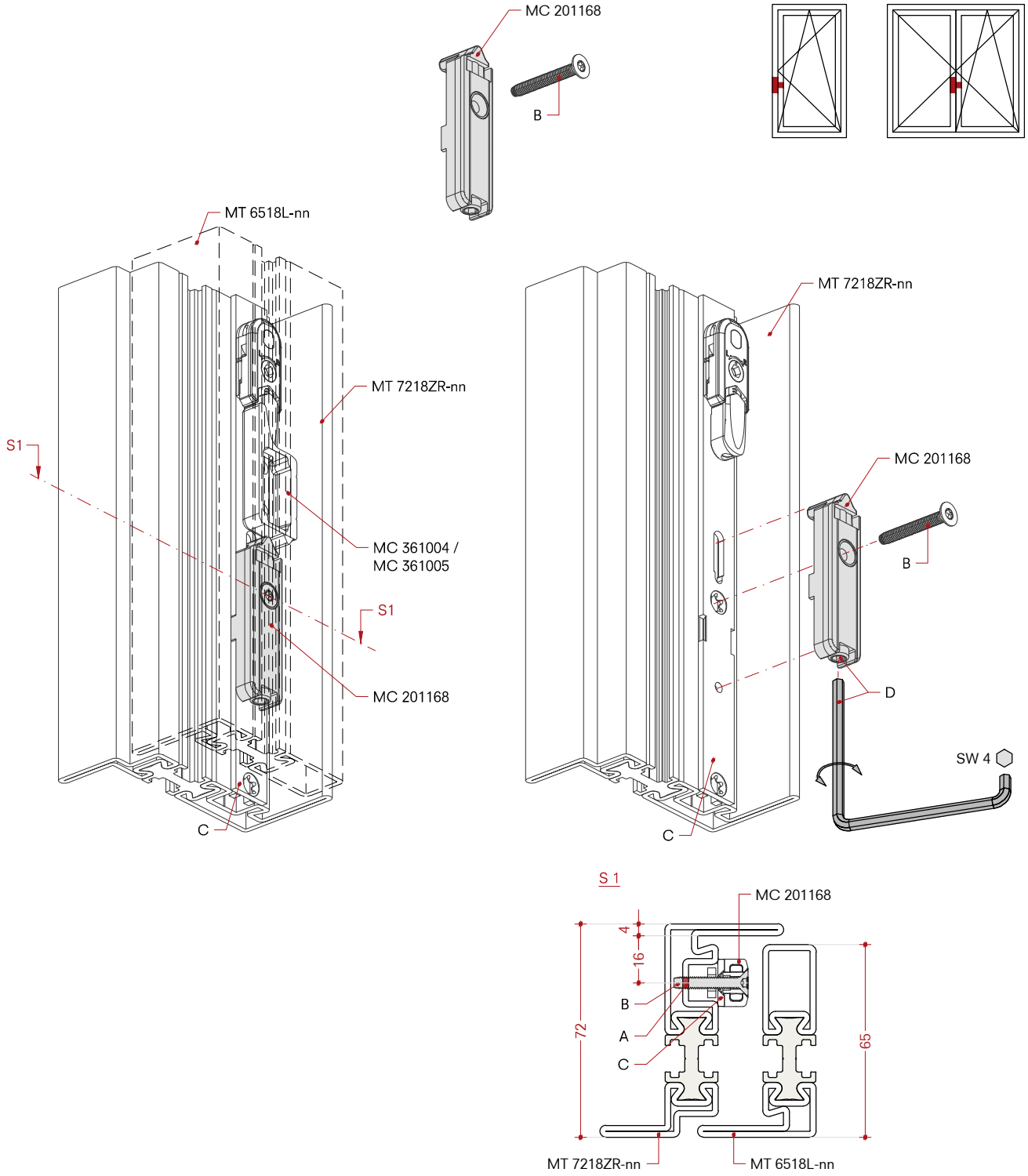




Door catch
MC 201168
Installed on faceplate

Scrocco porta
MC 201168
Installato sul frontalino

Pestillo de puerta
MC 201168
Instalado en la placa frontal



M65TB - 0038 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x25
E) Faceplate
F) Height adjustment ±2 mm with SW 4

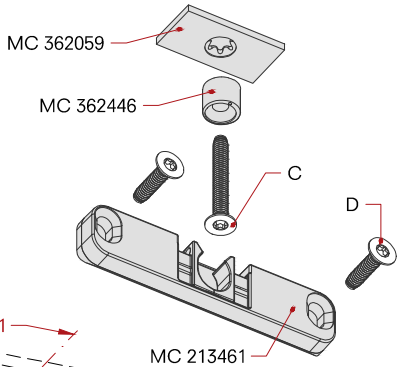
A) Foro Ø3.3 mm
B) Vite testa svasata M4x25
E) Frontalino
F) Regolazione in altezza ±2 mm con SW 4

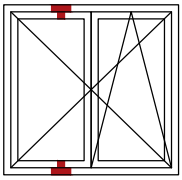
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x25
E) Placa frontal
F) Regulación de altura ± 2 mm con SW 4

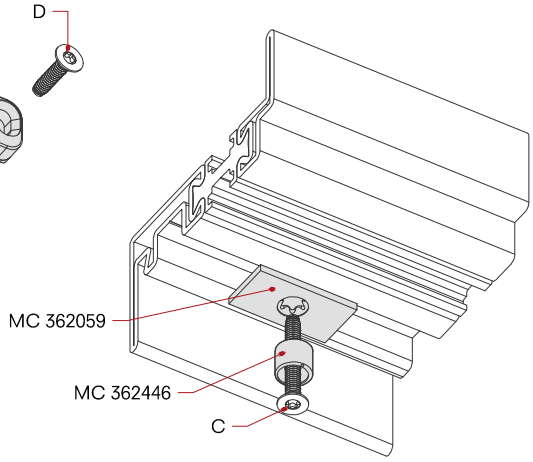
Bullet catch
MC 213461
with Bullet-catch roll MC 362446
and packer for bullet catch for
Eurogroove MC 362059

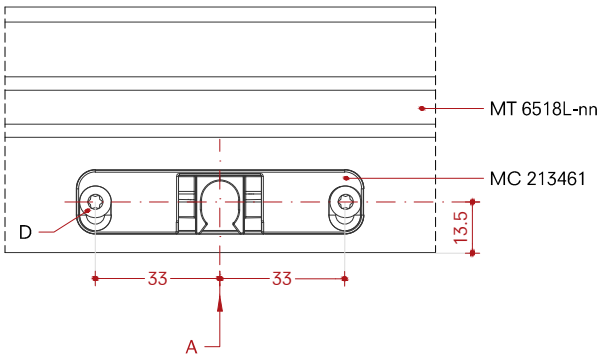
Chiusura perno
MC 213461
con rullo chiusura perno MC 362446
e packer perno per Eurogroove
MC 362059

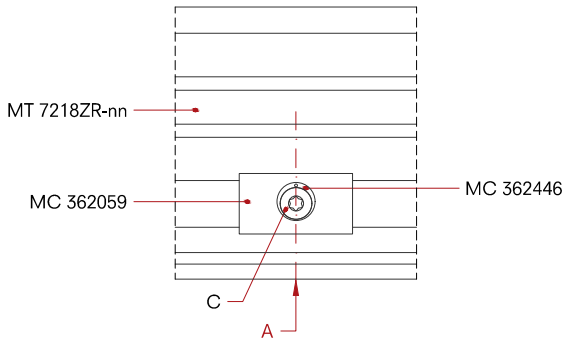
Cierre de pasador
MC 213461
con rodillo de cierre de pasador
MC 362446
y empaquetador de pasadores para
Eurogroove MC 362059

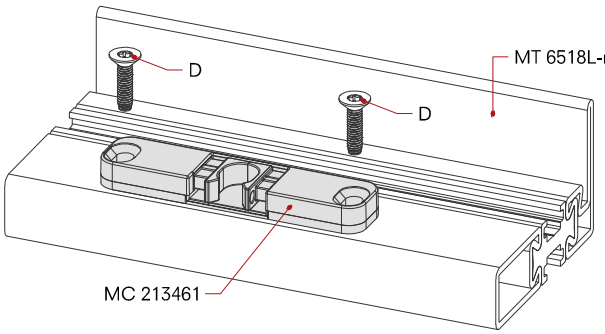


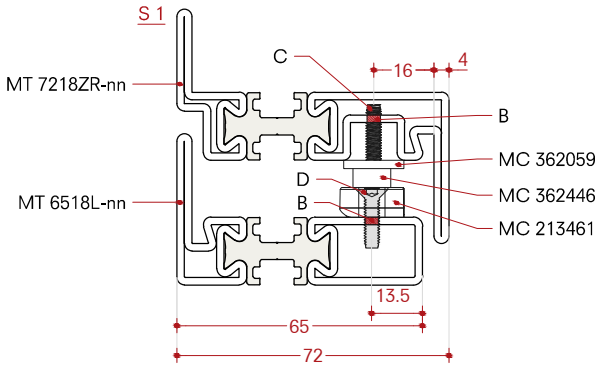












M65TB - 0039 DWG DXF

A) Centre Bullet catch
B) Hole Ø3.3 mm
C) Countersunk screw M4x25
D) Countersunk screw M4x16

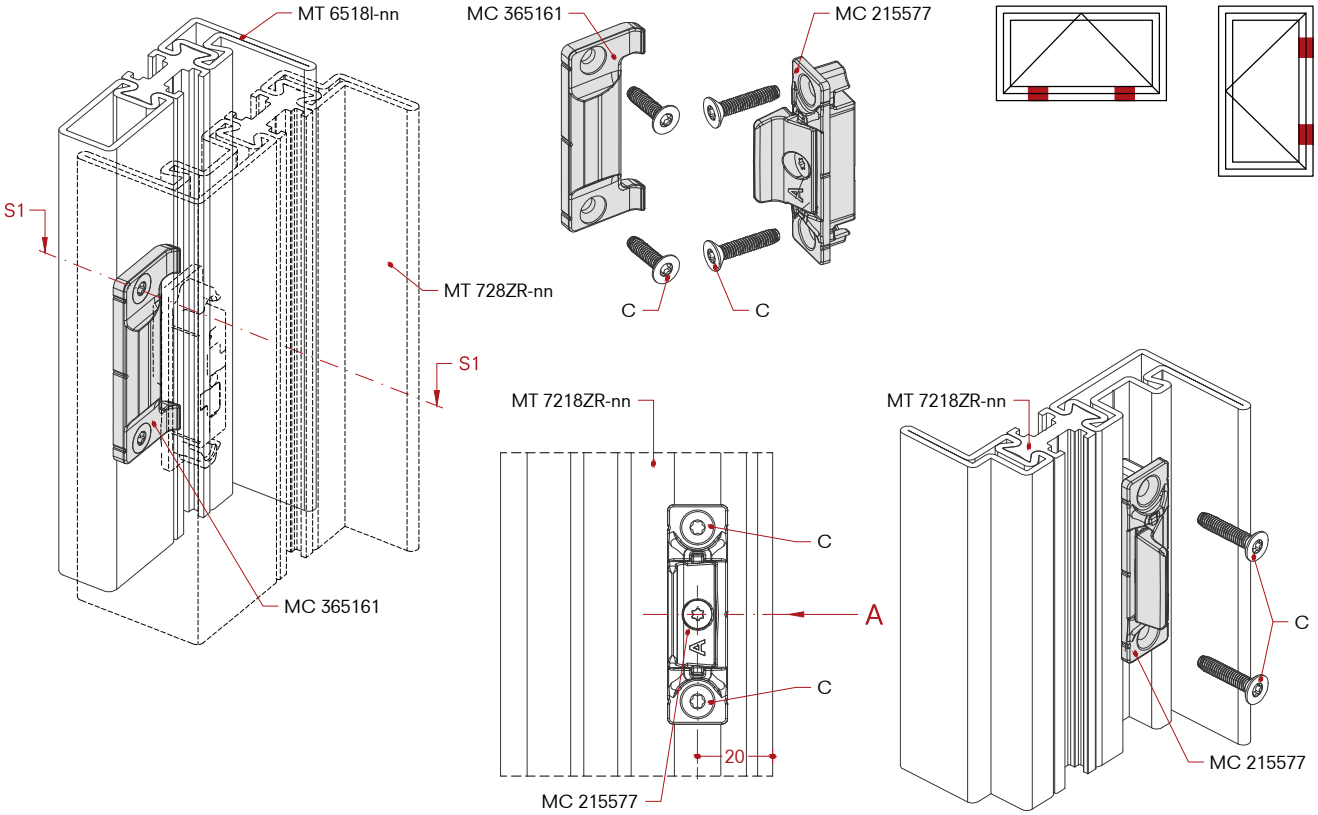
A) Centro chiusura perno
B) Foro Ø3.3 mm
C) Vite testa svasata M4x25
D) Vite testa svasata M4x16

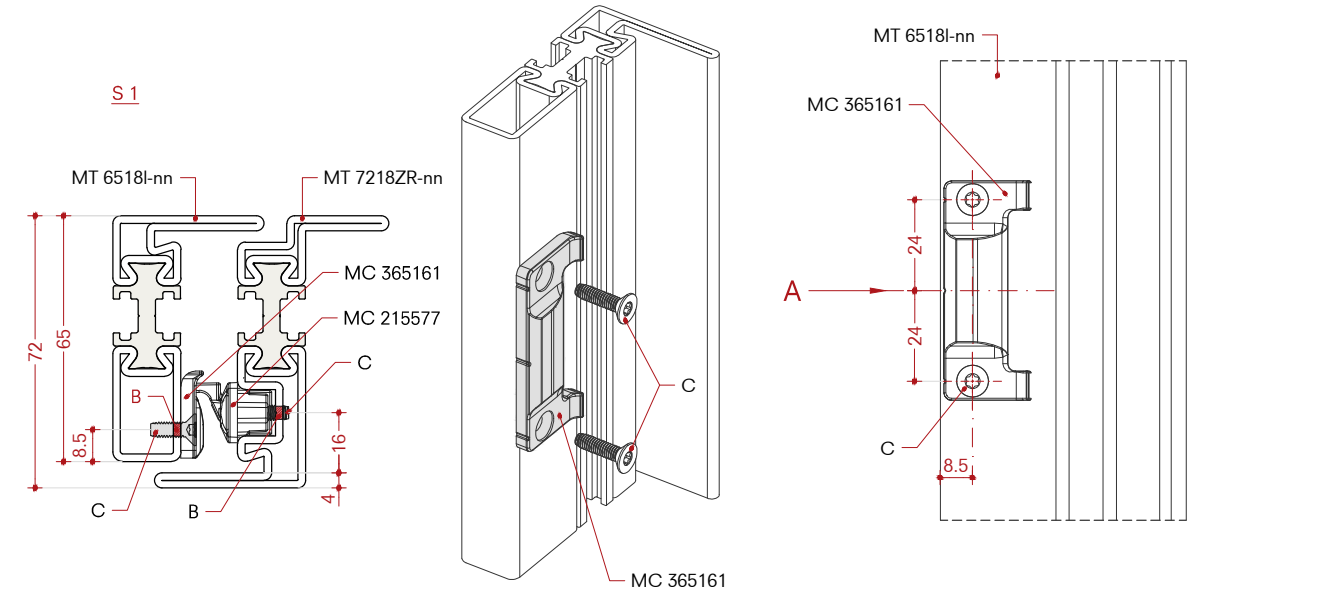
A) Cierre con pasador central
B) Oreficio Ø3.3 mm
C) Tornillo avellanado M4x25
D) Tornillo avellanado M4x16

Concealed compression lock
Frame component MC 365161
and sash component with lateral adjustment MC 215577

Cerniere centrali a scomparsa
MC 365161
e componente anta con aggiustamento laterale MC 215577

Bisagras ocultas centrales
MC 365161 y elemento de hoja con ajuste lateral MC 215577





M65TB - 0040 DWG DXF

A) Centre compression lock
B) Hole Ø3.3 mm
C) Countersunk screw M4x12

A) Centro serratura
B) Foro Ø3.3 mm
C) Vite testa svasata M4x12

A) Bloqueo central
B) Oreficio Ø3.3 mm
C) Tornillo avellanado M4x12

Please note:

It is necessary to set a spacer block in the area of the compression device (distance piece glazing).

Nota:

È necessario posizionare un blocco distanziatore nella zona del dispositivo di compressione.

Nota:

Se debe colocar un bloque espaciador en el área del dispositivo de compresión.

Pressure adjustment

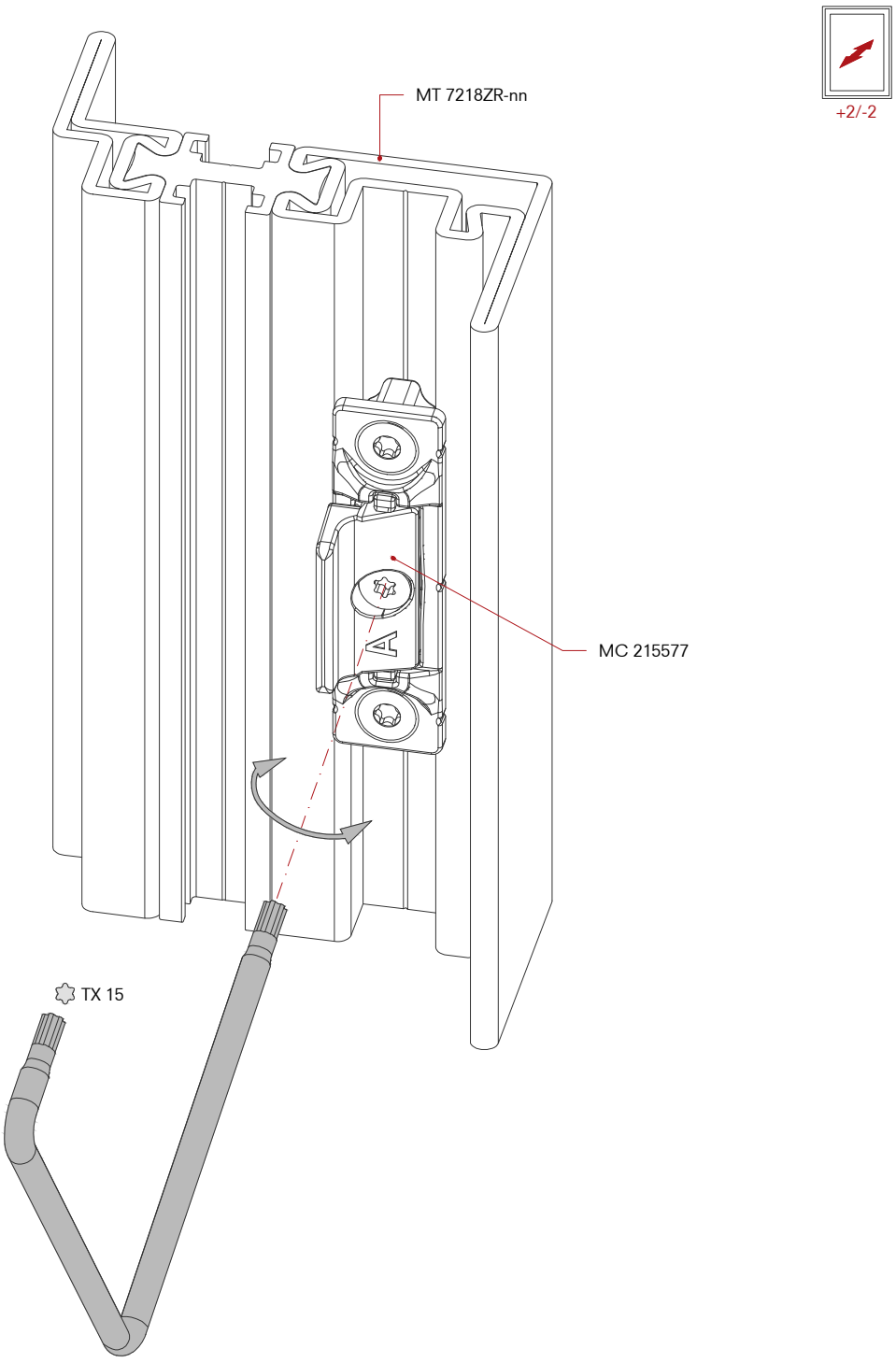
Air gap 10-14 mm adjustable

Regolazione pressione di contatto

Regolabile 10-14 mm

Ajuste de presión de contacto

Ajustable 10-14 mm



Adjustment range ± 2 mm with TX 15

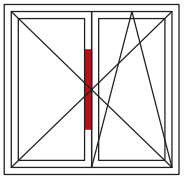
Regolazione ± 2 mm con TX 15

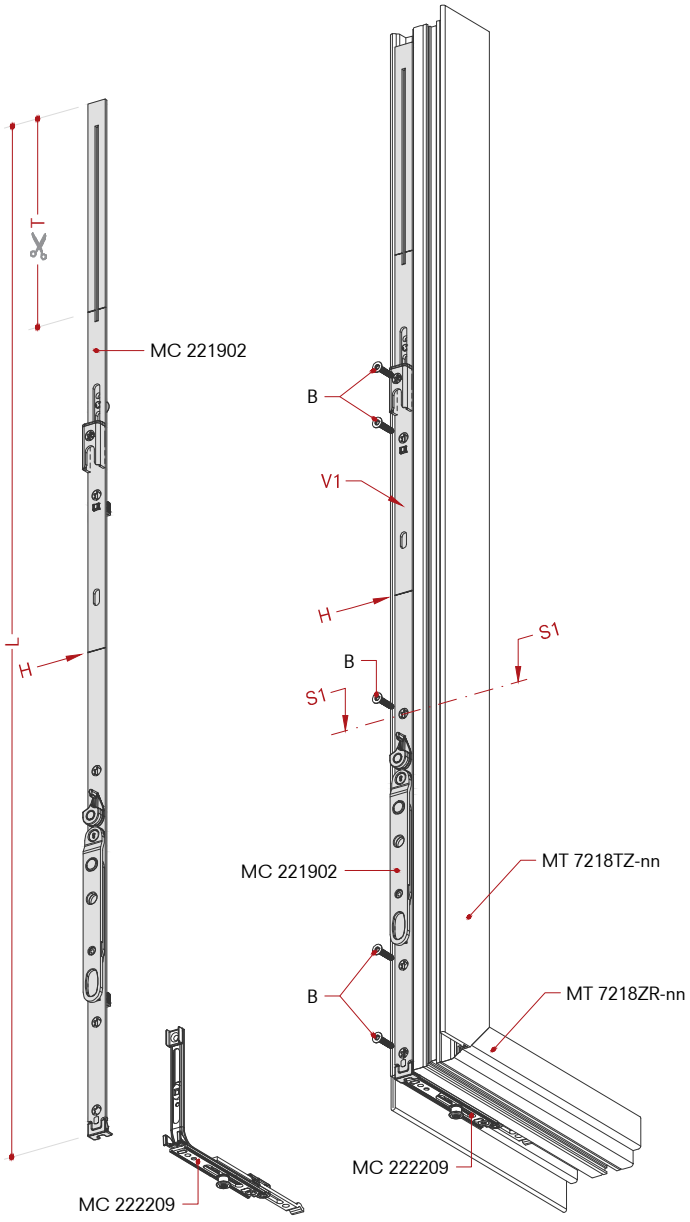
Ajuste ± 2 mm con TX 15

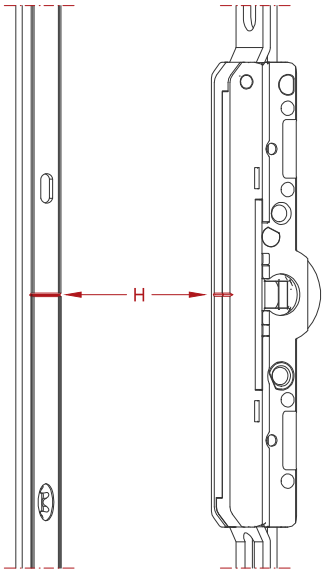
French casement drive gear fixed
MC 202873 - MC 221901
MC 221902 - MC 221903
MC 221906 - MC 207242
MC 221907 - MC 221908
MC 221909

Cremonese per gola fissa
MC 202873 - MC 221901
MC 221902 - MC 221903
MC 221906 - MC 207242
MC 221907 - MC 221908
MC 221909

Cremona semifija para ranura fija
MC 202873 - MC 221901
MC 221902 - MC 221903
MC 221906 - MC 207242
MC 221907 - MC 221908
MC 221909







M65TB - 0041 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
H) Matching of notches
L) Length drive gear
T) Maximum cut drive gear

X = Position screw connection drive gear

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

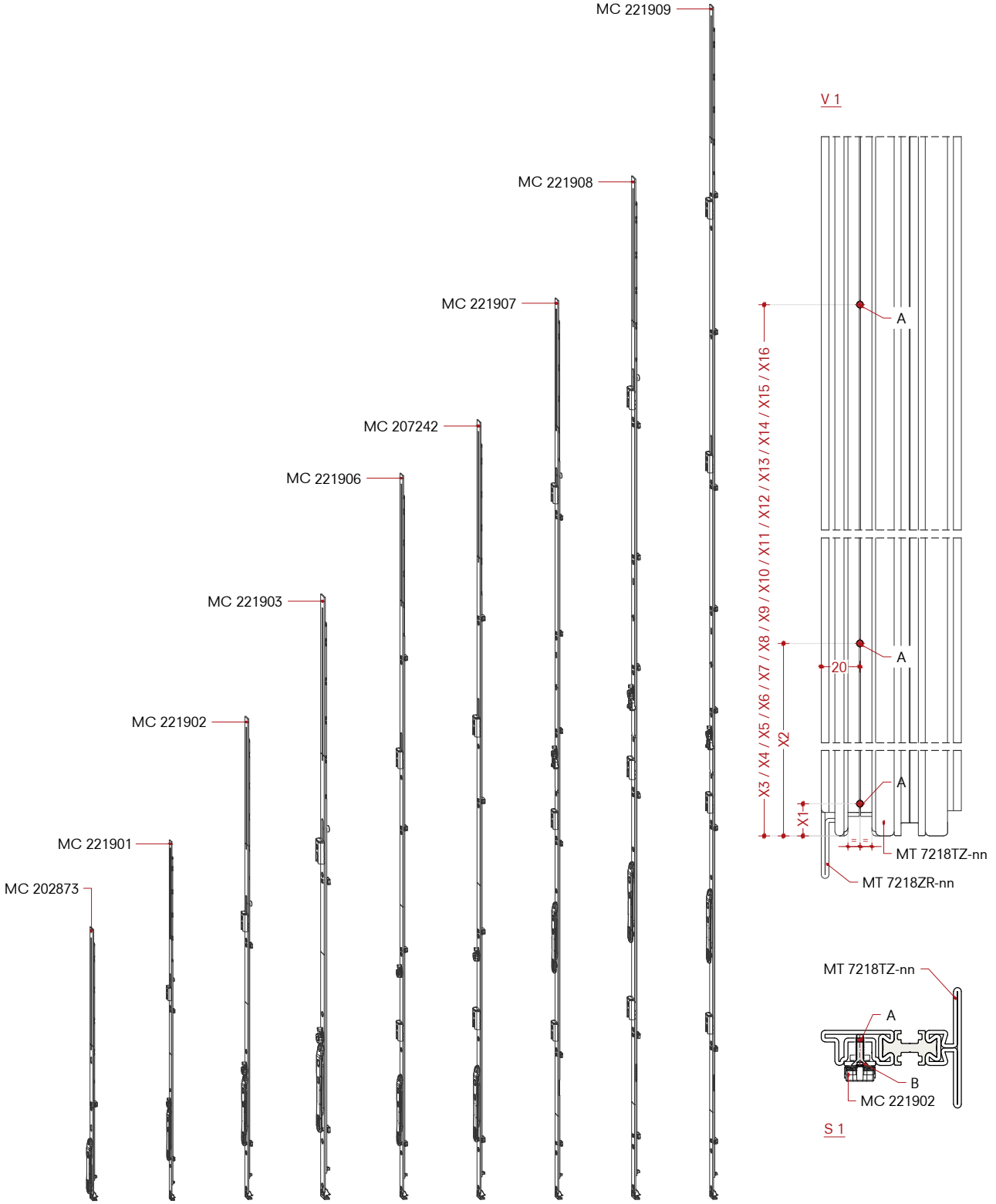
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
H) Abbinamento delle tacche
L) Lunghezza cremonese
T) Massimo taglio del cremonese

X = Posizione vite di fissaggio del cremonese

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
H) Coincidencia de muescas
L) Longitud del engranaje
T) Corte de engranaje máximo

X = Posición del tornillo de fijación del engranaje

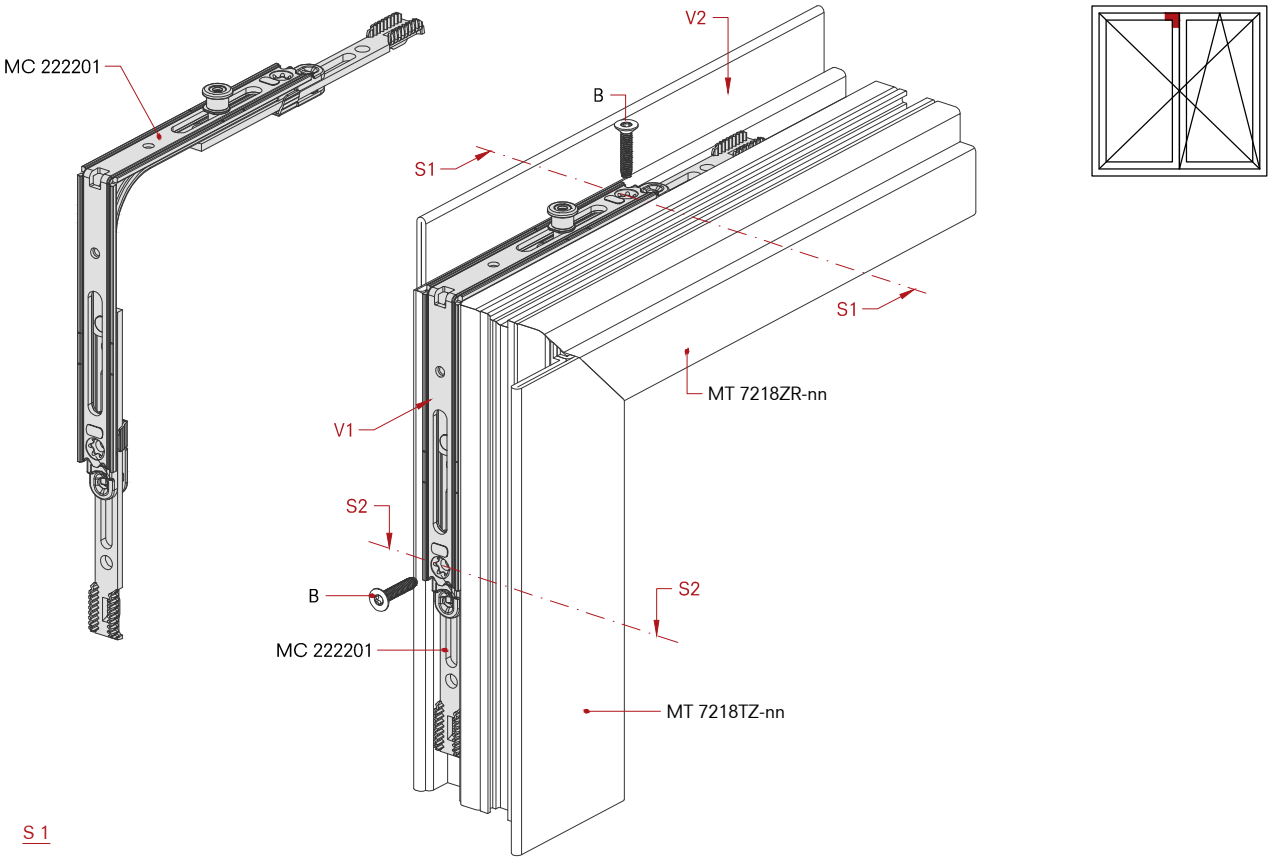


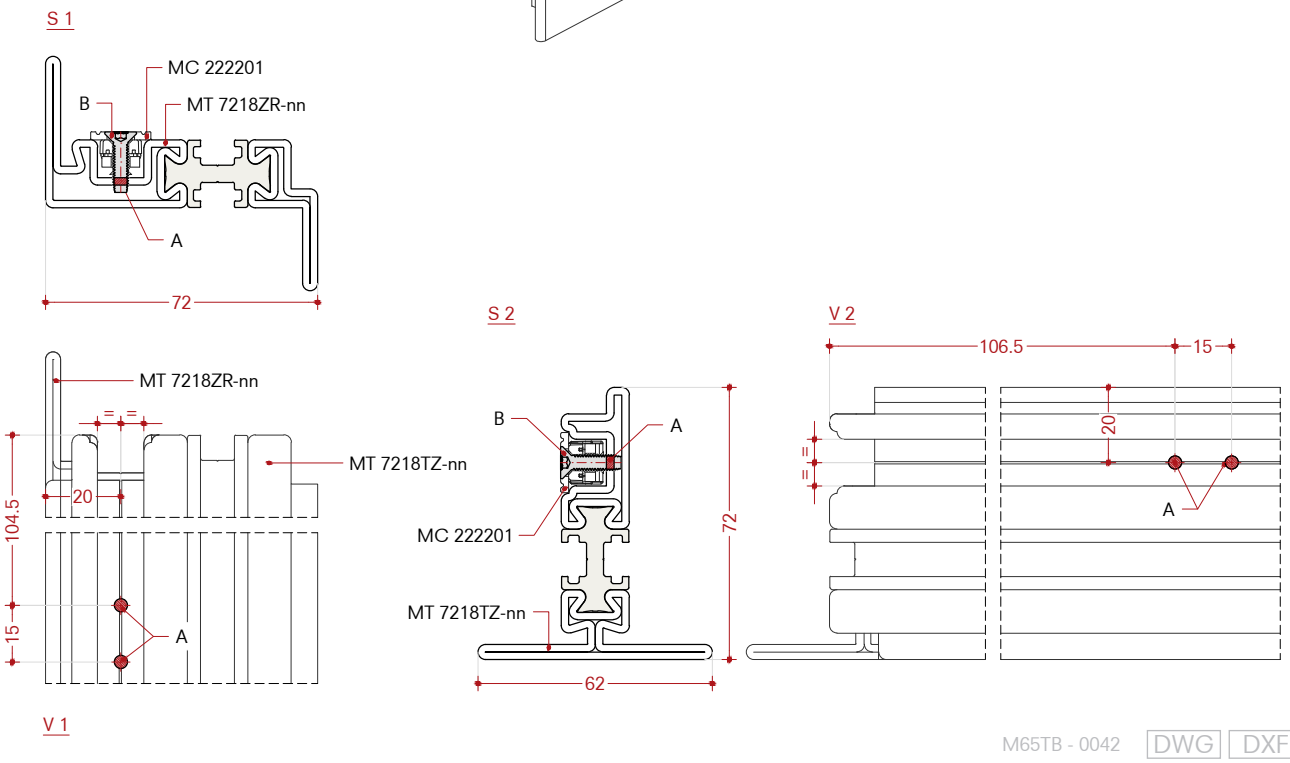
	L	T	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16
MC 202873	556.5	240.5	16.5	187.5	-	-	-	-	-	-	-	-	-	-		-	-	-
MC 221901	736.5	190.5	16.5	89.5	198	381.5	428	-	-	-	-	-	-	-	-	-	-	-
MC 221902	986.5	260.5	16.5	89.5	298	526.5	572	-	-	-	-	-	-	-	-	-	-	-
MC 221903	1236.5	260.5	16.5	89.5	301.5	398	626.5	672	843	-	-	-	-	-	-	-	-	-
MC 221906	1486.5	260.5	16.5	89.5	301.5	347.5	498	748	861.5	909.5	1098	-	-	-	-	-	-	-
MC 207242	1596	260.5	16.5	89.5	301.5	348	598	798	962	1008	1208	-	-	-	-	-	-	-
MC 221907	1846.5	260.5	16.5	89.5	301.5	348	475	628	736.5	782.5	894	948	1148	1407	1453	-	-	-
MC 221908	2096.5	260.5	16.5	89.5	301.5	348	475	628	736.5	782.5	894	948	1148	1407	1453	1693	-	-
MC 221909	2450	260.5	16.5	89.5	301.5	348	475	628	736.5	782.5	894	948	1148	1407	1453	1693	1907	1953

Corner element for French casement drive gear with 1 locking cam
MC 222201

Elemento angolare per cremonese fissa con 1 nottolino di bloccaggio
MC 222201

Elemento de esquina para piñón fija con 1 rodillo de bloqueo
MC 222201





M65TB - 0042 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

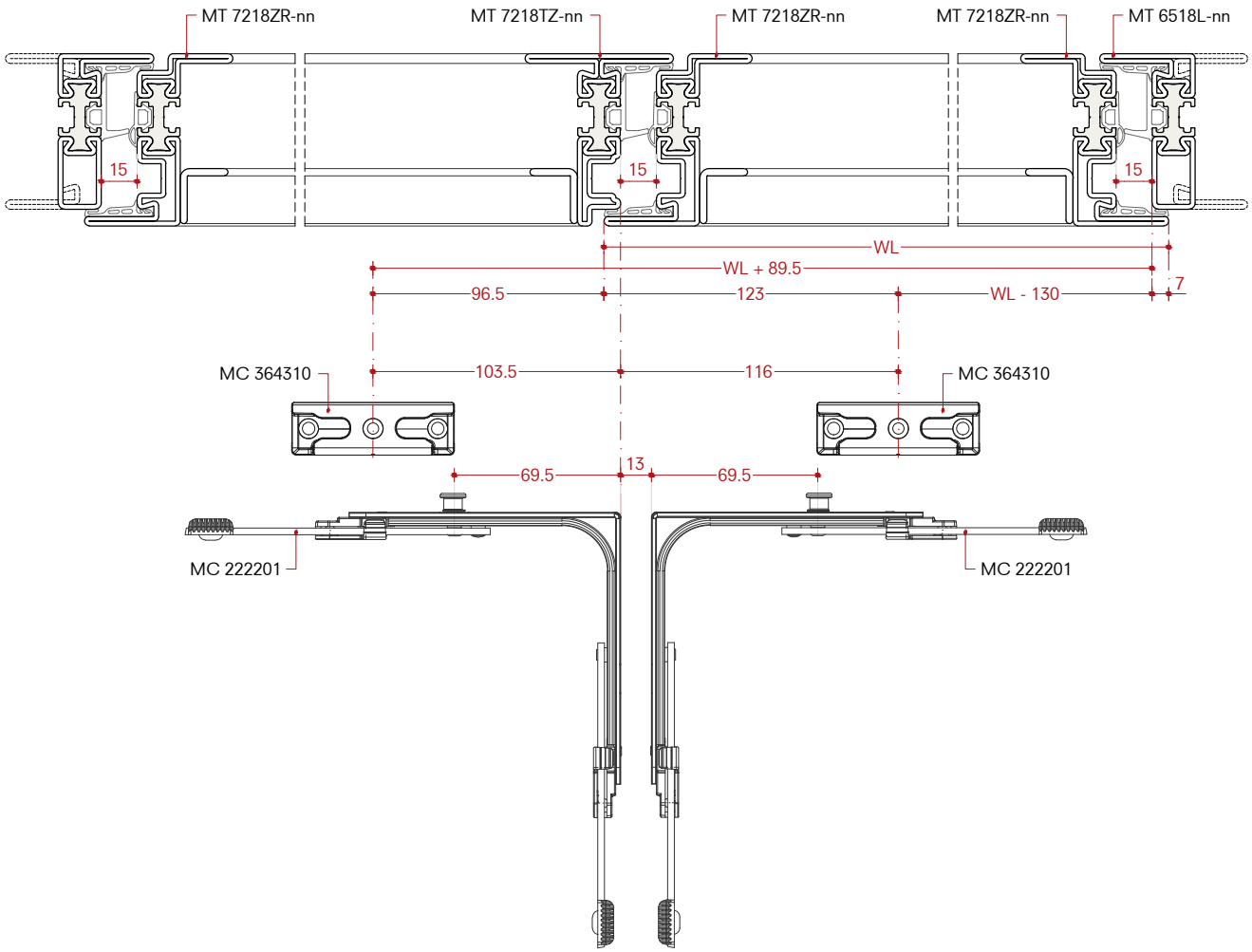
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

WL = Larghezza anta

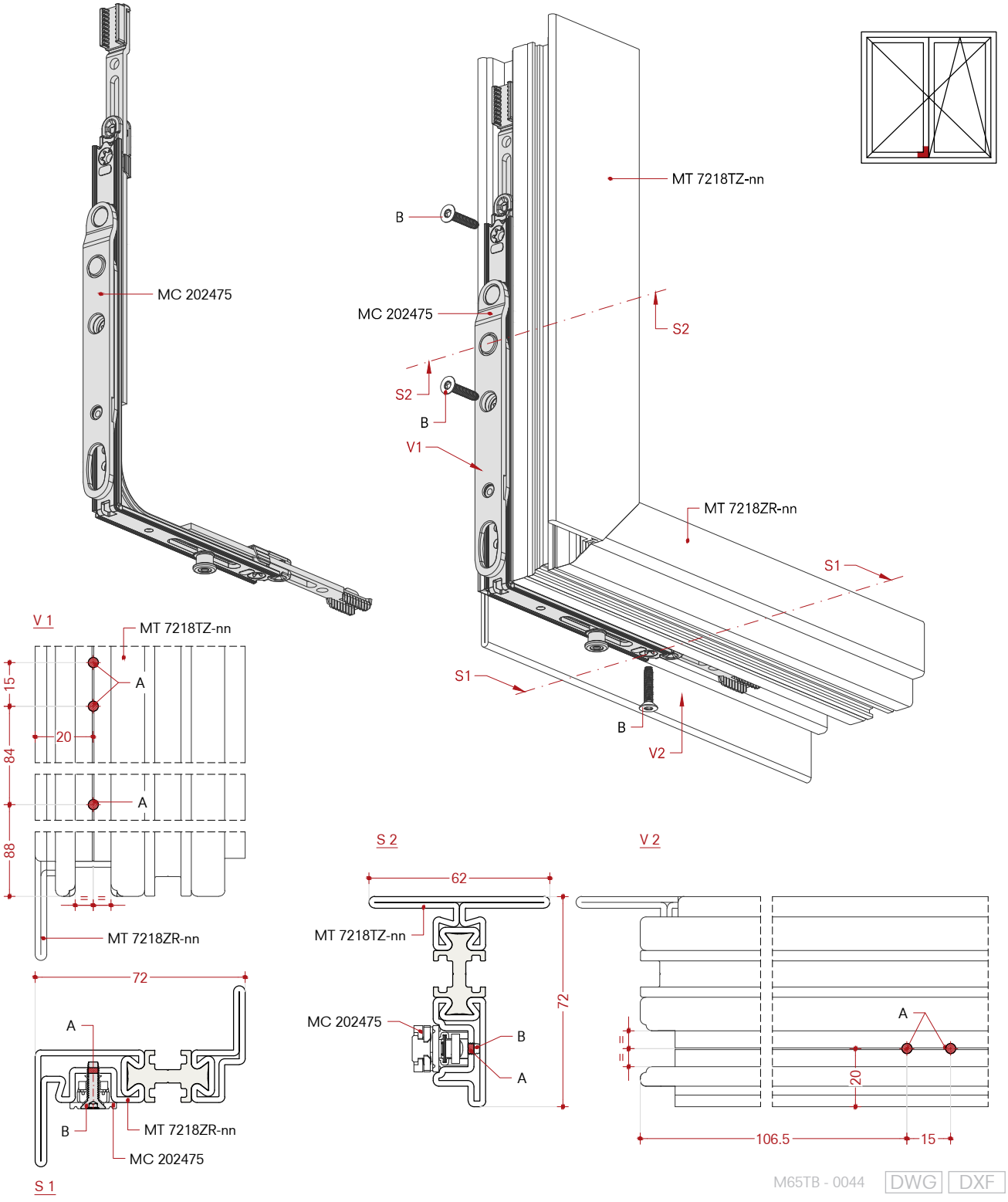
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

WL = Longitud hoja

Corner element for French casement drive gear variable with reverse-action lever and 1 locking cam
MC 202475

Elemento angolare per cremonese variabile con leva di inversione e 1 nottolino di bloccaggio
MC 202475

Elemento de esquina para piñón variable con palanca de acción inversa y 1 rodillo de bloqueo
MC 202475



M65TB - 0044 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

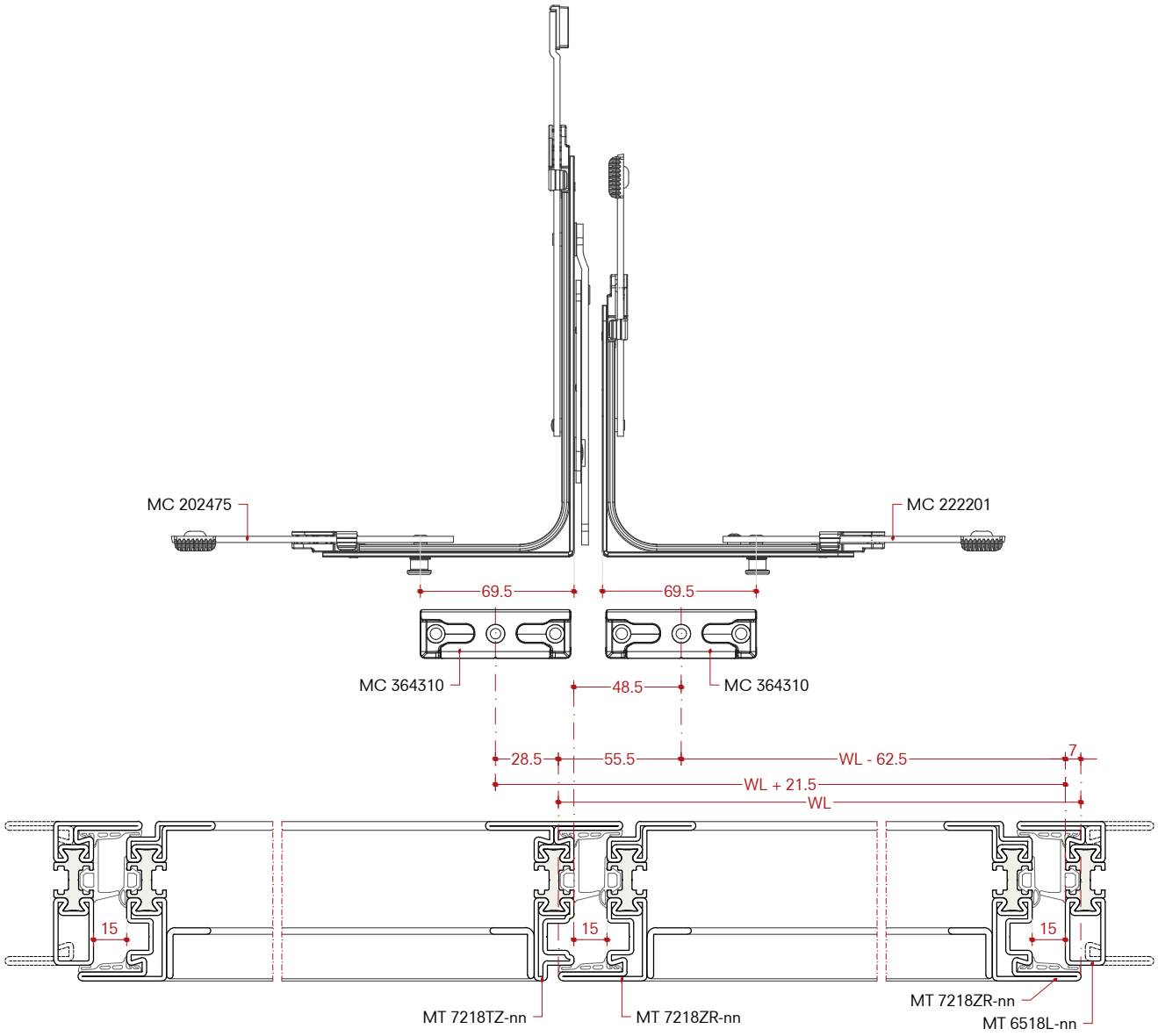
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Positioning striker plate

Posizionamento del riscontro

Posicionamiento del pieza de bloqueo



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

WL = Larghezza anta

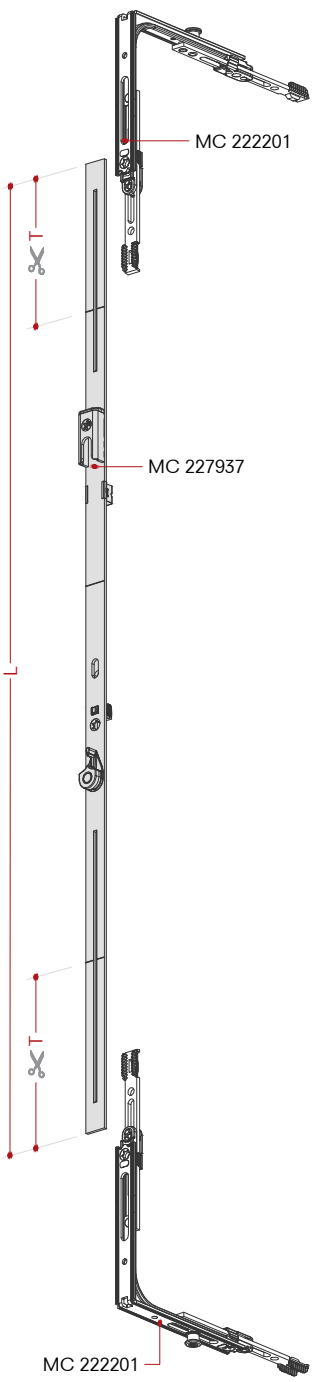
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

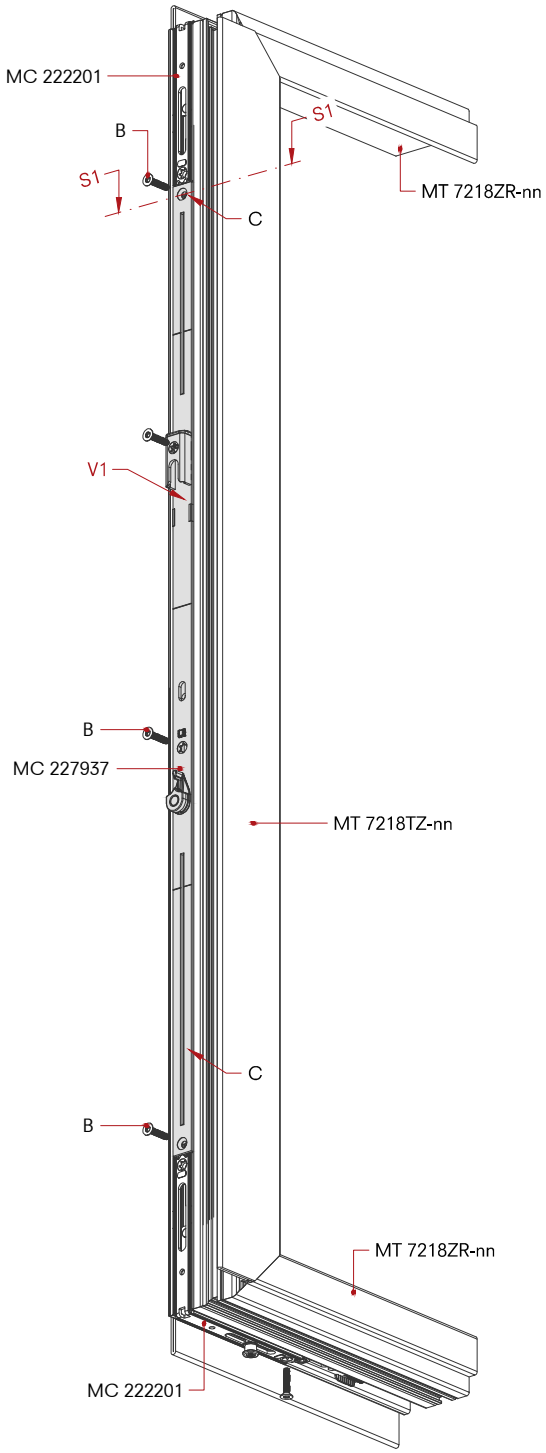
WL = Longitud hoja

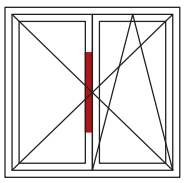
French casement drive gear variable
MC 227937
MC 202471

Cremonese per gola variabile
MC 227937
MC 202471

Cremona para ranura variable
MC 227937
MC 202471







M65TB - 0045 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) For additional fastening, see note page "punch pattern for cut-to-length faceplates"
L) Length drive gear
T) Maximum cut drive gear

X = Position screw connection drive gear

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

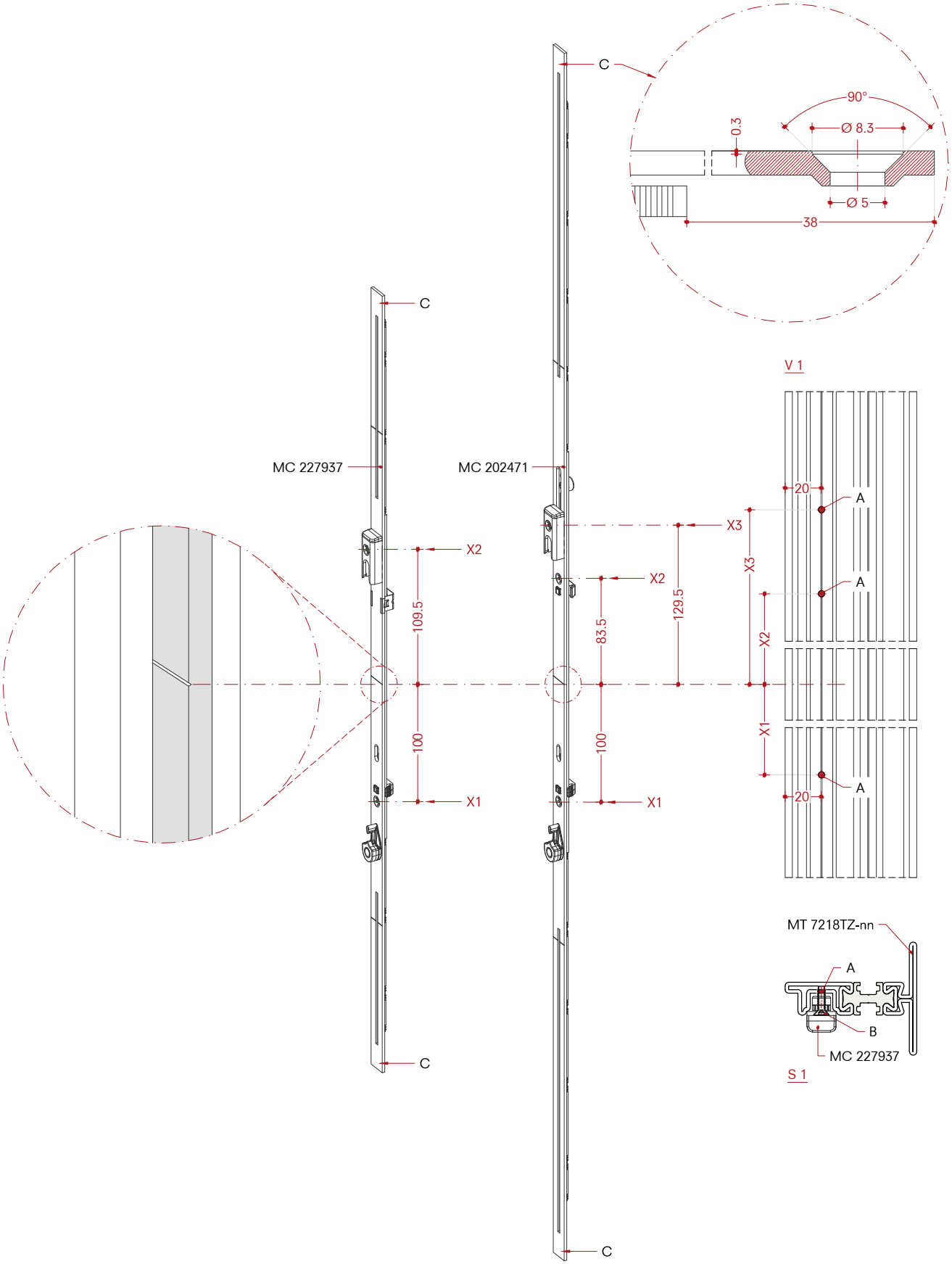
A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Per fissaggio aggiuntivo, vedere la pagina delle note "schema di punzonatura per frontalini tagliati a misura"
L) Lunghezza cremonese
T) Massimo taglio del cremonese

X = Posizione vite di fissaggio del cremonese

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Para fijación adicional, consulte la página de notas "patrón de perforación para placas frontales cortadas a medida"
L) Longitud del engranaje
T) Corte de engranaje máximo

X = Posición del tornillo de fijación del engranaje

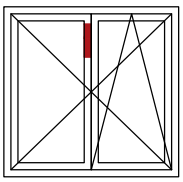


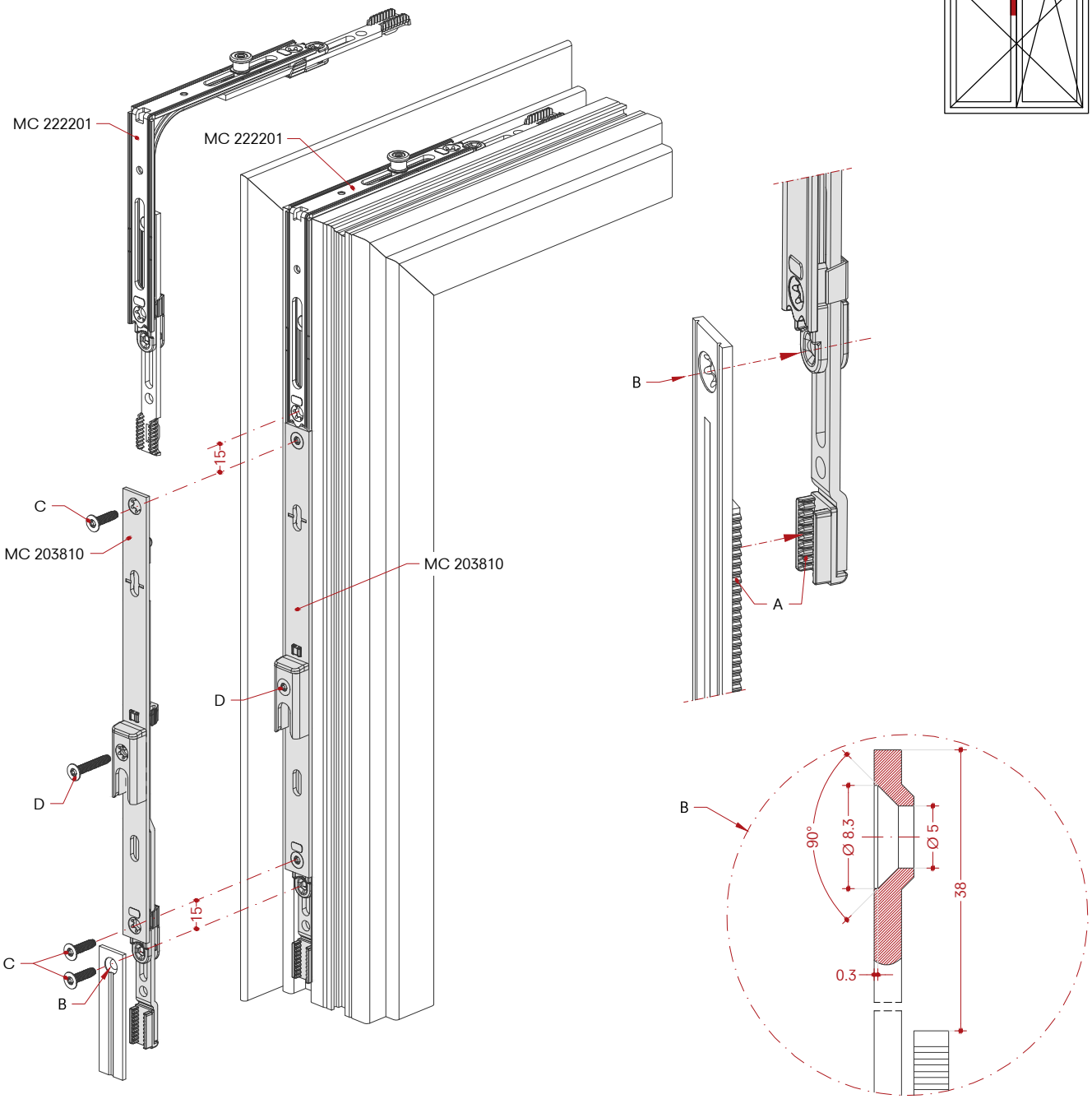
	L	T	X1	X2	X3
MC 227937	640	120.5	-100	109.5	-
MC 202471	995	260	-100	83.5	129.5

Faceplate extensions for French casement drive gear for 1 locking cam
MC 203810
MC 208333

Prolunga frontalino per cremonese per 1 nottolino di bloccaggio
MC 203810
MC 208333

Extensión frontal para piñón para 1 rodillo de bloqueo
MC 203810
MC 208333



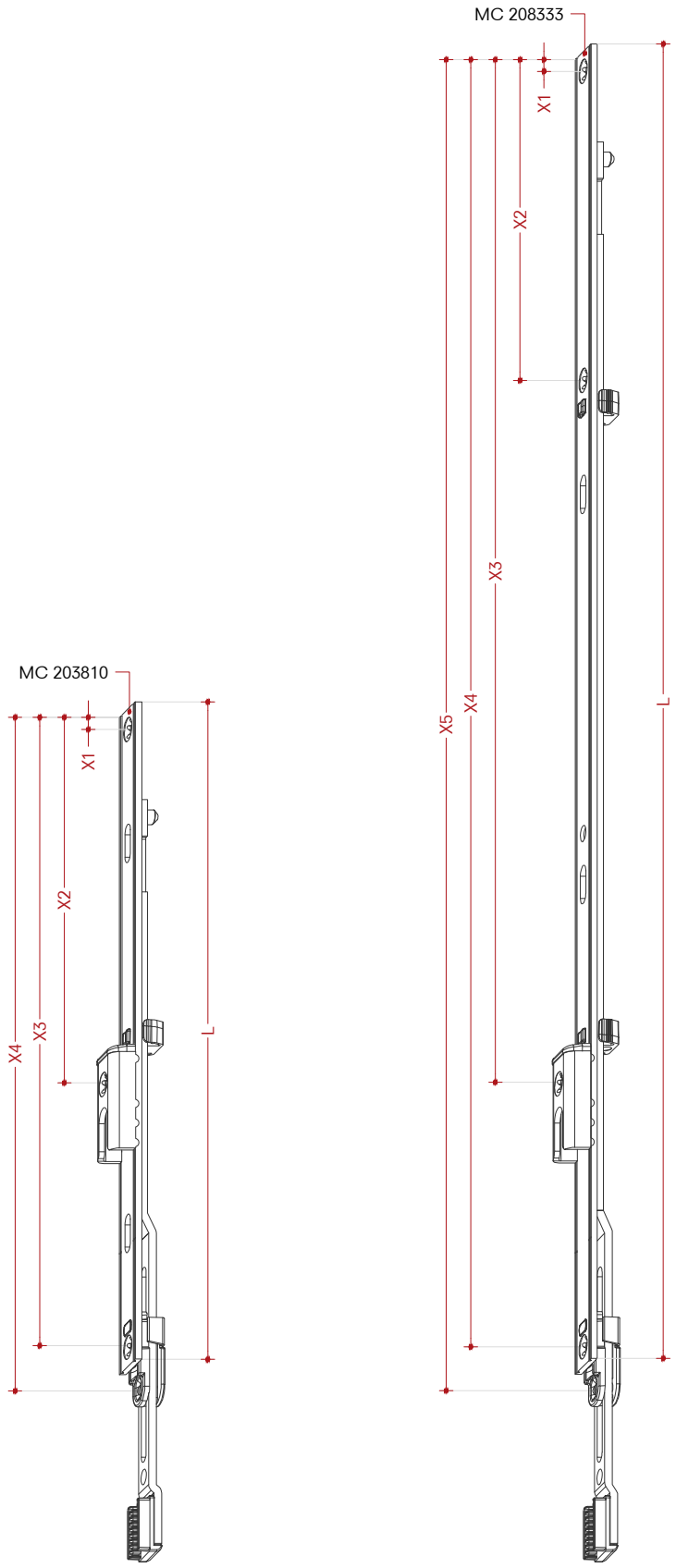


M65TB - 0049 DWG DXF

A) Coupling with serrated carrier connection
B) For additional fastening, see note page "punch pattern for cut-to-length faceplates"
C) Countersunk screw M4x16
D) Countersunk screw M4x25
L) Length faceplate extension
X) Position screw connection faceplate extension

A) Accoppiamento dentellato
B) Per fissaggio aggiuntivo, vedere la pagina delle note "schema di punzonatura per frontalini tagliati a misura"
C) Vite autofilettante a testa svasata M4x16
D) Vite autofilettante a testa svasata M4x25
L) Lughezza della prolunga
X) Posizionamento vite di fissaggio prolunga

A) Acoplamiento con dentado
B) Para fijación adicional, consulte la página de notas "patrón de perforación para placas frontales cortadas a medida"
C) Tornillo avellanado M4x16
D) Tornillo avellanado M4x25
L) Longitud de la extensión
X) Posicionamiento del tornillo de fijación

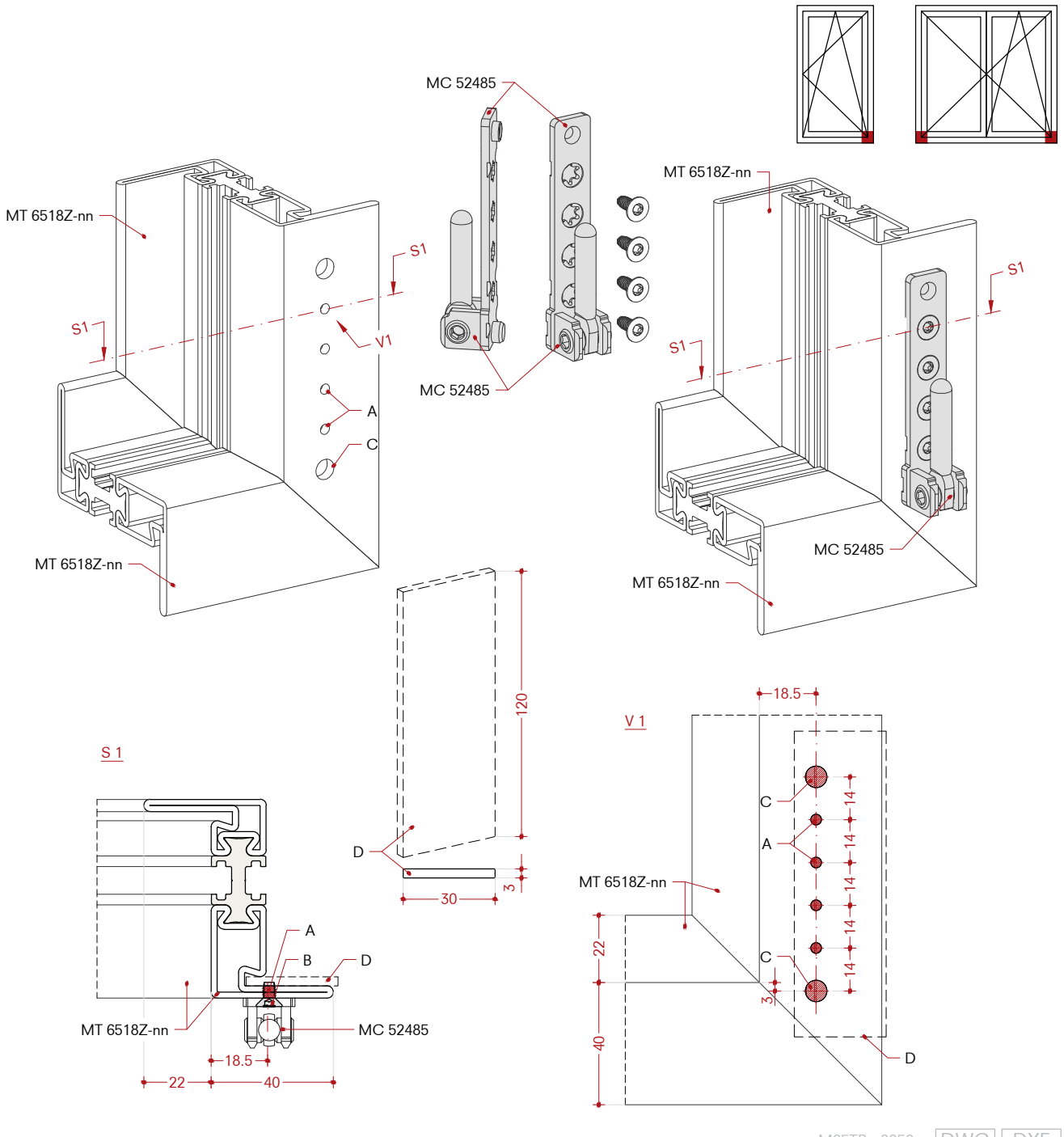


	L	X1	X2	X3	X4	X5
MC 203810	235	7	134	228	243	-
MC 208333	470	7	117.5	370	463	478

Pivot post with 7 mm supporting pins, 3 mm long
MC 52485
Leaf weight ≤ 120 kg
Installation on frame

Cuscinetto angolarecon perni di supporto da 7 mm, lunghi 3 mm
MC 52485
Peso anta ≤ 120 kg
Installazione sul telaio

Cojinete de esquina con pasadores de apoyo de 7 mm, 3 mm de largo
MC 52485
Peso de la hoja ≤ 120 kg
Instalación en el marco



M65TB - 0050 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.2 mm
B) Countersunk screw M4x8
C) Hole Ø7 mm
D) Use an aluminium base (30x100x3 mm) for drilling

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.2 mm
B) Vite testa svasata M4x8
C) Foro Ø7 mm
D) Utilizzare una base in alluminio (30x100x3 mm) per la foratura

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

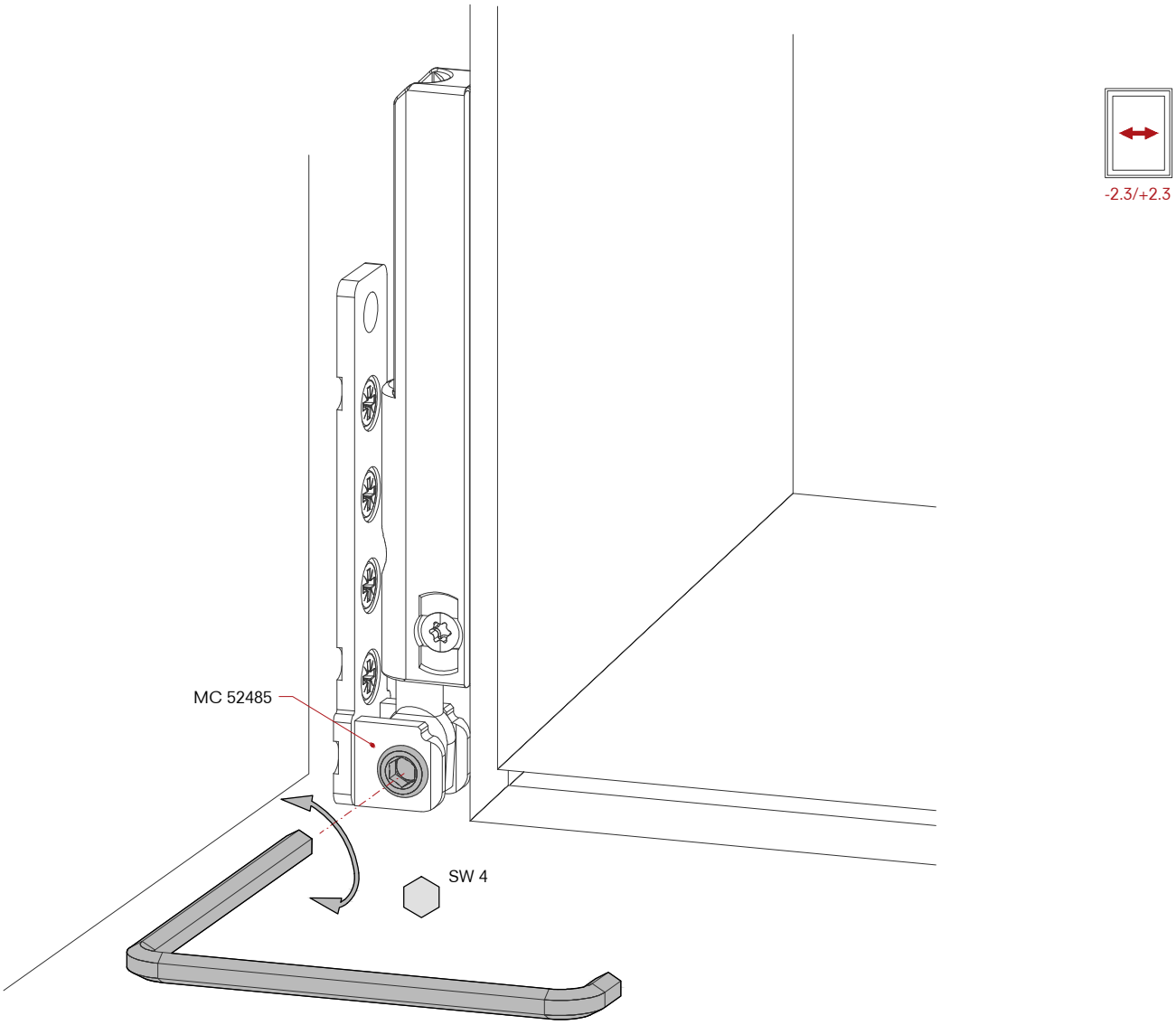
A) Oreficio Ø3.2 mm
B) Tornillo avellanado M4x8
C) Oreficio Ø7 mm
D) Utilice una base de aluminio (30x100x3 mm) para perforar

L = Apertura izquierda
R = Apertura derecha

Side adjustment

Regolazione orizzontale

Ajuste horizontal



Note:

- Screw the pivot post only after mounting the striker plates, otherwise the jigs for the frame can no longer be attached!
- The maximum sash weight must not be exceeded! Observe the application diagram!

