Processing Verarbeitung Usinage 5.0

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Welding	Schweißen	Soudage	5.3
Accessories installation	Montage Zubehör	Montage accessoires	5.4
Multipoint steel rods installation, with Graz	Montage Multipoint Stahlstangen, mit Graz	Montage Multipoint tiges de acier, avec Graz	5.5
Multipoint aluminum rods installation, with Graz and Mono	Montage Multipoint Aluminiumstangen, mit Graz und Mono	Montage Multipoint tiges de aluminium, avec Graz et Mono	5.6
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Glazing	Verglasung	Vitrage	5.10

Important notes:

All processes are considered glazed-in except where specified.

Wichtige Anmerkungen:

Alle Prozesse gelten als verglast, sofern nicht anders angegeben.

Remarques importantes:

Tous les usinages sont considérés comme vitrés de l'intérieur, sauf indication contraire.

Health and safety
Gesundheits- und Sicherheitsaspekte
Aspects sanitaires

5.1

Health and safety

W75 TB - D75 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.

Gesundheits- und Sicherheitsaspekte

W75 TB - D75 TB Profile mit vergossenen Polyamid-Isolator können grundsätzlich wie alle übrigen thermisch getrennten Profilsysteme verarbeitet werden. Für die Verarbeitung müssen keine speziellen Maschinen beschafft oder sonstige besondere Maßnahmen getroffen werden. Die üblichen Verarbeitungsprozesse wie Schweißen und Schleifen sind problemlos durchführbar. Beim Bohren, Sägen oder Zerspanen des Polyamid-Isolators wird ein Staub, vergleichbar mit Holzstaub, freigesetzt. Es werden hierfür keine speziellen Absaug- oder Filteranlagen benötigt, wir empfehlen jedoch Augen und Atemwege gemäss den Landesüblichen Sicherheitsvorschriften zu schützen. Beim Erhitzen von Polyamidhaltigen Stoffen werden gasförmige Substanzen freigesetzt. Aus diesem Grund wird empfohlen, ausschließlich mit geeigneter Schutzausrüstung in Bereichen mit ausreichenden Belüftungs- und Rauchabzugssystemen zu schweißen.

Aspects sanitaires et de sécurité

Profilés W75 TB - D75 TB avec polyamide isolant peuvent fondamentalement être usinés comme les autres systèmes de profilés en acier avec rupture de pont thermique. On ne nécessite pas des machines spéciales ou d'autres mesures particulières pour l'usinage. Les processus d'usinage usuels tels que le soudage et le meulage s'exécutent sans problème. Lors du perçage, de la coupe ou de l'usinage du polyamide, de la poussière, similaire à la poussière du bois, est libérée. Des aspirateurs ou des filtres appropriés ne sont pas nécessaires, mais nous recommandons de protéger les yeux et les voies respiratoires en appliquant les mesures de protections classiques en matière de sécurité de votre pays.
L'éventuel surchauffe du polyamide libère des substances gazeuses: pour cette raison, il est conseillé de souder avec les Equipements de Protection Individuelle prévus, dans des zones avec suffisamment aérage et, en présence d'un système d'évacuation des fumées.

Cutting | Zuschnitt | Découpe 5.2

Cutting

W75 TB - D75 TB profiles can be cut with conventional steel saws. However, when cutting and, in particular, when creating mitre cuts, cutting templates (D994XX-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”.

Zuschnitt

W75 TB - D75 TB Profile lassen sich mit herkömmlichen Metallsägen zuschneiden. Beim Zuschnitt sollten jedoch, ins besondere bei Gehrungsschnitten, passende Sägebeilagen (D994XX-00) verwendet werden, damit eine stabile Profileinspannung gewährleistet ist. Da die Profile sehr filigran sind, sollte die Vorschubgeschwindigkeit beim Sägen, im Vergleich zu konventionellen Stahlrohrprofilen, reduziert werden. Wir empfehlen eine Mikrosprüh-Schmierung für den Zuschnitt der Profile zu verwenden.

Weitere Informationen finden Sie auch im Kapitel “Allgemeine Informationen“.

Découpe

Les profilés W75 TB - D75 TB peuvent être découpés avec des scies à métaux conventionnelles. Pour la découpe, il convient toutefois d’utiliser des gabarit de découpe appropriés (D994XX-00), en particulier pour les découpes en onglet, afin de garantir un serrage stable du profilé. La vitesse d’avance pour le sciage doit être réduite par rapport aux profilés tubulaires en acier conventionnels. Nous recommandons d’utiliser une lubrification par microspray pour découper les profilés.

Pour plus d’informations, voir également le chapitre “Informations générales“.

Legend

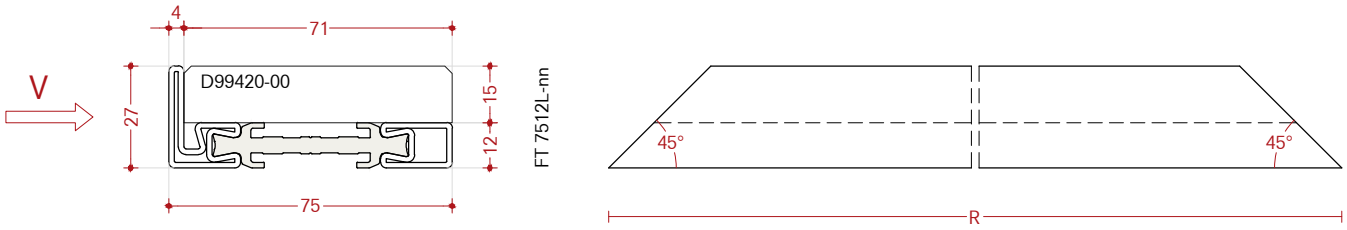
+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2
V = View
R = Reference cut length peak/peak
CL = Cutting Length
HF = Height Frame
HG = Height Glass
HL = Height Leaf
WF = Width Frame
WG = Width Glass
WL = Width Leaf

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:1 - 1:2
V = Ansicht
R = Referenz der Schnittmessung
mit größter Spitze
CL = Zuschnitt
HF = Höhe Rahmen
HG = Höhe Glas
HL = Höhe Flügel
WF = Länge Rahmen
WG = Länge Glas
WL = Länge Flügel

Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:1 - 1:2
V = Vue
R = Référence de la mesure
de coupe avec la plus grande pointe
CL = Découpe
HF = Hauteur dormant
HG = Hauteur vitre
HL = Hauteur ouvrant
WF = Largeur dormant
WG = Largeur vitre
WL = Largeur ouvrant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FT 7512L-nn
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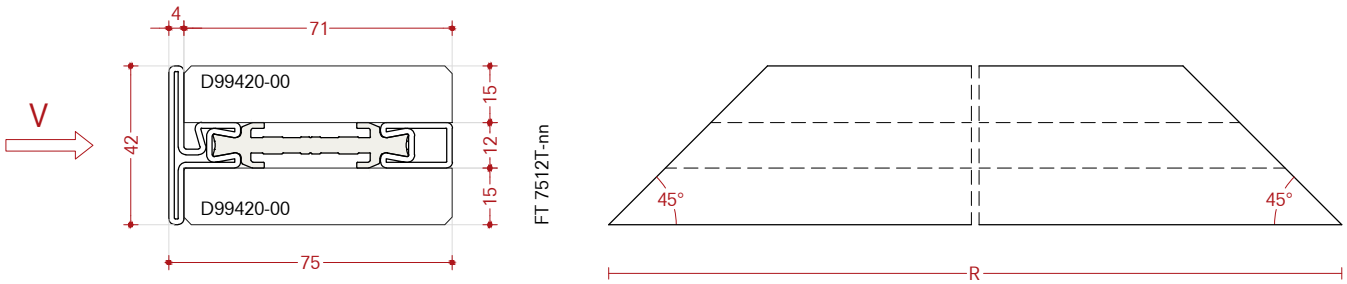
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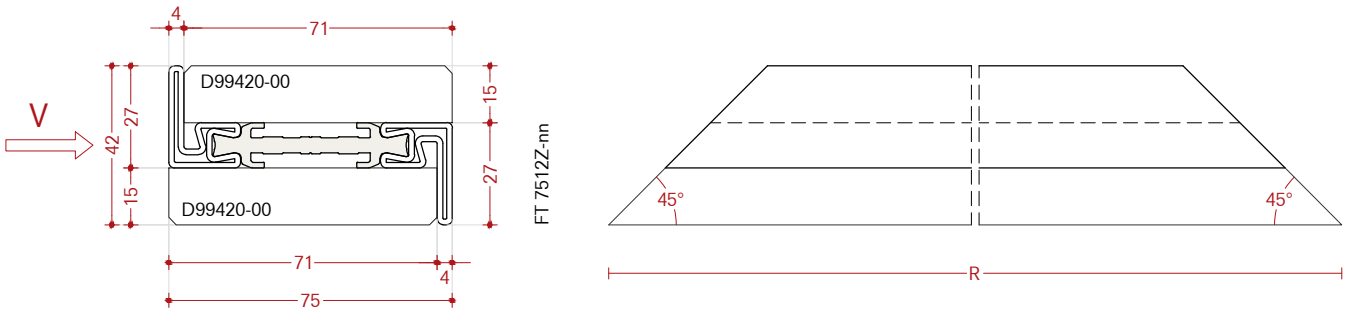
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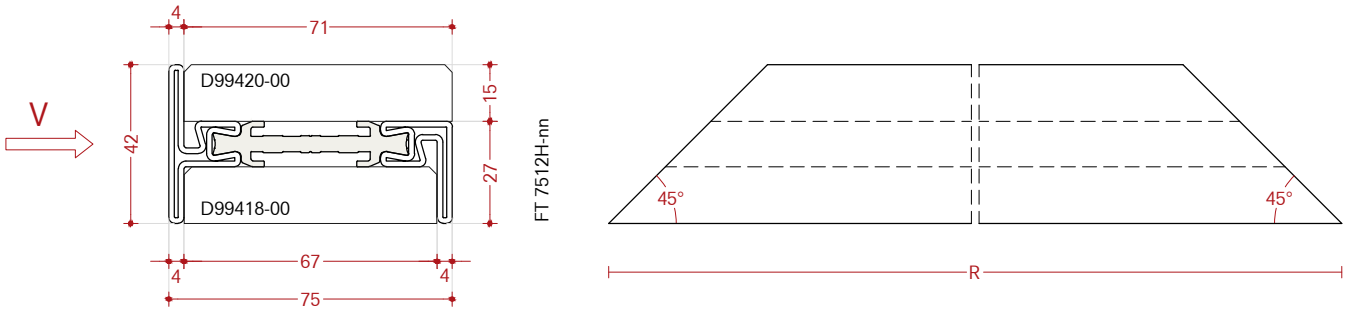
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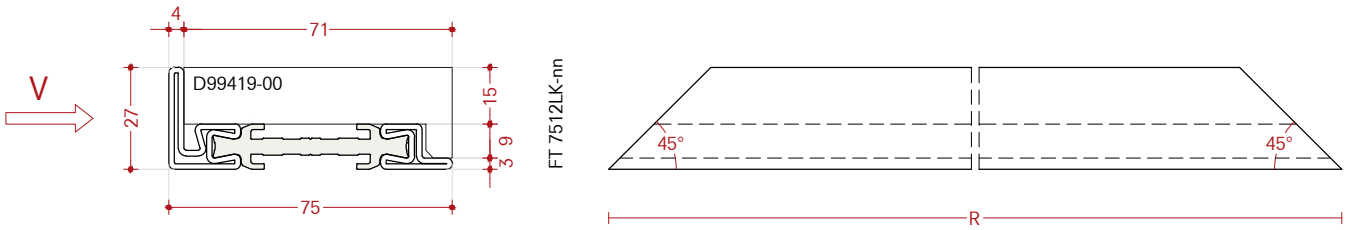
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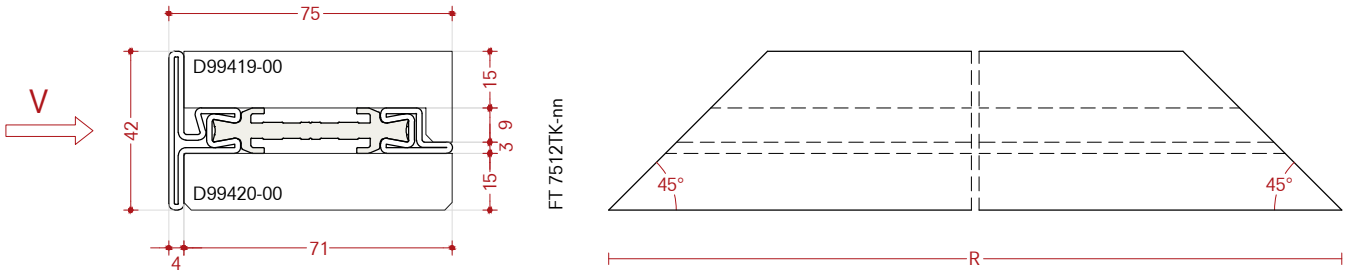
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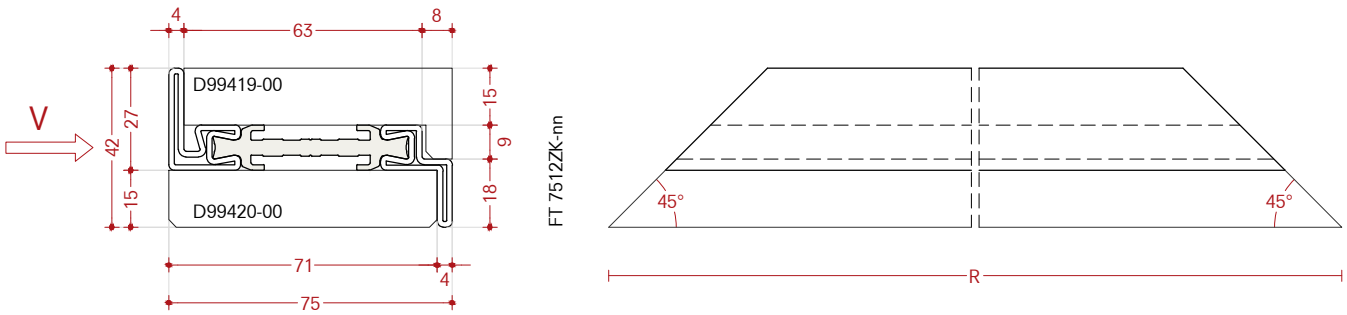
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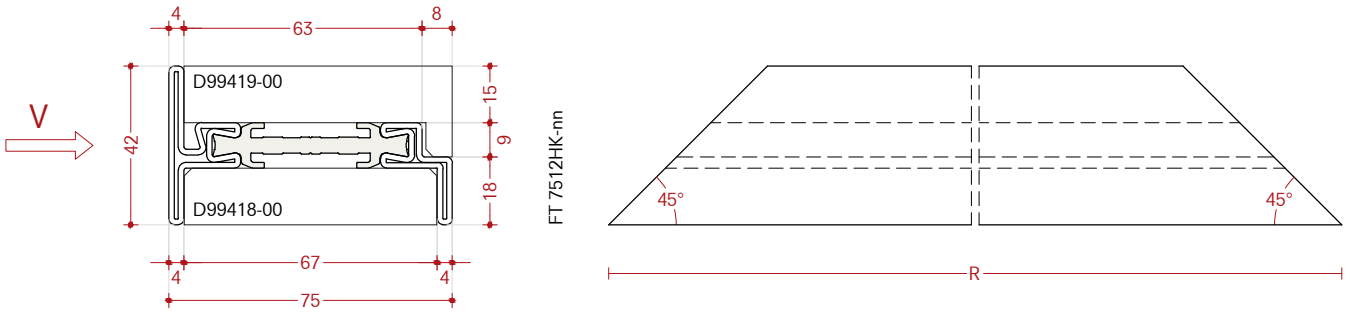
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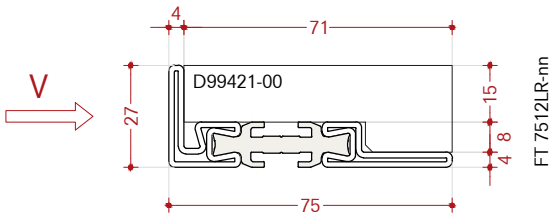