Adjustment range ± 2.3 mm with SW 4

Nota:

- Avvitare il perno di articolazione solo dopo aver montato i riscontri, altrimenti non è più possibile fissare le dime per il telaio!
- Il peso massimo dell'anta non deve essere superato! Osservare il diagramma dell'applicazione!

Regolazione ± 2.3 mm con SW 4

Nota:

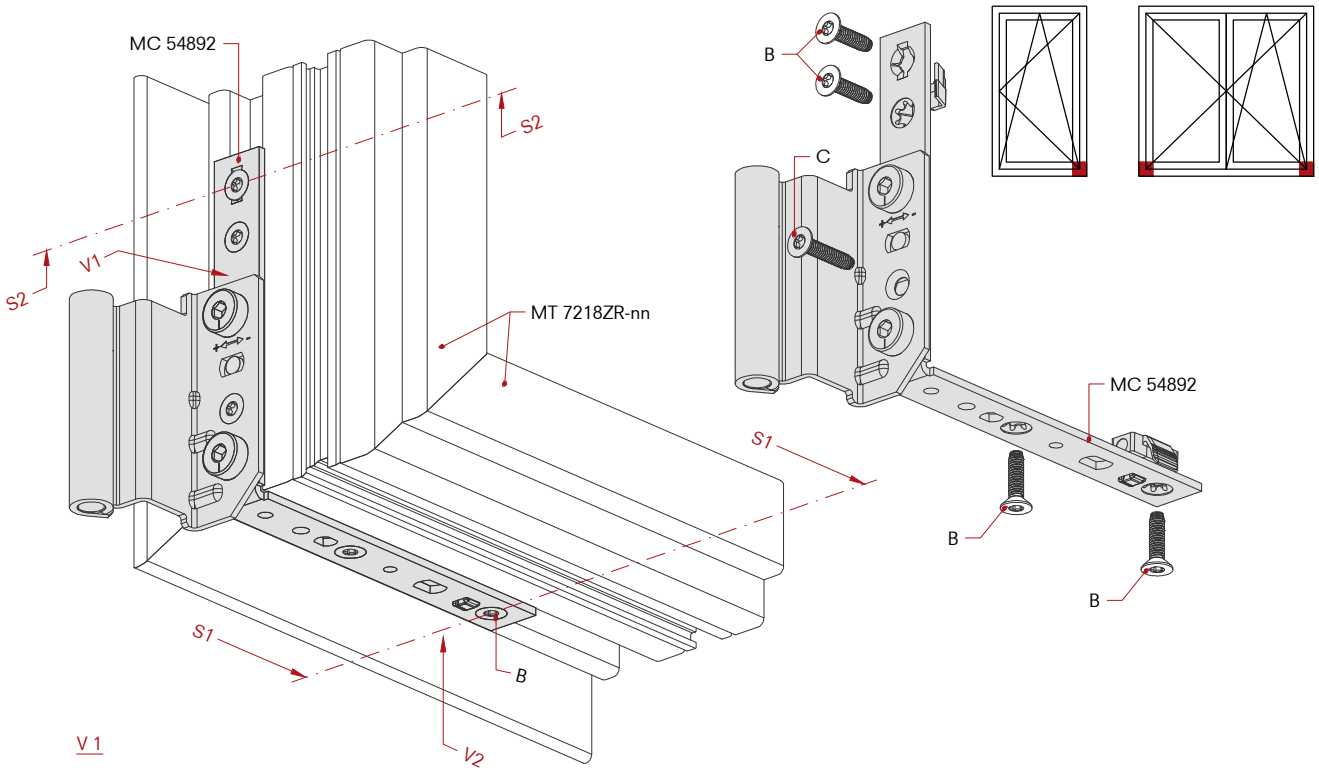
- Atornille el poste giratorio solo después de montar las placas de cierre, de lo contrario, las plantillas para el marco ya no se pueden colocar!
- No se debe sobrepasar el peso máximo de hoja! ¡Observe el diagrama de aplicación!

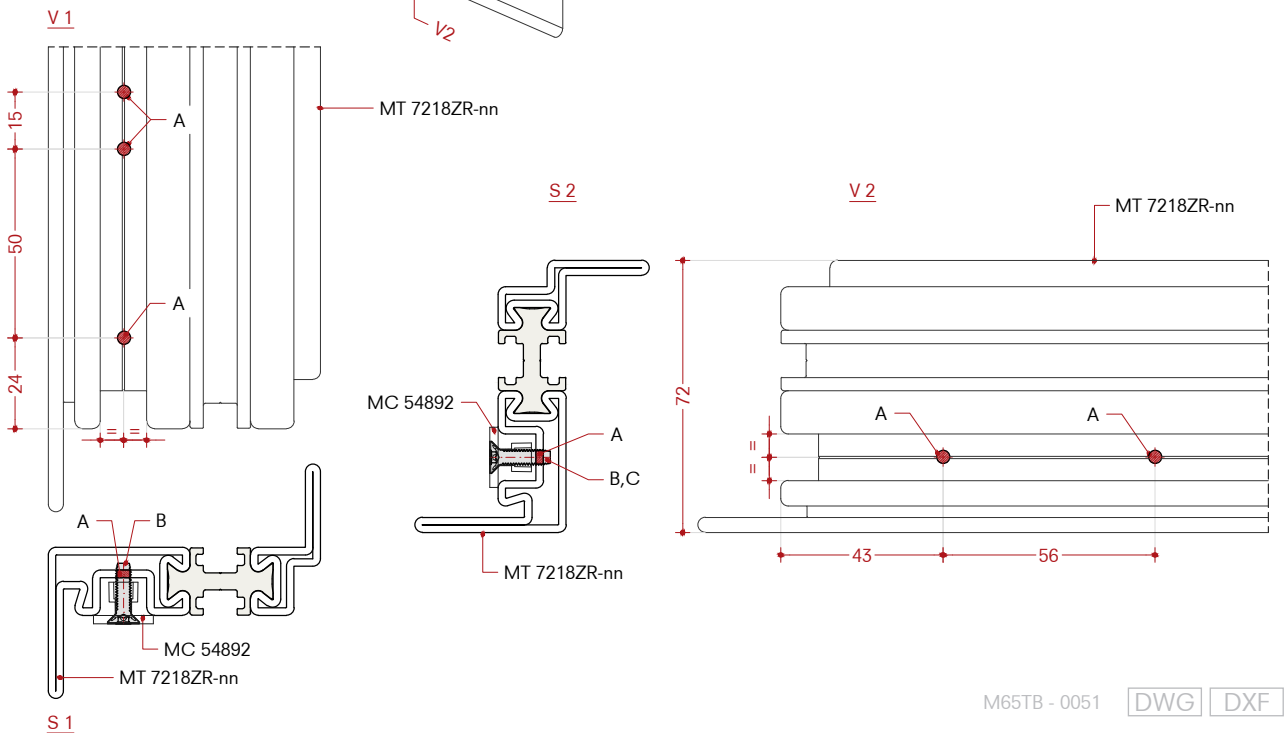
Ajuste ± 2.3 mm con SW 4

Corner support without rebate-leg screw fixing
MC 54892 R
MC 54893 L
Leaf weight ≤ 120 kg
Installation on leaf

Supporto angolare senza fissaggio di battuta a vite
MC 54892 R
MC 54893 L
Peso anta ≤ 120 kg
Installazione sull'anta

Soporte angular sin fijación de tope de tornillo
MC 54892 R
MC 54893 L
Peso de la hoja ≤ 120 kg
Instalación en la hoja





M65TB - 0051 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Countersunk screw M4x20

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Vite testa svasata M4x20

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

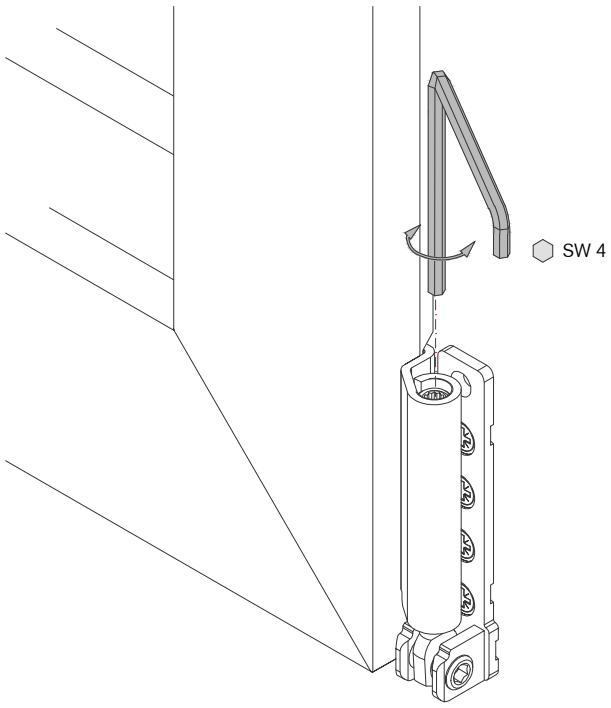
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Tornillo avellanado M4x20

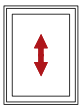
L = Apertura izquierda
R = Apertura derecha

Height adjustment

Regolazione verticale

Ajuste vertical





Adjustment range ± 2 mm with SW 4

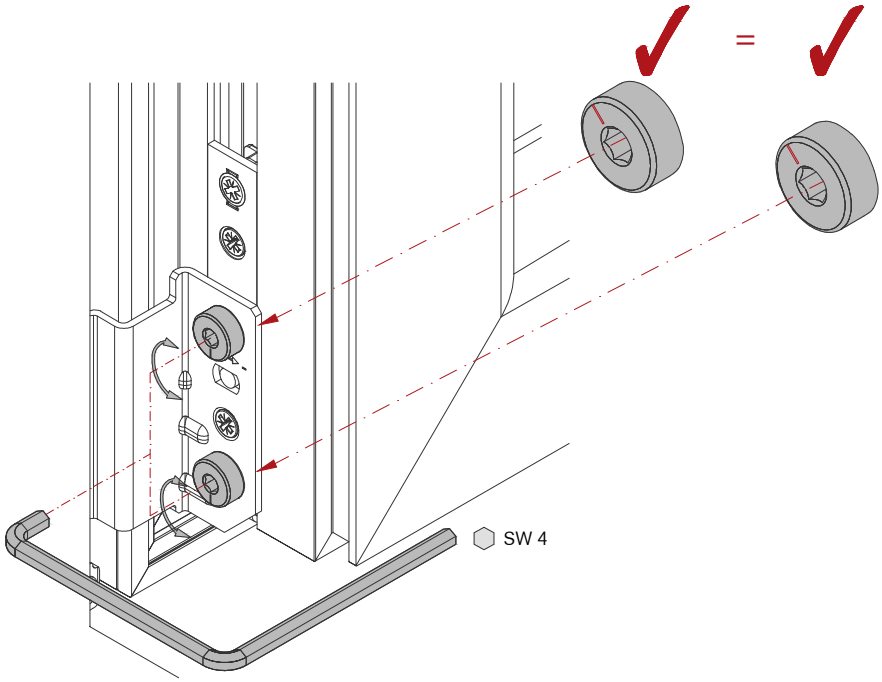
Regolazione ± 2 mm con SW 4

Ajuste ± 2 mm con SW 4

Pressure adjustment

Regolazione pressione di contatto

Ajuste de presión de contacto



Adjustment range ± 1 mm with SW 4

Regolazione ± 1 mm con SW 4

Ajuste ± 1 mm con SW 4

L = Left opening
R = Right opening

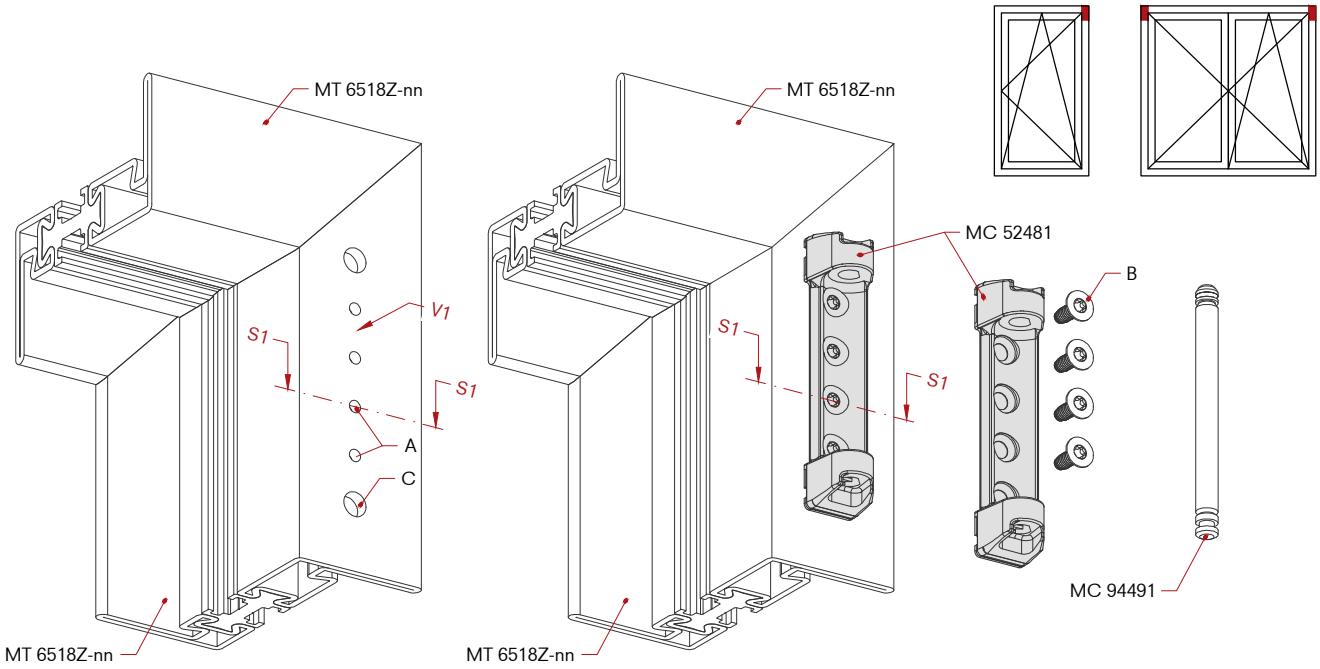
L = Apertura sinistra
R = Apertura destra

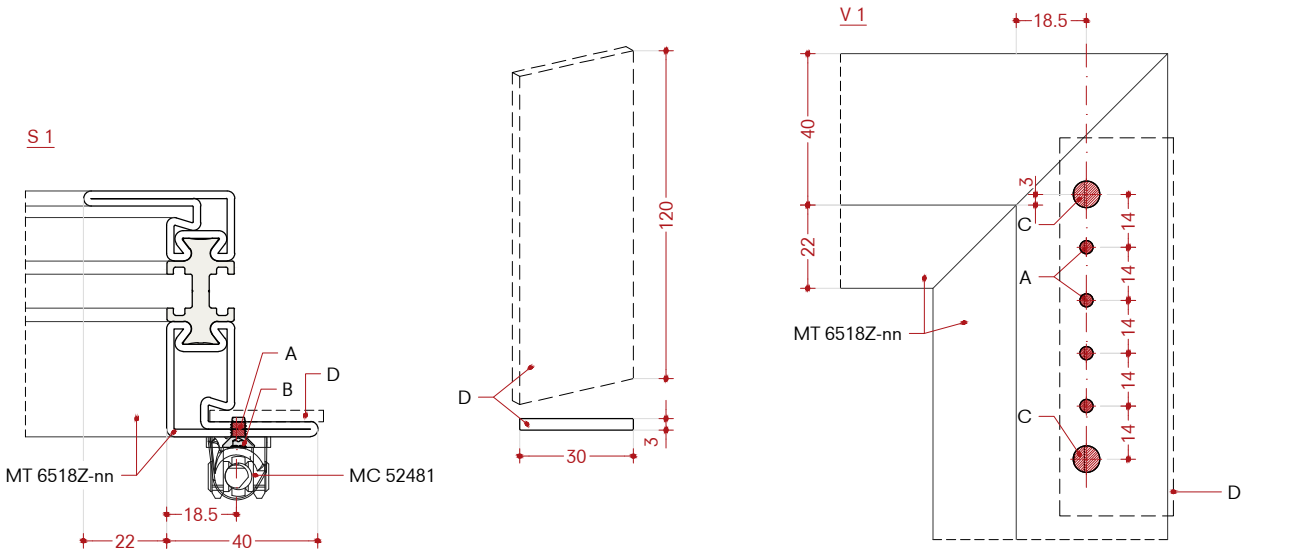
L = Apertura izquierda
R = Apertura derecha

Scissor stay hinge
with 7 mm supporting pin
MC 52481
and scissor stay hinge pin
MC 94491
Installation on frame

Braccio di supporto a forbice
con perno di supporto di 7 mm
MC 52481
e perno
MC 94491
Installazione sul telaio

Brazo de soporte de tijera
con pasador de soporte de 7 mm
MC 52481
y alfiler
MC 94491
Instalación en el marco





M65TB - 0052 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.2 mm
B) Countersunk screw M4x8
C) Hole Ø7 mm
D) Use an aluminium base
(30x100x3 mm) for drilling

L = Left opening
R = Right opening

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.2 mm
B) Vite testa svasata M4x8
C) Foro Ø7 mm
D) Utilizzare una base in alluminio
(30x100x3 mm) per la foratura

L = Apertura sinistra
R = Apertura destra

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

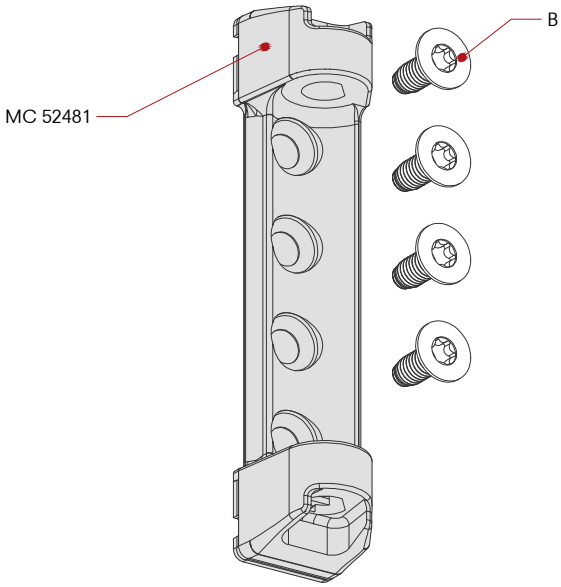
A) Oreficio Ø3.2 mm
B) Tornillo avellanado M4x8
C) Oreficio Ø7 mm
D) Utilice una base de aluminio
(30x100x3 mm) para perforar

L = Apertura izquierda
R = Apertura derecha

Installation scissor stay hinge

Installazione braccio di supporto a forbice

Montaje brazo de soporte de tijera



Note:

- Screw the scissor stay hinge only after mounting the striker plates, otherwise the jigs for the frame can no longer be attached!
- Insert the scissor stay hinge with the pins in the holes and screw the hinge with four screws (B).

Nota:

- Avvitare la cerniera del tirante a forbice solo dopo aver montato i riscontri, altrimenti non è più possibile fissare le dime per il telaio!
- Inserire la cerniera a forbice con i perni nei fori e avvitare la cerniera con quattro viti (B).

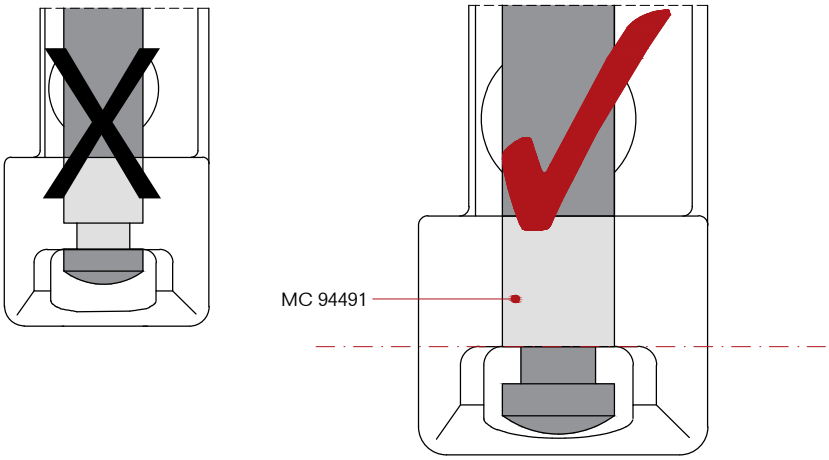
Nota:

- Atornille la bisagra del soporte de tijera solo después de montar las placas de impacto, de lo contrario ya no se podrán colocar las plantillas para el marco!
- Inserte la bisagra del soporte de tijera con los pasadores en los orificios y atornille la bisagra con cuatro tornillos (B).

Installation scissor stay hinge pin

Installazione perno del braccio di supporto a forbice

Montaje de pasador de brazo de soporte de tijera



Note:

- Failure to comply with these instructions may result in the sash falling out of the frame!

Nota:

- Il mancato rispetto di queste istruzioni può causare la caduta dell'anta dal telaio!

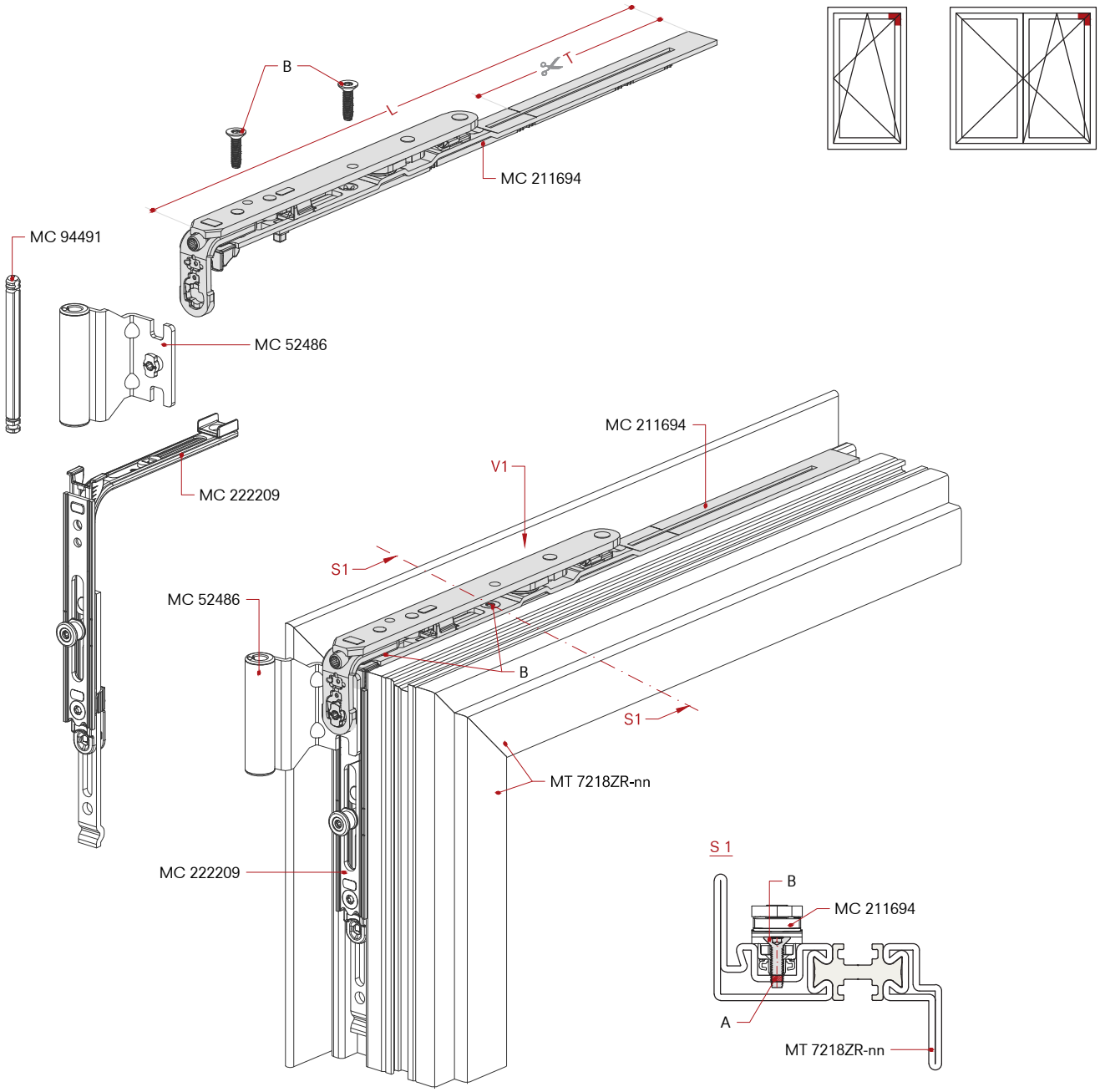
Nota:

- El incumplimiento de estas instrucciones puede provocar que la hoja se caiga del marco!

Scissor stay mounted
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906
with scissor stay support
MC 52486

Braccio a forbice premontato
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906
con supporto
MC 52486

Brazo de tijera premontado
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906
con soporte
MC 52486



M65TB - 0053 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

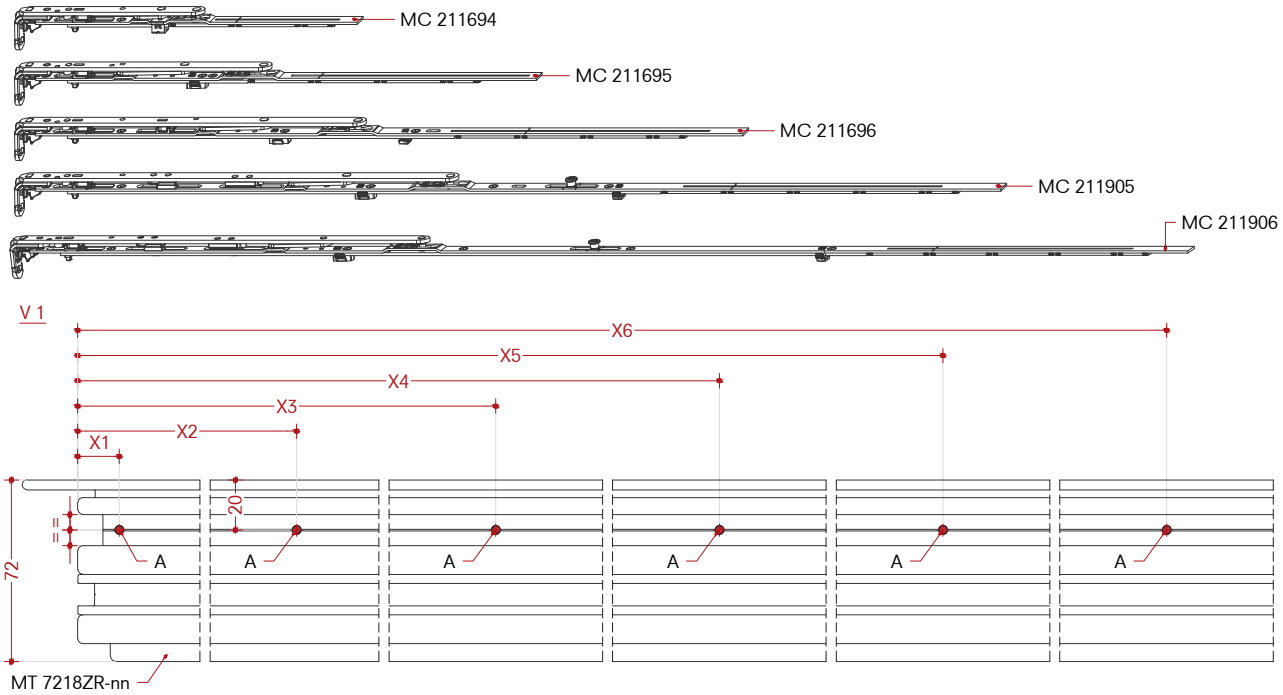
A) Hole Ø3.3 mm
B) Countersunk screw M4x16
L) Length scissor stay
T) Maximum cut scissor stay
X) Position screw connection scissor stay
Z) Position locking cam

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
L) Lunghezza forbice
T) Massimo taglio forbice
X) Posizionamento vite di fissaggio forbice
Z) Posizione della camma di bloccaggio

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

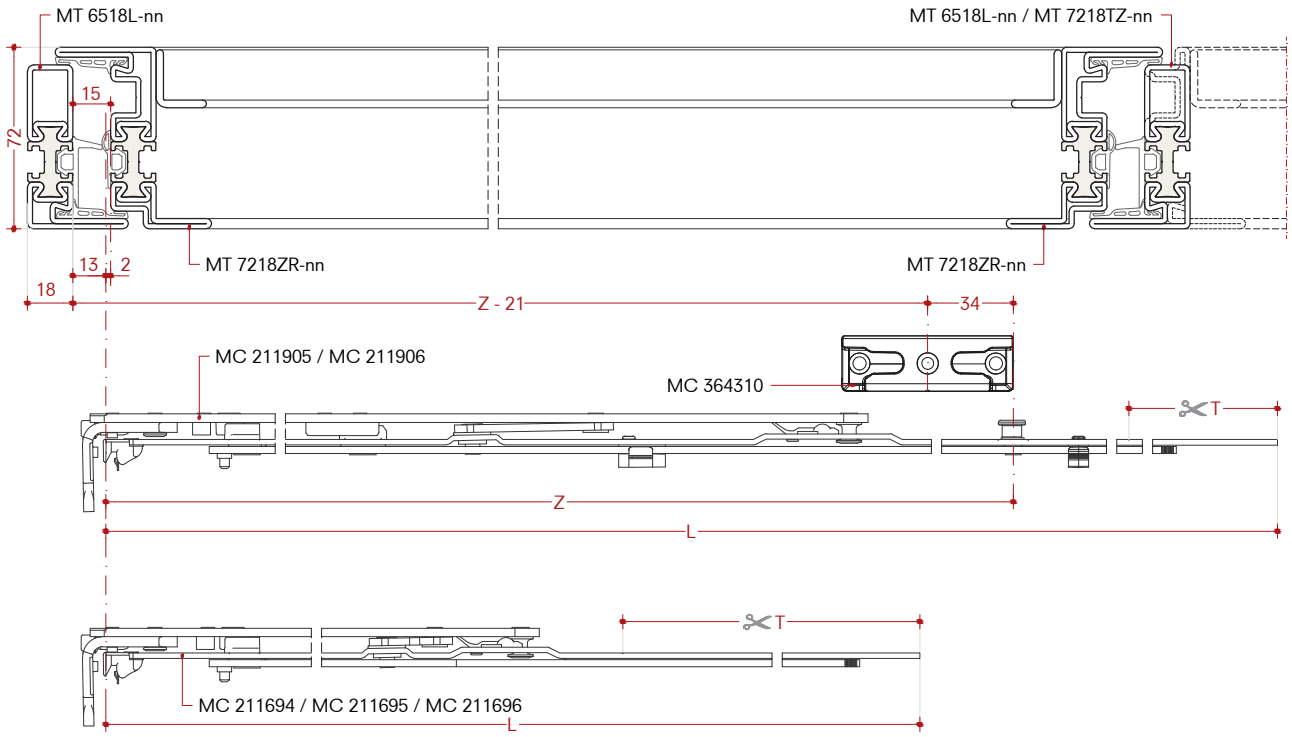
A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
L) Longitud de la tijera
T) Corte máximo en tijera
X) Colocación del tornillo de fijación de la tijera
Z) Posición de la leva de bloqueo



Positioning striker plate
(only for MC 211905 / MC 211906)

Posizionamento del riscontro
(solo per MC 211905 / MC 211906)

Posicionamiento del pieza de bloqueo
(solo para MC 211905 / MC 211906)



	L	T	X1	X2	X3	X4	X5	X6	Z
MC 211694	323	118	16.5	89.5	-	-	-	-	-
MC 211695	496.5	210	16.5	168	178	-	-	-	-
MC 211696	696.5	210	16.5	89.5	248	375	-	-	-
MC 211905	946.5	260	16.5	89.5	331	450	562	-	528
MC 211906	1196.5	260	16.5	89.5	331	450	621	827	587

Installation scissor stay mounted
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906

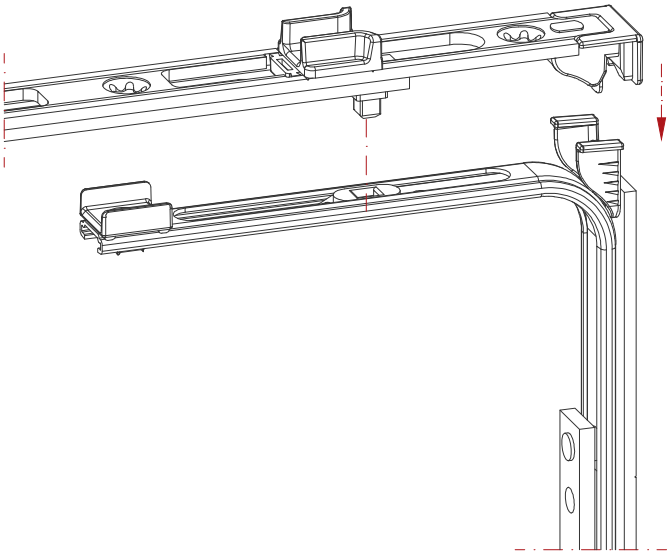
Installazione braccio a forbice premontato
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906

Montaje de brazo de tijera premontado
MC 211694 - MC 211695
MC 211696 - MC 211905
MC 211906

Engage snap joint

Innestare il giunto a scatto

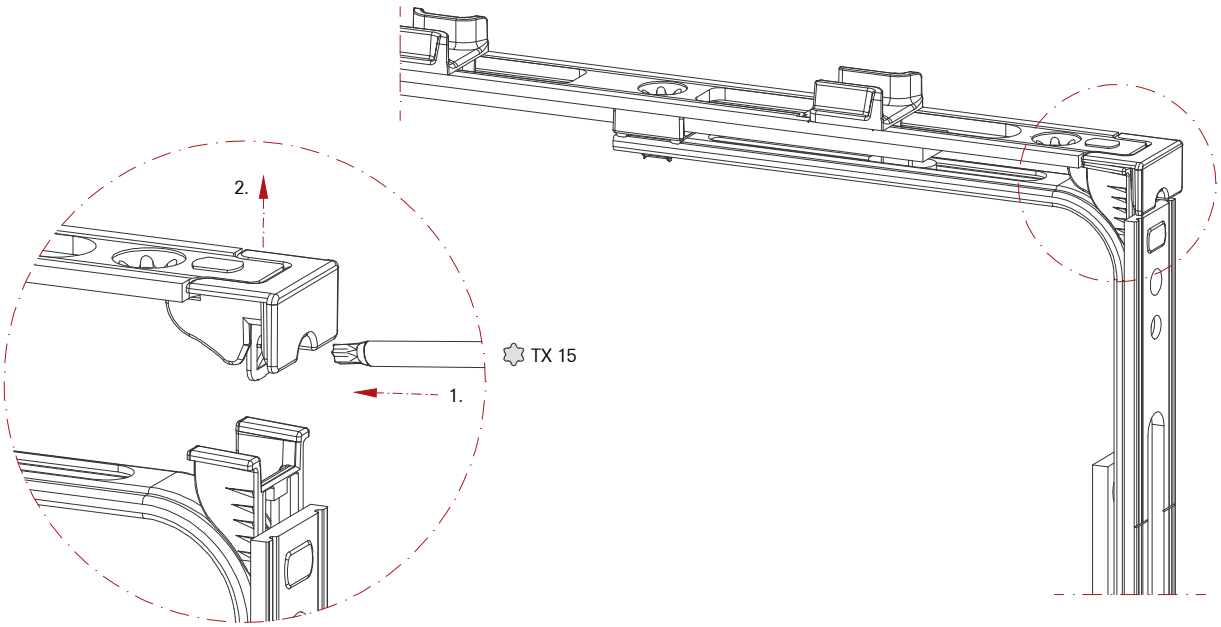
Enganche la junta a presión



Disengage snap joint

Sganciare il giunto a scatto

Desenganche la junta a presión



M65TB - 0054 DWG DXF

opening with TX 15

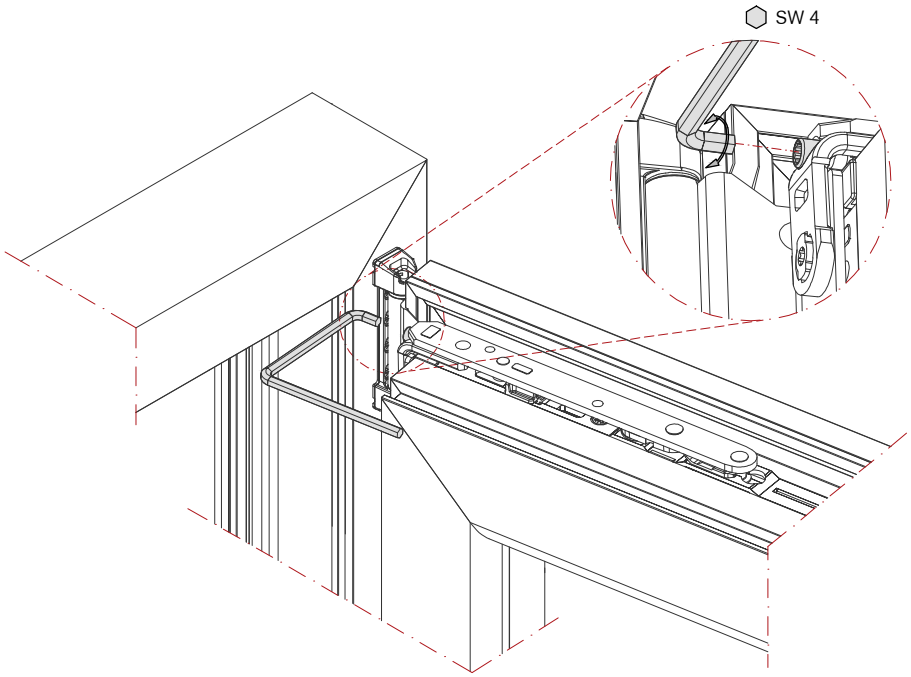
Apertura con TX 15

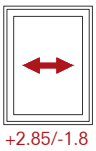
Apertura con TX 15

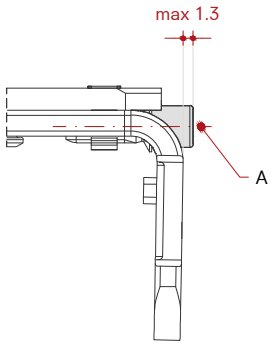
Lateral adjustment

Regolazione laterale

Ajuste lateral







A) When lowering the sash, make sure that the screw is not removed completely. The head of the screw must not protrude more than a maximum of 1 mm!

Adjustment range +2.85/-1.8 mm with SW 4

A) Quando si abbassa l'anta, assicurarsi che la vite non sia stata rimossa completamente. La testa della vite non deve sporgere oltre 1 mm massimo!

Regolazione +2.85/-1.8 mm con SW 4

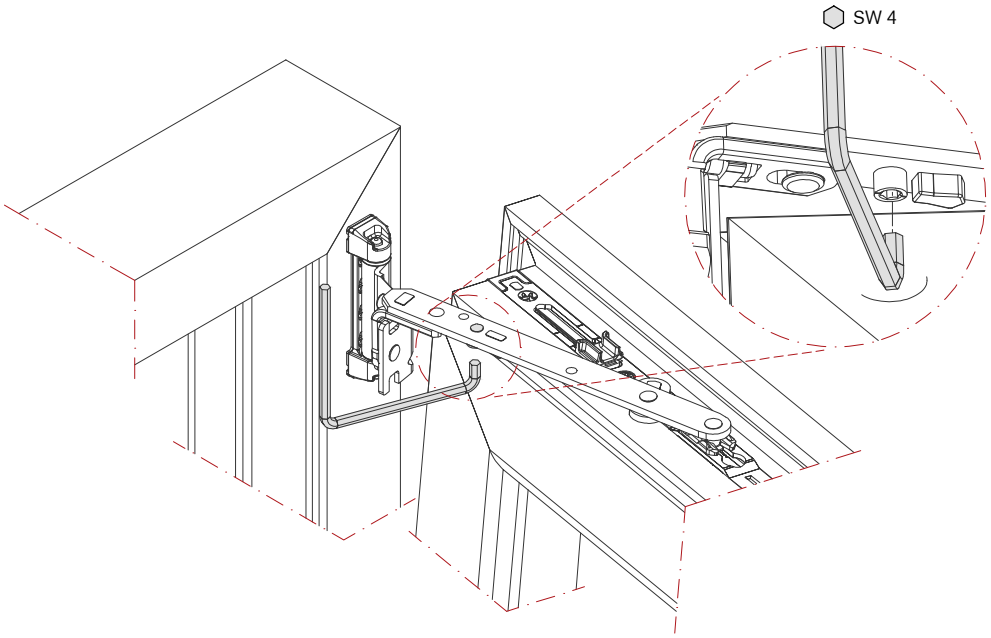
A) Al bajar la hoja, asegúrese de que el tornillo no se quite por completo. ¡La cabeza del tornillo no debe sobresalir más de 1 mm como máximo!

Ajuste +2.85/-1.8 mm con SW 4

Pressure adjustment

Regolazione pressione di contatto

Ajuste de presión de contacto



Adjustment range ± 1 mm with SW 4

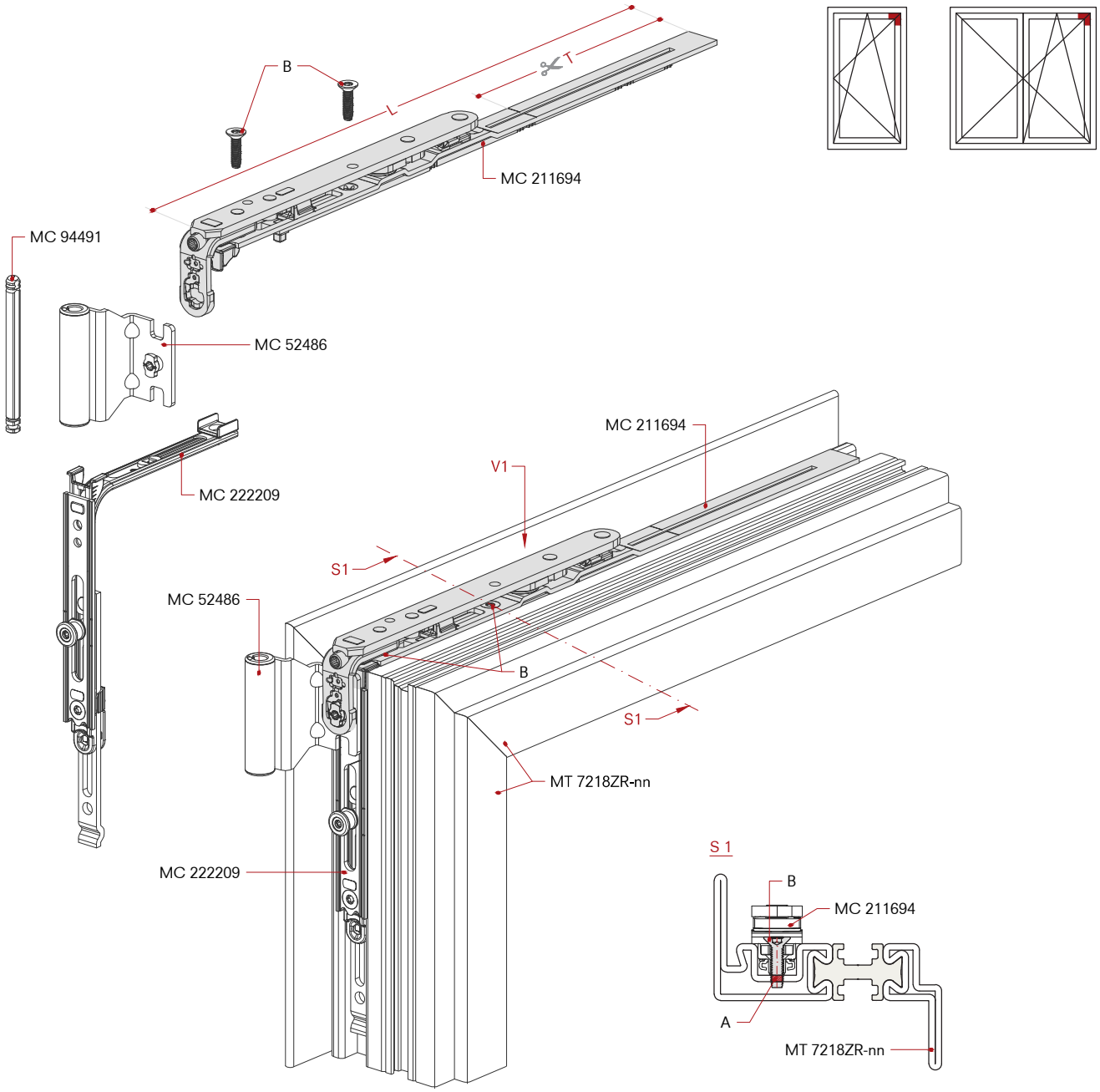
Regolazione ± 1 mm con SW 4

Ajuste ± 1 mm con SW 4

Turn-only hinge on top
MC 52462
with scissor stay support
MC 52486

Braccio rotazione superiore
MC 52462
con supporto
MC 52486

Brazo de rotación superior
MC 52462
con soporte
MC 52486



M65TB - 0055 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16

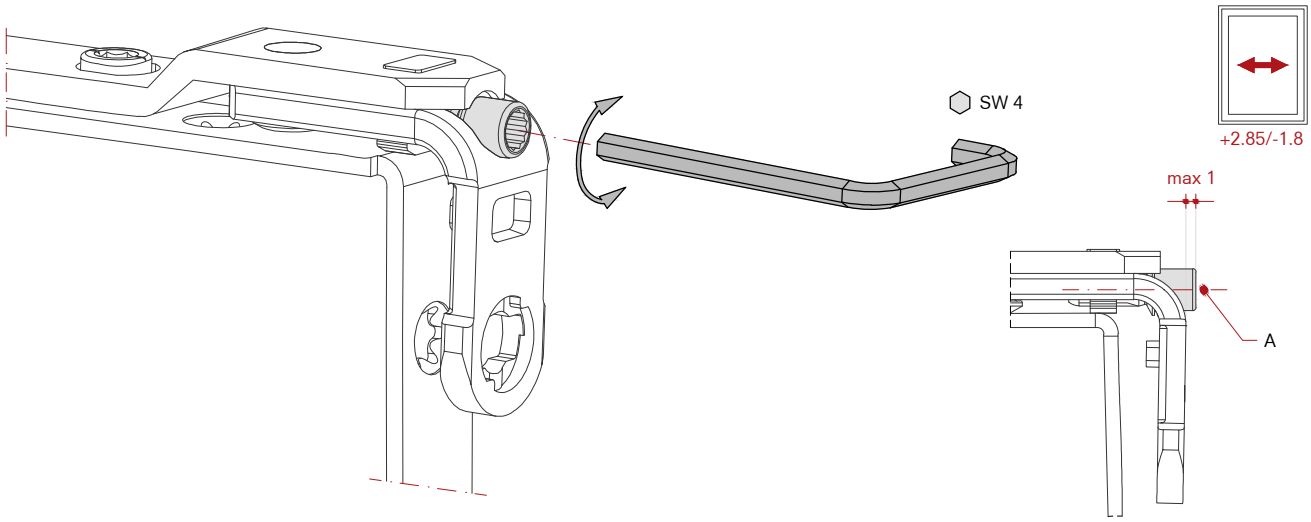
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16

Lateral adjustment



A) When lowering the sash, make sure that the screw is not removed completely. The head of the screw must not protrude more than a maximum of 1 mm!

Adjustment range +2.85/-1.8 mm with SW 4

Regolazione laterale

A) Quando si abbassa l'anta, assicurarsi che la vite non sia stata rimossa completamente. La testa della vite non deve sporgere oltre 1 mm massimo!

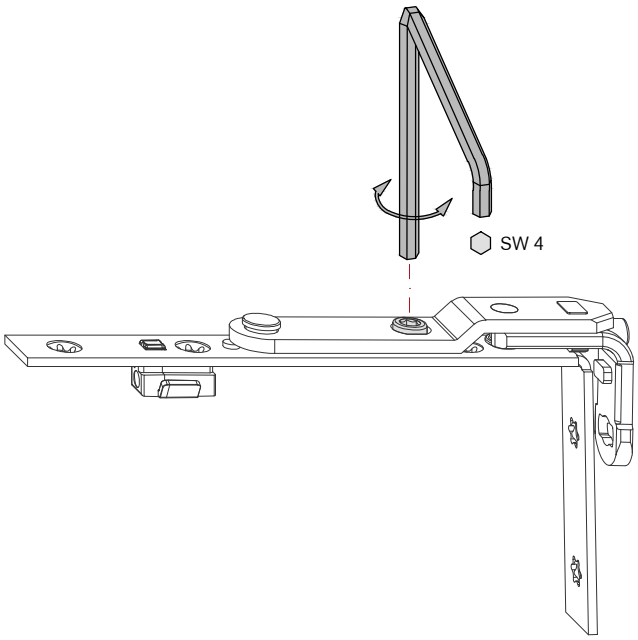
Regolazione +2.85/-1.8 mm con SW 4

Ajuste lateral

A) Al bajar la hoja, asegúrese de que el tornillo no se quite por completo. ¡La cabeza del tornillo no debe sobresalir más de 1 mm como máximo!

Ajuste +2.85/-1.8 mm con SW 4

Pressure adjustment



Adjustment range ± 1.5 mm with SW 4

Regolazione pressione di contatto

Regolazione ± 1.5 mm con SW 4

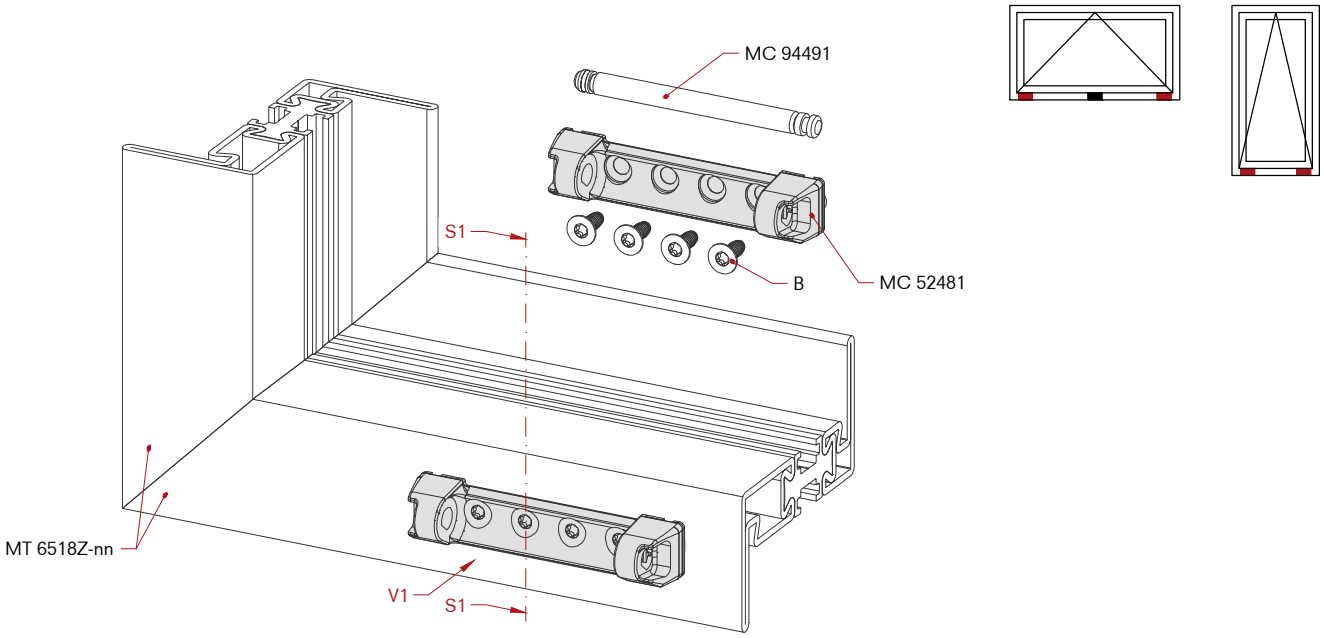
Ajuste de presión de contacto

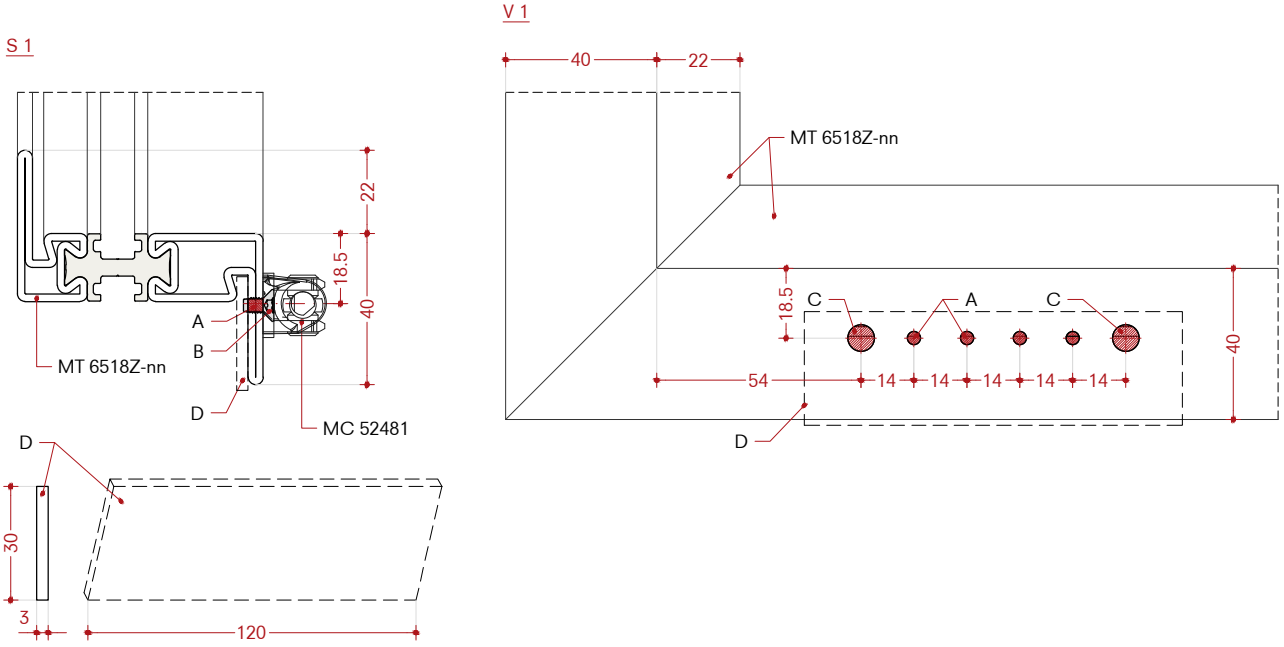
Ajuste ± 1.5 mm con SW 4

Scissor stay hinge
with 7 mm supporting pin
MC 52481
and scissor stay hinge pin
MC 94491
Installation on frame

Braccio di supporto a forbice
con perno di supporto di 7 mm
MC 52481
e perno
MC 94491
Installazione sul telaio

Brazo de soporte de tijera
con pasador de soporte de 7 mm
MC 52481
y alfiler
MC 94491
Instalación en el marco





M65TB - 0056 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.2 mm
B) Countersunk screw M4x8
C) Hole Ø7 mm
D) Use an aluminium base
(30x100x3 mm) for drilling

Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.2 mm
B) Vite testa svasata M4x8
C) Foro Ø7 mm
D) Utilizzare una base in alluminio
(30x100x3 mm) per la foratura

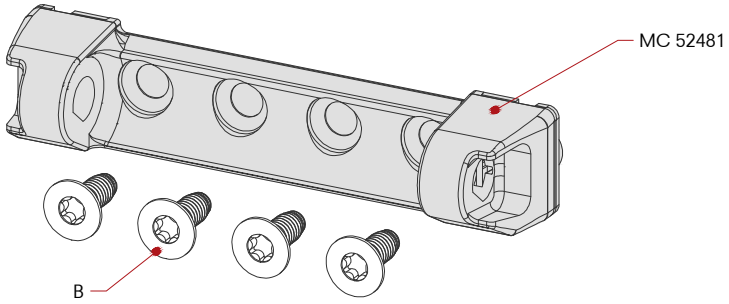
El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.2 mm
B) Tornillo avellanado M4x8
C) Oreficio Ø7 mm
D) Utilice una base de aluminio
(30x100x3 mm) para perforar

Installation scissor stay hinge

Installazione braccio di supporto a forbice

Montaje brazo de soporte de tijera



Note:

- Screw the scissor stay hinge only after mounting the striker plates, otherwise the jigs for the frame can no longer be attached!
- Insert the scissor stay hinge with the pins in the holes and screw the hinge with four screws (B).

Nota:

- Avvitare la cerniera del tirante a forbice solo dopo aver montato i riscontri, altrimenti non è più possibile fissare le dime per il telaio!
- Inserire la cerniera a forbice con i perni nei fori e avvitare la cerniera con quattro viti (B).

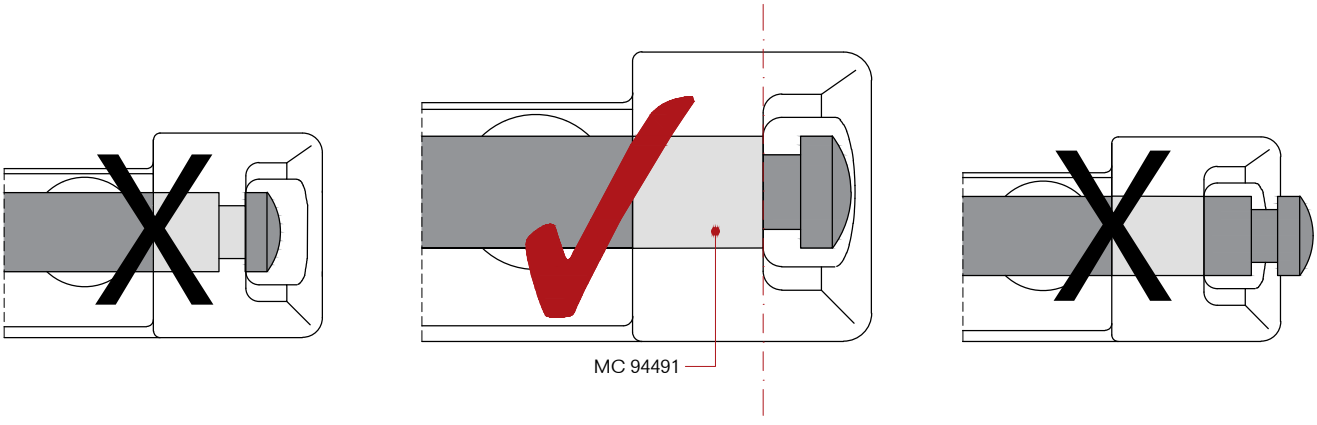
Nota:

- Atornille la bisagra del soporte de tijera solo después de montar las placas de impacto, de lo contrario ya no se podrán colocar las plantillas para el marco!
- Inserte la bisagra del soporte de tijera con los pasadores en los orificios y atornille la bisagra con cuatro tornillos (B).

Installation scissor stay hinge pin

Installazione perno del braccio di supporto a forbice

Montaje de pasador de brazo de soporte de tijera



Note:

- Failure to comply with these instructions may result in the sash falling out of the frame!

Nota:

- Il mancato rispetto di queste istruzioni può causare la caduta dell'anta dal telaio!

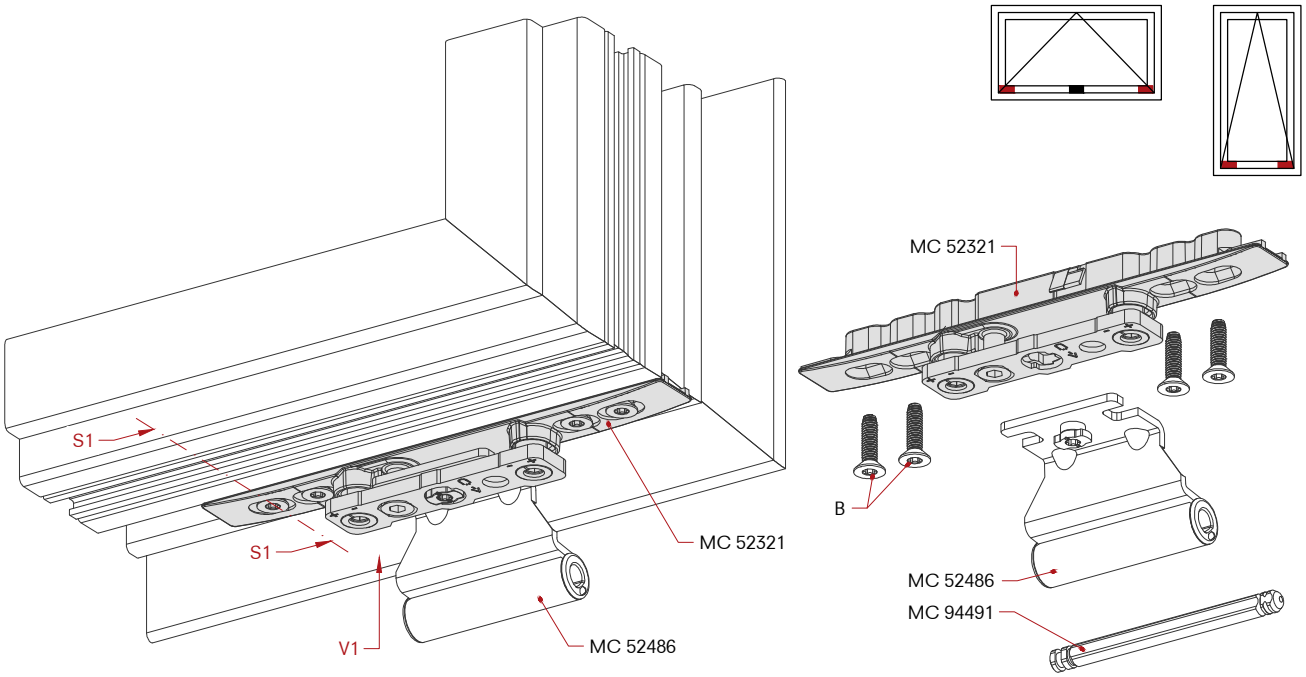
Nota:

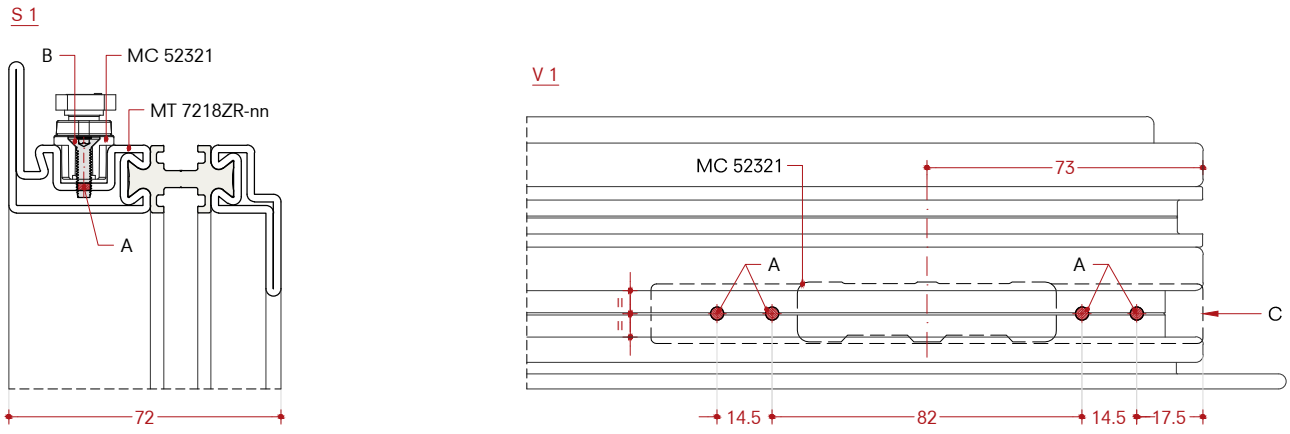
- El incumplimiento de estas instrucciones puede provocar que la hoja se caiga del marco!

Tilt-only hinge
MC 52321
with scissor stay support
MC 52486

Braccio rotante
MC 52321
e perno
MC 52486

Brazo giratorio
MC 52321
y alfiler
MC 52486





M65TB - 0057 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Fasten flush with rebate edge

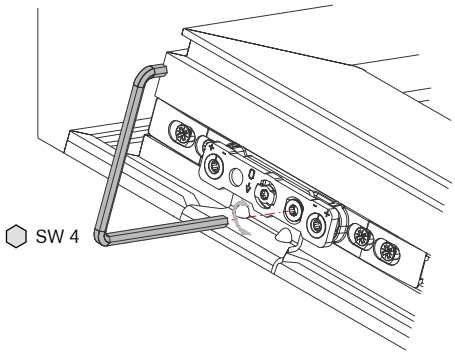
Il disegno rappresenta l'apertura destra
(l'apertura sinistra è l'immagine speculare)

A) Foro Ø3.3 mm
B) Vite testa svasata M4x16
C) Fissare a filo con il bordo della battuta

El dibujo representa la apertura derecha
(la apertura izquierda es la imagen especular)

A) Oreficio Ø3.3 mm
B) Tornillo avellanado M4x16
C) Sujete al ras con el borde rebajado

Height adjustment



Adjustment range ± 2 mm with SW 4

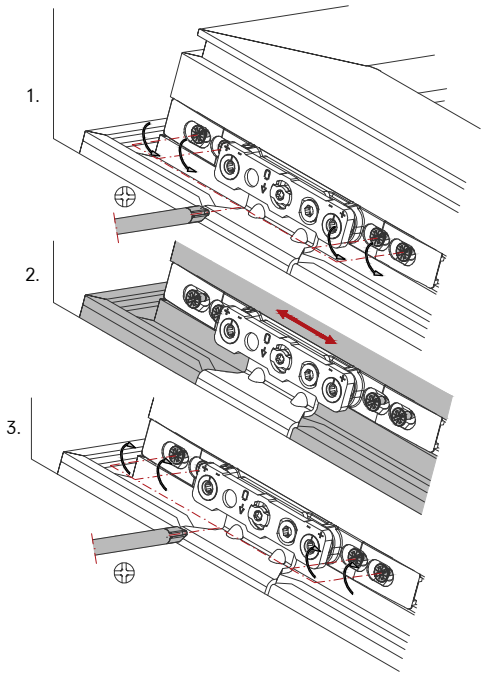
Regolazione verticale

Regolazione ± 2 mm con SW 4

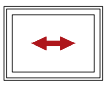
Ajuste vertical

Ajuste ± 2 mm con SW 4

Side adjustment



Regolazione orizzontale



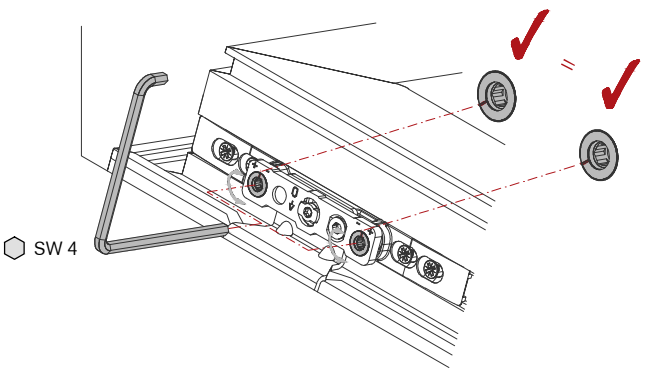
- Lateral adjustment ± 2.5 mm
- For lateral and/or height adjustment, loosen all 4 screws, position the tilt-only hinge correctly and re-tighten all screws firmly.

- Regolazione laterale ± 2.5 mm
- Per la regolazione laterale e/o verticale, allentare tutte e 4 le viti, posizionare correttamente la cerniera e serrare nuovamente tutte le viti.

Ajuste horizontal

- Ajuste lateral ± 2.5 mm
- Para el ajuste lateral y/o vertical, afloje los 4 tornillos, coloque la bisagra correctamente y vuelva a apretar todos los tornillos.

Pressure adjustment



Note:
- Adjust both eccentric bolts parallel!

Adjustment range ± 1 mm with SW 4

Regolazione pressione di contatto

Nota:
- Regolare entrambi i bulloni eccentrici!

Regolazione ± 1 mm con SW 4

Ajuste de presión de contacto

Nota:
- ¡Ajuste ambos pernos excéntricos!

Ajuste ± 1 mm con SW 4

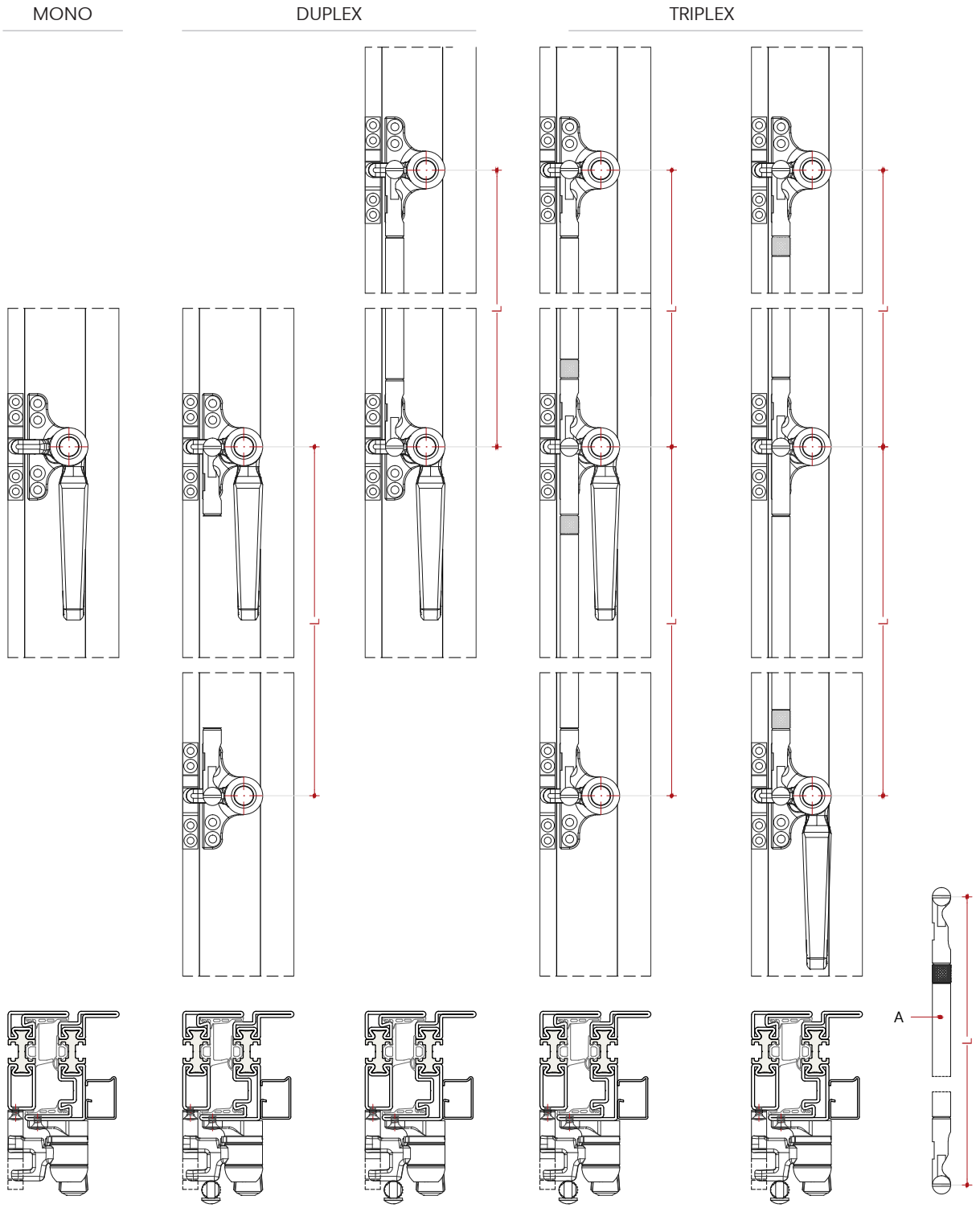
Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

Handles **Maniglie** **Manillas** 5.10

Installation
Heritage window handle
Open in, single leaf window

Montaggio
Maniglia Heritage per finestra
Finestra a un battente apertura interna

Montaje
Manilla de ventana Heritage
Apertura hacia dentro, ventana de 1 hoja



Scale 1:4
A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4
A) Barra di collegamento

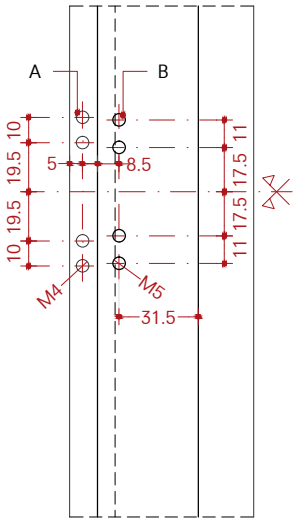
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

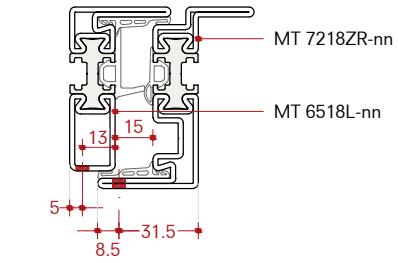
Escala 1:4
A) Barra de enlace

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

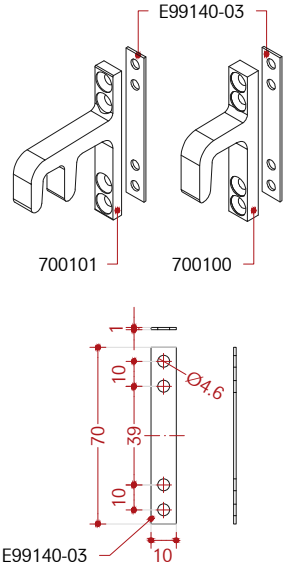
Assembly / Montaggio / Montaje

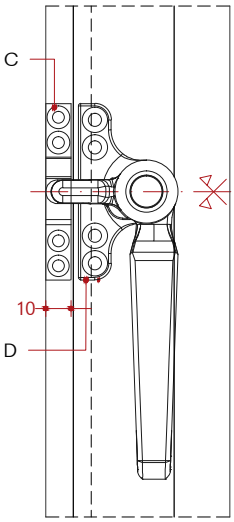
Profiles drilling
Foratura profili
Orificios en perfiles

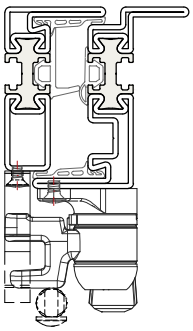


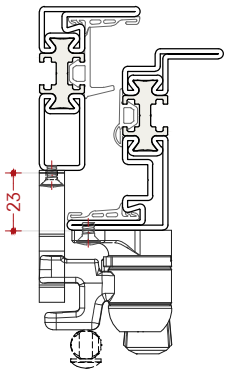


Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre

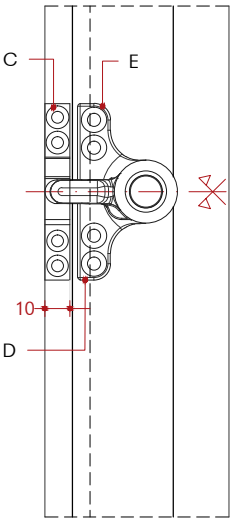


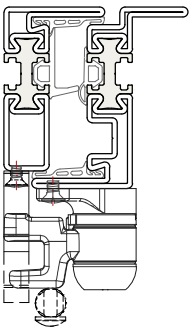


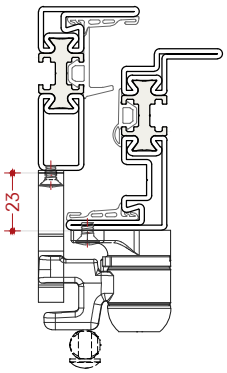




Additional locking nose and hook
Punto di chiusura e gancio addizionali
Cierre adicional y gancho de cierre







A) M4 holes on frame profile
B) M5 holes on leaf profile
C) Fastening of locking hook with M4x8 ISO2010/ISO7047 screws
D) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
E) A 70122X nn connection rod required to connect the handle to additional locking nose

For any additional information please contact our technical office.

A) Fori M4 sul profilo del telaio
B) Fori M5 su profilo anta
C) Fissaggio punto di chiusura e gancio addizionale con viti M4x8 ISO2010/ISO7047
D) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
E) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura addizionale

Per ulteriori informazioni contattare l'ufficio tecnico.

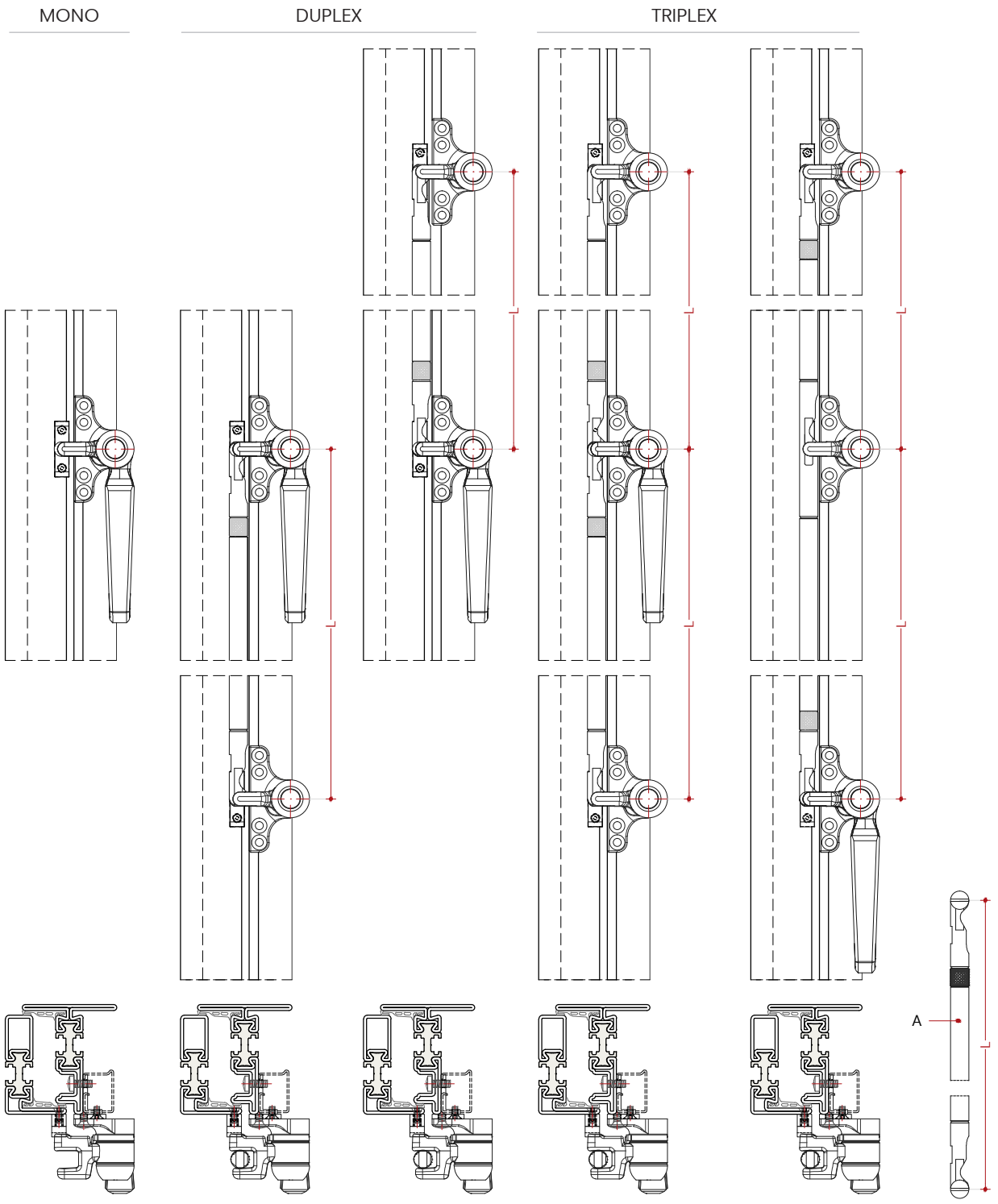
A) Oreficios M4 en el perfil del marco
B) Oreficios M5 en el perfil de la hoja
C) Fijación del punto de bloqueo y gancho adicional con tornillos D99902-03 o D99904-03 (M4x8 mm)
D) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
E) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional

Para más información contactar la nuestra oficina técnica.

Installation
Heritage window handle
Open out, single leaf window

Montaggio
Maniglia Heritage per finestra
Finestra a un battente apertura esterna

Montaje
Manilla de ventana Heritage
Apertura hacia fuera, ventana de 1 hoja



Scale 1:4
A) Connection rod

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Scala 1:4
A) Barra di collegamento

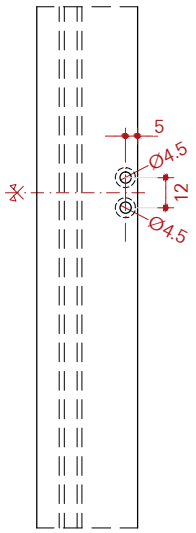
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

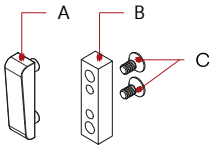
Escala 1:4
A) Barra de enlace

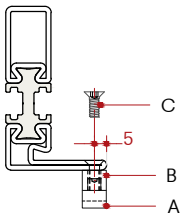
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montaggio / Montaje

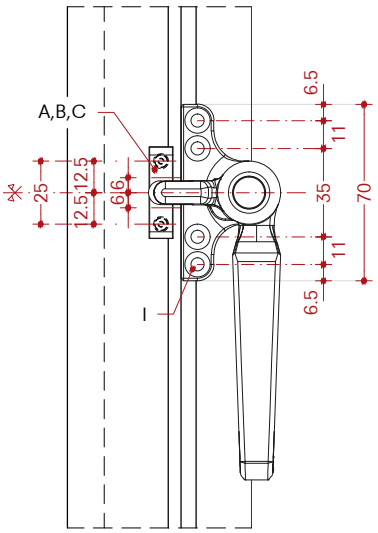
Profiles drilling
Foratura profili
Orificios en perfiles

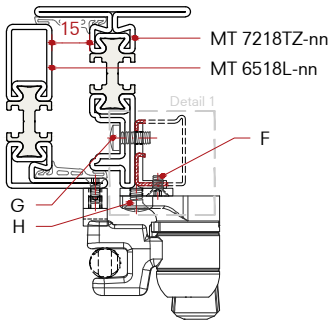


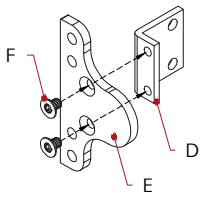


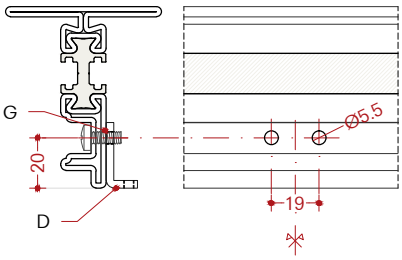


Handle and locking hook
Maniglia e gancio di chiusura
Manilla y gancho de cierre

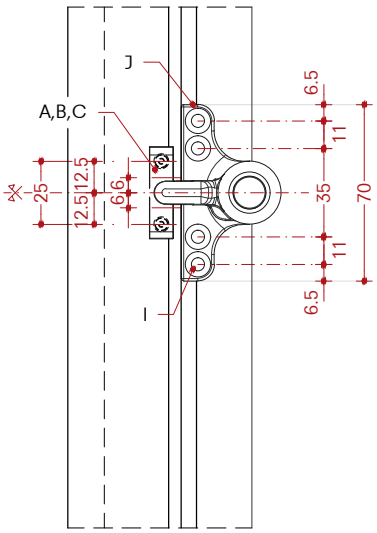


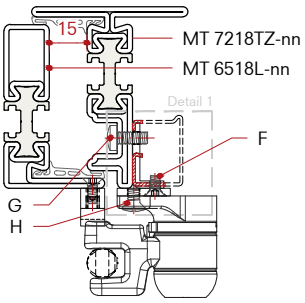




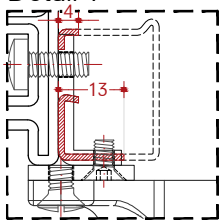


Additional locking nose and hook
Punto di chiusura e gancio addizionali
Cierre adicional y gancho de cierre





Detail 1



A) Wedge 700105 NB
B) Stainless steel shim D99151-03
C) M4x10 ISO10642 screw
D) Bracket D99152-03
E) Base for bracket D99152-03
F) M4x8 ISO10642 screw
G) M5x12 ISO7045 screw
H) M5x8 ISO2010 screw
I) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
J) A 70122X nn connection rod required to connect the handle to additional locking nose

For any additional information please contact our technical office.

A) Cuneo 700105 NB
B) Spessore in acciaio inox D99151-03
C) Vite M4x10 ISO10642
D) Staffa D99152-03
E) Base per staffa D99152-03
F) Vite M4x8 ISO10642
G) Vite M5x12 ISO7045
H) Vite M5x8 ISO2010
I) Fissaggio della maniglia con viti M5x8 ISO2010/ISO7047
J) 70122X nn asta di collegamento necessaria per collegare la maniglia al punto di chiusura addizionale

Per ulteriori informazioni contattare l'ufficio tecnico.

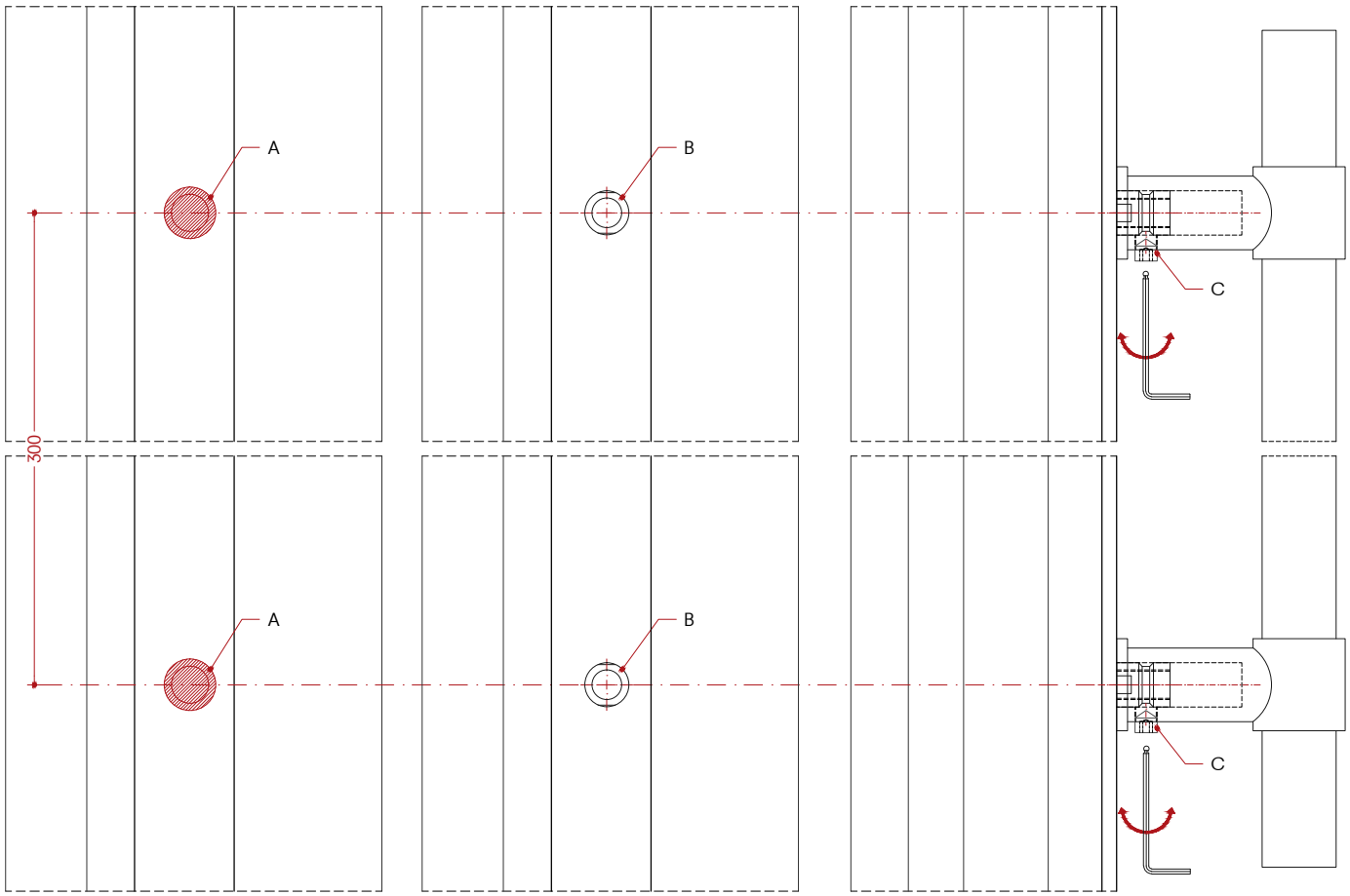
A) Cuña de bloqueo 700105 NB
B) Base de acero inoxidable D99151-03
C) Tornillo M4x10 ISO10642
D) Ángulo D99152-03
E) Base para ángulo D99152-03
F) Tornillo M4x8 ISO10642
G) Tornillo M5x12 ISO7045
H) Tornillo M5x8 ISO2010
I) Fijación del tirador con tornillos M5x8 ISO2010/ISO7047
J) 70122X nn varilla de conexión necesaria para conectar la manija al punto de bloqueo adicional

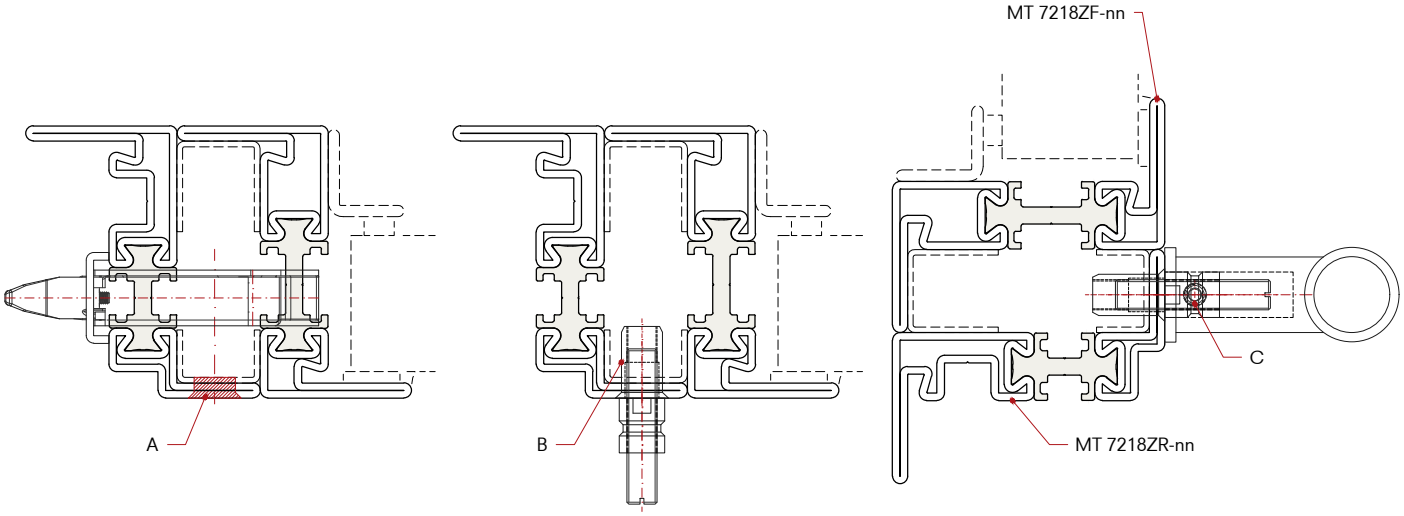
Para más información contactar la nuestra oficina técnica.

Installation
Pull handle 760600 nn L = 400
Side by side fastening on
MT 7218ZR-nn + MT 7218ZF-nn

Montaggio
Maniglione 760600 nn L = 400
Fissaggio passante su
MT 7218ZR-nn + MT 7218ZF-nn

Montaje
Manilla de empuje 760600 nn L = 400
Fijación a un lado en
MT 7218ZR-nn + MT 7218ZF-nn





A) n°02 Ø10 mm countersunk holes
B) M8 rivet nut (not provided)
C) Fastening with M6x6 screws

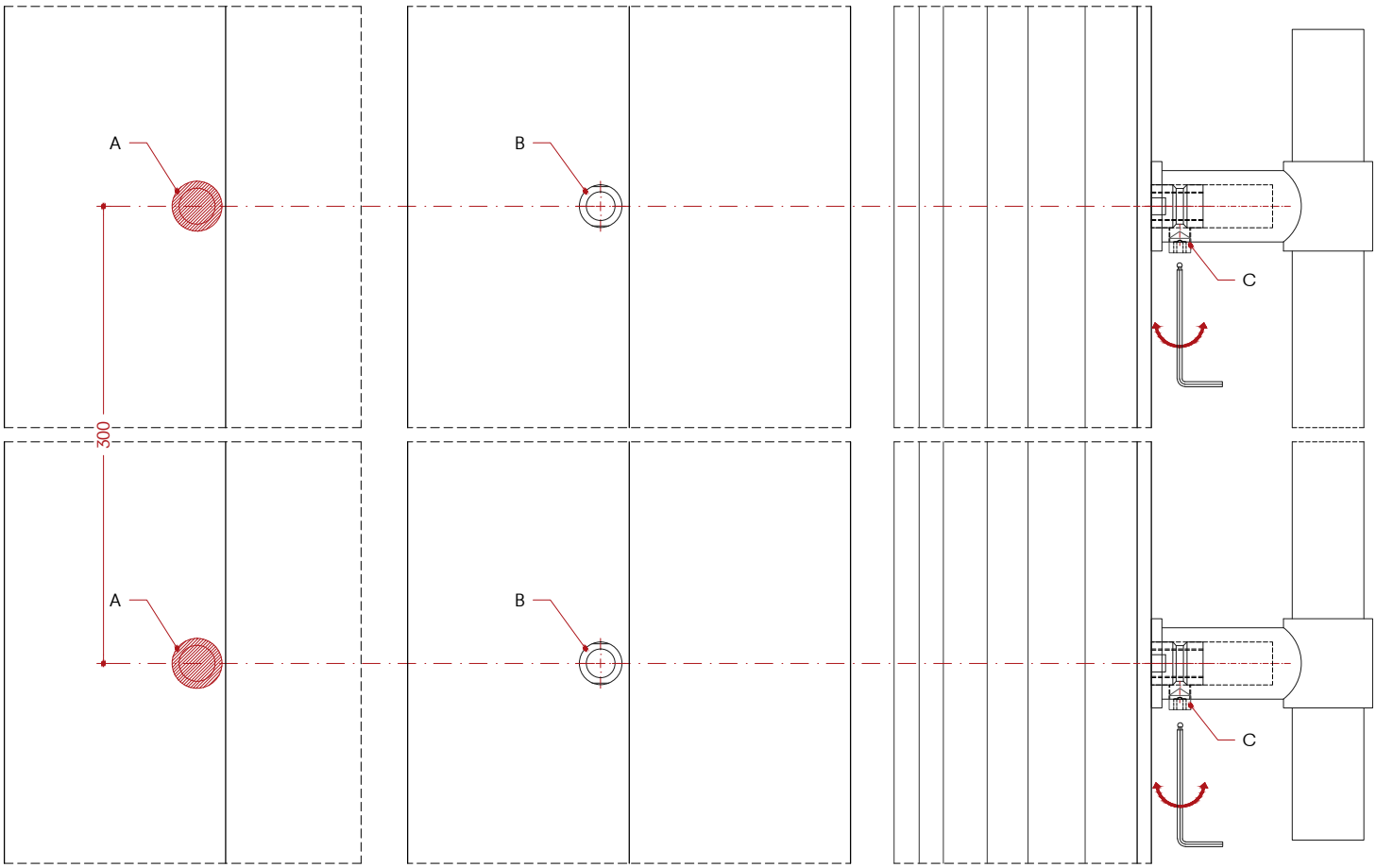
A) n°02 fori svasati Ø10 mm
B) Rivetto M8 (non fornito)
C) Fissaggio con viti M6x6

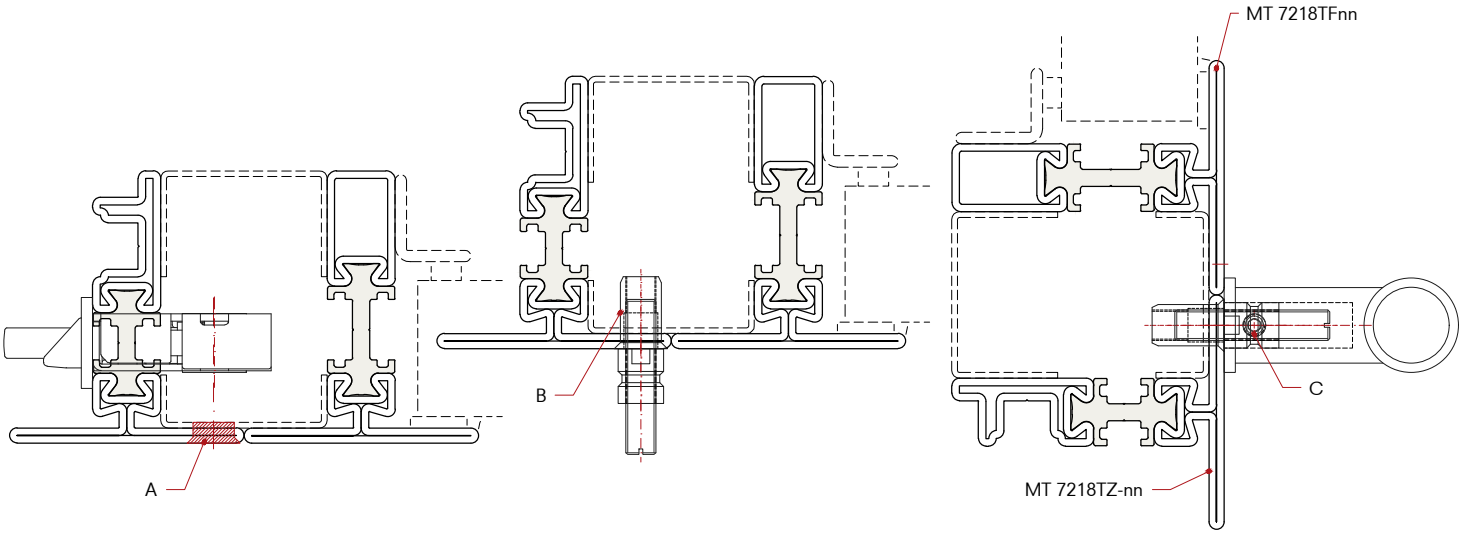
A) n°02 orificios avellanados Ø10 mm
B) Tuerca de remache M8 (no suministrada)
C) Fijación con tornillos M6x6

Installation
Pull handle 760600 nn L = 400
Side by side fastening on locking box

Montaggio
Maniglione 760600 nn L = 400
Fissaggio passante su scatola serratura

Montaje
Manilla de empuje 760600 nn L = 400
Fijación a un lado en serradura





A) n°02 Ø10 mm countersunk holes
B) M8 rivet nut (not provided)
C) Fastening with M6x6 screws

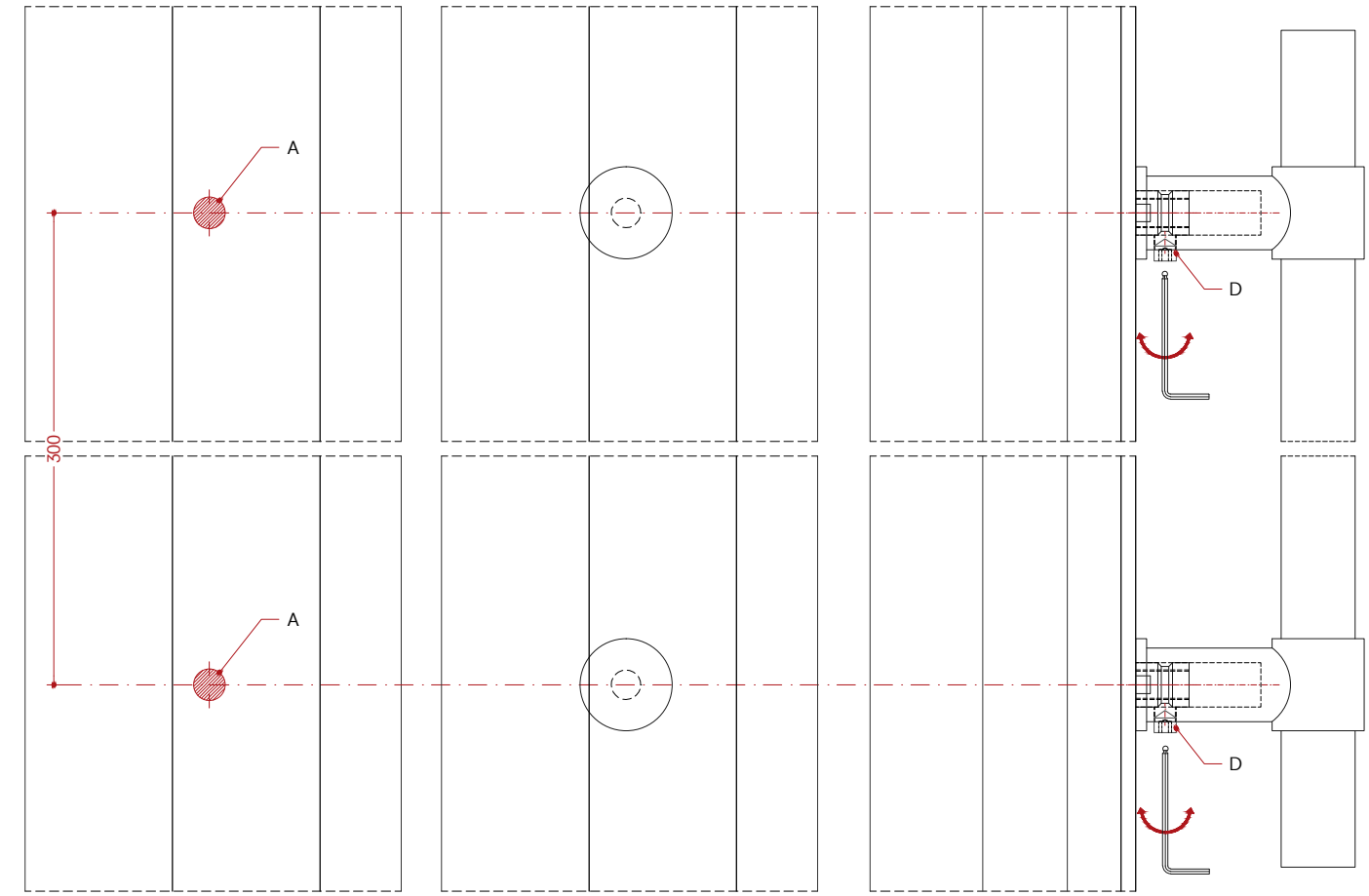
A) n°02 fori svasati Ø10 mm
B) Rivetto M8 (non fornito)
C) Fissaggio con viti M6x6 mm

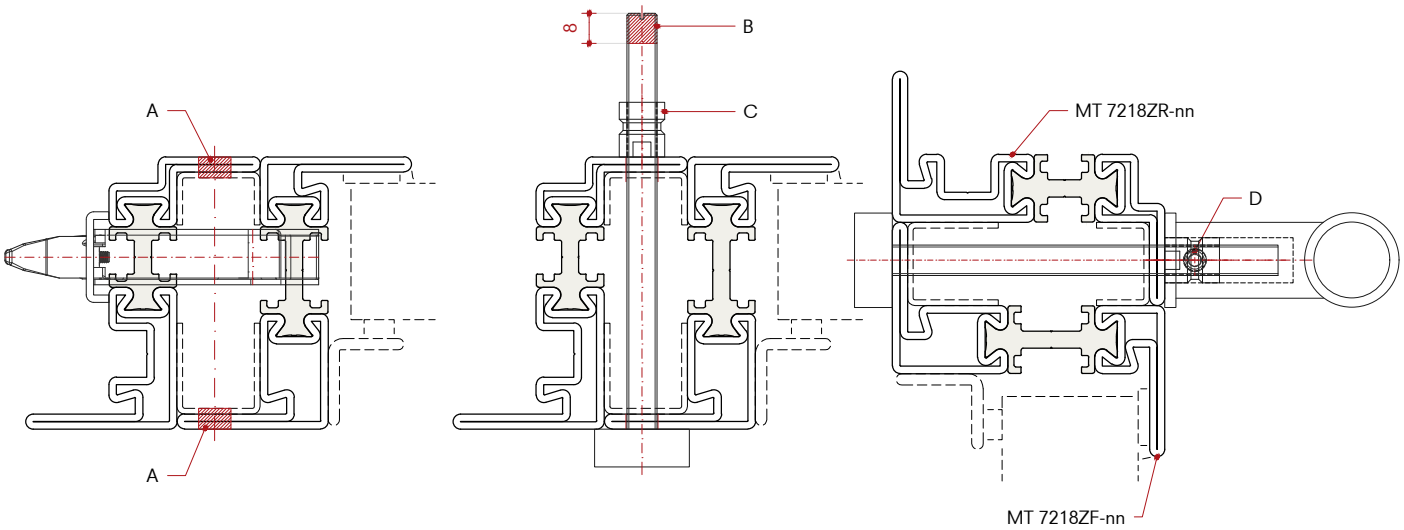
A) n°02 orificios avellanados Ø10 mm
B) Tuerca de remache M8 (no suministrada)
C) Fijación con tornillos M6x6

Installation
Pull handle 760605 nn L = 400
Side by side fastening on
MT 7218ZR-nn + MT 7218ZF-nn

Montaggio
Maniglione 760605 nn L = 400
Fissaggio passante su
MT 7218ZR-nn + MT 7218ZF-nn

Montaje
Manilla de empuje 760605 nn L = 400
Fijación a un lado en
MT 7218ZR-nn + MT 7218ZF-nn





A) n°02 Ø8.5 mm countersunk holes
B) Cut the screws
C) M8 rivet nut (not provided)
D) Fastening with M6x6 screws

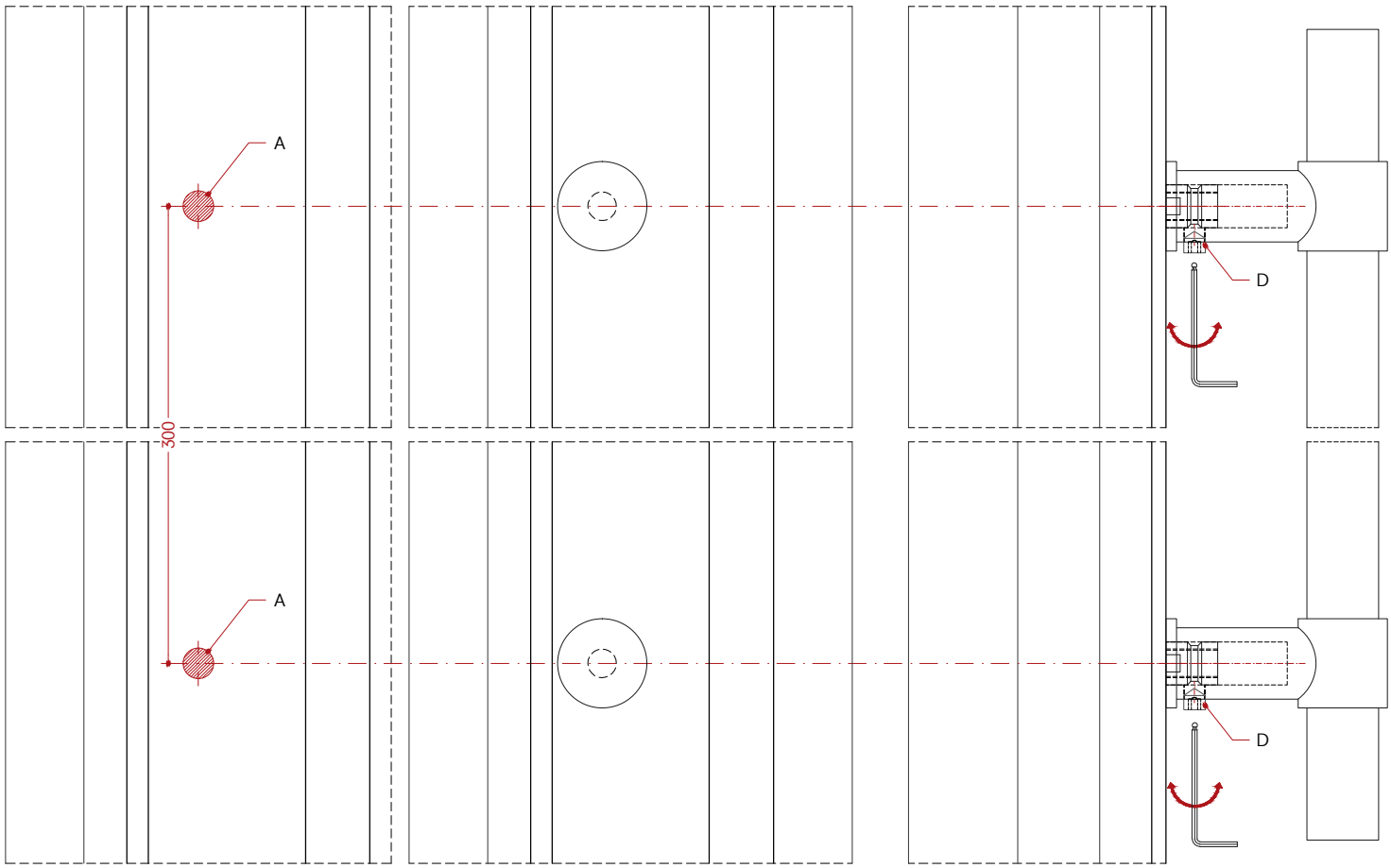
A) n°02 fori svasati Ø8.5 mm
B) Accorciare la vite
C) Rivetto M8 (non fornito)
D) Fissaggio con viti M6x6

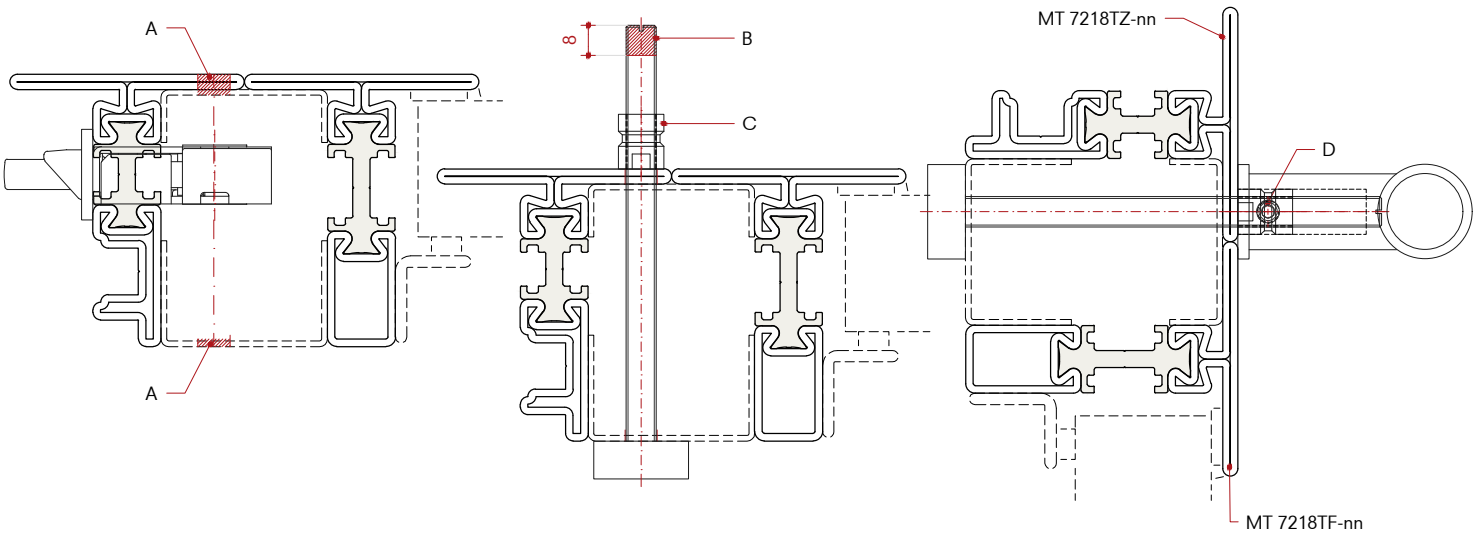
A) n°02 orificios avellanados Ø8.5 mm
B) Acortar el tornillo
C) Tuerca de remache M8 (no suministrada)
D) Fijación con tornillos M6x6

Installation
Pull handle 760605 nn L = 400
Side by side fastening on locking box

Montaggio
Maniglione 760605 nn L = 400
Fissaggio passante su scatola serratura

Montaje
Manilla de empuje 760605 nn L = 400
Fijación a un lado en serradura





A) n°02 Ø8.5 mm countersunk holes
B) Cut the screws
C) M8 rivet nut (not provided)
D) Fastening with M6x6 screws

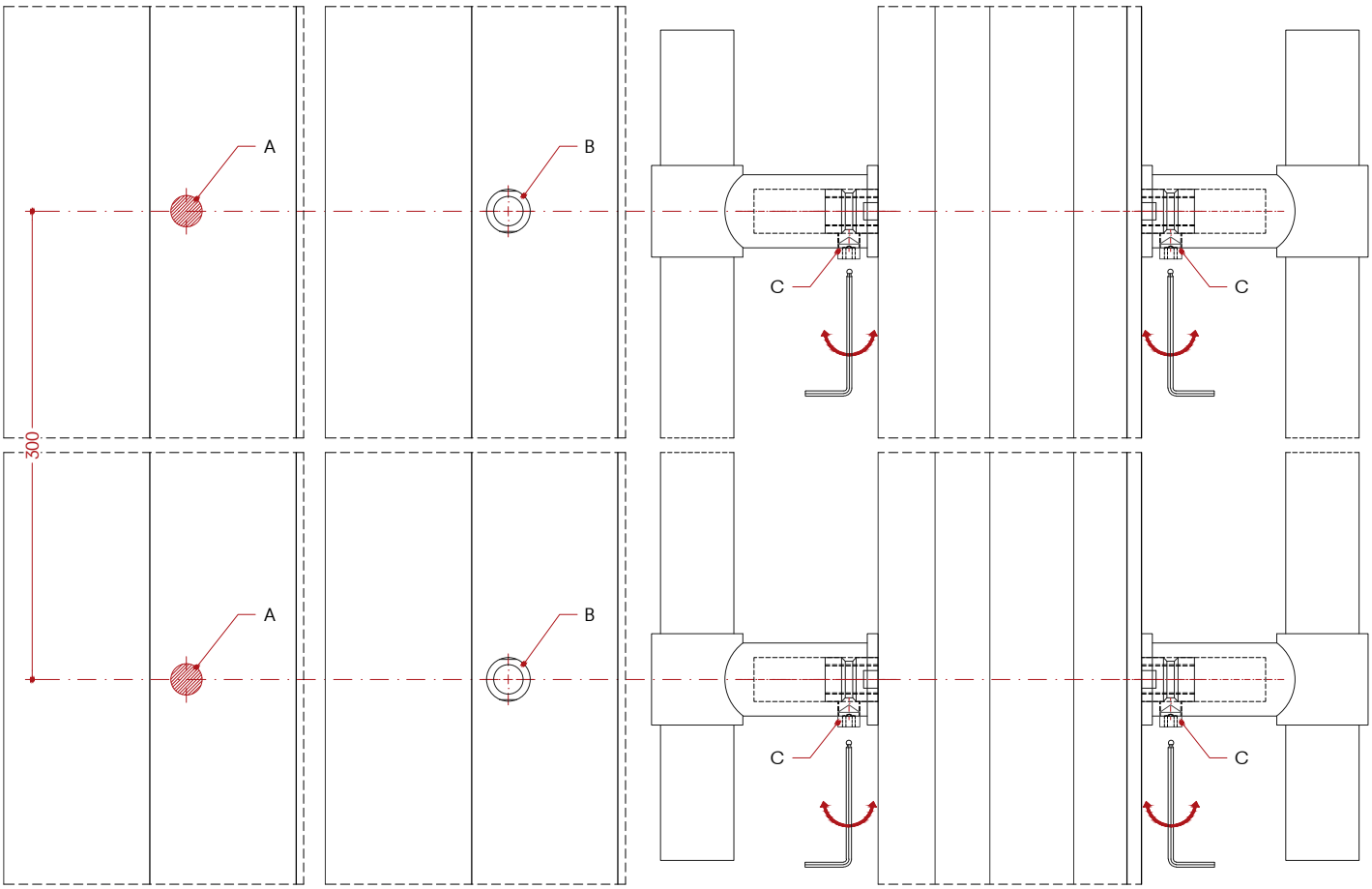
A) n°02 fori svasati Ø8.5 mm
B) Accorciare la vite
C) Rivetto M8 (non fornito)
D) Fissaggio con viti M6x6

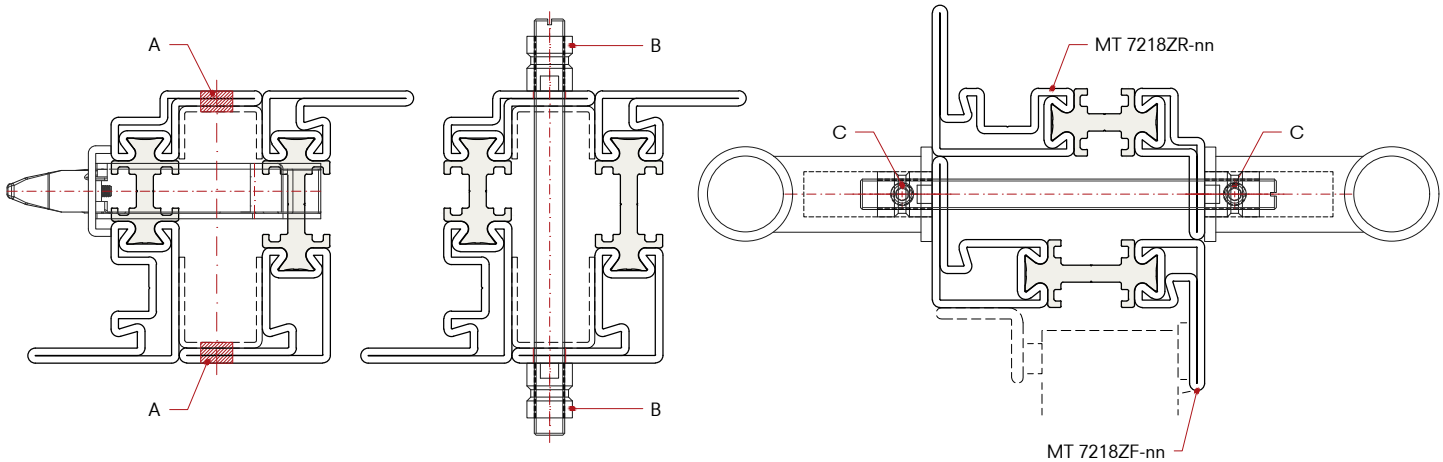
A) n°02 orificios avellanados Ø8.5 mm
B) Acortar el tornillo
C) Tuerca de remache M8 (no suministrada)
D) Fijación con tornillos M6x6

Installation
Pull handle 760610 nn L = 400
Side by side fastening on
MT 7218ZR-nn + MT 7218ZF-nn
Pull handle above the lock

Montaggio
Maniglione 760610 nn L = 400
Fissaggio passante su
MT 7218ZR-nn + MT 7218ZF-nn
Maniglione sopra la serratura

Montaje
Manilla de empuje 760610 nn L = 400
Fijación a un lado en
MT 7218ZR-nn + MT 7218ZF-nn
Manilla encima de la cerradura





A) n°02 Ø8.5 mm countersunk holes
B) M8 rivet nut (not provided)
C) Fastening with M6x6 screws

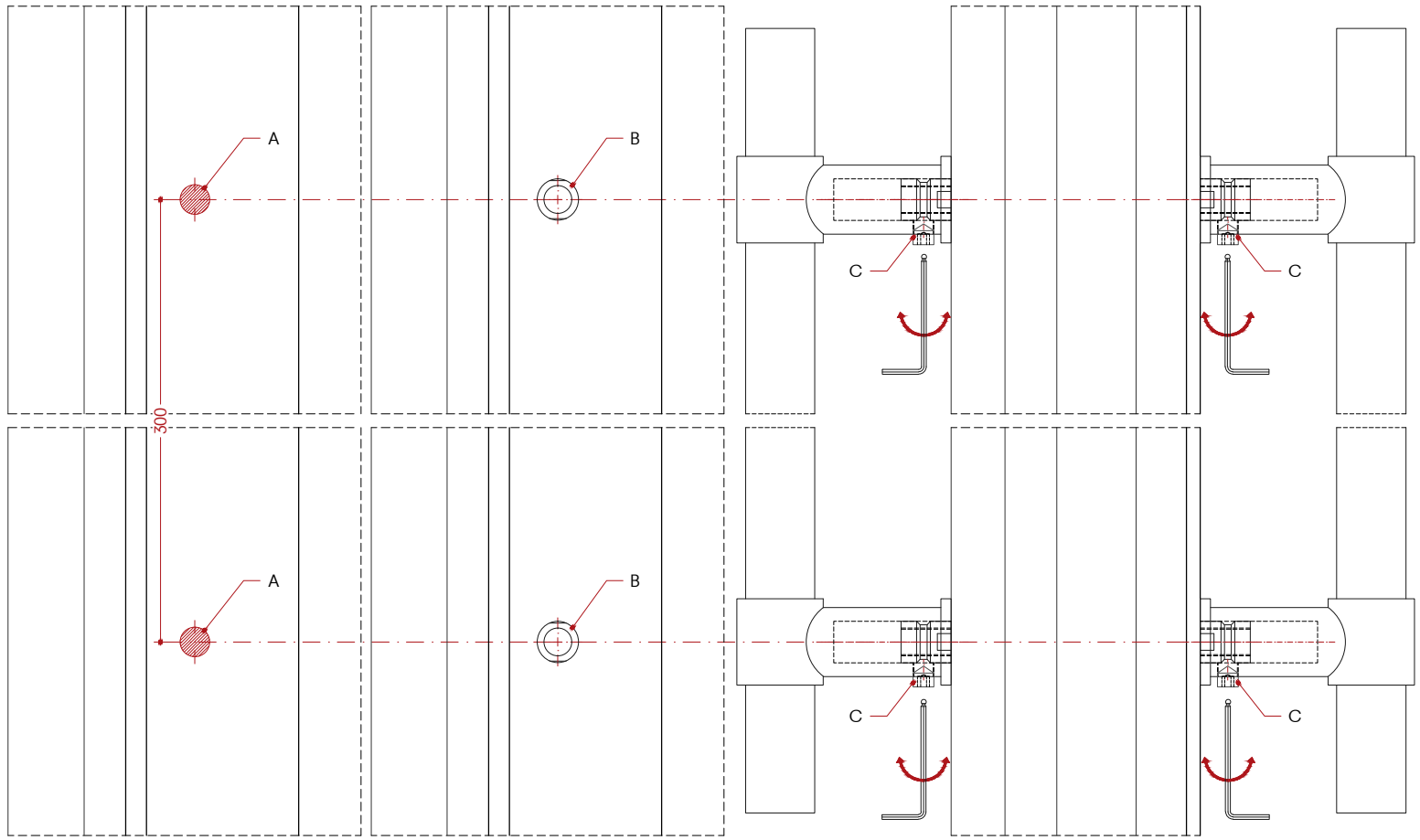
A) n°02 fori svasati Ø8.5 mm
B) Rivetto M8 (non fornito)
C) Fissaggio con viti M6x6

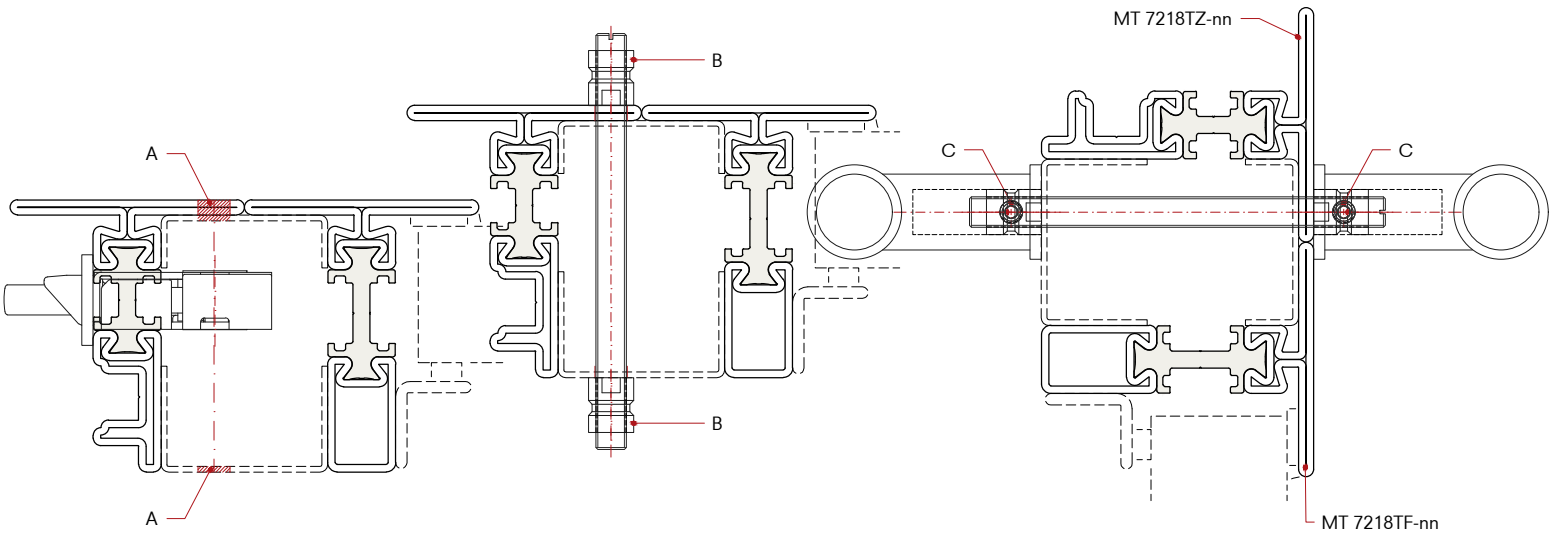
A) n°02 orificios avellanados Ø8.5 mm
B) Tuerca de remache M8 (no suministrada)
C) Fijación con tornillos M6x6

Installation
Pull handle 760610 nn L = 400
Side by side fastening on locking box
Pull handle above the lock

Montaggio
Maniglione 760610 nn L = 400
Fissaggio passante su scatola serratura
Maniglione sopra la serratura

Montaje
Manilla de empuje 760610 nn L = 400
Fijación a un lado en serradura
Manilla encima de la cerradura





A) n°02 Ø8.5 mm countersunk holes
B) M8 rivet nut (not provided)
C) Fastening with M6x6 screws

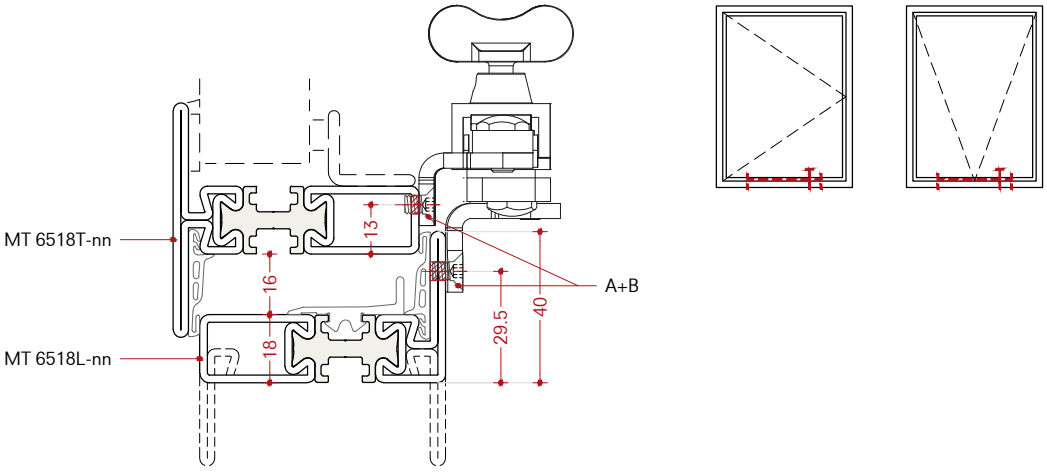
A) n°02 fori svasati Ø8.5 mm
B) Rivetto M8 (non fornito)
C) Fissaggio con viti M6x6

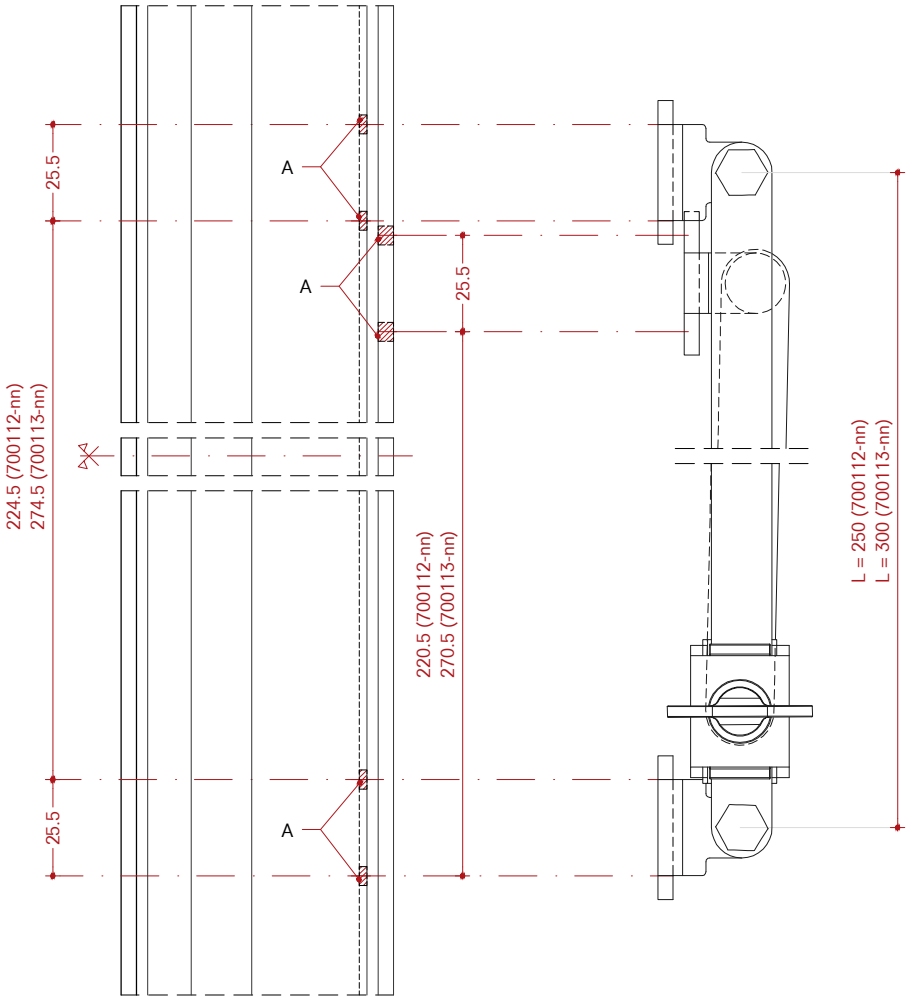
A) n°02 orificios avellanados Ø8.5 mm
B) Tuerca de remache M8 (no suministrada)
C) Fijación con tornillos M6x6

Installation
Slide stay 700112 nn (L = 250)
and 700113 nn (L = 300)
Open out

Montaggio
Braccio di bloccaggio scorrevole
700112 nn (L = 250)
e 700113 nn (L = 300)
Apertura esterna

Montaje
Soporte deslizante
700112 nn (L = 250)
y 700113 nn (L = 300)
Apertura hacia fuera

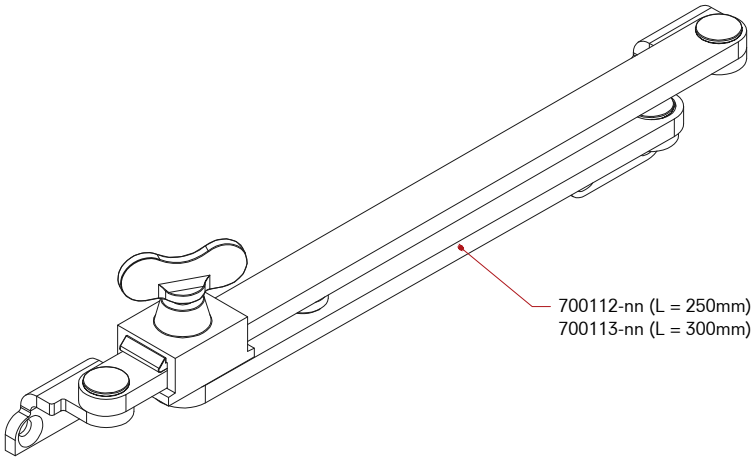


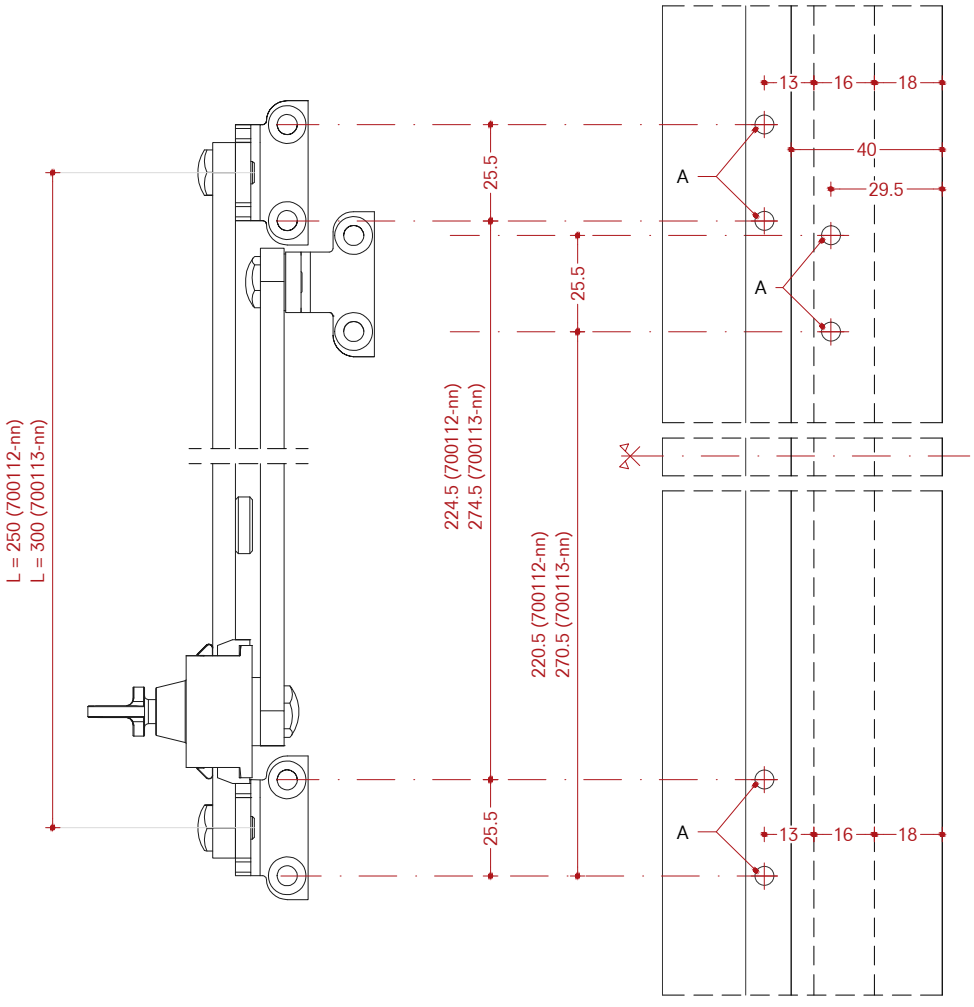


A) n°06 M5 holes
B) n°06 M5x8 ISO10642 screws

A) n°06 fori M5
B) n°06 viti M5x8 ISO10642

A) n°06 orificios M5
B) n°06 tornillos M5x8 ISO10642

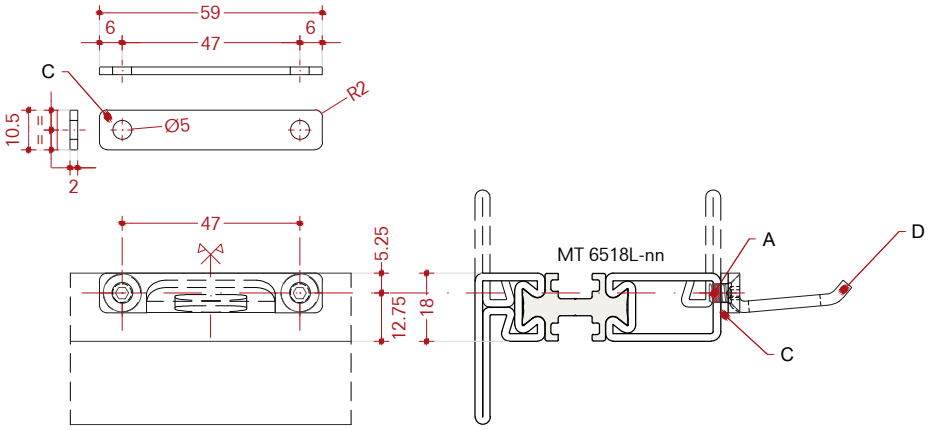

700112-nn (L = 250mm)
700113-nn (L = 300mm)

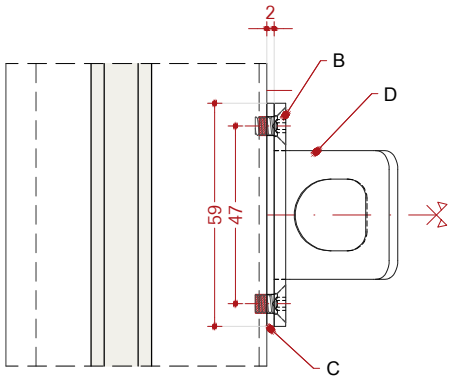

L = 250 (700112-nn)
L = 300 (700113-nn)
25.5
224.5 (700112-nn)
274.5 (700113-nn)
25.5
220.5 (700112-nn)
270.5 (700113-nn)
25.5
13
16
18
40
29.5
A
A
A
13
16
18

Installation
Spring catch 703000 nn
and spring catch plate 703001 nn

Montaggio
Cricchetto 703000 nn
e riscontro 703001 nn

Montaje
Pasador 703000 nn
y placa de fijador 703001 nn

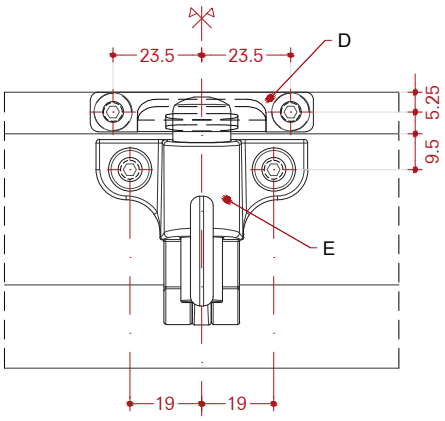


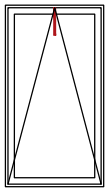


Single spring catch

Cricchetto singolo

Lengüeta de pasador

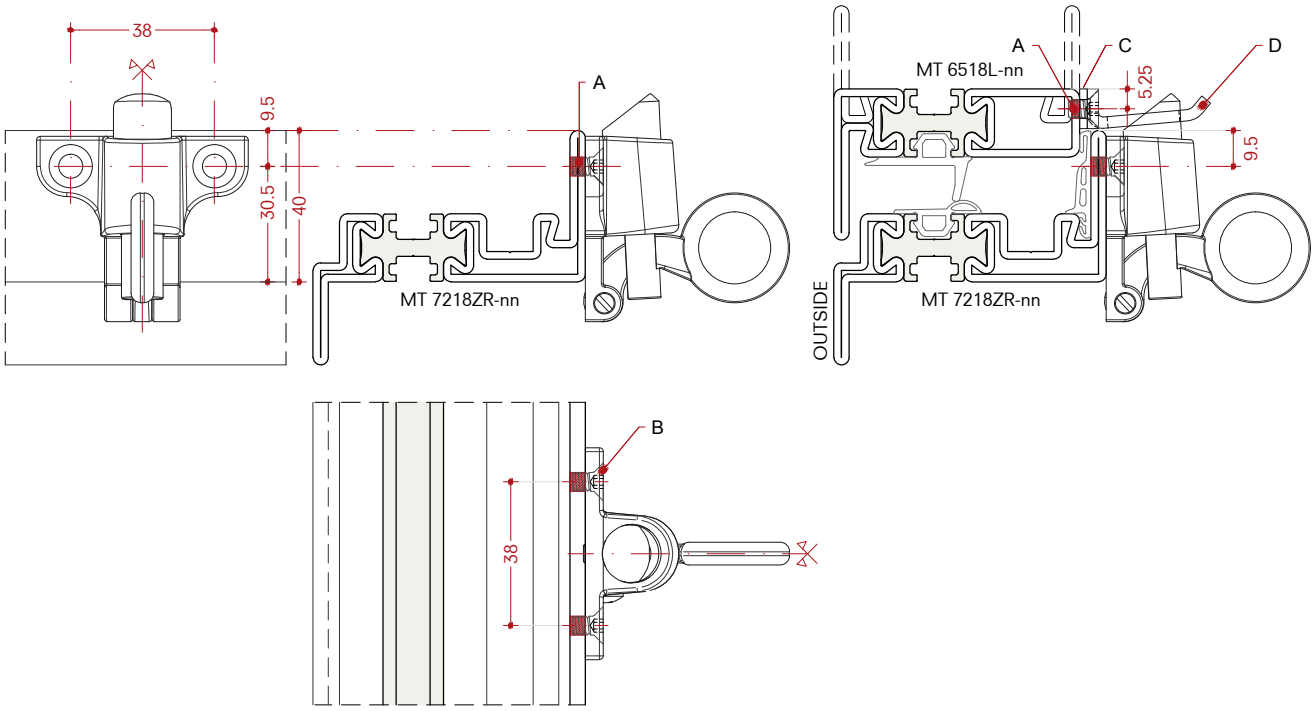




A) n°02 M5 holes
B) Fastening with M5x8 ISO10642 screws
C) Shim stainless steel AISI 304 in-house production
D) 703001 nn spring catch plate
E) 703000 nn spring catch

A) n°02 fori M5
B) Fissaggio con viti M5x8 ISO10642
C) Piatto in acciaio inox AISI 304 (non fornito)
D) 703001 nn piastra per cricchetto
E) 703000 nn cricchetto

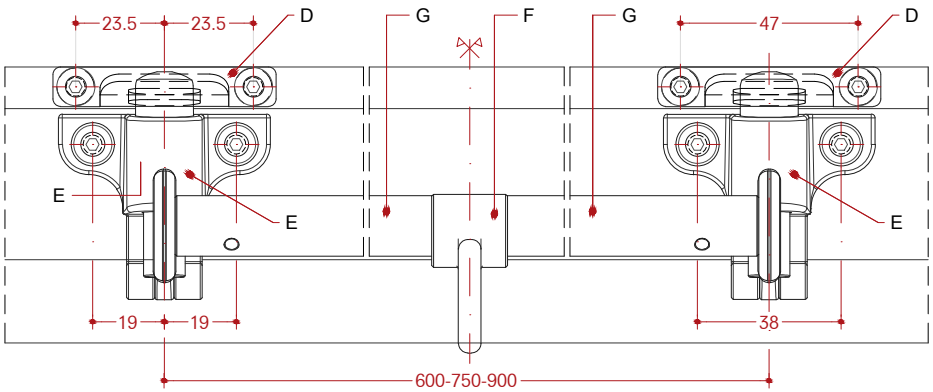
A) n°02 oreficios M5
B) Fijación con tornillos M5x8 ISO10642
C) Placa de acero inoxidable AISI 304 (no provisto)
D) 703001 nn placa para lengüeta
E) 703000 nn lengüeta de pasador

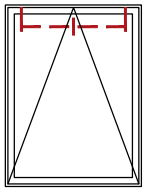


Double spring catch

Cricchetto doppio

Lengüeta de pasador doble





A) n°02 M5 holes
B) Fastening with M5x8 ISO10642 screws
C) Shim stainless steel AISI 304 in-house production
D) 703001 nn spring catch plate
E) 703000 nn spring catch
F) 700520 nn connecting tube ring
G) Connecting tube
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

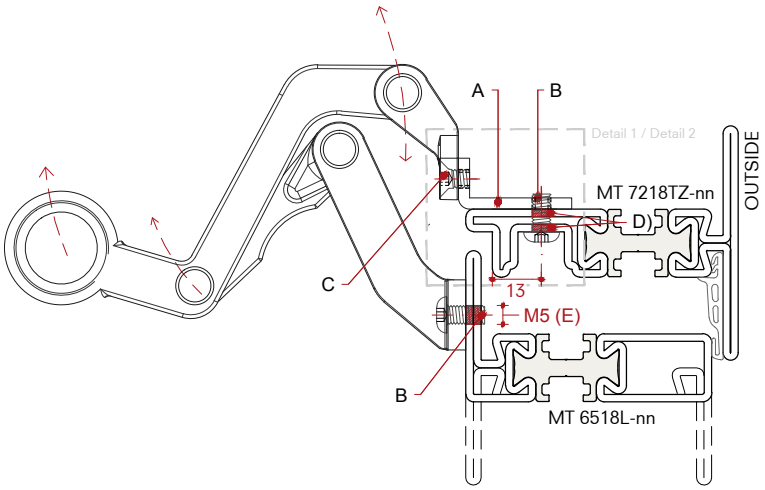
A) n°02 fori M5
B) Fissaggio con viti M5x8 ISO10642
C) Piatto in acciaio inox AISI 304 (non fornito)
D) 703001 nn piastra per cricchetto
E) 703000 nn cricchetto
F) 700520 nn anello tubo collegamento
G) Tubo di collegamento
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

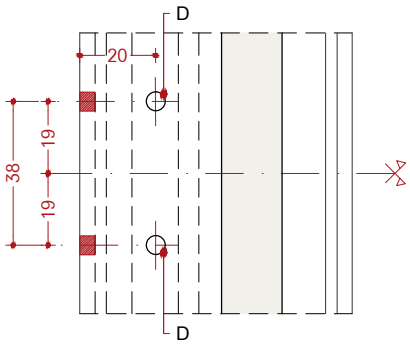
A) n°02 oreficios M5
B) Fijación con tornillos M5x8 ISO10642
C) Placa de acero inoxidable AISI 304 (no provisto)
D) 703001 nn placa para lengüeta
E) 703000 nn lengüeta de pasador
F) 700520 nn anillo tubo de conexión
G) Tubo de conexión
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