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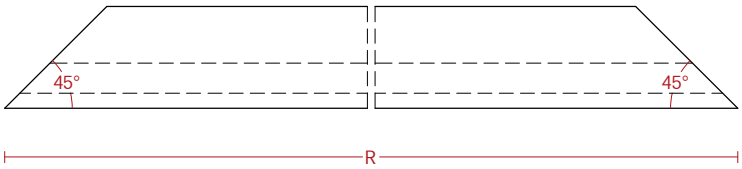

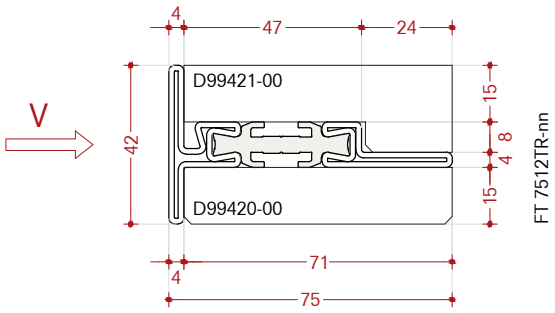

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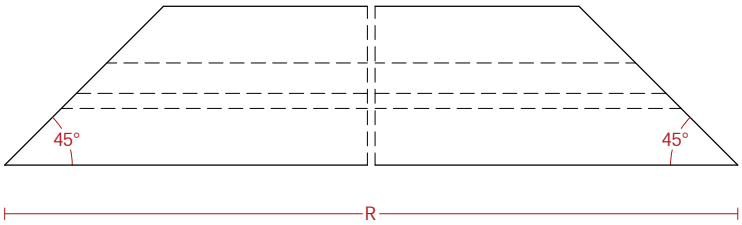

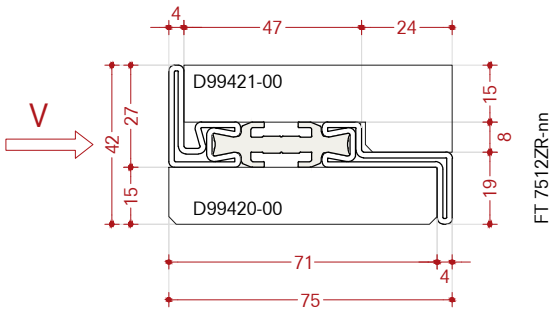

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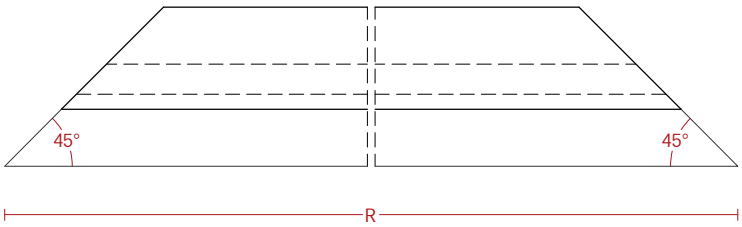

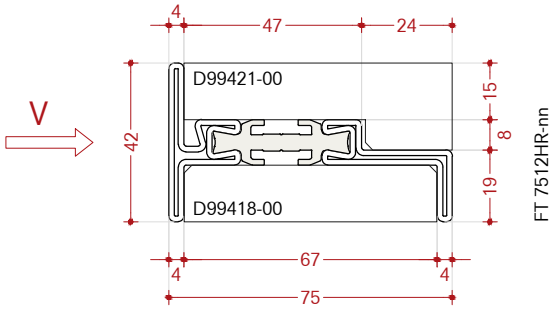

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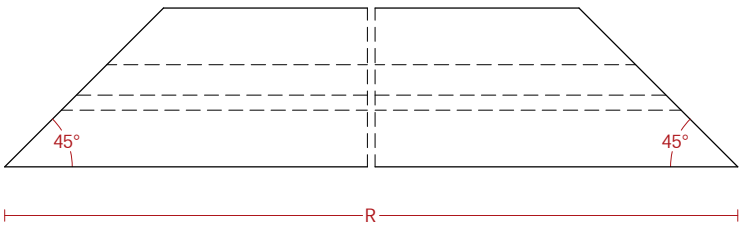