Installation
Folding opener
700500 nn and 700501 nn

Montaggio
Braccio a compasso
700500 nn e 700501 nn

Montaje
Brazo articulado
700500 nn y 700501 nn

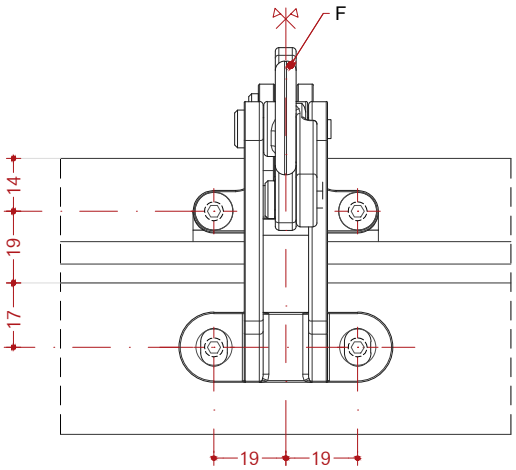


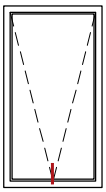


Single folding opener

Braccio a compasso singolo

brazo articulado

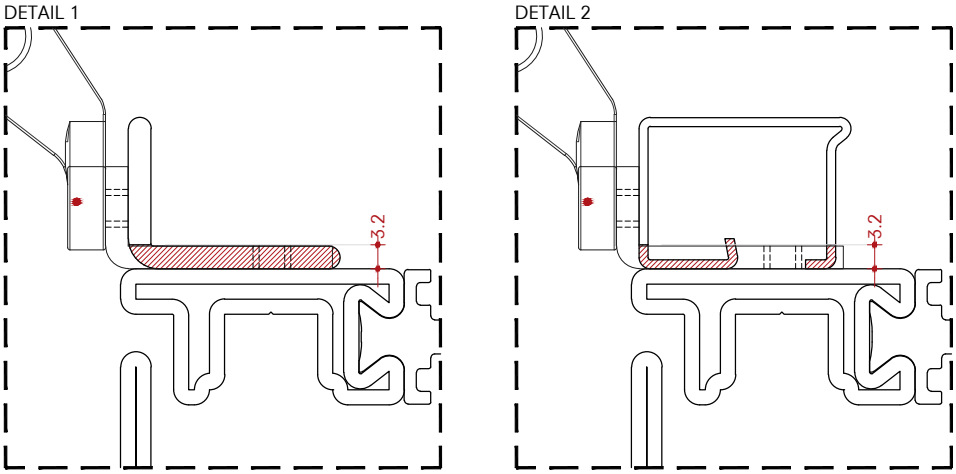




A) D99150-03 bracket folding opener
B) Fastening with M5x10 ISO7380 screws
C) Fastening with M5x8 ISO10642 screws
D) Hole Ø5.5 mm
E) Tapped hole M5
F) 700500 nn folding opener

A) D99150-03 staffa per braccio a compasso
B) Fissaggio con viti M5x10 ISO7380
C) Fissaggio con viti M5x8 ISO10642
D) Foro Ø5.5 mm
E) Foro filettato M5
F) 700500 nn braccio a compasso

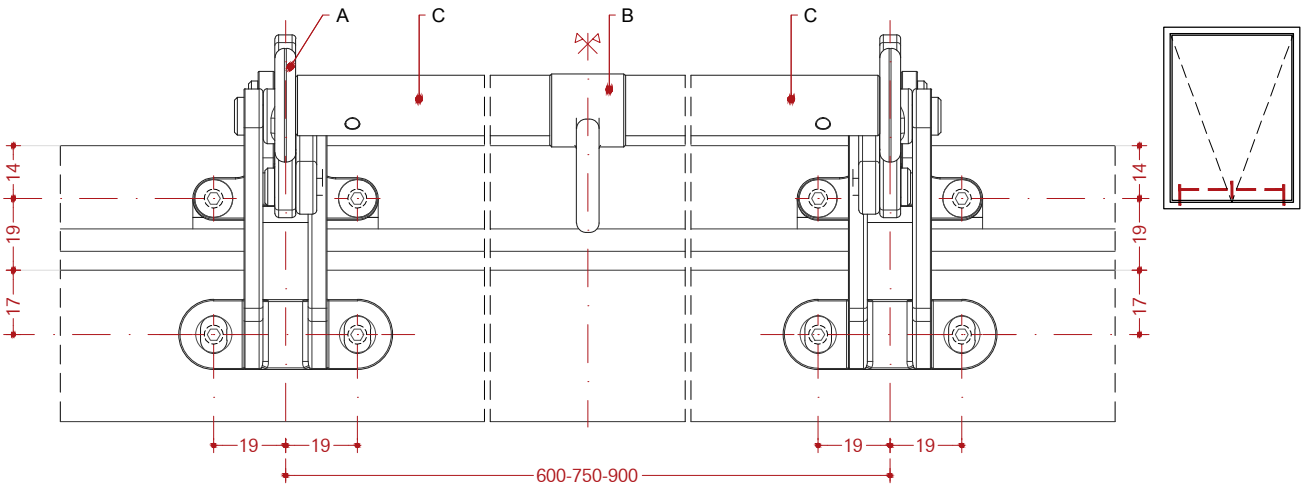
A) D99150-03 soporte de brazo articulado
B) Fijación con tornillos M5x10 ISO7380
C) Fijación con tornillos M5x8 ISO10642
D) Oreficio Ø5.5 mm
E) Oreficio roscado M5
F) 700500 nn brazo articulado



Double folding opener

Braccio a compasso doppio

Brazo articulado doble



A) 700501 nn double folding opener
B) 700520 nn connecting tube ring
C) Connecting tube
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

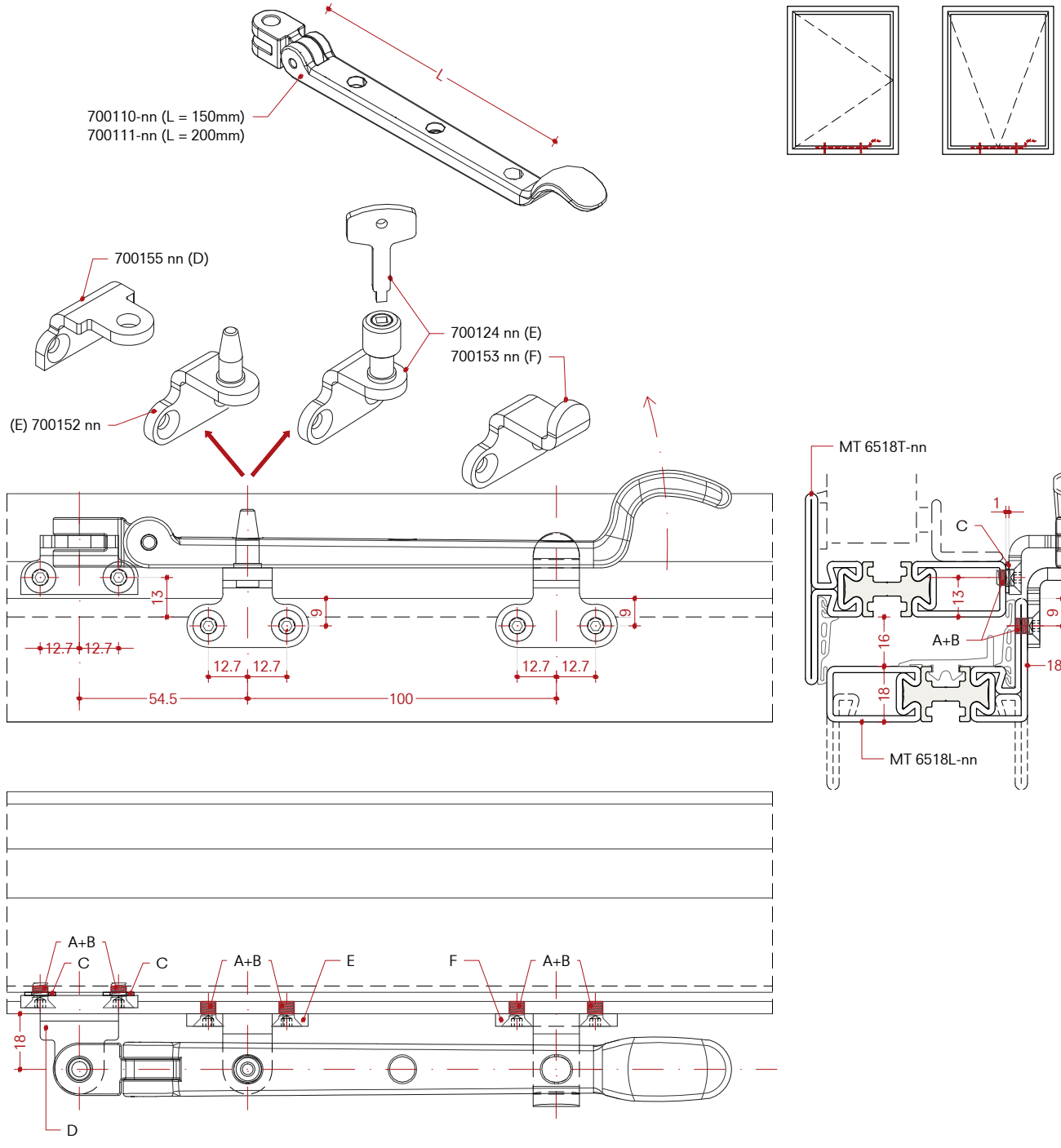
A) 700501 nn doppio braccio a compasso
B) 700520 nn anello tubo collegamento
C) Tubo di collegamento
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

A) 700501 nn doble brazo articulado
B) 700520 nn anillo tubo de conexión
C) Tubo de conexión
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

Installation
Peg stay - curved design
700110 nn (L = 150)
and 700111 nn (L = 200)
Open out

Montaggio
Braccio di bloccaggio - design curvo
700110 nn (L = 150)
e 700111 nn (L = 200)
Apertura esterna

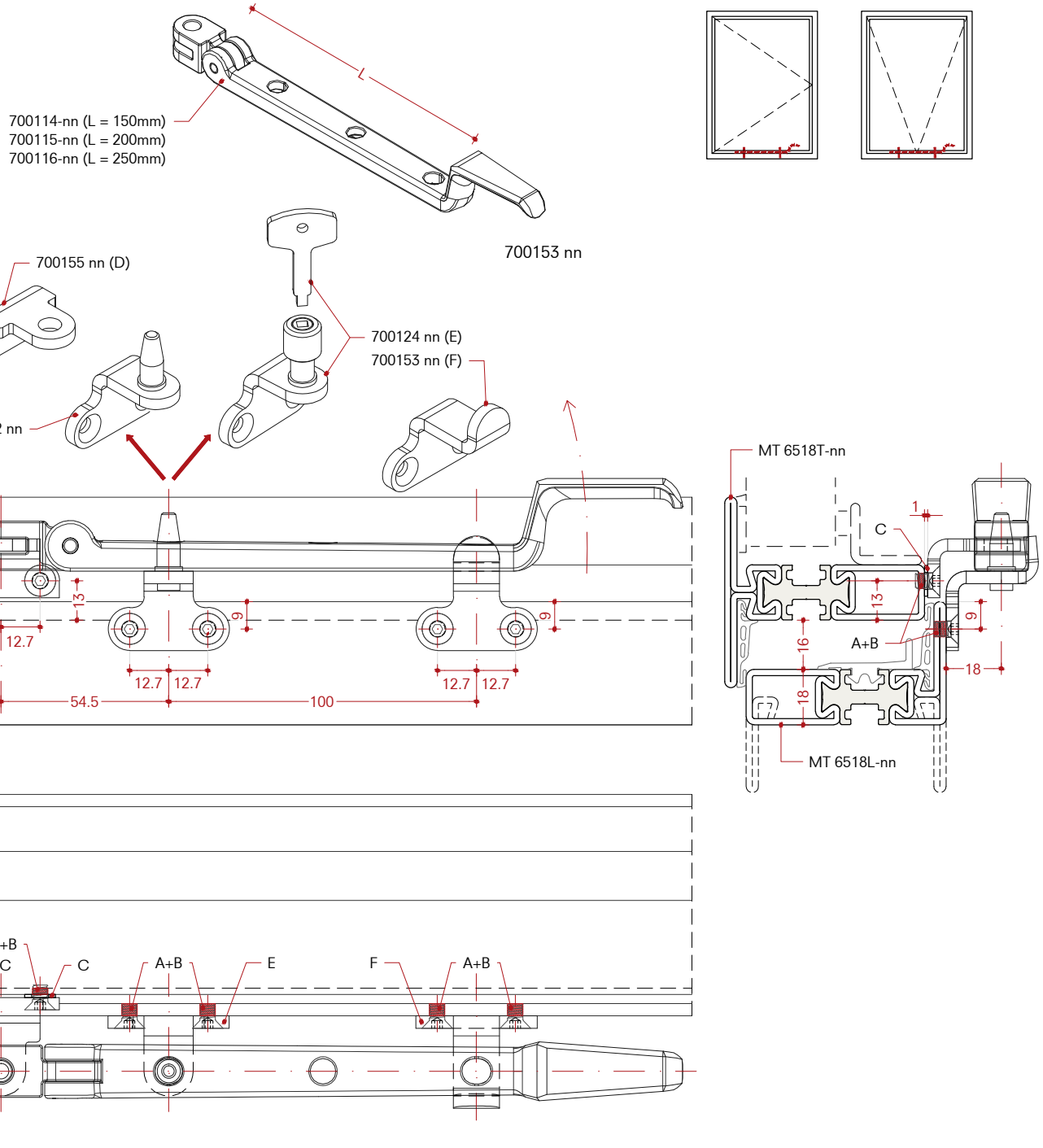
Montaje
Brazo fijo - diseño curvo
700110 nn (L = 150)
y 700111 nn (L = 200)
Apertura hacia fuera



A) n°06 M5 holes
B) n°06 M5x8 ISO10642 screws
C) n°02 M5 ISO709 washers
D) Peg stay bracket 700155 nn
E) Peg stay pin 700152 nn option with key 700124 nn
F) Peg stay rest 700153 nn

A) n°06 fori M5
B) n°06 viti M5x8 ISO10642
C) n°02 rondelle M5 ISO709
D) Staffa per braccio di bloccaggio 700155 nn
E) Perno fermo per braccio di bloccaggio 700152 nn opzione con chiave 700124 nn
F) Supporto per braccio di bloccaggio 700153 nn

A) n°06 M5 oreficios
B) n°06 tornillos M5x8 ISO10642
C) n°02 arandelas M5 ISO709
D) Soporte para brazo de bloqueo 700155 nn
E) Pasador de tope para brazo de bloqueo 700152 nn opción con llave 700124 nn
F) Soporte para brazo de bloqueo 700153 nn



A) n°06 M5 holes
B) n°06 M5x8 ISO10642 screws
C) n°02 M5 ISO709 washers
D) Peg stay bracket 700155 nn
E) Peg stay pin 700152 nn option with key 700124 nn
F) Peg stay rest 700153 nn

A) n°06 fori M5
B) n°06 viti M5x8 ISO10642
C) n°02 rondelle M5 ISO709
D) Staffa per braccio di bloccaggio 700155 nn
E) Perno fermo per braccio di bloccaggio 700152 nn opzione con chiave 700124 nn
F) Supporto per braccio di bloccaggio 700153 nn

A) n°06 M5 oreficios
B) n°06 tornillos M5x8 ISO10642
C) n°02 arandelas M5 ISO709
D) Soporte para brazo de bloqueo 700155 nn
E) Pasador de tope para brazo de bloqueo 700152 nn opción con llave 700124 nn
F) Soporte para brazo de bloqueo 700153 nn

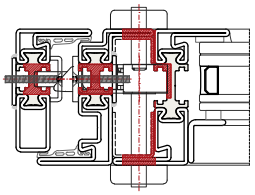
Accessories installation: **Montaggio accessori:** **Montaje accesorios:**

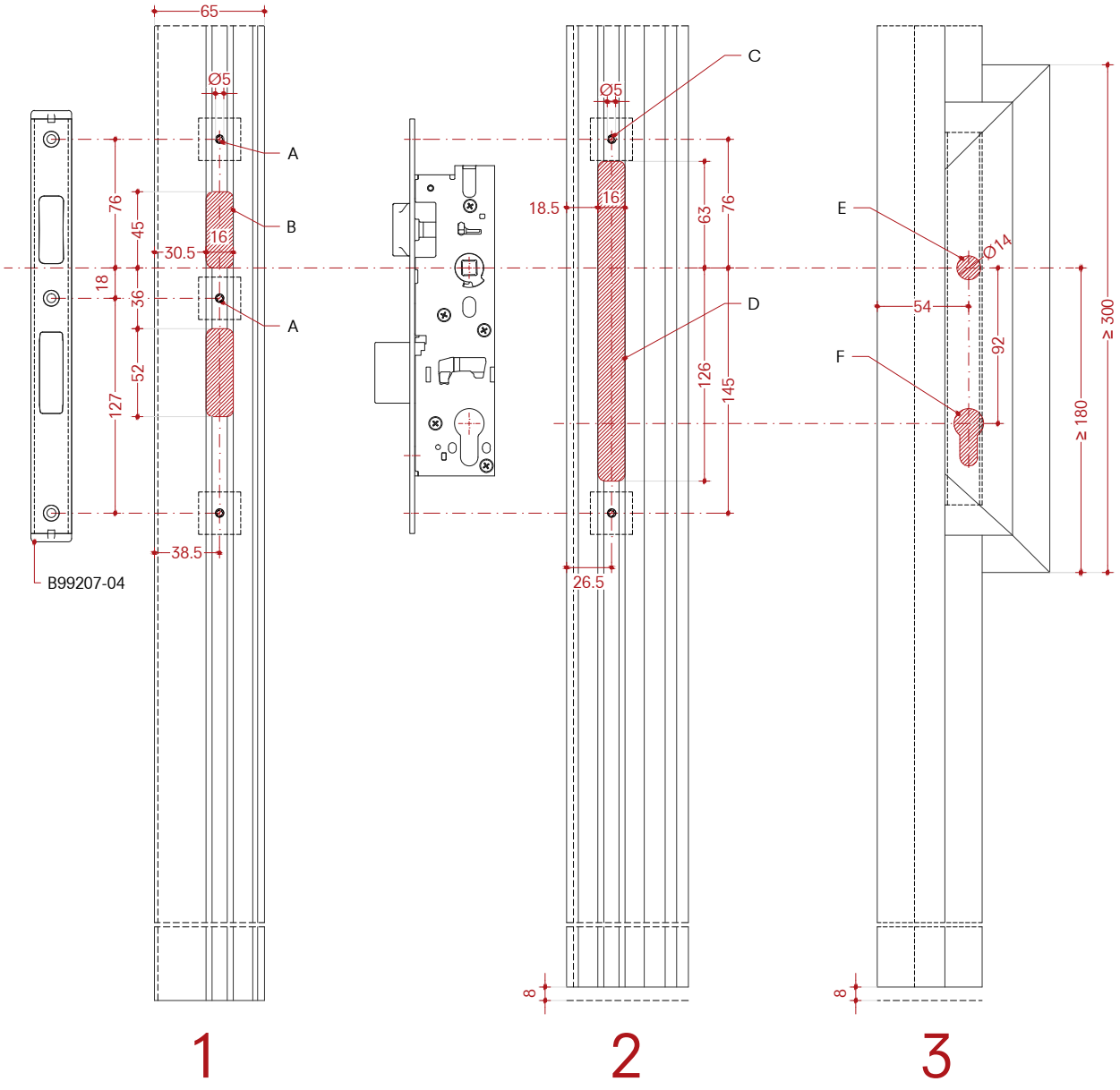
Locks **Serrature** **Cerraduras** 5.11

Installation
Lock B99016-02
with locking box MT 7218ZF-nn
Open in door

Montaggio
Serratura B99016-02
con scatola MT 7218ZF-nn
Porta apertura interna

Montaje
Cerradura B99016-02
con serradura MT 7218ZF-nn
Puerta apertura hacia dentro



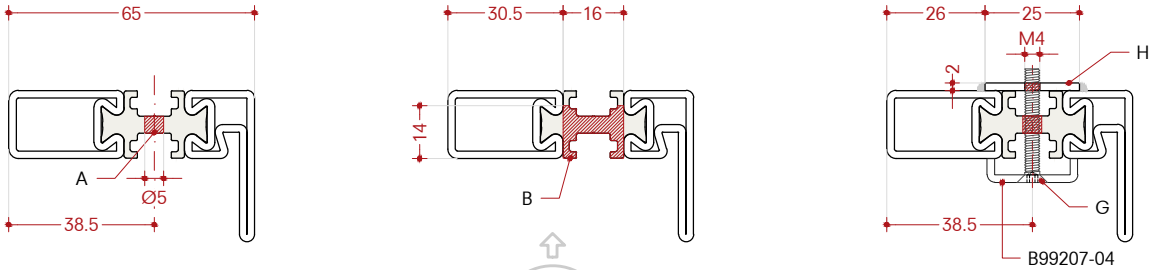


Scale 1:4
A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:4
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:4
A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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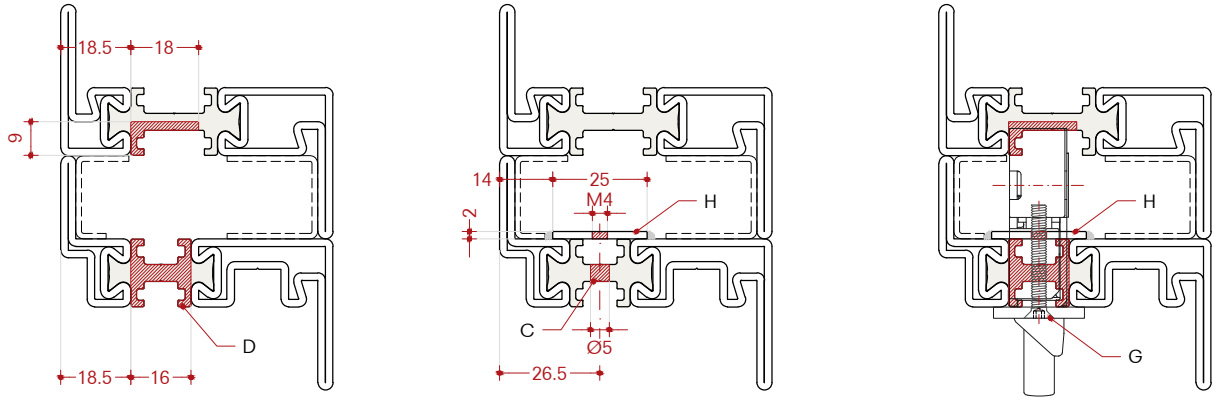

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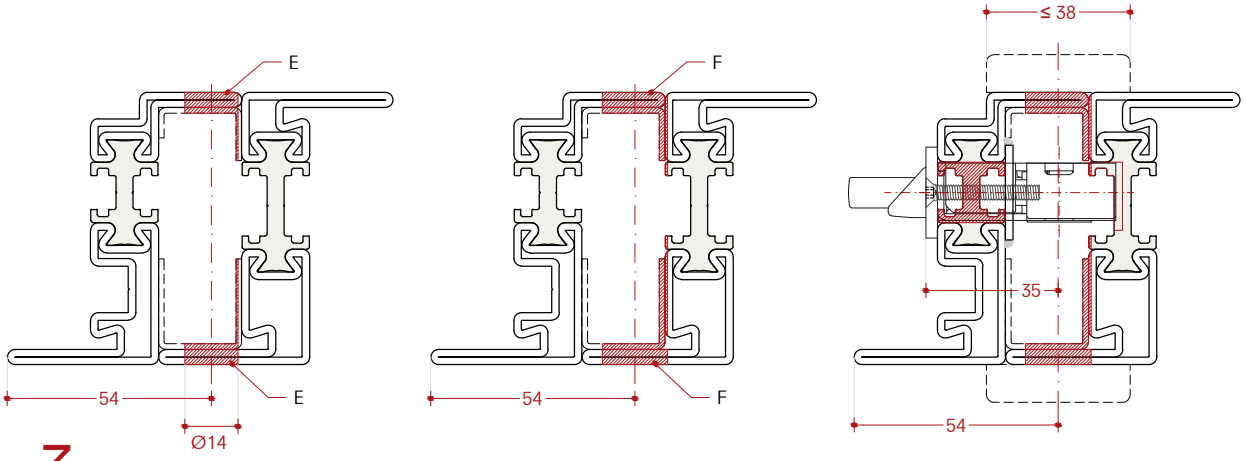
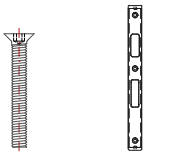




M4x30
ISO10642
n° 5 pcs

B99207-04
n° 1 pc

A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x30 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)

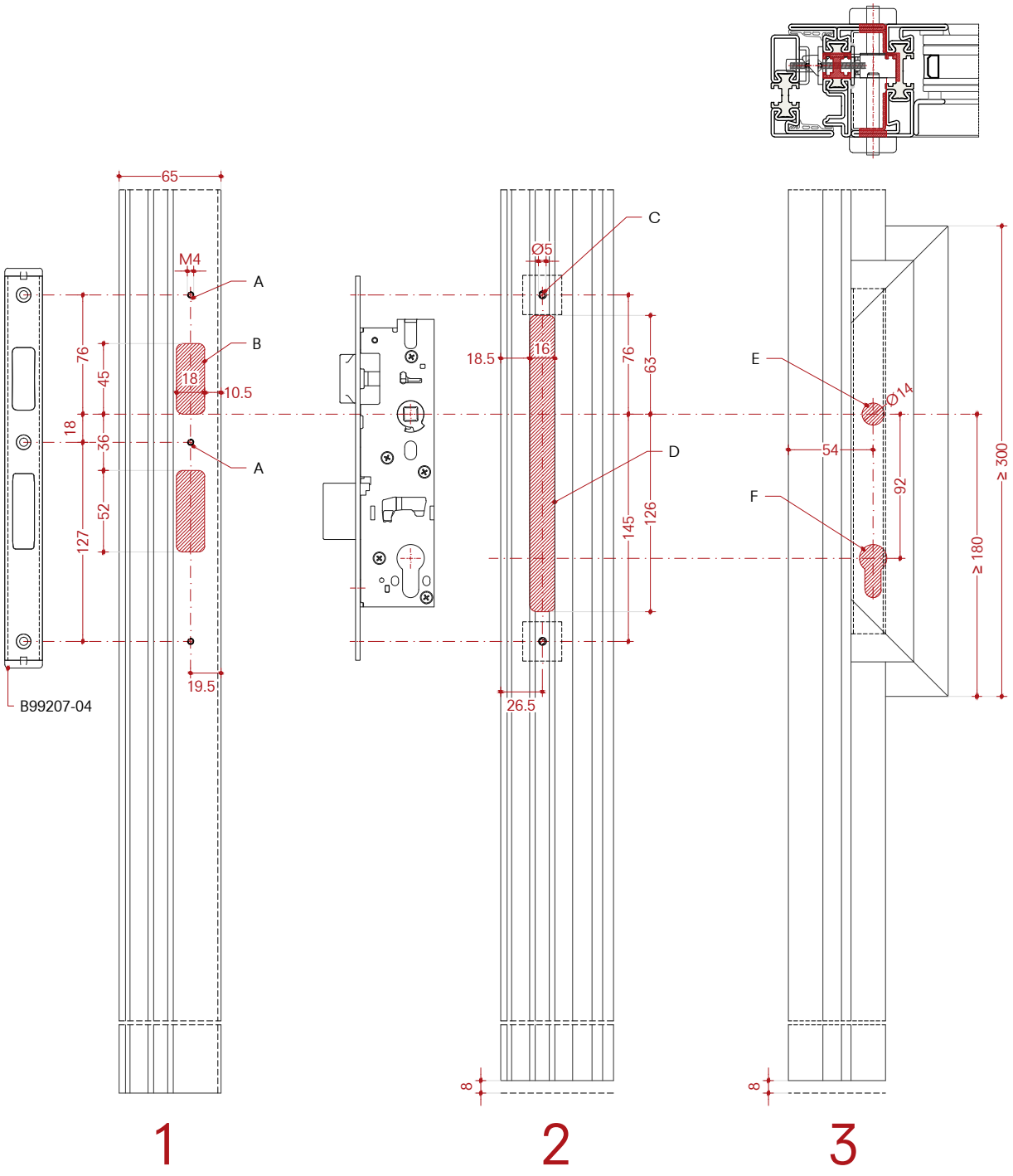
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x30 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)

A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x30 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)

Installation
Lock B99016-02
with locking box MT 7218ZF-nn
Open out door

Montaggio
Serratura B99016-02
con scatola MT 7218ZF-nn
Porta apertura esterna

Montaje
Cerradura B99016-02
con serradura MT 7218ZF-nn
Puerta apertura hacia fuera

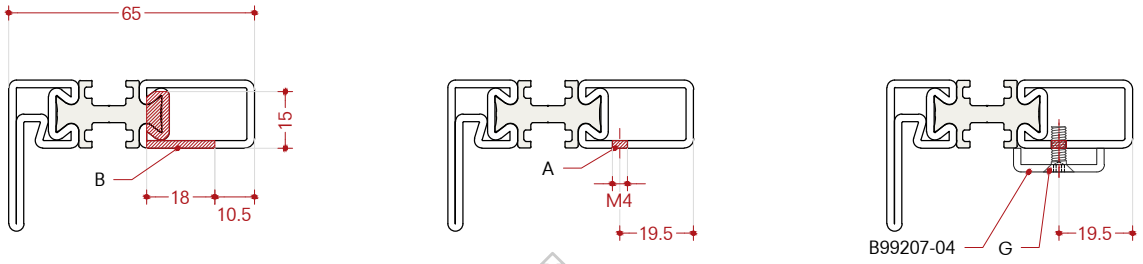


Scale 1:4
A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:4
A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:4
A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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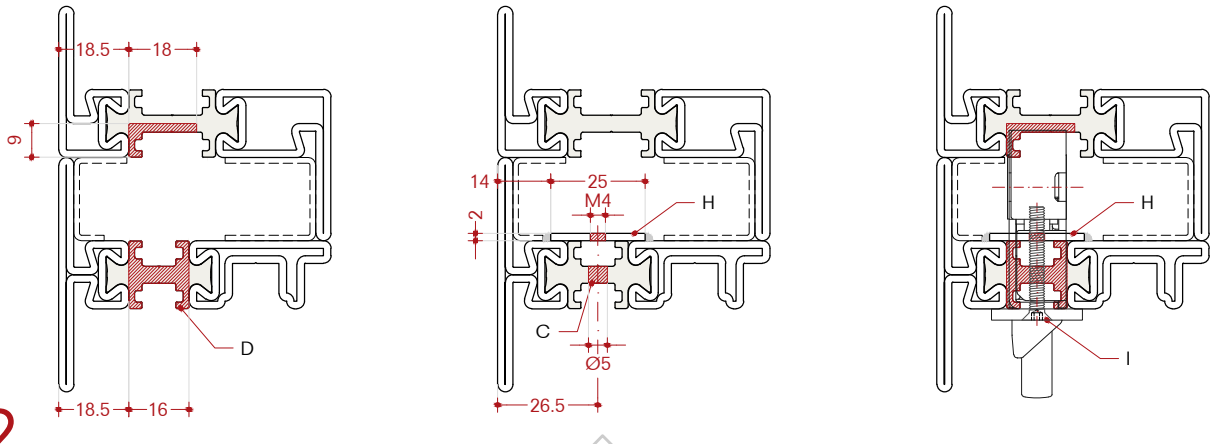

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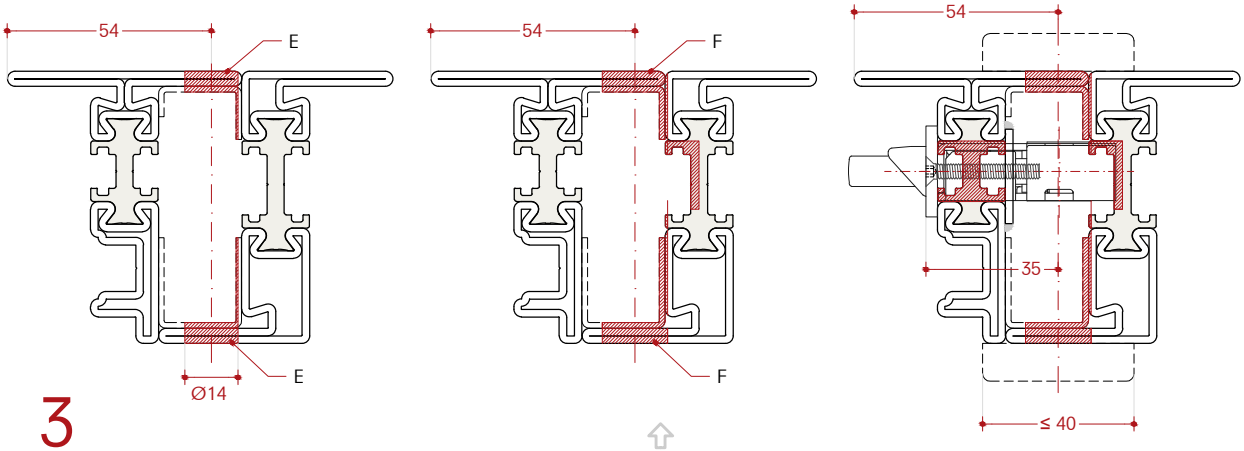
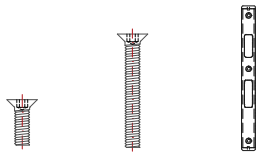




M4x12
ISO 10642
n° 3 pcs

M4x30
ISO10642
n° 2 pcs

B99207-04
n° 1 pc

A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x12 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)
I) Fastening with M4x30 ISO10642 screws

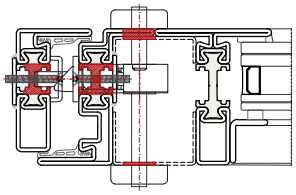
A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x12 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)
I) Montaggio con viti M4x30 ISO10642

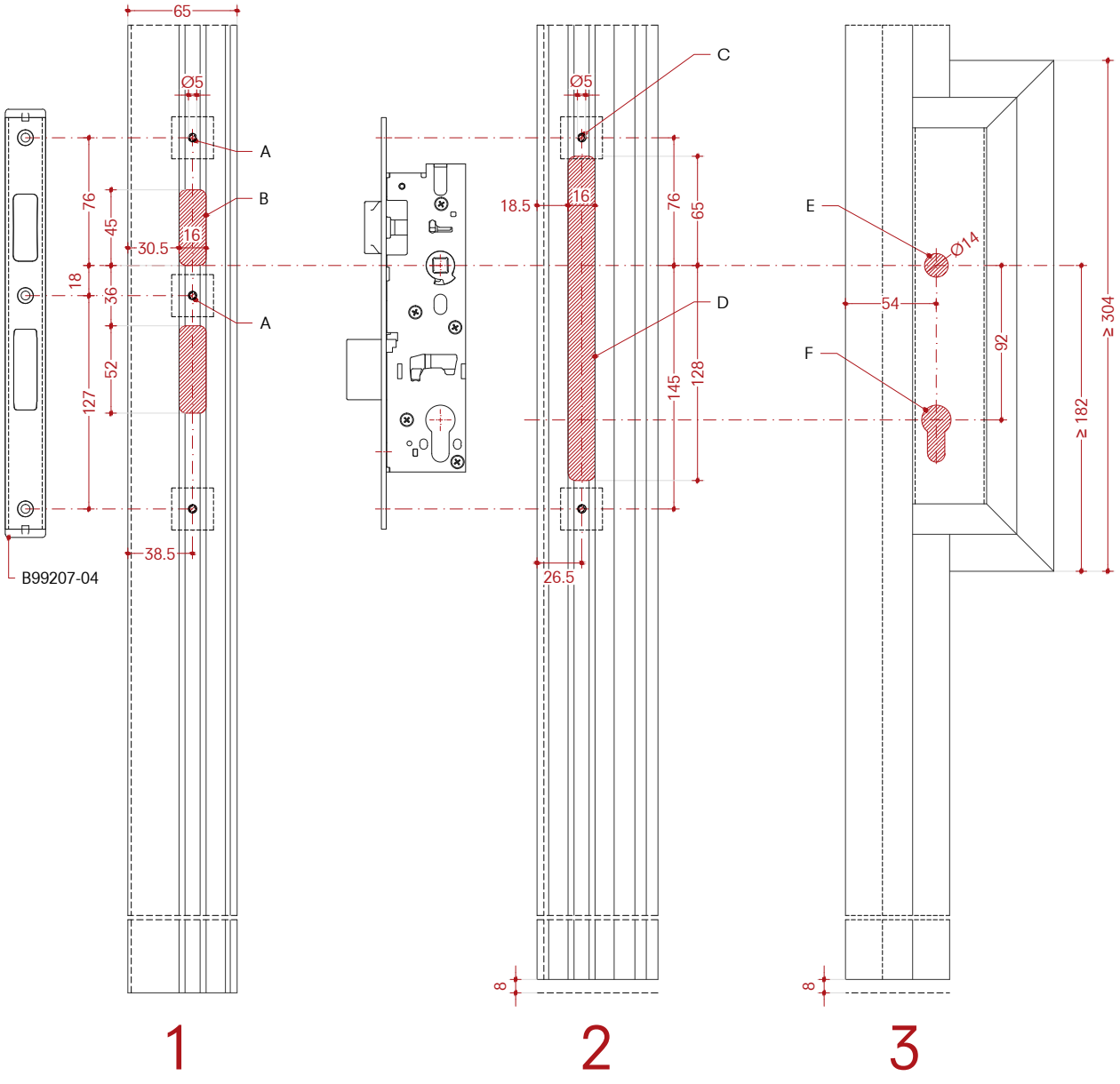
A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x12 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)
I) Montaje con tornillos M4x30 ISO10642

Installation
Lock B99016-02
with locking box MT 7218TF-nn
and additional brackets
Open in door

Montaggio
Serratura B99016-02
con scatola MT 7218TF-nn
e staffe aggiuntive
Porta apertura interna

Montaje
Cerradura B99016-02
con serradura MT 7218TF-nn
y soportes adicionales
Puerta apertura hacia dentro



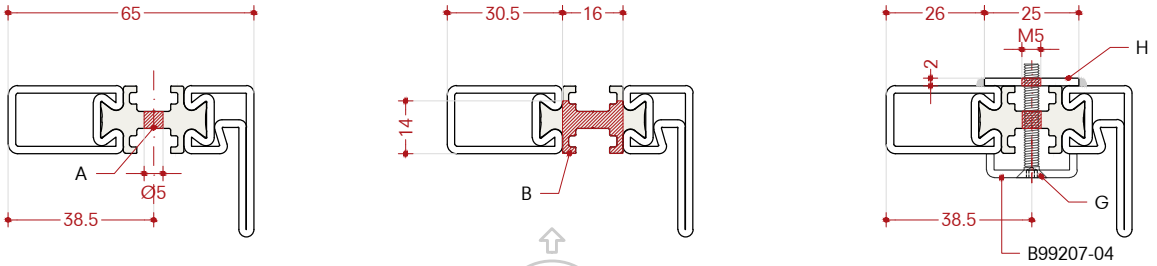


Scale 1:4
A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:4
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:4
A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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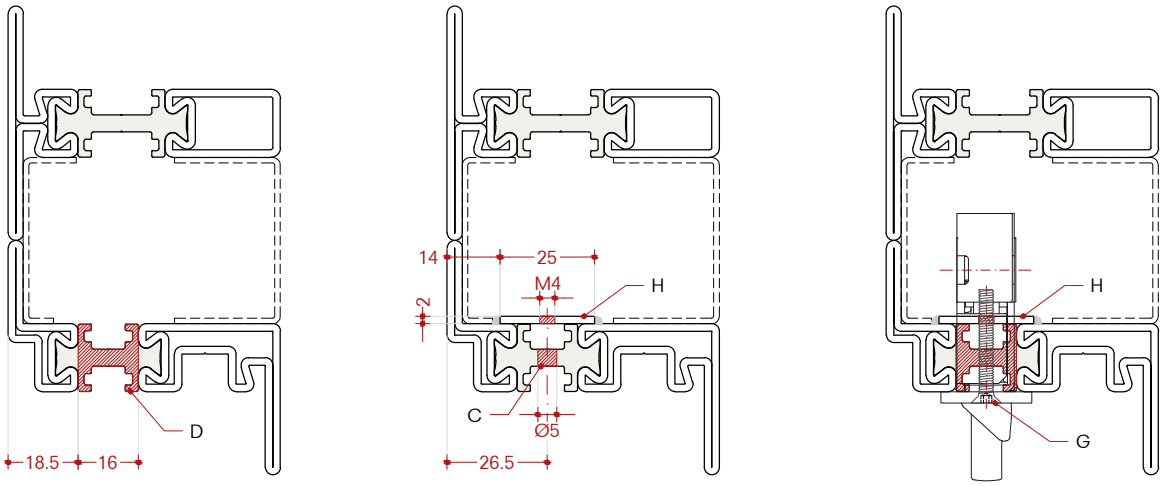

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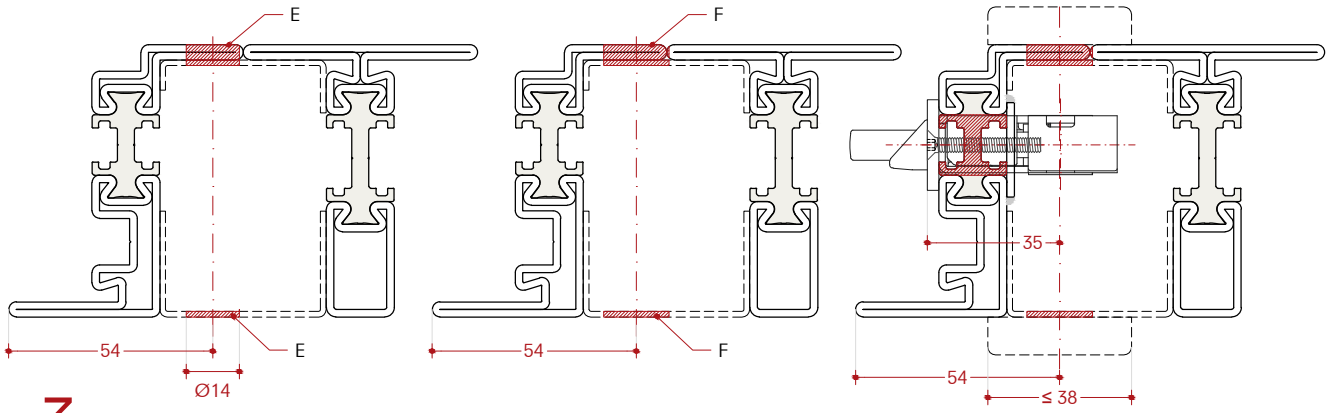
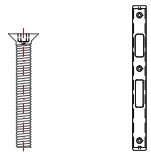




M4x30
ISO10642
n° 5 pcs

B99207-04
n° 1 pc

A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x30 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)

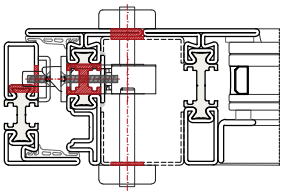
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x30 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)

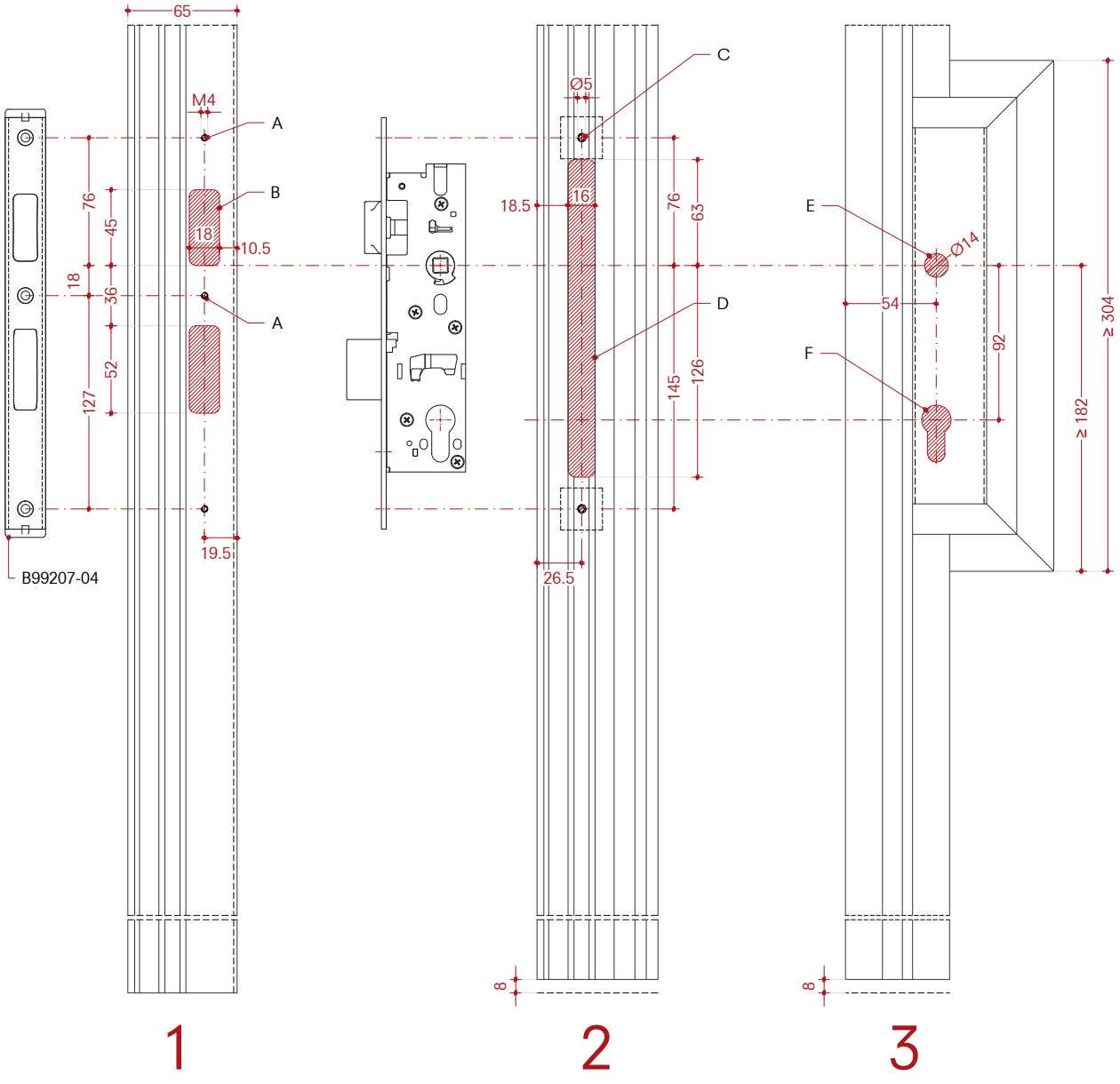
A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x30 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)

Installation
Lock B99016-02
with locking box MT 7218TF-nn
and additional brackets
Open out door

Montaggio
Serratura B99016-02
con scatola MT 7218TF-nn
e staffe aggiuntive
Porta apertura esterna

Montaje
Cerradura B99016-02
con serradura MT 7218TF-nn
y soportes adicionales
Puerta apertura hacia fuera

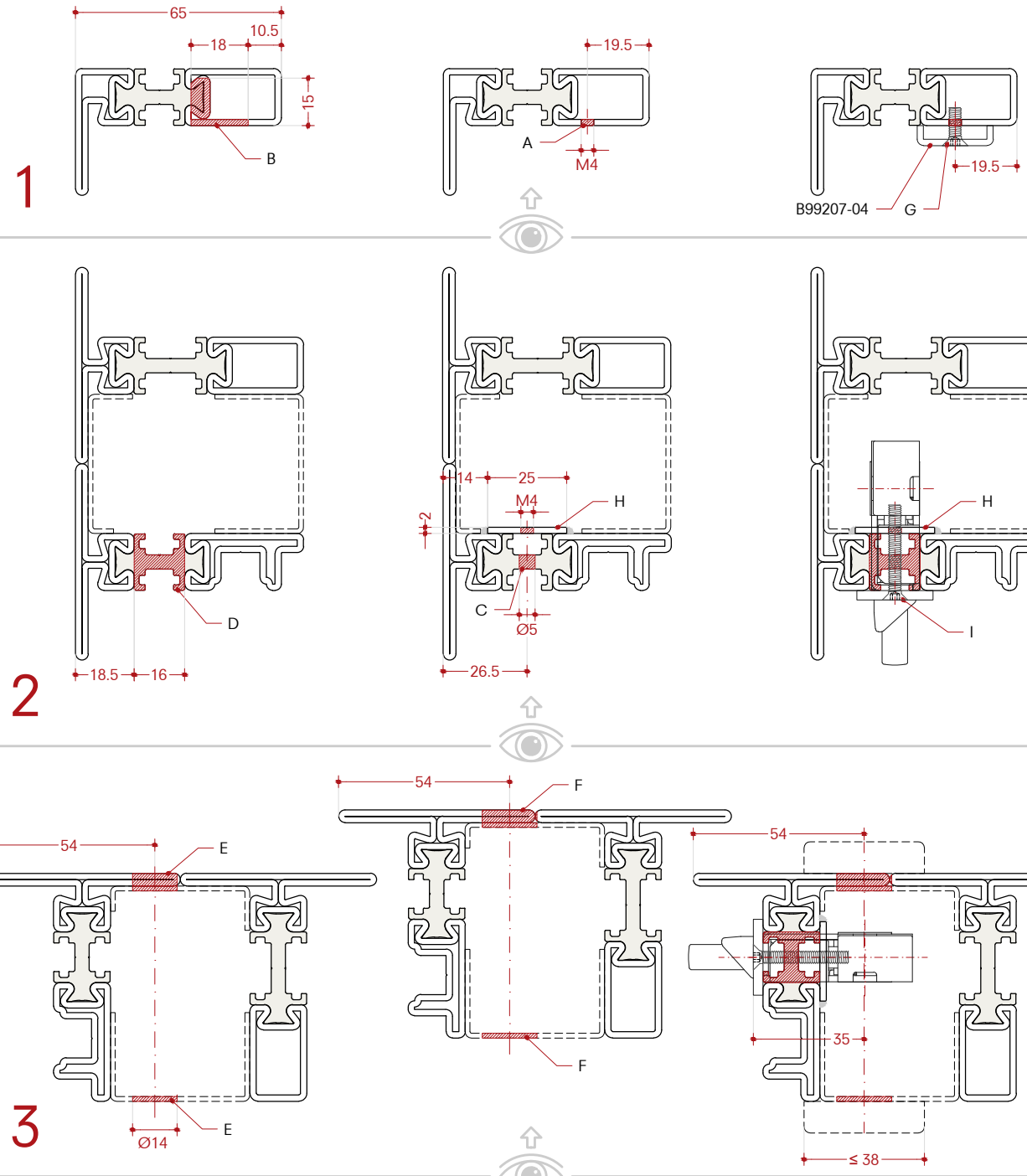


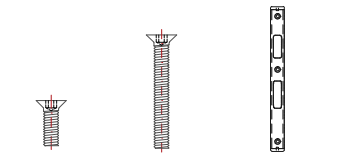


Scale 1:4
A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:4
A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:4
A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros





A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x12 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)
I) Fastening with M4x30 ISO10642 screws

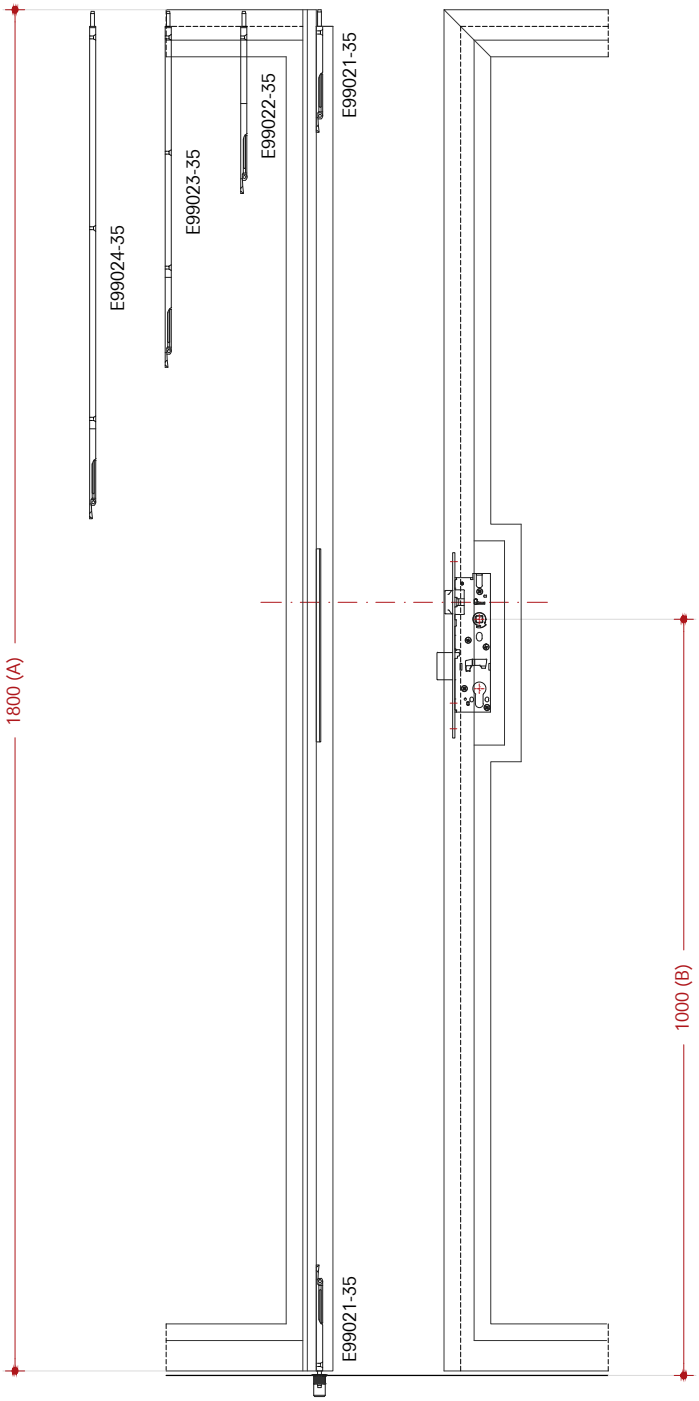
A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x12 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)
I) Montaggio con viti M4x30 ISO10642

A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x12 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)
I) Montaje con tornillos M4x30 ISO10642

Installation
Flush bolt E9902X-35
Lock B99016-02
Double leaf door open in with locking box

Montaggio
Catenaccio E9902X-35
Serratura B99016-02
Porta a due battenti apertura interna con scatola serratura

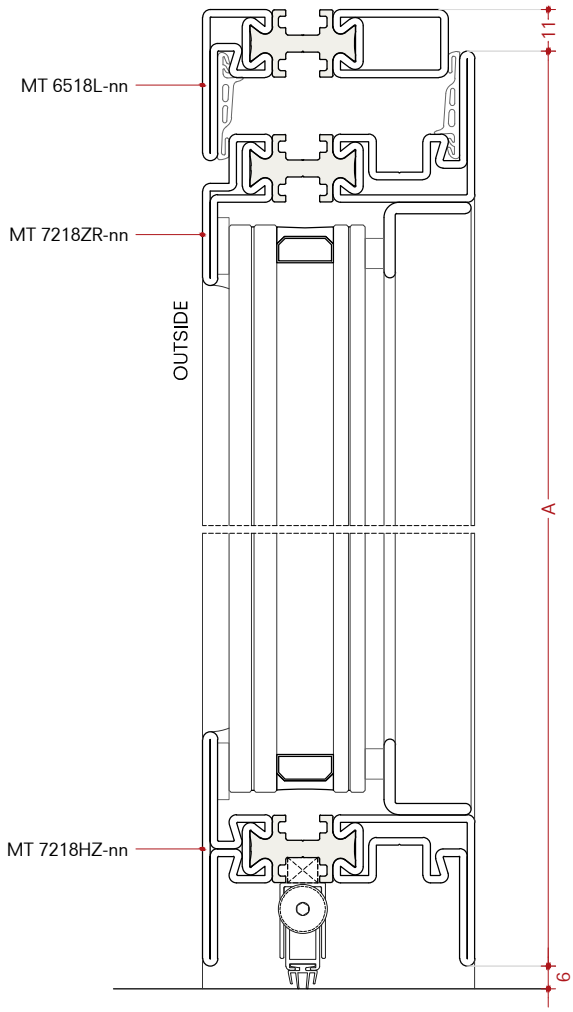
Montaje
Pasador de canto E9902X-35
Cerradura B99016-02
Puerta abatible de dos hojas que se abre hacia dentro con caja de cerradura

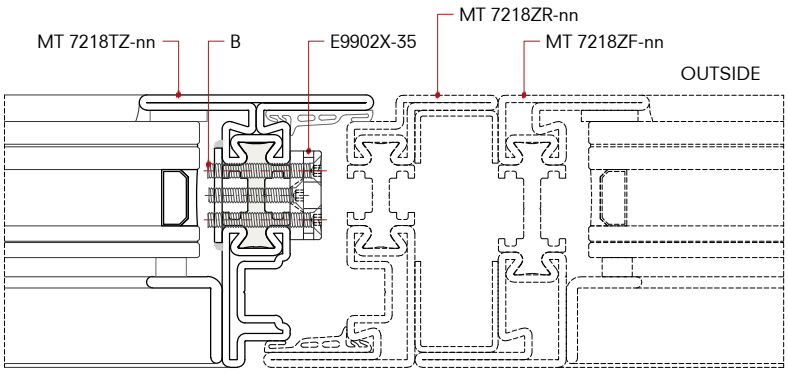


Scale 1:10
A) Minimum height leaf
B) Height handle

Scala 1:10
A) Altezza minima anta
B) Altezza maniglia

Escala 1:10
A) Altura mínima de la hoja
B) Altura de la manilla





A) Height leaf
B) Fastening with M4x30 mm ISO10642 screws and cut the screws

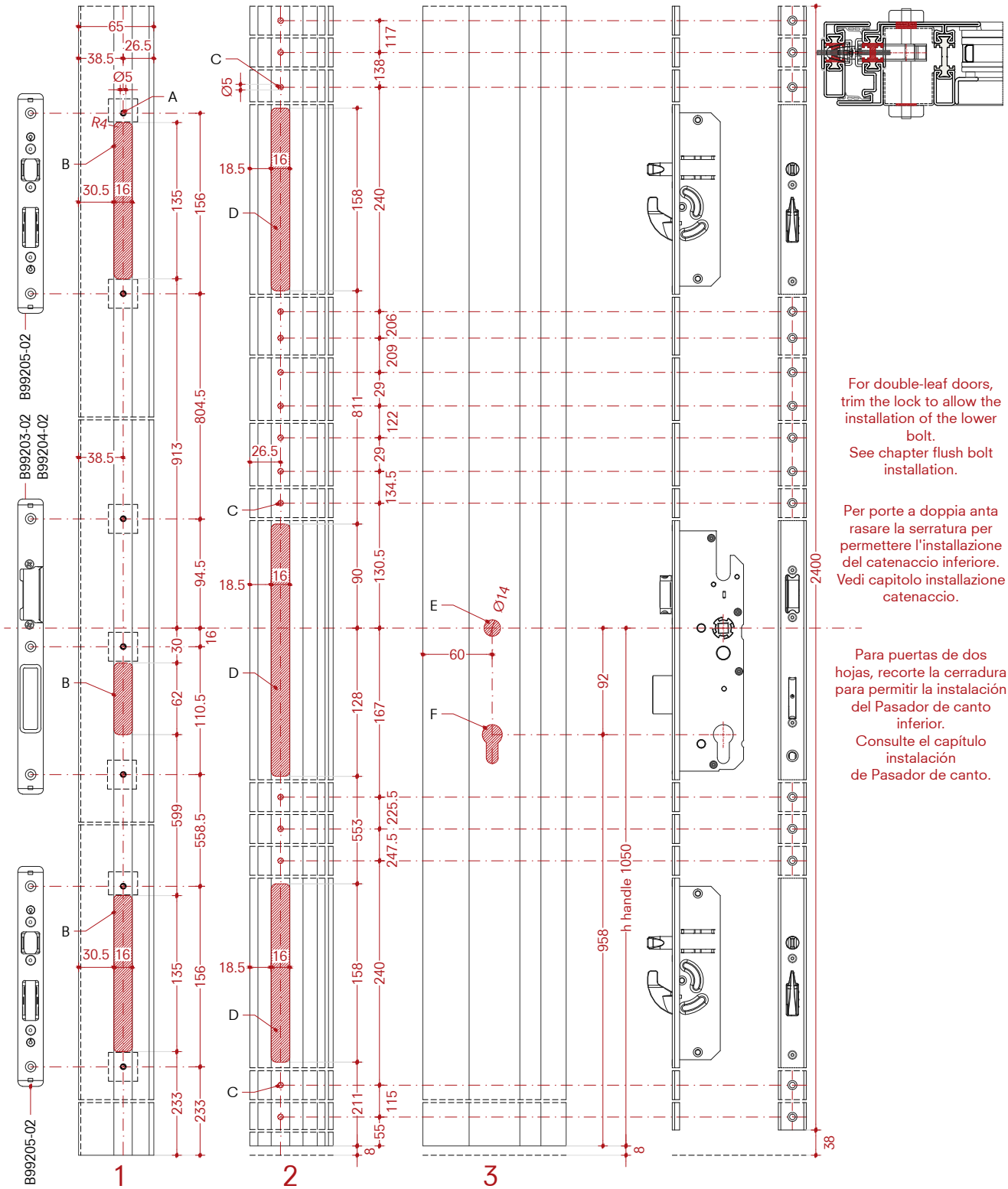
A) Altezza anta
B) Fissaggio con viti M4x30 mm ISO10642 e accorciare le viti

A) Altura de la hoja
B) Fijación con tornillos M4x30 mm ISO10642 y recortar tornillos

Installation
Lock B99172-02 with full height additional profile MT 7218TF-nn
Open in door

Montaggio
Serratura B99172-02
con profilo supplementare MT 7218TF-nn
Porta apertura interna

Montaje
Cerradura B99172-02
Con con perfil adicional MT 7218TF-nn
Puerta apertura hacia dentro

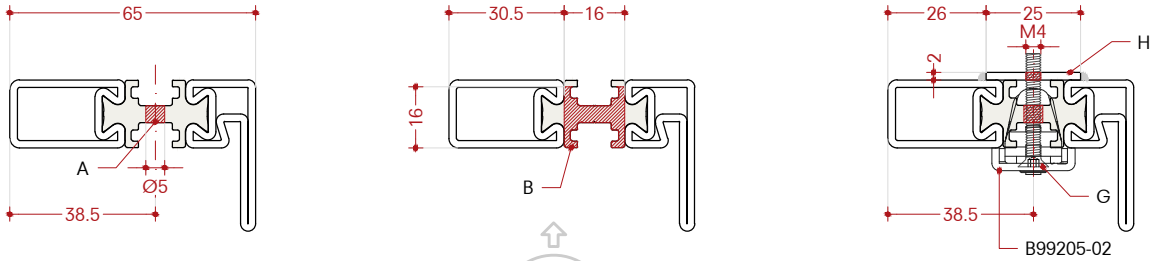


Scale 1:5
A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:5
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:5
A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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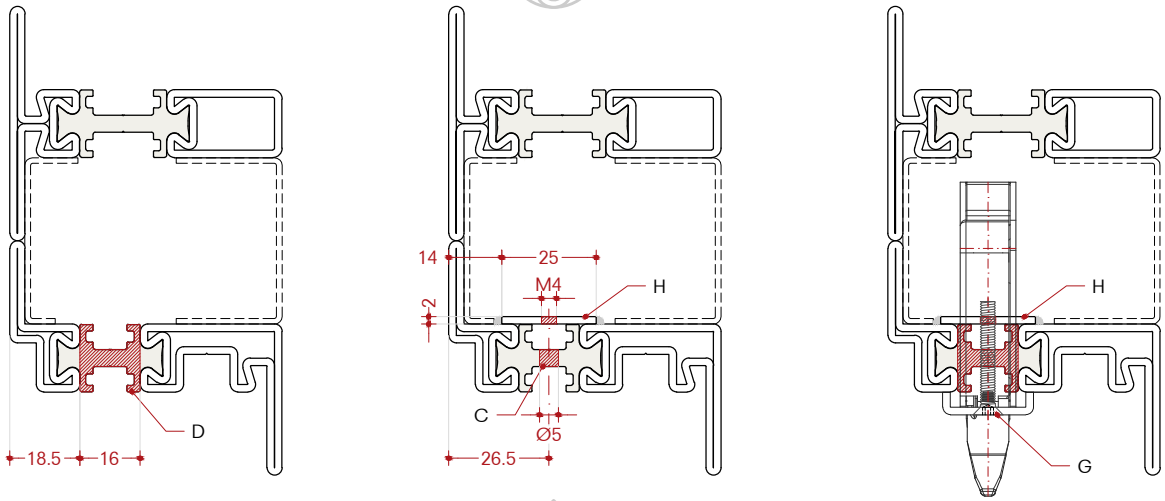

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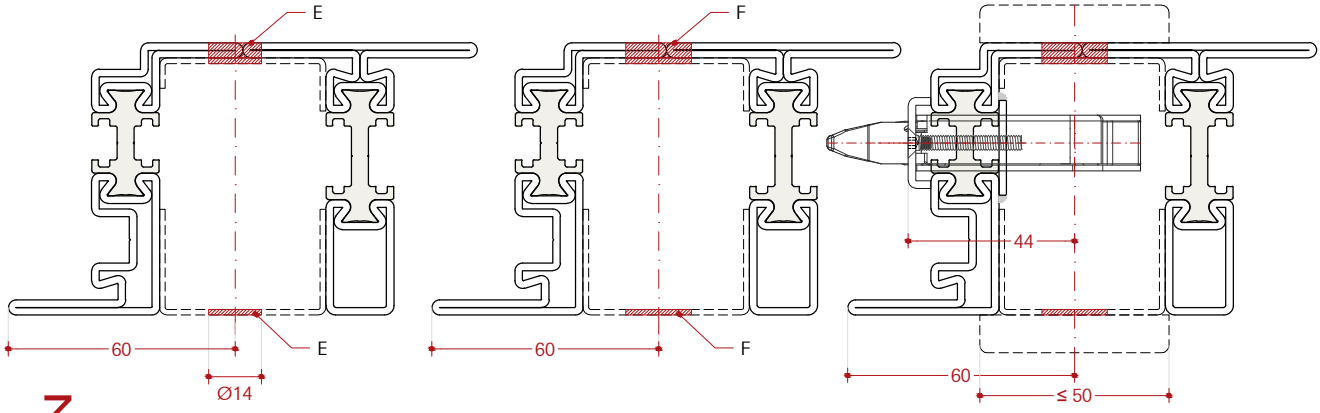
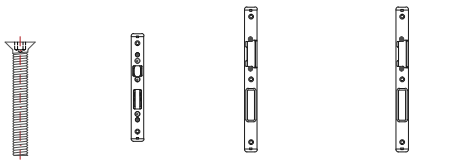
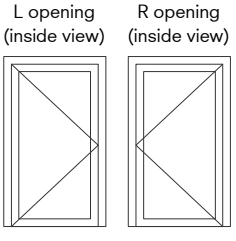






A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x30 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)

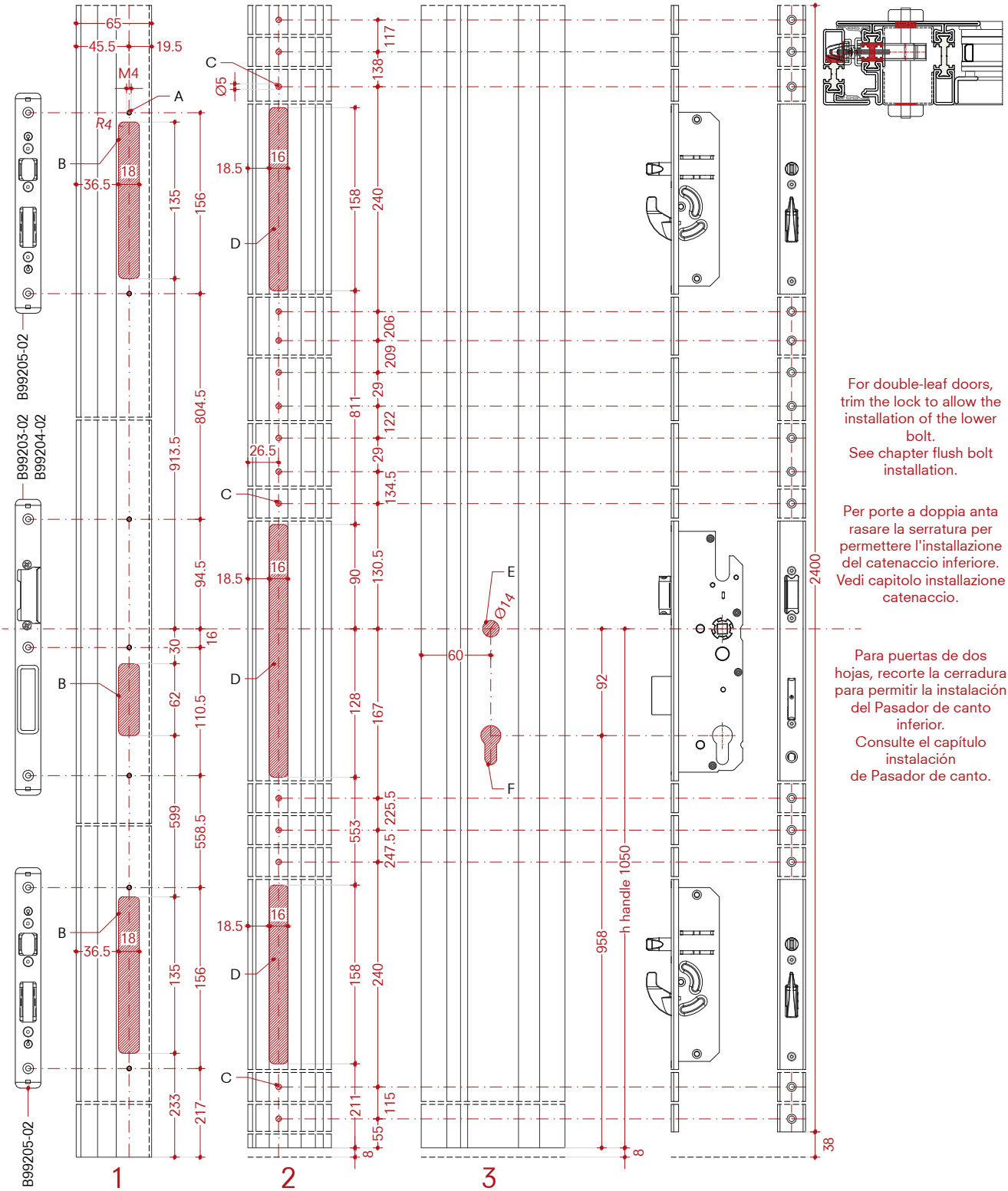
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x30 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)

A) Oreficio de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x30 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)

Installation
Lock B99172-02 with full height additional profile MT 7218TF-nn
Open out door

Montaggio
Serratura B99172-02
con profilo supplementare MT 7218TF-nn
Porta apertura esterna

Montaje
Cerradura B99172-02
Con con perfil adicional MT 7218TF-nn
Puerta apertura hacia fuera



For double-leaf doors, trim the lock to allow the installation of the lower bolt.
See chapter flush bolt installation.

Per porte a doppia anta rasare la serratura per permettere l'installazione del catenaccio inferiore.
Vedi capitolo installazione catenaccio.

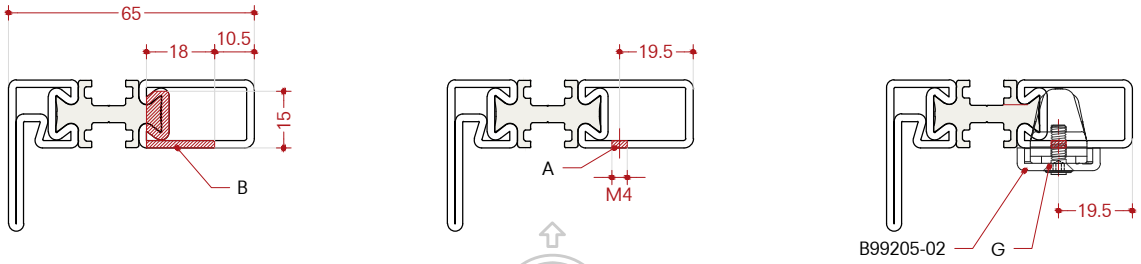
Para puertas de dos hojas, recorte la cerradura para permitir la instalación del Pasador de canto inferior.
Consulte el capítulo instalación de Pasador de canto.