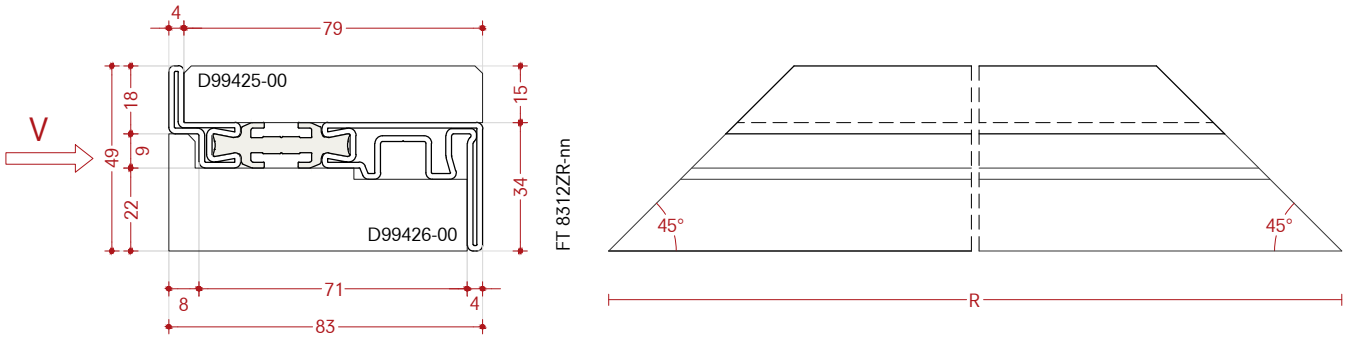
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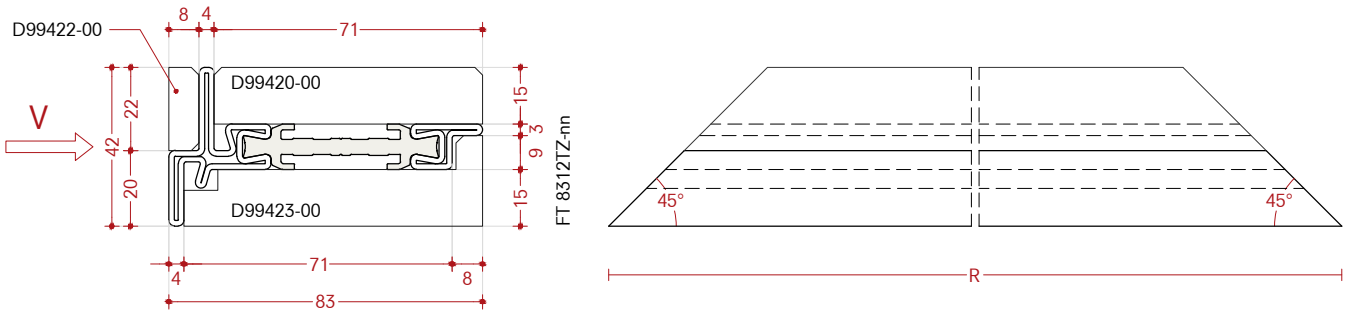
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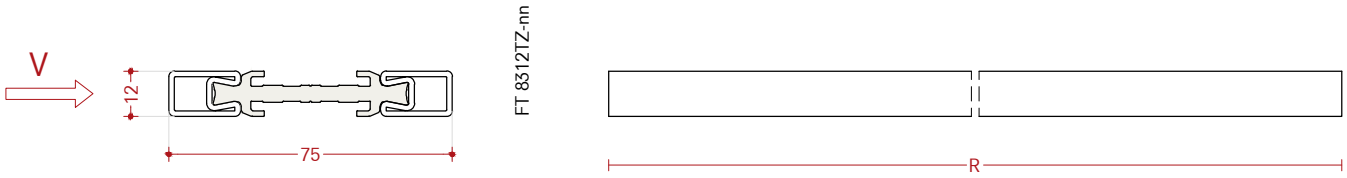
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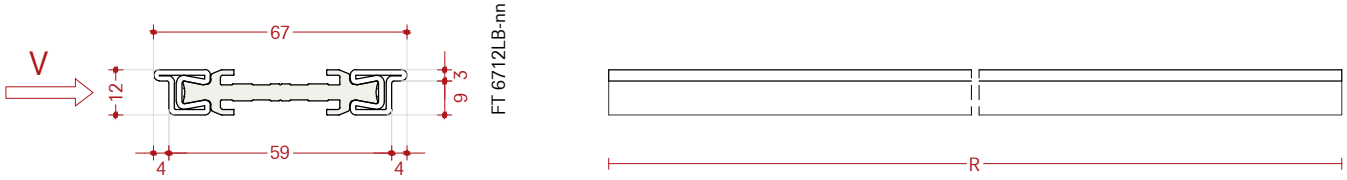
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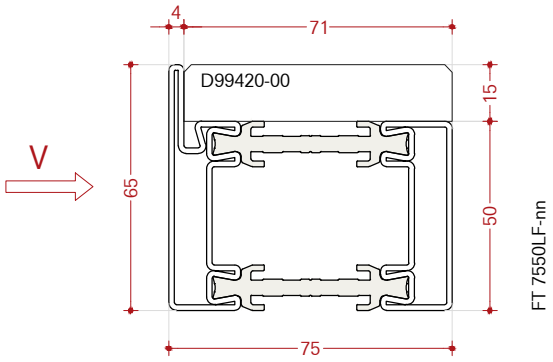

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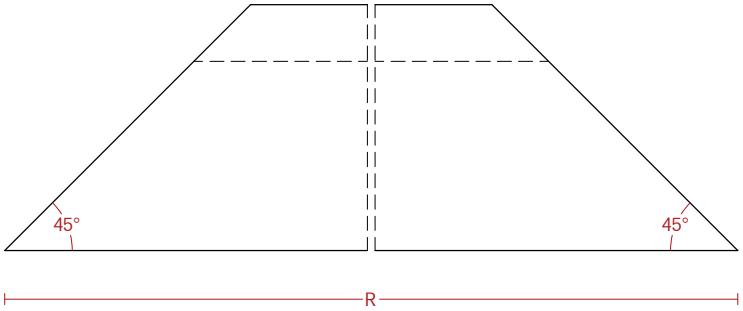

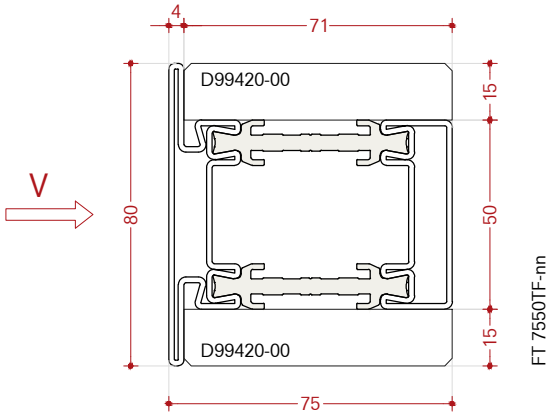

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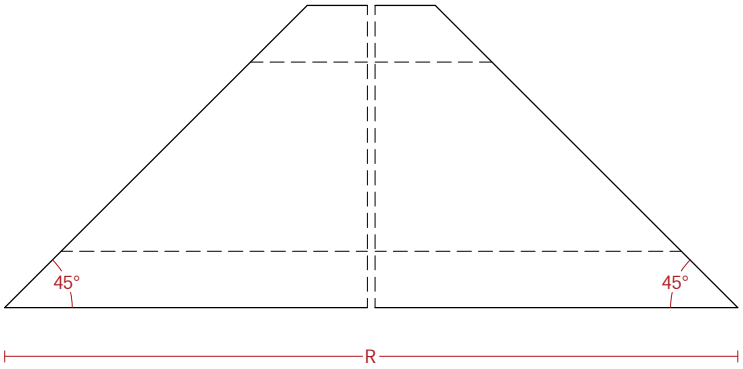

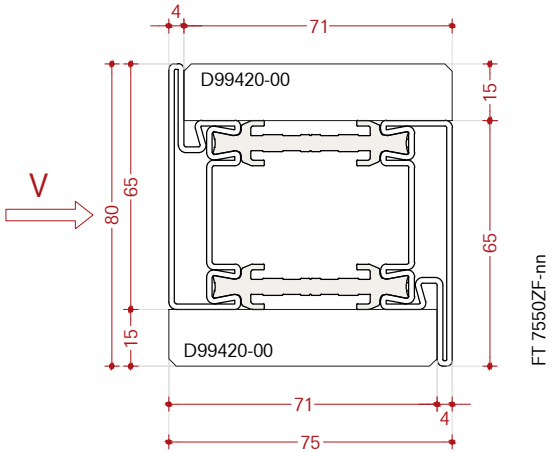

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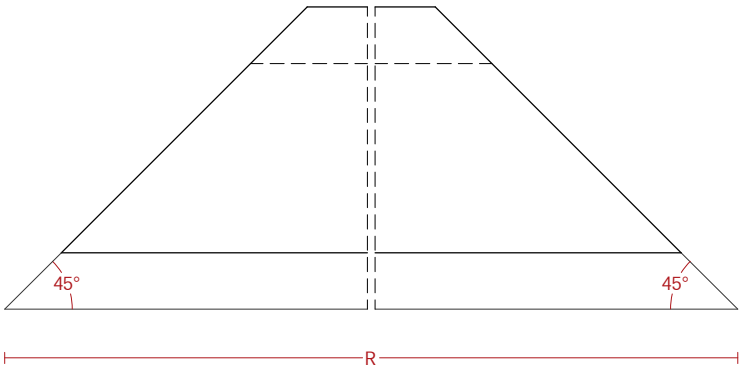