Scale 1:5
A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:5
A) Fori filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:5
A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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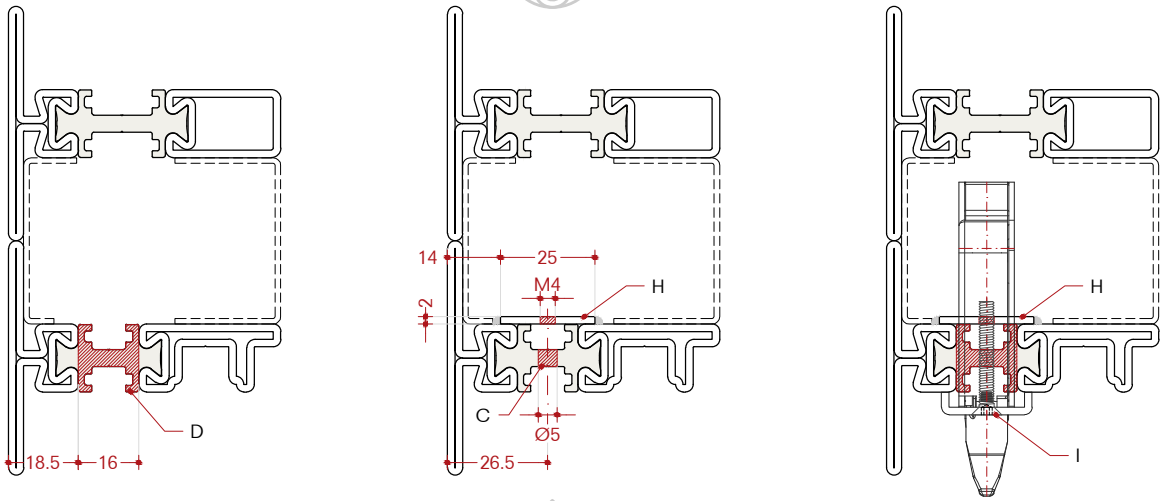
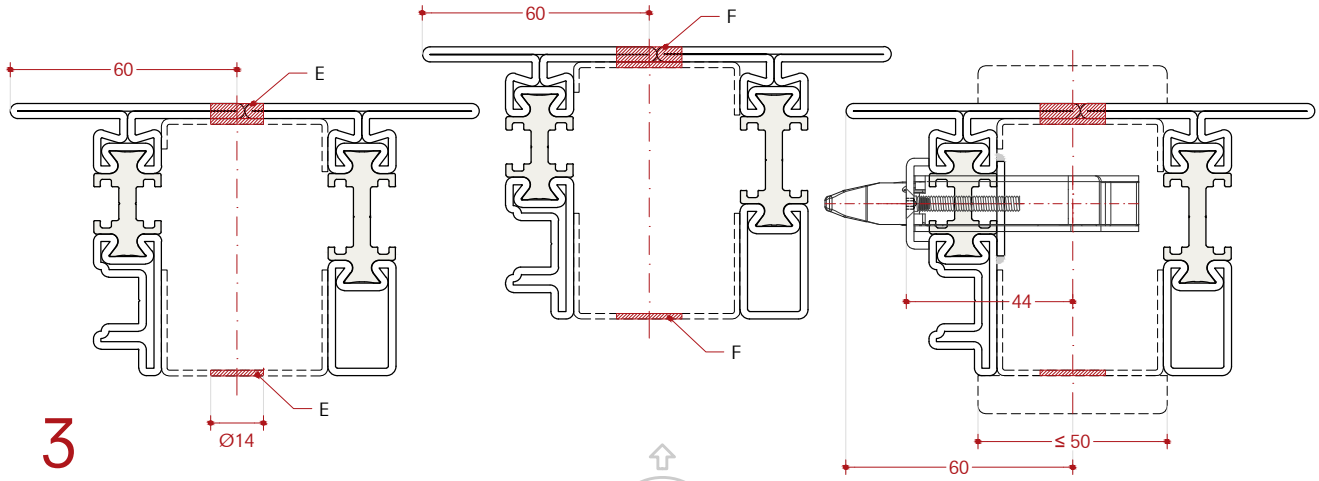
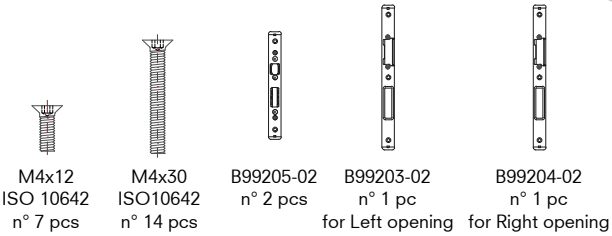
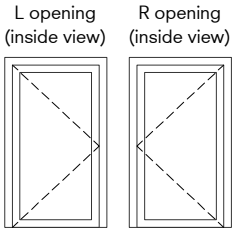


3







A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x12 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)
I) Fastening with M4x30 ISO10642 screws

A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x12 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)
I) Montaggio con viti M4x30 ISO10642

A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x12 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)
I) Montaje con tornillos M4x30 ISO10642

Installation
Flush bolt E9902X-35
Lock B99172-02
Double leaf door open in with widening on complete height on lock side

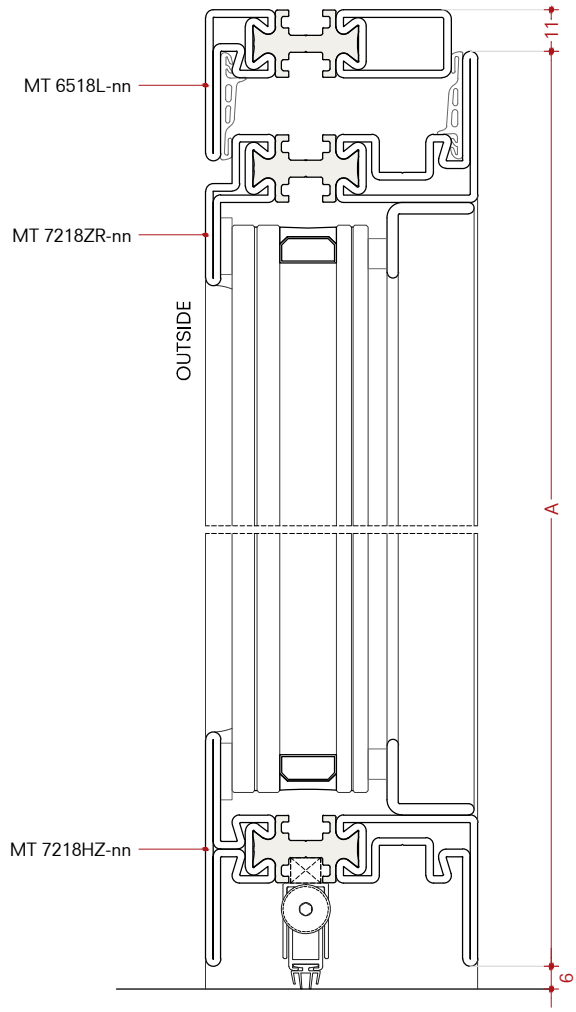
Montaggio
Catenaccio E9902X-35
Serratura B99172-02
Porta a due battenti apertura interna con montante maggiorato lato serratura

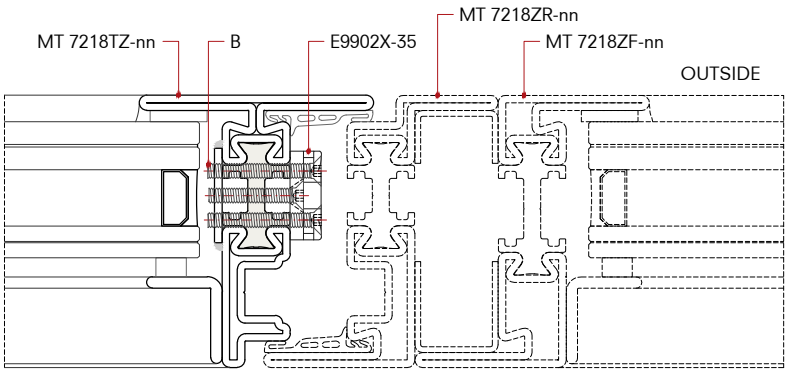
Montaje
Pasador de canto E9902X-35
Cerradura B99172-02
Puerta abatible de dos hojas que se abre hacia dentro con mayor posición vertical en el lado de la cerradura

Scale 1:10
A) Minimum height leaf
B) Height handle

Scala 1:10
A) Altezza minima anta
B) Altezza maniglia

Escala 1:10
A) Altura mínima de la hoja
B) Altura de la manilla





A) Height leaf
B) Fastening with M4x30 mm ISO10642 screws and cut the screws

A) Altezza anta
B) Fissaggio con viti M4x30 mm ISO10642 e accorciare le viti

A) Altura de la hoja
B) Fijación con tornillos M4x30 mm ISO10642 y recortar tornillos

Installation
Flush bolt E99035-02
Lock B99172-02
Double leaf door open out with widening on complete height on lock side

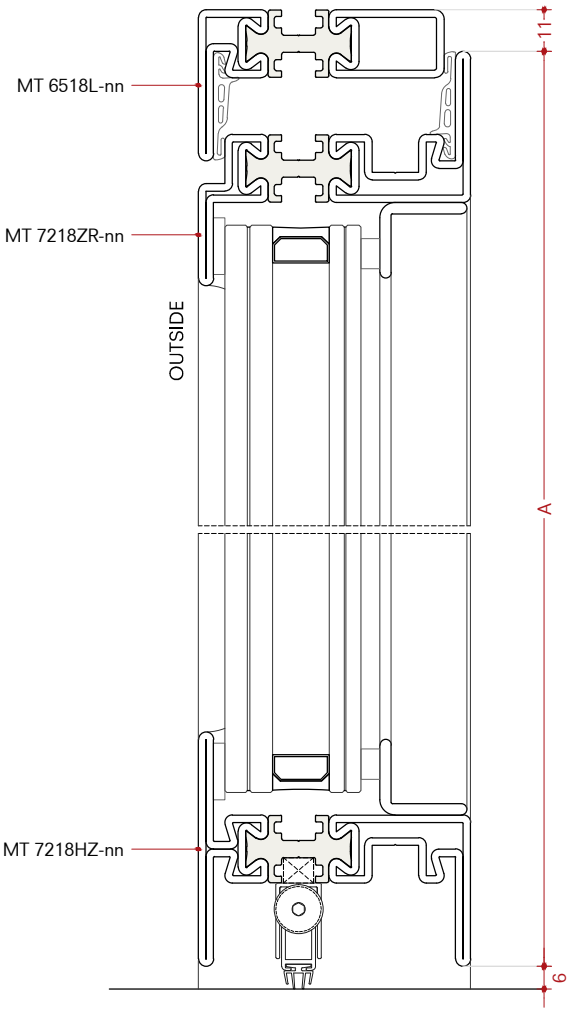
Montaggio
Catenaccio E99035-02
Serratura B99172-02
Porta a due battenti apertura esterna con montante maggiorato lato serratura

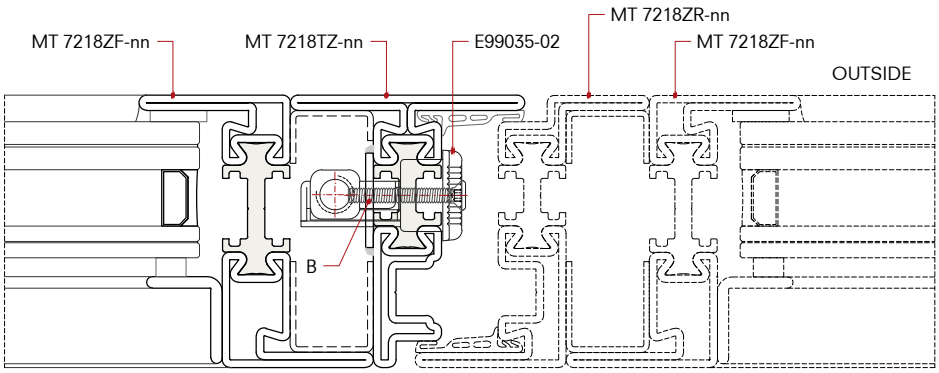
Montaje
Pasador de canto E99035-02
Cerradura B99172-02
Puerta abatible de dos hojas que se abre hacia fuera con mayor posición vertical en el lado de la cerradura

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Can be shortened

Scala 1:10
A) Altezza minima anta
B) Altezza maniglia
C) Rasabile

Escala 1:10
A) Altura mínima de la hoja
B) Altura de la manilla
C) Se puede acortar





A) Height leaf
B) Fastening with M4x30 mm ISO10642 screws and cut the screws

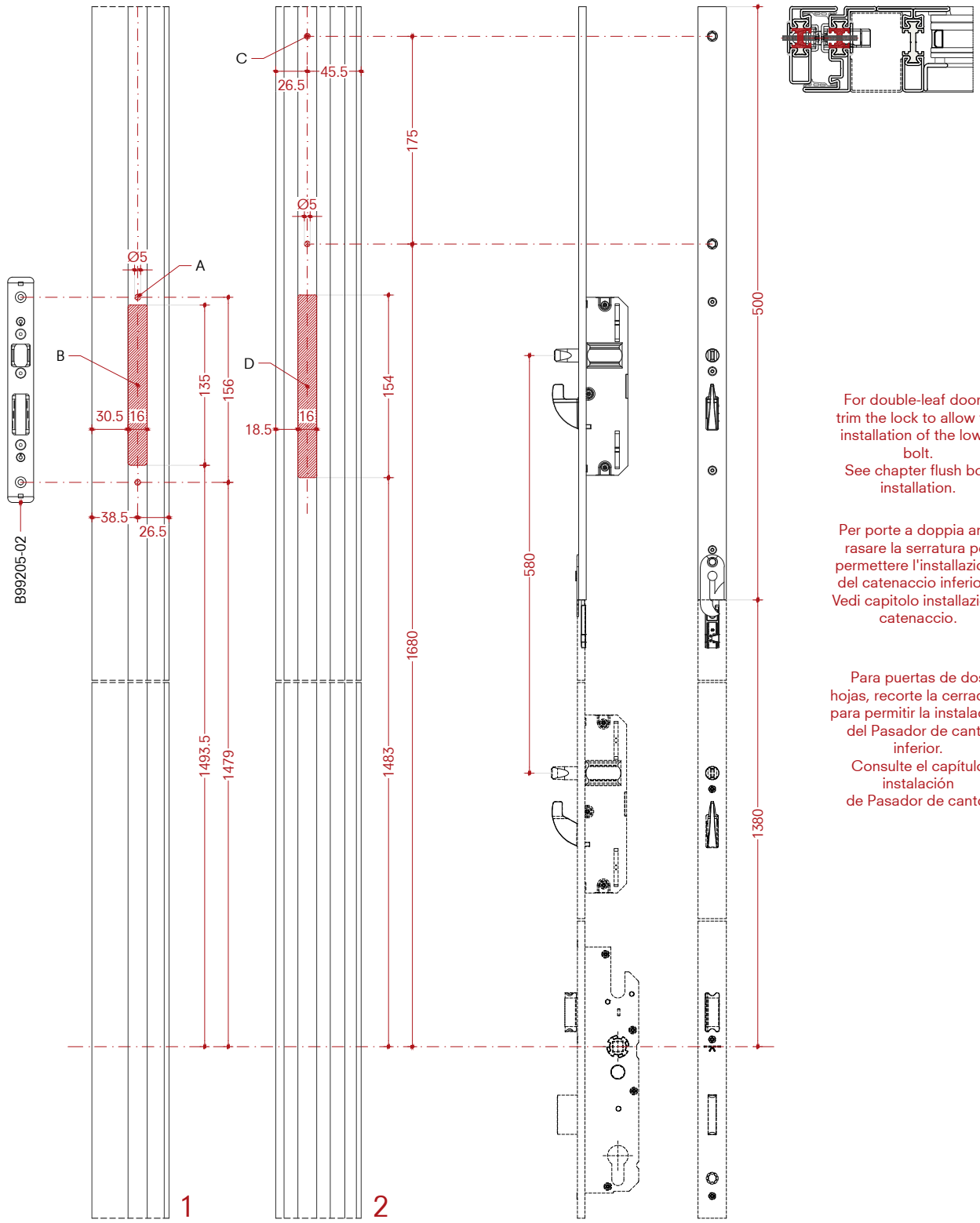
A) Altezza anta
B) Fissaggio con viti M4x30 mm ISO10642 e accorciare le viti

A) Altura de la hoja
B) Fijación con tornillos M4x30 mm ISO10642 y recortar tornillos

Installation
Lock B99169-02 with full height additional profile MT 7218TF-nn
Open in door

Montaggio
Serratura B99169-02
con profilo supplementare MT 7218TF-nn
Porta apertura interna

Montaje
Cerradura B99169-02
Con con perfil adicional MT 7218TF-nn
Puerta apertura hacia dentro



For double-leaf doors, trim the lock to allow the installation of the lower bolt.
See chapter flush bolt installation.

Per porte a doppia anta rasare la serratura per permettere l'installazione del catenaccio inferiore.
Vedi capitolo installazione catenaccio.

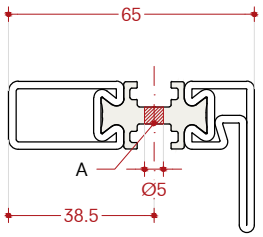
Para puertas de dos hojas, recorte la cerradura para permitir la instalación del Pasador de canto inferior.
Consulte el capítulo instalación de Pasador de canto.

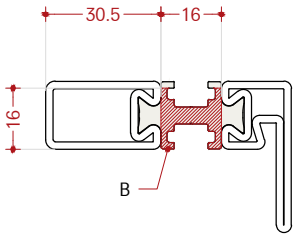
Scale 1:5
A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

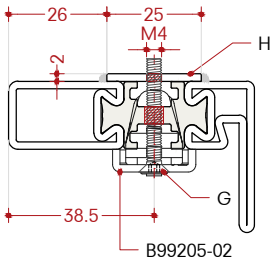
Scala 1:5
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:5
A) Orificios de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1







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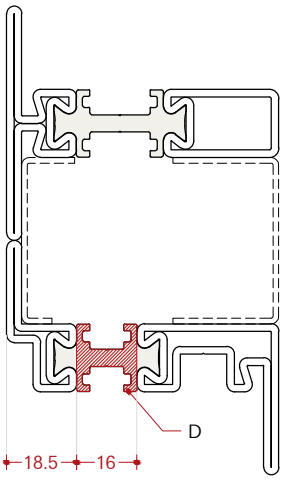
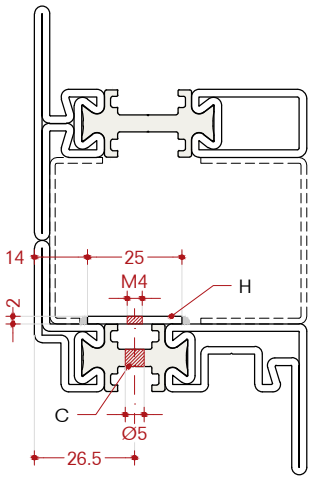
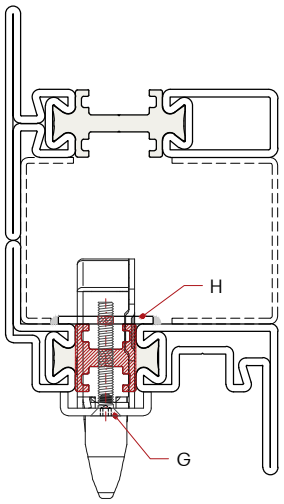
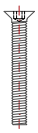








M4x30
ISO10642
n° 4 pcs

B99205-02
n° 1 pc

A) Holes Ø5 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x30 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)

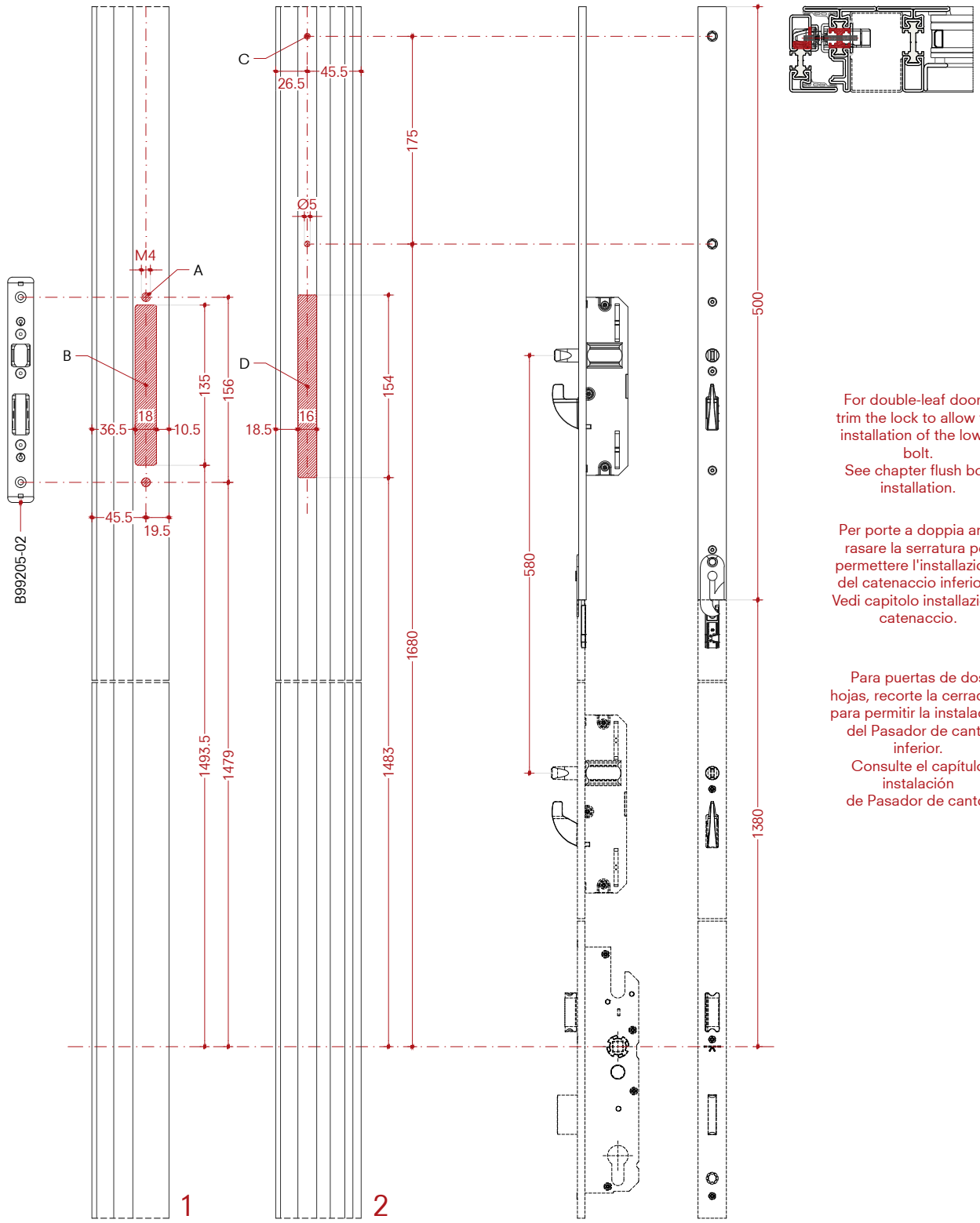
A) Fori Ø5 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x30 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)

A) Oreficio de Ø5 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x30 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)

Installation
Lock B99169-02 with full height additional profile MT 7218TF-nn
Open out door

Montaggio
Serratura B99169-02
con profilo supplementare MT 7218TF-nn
Porta apertura esterna

Montaje
Cerradura B99169-02
Con con perfil adicional MT 7218TF-nn
Puerta apertura hacia fuera



For double-leaf doors, trim the lock to allow the installation of the lower bolt.
See chapter flush bolt installation.

Per porte a doppia anta rasare la serratura per permettere l'installazione del catenaccio inferiore.
Vedi capitolo installazione catenaccio.

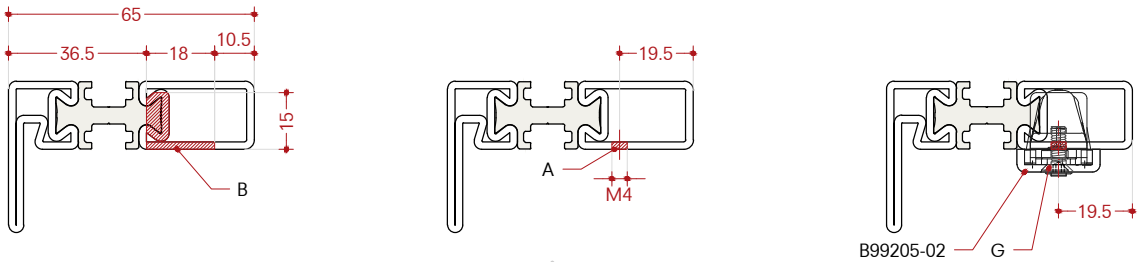
Para puertas de dos hojas, recorte la cerradura para permitir la instalación del Pasador de canto inferior.
Consulte el capítulo instalación de Pasador de canto.

Scale 1:5
A) Holes M4 mm in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling

Scala 1:5
A) Fori M4 mm nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri

Escala 1:5
A) Orificios de M4 mm en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros

1



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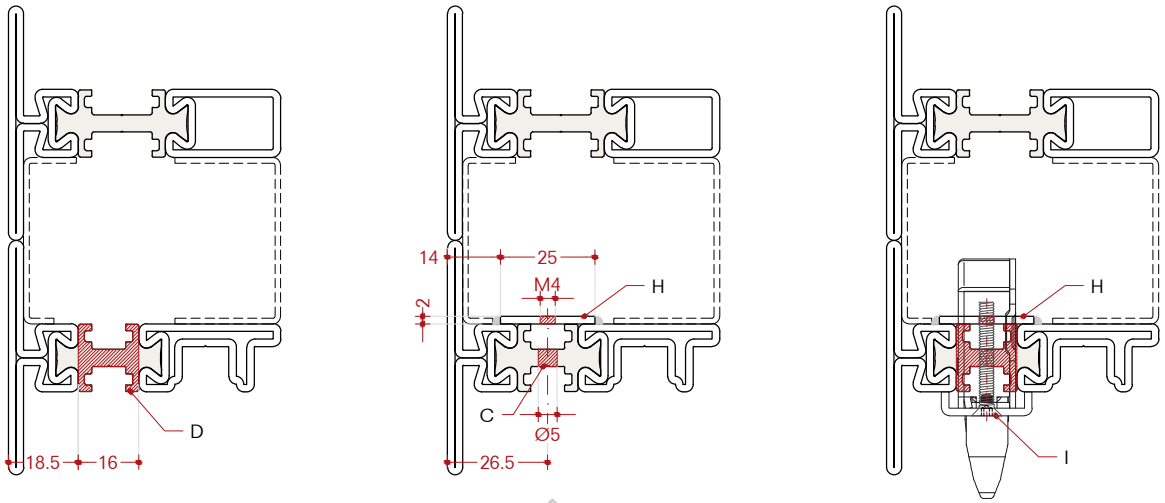
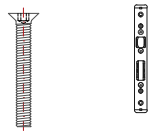




M4x30
ISO10642
n° 4 pcs

B99205-02
n° 1 pc

A) Tapped hole M4 in door frame
B) Cut-out in door frame
C) Holes Ø5 mm in the door leaf
D) Milling in the door leaf
E) Lever handle bore Ø14 mm
F) Profile cylinder milling
G) Fastening with M4x12 ISO10642 screws
H) M4 holes on 25x25x2 mm plate (not provided)
I) Fastening with M4x30 ISO10642 screws

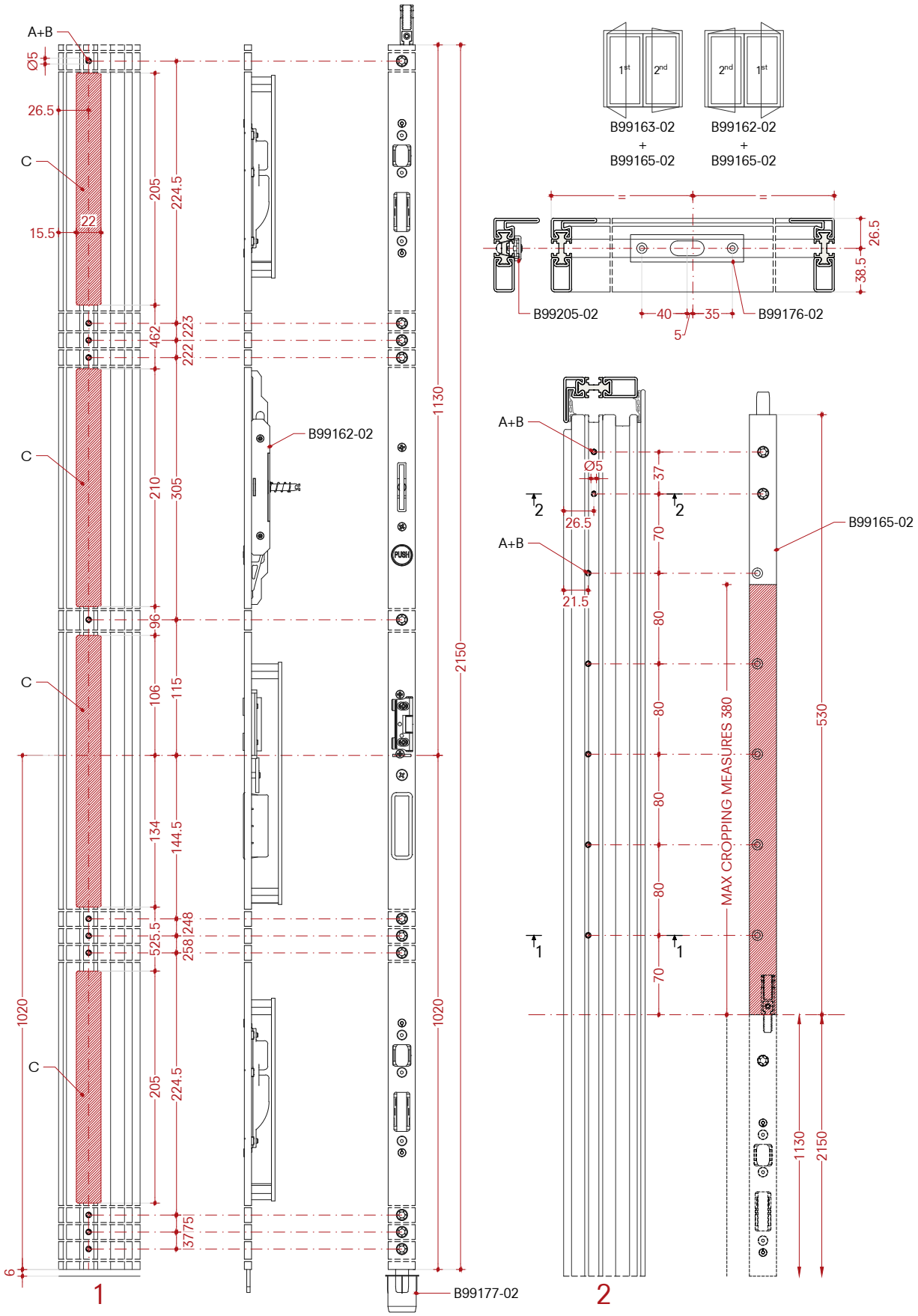
A) Foro filettato M4 nel telaio della porta
B) Foratura del telaio della porta
C) Fori Ø5 mm nell'anta della porta
D) Fresatura nell'anta della porta
E) Foro leva maniglia Ø14 mm
F) Fresatura profili per i cilindri
G) Montaggio con viti M4x12 ISO10642
H) Fori M4 su piastra 25x25x2 mm (non fornita)
I) Montaggio con viti M4x30 ISO10642

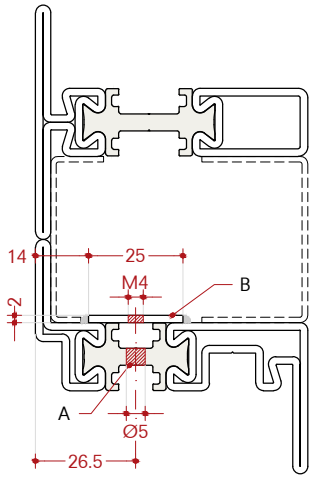
A) Orificio roscado M4 en marco de la puerta
B) Oreficio en marco de la puerta
C) Orificios de Ø5 mm en hoja de la puerta
D) Fresado en hoja de la puerta
E) Palanca de perfil de Ø14 mm
F) Fresado en perfil para cilindros
G) Montaje con tornillos M4x12 ISO10642
H) Orificios M4 en placa 25x25x2 mm (no provisto)
I) Montaje con tornillos M4x30 ISO10642

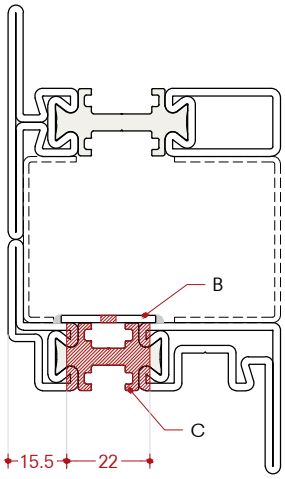
Installation
2nd leaf shoot bolt B99165-02
Open in door

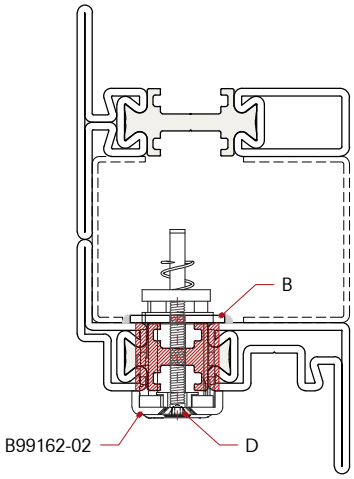
Montaggio
Catenaccio 2a anta B99165-02
Porta apertura interna

Montaje
Pasador de canto 2do hoja B99165-02
Puerta apertura hacia dentro









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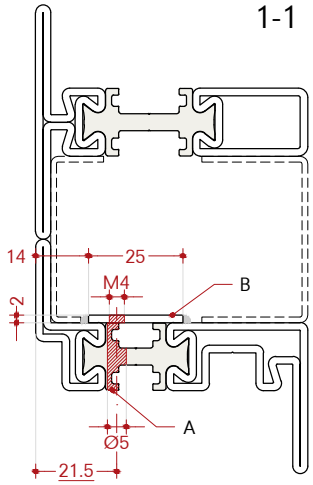

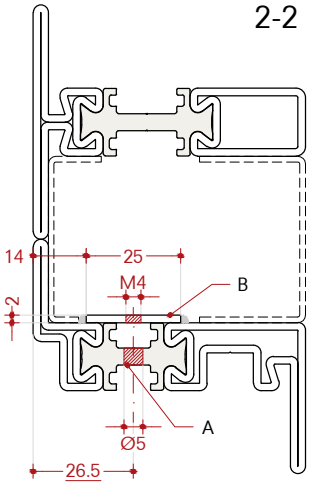

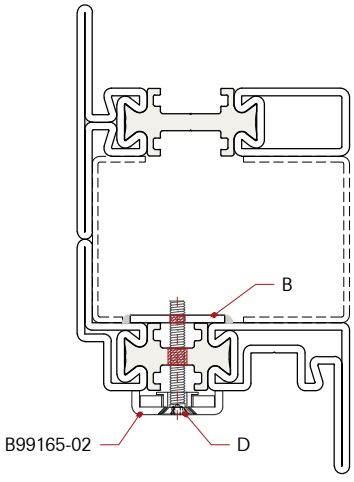

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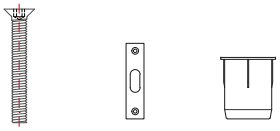


M4x30
ISO10642
n° 18 pcs

B99176-02
n° 1 pc

B99177-02
n° 1 pc

A) Holes Ø5 mm in the door leaf
B) M4 holes on 25x25x2 mm plate (not provided)
C) Milling in the door leaf
D) Fastening with M4x30 ISO10642 screws

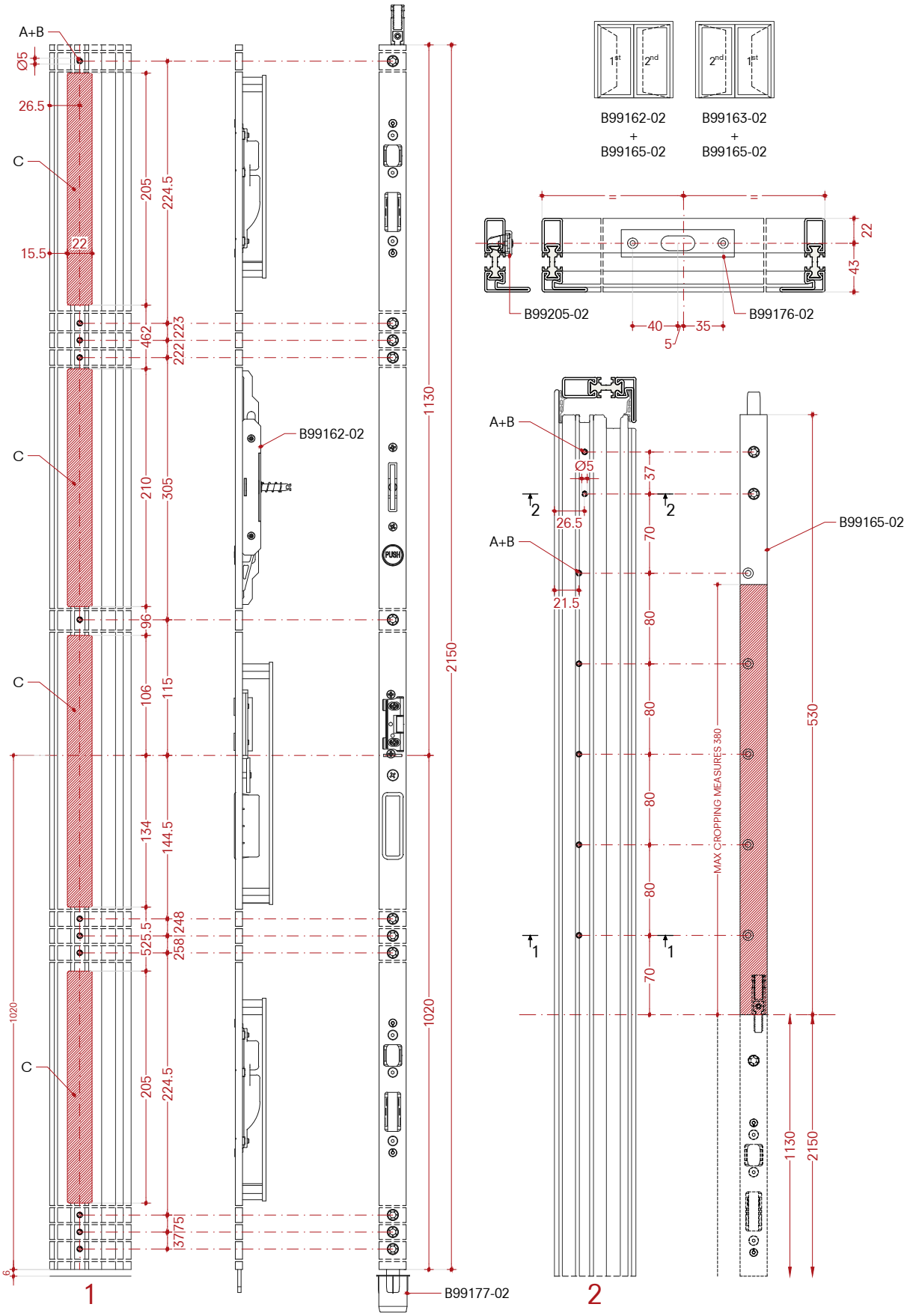
A) Fori Ø5 mm nell'anta della porta
B) Fori M4 su piastra 25x25x2 mm (non fornita)
C) Fresatura nell'anta della porta
D) Montaggio con viti M4x30 ISO10642

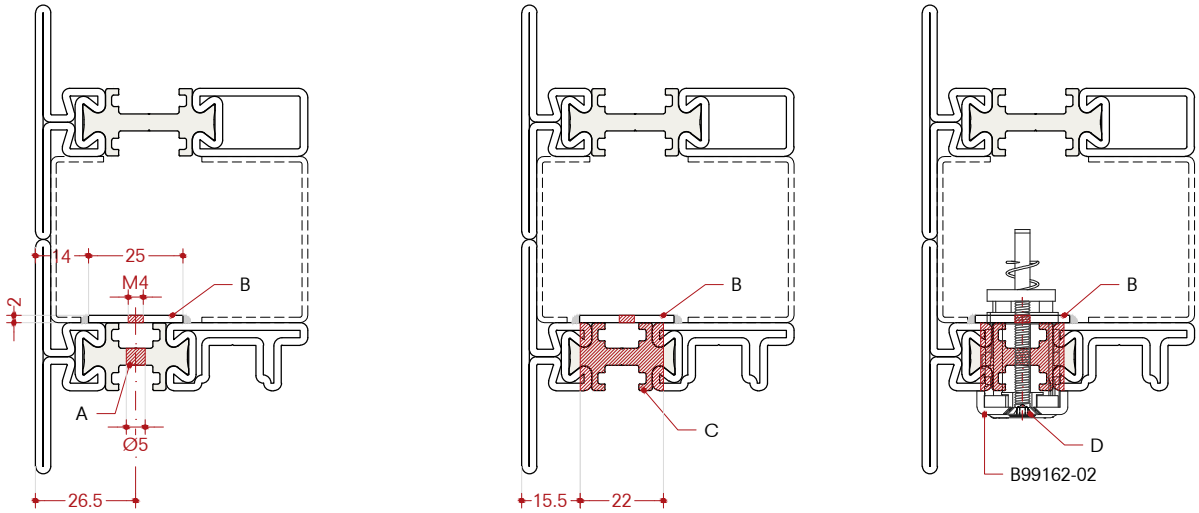
A) Orificios de Ø5 mm en hoja de la puerta
B) Orificios M4 en placa 25x25x2 mm (no provisto)
C) Fresado en hoja de la puerta
D) Montaje con tornillos M4x30 ISO10642

Installation
2nd leaf shoot bolt B99165-02
Open out door

Montaggio
Catenaccio 2a anta B99165-02
Porta apertura esterna

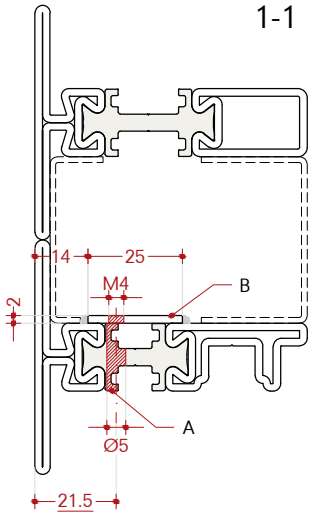
Montaje
Pasador de canto 2do hoja B99165-02
Puerta apertura hacia fuera



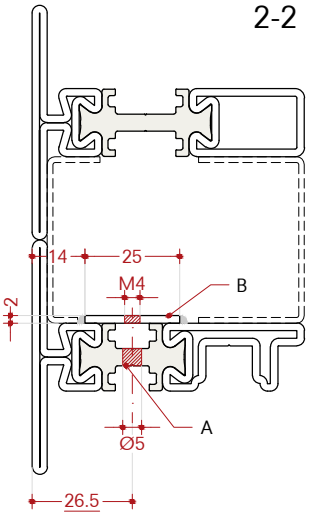


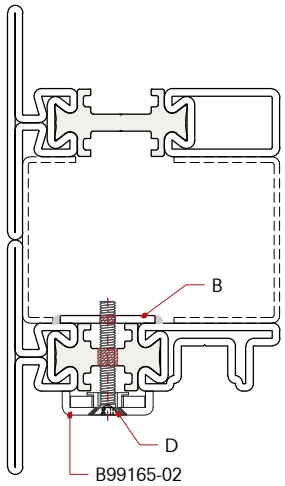
1

1-1



2-2





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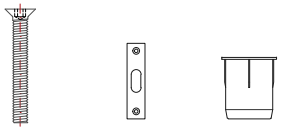


M4x30
ISO10642
n° 18 pcs

B99176-02
n° 1 pc

B99177-02
n° 1 pc

A) Holes Ø5 mm in the door leaf
B) M4 holes on 25x25x2 mm plate (not provided)
C) Milling in the door leaf
D) Fastening with M4x30 ISO10642 screws

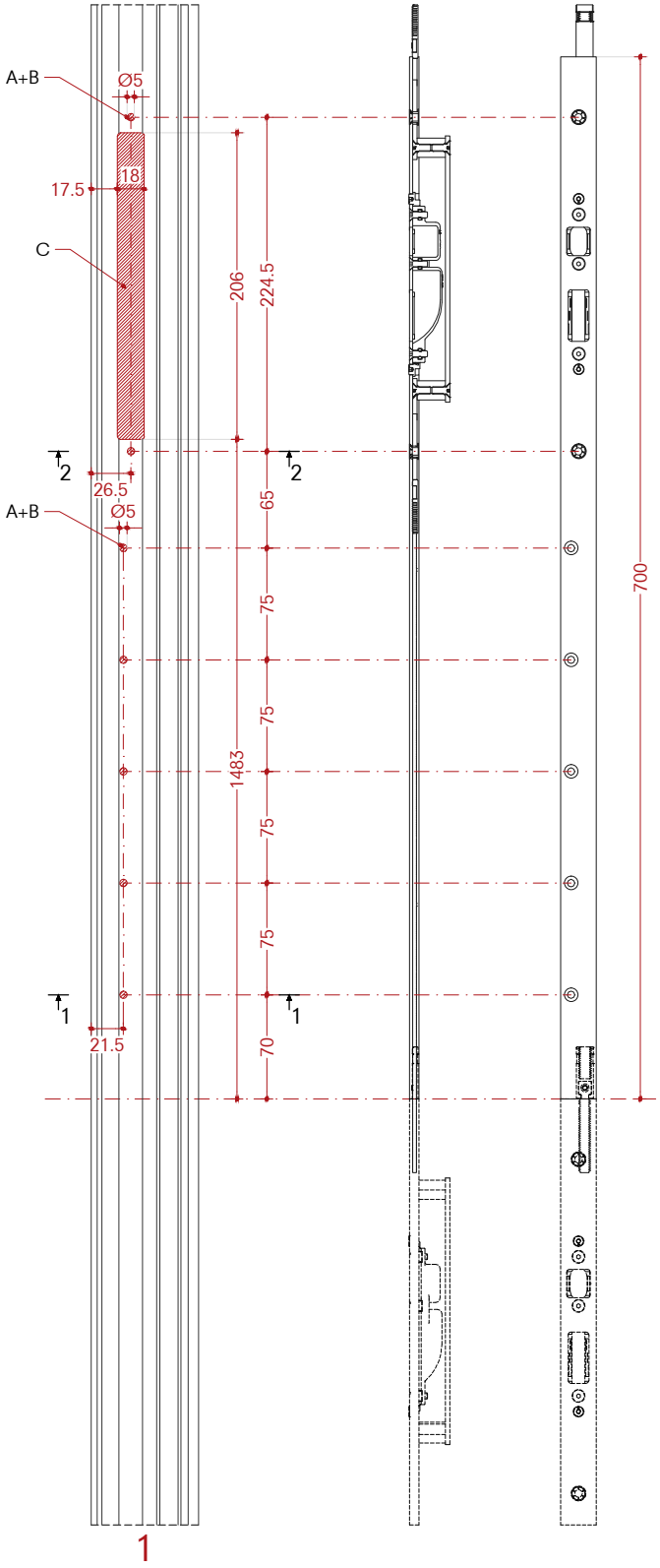
A) Fori Ø5 mm nell'anta della porta
B) Fori M4 su piastra 25x25x2 mm (non fornita)
C) Fresatura nell'anta della porta
D) Montaggio con viti M4x30 ISO10642

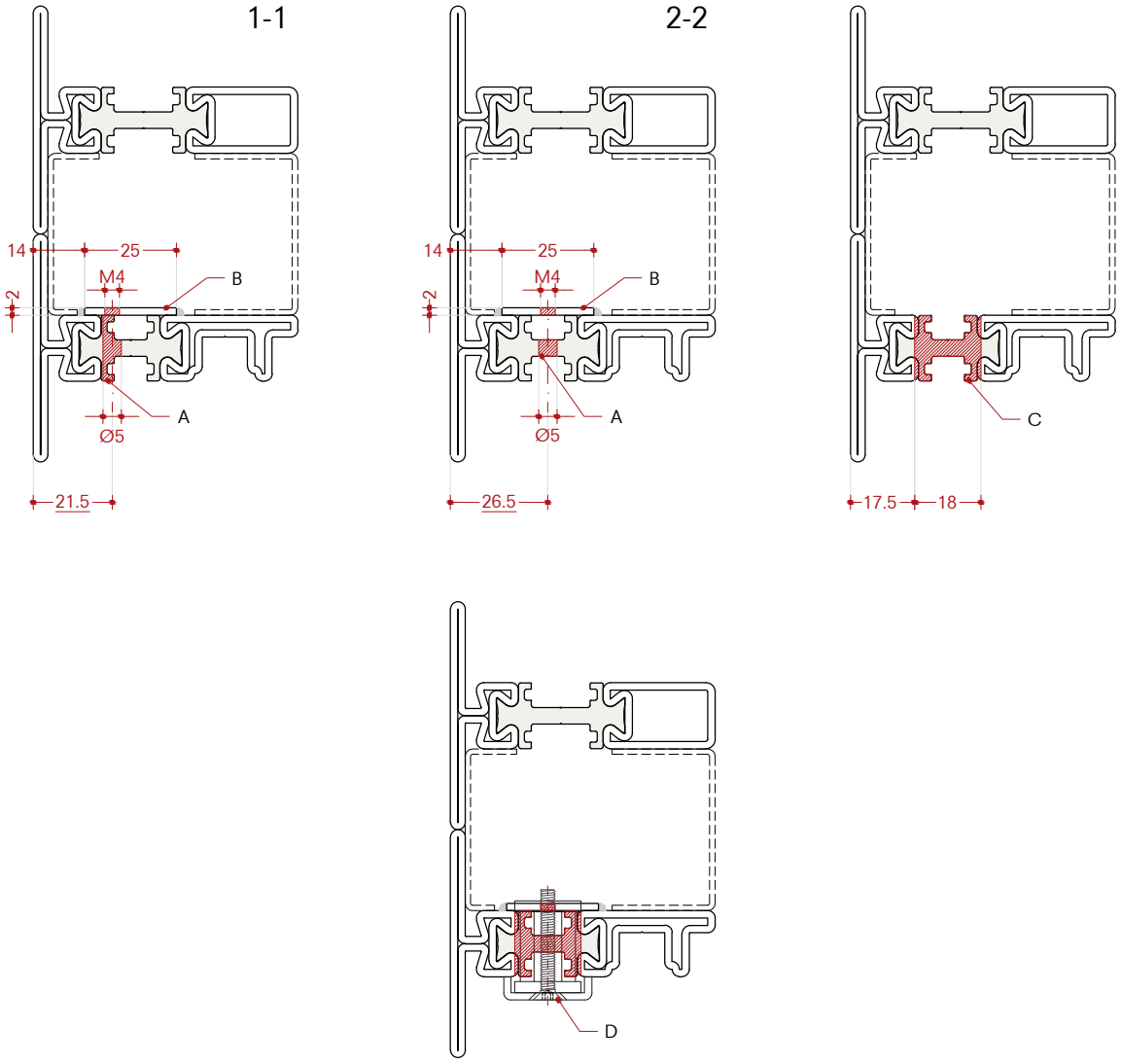
A) Orificios de Ø5 mm en hoja de la puerta
B) Orificios M4 en placa 25x25x2 mm (no provisto)
C) Fresado en hoja de la puerta
D) Montaje con tornillos M4x30 ISO10642

Installation
2nd leaf extension B99164-02
Open in door

Montaggio
Prolunga 2a anta B99164-02
Porta apertura interna

Montaje
Extensión 2do hoja B99164-02
Puerta apertura hacia dentro





1

M4x30
ISO10642
n° 7 pcs

A) Holes Ø5 mm in the door leaf
B) M4 holes on 25x25x2 mm plate (not provided)
C) Milling in the door leaf
D) Fastening with M4x30 ISO10642 screws

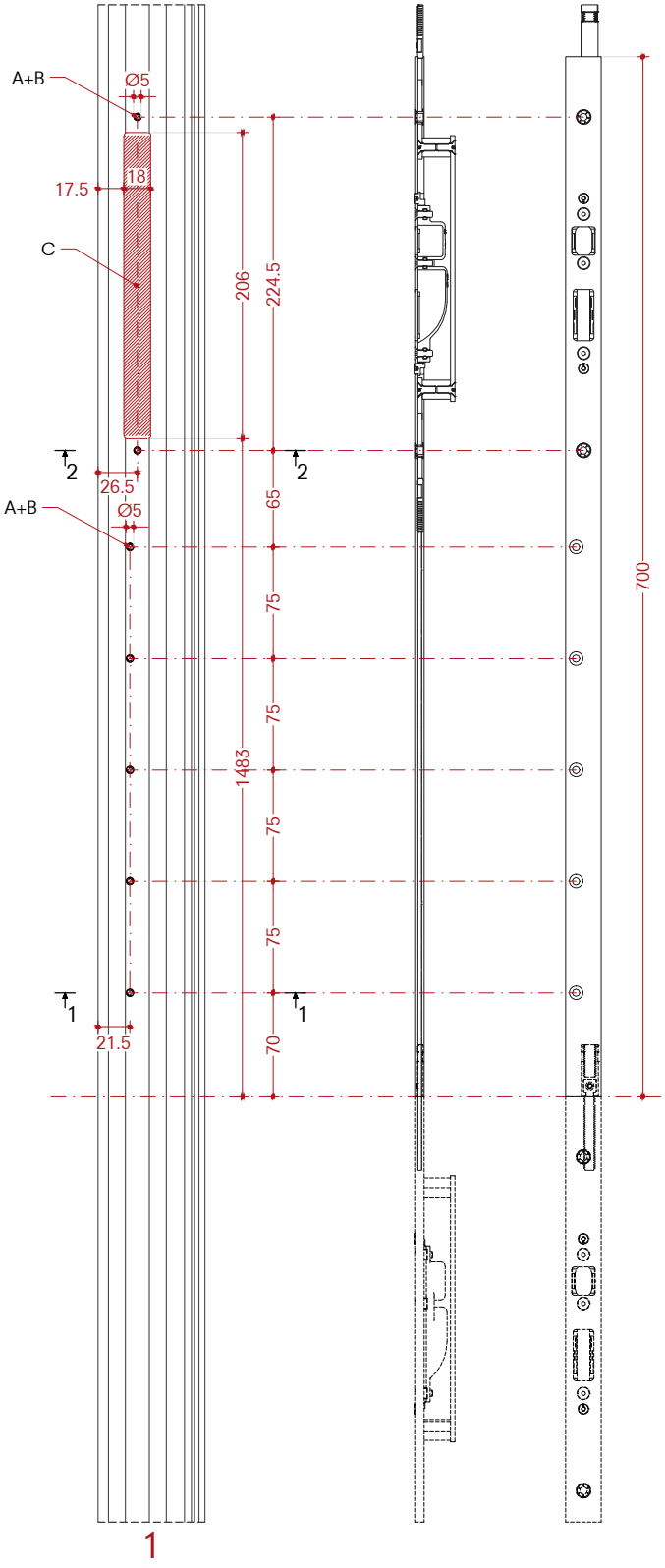
A) Fori Ø5 mm nell'anta della porta
B) Fori M4 su piastra 25x25x2 mm (non fornita)
C) Fresatura nell'anta della porta
D) Montaggio con viti M4x30 ISO10642

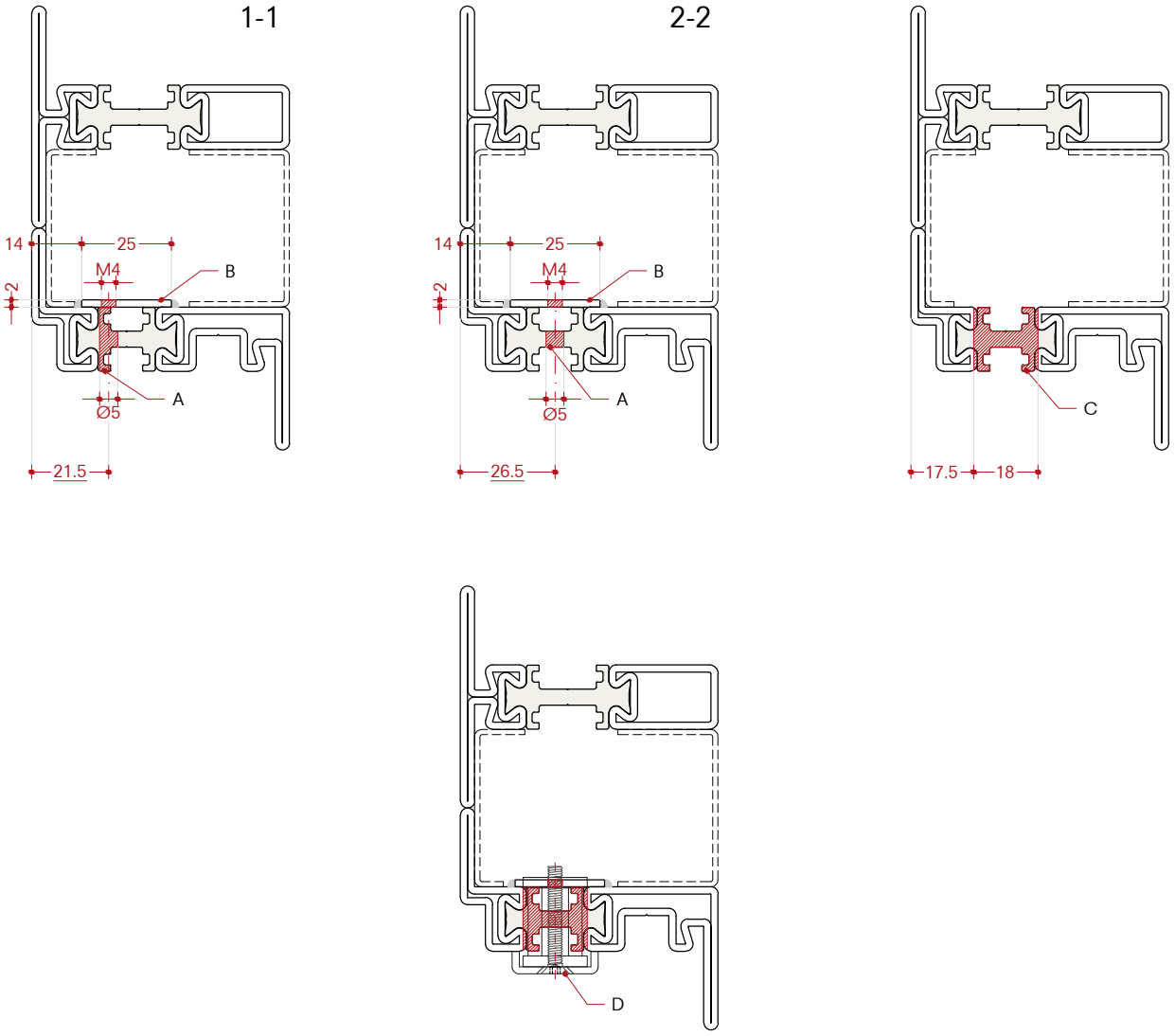
A) Orificios de Ø5 mm en hoja de la puerta
B) Orificios M4 en placa 25x25x2 mm (no provisto)
C) Fresado en hoja de la puerta
D) Montaje con tornillos M4x30 ISO10642

Installation
2nd leaf extension B99164-02
Open out door

Montaggio
Prolunga 2a anta B99164-02
Porta apertura esterna

Montaje
Extensión 2do hoja B99164-02
Puerta apertura hacia fuera





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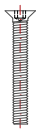


M4x30
ISO10642
n° 7 pcs

A) Holes Ø5 mm in the door leaf
B) M4 holes on 25x25x2 mm plate (not provided)
C) Milling in the door leaf
D) Fastening with M4x30 ISO10642 screws

A) Fori Ø5 mm nell'anta della porta
B) Fori M4 su piastra 25x25x2 mm (non fornita)
C) Fresatura nell'anta della porta
D) Montaggio con viti M4x30 ISO10642

A) Orificios de Ø5 mm en hoja de la puerta
B) Orificios M4 en placa 25x25x2 mm (no provisto)
C) Fresado en hoja de la puerta
D) Montaje con tornillos M4x30 ISO10642

Installation
2nd leaf extension B99164-02
Open in door

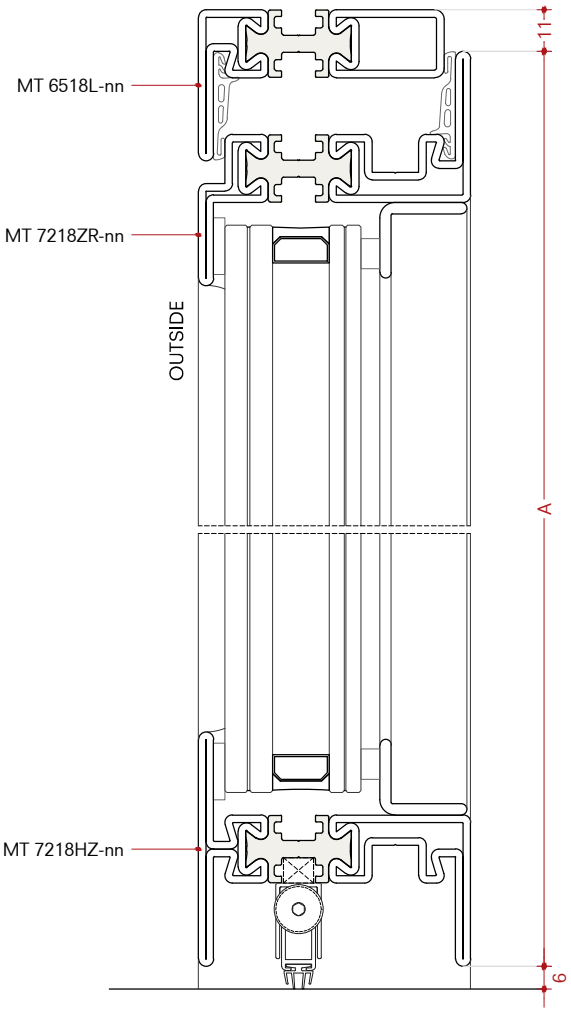
Scale 1:10
A) Height leaf
B) Height handle
C) Can be shortened

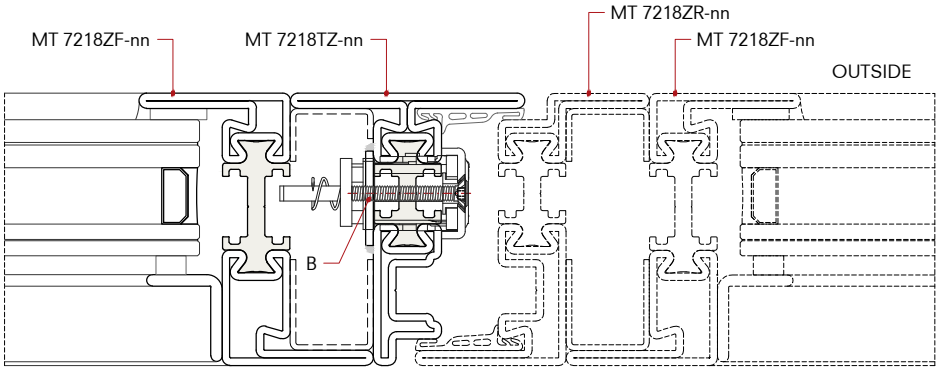
Montaggio
Prolunga 2a anta B99164-02
Porta apertura interna

Scala 1:10
A) Altezza anta
B) Altezza maniglia
C) Rasabile

Montaje
Extensión 2do hoja B99164-02
Puerta apertura hacia dentro

Escala 1:10
A) Altura de la hoja
B) Altura de la manilla
C) Se puede acortar





A) Height leaf
B) Fastening with M4x30 mm ISO10642 screws and cut the screws

A) Altezza anta
B) Fissaggio con viti M4x30 mm ISO10642 e accorciare le viti

A) Altura de la hoja
B) Fijación con tornillos M4x30 mm ISO10642 y recortar tornillos

Installation
2nd leaf extension B99164-02
Open in door

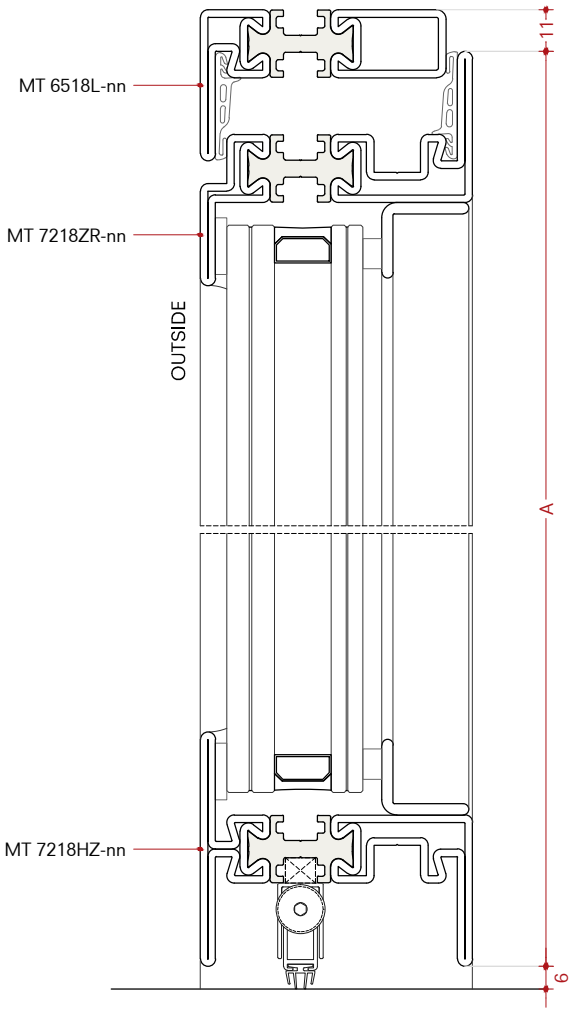
Scale 1:10
A) Height leaf
B) Height handle
C) Can be shortened

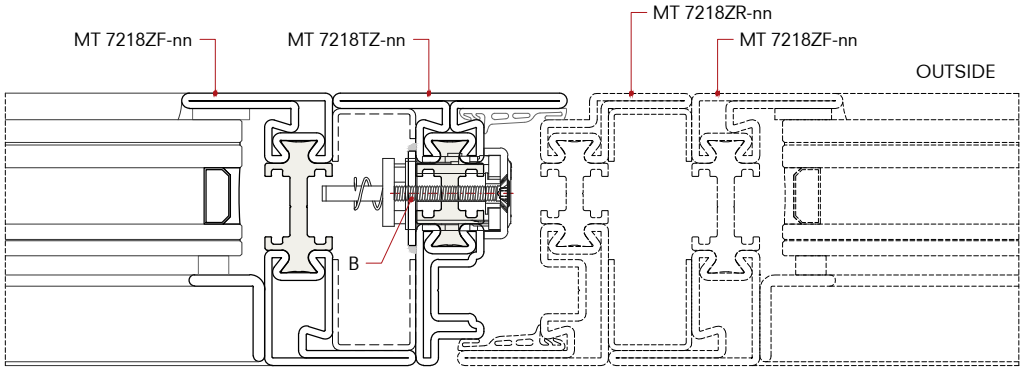
Montaggio
Prolunga 2a anta B99164-02
Porta apertura interna

Scala 1:10
A) Altezza anta
B) Altezza maniglia
C) Rasabile

Montaje
Extensión 2do hoja B99164-02
Puerta apertura hacia dentro

Escala 1:10
A) Altura de la hoja
B) Altura de la manilla
C) Se puede acortar





A) Height leaf
B) Fastening with M4x30 mm ISO10642 screws and cut the screws

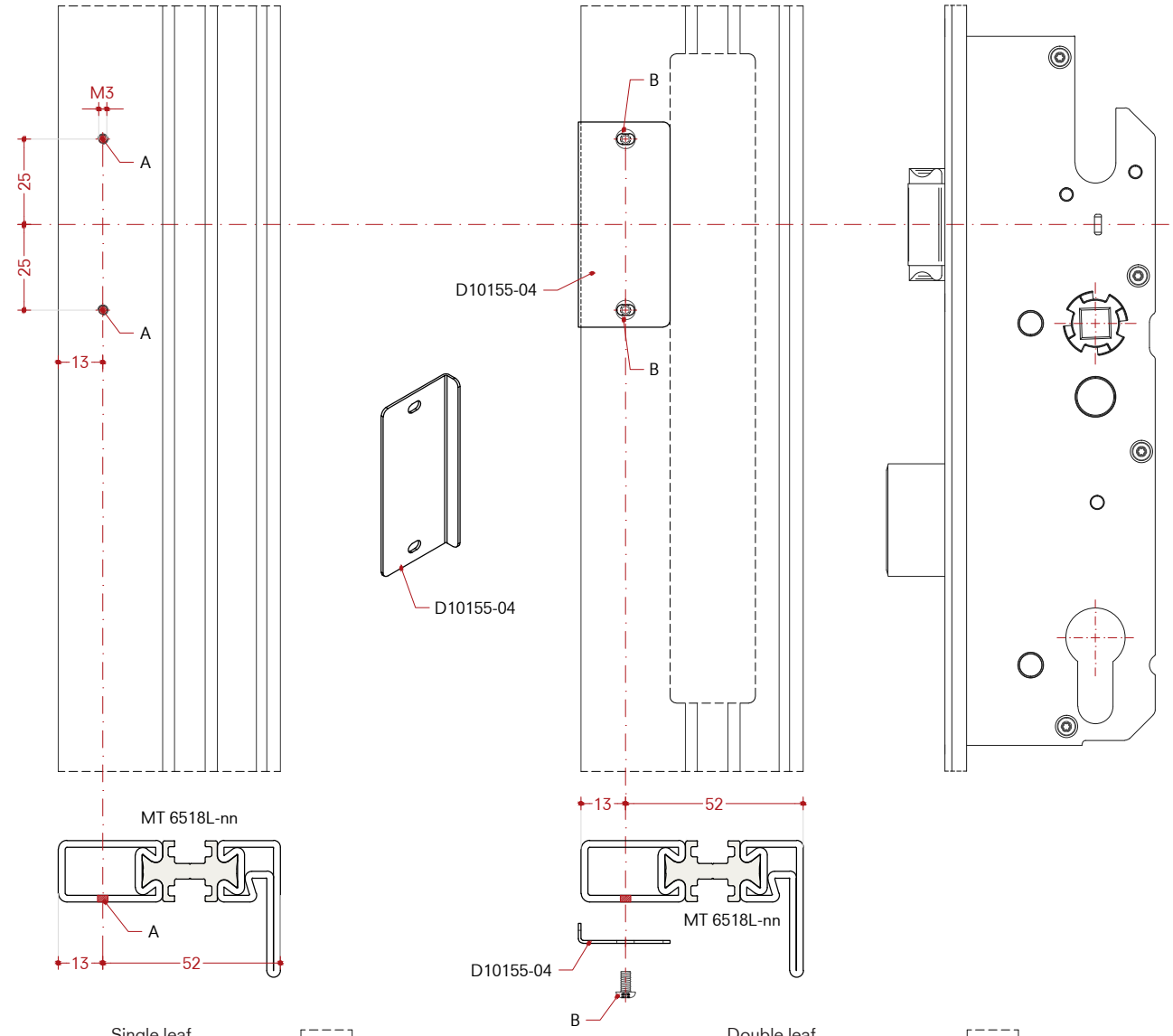
A) Altezza anta
B) Fissaggio con viti M4x30 mm ISO10642 e accorciare le viti

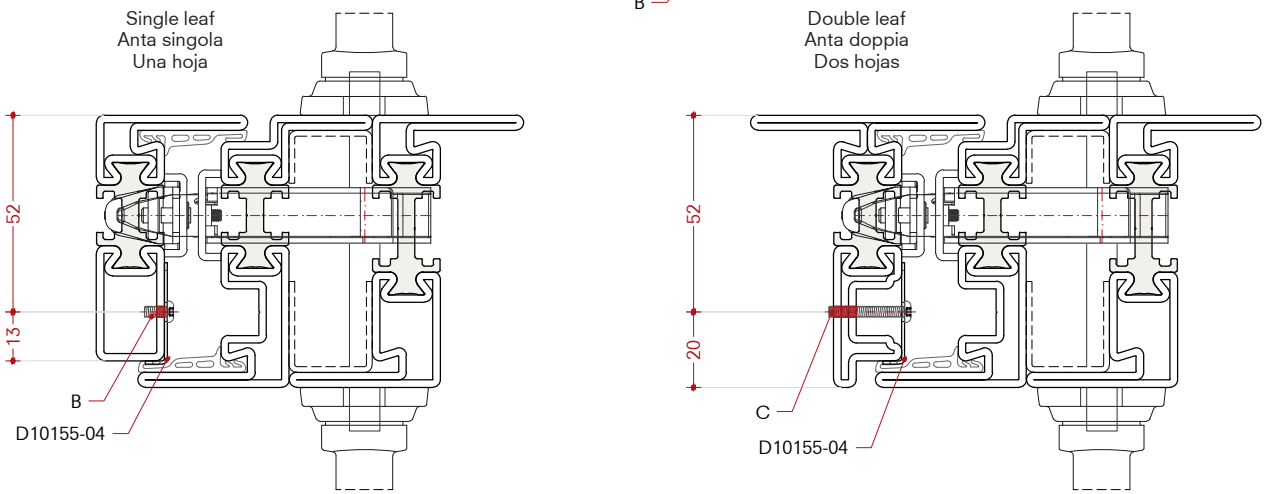
A) Altura de la hoja
B) Fijación con tornillos M4x30 mm ISO10642 y recortar tornillos

Installation of rebate protection for latchbolt
Open in door

Montaggio protezione battuta per scrocco
Porta apertura interna

Montaje de protección de parada para pestillo
Puerta apertura hacia dentro





A) Holes M3 mm in door frame
B) Fastening with M3x6 ISO7380 screws
C) Fastening with M3x20 ISO7380 screws and cut the screws

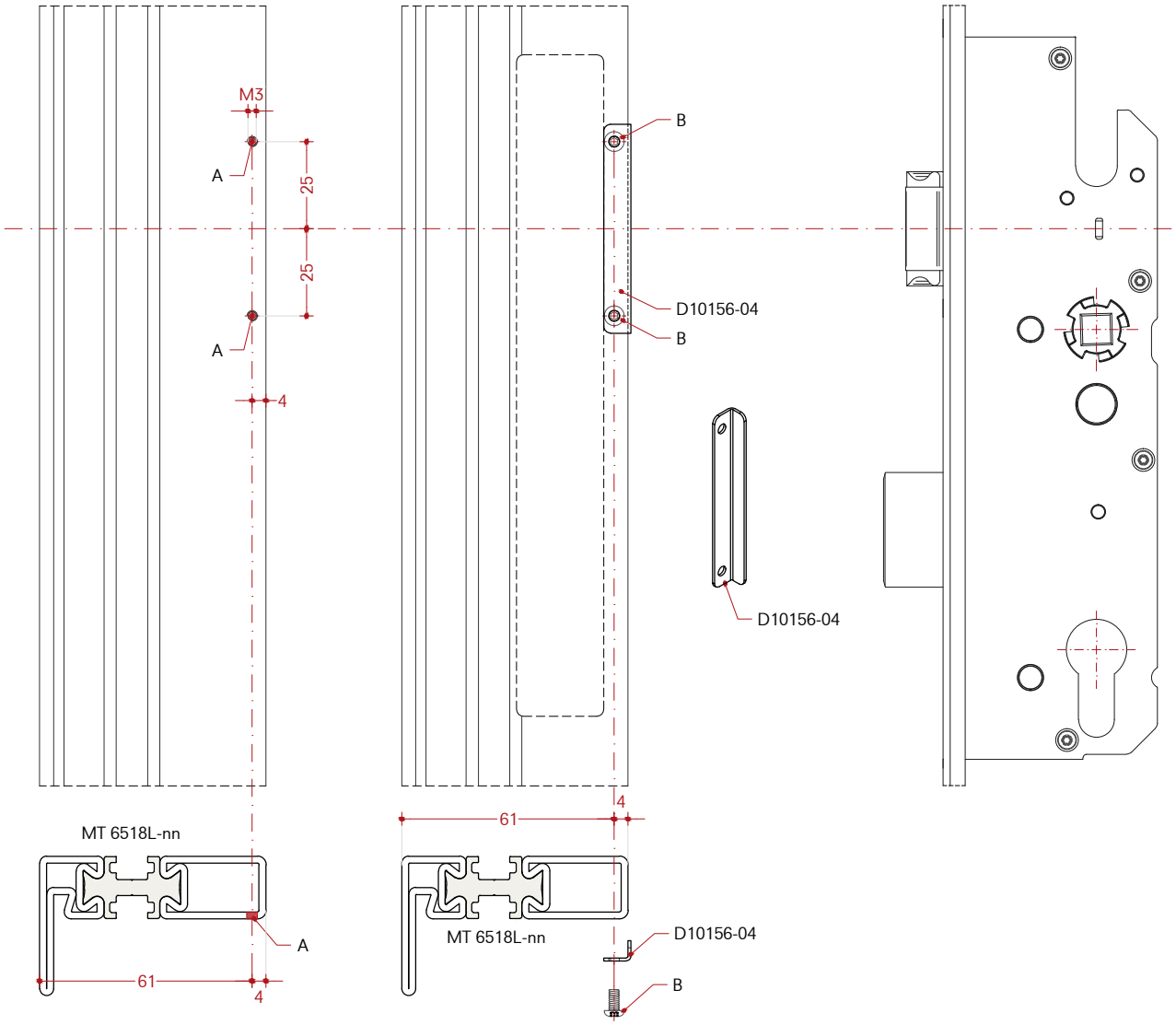
A) Fori M3 mm nel telaio della porta
B) Fissaggio con viti M3x6 ISO7380
C) Fissaggio con viti M3x20 ISO7380 e accorciare le viti

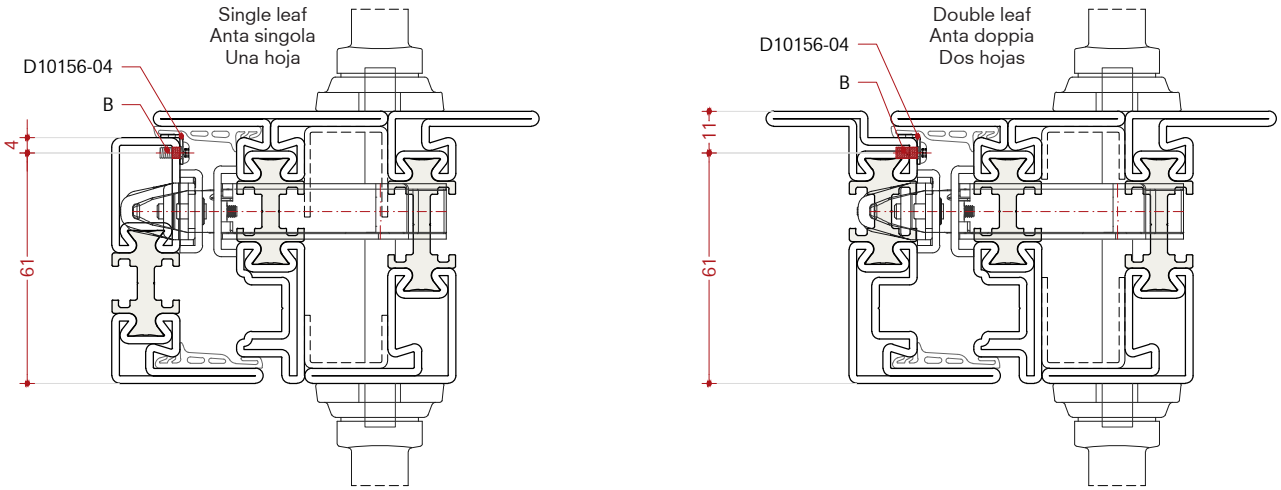
A) Orificios de M3 mm en marco de la puerta
B) Fijación con tornillos M3x6 ISO7380
C) Fijación con tornillos M3x20 ISO7380 y recortar tornillos

Installation of rebate protection for latchbolt
Open out door

Montaggio protezione battuta per scrocco
Porta apertura esterna

Montaje de protección de parada para pestillo
Puerta apertura hacia fuera





A) Holes M3 mm in door frame
B) Fastening with M3x6 ISO7380 screws

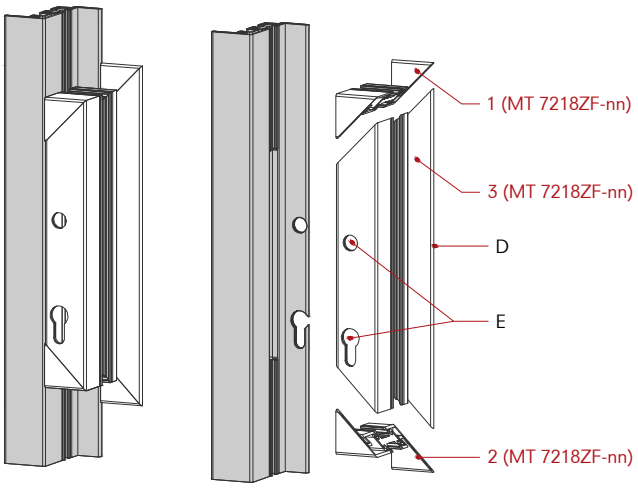
A) Fori M3 mm nel telaio della porta
B) Fissaggio con viti M3x6 ISO7380

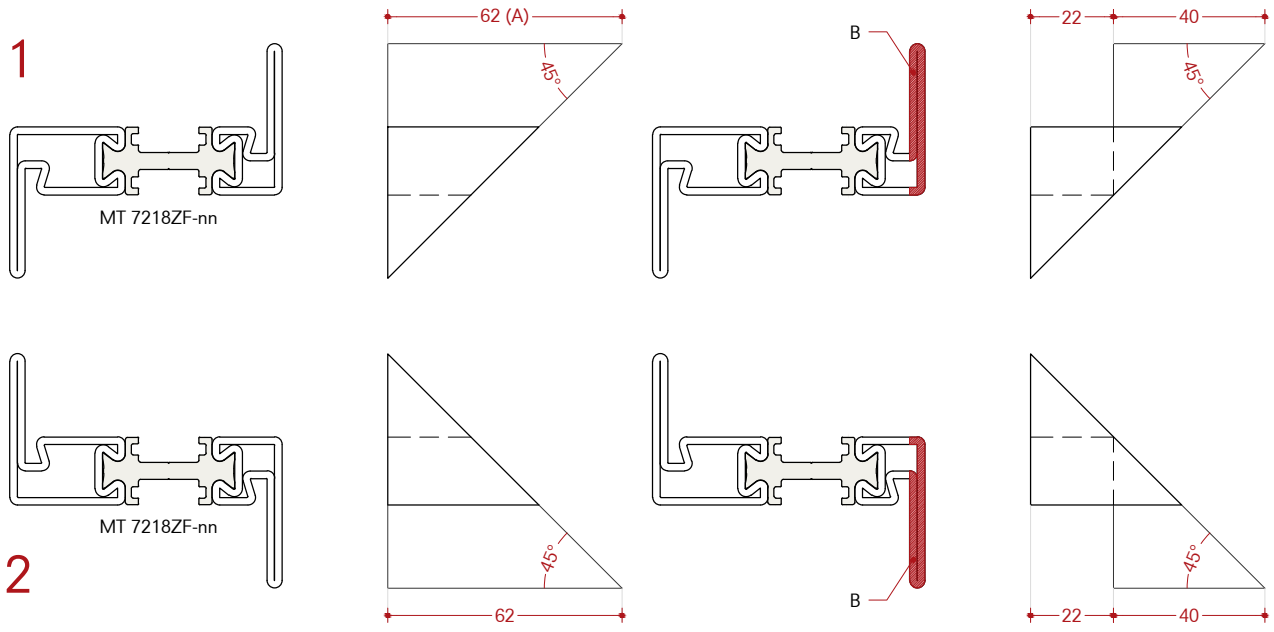
A) Orificios de M3 mm en marco de la puerta
B) Fijación con tornillos M3x6 ISO7380

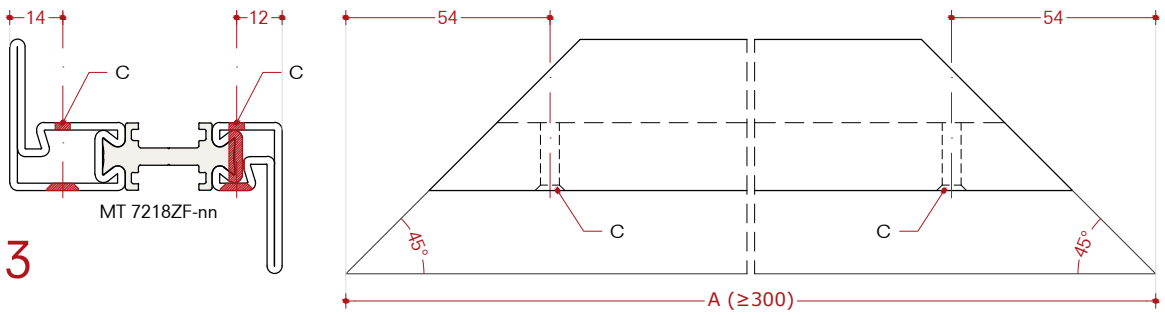
Processing
Locking box with MT 7218ZF-nn

Lavorazione
Scatola serratura con MT 7218ZF-nn

Mecanizado
Cerradura con MT 7218ZF-nn



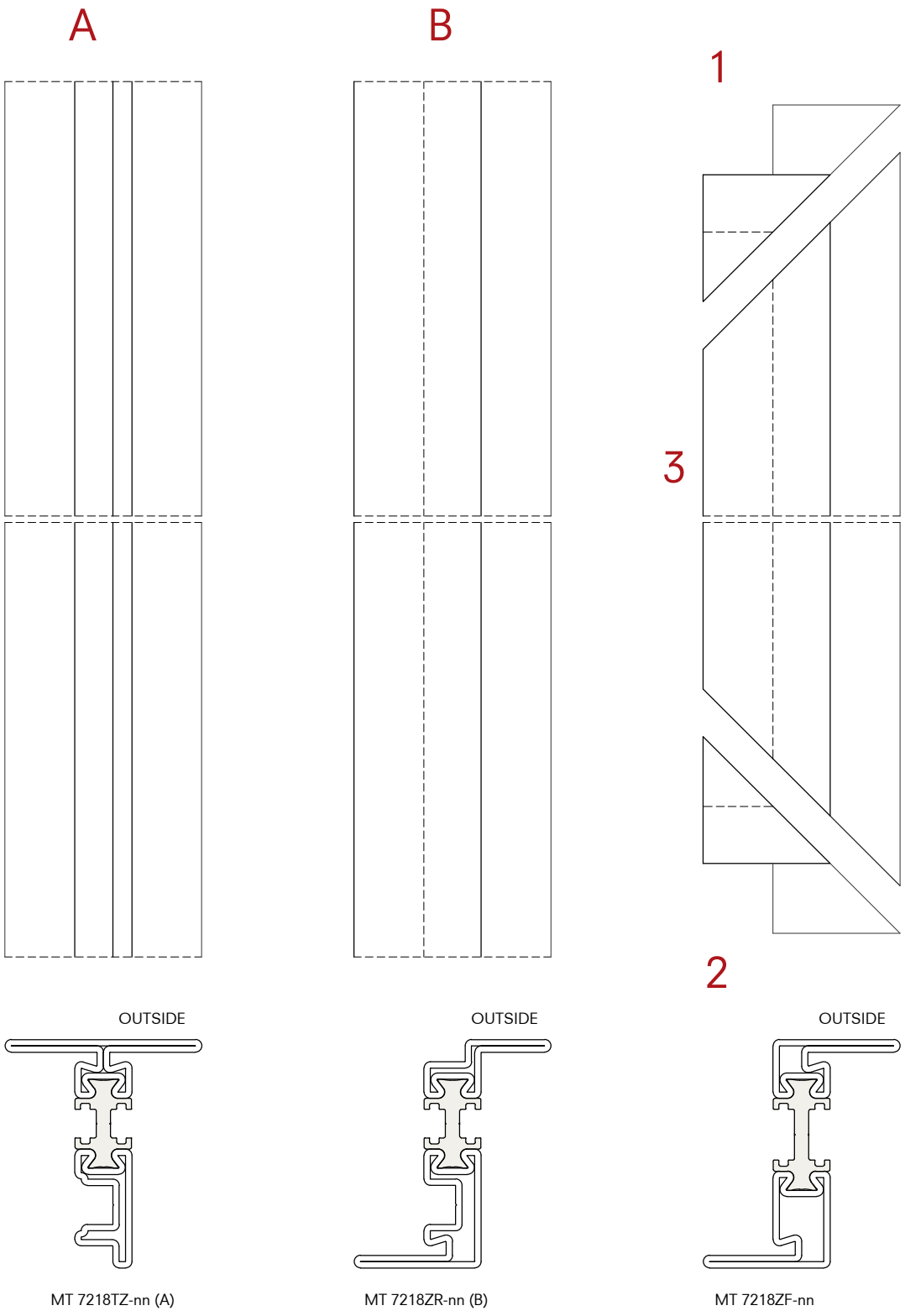




A) Cutting length
B) Cut off profile
C) n°04 holes Ø5 mm
D) Height of locking box variable
E) Holes depending on the lock

A) Lunghezza di taglio
B) Taglio del profilo
C) n°04 fori Ø5 mm
D) Altezza variabile della scatola serratura
E) Numero fori in funzione della serratura

A) Longitud de corte
B) Fresado de perfil
C) n°04 orificios Ø5 mm
D) Altura variable de la caja de seguridad
E) Número de oreficios según la cerradura



MT 7218TZ-nn (A)

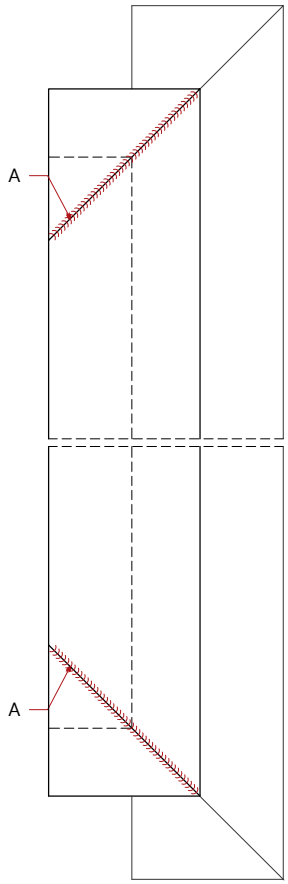
MT 7218ZR-nn (B)

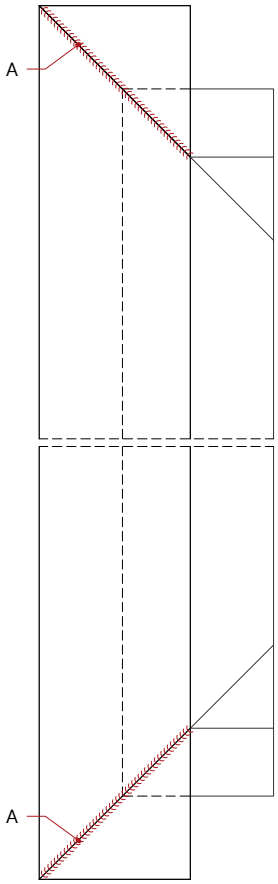
MT 7218ZF-nn

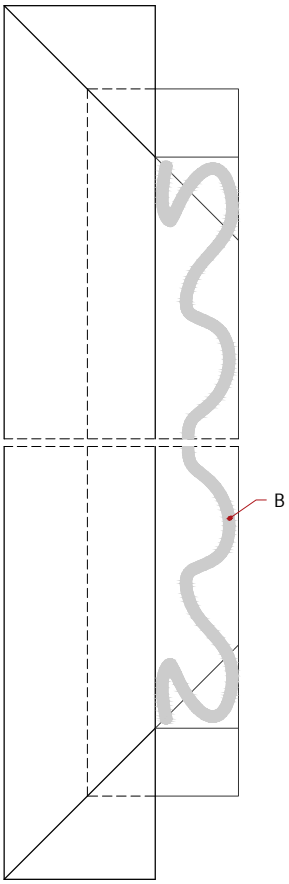
A) Open out
B) Open in

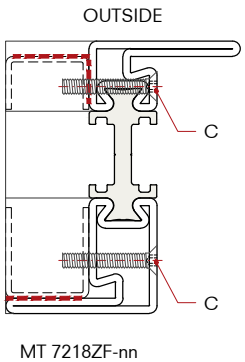
A) Apertura esterna
B) Apertura interna

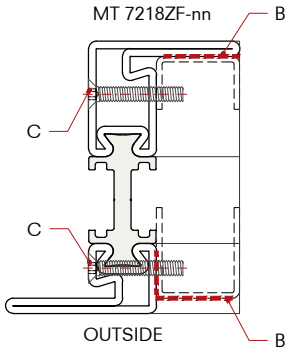
A) Apertura hacia fuera
B) Apertura hacia dentro

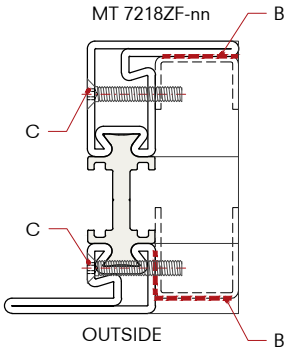










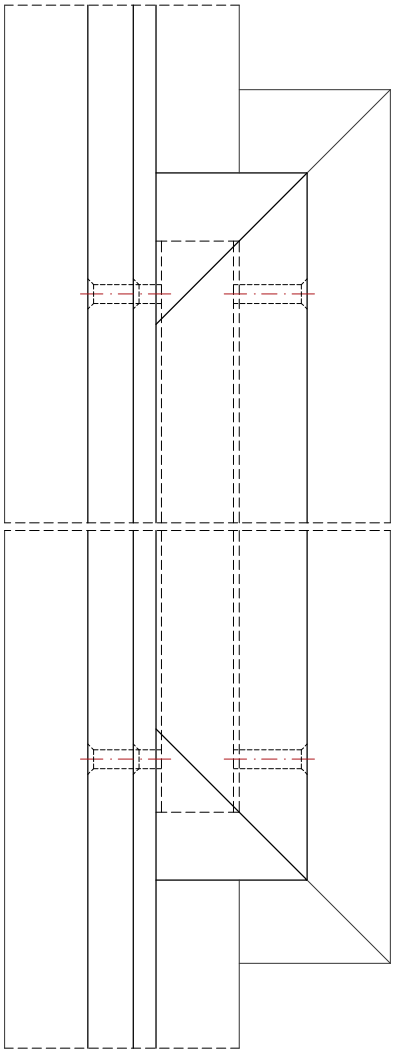


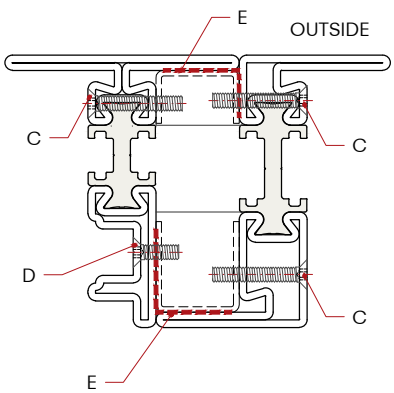
A) Welding
B) Sealant
C) Fastening with M4x25 ISO10642 screws

A) Saldatura
B) Sigillatura
C) Fissaggio con viti M4x25 ISO10642

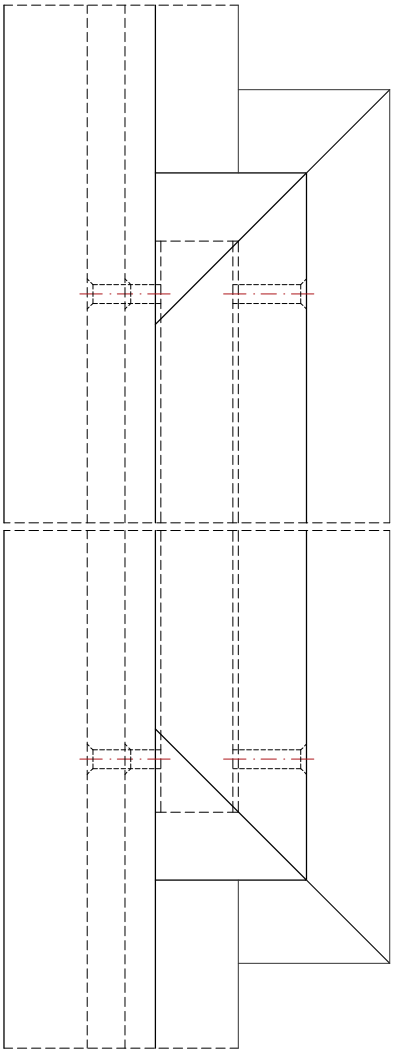
A) Soldadura
B) Agente sellante
C) Fijación con tornillos M4x25 ISO10642

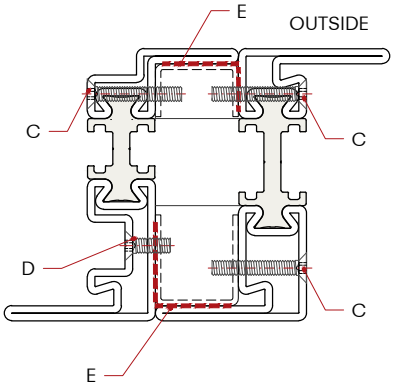
A





B





A) Locking box open out
B) Locking box open in
C) Fastening with M4x25 ISO10642 screws
D) Fastening with M4x12 ISO10642 screws
E) Sealant

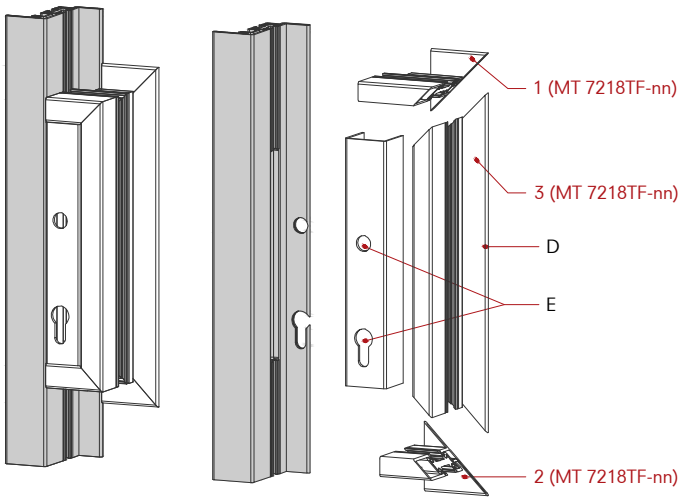
A) Scatola serratura apertura esterna
B) Scatola serratura apertura interna
C) Fissaggio con viti M4x25 ISO10642
D) Fissaggio con viti M4x12 ISO10642
E) Sigillatura

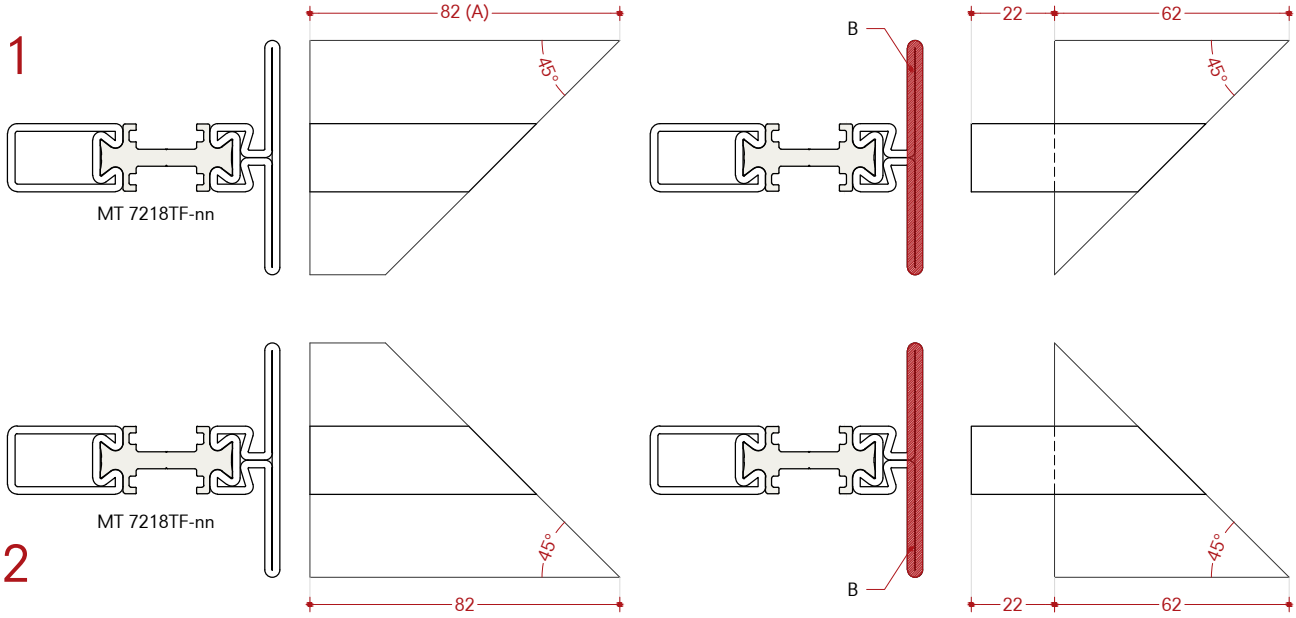
A) Cerradura apertura hacia fuera
B) Cerradura apertura hacia dentro
C) Fijación con tornillos M4x25 ISO10642
D) Fijación con tornillos M4x12 ISO10642
E) Agente sellante

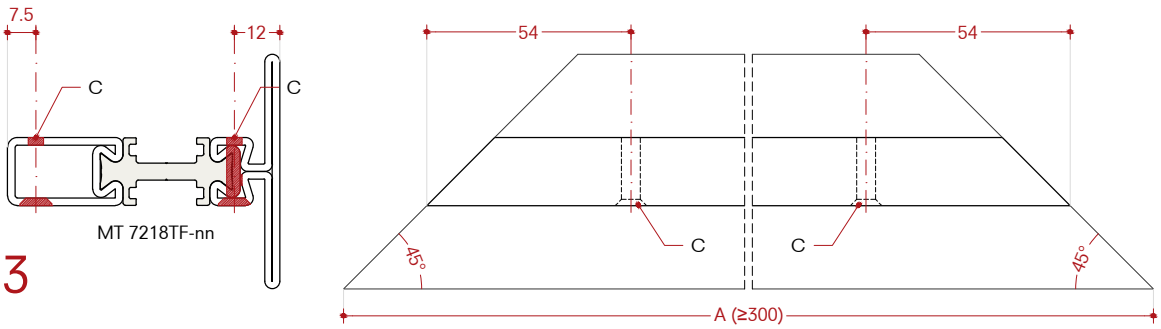
Processing
Locking box with MT 7218TF-nn
And additional brackets

Lavorazione
Scatola serratura con MT 7218TF-nn
E supporto aggiuntivo

Mecanizado
Cerradura con MT 7218TF-nn
Y apoyo adicional



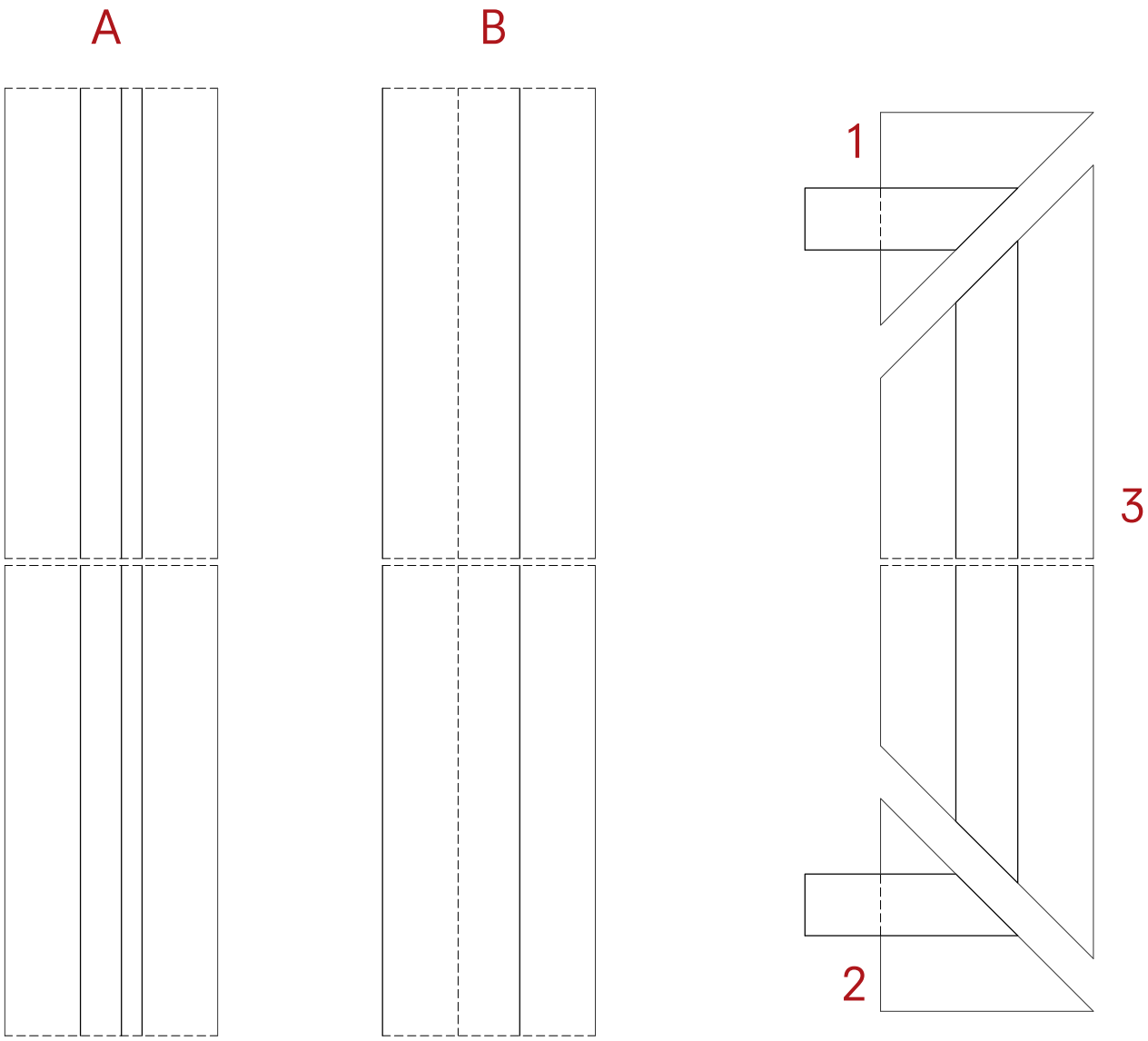




A) Cutting length
B) Cut off profile
C) n°02 holes Ø5 mm
D) Height of locking box variable
E) Holes depending on the lock

A) Lunghezza di taglio
B) Taglio del profilo
C) n°02 fori Ø5 mm
D) Altezza variabile della scatola serratura
E) Numero fori in funzione della serratura

A) Longitud de corte
B) Fresado de perfil
C) n°02 orificios Ø5 mm
D) Altura variable de la caja de seguridad
E) Número de oreficios según la cerradura



MT 7218TZ-nn (A)

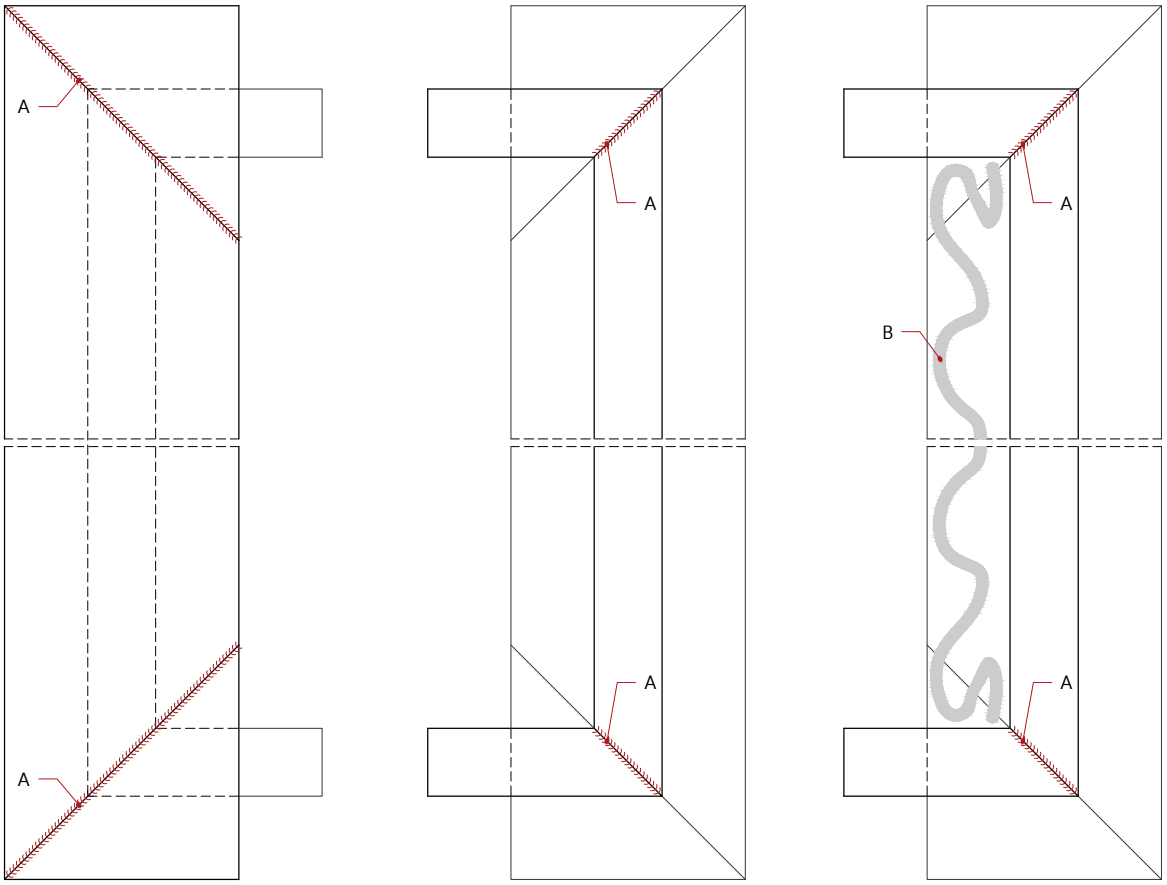
MT 7218ZR-nn (B)

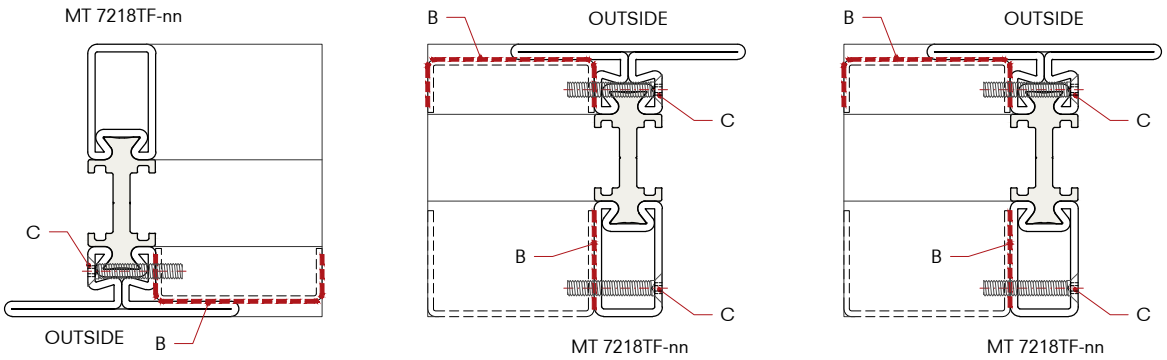
MT 7218TF-nn

A) Open out
B) Open in

A) Apertura esterna
B) Apertura interna

A) Apertura hacia fuera
B) Apertura hacia dentro



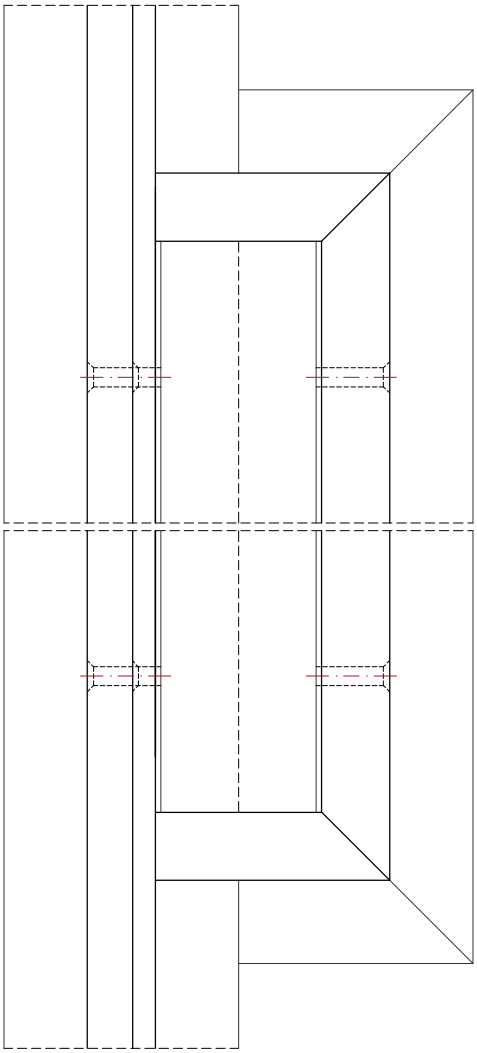


A) Welding
B) Sealant
C) Fastening with M4x25 ISO10642 screws

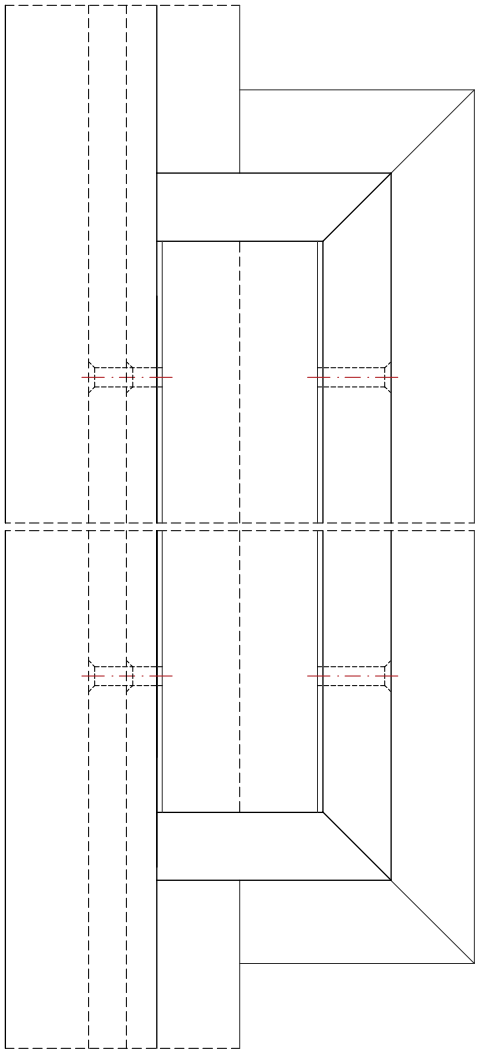
A) Saldatura
B) Sigillatura
C) Fissaggio con viti M4x25 ISO10642

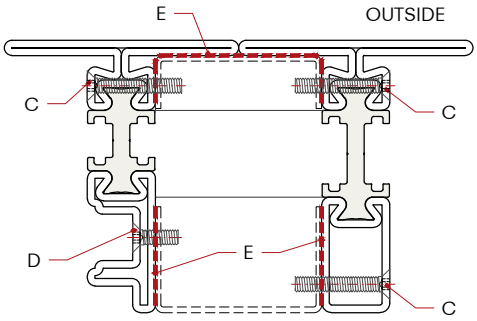
A) Soldadura
B) Agente sellante
C) Fijación con tornillos M4x25 ISO10642

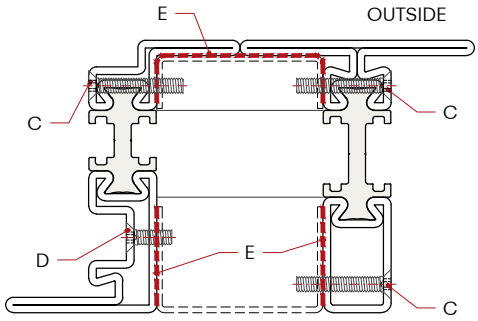
A



B







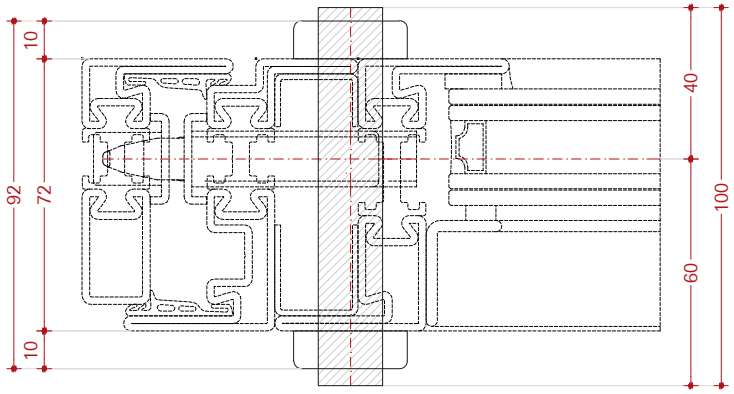
A) Locking box open out
B) Locking box open in
C) Fastening with M4x25 ISO10642 screws
D) Fastening with M4x12 ISO10642 screws
E) Sealant

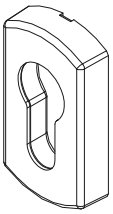
A) Scatola serratura apertura esterna
B) Scatola serratura apertura interna
C) Fissaggio con viti M4x25 ISO10642
D) Fissaggio con viti M4x12 ISO10642
E) Sigillatura

A) Cerradura apertura hacia fuera
B) Cerradura apertura hacia dentro
C) Fijación con tornillos M4x25 ISO10642
D) Fijación con tornillos M4x12 ISO10642
E) Agente sellante

Cylinder combinations
Combinazioni cilindro
Combinaciones cilindro

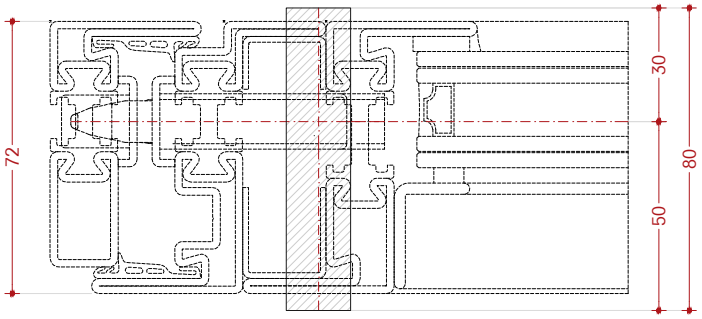
B99172-02 - MT 7218ZR-nn / MT 7218ZF-nn

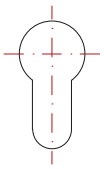




700910 nn

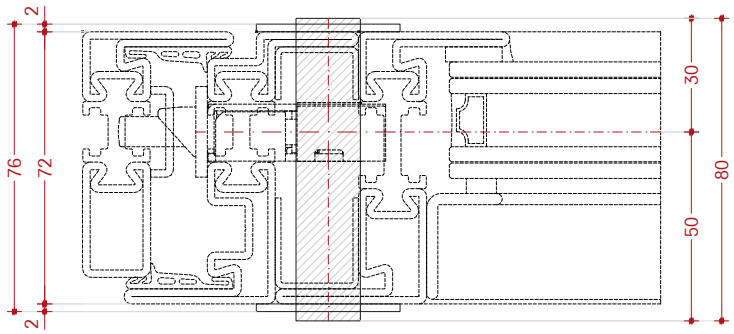
B99172-02 - MT 7218ZR-nn / MT 7218ZF-nn

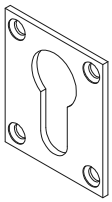




Cylinder without escutcheon
Cilindro senza bocchetta
Cilindro sin roseta

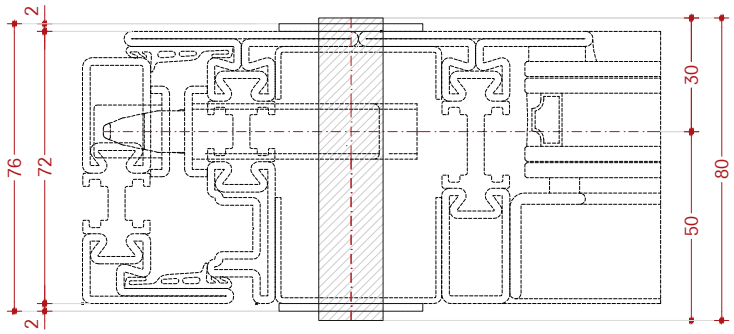
B99006-02 - MT 7218ZR-nn / MT 7218ZF-nn

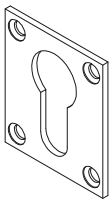




750070nn

B99172-02 - MT 7218TZ-nn / MT 7218TF-nn





750070nn

Glazing

Vetrazione

Acristalamiento

5.12

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legenda

+ = Anta fissa
—— = Apertura interna
- - - = Apertura esterna
Misure in: mm
Scala 1:1 - 1:2

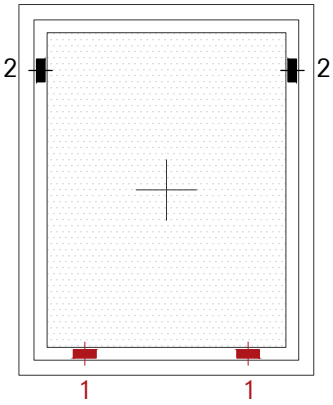
Leyenda

+ = Fijo
—— = Apertura interna
- - - = Apertura externa
Medidas en: mm
Escala 1:1 - 1:2

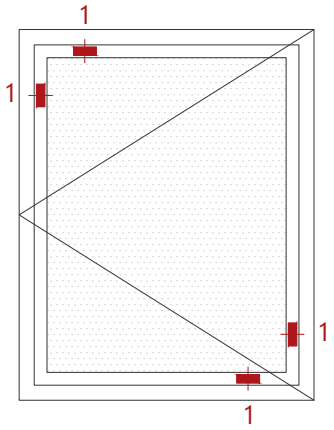
Installation
Glazing

Montaggio
Vetrazioni

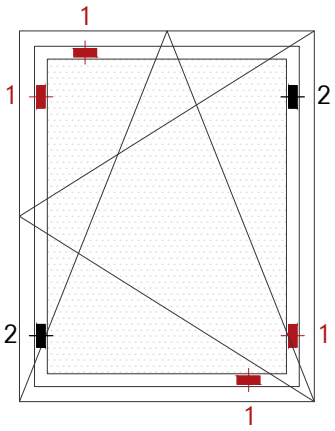
Montaje
Acristalamiento



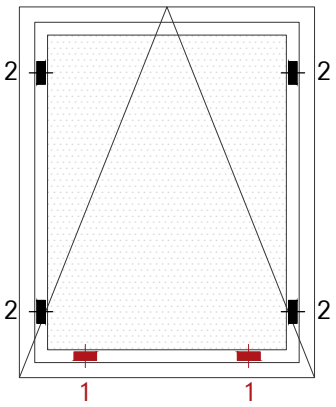
Fixed window (Windows and doors)
Finestra fissa (Serramenti esterni)
Ventana fija (Ventanas y puertas)



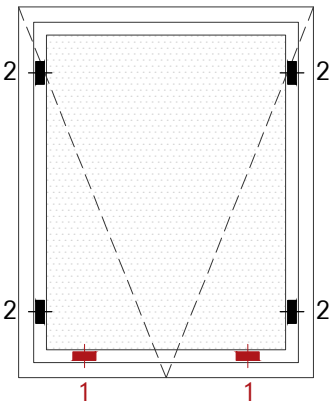
Single leaf window open in and open out
Finestra a un battente apertura interna e esterna
Ventana de una hoja que se abre hacia dentro y fuera



Single leaf window
Finestra a un battente
Ventana de una hoja



Bottom hung window open in
Finestra vasistas apertura interna
Ventana oscilante que se abre hacia dentro

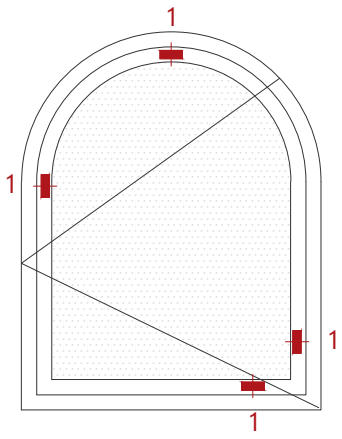


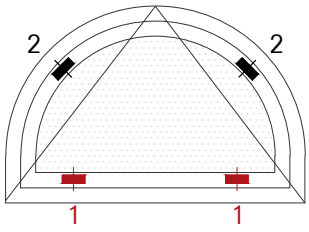
Top hung projecting window open out
Finestra a sporgere apertura esterna
Ventana proyectante que se abre hacia fuera

1) Support shims
2) Distance shims

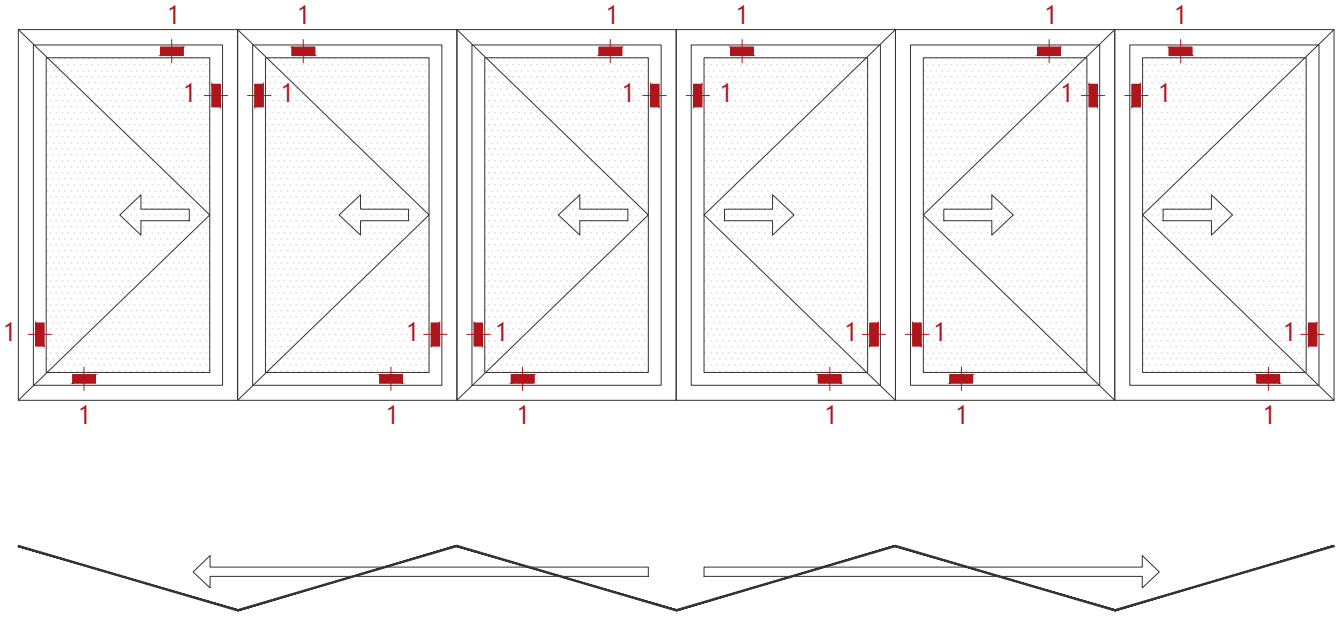
1) Spessori di supporto
2) Spessori di distanza

1) Espesores de soporte
2) Calzas de distancia





Single leaf window open in and open out	Open in bottom hung window
Finestra a un battente apertura interna e esterna	Finestra vasistas apertura interna
Ventana de una hoja que se abre hacia dentro y fuera	Ventana oscilante que se abre hacia dentro

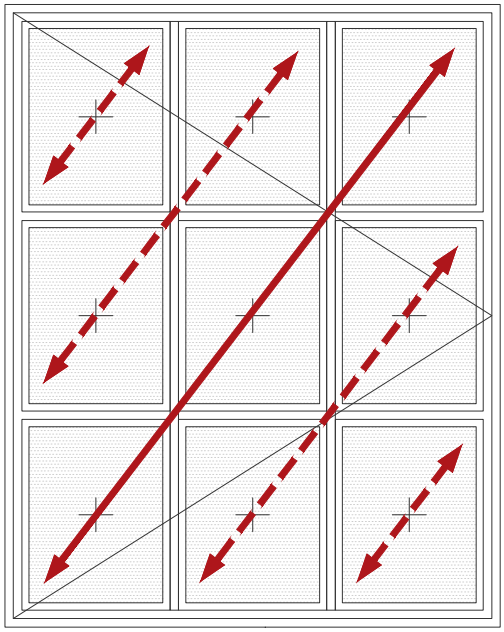


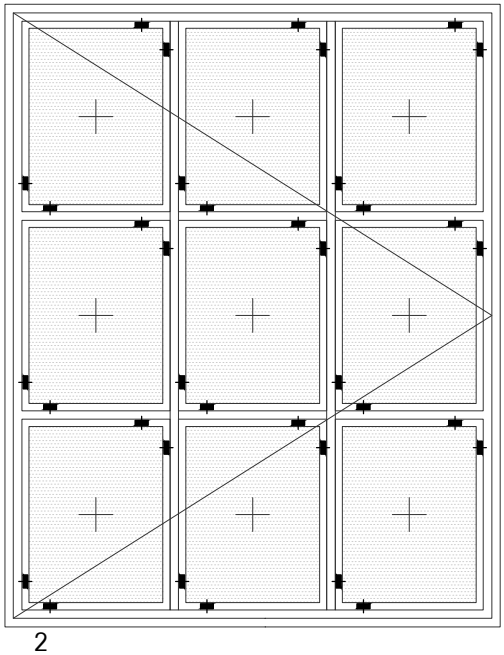
Bi-folding door system 6 leaves (3+3 leaves)
Sistema di porte a libro 6 ante (3+3 ante)
Sistema de puerta plegable 6 hojas (3+3 hojas)

1) Support shims
2) Distance shims

1) Spessori di supporto
2) Spessori di distanza

1) Espesores de soporte
2) Calzas de distancia





Single leaf window open in and open out

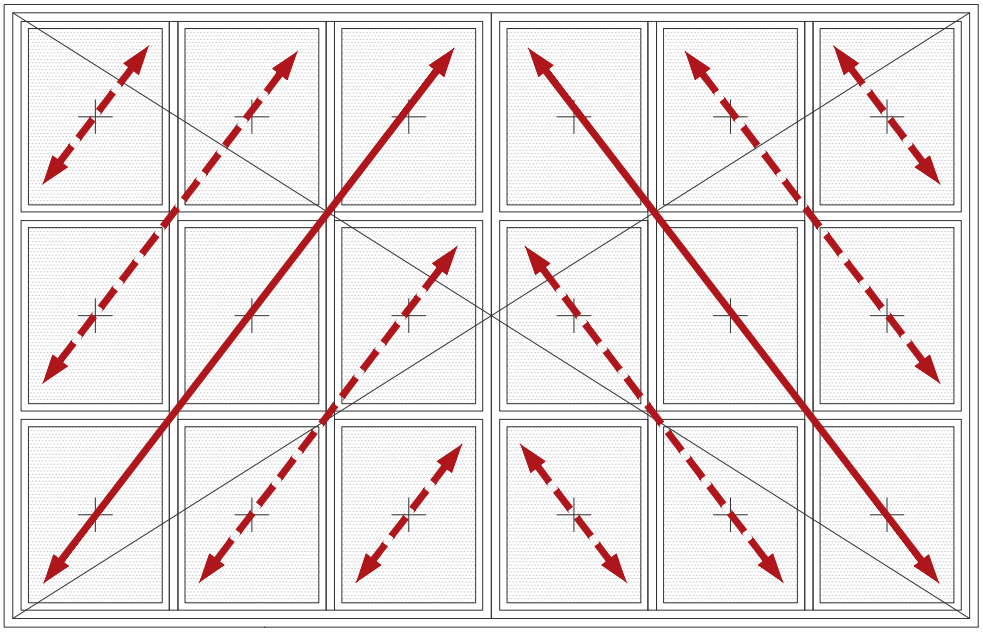
Finestra a un battente apertura interna ed esterna

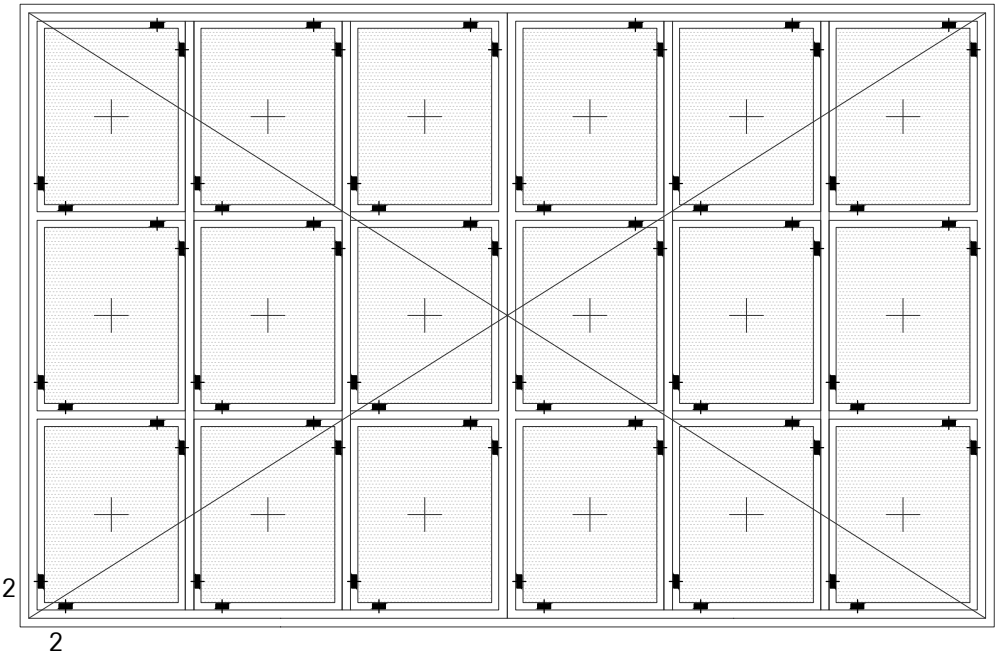
Ventana de una hoja que se abre hacia dentro y fuera

2) Distance shims

2) Spessori di distanza

2) Calzas de distancia





Double leaf window open in and open out

Finestra a due battenti apertura interna ed esterna

Ventana de dos hojas que se abre hacia dentro y fuera

2) Distance shims

2) Spessori di distanza

2) Calzas de distancia

Installation
Glazing beads

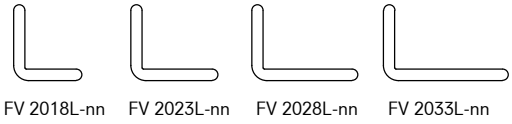
Montaggio
Fermavetri

Montaje
Junquillos

45° cutting of angled glazing beads and welding of the corners on the inside.

Taglio a 45° dei fermavetri angolari e saldatura degli angoli sul lato interno.

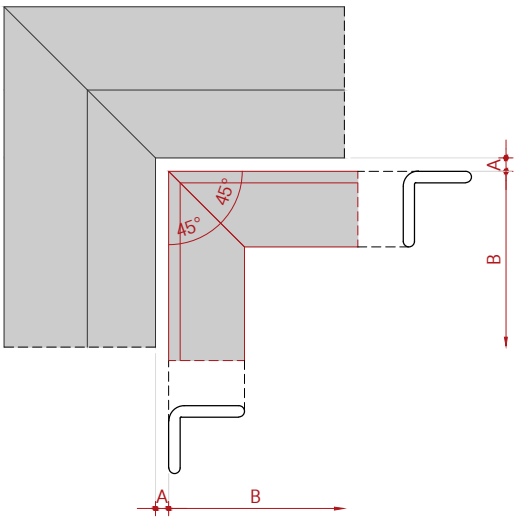
Corte de junquillos a 45° y soldado desde el interior.

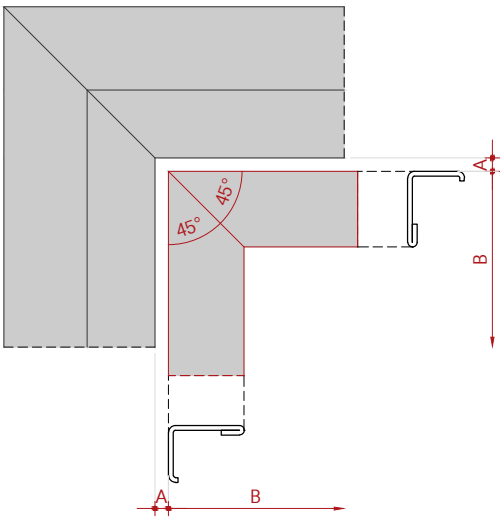


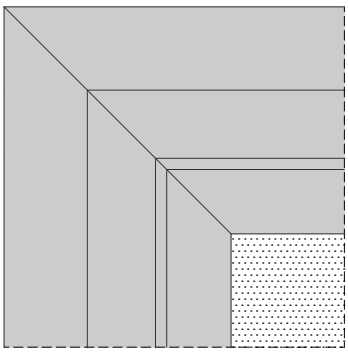
FV 2018L-nn FV 2023L-nn FV 2028L-nn FV 2033L-nn

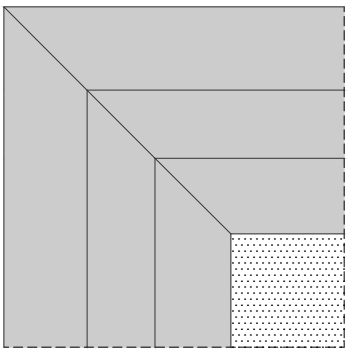
FV 2015A-nn FV 2018A-06 FV 2023A-06 FV 2028A-06 FV 2033A-06

FV 2003R-06









A) 0.5 mm inlay as gap
B) Cutting length

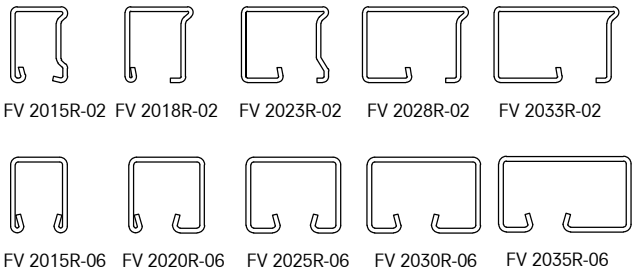
A) Aria di 0.5 mm
B) Lunghezza di taglio

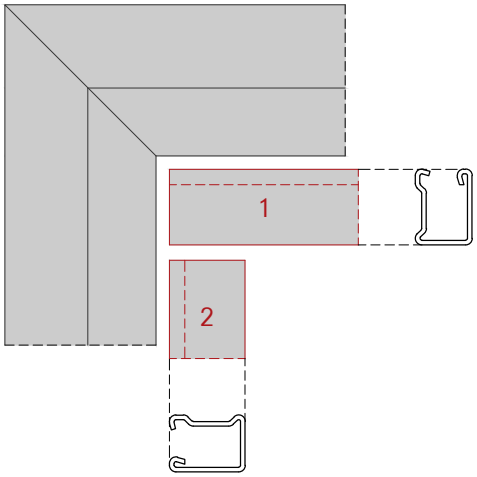
A) Inserto de 0.5 mm como distancia
B) Longitud de corte

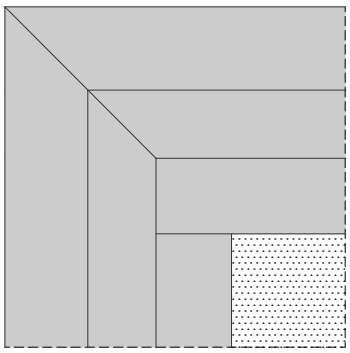
90° cutting of glazing beads.

Taglio a 90° dei fermavetri.

Corte de junquillos a 90°.



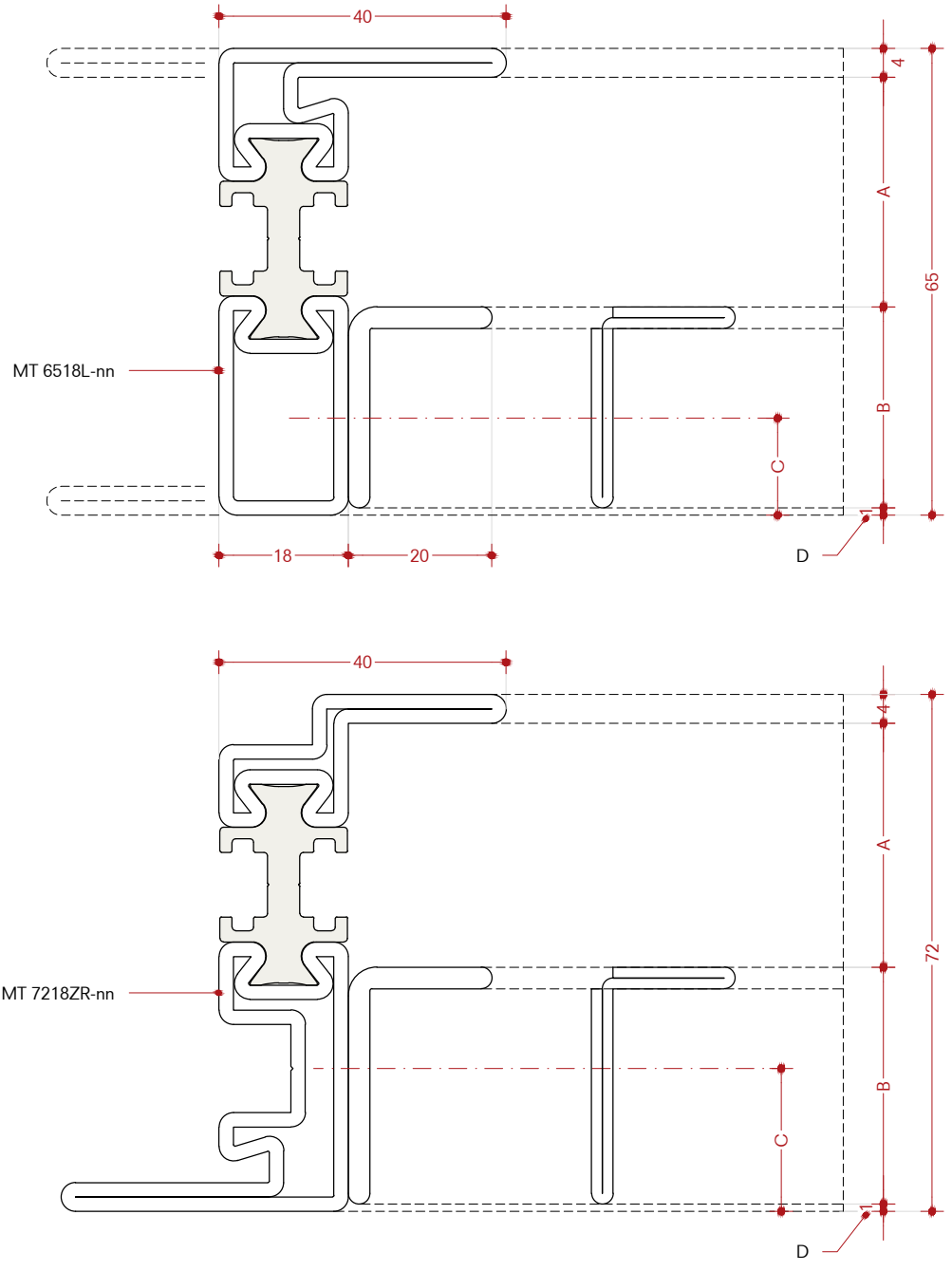




Installation
Glazing beads
Positioning of glazing bead

Montaggio
Fermavetri
Posizionamento fermavetro

Montaje
Junquillos
Colocación de junquillo



Dimensions see chapter 2.3
"Glazing table"

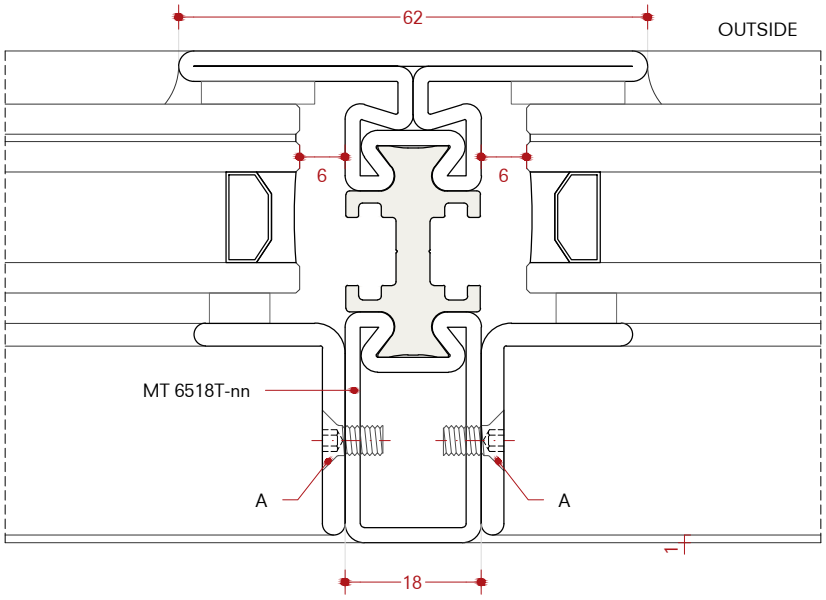
A) Glazing including internal gasket and external gasket
B) Depth of glazing bead
C) Position of the screw connection
D) Positioning of the glazing bead: recommendation offset 1 mm

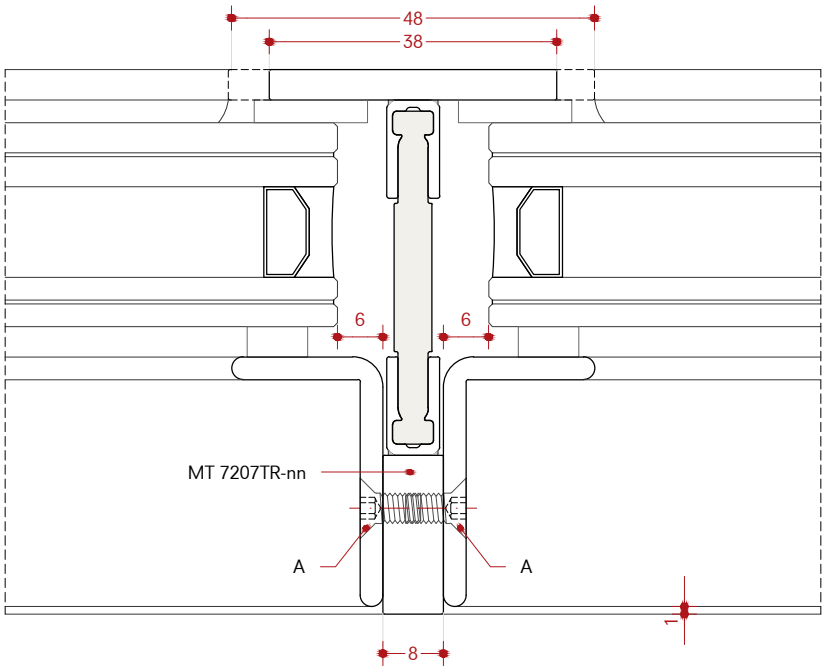
Dimensioni vedi capitolo 2.3
"Tabella vetrazioni"

A) Vetri comprensivi di guarnizione interna e guarnizione esterna
B) Profondità del fermavetro
C) Posizione della vite di fissaggio
D) Posizionamento del fermavetro: offset consigliato 1 mm

Dimensiones ver capítulo 2.3
"Tabla de acristalamiento"

A) Acristalamiento que incluye junta interna y junta externa
B) Profundidad del cordón de acristalamiento
C) Posición de tornillo
D) Posicionamiento del cordón de acristalamiento: recomendación de compensación 1 mm





A) Screws D99815-03 - D99867-03 - D99866-03

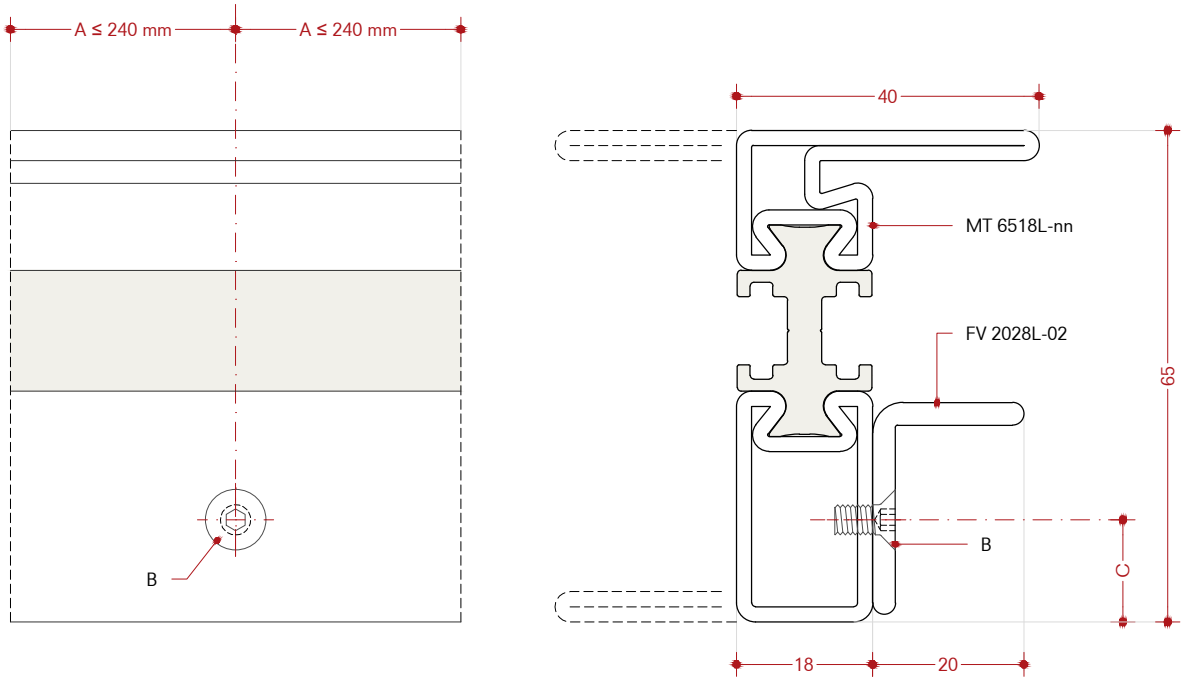
A) Viti D99815-03 - D99867-03 - D99866-03

A) Tornillos D99815-03 - D99867-03 - D99866-03

Installation
Glazing beads
Positioning of the fixing screws

Montaggio
Fermavetri
Posizionamento viti di fissaggio

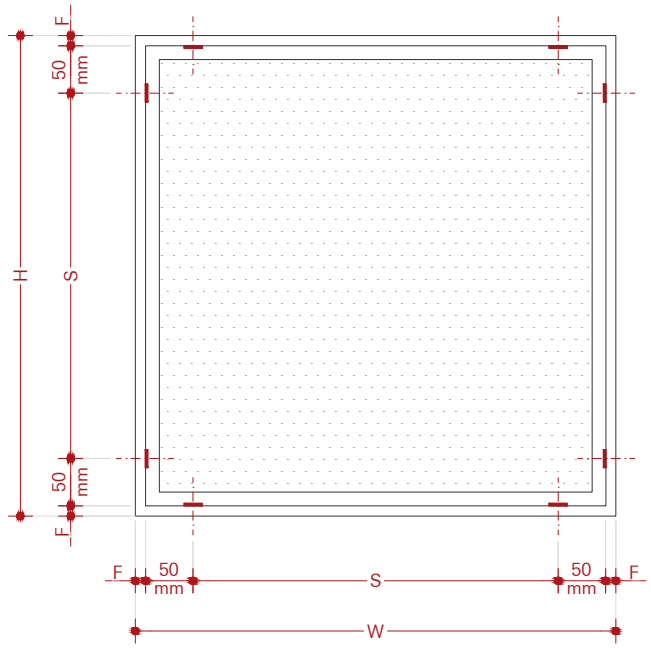
Montaje
Junquillos
Colocación de tornillos

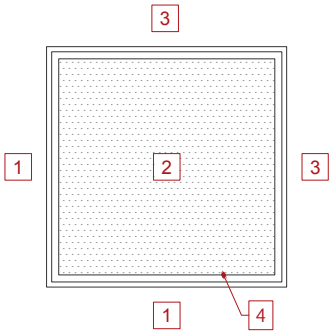


A) Maximum fixing distance
B) Fastening with fixing screw see chapter 2.3 "Glazing table"
C) Position of the screw connection see chapter 2.3 "Glazing table"

A) Distanza massima di fissaggio
B) Vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
C) Posizione vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"

A) Distancia máxima de fijación
B) Fijación con tornillo ver capítulo 2.3 "Tabla de acristalamiento"
C) Posición de tornillo ver capítulo 2.3 "Tabla de acristalamiento"





Assembly sequence

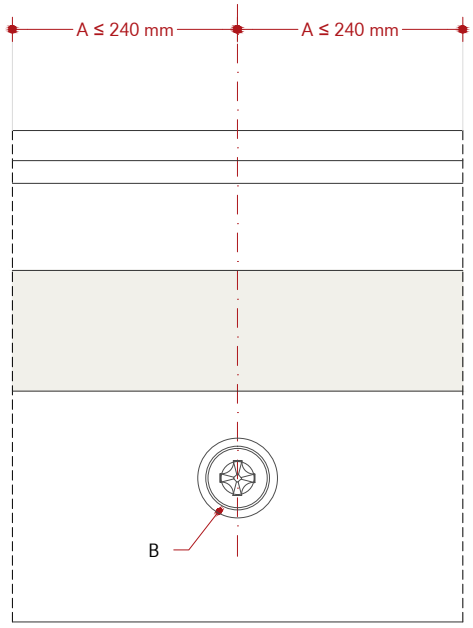
1) Prepare the screws on two sides.
2) Install the glass.
3) Install the screws on the other sides.
4) Install the snap-on glazing beads.