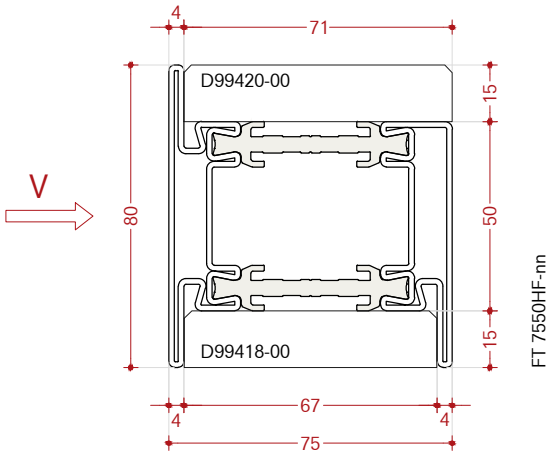

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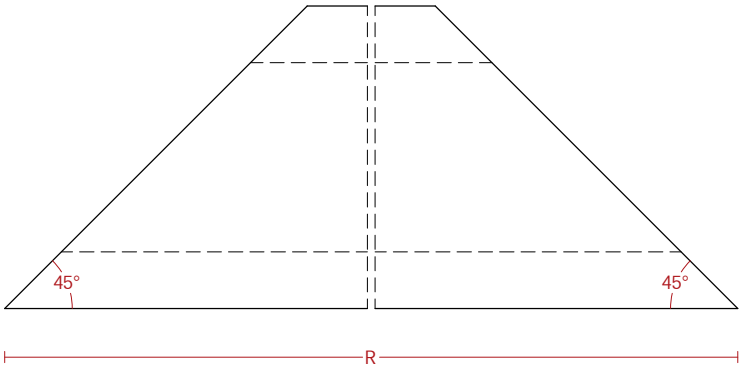

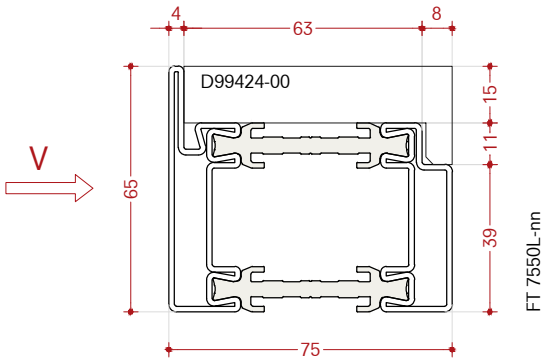

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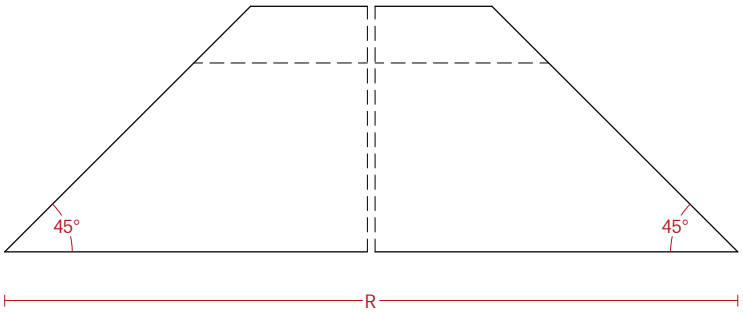

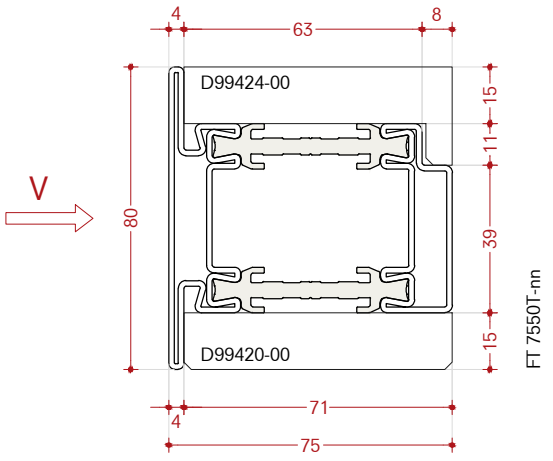

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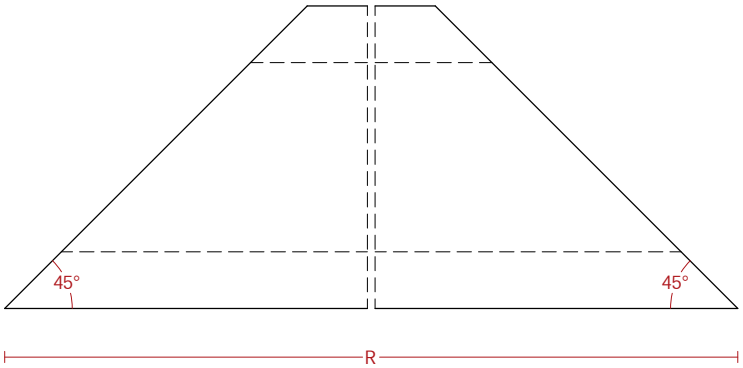

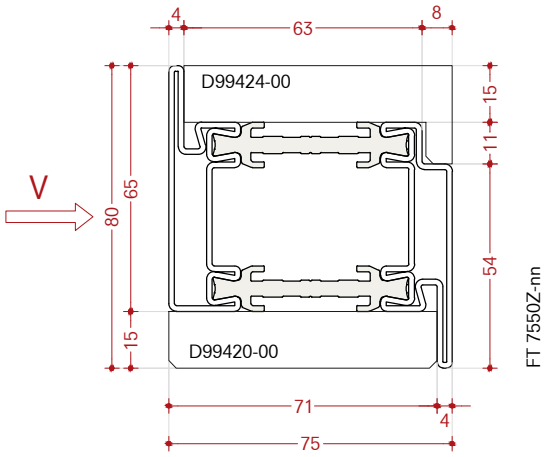

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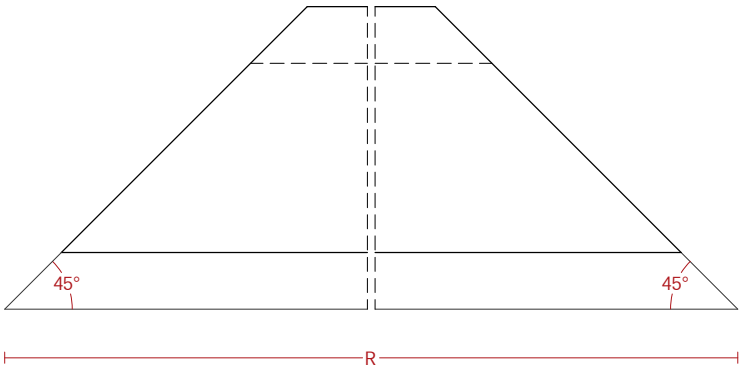

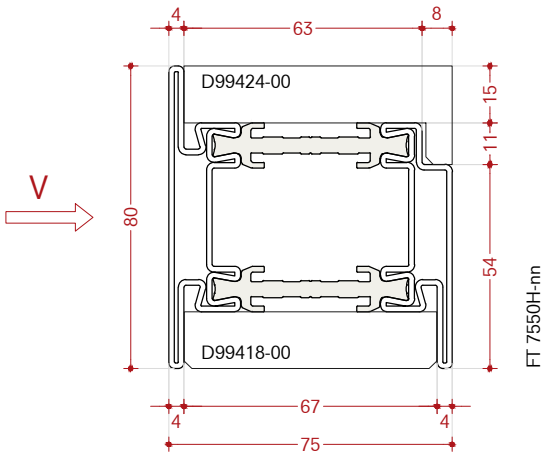

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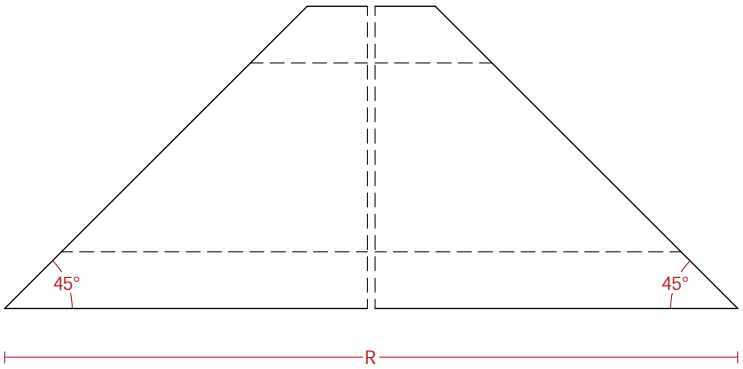