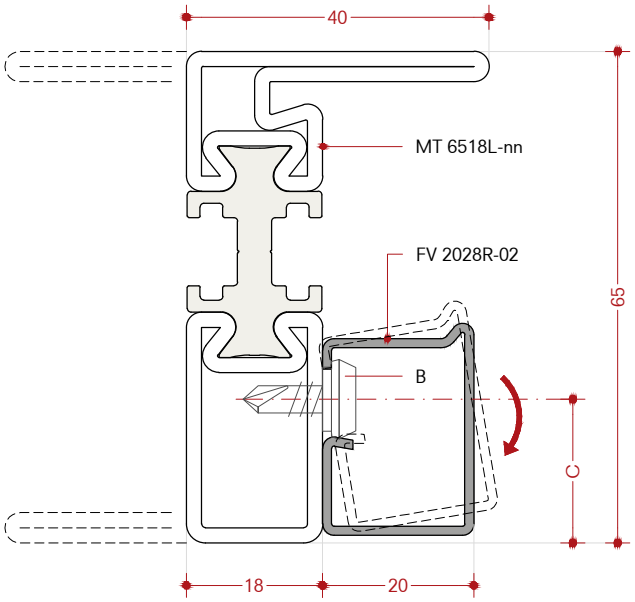
Sequenza di montaggio

1) Predisporre le viti su due lati.
2) Installare il vetro.
3) Installare le viti sui lati rimanenti.
4) Installare i fermavetri a scatto.

Secuencia de montaje

1) Prepare los tornillos en dos lados.
2) Instale el vidrio.
3) Instale los tornillos en los lados restantes.
4) Instale los junquillos a presión.





NOTE:

We suggest to fix the bushes on the top and on the right side after the installation of the glass.

A) Maximum fixing distance
B) Fastening with fixing screw see chapter 2.3 "Glazing table"
C) Position of the screw connection see chapter 2.3 "Glazing table"
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

NOTA:

Suggeriamo di fissare le boccole sul lato superiore e sul lato destro dopo l'installazione del vetro.

A) Massima distanza di fissaggio
B) Vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
C) Posizione vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
F) Larghezza profilo interno
H) Altezza totale
S) Distanzatra le clips esterne
W) Larghezza totale

NOTA:

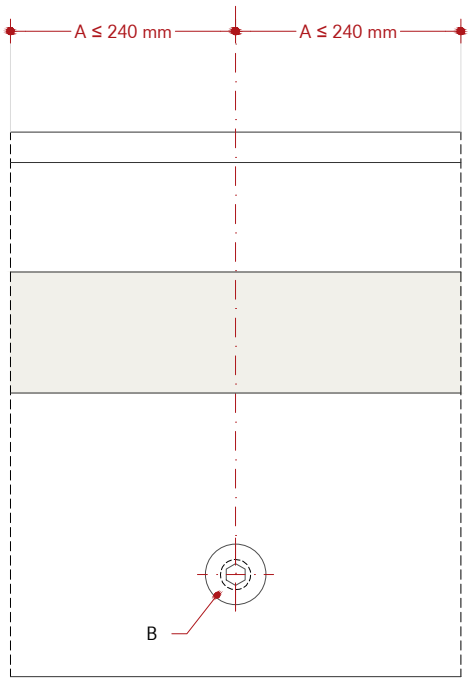
Sugerimos fijar los arbustos en la parte superior y en el lado derecho después de la instalación del vidrio.

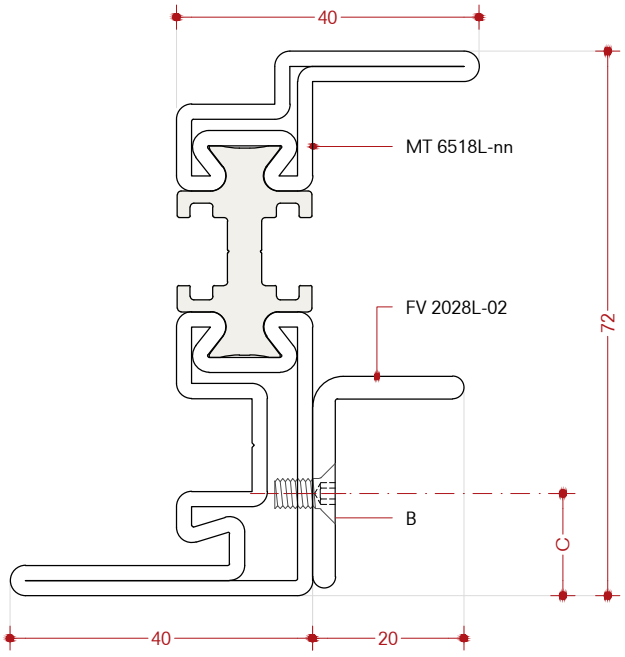
A) Distancia máxima de fijación
B) Fijación con tornillo ver capítulo 2.3 "Tabla de acristalamiento"
C) Posición de tornillo ver capítulo 2.3 "Tabla de acristalamiento"
F) Ancho del perfil interno
H) Altura total
S) Distancia entre clips externos
W) Ancho total

Installation
Glazing beads
Positioning of the fixing screws

Montaggio
Fermavetri
Posizionamento viti di fissaggio

Montaje
Junquillos
Colocación de tornillos

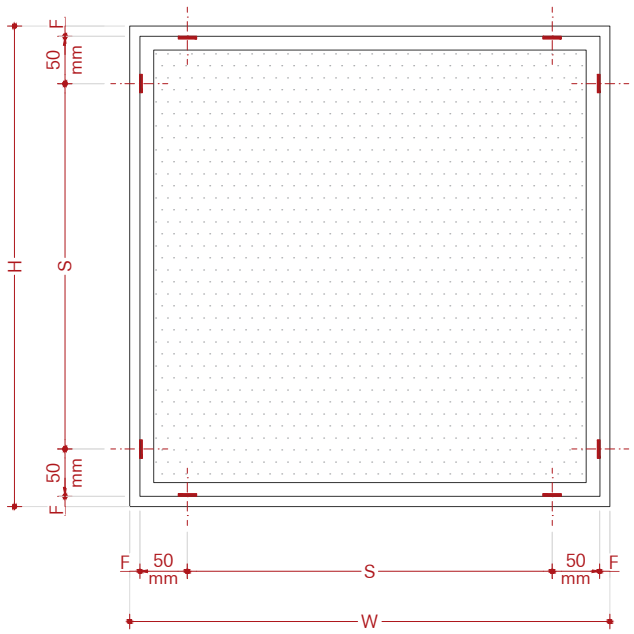


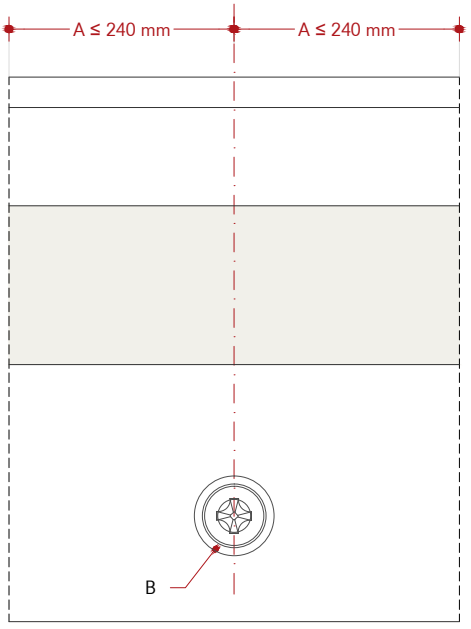


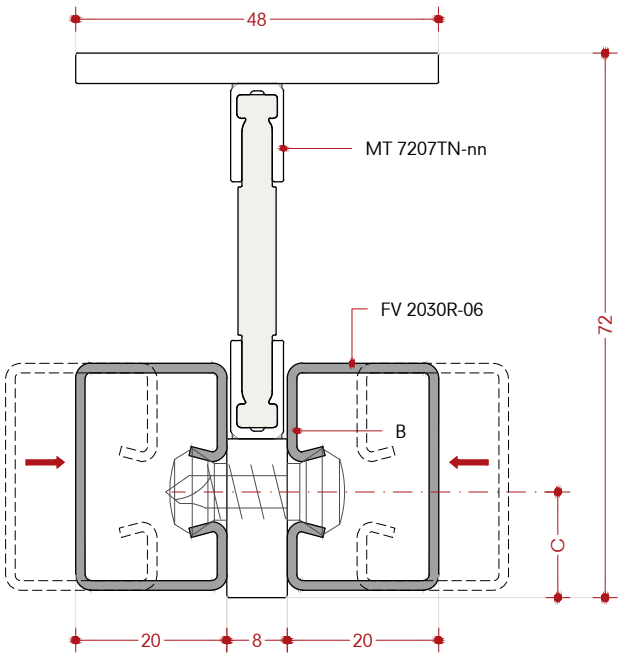
A) Maximum fixing distance
B) Fastening with fixing screw see chapter 2.3 "Glazing table"
C) Position of the screw connection see chapter 2.3 "Glazing table"

A) Distanza massima di fissaggio
B) Vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
C) Posizione vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"

A) Distancia máxima de fijación
B) Fijación con tornillo ver capítulo 2.3 "Tabla de acristalamiento"
C) Posición de tornillo ver capítulo 2.3 "Tabla de acristalamiento"







NOTE:
Offset 10 mm fixing position.

We suggest to fix the bushes on the top and on the right side after the installation of the glass.

A) Maximum fixing distance
B) Fastening with fixing screw see chapter 2.3 "Glazing table"
C) Position of the screw connection see chapter 2.3 "Glazing table"
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

NOTA:
Posizione di fissaggio scarto 10 mm

Suggeriamo di fissare le boccole sul lato superiore e sul lato destro dopo l'installazione del vetro.

A) Massima distanza di fissaggio
B) Vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
C) Posizione vite di fissaggio vedi capitolo 2.3 "Tabella vetrazioni"
F) Larghezza profilo interno
H) Altezza totale
S) Distanzatra le clips esterne
W) Larghezza totale

NOTA:
Posición de fijación offset 10 mm

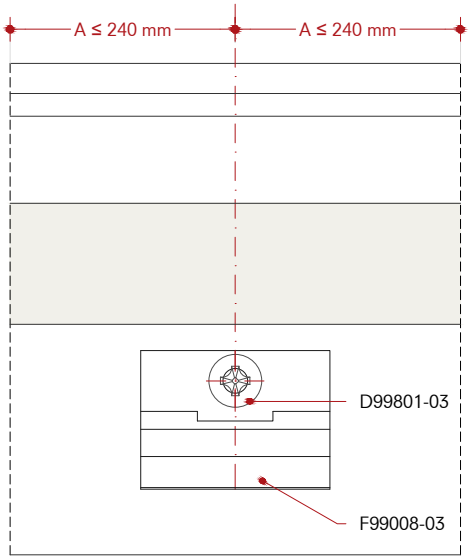
Sugerimos fijar los arbustos en la parte superior y en el lado derecho después de la instalación del vidrio.

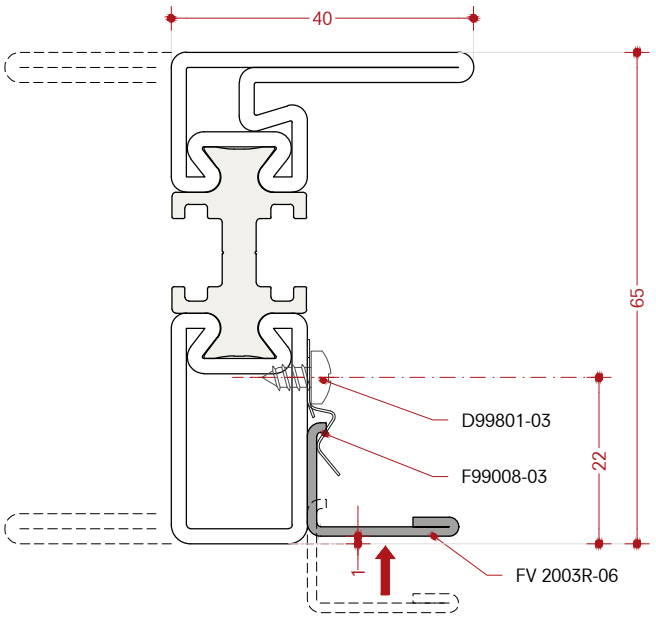
A) Distancia máxima de fijación
B) Fijación con tornillo ver capítulo 2.3 "Tabla de acristalamiento"
C) Posición de tornillo ver capítulo 2.3 "Tabla de acristalamiento"
F) Ancho del perfil interno
H) Altura total
S) Distancia entre clips externos
W) Ancho total

Installation
Glazing beads
Fastening of clips F99008-03
with screws D99801-03

Montaggio
Fermavetri
Posizionamento clips F99008-03
con viti D99801-03

Montaje
Junquillos
Colocación de clips F99008-03
con tornillos D99801-03

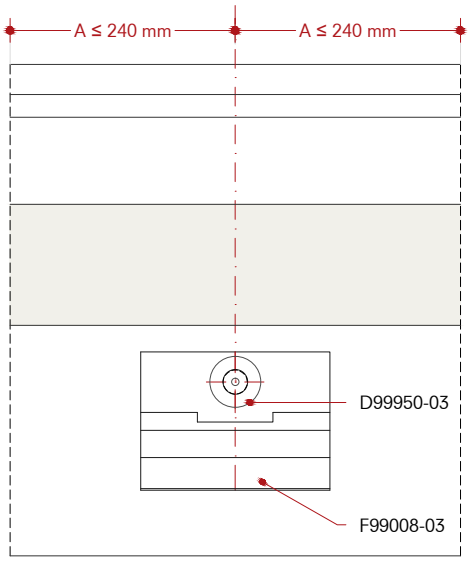


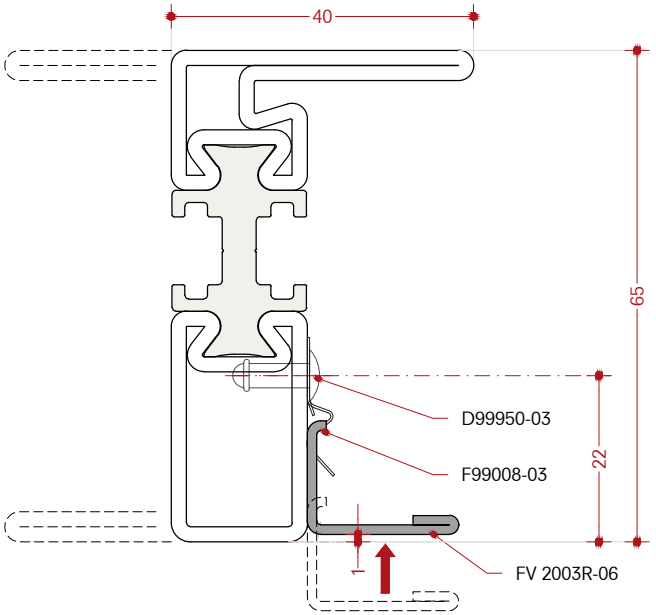


Fastening of clips F99008-03
With rivet D99950-03

Posizionamento clips F99008-03
con rivetto D99950-03

Colocación de clips F99008-03
con remache D99950-03

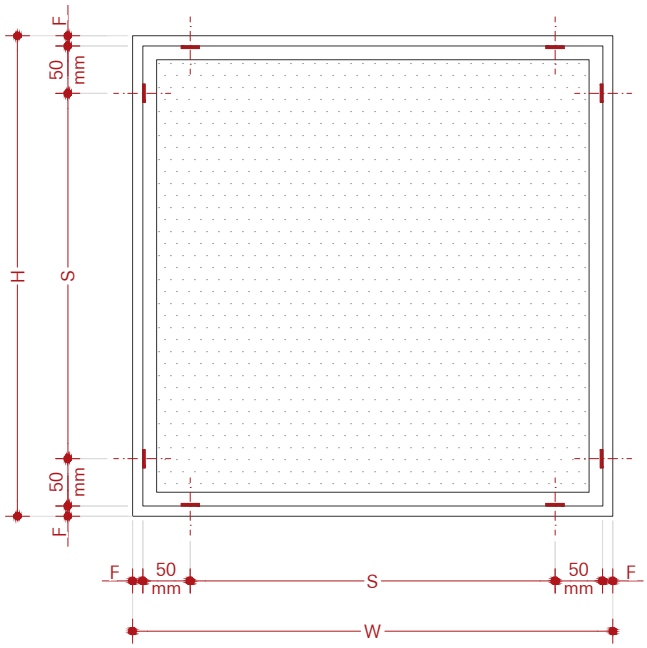


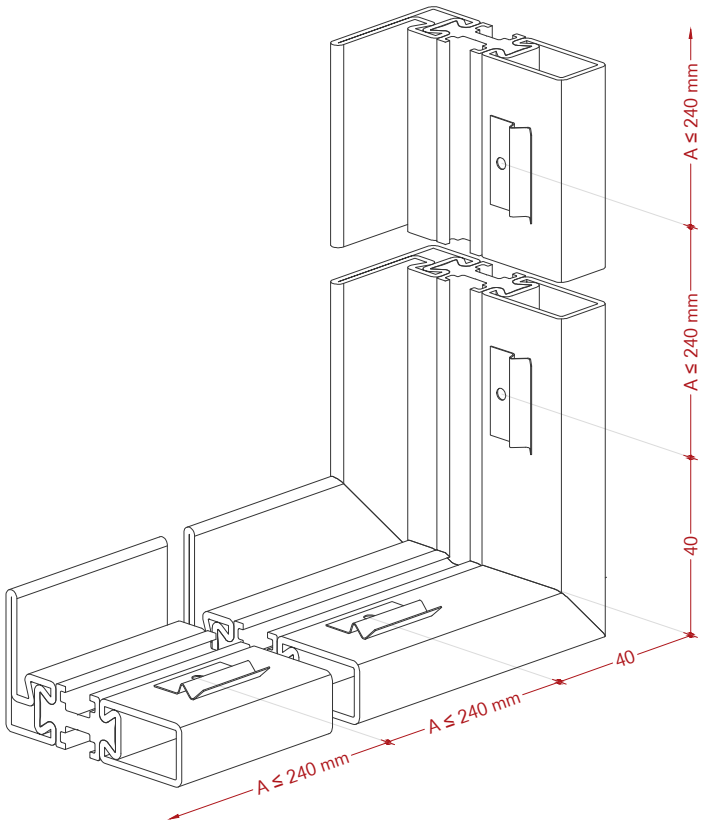


A) Maximum fixing distance

A) Distanza massima di fissaggio

A) Distancia máxima de fijación





A) Maximum fixing distance
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

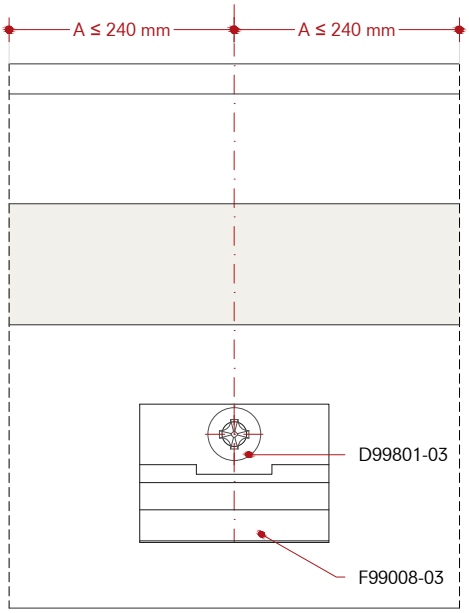
A) Massima distanza di fissaggio
F) Larghezza profilo interno
H) Altezza totale
S) Distanzatra le clips esterne
W) Larghezza totale

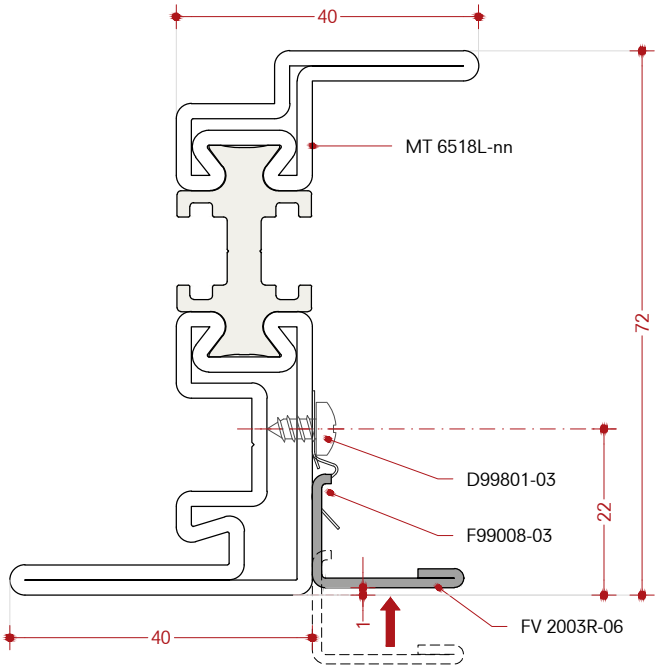
A) Distancia máxima de fijación
F) Ancho del perfil interno
H) Altura total
S) Distancia entre clips externos
W) Ancho total

Installation
Glazing beads
Fastening of clips F99008-03
with screws D99801-03

Montaggio
Fermavetri
Posizionamento clips F99008-03
con viti D99801-03

Montaje
Junquillos
Colocación de clips F99008-03
con tornillos D99801-03

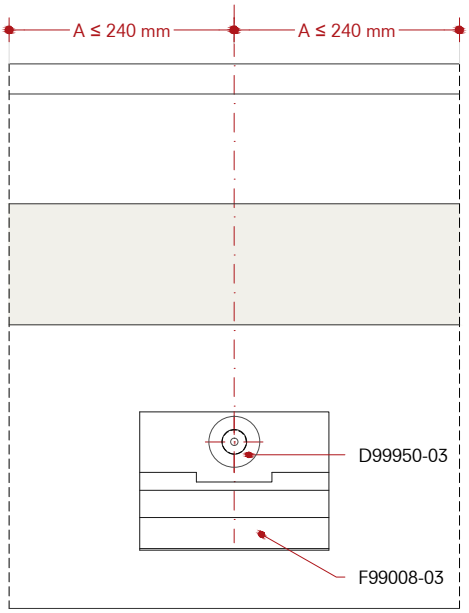


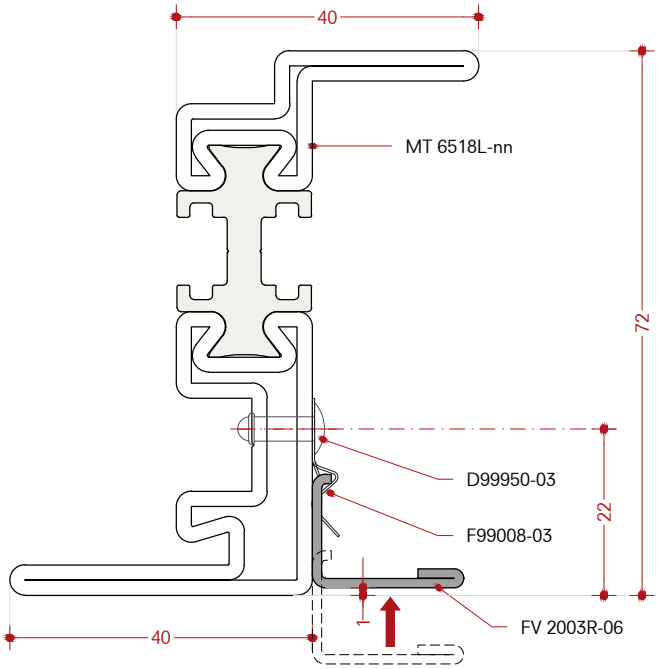


Fastening of clips F99008-03
With rivet D99950-03

Posizionamento clips F99008-03
con rivetto D99950-03

Colocación de clips F99008-03
con remache D99950-03

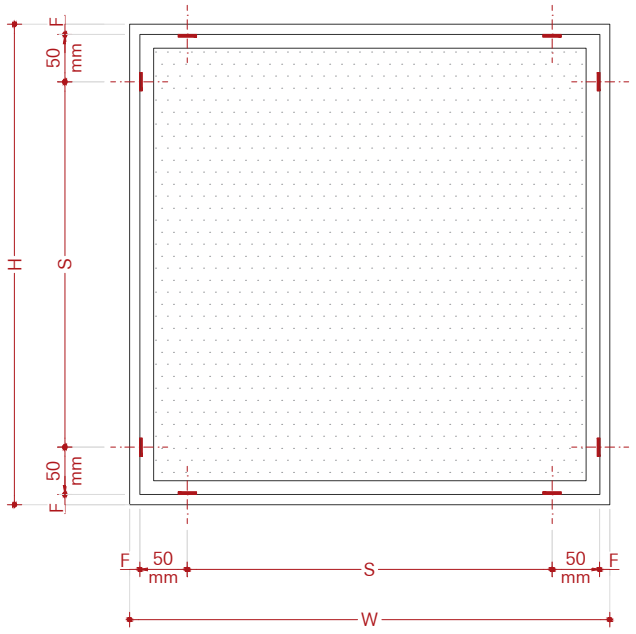


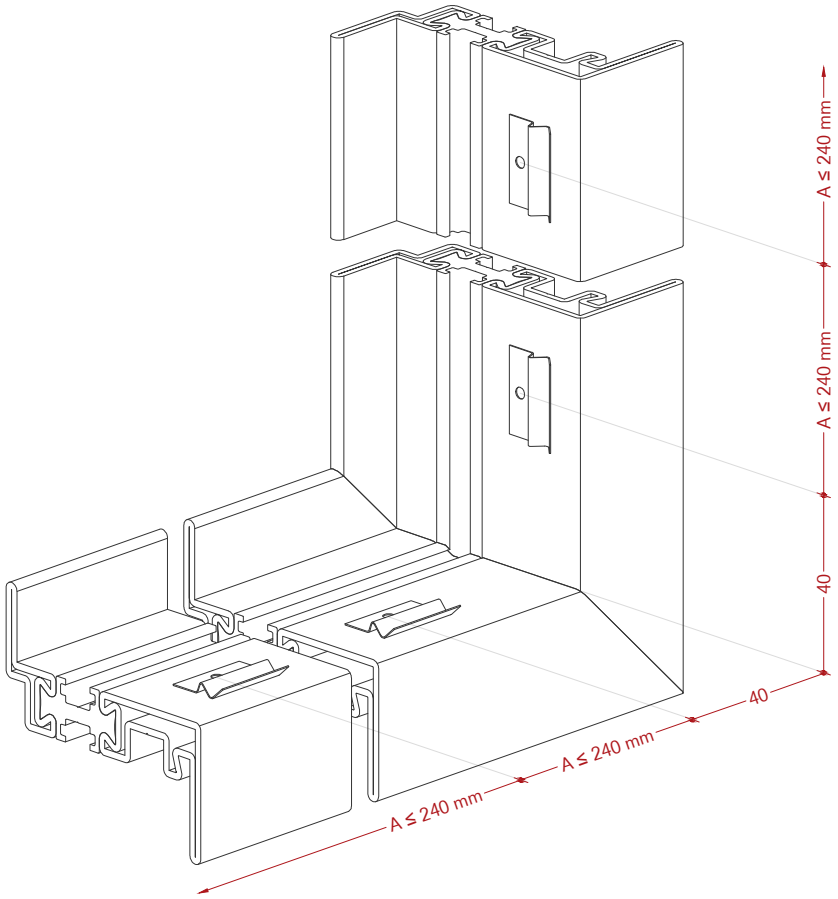


A) Maximum fixing distance

A) Distanza massima di fissaggio

A) Distancia máxima de fijación





A) Maximum fixing distance
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

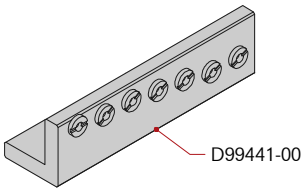
A) Massima distanza di fissaggio
F) Larghezza profilo interno
H) Altezza totale
S) Distanzatra le clips esterne
W) Larghezza totale

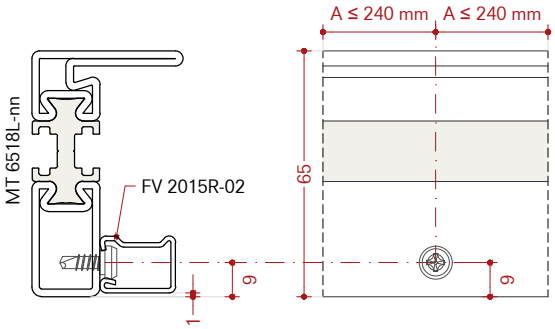
A) Distancia máxima de fijación
F) Ancho del perfil interno
H) Altura total
S) Distancia entre clips externos
W) Ancho total

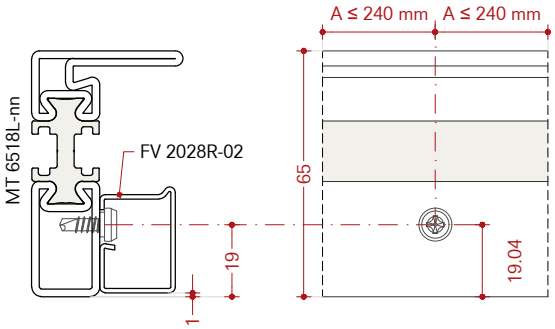
Installation
Template D99441-00
for FV 20XXR-02 glazing beads

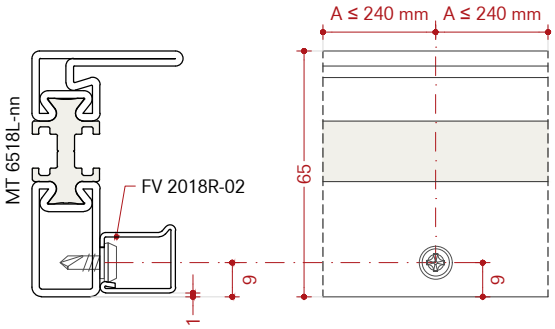
Montaggio
Dima D99441-00
per fermavetri FV 20XXR-02

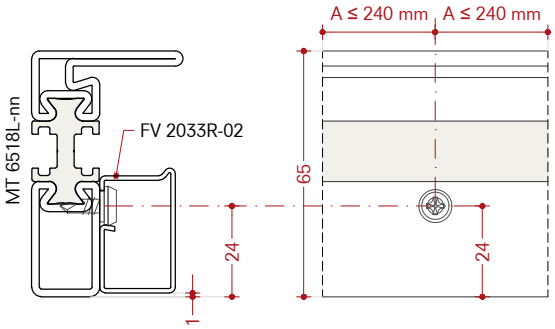
Montaje
Plantilla D99441-00
para junquillos FV 20XXR-02

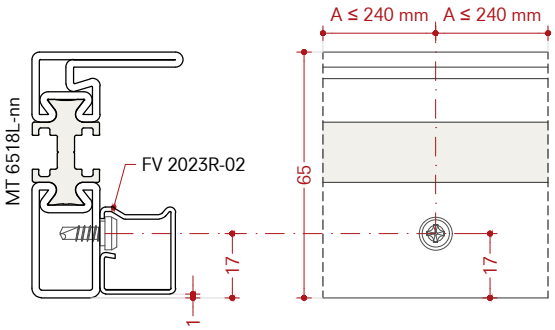


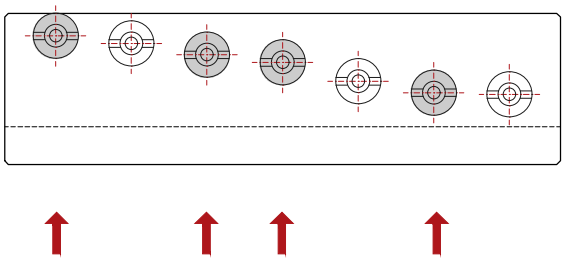


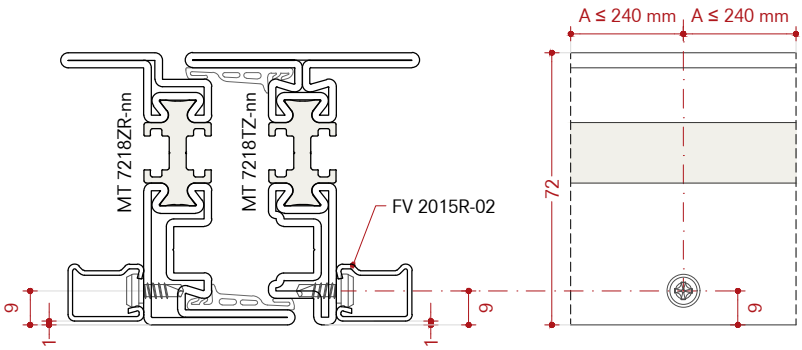








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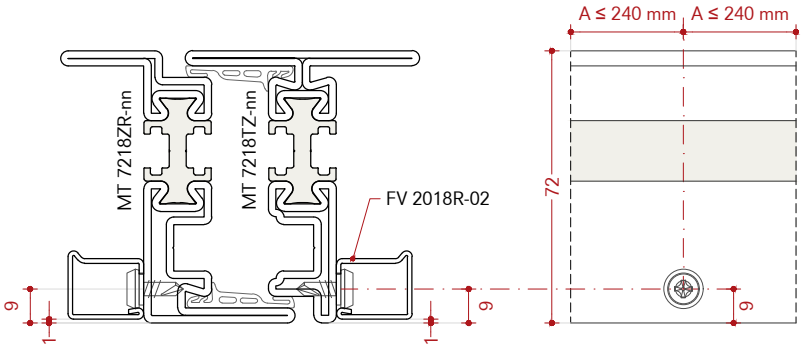
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FV 2018R-02
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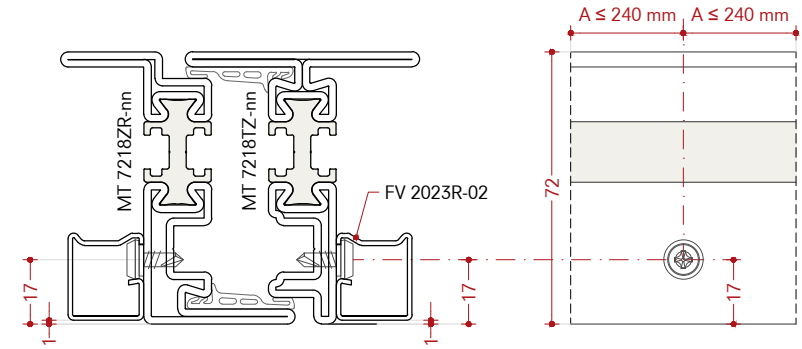
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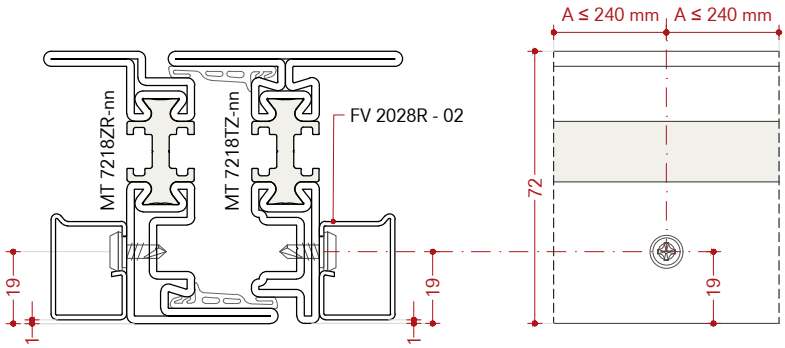
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FV 2028R - 02
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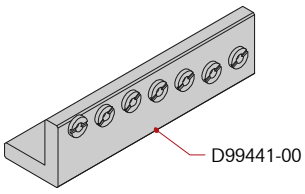
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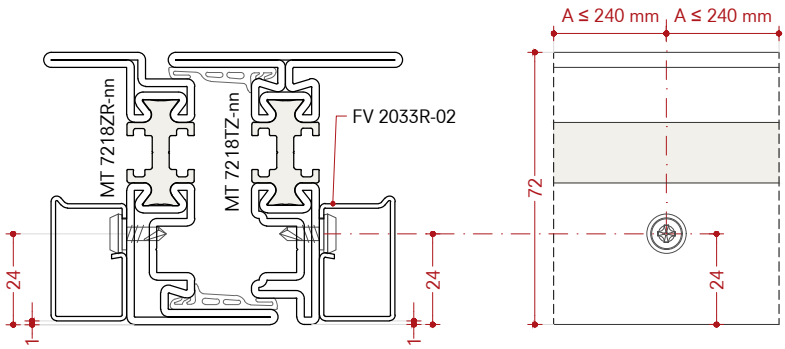
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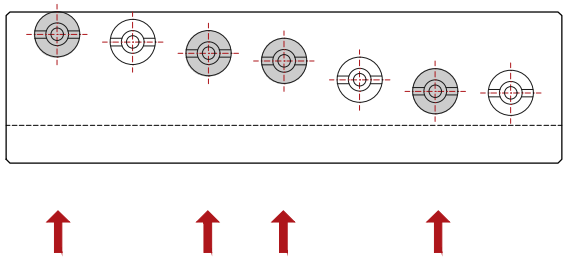
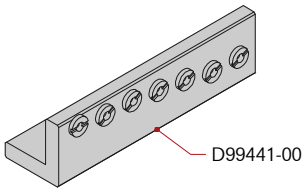
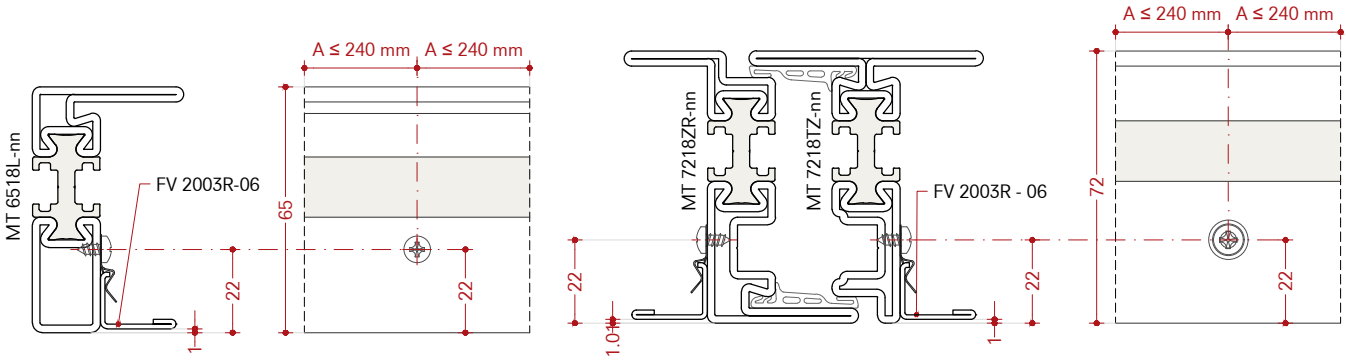


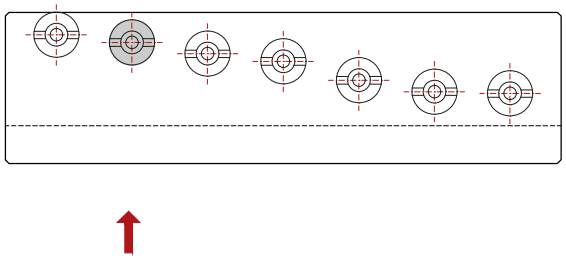
Installation
Template D99441-00
for FV 2003R-06 glazing beads

Montaggio
Dima D99441-00
per fermavetri FV 2003R-06

Montaje
Plantilla D99441-00
para junquillos FV 2003R-06



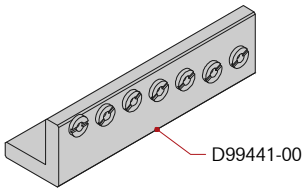


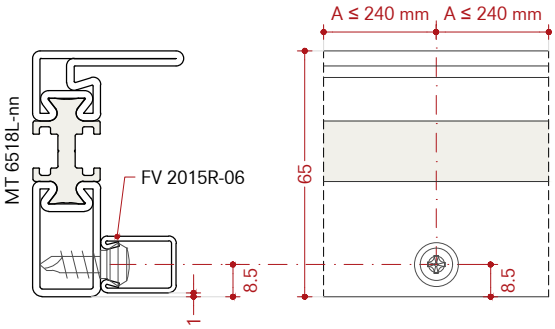


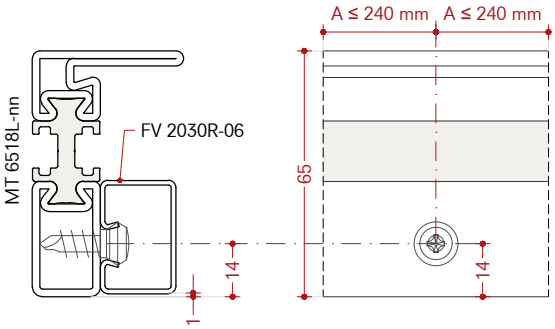
Installation
Template D99441-00
for FV 20XXR-06 glazing beads

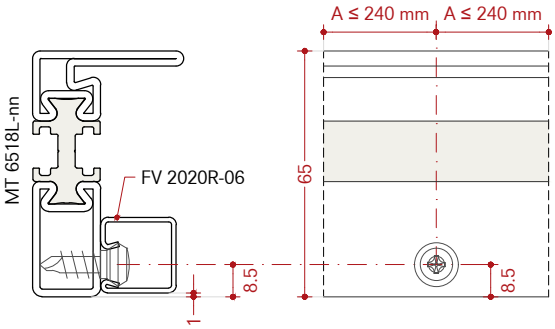
Montaggio
Dima D99441-00
per fermavetri FV 20XXR-06

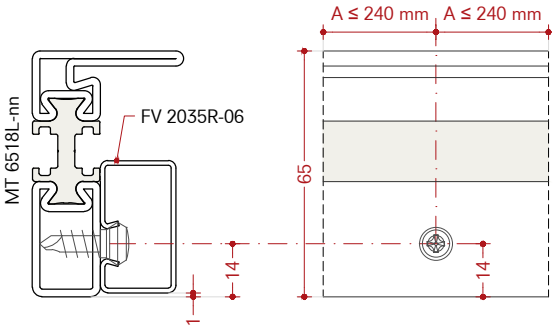
Montaje
Plantilla D99441-00
para junquillos FV 20XXR-06

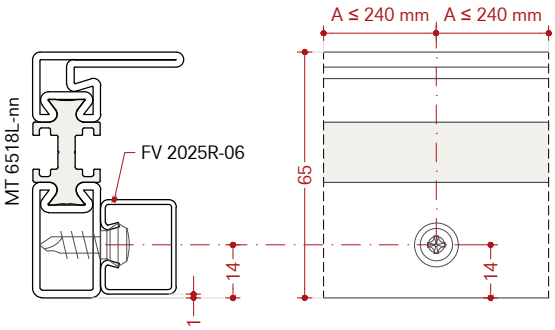


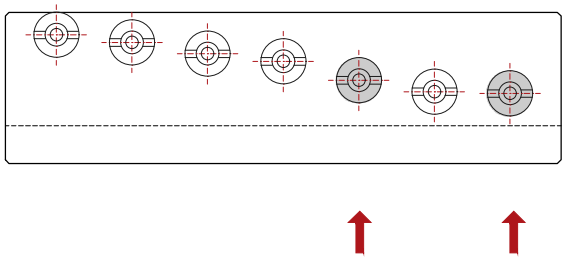


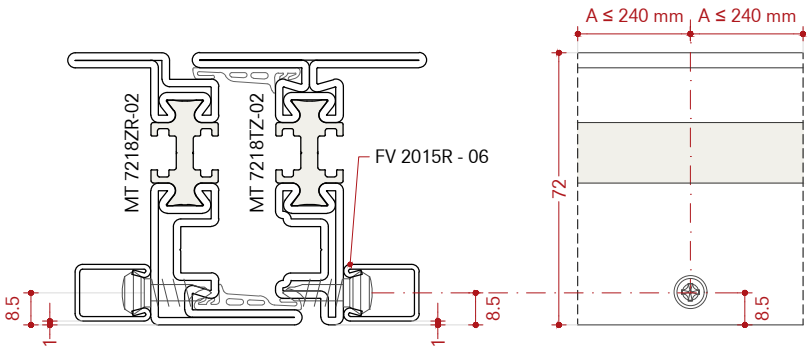








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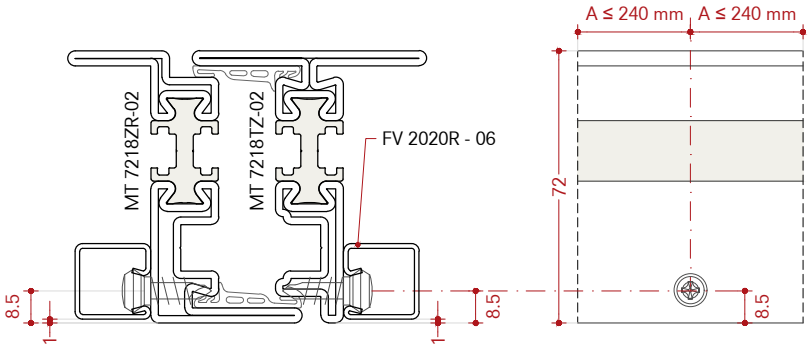
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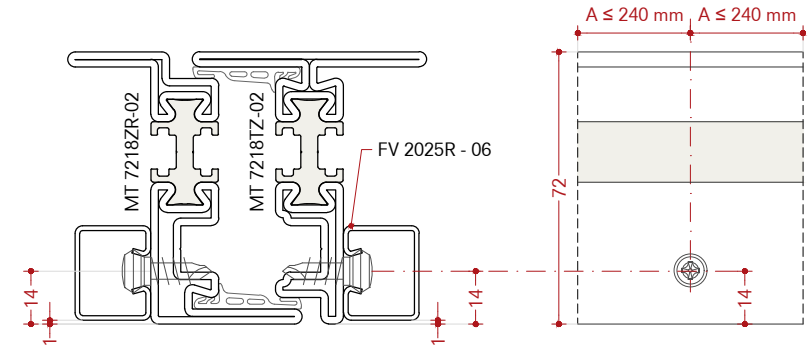
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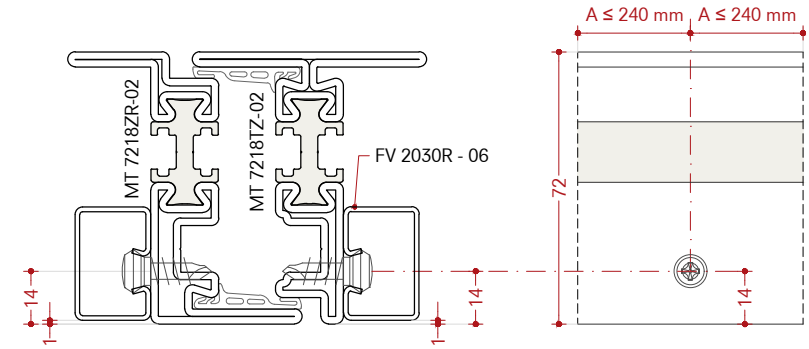
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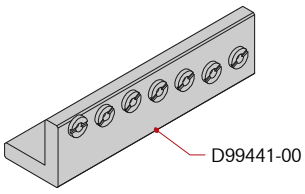
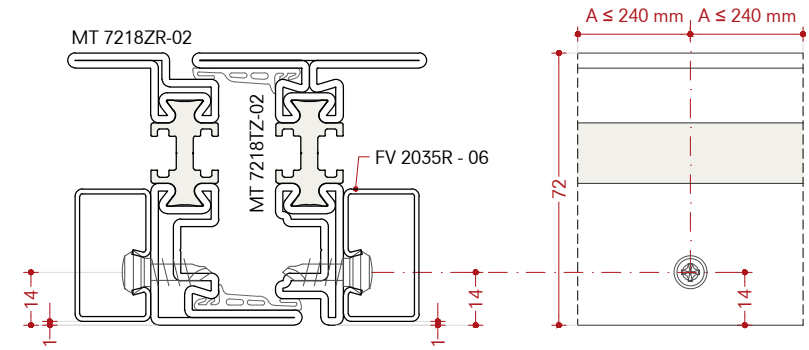

D99441-00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FV 2035R - 06
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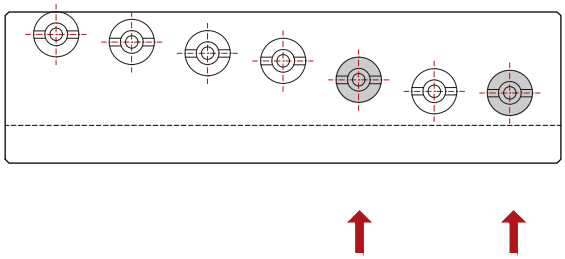


General technical instructions

Indicazioni tecniche generali

Instrucciones técnicas generales

6.0

Ventilation glazing rebate — Ventilazione vetrocamera — Ventilación del acristalamiento — 6.1
Bending radius — Raggi di curvatura — Radios de curvatura — 6.2
Coating — Verniciatura — Pintura — 6.3

Ventilation glazing rebate

Ventilazione vetrocamera

Ventilación del acristalamiento

6.1

Ventilation glazing rebate

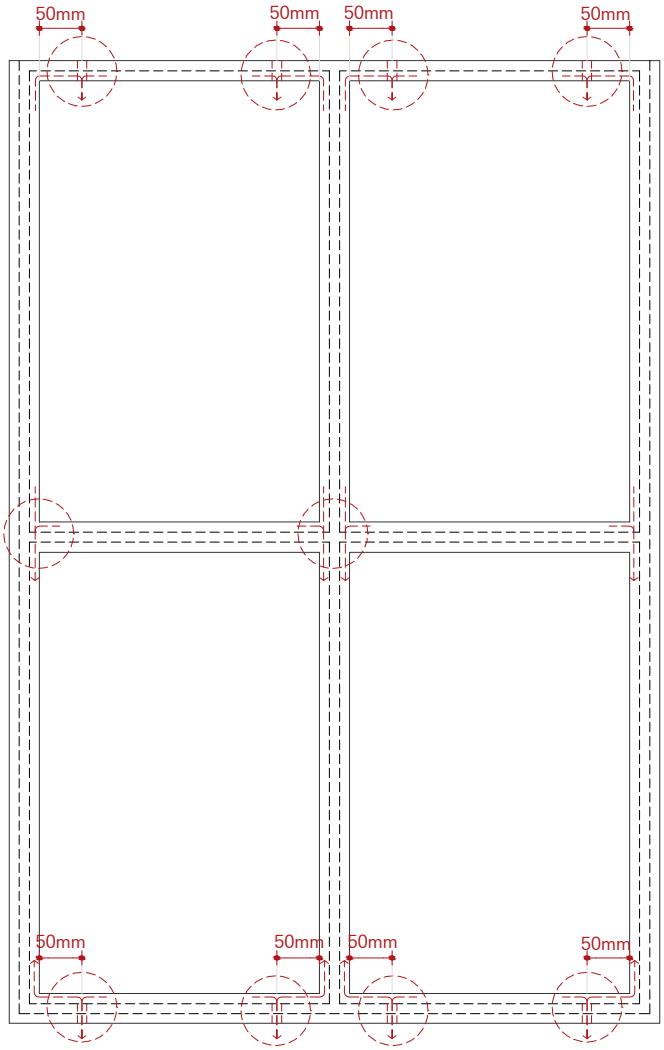
If there is a high chance of moisture forming in the glazing rebate, appropriate ventilation must be provided.
In such cases, drainage holes and outlets must be provided to enhance air circulation and to keep moisture away from the insulated glazing.

Ventilazione vetrocamera

Se esiste un'alta possibilità di formazione di umidità nella battuta del vetro, deve essere fornita un'adeguata ventilazione.
In tal caso, devono essere previsti fori di drenaggio e aerazione per migliorare la circolazione dell'aria ed evitare formazione di umidità sui vetri isolanti.

Ventilación del acristalamiento

Si existe una alta probabilidad de que se forme humedad el galce del acristalamiento, se debe proporcionar una ventilación adecuada.
En tales casos, se deben proporcionar orificios de drenaje y salidas para mejorar la circulación del aire y mantener la humedad alejada del acristalamiento aislado.



Bending radius | Raggi di curvatura | Radios de curvatura 6.2

Bending radius Raggi di curvatura Radios de curvatura

Fixed frames Telai fissi Marcos fijos		
Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
MT 6518L-nn	L profile Profilo a L L perfil	450 mm
MT 6518T-nn	T profile Profilo a T T perfil	500 mm
MT 6518Z-nn	Z profile Profilo a Z Z perfil	450 mm
MT 6518H-nn	H profile Profilo a H H perfil	500 mm
MT 7218LF-nn	L profile Profilo a L L perfil	450 mm
MT 8418SU-nn	I profile Profilo a I I perfil	450 mm

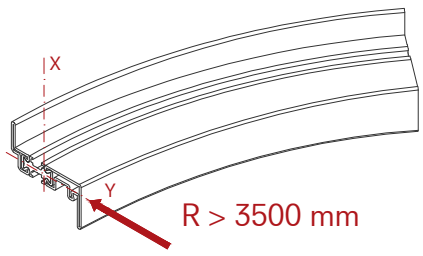
Window + Door Finestra + Porta Ventana + Puerta		
Profile Profilo Perfil	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
MT 7218TF-nn	T profile Profilo a T T perfil	500 mm
MT 7218ZF-nn	Z profile Profilo a Z Z perfil	450 mm
MT 7218HF-nn	H profile Profilo a H H perfil	500 mm
MT 7218TZ-nn	T profile Profilo a T T perfil	450 mm
MT 7218ZR-nn	Z profile Profilo a Z Z perfil	450 mm
MT 7218HZ-nn	H profile Profilo a H H perfil	500 mm
MT 7218LR-nn	L profile Profilo a L L perfil	450 mm

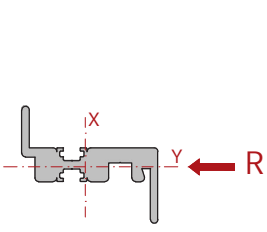
Fixed frames Telai fissi Marcos fijos		
Glazing bead Profilo fermavetro Marcos	Description Descrizione Descripción	Minimum radius Raggio minimo Radio mínimo
FV 2015R-02	Glazing bead Profilo fermavetro Marcos	500 mm
FV 2018R-02	"	500 mm
FV 2023R-02	"	500 mm
FV 2028R-02	"	500 mm
FV 2033R-02	"	500 mm
FV 2003R-06	"	500 mm
FV 2015R-06	"	500 mm
FV 2020R-06	"	500 mm
FV 2025R-06	"	500 mm
FV 2030R-06	"	500 mm
FV 2035R-06	"	500 mm
FV 2015A-nn	"	500 mm
FV 2018A-nn	"	500 mm
FV 2023A-nn	"	500 mm
FV 2028A-nn	"	500 mm
FV 2033A-nn	"	500 mm
FV 2018L-02	"	500 mm
FV 2023L-02	"	500 mm
FV 2028L-02	"	500 mm
FV 2033L-02	"	500 mm

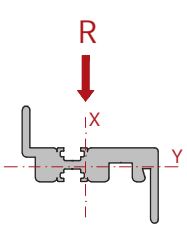
The bending along the x axis is allowed only for minimum radius of 3500 mm

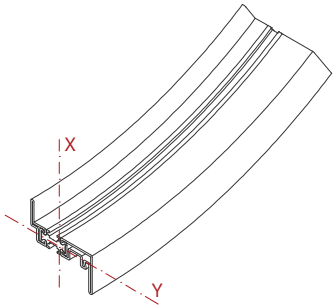
La calandratura lungo l'asse x è consentita solo per un raggio minimo di 3500 mm

El calandrado a lo largo del eje x está permitida solo para un radio mínimo de 3500 mm









Coating | Verniciatura | Pintura 6.3

Coating | Verniciatura a liquido | Pintura líquida

Painting procedure (ISO 12944) - based on Sherwin Williams liquid paints
Procedura di verniciatura (ISO 12944) - basata sulle vernici liquide Sherwin Williams
Procedimiento de pintura (ISO 12944) - basado en pinturas líquidas Sherwin Williams

Surface cleaning / Pulizia delle superfici / Limpieza de superficie

- Sand blast frames until metal gets almost white with grit Sa 2.5 for cycle C3-H/C4-M or sand blast frames until metal gets totally white with grit Sa 3 for cycle C5M-H.
- Clean up any debris of sand blasting with compressed air in order to obtain a perfectly cleaned surface.
- Apply the first primer layer within 2 hours from sand blasting or, in any case, before the oxidation process starts.

- Sabbiare i telai fino a quando il metallo diventa quasi bianco con graniglia Sa 2.5 per il ciclo C3-H/C4-M o sabbiare i telai fino a quando il metallo non diventa completamente bianco con graniglia Sa 3 per il ciclo C5M-H.
- Pulire dai residui della sabbiatura con aria compressa per ottenere una superficie perfettamente pulita.
- Applicare il primo strato di primer entro 2 ore dalla sabbiatura o, comunque, prima dell'inizio del processo di ossidazione.

- Lije los marcos con chorro de arena hasta que el metal se vuelva casi blanco con el grano Sa 2.5 para el ciclo C3-H/C4-M o lije los marcos con chorro de arena hasta que el metal se vuelva totalmente blanco con el grano Sa 3 para el ciclo C5M-H.
- Limpie cualquier residuo de chorro de arena con aire comprimido para obtener una superficie perfectamente limpia.
- Aplique la primera capa de imprimación dentro de las 2 horas posteriores al chorro de arena o, en cualquier caso, antes de que comience el proceso de oxidación.

Liquid painting options / Opzioni di verniciatura a liquido / Opciones de pintura líquida

C3-H	• Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 70 µm • Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 70 µm • Apply a third layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). • Total coating thickness: 200 µm	• Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 70 µm • Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 70 µm • Applicare un terzo strato di smalto poliacrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). • Spessore totale del rivestimento: 200 µm	• Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 70 µm • Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 70 µm • Aplique una tercera capa de esmalte poliacrílico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). • Espesor total del recubrimiento: 200 µm.
C4-M	• Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm • Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm • Apply a third layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). • Total coating thickness: 240 µm	• Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm • Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm • Applicare un terzo strato di smalto poliacrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). • Spessore totale del rivestimento: 240 µm	• Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm • Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm • Aplique una tercera capa de esmalte poliacrílico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). • Espesor total del recubrimiento: 240 µm.
C5M-H	• Apply first layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 80 µm • Apply a second layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm • Apply a third layer of the epoxy primer with zinc phosphate Macropoxy C400V3, grey or white 90 µm • Apply final layer of poly-acrylic enamel Inverplast/B pastel: 60 µm Colours and shades as per customer choice (*). • Total coating thickness: 320 µm	• Applicare il primo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 80 µm • Applicare un secondo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm • Applicare un terzo strato di primer epossidico con fosfato di zinco Macropoxy C400V3, grigio o bianco 90 µm • Applicare lo strato finale di smalto poliacrilico Inverplast/B pastello: 60 µm Colori e tonalità a scelta del cliente (*). • Spessore totale del rivestimento: 320 µm	• Aplique la primera capa de la imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 80 µm • Aplique una segunda capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm • Aplique una tercera capa de imprimación epoxi con fosfato de zinc Macropoxy C400V3, gris o blanco 90 µm • Aplique la capa final de esmalte poliacrílico Inverplast/B pastel: 60 µm Colores y tonos según la elección del cliente (*). • Espesor total del recubrimiento: 320 µm

Drying-curing process / Processo di essiccazione-indurimento / Proceso de secado-curado

- Dry frames for at least 5 hours at a room temperature of 15°C (60°F) between the different applications of epoxy primers.
- Wait for at least 8 hours at a room temperature of 15°C (60°F) before applying the final enamel paint on the last epoxy primer application.
- Max. humidity level: 85%

- Asciugare i telai per almeno 5 ore a una temperatura ambiente di 15°C (60°F) un'applicazione e l'altra di primer epossodico.
- Attendere almeno 8 ore a temperatura ambiente di 15°C (60°F) prima di applicare la vernice a smalto finale sull'ultima applicazione di primer epossidico.
- Massimo livello di umidità: 85%

- Seque los marcos durante al menos 5 horas a una temperatura ambiente de 15°C (60°F) entre las diferentes aplicaciones de imprimaciones epoxi.
- Espere al menos 8 horas a una temperatura ambiente de 15°C (60°F) antes de aplicar la pintura de esmalte final en la última aplicación de imprimación epoxi.
- Max. nivel de humedad: 85%

(*) For colour selection and/or special touch up finishes, please contact directly Sherwin Williams.
(*) Per la selezione del colore e/o finiture speciali di ritocco, contattare direttamente Sherwin Williams.
(*) Para la selección de colores y/o acabados especiales de retoque, comuníquese directamente con Sherwin Williams.

Powder Coating

M65 TB profiles can be wet painted and powder coated. In case of powder coating the profile temperature must not exceed 180°C (18 min.). Once out of the oven the frame must be accurately removed and laid in a horizontal position until complete coating. Depending on the aesthetic requirements, for window leaves we recommend to cover the visible areas of the isolator with a heat resistant tape before powder coating.
Polyester powder is mainly used.
The object temperature of max. 180°C to be measured on the frame in the furnace must not exceed a duration of 18 minutes when powder coating frames of composite profiles. Compliance with this condition is to be documented regularly by records.
Contact must be established in such a way to prevent any deformation of the profiles and frames. Additional support may be required for flexible profiles. All the holes and millings must be foreseen before the painting operations.

Process sequence

Preparation
- Grind welding points, blast them if necessary (remove waviness).
- Degreasing and cleaning of all component surfaces.
- Roughening (in general sweeping) of all component surfaces / alternative: chemical surface treatment.

Painting cycle
- Degreasing
- Flushing
- Zinc phosphating
- Flushing
- 1x polyester powder paint, nominal coat thickness of 60-90 µm

The safety regulations and procedural instructions of the manufacturers must be observed.

Verniciatura a polvere

I profili M65 TB possono essere verniciati a liquido e verniciati a polvere. In caso di verniciatura a polvere, la temperatura dei profili non deve superare i 180°C (18 min.). All'uscita del forno i telai vanno rimossi accuratamente ed adagiati in posizione piana fino al completo raffreddamento. A seconda delle esigenze estetiche, consigliamo di coprire le aree visibili dell'anima in poliammide con un nastro resistente al calore prima della verniciatura a polvere.
Vengono utilizzate prevalentemente polveri di poliestere. In caso di rivestimento con vernice in polvere su telai realizzati con profili compositi OTTOSTUMM | Mogs la temperatura dei profili, che deve essere misurata sul telaio nel forno, non deve superare i 180°C per 18 minuti. Il rispetto di queste condizioni deve essere documentato regolarmente tramite apposite registrazioni. Il supporto dei telai deve avvenire in modo tale da escludere ogni possibile deformazione. In caso di profili flessibili potrebbe essere necessario un supporto aggiuntivo. Tutti i fori e le lavorazioni devono essere previste prima delle operazioni di verniciatura.

Fasi del processo

Preparazione
- Smerigliatura dei punti di saldatura, se necessario sabbiatura (eliminare le ondulazioni).
- Rimozione del grasso e pulizia di tutte le superfici del componente.
- Preparazione meccanica (in genere sabbiatura leggera, sweep) di tutte le superfici del componente / In alternativa: trattamento chimico della superficie.

Ciclo verniciatura
- Sgrassaggio
- Risciacquo
- Fosfatazione allo zinco
- Risciacquo
- 1x vernice in polvere PE, spessore dello strato nominale 60-90 µm

Osservare le precauzioni di sicurezza e le indicazioni sui metodi del produttore.

Recubrimiento en polvo

Los perfiles M65 TB pueden pintarse en húmedo y recubrirse con pintura en polvo. En caso de recubrimiento en polvo, la temperatura del perfil no debe superar los 180°C (18 min.). Dependiendo de los requisitos estéticos, para las ventanas recomendamos cubrir las áreas visibles del aislador con una cinta resistente al calor antes del recubrimiento en polvo. Al igual que en el revestimiento individual de piezas de aluminio, se usan principalmente polvos de poliéster. En el caso de revestimiento laca en polvo de marcos de perfiles de unión de OTTOSTUMM | Mogs no se debe superar el tiempo de 18 min de exposición a la temperatura de objeto de máx. 180°C medida en el marco en el horno. Debe documentarse el cumplimiento de este requisito mediante un registro regular de las condiciones. El contacto debe realizarse de manera que los perfiles y marcos no puedan deformarse. En el caso de perfiles que se doblan con facilidad puede hacer falta un soporte adicional. Todos los oreficios y los procesos de poliuretano deben preverse antes de las operaciones de pintura. Siempre proporcione la cinta protectora en las superficies del poliuretano. Después de pintar, coloque cuidadosamente los marcos en posición horizontal hasta que estén completamente fríos.

Secuencia

Preparación
- Lijar los puntos de soldadura o aplicar chorro si es necesario (eliminar ondulaciones).
- Desengrasar y limpiar todas las superficies de componentes.
- Raspado (p. ej. Sweeping) de todas las superficies de componentes/alternativa: tratamiento químico de la superficie.

Ciclo de pintura
- Desengrasado
- Enrojecimiento
- Realizar fosfatado de cinc
- Enrojecimiento
- 1x capa de laca de polvo de poliéster, grosor nominal de capa 60-90 µm

Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento de los fabricantes.

VFF leaflet St. 01: 2015-10

Correlation of corrosivity categories, protection period and corrosion protection classes.

Scheda descrittiva VFF St. 01: 2015-10

Corrispondenze tra categorie di corrosività, durata della protezione e classi di protezione contro la corrosione.

Hoja de datos St. 01 VFF: 2015-10

Relación de categorías de corrosividad, duración de protección, accesibilidad y clases de protección contra corrosión.

Corrosivity category Categoria corrosività Categoría corrosividad	Protection period Periodo di protezione Período de protección	Corrosion protection class (1) Classe di protezione Clase de protección		Environment example outdoors Esempio di ambiente esterno Ejemplo de ambiente externo	Environment example indoors Esempio di ambiente interno Ejemplo de ambiente interno
C1 Insignificant Insignificante Insignificante	Low Basso Bajo	I	I		Heated building with neutral atmosphere. Edificio riscaldato con atmosfera neutra. Edificio climatizado con ambiente neutral.
	Médium Medio Medio	I	I		
	High Alto Alto	I	I		
C2 Low Basso Bajo	Low Basso Bajo	I	II	Rural areas with a low level of pollution. Zone rurali con basso livello di inquinamento. Zonas rurales con bajo nivel de contaminación.	Buildings where condensation may occasionally occur, e.g. gymnasiums. Edifici in cui può verificarsi occasionalmente condensa, ad es. palestre. Edificios donde puede producirse condensación ocasionalmente, p. Ej. gimnasios.
	Medium Medio Medio	I	II		
	High Alto Alto	I	III		
C3 Moderate Moderato Moderar	Low Basso Bajo	II	III	Urban and industrial atmosphere, moderate sulphur dioxide pollution, coastal area with low salt content. Ambiente urbano e industriale, moderato inquinamento da anidride solforosa, area costiera a basso contenuto di sale. Atmósfera urbana e industrial, contaminación moderada de dióxido de azufre, área costera con bajo contenido de sal.	Production rooms with high humidity and some air pollution, e.g. laundries, dairies, canteen kitchens, winter gardens. Ambiente urbano e industriale, moderato inquinamento da anidride solforosa, area costiera a basso contenuto di sale. Atmósfera urbana e industrial, contaminación moderada de dióxido de azufre, área costera con bajo contenido de sal.
	Medium Medio Medio	II	III		
	High Alto Alto	II	III		
C4 High Alto Alto	Low Basso Bajo	III	III	Industrial areas, tunnels, traffic junctions, moderate salt load. Aree industriali, gallerie, incroci stradali, carico di sale moderato. Zonas industriales, túneles, cruces de tráfico, carga salina moderada.	Chemical plants, swimming pools, slaughterhouses. Impianti chimici, piscine, macelli. Plantas químicas, piscinas, mataderos.
	Medium Medio Medio	III	III		
	High Alto Alto	III	> III (2)		
C5-I Very high Molto alto Muy alto	Low Basso Bajo	III	> III (2)	Industrial sectors with high moisture and aggressive atmosphere. Settori industriali con elevata umidità e atmosfera aggressiva. Sectores industriales con alta humedad y ambiente agresivo.	Buildings or areas with almost constant condensation and heavy pollution. Edifici o aree con condensa quasi costante e forte inquinamento. Edificios o áreas con condensación casi constante y fuerte contaminación.
	Medium Medio Medio	III	> III (2)		
	High Alto Alto	> III (2)	> III (2)		
C5-M Very high Molto alto Muy alto	Low Basso Bajo	III	> III (2)	Coastal and offshore areas with high salt concentration. Zone costiere e offshore con alta concentrazione di sale. Zonas costeras y mar adentro con alta concentración de sal.	Buildings or areas with almost constant condensation and heavy pollution. Edifici o aree con condensa quasi costante e forte inquinamento. Edificios o áreas con condensación casi constante y fuerte contaminación.
	Medium Medio Medio	III	> III (2)		
	High Alto Alto	> III (2)	> III (2)		

(1) The indication of the corrosion protection class serves only the assignment of the previous building authority requirements to the new European classification system consisting of corrosivity category and protection period.
(2) The corrosion protection classes are not applicable in the event of very high corrosion loads and long protection periods as well as special loads. In the case of these loads and conditions, the necessary measures must be determined on a case-by-case basis.

Source: DIN 55634 table 1.