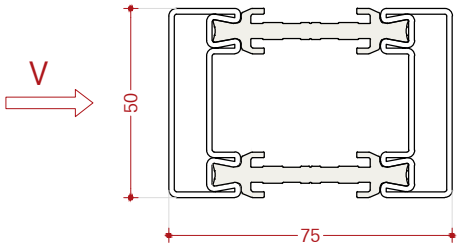

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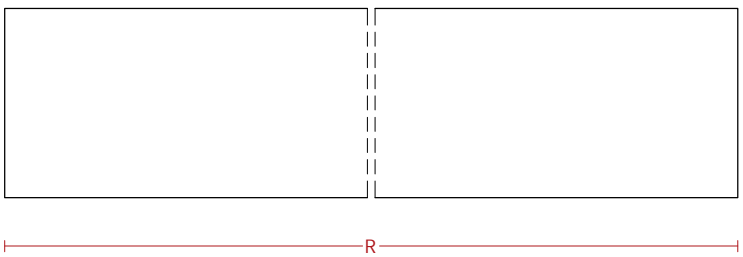
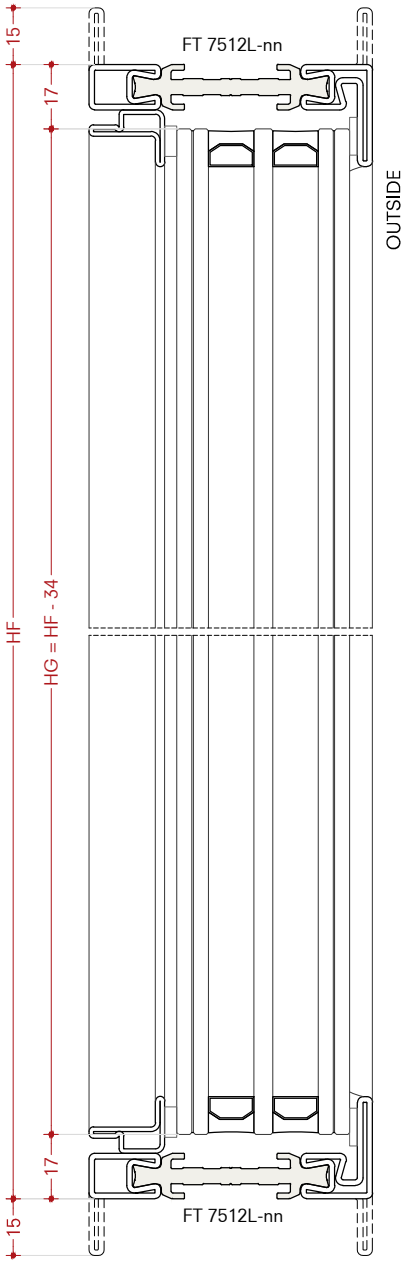
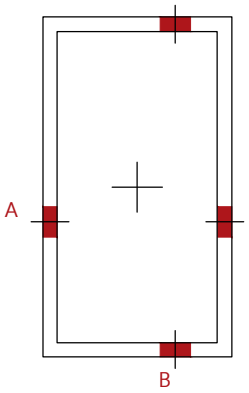