(1) L'indicazione della classe di protezione contro la corrosione serve solo per l'allineamento dei requisiti inerenti alla sorveglianza sulle costruzioni al nuovo sistema di classificazione europeo in base a categoria di corrosività e durata della protezione.
(2) In presenza di esposizione a corrosione intensa, durata della protezione prolungata e sollecitazioni particolari le classi di protezione contro la corrosione non sono applicabili. In simili circostanze e condizioni occorre definire le misure da adottare caso per caso.

Fonte: DIN 55634 Tabella 1.

(1) La indicación de la clase de protección contra corrosión solo sirve para asignar los requisitos antiguos de la obra al nuevo sistema de clasificación europeo compuesto por categoría de corrosividad y duración de protección.
(2) En caso de gran carga por corrosión y duración de protección, así como en caso de cargas especiales, las clases de protección contra corrosión no son aplicables. En este caso de cargas y condiciones deben determinarse las medidas individualmente para cada caso.

Fuente: DIN 55634 Tabla 1.

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7.1 Foreword

The profile systems from OTTOSTUMM | Mogs are designed for use in door, window and façade construction. The high dimensional accuracy and straightness of the profiles makes them easy to be processed.
These documents are intended for specialist companies that are familiar with the relevant standards, directives and regulations.

Notes on construction suggestions and application examples:
- The illustrations shown are non-binding suggestions.
- The examples cannot cover every possible application.
- All relevant regulations are to be observed.
- The processing guidelines for the OTTOSTUMM | Mogs product ranges also apply.
- The static dimensioning of the profiles, anchors, dowels, screws and glazing must be determined independently by the executing company in accordance with the applicable standards, directives and regulations.
- In individual cases they must be checked for their usefulness and, if necessary, modified in consultation with the responsible architect, structural engineer and/or building physicist.
- The professional execution is the responsibility of the executing company.
- OTTOSTUMM | Mogs assumes no liability for this.

For all items contained in this documentation, as well as for all activities related to them (order, transport, etc.), our General Conditions and Terms, which can be downloaded at www.ottostumm-mogs.com, apply.

7.1 Premessa

I sistemi per profili di OTTOSTUMM | Mogs sono progettati per l'utilizzo nella costruzione di porte, portoni, finestre e facciate. L'elevata precisione dimensionale e la perfetta linearità dei profili semplificano la lavorazione. La presente documentazione è riservata ad aziende che hanno già dimestichezza con le norme, le direttive e le disposizioni in materia.

Note relative alle proposte di costruzione e agli esempi di applicazione:
- Le raffigurazioni fornite sono proposte non vincolanti.
- Gli esempi non possono coprire ogni singolo caso applicativo.
- Tenere conto di tutte le disposizioni vigenti in materia.
- Osservare anche le direttive di lavorazione dei diversi sistemi OTTOSTUMM | Mogs.
- Il dimensionamento statico dei profili, degli ancoraggi, dei tasselli, delle viti e delle vetrature deve essere definito dalla ditta esecutrice sotto la propria responsabilità e in conformità alle norme, direttive e disposizioni vigenti in materia.
- In circostanze particolati deve esserne verificata la fruibilità e, se necessario, devono essere apportate le dovute modifiche in accordo con i professionisti competenti.
- Della corretta esecuzione è responsabile la ditta esecutrice.
- OTTOSTUMM | Mogs è sollevata da qualsiasi responsabilità a riguardo.

Per ulteriori avvertenze, fare riferimento a quanto specificato nel Disclaimer.
Per tutti gli articoli contenuti nella presente documentazione, così come per ogni attività ad essi collegata (ordine, trasporto ecc) fanno fede le nostre Condizioni generali di vendita, scaricabili al sito www.ottostumm-mogs.com

7.1 Prólogo

Los sistemas de perfiles de OTTOSTUMM | Mogs han sido concebidos para su uso en la construcción de puertas, portales, ventanas y fachadas. La gran precisión y el carácter especialmente recto de los perfiles permite un procesamiento sencillo.
La presente documentación van dirigidas a empresas especializadas que están familiarizadas con las directivas y normativas aplicables.

Notas relativas a sugerencias de construcción y ejemplos de aplicación:
-Las representaciones indicadas son sugerencias no vinculantes.
- Los ejemplos no pueden representar todos los casos posibles de aplicación.
- Deben tenerse en cuenta todas las normas aplicables.
- Además, deben respetarse las directivas de procesamiento de los programas OTTOSTUMM | Mogs.
- El dimensionamiento estático de los perfiles, los anclajes, los tacos, tornillos y acristalamientos debe determinarlos la empresa responsable por su cuenta de conformidad con las normas, directivas y disposiciones vigentes.
- En casos individuales habrá que comprobar la viabilidad y puede ser necesario realizar cambios tras consulta con el arquitecto, ingeniero o calculistas.
- La responsabilidad de la realización correcta de estas tareas recae sobre la empresa encargada.
- OTTOSTUMM | Mogs no puede dar garantía alguna al respecto.

Para mayor información, diríjase a las cláusulas especificadas en la nota de descargo de responsabilidad.
Para todos los artículos contenidos en esta documentación, así como para todas las actividades ligadas (pedidos, transporte, etc) se aplican las condiciones generales de venta, que se pueden descargar desde www.ottostumm-mogs.com.

7.2 Materials

OTTOSTUMM | Mogs profiles are produced in the following material variants:

A) Aluminum (-00) Aluminum alloy EN AW 6060 according to EN 573-3, state T 66 according to EN 755-2 for complementary profiles.
B) Galvanized steel (-02) Steel profiles 2 mm thick, grade 1.0242, S250GD+ZM130-BO according to EN 10346 and 10143, galvanized with a continuous hot process. Thermal break consisting of a glass fiber reinforced polyamide insulation.
C) Stainless steel (-05) Stainless steel profiles 2 mm thick, quality AISI 316L according to EN 10088-1 T2, finish 2B according to EN 10088-2. Thermal break consisting of a glass fiber reinforced polyamide insulation.
D) Cor-Ten steel (-07) Cor-Ten steel profiles thickness 2 mm, quality 1.8946 - S355J2WP according to EN 10025 T1/T5. Thermal break consisting of a glass fiber reinforced polyamide insulation.
E) Bright steel (-12) Cold rolled steel profiles 2 mm thick, quality/grade 1.0038, S235JR according to EN 10025 and EN 10027. Thermal break consisting of an insulation in polyamide reinforced with glass fiber.

The standard designation is:
S250GD+ZM 130-B-O according to EN 10346 and EN 10143
Material no. 1.0244 according to table 2 EN 10346
Density: 7.85 kg/dm^3
0.2% yield strength: 280 N/mm^2
Tensile strength: 360 N/mm^2
Elongation at break: 18%
E module: 210000 N/mm^2
The coating consists of zinc with 1-2 wt.% magnesium (abbreviation: ZM).
The total weight of coating is 130 g/m^2. This corresponds to a coat thickness of approx. 10 µm per side (abbreviation: ZM 130).
The profiles are supplied with surface type B (= improved surface) with surface treatment O (= oiled). Surface type B is achieved by cold re-rolling.

Galvanized steel - 02
Profiles made from 2 mm steel, material quality 1.0242, S250GD + ZM130-BO in accordance with EN 10346 and 10143, continuously hot-dip galvanized. Joined by a glass fiber reinforced polyamide insulator.

Stainless steel - 05
Profiles made of 2 mm stainless steel, material quality 316L according to EN 10088-1 T2, surface 2B according to EN 10088-2. Joined by a glass fiber reinforced polyamide insulator.

Cor-Ten steel - 07
Profile made of 2 mm Cor-Ten steel, Material quality 1.8946 - S355J2WP according EN 10025 T1/T5. Joined by a glass fiber reinforced polyamide insulator.

Bright steel - 12
Profile made of 2 mm steel, material quality 1.0038, S235JR cold rolled steel, according EN 10025 and EN 10027. Joined by a glass fiber reinforced polyamide insulator.

7.2 Materiali

I profili OTTOSTUMM | Mogs sono realizzati nelle seguenti varianti di materiale:

A) Alluminio (-00) Lega di alluminio EN AW 6060 secondo EN 573-3, stato T 66 secondo EN 755-2 per profili complementari.
B) Acciaio zincato (-02) Profili in acciaio spessore 2 mm, grado1.0242, S250GD+ZM130-BO a norma EN 10346 e 10143, zincati con processo continuo a caldo. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.
C) Acciaio inossidabile (-05) Profili in acciaio inossidabile spessore 2 mm, qualità AISI 316L a norma EN 10088-1 T2, finitura 2B a norma EN 10088-2. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.
D) Acciaio Cor-Ten (-07) Profili in acciaio Cor-Ten spessore 2 mm, qualità 1.8946 - S355J2WP a norma EN 10025 T1/T5. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.
E) Acciaio decapato (-12) Profili in acciaio laminato a freddo spessore 2 mm, qualità/grado 1.0038, S235JR a norma EN 10025 e EN 10027. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.

La norma presenta la seguente denominazione:
S250GD+ZM 130-B-O secondo EN 10346 ed EN 10143
Materiale n. 1.0244 secondo tabella 2 EN 10346
Densità: 7.85 kg/dm^3
0,2% Limite di elasticità: 280 N/mm^2
Resistenza alla trazione: 360 N/mm^2
Resistenza alla rottura: 18%
Modulo E: 210000 N/mm^2
Il rivestimento è in zinco con magnesio all'1-2% del peso
(abbreviazione ZM).
Il peso totale dello strato di zinco è 130 g/m^2, corrispondente a uno spessore di ca. 10 µm per lato (abbreviazione ZM 130).
I profili sono forniti con finitura superficiale B (= superficie nobilitata) con trattamento della superficie O (= oliata). La finitura superficiale B si ottiene mediante rilaminazione a freddo.

Acciaio zincato – 02
Profili in acciaio spessore 2 mm, grado 1.0242, S250GD + ZM130-BO a norma EN 10346 e 10143, zincati con processo continuo a caldo. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.

Acciaio inossidabile – 05
Profili in acciaio inossidabile spessore 2 mm, qualità AISI 316L a norma EN 10088-1 T2, finitura 2B a norma EN 10088-2. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.

Acciaio Cor-Ten – 07
Profili in acciaio Cor-Ten spessore 2 mm, qualità 1.8946 - S355J2WP a norma EN 10025 T1/ T5. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.

Acciaio decapato – 12
Profili in acciaio laminato a freddo spessore 2 mm, qualità/grado 1.0038, S235JR a norma EN 10025 e EN 10027. Taglio termico costituito da un isolante in poliammide rinforzata con fibra di vetro.

7.2 Materiales

Los perfiles OTTOSTUMM | Mogs se fabrican en las siguientes variantes de material:

A) Aluminio (-00) Aleación de aluminio EN AW 6060 según EN 573-3, estado T 66 según EN 755-2 para perfiles complementarios.
B) Acero galvanizado (-02) Perfiles de acero de 2 mm de espesor, grado 1.0242, S250GD+ZM130-BO según EN 10346 y 10143, galvanizados con proceso continuo en caliente. Rotura de puente térmico formado por un aislamiento de poliamida reforzado con fibra de vidrio.
C) Acero inoxidable (-05) Perfiles de acero inoxidable de 2 mm de espesor, calidad AISI 316L según EN 10088-1 T2, acabado 2B según EN 10088-2. Rotura de puente térmico formado por un aislamiento de poliamida reforzado con fibra de vidrio.
D) Acero Cor-Ten (-07) Perfiles de acero Cor-Ten espesor 2 mm, calidad 1.8946 - S355J2WP según EN 10025 T1/T5. Rotura de puente térmico formado por un aislamiento de poliamida reforzado con fibra de vidrio.
E) Acero bruto (-12) Perfiles de acero laminado en frío de 2 mm de espesor, calidad/grado 1.0038, S235JR según EN 10025 y EN 10027. Rotura térmica constituida por un aislamiento en poliamida reforzada con fibra de vidrio.

La denominación normativa es:
S250GD+ZM 130-B-O de conformidad con EN 10346 y EN 10143
N.° de material 1.0244 de conformidad con la Tabla 2 EN 10346
Densidad: 7.85 kg/dm^3
0,2% límite de expansión: 280 N/mm^2
Resistencia de tracción: 360 N/mm^2
Extensión de rotura: 18%
Módulo E: 210000 N/mm^2
El recubrimiento está hecho de cinc con una fracción de masa 1-2% De magnesio (abreviatura ZM).
El peso de carga (= peso de recubrimiento) asciende a un total de 130 g/m^2. Este valor se corresponde con un grosor de capa de aprox. 10 µm por lado (abreviatura ZM 130).
Los perfiles se suministran con el tipo de superficie B (= superficie mejorada) con el tratamiento de superficie O (= lubricado con aceite). El tipo de superficie B se obtiene mediante aplanado con rodillo en frío.

Acero galvanizado - 02
Perfiles de acero de 2 mm, calidad del material 1.0242, S250GD + ZM130-BO según EN 10346 y 10143, galvanizados en caliente de forma continua. Unidos por un aislante de poliamida reforzada con fibra de vidrio.

Acero inoxidable - 05
Perfiles de acero inoxidable de 2 mm, calidad de material 316L según EN 10088-1 T2, superficie 2B según EN 10088-2. Unidos por un aislante de poliamida reforzada con fibra de vidrio.

Acero Corten - 07
Perfiles en acero Cor-Ten de 2 mm, calidad del material 1.8946 - S355J2WP según EN 10025 T1/ T5. Unidos por un aislante de poliamida reforzada con fibra de vidrio.

Acero bruto - 12
Perfiles en acero bruto de 2 mm, calidad de material 1.0038, S235JR laminado en frio, según EN 10025 y EN 10027. Unidos por un aislante de poliamida reforzada con fibra de vidrio.

7.3 European standards

EN 1993-1-1: Design of steel structures - Part 1-1: General rules and rules for buildings
EN 1993-1 -1/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-1: General rules and rules for buildings
EN 1993-1-2: Design of steel structures - Part 1-2: General rules - Structural fire design
EN 1993-1 -2/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-2: General rules - Structural fire design
EN 1993-1-3: Design of steel structures - Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting
EN 1993-1 -3/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting
EN 1993-1-4: Design of steel structures - Part 1-4: General rules - Supplementary rules for stainless steels
EN 1993-1 -4/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-4: General rules - Supplementary rules for stainless steels
EN 1993-1-5: Design of steel structures - Part 1-5: Plated structural elements
EN 1993-1 -5/NA: National Annex - Nationally determined parameters -: Design of steel structures - Part 1-5: Plated structural elements
EN ISO 1461: Hot dip galvanized coatings on fabricated iron and steel articles
EN 10143: Continuously hot-dip coated steel sheet and strip - Tolerances on dimensions and shape
EN 10346: Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions
EN 12944: Corrosion protection of steel structures by protective paint systems
EN 12944-1: General introduction
EN 12944-2: Classification of environments
EN 12944-3: Design considerations
EN 12944-4: Types of surface and surface preparation
EN 12944-5: Protective paint systems
EN 12944-6: Laboratory performance test methods
EN 12944-7: Execution and supervision of paint work
EN 12944-8: Development of specifications for new work and maintenance

7.3 Norme europee

EN 1993-1-1: Misurazione e progettazione di strutture in acciaio - Parte 1-1: Regole generali e regole per gli edifici
EN 1993-1 -1/NA: Allegato nazionale - Parametri definiti a livello nazionale-: Misurazione e progettazione di strutture in acciaio - Parte 1-1: Regole generali e regole per gli edifici
EN 1993-1-2: Misurazione e progettazione di strutture in acciaio - Parte 1-2: Regole generali - Progettazione di strutture portanti in caso di incendio
EN 1993-1 -2/NA: Allegato nazionale - Parametri definiti a livello nazionale-: Misurazione e progettazione di strutture in acciaio - Parte 1-2: Regole generali - Progettazione di strutture portanti in caso di incendio
EN 1993-1-3: Misurazione e progettazione di strutture in acciaio - Parte 1-3: Regole generali - Regole supplementari per l'impiego di profilati e lamiere piegati a freddo
EN 1993-1 -3/NA: Allegato nazionale - Parametri definiti a livello nazionale-: Misurazione e progettazione di strutture in acciaio - Parte 1-3: Regole generali - Regole supplementari per l'impiego di profilati e lamiere sottili formati a freddo
EN 1993-1-4: Misurazione e progettazione di strutture in acciaio - Parte 1-4: Regole generali di progettazione - Regole supplementari per l'impiego di acciai inossidabili
EN 1993-1 -4/NA: Allegato nazionale - Parametri definiti a livello nazionale-: Misurazione e progettazione di strutture in acciaio - Parte 1-4: Regole generali di progettazione - Regole supplementari per l'impiego di acciai inossidabili
EN 1993-1-5: Misurazione e progettazione di strutture in acciaio - Parte 1-5: Elementi strutturali a lastra
EN 1993-1 -5/NA: Allegato nazionale - Parametri definiti a livello nazionale -: Misurazione e progettazione di strutture in acciaio - Parte 1-5: Elementi strutturali a lastra
EN ISO 1461: Rivestimento di zincatura per immersione a caldo su prodotti in acciaio (zincatura di pezzi singoli)
EN 10143: Lamiere e nastri di acciaio con affinazione continua mediante immersione a caldo - Dimensioni limite e tolleranze di forma
EN 10346: Lamiere e nastri in acciaio da costruzione con affinazione continua mediante immersione a caldo - Condizioni tecniche di fornitura
EN 12944: Protezione dalla corrosione di strutture in acciaio mediante verniciatura
EN 12944-1: Informazioni generali, termini, corrosione
EN 12944-2: Suddivisione delle condizioni ambientali
EN 12944-3: Regole di base per la progettazione
EN 12944-4: Tipi di superficie e preparazione della superficie
EN 12944-5: Sistemi di verniciatura
EN 12944-6: Prove in laboratorio per la valutazione dei sistemi di verniciatura
EN 12944-7: Esecuzione e supervisione dei lavori di verniciatura
EN 12944-8: Stesura di specifiche per lavori nuovi e di manutenzione

7.3 Normas europeas

EN 1993-1-1: Proyecto de estructuras de acero. Parte 1-1: Reglas generales y reglas para edificios.
AN UNE EN 1993-1 -1: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-1: Reglas generales y reglas para edificios.
EN 1993-1-2: Proyecto de estructuras de acero. Parte 1-2: Reglas generales. Proyecto de estructuras sometidas al fuego.
AN UNE EN 1993-1 -2: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-2: Reglas generales. Proyecto de estructuras sometidas al fuego.
EN 1993-1-3: Proyecto de estructuras de acero. Parte 1-3: Reglas generales. Reglas adicionales para perfiles y chapas de paredes delgadas conformadas en frío.
AN UNE EN 1993-1 -3: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-3: Reglas generales. Reglas adicionales para perfiles y chapas de paredes delgadas conformadas en frío.
EN 1993-1-4: Proyecto de estructuras de acero. Parte 1-4: Reglas generales. Reglas adicionales para los aceros inoxidables.
AN UNE EN 1993-1 -4: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-4: Reglas generales. Reglas adicionales para los aceros inoxidables.
EN 1993-1-5: Proyecto de estructuras de acero. Parte 1-5: Placas planas cargadas en su plano.
AN UNE EN 1993-1 -5: Anejo Nacional: Parámetros de determinación nacional: Proyecto de estructuras de acero. Parte 1-5: Placas planas cargadas en su plano.
EN ISO 1461: Recubrimientos de galvanización en caliente sobre piezas de hierro y acero.
EN 10143: Chapas y bandas de acero con revestimiento metálico en continuo por inmersión en caliente. Tolerancias dimensionales y de forma.
EN 10346: Productos planos de acero recubiertos en continuo por inmersión en caliente. Condiciones técnicas de suministro.
EN 12944: Protección de estructuras de acero frente a la corrosión mediante sistemas de pintura protectores
EN 12944-1: Introducción general.
EN 12944-2: Clasificación de ambientes.
EN 12944-3: Consideraciones sobre el diseño.
EN 12944-4: Tipos y preparación de superficies.
EN 12944-5: Sistemas de pintura protectores.
EN 12944-6: Ensayos de comportamiento en laboratorio.
EN 12944-7: Ejecución y supervisión de trabajos de pintado.
EN 12944-8: Desarrollo de especificaciones para trabajos nuevos y mantenimiento.

7.4 Order

Delivery lengths of profiles and packaging units of accessories and fittings are included in the program list. In the case of insulate profiles, the outside unfolding specified for profiles contains the entire visible unfolding. The specified weights per metre apply to the corresponding material and the weights of the composite webs are included in the insulated profiles.

7.4 Ordine

Le lunghezze di fornitura dei profili e le confezioni di accessori e ferramenta sono indicate nel catalogo. In caso di profili taglio termico lo sviluppo esterno si riferisce all'intero sviluppo visibile. I pesi al metro indicati si riferiscono al rispettivo materiale e in caso di profili taglio termico sono inclusi anche i pesi delle anime isolanti di collegamento.

7.4 Pedido

Las longitudes de suministro y las unidades de embalaje de accesorios y herrajes se pueden consultar en los listados. En el caso de los perfiles de unión, la estructura exterior indicada incluye toda la estructura visible. Los pesos por metro se refieren al material correspondiente y en el caso de los perfiles de unión se incluye el peso de las barras de unión.

7.5 Transport and storage

OTTOSTUMM | Mogs profiles are treated and pack extremely carefully at the factory to rule out any corrosion and mechanical damage at the distribution warehouses and during transport to the processor.
The risk is transferred to the purchaser when the goods are handed over to a freight forwarder or carrier, at the latest, however, when they leave the warehouse or the supplying plant.
Unloading operations can be carried out with an overhead crane or forklift truck.
Only forklift trucks with wide forks set at a large distance may be used for unloading and transport.
For the timely notification of transport damage and other material defects, the corresponding information in our terms of sale shall apply.

OTTOSTUMM | Mogs profiles must be stored separately according to the material in order to exclude a risk of corrosion due to extraneous rust particles on stainless steel and aluminium. Dry storage in suitable rooms must be ensured to avoid corrosion. Short-term strong temperature fluctuations in the storage room should be avoided in view of possible condensation water formation in the profile stack.
The profiles must rest on wood or plastic, materials which must not contain any aggressive substances that could trigger chemical reactions at the contact surfaces with the profiles.
Scratches, indentations or other deformation or damage to the surface must be avoided during storage and transport. This applies in particular to the interim storage of profiles that have already been subjected to surface treatment.
They may be removed from storage racks only by lifting them out.
For businesses that process aluminium as well as steel, it is a matter of course that strict spatial separation of these materials is ensured both during storage and processing. The formation of white rust in continuously hot-dip galvanized materials does not constitute a reason for complaint.

7.5 Trasporto e stoccaggio

I profili OTTOSTUMM | Mogs vengono trattati e imballati in magazzino con estrema accortezza per proteggerli dalla corrosione e da possibili danni meccanici che possono subire nei magazzini di distribuzione e durante il trasporto verso il produttore di serramenti.
Con l'affidamento della merce a un vettore o trasportatore, e comunque al più tardi all'uscita dal magazzino o dallo stabilimento di produzione, il rischio viene trasferito al cliente.
Le operazioni di scarico possono avvenire con carroponte o con carrello elevatore.
Se si utilizza un carrello elevatore per scaricare e trasportare la merce, le forche dell'elevatore devono essere larghe e regolate alla massima distanza.
Per la segnalazione tempestiva di eventuali danni dovuti al trasporto o altri difetti strutturali valgono le indicazioni relative contenute nelle nostre condizioni di vendita.

I profili OTTOSTUMM | Mogs devono essere obbligatoriamente stoccati in base al materiale per evitare il pericolo di corrosione dovuto a particelle di ruggine volatile che vengono a contatto con l'acciaio inossidabile e l'alluminio. Per evitare la corrosione deve essere garantito uno stoccaggio in locali adeguatamente protetti dall'umidità. Variazioni brusche della temperatura all'interno del luogo di stoccaggio devono essere evitate per impedire la formazione di acqua di condensa tra i profili. I profili devono poggiare su legno o plastica, materiali che non devono contenere sostanze aggressive che potrebbero innescare reazioni chimiche nei punti di contatto tra i profili. Evitare graffi, impronte, deformazioni o danni superficiali di qualunque natura durante l'immagazzinaggio e il trasporto. Ciò vale in particolare in caso di stoccaggi intermedi di profili già sottoposti a trattamento della superficie. Il prelievo dai luoghi di stoccaggio può avvenire soltanto per sollevamento.
In aziende che prevedono la lavorazione di alluminio oltre a quella dell'acciaio è ovviamente necessario predisporre una rigida separazione degli spazi adibiti alla lavorazione, ma anche allo stoccaggio di questi due materiali. La formazione di ossidazione bianca sui materiali sottoposti ad affinazione continua mediante immersione a caldo non costituisce motivo di reclamo.

7.5 Transporte y almacenamiento

Los perfiles de OTTOSTUMM | Mogs se tratan con la máxima diligencia en fábrica para evitar corrosión y daños mecánicos en los almacenes de distribución y en el transporte a la empresa procesadora.
La responsabilidad sobre la mercancía se transfiere al comprador en el momento de la entrega a la empresa de transporte o el encargado de transporte y, como muy tarde, en el momento en el que la mercancía abandona el almacén o la fábrica proveedora.
Las operaciones de descarga se pueden realizar con un puente grúa o carro elevador. Si se realizan descargas y transportes con carretilla elevadora, solo se deben emplear horquillas anchas y ajustadas a distancias amplias.
En cuanto a los plazos de comunicación de daños de transporte u otros imperfectos materiales se aplican las indicaciones correspondientes en nuestras condiciones de venta.

Los perfiles de OTTOSTUMM | Mogs deben almacenarse obligatoriamente separados por material para evitar cualquier posibilidad de corrosión por partículas de óxido ajeno en el acero y el aluminio inoxidables. Para evitar la corrosión hay que garantizar un almacenamiento en seco en espacios adecuados. Deben evitarse las oscilaciones térmicas repentinas en el espacio de almacenamiento para evitar la posible formación de agua de condensación en las pilas de los perfiles. Los perfiles deben apilarse sobre madera o plástico, materiales que no tienen que contener sustancias agresivas que puedan provocar reacciones químicas en las superficies de contacto con los perfiles.
Durante el transporte y el almacenamiento deben evitarse arañazos, abolladuras o cualquier otra deformación o forma de daño en las superficies. Hay que tener especial cuidado en los almacenamientos temporales de los perfiles cuyas superficies ya han sido tratadas.
Para retirar los perfiles de sus estructuras de almacenamiento siempre se deben elevar, nunca arrastrar.
En el caso de empresas que aparte de acero también procesan aluminio, debe preverse una separación física estricta de ambos materiales tanto durante el almacenamiento como el procesamiento. La formación de óxido blanco en los materiales con galvanizado continuo en caliente no representa un motivo de reclamación.

7.6 Processing

7.6.1 General

Special attention must be paid to the strictly separate processing of the materials galvanized steel, stainless steel, Cor-Ten steel, bright steel and aluminium. No tools of any kind must be mutually shared. Width and height tolerances of ±1 mm beyond the outer dimensions apply to the production of the frames unless expressly stated otherwise in the product chapters.
For the sealing of joint zones not closed by welding in joined frame connections, we strongly recommend using a narrow joint sealant.
OTTOSTUMM | Mogs door fittings are supplied with initial factory lubrication and do not need to be greased during installation. Information on further maintenance can be found in the processing guidelines. Window fittings must be greased slightly during installation in accordance with the instructions in the fitting packaging.
Observe the wall thickness of 2 mm and - in particular when welding - the zinc-magnesium coating.
Commercially available products for machining carbon steel are to be used as coolants and lubricants.

7.6 Lavorazione

7.6.1 Aspetti generali

Prestare particolare attenzione alla lavorazione separata di acciaio zincato, acciaio inox, acciaio Cor-Ten, acciaio decapato e alluminio. Gli utensili di qualsiasi tipo non devono essere utilizzati in modo alternato per le diverse lavorazioni. Salvo diversamente indicato nei capitoli dedicati, la tolleranza di larghezza e altezza ammessa per la fabbricazione dei telai è di ±1 mm rispetto alla misura esterna.
Per l'isolamento delle fughe in corrispondenza delle giunzioni del telaio che non vengono saldate si consiglia vivamente l'utilizzo di un apposito sigillante per fughe sottili. Le ferramenta per porte OTTOSTUMM | Mogs sono fornite con una prima lubrificazione in fabbrica e non deve essere aggiunto grasso durante il montaggio. Per informazioni sulla manutenzione successiva fare riferimento alle direttive di lavorazione. Le ferramenta per finestre devono essere leggermente lubrificate durante il montaggio secondo quanto riportato sulle confezioni.
Da tenere in particolare considerazione è lo spessore della lamiera pari a 2 mm.
Durante la lavorazione degli acciai, impiegare prodotti di raffreddament e lubrificazione comunemente disponibili in commercio.

7.6 Procesamiento

7.6.1 Generalidades

Hay que prestar especial atención a la separación de los materiales de acero galvanizado, acero inoxidable, acero Cor-Ten, acero bruto y aluminio. Las herramientas no se pueden emplear de forma conjunta para ambos materiales. Si no se establece expresamente lo contrario en los capítulos concretos del producto, la tolerancia aplicable de anchura y altura para la fabricación de marcos es de ±1 mm. Para sellar zonas de fuga cerradas mediante procesos distintos a la soldadura en el caso de las uniones de marcos (unión a tope o con inglete) recomendamos encarecidamente el uso del agente sellante para fugas.
Los herrajes de puertas OTTOSTUMM | Mogs se suministran con una lubricación inicial de fábrica y no necesitan engrasarse durante el montaje. Las indicaciones sobre el mantenimiento posterior deben consultarse en las directivas de procesamiento. Los herrajes de ventana deben engrasarse ligeramente en el montaje tal y como se indica en las instrucciones de los embalajes de los herrajes.
Debe tenerse en cuenta su grosor de pared de 2 mm y, especialmente a la hora de soldar, el recubrimiento de cinc-magnesio.
Como agentes refrigerantes y lubricantes deben emplearse los productos habituales del sector para la mecanización de aceros al carbono.

7.6.2 Sawing

Particular attention must be paid to the clamping of sectional steel profiles. Special cutting supports corresponding to the profile shapes must be inserted for this purpose.
Cuts are usually made with metal cold circular saws, which can make angle cuts within a range of ±90°. However, high-performance band saws or hand saws can be used also for simple, straight cuts.
Only HSS saw blades are to be used.
Fine toothing is required for OTTOSTUMM | Mogs profiles.
Cutting speed according to the material to be cut.
Tooth pitch: 4-6 mm
Saw blade thickness: 2.4 to 4 mm
The specifications depend on the type of machine used.
Universal cold circular saws are recommended as sawing machines.

7.6.2 Taglio a sega

Prestare particolare attenzione al bloccaggio dei profili in acciaio. A tal riguardo, utilizzare le dime di taglio specifiche.
I tagli vengono eseguiti in genere con seghe circolari per metallo a freddo; i tagli ad angolo possono essere eseguiti in un range tra ±90°. Per tagli diritti più semplici possono essere utilizzate anche seghe a nastro ad alte prestazioni o seghe manuali.
Utilizzare unicamente lame per seghe HSS.
Per i profili OTTOSTUMM | Mogs è richiesta una dentatura fine.
Velocità di taglio in base al materiale da tagliare.
Passo dei denti: 4-6 mm
Spessore della lama: da 2.4 a 4 mm
I dati indicati dipendono dal tipo di macchinario utilizzato.
Si consiglia l'utilizzo di seghe circolari a freddo universali.

7.6.2 Corte con sierra

Hay que prestar atención especial a la sujeción de tubos perfilados de acero. En este contexto, hay que usar hojas de sierra adecuadas a las formas de perfil.
Por norma general, los cortes a medida se realizan con sierras circulares para corte de metales en frío con capacidad para realizar cortes angulares de ±90°. No obstante, para realizar otros cortes más sencillos y rectos se pueden emplear sierras de alto rendimiento o sierras manuales.
Solo se deben emplear hojas de sierra HSS.
Los perfiles de OTTOSTUMM | Mogs requieren un dentado fino.
Velocidad de corte según el material a cortar.
División de dientes: 4-6 mm
Grosor de hoja de sierra: 2.4 a 4 mm
Las indicaciones propuestas dependen del tipo de máquina empleado.
Se recomiendan sierras circulares universales de corte en frío.

7.6.3 Drilling

Drilling jigs or templates should always be used.
The drills - standard range (HSS) - must be ground exactly and always kept sharp (reground). Angles, cutting edges and relief cuts to the core must be symmetrical. Point angle of 116°-118°.

Drilling Ø [mm]	Speed [rpm]	Feed rate [mm/rev.]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

Spray cooling for large cross-sections increases the tool life.

7.6.3 Foratura

Utilizzare sempre schemi o dime di foratura. Le punte - gamma comune (HSS) - devono essere affilati con precisione e l'affilatura deve essere costantemente manutenuta (affilatura periodica). Gli angoli, i profili del tagliente e gli angoli di spoglia rispetto al nucleo della punta devono essere simmetrici. Angolo di punta 116°-118°.

Foro Ø [mm]	Velocità [rpm]	Avanzamento [mm/giro]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

In caso di sezioni di grandi dimensioni il raffreddamento a spruzzo prolunga la vita utile dell'utensile.

7.6.3 Taladrado

Siempre debe emplear calibres o plantillas de taladro.
Los taladros, gama habitual (HSS), deben mantenerse siempre bien lijados y afilados (reafilar). Cualquier ángulo, borde de corte o lijado posterior con respecto al alma debe ser simétrico. Ángulo punta 116°-118°.

Taladro Ø [mm]	Velocidad [rpm]	Avance [mm/vuelta]
3	1000	0.11
4.8	780	0.12
5.2	730	0.125
6	625	0.13
7	560	0.14
8	500	0.145
9.2	410	0.165

La refrigeración por pulverización en las secciones más amplias aumenta la vida útil de las herramientas.

7.6.4 Tapping and thread cutting

Use HSS tools. The cutting speed is approx. 10% higher than with alloyed steels.

7.6.4 Filettatura

Utilizzare utensili HSS. È richiesta una velocità di taglio del 10% superiore a quella impiegata con gli acciai legati.

7.6.4 Taladrado y corte roscado

Emplear herramientas HSS. La velocidad de corte es aprox. un 10% superior que la de los aceros de aleación.

7.6.5 Milling

The milling cutters - standard range (HSS) - must be ground exactly and always kept sharp (reground). Angles, cutting edges and relief cuts must be symmetrical.
The required milling work must be carried out with tools for thin-walled profiles (with profile miller or machining centre for steel and stainless steel).

7.6.5 Fresatura

Le frese - gamma comune (HSS) - devono essere affilate con precisione e l'affilatura deve essere costantemente manutenuta (affilatura periodica). Gli angoli, i profili del tagliente e le spoglie devono essere simmetrici.
Le operazioni di fresatura richieste devono essere eseguite con utensili per profili in lamiera sottile (con frese a pantografo o centri di lavorazione per acciaio e acciaio inox).

7.6.5 Fresado

La fresas, gama habitual (HSS), deben mantenerse siempre bien lijadas y afiladas (reafilar). Cualquier ángulo, borde de corte o lijado posterior ser simétrico.
Los trabajos de fresado requeridos deben llevarse a cabo con perfiles de paredes finas (con fresa de copia o centro de mecanizado para acero y acero inoxidable).

7.6.6 Welding

M65 TB profiles can be welded with all common fusion or resistance welding methods. As with alloy steels, the use of oxyacetylene welding is not recommended (deformation due to the heating of a large surface of the profile).
The methods suitable for galvanized steel (-02) are the following:
- Arc welding with metal under active gas protection (MAG).
- Cold metal transfer welding (CMT).

The method suitable for Cor-Ten (-07) and bright (-12) steel is the following:
- Arc welding with metal under active gas protection (MAG).

The method suitable for stainless steel (-05) is as follows:
- Arc welding with infusible electrode under inert gas protection (TIG).

When welding, care must be taken to avoid overheating the profiles.
We recommend the use of heat sinks located in close proximity of the welded area, as well as to proceed in small segment, always waiting forthe profile to cool down.
The heat generated during welding of profiles and hinges must be dissipated using brass, copper and aluminium welding attachments.
Keep minimum 3 mm distance from welding seam to polyamide web.

7.6.6 Saldatura

I profili M65 TB possono essere saldati con tutti i comuni metodi di saldatura per fusione o a resistenza. Come con gli acciai legati si sconsiglia l'uso della saldatura ossiacetilenica (deformazione a causa del riscaldamento di un'ampia superficie del profilo).
I metodi particolarmente adatti per acciaio zincato (-02), sono i seguenti:
- Saldatura ad arco con metallo sotto protezione di gas attivo (MAG).
- Saldatura ad arco voltaico freddo stabile (CMT).

Il metodo particolarmente adatto per acciaio Cor-Ten (-07) e decapato (-12), è il seguente:
- Saldatura ad arco con metallo sotto protezione di gas attivo (MAG).

Il metodo particolarmente adatto per l'acciaio inox (-05), è il seguente:
- Saldatura ad arco con elettrodo infusibile sotto protezione di gas inerte (TIG).

Durante la saldatura occorre prestare attenzione a non surriscaldare eccessivamente i profili.
Consigliamo l'utilizzo di dissipatori di calore posizionati nelle immediate vicinanze della zona interessata dalla saldatura, di procedere per tratti e attendere che il profilo si raffreddi prima di terminare l'operazione.
Il calore prodotto durante la saldatura dei profili e cerniere può essere disperso utilizzando controsagome in ottone, rame, alluminio.
Il cordone di saldatura va tenuto ad una distanza di almeno 3 mm dall'anima in poliammide.

7.6.6 Soldadura

Los perfiles M65 TB se pueden soldar con todos los métodos comunes de soldadura por fusión o por resistencia. Al igual que con los aceros aleados, no se recomienda el uso de soldadura de oxiacetileno (deformación debido al calentamiento de una gran superficie del perfil).
Los métodos especialmente adecuados para el acero galvanizado (-02) son los siguientes:
- Soldadura por arco con metal bajo protección activa de gas (MAG).
- Soldadura estable por arco frío (CMT).

El método especialmente adecuado para acero Cor-Ten (-07) y bruto (-12) es el siguiente:
- Soldadura por arco con metal bajo protección activa de gas (MAG).

El método particularmente adecuado para acero inoxidable (-05) es el siguiente:
- Soldadura por arco con electrodo infusible bajo protección de gas inerte (TIG).

Durante la soldadura, se debe tener cuidado de no sobrecalentar los perfiles.
Recomendamos el uso de disipadores en las inmediaciones del área afectada por la soldadura, proceder por tramos y esperar a que el perfil seenfríe antes de finalizar la operación.
El calor generado durante la soldadura de perfiles y bisagras se debe disipar utilizando accesorios de soldadura de latón, cobre y aluminio.
Mantenga una distancia mínima de 3 mm desde la costura de soldadura hasta la banda de poliamida.

7.6.7 Welding station

When welding elements, make sure the working surface is absolutely flat! A suitable welding table with fasteners is recommended for this purpose.
The welding station should always be well ventilated.
Smoke extraction systems are recommended here! The relevant regulations must be observed.

7.6.7 Postazione di saldatura

Per la saldatura degli elementi è richiesta una superficie di lavoro assolutamente in piano. Si consiglia pertanto l'utilizzo di un apposito banco di saldatura con mezzi di fissaggio.
La postazione di saldatura deve essere sempre ben ventilata.
Si consiglia l'utilizzo di un impianto di aspirazione dei fumi. Osservare le disposizioni vigenti in materia.

7.6.7 Puesto de soldadura

Al soldar los elementos debe garantizarse que la superficie de trabajo está totalmente nivelada.
En este caso, recomendamos una mesa de soldadura adecuada con medios de fijación.
El puesto de soldadura siempre debe estar bien ventilado.
En este contexto, recomendamos el uso de dispositivos de extracción de humo. Deben tenerse en cuenta todas las normas aplicables.

7.6.8 Straightening work

If, despite all precautions, slight distortions occur in the frame and sash, they should be straightened using suitable spindle presses or other straightening machines.

7.6.8 Lavori di rettifica

Se, nonostante tutte le precauzioni del caso, i telai o i battenti subiscono lievi deformazioni, è possibile rettificarli con l'impiego di apposite presse a bilanciere o altri macchinari di rettifica.

7.6.8 Enderezamiento

Si a pesar de tomar todas las precauciones surgen pequeñas deformaciones en el marco y las hojas, deben corregirse mediante prensas de husillo u otros dispositivos de ajuste.

7.6.9 Plastering

The weld seams are usually plastered with an angle grinder (for further information, refer to the processing guidelines).
In order to achieve a clean visible surface of the element and ensure the exact function of the glazing bead, the corners must be treated with a file.

7.6.9 Ripulitura

I cordoni di saldatura vengono rifiniti solitamente con la smerigliatrice angolare (per ulteriori indicazioni vedere le direttive di lavorazione).
Per ottenere una superficie visibile dell'oggetto pulita e per garantire il corretto funzionamento dei profili fermavetro, è necessario ripassare gli angoli con una lima.

7.6.9 Acabado

Normalmente los cordones de soldadura se repasan con la lijadora angular (más información en las directivas de procesamiento). Para obtener una superficie visible limpia del elemento y para garantizar el funcionamiento preciso de la barra de soporte de cristal, hay que repasar las esquinas con una lima.

7.7 Surface treatment

7.7 Trattamento della superficie

7.7 Tratamiento de superficie

7.7.1 General notes, coating

The surface treatment serves corrosion protection and colour design. With steel profiles, it must always be carried out after machining. Exception: aluminium profiles.
Coating accumulation should be avoided, in particular in the area of the sealing and glazing bead mounting zones.

Decisive are:
- EN ISO 12944 Corrosion protection of steel structures by protective paint systems
- DIN 55634 Paints, varnishes and coatings corrosion protection of supporting thin-walled building components made of steel
- Guideline from GSB or Qualicoat for piece coating of steel parts
- Also refer to VFF leaflet ST.01

In the case of high corrosion loads and a long protection period (e.g. windows near the coast) and special loads, the suitable corrosion protection system must be determined in each individual case.
The manufacturer of the coating material must prove the suitability of their product for the coating of the profiles and the corrosion protection of the overall system (primer and top coat, weld seam area, cutting edge).

7.7.1 Aspetti generali, la verniciatura

Il trattamento della superficie è necessario per la protezione contro la corrosione e per la finitura cromatica dell'oggetto. In linea di massima va eseguito dopo la lavorazione dei profili in acciaio. Eccezione: profili in alluminio.
Evitare gli accumuli di rivestimento in particolare nelle zone delle guarnizioni e delle sedi dei profili fermavetro.

Riferimenti normativi:
- EN ISO 12944 Protezione dalla corrosione di strutture di acciaio mediante verniciatura e rivestimento
- DIN 55634 Verniciature e rivestimenti protezione anticorrosione di componenti portanti in lamina d'acciaio sottile
- Direttiva GSB o Qualicoat per la zincatura di singoli pezzi per articoli in acciaio
- Fare riferimento anche alla scheda descrittiva VFF ST.01

In presenza di esposizione a corrosione intensa, durata della protezione prolungata (ad esempio serramenti in zona costiera) o sollecitazioni particolari, occorre definire un sistema di protezione contro la corrosione specifico per il singolo caso.
Il produttore del materiale usato per la verniciatura deve provare l'idoneità del suo prodotto per il rivestimento dei profili e la protezione contro la corrosione dell'intero sistema (rivestimento di base e topcoat, zona del cordone di saldatura, bordo tagliato).

7.7.1 Generalidades, la pintura

El tratamiento de la superficie sirve como protección contra la corrosión y para dar color. Por norma general, debe realizarse tras la mecanización de perfiles de acero. Excepción: Perfiles de aluminio.
Debe evitarse la acumulación del revestimiento, sobre todo en las zonas de alojamiento de las juntas y la barra de soporte de cristal.

Se aplican las siguientes normas:
- EN ISO 12944 Protección de estructuras de acero frente a la corrosión mediante sistemas de pintura protectores.
- DIN 55634 Sustancias de revestimiento y recubrimientos protección contra corrosión de componentes portantes de paredes finas de acero
- Directiva de GSB o Qualicoat para el revestimiento individual de componentes de acero
- Debe hacerse referencia a la hoja de datos ST.01 de VFF

Si la carga corrosiva es muy elevada y se requiere una protección prolongada (p. ej. Ventanas en zona de costa) y en caso de exigencias especiales, hay que determinar el sistema de protección contra corrosión adecuado en cada caso individual.
El fabricante debe acreditar el carácter adecuado de su producto para el revestimiento de los perfiles (sin tratamiento o galvanizado continuo en caliente) y para la protección contra corrosión del sistema completo (revestimiento básico y de cobertura, zona de cordón de soldadura, borde de corte).

7.7.2 Procedure

In order to achieve perfect adhesion of the coating system, an appropriate surface must be created by cleaning and roughening or chemical pre-treatment.

7.7.2 Procedura

Per ottenere un'adesione perfetta del sistema di rivestimento, anche la superficie di acciaio deve essere adeguatamente pulita, irruvidita o sottoposta ad apposito pretrattamento chimico.

7.7.2 Procedimiento

Debe conseguirse una superficie adecuada mediante la limpieza, el raspado o el tratamiento previo químico para garantizar la adherencia impecable del sistema de revestimiento.

7.7.3 Weld seam area

Welding beads and scale must be carefully removed with the grinding machine and, if necessary, reworked with a blasting gun and corundum sand.

7.7.3 Area del cordone di saldatura

Eliminare accuratamente perle di saldatura e scaglie di laminazione con la smerigliatrice; se necessario perfezionare con una pistola per sabbiatura e sabbia di corindone.

7.7.3 Zona de cordón de soldadura

Las perlas de soldadura y las marcas por óxido deben eliminarse cuidadosamente con la lijadora y, en caso necesario, repasarse después con una pistola a presión y corindón.

7.7.4 Cleaning the surfaces

Due to the forming process and the subsequent machining, the profile surfaces are soiled with cooling lubricant, grease, cutting oil etc. To ensure perfect adhesion of the coating, the profiles must be completely cleaned. The choice of the cleaning process is incumbent on the coating company carrying out the work.
Possible cleaning processes:
A) Washing off with solvent mixtures
B) Steam jet cleaning with or without chemical additives
C) High-pressure hot-water cleaning with or without chemical additives
D) Alkaline or acidic decoction degreasing in immersion or spraying process.

7.7.4 Pulizia delle superfici

A seguito del processo di profilatura e della successiva lavorazione, le superfici dei profili si sporcano con residui di refrigerante, grasso, olio di taglio, ecc. Per ottenere un'adesione perfetta del rivestimento, è necessario pulire accuratamente i profili. La scelta del metodo di pulizia spetta alla ditta che esegue i trattamenti.
Metodi di pulizia possibili:
A) Risciacquo con miscela di solventi
B) Pulizia con getto di vapore con o senza additivi chimici
C) Pulizia con idropulitrice ad alta pressione con o senza additivi chimici
D) Sgrassaggio in ambiente alcalino o acido per immersione o a spruzzo.

7.7.4 Limpieza de las superficies

Debido al proceso de cambio de forma y la mecanización posterior, las superficies del perfil están contaminadas con lubricantes de refrigeración, grasas, aceites de corte, etc. Los perfiles deben limpiarse para garantizar un nivel de adherencia óptimo del revestimiento. La empresa encargada del revestimiento debe elegir el procedimiento de limpieza adecuado.
Procedimientos de limpieza admisibles:
A) Aclarado con mezcla de disolventes
B) Limpieza con chorro de vapor con o sin adición de sustancias químicas
C) Limpieza con chorro de agua caliente a presión con o sin adición de sustancias químicas
D) Desengrasado por cocción alcalina o ácida mediante inmersión o pulverización.

7.7.5 Mechanical roughening of the surface

Mechanical roughening significantly improves the adhesion between the coating and the substrate. In the simplest case, the profiles and frames are ground with abrasive paper or corundum plastic fleece (e.g. Scotch Brite). Disadvantage: very high input for profiled surfaces - no reliable process. In particular with larger quantities, overblowing (= sweep jets) with corundum at reduced pressure and a jet impact angle of < 30° is more economic and safer. Any abrasion and blasting abrasive residue must be removed completely.

Warning: In the case of continuously hot-dip galvanized profiles, the metal coating must not be removed.

7.7.5 Preparazione meccanica della superficie

La preparazione meccanica migliora decisamente l'adesione tra rivestimento e fondo. Nel caso più semplice i profili e i telai vengono smerigliati con carta abrasiva o tela sintetica al corindone (ad es. Scotch Brite). Svantaggi: molto faticoso in caso di superfici profilate - metodo proceduralmente non affidabile. Soprattutto in presenza di grandi quantità di pezzi, una sabbiatura leggera con corindone ad una pressione inferiore e un angolo di impatto entro i 30° è più proficua e sicura. Eliminare completamente il materiale abraso e i residui di materiale per sabbiatura.

Avvertenza: in caso di profili zincati per immersione a caldo il rivestimento metallico non può essere rimosso.

7.7.5 Raspado mecánico de la superficie

El Raspado mecánico mejora notablemente la adherencia entre el revestimiento y la base. En los casos más simples, los perfiles y marcos se tratan con papel de lija o fieltro de corindón y plástico (p. ej. Scotch Brite). Desventaja: Se requiere un gran esfuerzo en las superficies perfiladas; no es un proceso seguro. Sobre todo para cantidades mayores es preferible la técnica del sobresoplado (= chorro Sweep) con corindón a presión reducida y un ángulo de impacto del chorro 30° porque es más segura y rentable. Debe eliminarse cualquier resto de material desprendido la fricción o resto del material del chorro.

Advertencia: En el caso de los perfiles con galvanizado continuo en caliente no se debe eliminar el recubrimiento metálico.

7.7.6 Chemical surface treatment

Chemical pickling surface treatment is an alternative to mechanical roughening. The procedural instructions and safety regulations must be observed. Use a method compatible for galvanized profiles. The removal of any superficial white oxideis only possible by mechanical treatment such as sweeping or grinding.

7.7.6 Trattamento chimico della superficie

Il trattamento chimico per il decapaggio della superficie rappresenta un'alternativa al trattamento meccanico. Osservare le linee guida sul metodo e le precauzioni di sicurezza. Utilizzare un metodo compatibile con profili zincati. L'eliminazione di eventuale ossido bianco superficiale è possibile solo mediante trattamento meccanico come sabbiatura leggera (sweep) o smerigliatura.

7.7.6 Tratamiento químico de la superficie

El tratamiento químico para decapado de la superficie representa una alternativa al raspado mecánico. Deben tenerse en cuenta las normas de seguridad y las instrucciones del procedimiento. Utilice un método compatible con perfiles galvanizados. El óxido blanco solo se puede retirar mediante tratamiento mecánico como el Sweeping o el lijado.

7.7.7 Types of coating

M65 TB profiles can be powder coated or wet painted.

You'll find the different painting techniques in a specific chapter of this documentation (6.3.0).

7.7.7 Tipi di verniciatura

I profili M65 TB possono essere verniciati sia a liquido che a polveri.

Trovate le diverse metodologia di verniciatura nell'apposito capitolo di questa documentazione (6.3.0).

7.7.7 Tipos de pintura

Los perfiles M65 TB se pueden pintar en húmedo y recubrirse con pintura en polvo.

Encontrará las diferentes técnicas de pintura en un capítulo específico de esta documentación (6.3.0).

7.7.8 Cor-Ten profile (-07) oxidation

The Cor-Ten steel is like a natural, "living" material. With the passage of time and exposure to weathering it takes on different and unique shades. Under normal conditions this phenomenon (formation and stabilization of the surface protective "patina") requires from a minimum of one to a maximum of four years. This natural oxidation process can also be obtained chemically, with different processes, for example as described below.

Guidelines for the oxidation and passivation process:
- Cleaning with a brush the surfaces to be treated, applying a neutral detergent and drying with a cotton rag;
- Application of a suitable product as oxidation starter (In this phase do not expose the surfaces directly to the weathering);
- Apply a film of demineralized water with a cotton rag, wait for a "medium" dark shade will be reached;
- Once the desired shade is obtained, apply a suitable passivating product. Take care to avoid any dripping.

Process of finishing:
- Apply the beeswax on the treated surfaces;
- As an alternative to beeswax, apply a suitable oil.

Each process (products and procedures) must be verified in relation to location environment. The choice between oil or wax must consider the final location (internal or external) of the windows and doors.
The finishing must be resumed and maintained following a plan, depending on weathering and exposure conditions.
About the finishing, the oil is the easiest one in terms of application and maintenance. It also allows the resuming of Cor-Ten surface in case of formation of halos due to water stagnation. Attention: the oil must be uniformly applied and after application dried with a cotton rag. Being a chemical process, pay attention to washout and chalking of the patina surface over the time. To limit these effects, it is recommended to plan periodic treatments of the surface with applications of suitable wax or oil.
To preserve the state of the existing artifacts and masonry where the Cor-Ten steel windows and doors will be installed, proper drainage system must be provided and washable and non-absorbent materials must be used.

7.7.8 Ossidazione su profili Cor-Ten (-07)

Il Cor-Ten è un materiale naturale, vivo, che con il passare del tempo e l'esposizione agli agenti atmosferici assume di volta in volta tonalità diverse ed uniche. In normali condizioni questo fenomeno di formazione e stabilizzazione dello stato superficiale di patina protettiva può richiedere da uno, fino ad un massimo di quattro anni. Questo naturale processo di ossidazione può essere ottenuto anche chimicamente, con differenti procedure tra le quali ad esempio quella qui di seguito descritta.

Linee guida al processo di ossidazione e passivazione:
- Pulizia dei manufatti con pennello, stesura del detergente e asciugatura con pezza di cotone;
- Applicazione soluzione di innesco dell'ossidazione con prodotto a scelta (evitare di lasciare i telai alle intemperie);
- Applicare una mano di acqua demineralizzata con pezza di cotone, attendere il raggiungimento di una tonalità "media";
- Al raggiungimento della tonalità desiderata, applicare il passivante scelto facendo attenzione a non formare colature.

Al termine del processo:
- Stendere la cera d'api sulla superficie dei profili;
- In alternativa alla cera d'api, usare un olio dedicato.

Ogni procedimento deve essere verificato dal punto di vista dei prodotti scelti e delle procedure oltre che in relazione all'ubicazione del cantiere. La scelta di finire il Cor-Ten a olio o a cera va fatta in base alla tipologia di serramento: interno o esterno. La finitura va ripresa e manutentata secondo periodi temporali predefiniti, a seconda di quanto e come è esposto il serramento. Tra le due finiture, quella ad olio è più facile da realizzare e da mantenere ed inoltre consente di riprendere il Cor-Ten in caso di formazione di aloni dovuti a ristagno d'acqua. Attenzione: se la scelta ricade sull'uso dell'olio, occorre prestare particolare attenzione poiché dopo l'applicazione va asciugato e "uniformato" con una pezza di cotone. Va prestata particolare attenzione all'eventuale dilavamento e sfarinamento della patina superficiale che tale finitura può generare con il passare del tempo. Per contenere tali fenomeni è comunque consigliabile pianificare trattamenti periodici con applicazioni di idonee cere oppure olii. Inoltre, se si volesse preservare lo stato dei manufatti su cui si andranno ad installare i serramenti in acciaio Cor-Ten, si dovranno prevedere appositi canali di scolo o si dovranno accostare ad essi materiali lavabili e non assorbenti.

7.7.8 Oxidación en perfiles Cor-Ten (-07)

Cor-Ten es un material natural, vivo, que con el paso del tiempo y la exposición a los agentes atmosféricos adquiere tonalidades distintas y únicas. En condiciones normales, este fenómeno de formación y estabilización del estado superficial de pátina protectora puede durar de uno a un máximo de cuatro años. Este proceso de oxidación natural también se puede obtener químicamente, con diferentes procedimientos como por ejemplo:

Directrices para el proceso de oxidación y pasivación:
- Limpiar las piezas con un cepillo, aplicar el detergente y secar con un paño de algodón;
- Aplicar la solución detonante de oxidación con el producto de su elección (evite dejar los marcos a la intemperie);
- Aplicar una capa de agua desmineralizada con un trozo de algodón, se alcanzará un tono "medio";
- Cuando se alcance el tono deseado, aplicar el producto pasivante elegido, evitando que no se formen gotas.

Al final del proceso:
- Extender la cera de abejas en la superficie de los perfiles;
- Como alternativa a la cera de abejas, utilice un aceite específico.

Cada procedimiento debe verificarse desde el punto de vista de los productos y procedimientos elegidos, así como en relación con la ubicación del sitio. La elección de terminar el Cor-Ten con aceite o cera debe hacerse según el tipo de ventana: interna o externa. El acabado debe reanudarse y mantenerse de acuerdo con períodos de tiempo predefinidos, dependiendo de cuánto y cómo esté expuesta la ventana. De los dos acabados, el aceitoso es más fácil de realizar y mantener y además permite retomar el Cor-Ten en caso de formación de halos por estancamiento de agua. Atención: si se elige el uso de aceite, se debe prestar especial atención ya que después de la aplicación se debe secar y "uniformar" con un trozo de algodón. Como se trata de un proceso químico, se debe prestar especial atención a cualquier lavado y tiza de la pátina de la superficie que este acabado pueda generar con el tiempo. Sin embargo, para contener estos fenómenos es aconsejable planificar tratamientos periódicos con aplicaciones de ceras o aceites adecuados. Además, si desea preservar el estado de los artefactos en los que se instalarán las ventanas y puertas de acero Cor-Ten, se deben proporcionar canales de drenaje adecuados o se deben combinar materiales lavables y no absorbentes con ellos.

7.8 Installation on site

7.8.1 Glazing

The glazing systems of all OTTOSTUMM | Mogs series comply with the relevant standards, the cushioning regulations of the glazing trade and the guidelines of insulating glass manufacturers. Particular attention must be paid to the regulations regarding pressure compensation and drainage from free rebate spaces.
All glazing systems are usually designed for glazing between elastomer profiles (EPDM or neoprene).
If necessary, a silicone-free lubricant is applied to the seals to facilitate installation.
The glass mass is determined and the glazing beads and sealing profiles are selected on the basis of the filling thickness according to the specifications in the program list and processing documents.
Wet glazing is possible and must be carried out in accordance with the generally applicable regulations.
In the case of acrylic glass (PMMA) and polycarbonate (PC) fillings, the risk of stress cracks in these sheets in contact with our EPDM seals cannot be excluded. The risk of incompatibility is beyond our control and must be clarified by the processor with the manufacturers of such fillings.

7.8.2 Joint sealing

For the sealing of structural attachment and construction joints, use specific and certified products, referring to the manufacturer's instructions.

7.8.3 Prevention of surface damage during installation

For a correct conservation of OTTOSTUMM | Mogs frames it is advisable to use counter frames, in order to carry out the installation only at the conclusion of the masonry and plastering works.
In case of installation at an early stage of the construction site, with the use of self-adhesive plastic films, the user is solely responsible for ensuring that the products used are fully compatible with the components.
For large objects, we recommend the interim acceptance of construction phases immediately after their completion.

7.8.4 Cleaning

In addition to the exposure to the sun and weather, exterior wall elements are exposed to aggressive air components and are therefore inevitably subject to soiling. This not only impairs the appearance of the components, but also poses an increased risk of corrosion due to the constant effect of the dirt deposits. The components must therefore be cleaned at intervals, which vary depending on the location. In the following we confine ourselves to a few

7.8 Posa in opera

7.8.1 Vetrazione

I sistemi di vetratura di tutte le serie OTTOSTUMM | Mogs rispettano le norme in materia, le disposizioni valide per la lavorazione artigianale del vetro e le linee guida dei produttori di vetro isolante. Da tenere in particolare considerazione sono le disposizioni relative alla compensazione della pressione e al drenaggio dagli spazi sotto il vetro.
In linea generale tutti i sistemi di vetratura sono predisposti per la sigillatura con guarnizioni (EPDM o Neoprene).
Se necessario, le guarnizioni sono progettate per essere montate semplicemente con un lubrificante privo di silicone.
Il calcolo delle dimensioni del vetro e la scelta dei profili fermavetro e dei profili di tenuta devono avvenire in base allo spessore della vetrata isolante e secondo le indicazioni contenute nel catalogo e nella documentazione per la lavorazione.
La vetratura sigillata con silicone è ammessa e deve essere realizzata secondo le normative genericamente valide.
In caso di installazione di lastre di acrilico (PMMA) e policarbonato (PC) non è escluso il rischio di crepe da tensione nelle zone dovute al contatto con le nostre guarnizioni in EPDM. Il pericolo di incompatibilità è fuori dal nostro controllo, pertanto il produttore di serramenti è tenuto a chiarire tali eventualità con i produttori di questo tipo di lastre.

7.8.2 Sigillatura giunti

Per l'isolamento delle fughe della costruzione e dei punti di giunzione con il vano murario, utilizzare prodotti specifici e certificati, rifacendosi alle indicazioni del produttore.

7.8.3 Prevenzione dei danni ai telai durante la posa

Per una corretta conservazione dei telai OTTOSTUMM | Mogs si consiglia di utilizzare sempre dei controtelai, in modo da eseguire la posa in opera solo a conclusione dei lavori di muratura e intonacatura.
In caso di posa in fase iniziale del cantiere, con utilizzo di pellicole di plastica autoadesive rimovibili, l'utilizzatore sarà il solo responsabile della completa compatibilità dei prodotti utilizzati con i componenti da montare.
In caso di grandi dimensioni consigliamo di procedere al collaudo del lotto appena posato.

7.8.4 Pulizia

I serramenti sono esposti a diverse sollecitazioni quali sole, agenti atmosferici, ma anche particelle aggressive presenti nell'aria ed è quindi inevitabile che si sporchino. Oltre a pregiudicare l'aspetto delle superfici, l'imbrattamento aumenta il rischio di corrosione dovuta al contatto costante con i depositi di sporco. I serramenti devono essere puliti a intervalli regolari a seconda del luogo di installazione.
Ci limitiamo a fornire le seguenti indicazioni fondamentali:

7.8 Montaje

7.8.1 Acristalamiento

Los sistemas de acristalamiento de todas las series OTTOSTUMM | Mogs cumplen las normas generales aplicables, los reglamentos de colocación de calzos del gremio cristalero y las directrices de los fabricantes del vidrio aislante. Debe prestar especial atención a las normas relativas a la compensación de presión y el drenaje de agua en las zonas del galce.
Por norma general, todos los sistemas de acristalamiento han sido concebidos para el acristalamiento entre perfiles de elastómero (EPDM o neoprenos).
Si se requiere, las juntas están provistas de un lubricante sin silicona para facilitar su montaje.
La determinación de las medidas del vidrio, así como la elección de barras de soporte de cristal y perfiles de sellado en función del grosor de llenado deben realizarse de acuerdo con las indicaciones en la lista de programas o en la documentación de procesamiento.
Se puede realizar un acristalamiento en mojado siempre y cuando se cumplan los reglamentos generales vigentes.
En el caso de rellenos de vidrio acrílico (PMMA) y policarbonato (PC) no se puede descartar el riesgo de fisuras por tensión en esas placas cuando entran en contacto con nuestras juntas de EPDM. El riesgo de esta incompatibilidad está fuera de nuestro control y debe evaluarlo la empresa procesadora junto con los fabricantes de los rellenos citados.

7.8.2 Sellado de juntas

Para sellar fugas de conexiones constructivas y fugas generales en la construcción, use productos específicos y certificados, refiriéndose a las indicaciones del fabricante.

7.8.3 Prevención de daños superficiales en marcos

Para una correcta conservación de los marcos OTTOSTUMM | Mogs es aconsejable utilizar siempre contramarcos, con el fin de realizar la instalación solo al finalizar los trabajos de albañilería y revoque.
Si se emplean otros procedimientos de protección, con láminas autoadhesivas de plástico, use productos especificados y certificados, en base a las instrucciones del fabricante.
En caso de objetos de grandes dimensiones, recomendamos la recepción intermedia de los tramos constructivos inmediatamente después de su fabricación.

7.8.4 Limpieza de componentes

Aparte del sol y las influencias climáticas, los elementos de paredes exteriores están expuestos a componentes agresivos del aire, por lo que la suciedad es inevitable. La suciedad no solo compromete la apariencia estética de los componentes, sino que representa un serio riesgo de corrosión debido a la actuación continua de la contaminación cuando se acumula en zonas concretas. Por ello, los componentes deben limpiarse en intervalos regulares que varían según el lugar de uso.
Desde OTTOSTUMM | Mogs nos limitaremos a

essential notes:
Light soiling is removed with water and a neutral cleaning agent (no soapy water!) using a sponge and cloth. Then rise thoroughly with demineralized water.
If other cleaning agents are required, a test application on a concealed surface should first ensure that surfaces are neither mechanically nor chemically corroded. Cleaners with pH values below 5 and above 8 as well as abrasive or scouring agents such as steel wool or wire brushes must be excluded in any case.
Further details can be found in the technical literature.

7.8.5 Use and maintenance

The Construction Products Ordinance must always be observed here. Any relevant product standards also apply.
If there are no malfunctions or damage caused by inappropriate handling, maintenance for private use can be limited to easily oiling or greasing accessible sliding fitting parts at large intervals. Maintenance work for large objects and public buildings should be carried out by a specialist, especially since it involves more extensive maintenance measures. By concluding a maintenance contract with the building owner, the processor can ensure that the quality of their work is maintained to the satisfaction of their customers over a long period of use.
In this context, please also observe the maintenance instructions of the fitting manufacturers.

The following maintenance work is to be performed:

E) Cleaning of elements, in particular moving parts and functional zones.
F) Inspection of the seals between:
   – Sash and blind frame Replace damaged rebate gaskets.
   – Glass and sash frame
   – Element frame and building structure
   – If necessary, repair or replace the sealants or sealing profiles.
G) Inspection of the corner and butt joint at the seals. If necessary, repair them with the adhesives and sealants.
H) Subject the glazing to a visual inspection for cracks, including edge cracks, and replace it if necessary.
I) Verification of all functions:
   – Check the fitting components for ease of movement and grease the movable parts if necessary. Bolted strips with plastic bearing bushings are maintenance-free and must not be lubricated.

The replacement of non-functional parts (fittings, accessories, glass etc.) is the responsibility of the authorised specialist company.

Eliminare lo sporco leggero con acqua e un prodotto per la pulizia neutro (no soluzioni saponate!) applicati con una spugna e un panno. Dopodiché risciacquare accuratamente con acqua demineralizzata.
In caso si renda necessario l'utilizzo di altri detergenti, eseguire una prova su una superficie nascosta per verificare che non vi siano reazione meccaniche o chimiche sulle superfici. Evitare assolutamente detersivi con ph inferiore a 5 o superiore a 8, nonché prodotti abrasivi o leviganti, lana o spazzole d'acciaio.
Per ulteriori dettagli consultare la letteratura specifica.

7.8.5 Uso e manutenzione

A riguardo è necessario attenersi essenzialmente al regolamento sui prodotti per l'edilizia. Si applicano inoltre le rispettive norme di prodotto, ove presenti.
Se non sono presenti malfunzionamenti o danni dovuti ad uso improprio, è possibile limitarsi alla manutenzione prevista in caso di utilizzo privato, che consiste nella lubrificazione con quantità moderate di olio o grasso dei componenti mobili delle ferramenta a cui è possibile accedere ad intervalli relativamente distanziati. I lavori di manutenzione su oggetti di grandi dimensioni o su edifici pubblici devono essere eseguiti da ditte qualificate, in particolare quando l'intervento è associato ad altre misure conservative del fabbricato. In questo caso il produttore di serramenti può stipulare un contratto di garanzia per assicurarsi che la qualità del suo lavoro resti invariata nel tempo, per la massima soddisfazione del cliente.
A tal riguardo occorre tenere presenti anche le istruzioni di manutenzione del costruttore delle ferramenta.

I lavori di manutenzione da eseguire sono i seguenti:

E) Pulizia degli elementi, in particolare delle parti mobili e delle aree rilevanti per il funzionamento.
F) Controllo della tenuta tra:
   – Telaio del battente e telaio dell'anta; sostituire le guarnizioni della battuta danneggiate.
   – Vetro e telaio del battente;
   – Telaio dell'infisso e muratura;
   – Se necessario migliorare la qualità del sigillante o dei profili di tenuta, oppure sostituirli.
G) Controllo delle giunzioni d'angolo delle guarnizioni; eventualmente, migliorare la qualità con i collanti/sigillanti.
H) Controllo della vetratura mediante ispezioni visive in merito a fessurazioni; se necessario sostituire.
I) Controllo di tutte le funzionalità:
   – Controllare la mobilità di tutti i componenti della ferramenta, eventualmente ingrassare le parti mobili. Le cerniere con boccole in plastica non richiedono manutenzione e non devono essere lubrificati.

La sostituzione di parti non funzionanti (ferramenta, vetro, accessorio) spetta alla ditta specializzata autorizzata.

transmitirle las siguientes recomendaciones:
La suciedad ligera debe eliminarse con agua y un producto de limpieza neutro (no se permiten las soluciones de jabón) con ayuda de una esponja o un paño. A continuación se debe realizar un aclarado exhaustivo con agua demineralizada. Si otros agentes limpiadores son requeridos, una prueba en una zona poco visible que las superficies no sufren daños mecánicos ni químicos. Deben descartarse directamente los productos de limpieza con valores de pH inferiores a 5 y superiores a 8, así como cualquier medio con efecto abrasivo o lijador, así como cepillos metálicos o lana de acero.
Puede consultar más detalles en la documentación especializada.

7.8.5 Uso y mantenimiento

Por norma general, en este caso debe tenerse en cuenta la normativa de productos constructivos. Adicionalmente deben tenerse en cuenta las normas de producto aplicables, si las hay.
Si no se da un funcionamiento incorrecto y si no hay daños causados por un tratamiento incorrecto, el mantenimiento para uso privado puede limitarse a la lubricación ligera con aceite o grasa de los componentes deslizantes accesibles de los herrajes en intervalos regulares prolongados. Los trabajos de mantenimiento de objetos de mayor tamaño o de obras públicas debe realizarlos un especialista siempre y cuando estén sujetos a más medidas de conservación. En este caso, la empresa procesadora puede celebrar un contrato de mantenimiento con los propietarios de la obra para garantizar que la calidad de su trabajo se conserve durante un período de uso prolongado y cumplir los requisitos de su cliente.
En este contexto debe tener en cuenta también las indicaciones de mantenimiento del fabricante de los herrajes.

Deben llevarse a cabo los siguientes trabajos de mantenimiento:

E) Limpieza de los elementos, sobre todo piezas y zonas de funcionamiento móviles.
F) Comprobación de las juntas entre:
   – Marcos de hojas y de molduras, sustituir las juntas de tope dañadas.
   – Cristal y marcos de hojas
   – El marco general del elemento y el cuerpo constructivo
   – Sustituir o corregir los agentes sellantes o los perfiles de junta si es necesario.
G) Comprobación de las uniones en esquina y tope en las juntas; aplicar los agentes adhesivos y sellantes del capítulo Medios auxiliares si es necesario.
H) Comprobación del acristalamiento en busca de fisuras zonas estalladas, sustitución en caso necesario.
I) Comprobación de todas las funciones:
   – comprobar la facilidad de marcha de las piezas de herraje, lubricar las piezas móviles si es necesario. En caso de cintas atornilladas con cojinetes de plástico, estos están libres de mantenimiento y no deben lubricarse.

Solo empresas especializadas deben ocuparse de la sustitución de piezas que no funcionan (herraje, accesorios, cristal, etc.).

7.9 Technical services

Our planning and drawing documents, processing guidelines and fitting installation plans make it easier for you to process our systems. Even without explicit indication, the processing guidelines of the basic series apply to all object-related construction suggestions. Furthermore, the consulting services of our company and our sales partners are at your disposal. Documents and consultations correspond to our best knowledge. However, no guarantee can be given for the absence of errors, unless the errors are based on intent or gross negligence on our part.
We offer our processors seminars with intensive instruction in the theory and practice of OTTOSTUMM | Mogs systems. We also support other EDP software, such as FPPRO Emmigisoft and LogiKal® from ORGADATA etc. We keep our customers up to date with the latest technical and standardization information.

7.9 Consulenza tecnica

I nostri elaborati di progetto, disegni, direttive di lavorazione e schemi di montaggio delle ferramenta semplificano la lavorazione dei nostri sistemi. Anche senza esplicita indicazione le direttive di lavorazione delle serie di base valgono per tutte le proposte costruttive riferite all'oggetto. I nostri consulenti interni e partner commerciali sono inoltre a vostra completa disposizione. La documentazione e le consulenze riflettono le migliori conoscenze di cui disponiamo. Non possiamo assumerci tuttavia la responsabilità per l'assoluta assenza di errori, salvo il caso in cui l'errore sia dovuto a dolo o grave negligenza da parte nostra.
Ai nostri produttori di serramenti offriamo seminari con una ricca offerta di nozioni teoriche e pratiche sui sistemi OTTOSTUMM | Mogs. Sosteniamo inoltre software dedicati, come FPPRO Emmigisoft e LogiKal® di ORGADATA, ecc. Teniamo i nostri clienti aggiornati su questioni tecniche e normative fornendo loro continue informazioni.

7.9 Apoyo técnico

Nuestra documentación de planificación y representación gráfica, las directivas de procesamiento y los planos de montaje de herrajes le facilitan el procesamiento de nuestros sistemas. Aunque no se indique expresamente, en todas las propuestas constructivas concretas de un objetos se deben aplicar las directivas de procesamiento de las series básicas. Además, puede acudir a los servicios de asesoramiento de nuestra empresa y nuestros socios de distribución. La documentación y el asesoramiento que facilitamos se basa en nuestros conocimientos y lo ofrecemos de buena fe. No obstante no podemos garantizar la ausencia de errores a excepción de información errónea facilitada con premeditación o por negligencia grave.
A nuestras empresas procesadoras le ofrecemos seminarios con formación intensiva teórica y práctica para los sistemas OTTOSTUMM | Mogs. Además trabajamos con otros programas de procesamiento electrónico de datos como, por ejemplo, FPPRO y LogiKal® de ORGADATA, etc. Mantenemos a nuestros clientes siempre al día en cuanto a la técnica y las normativas gracias a la información actualizada que manejamos.

7.10 Disclaimer

All the information contained in this documentation is given to the best of our knowledge and ability. However, we decline all responsibility for the use of any suggestions, examples of applications and/or data, or for typographical errors or scale reproductions.
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