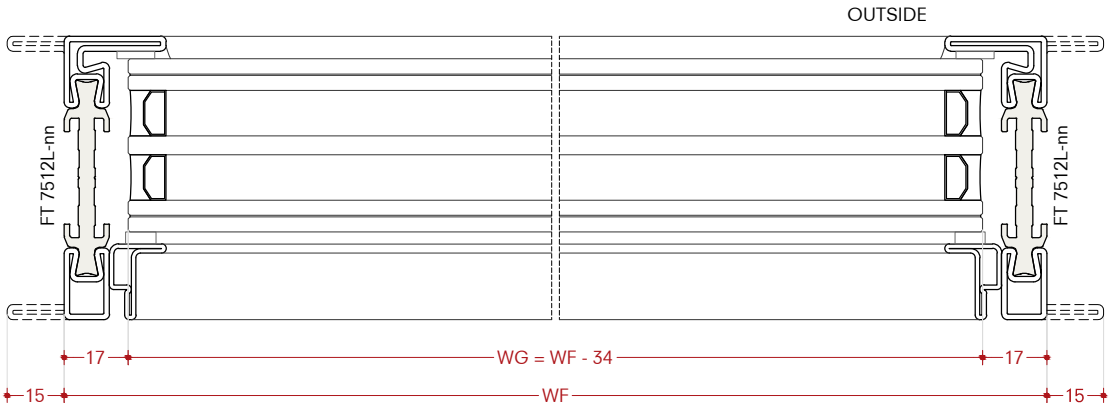
Cutting length
FT 7512L-nn
Fixed frame

Zuschnitt
FT 7512L-nn
Festverglasung

Découpe
FT 7512L-nn
Fenêtre fixe



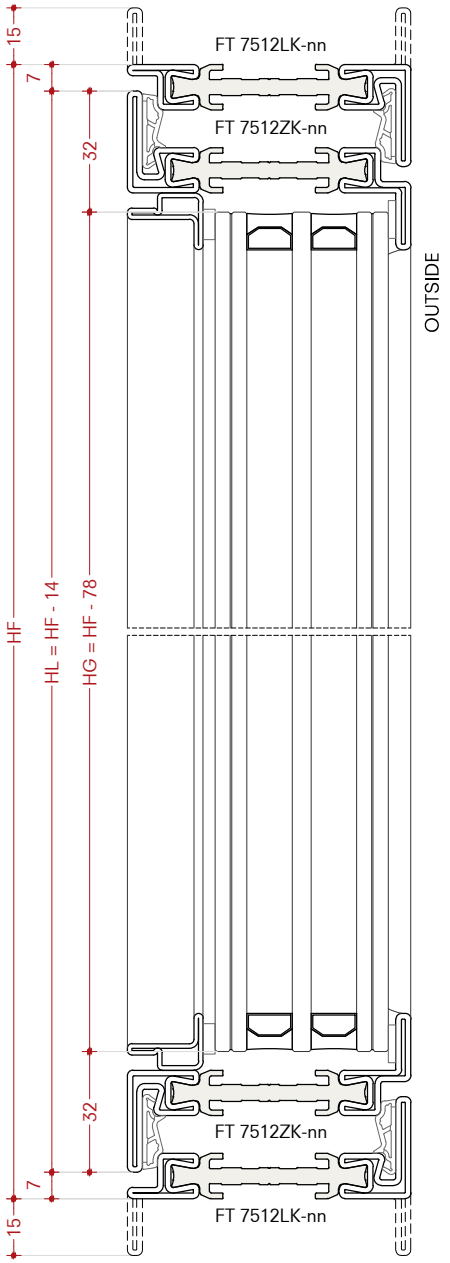


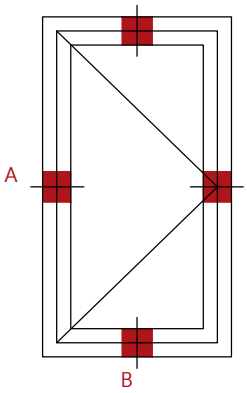


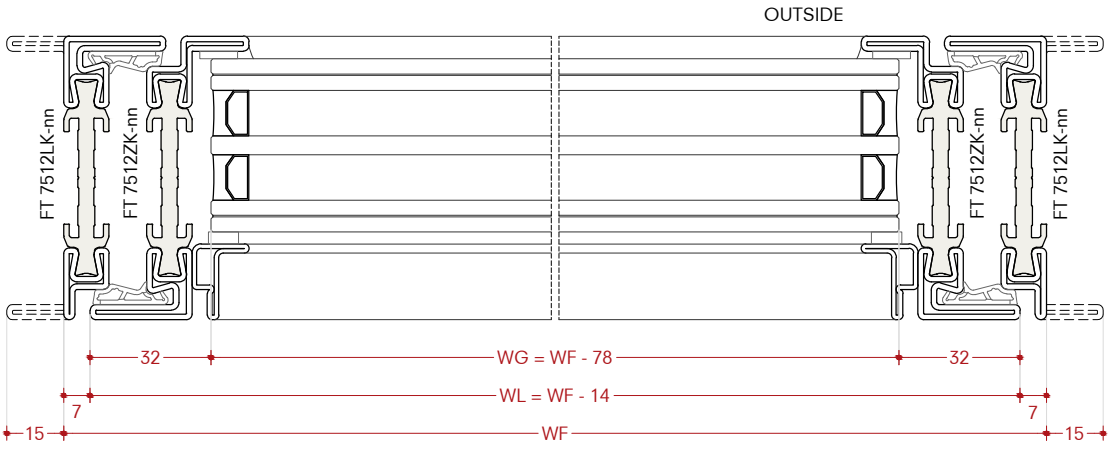
Cutting length
Single leaf window
Open in
Flush profiles

Zuschnitt
Einflüglige Fenster
Nach innen öffnend
Flächenbündige profile

Découpe
Fenêtre à un vantail
Ouverture intérieure
Profilés coplanaires



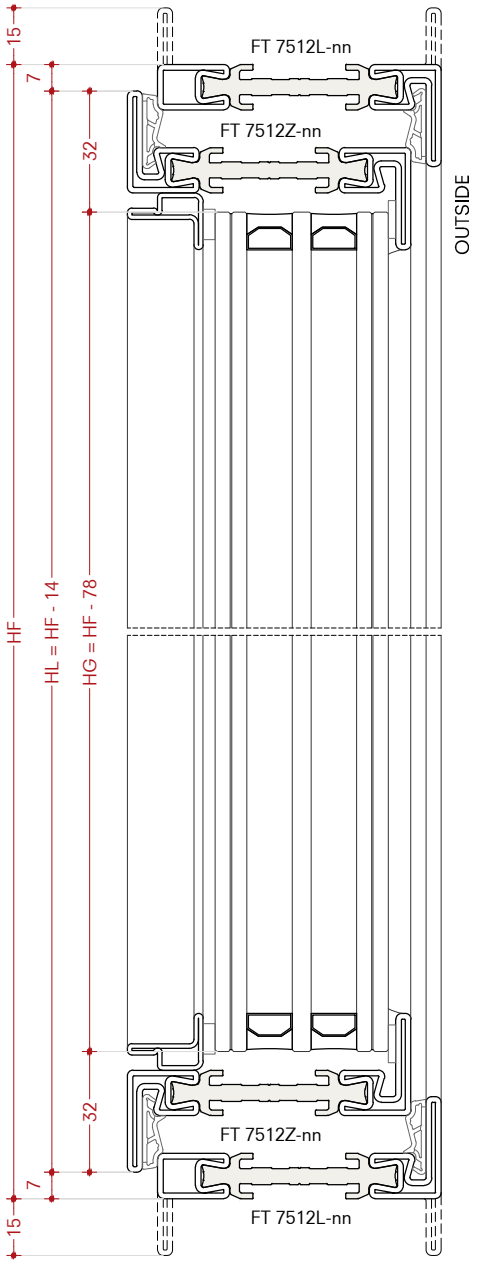


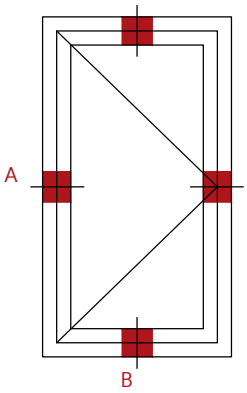


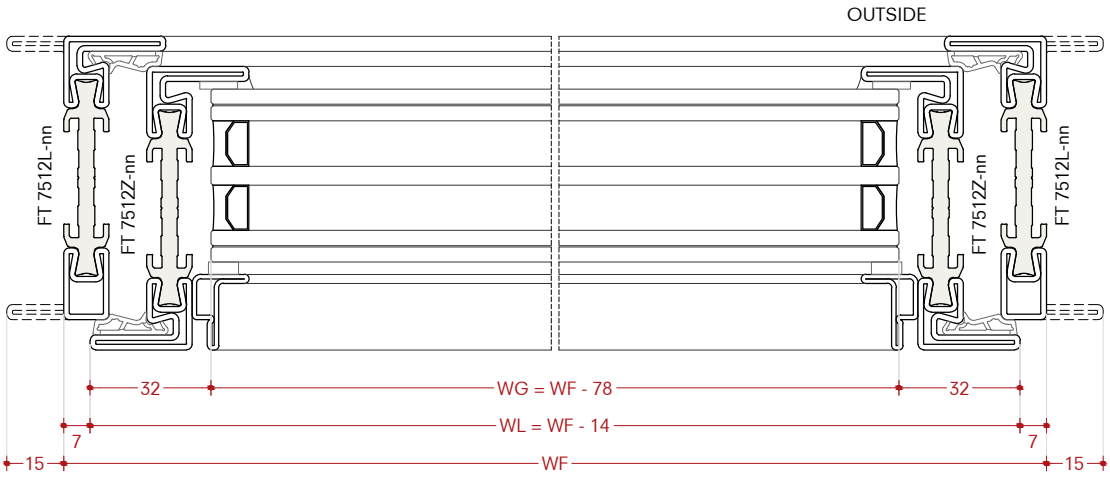
Cutting length
Single leaf window
Open in
Overlapped profiles

Zuschnitt
Einflüglige Fenster
Nach innen öffnend
Überlappende profile

Découpe
Fenêtre à un vantail
Ouverture intérieure
Profilés superposés



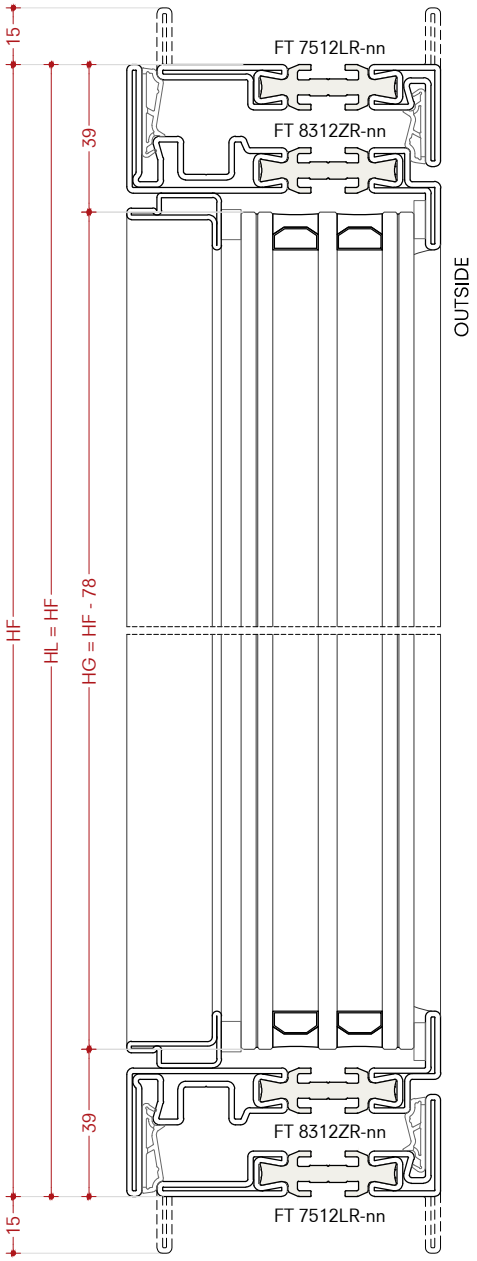


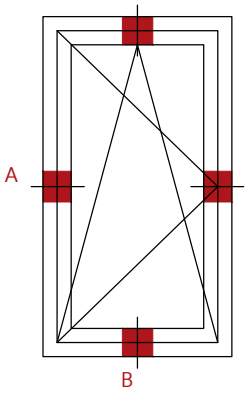


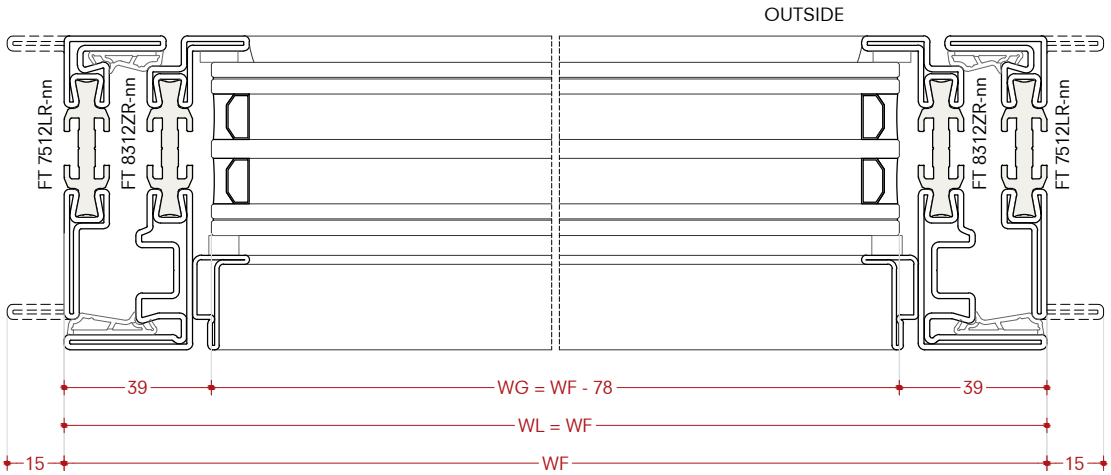
Cutting length
Tilt&Turn profiles
Open in

Zuschnitt
Dreh-Kippfenster
Nach innen öffnend

Découpe
Fênetre oscillo-battant
Ouverture intérieure



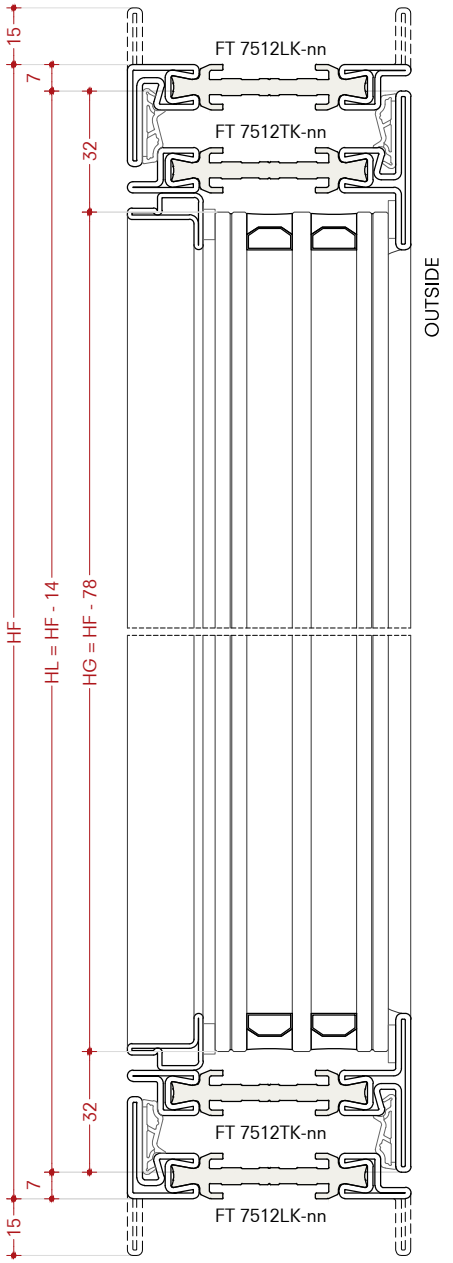


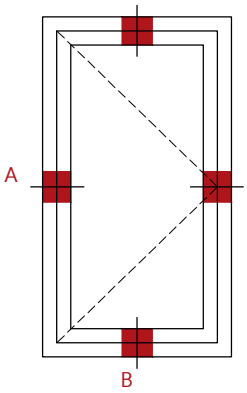


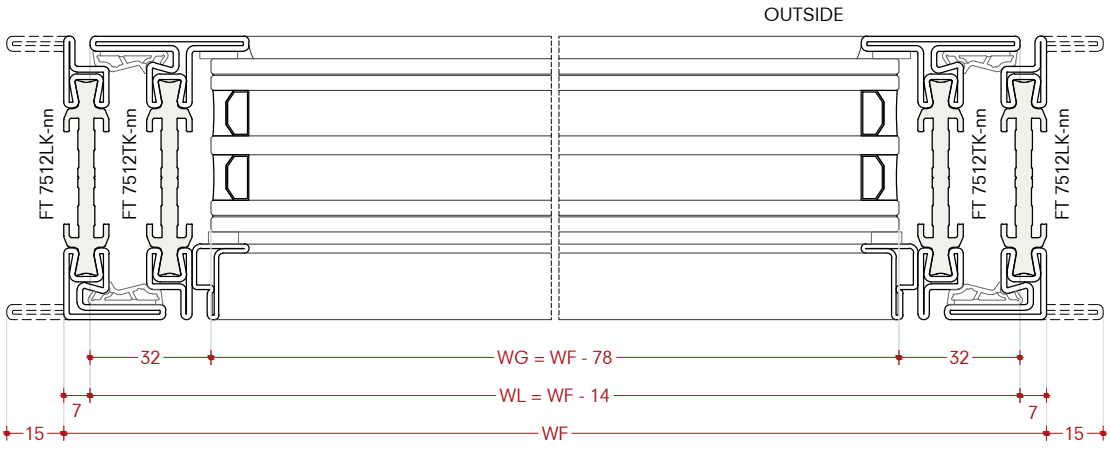
Cutting length
Single leaf window
Open out
Flush profiles

Zuschnitt
Einflüglige Fenster
Nach außen öffnend
Flächenbündige profile

Découpe
Fenêtre à un vantail
Ouverture extérieure
Profilés coplanaires



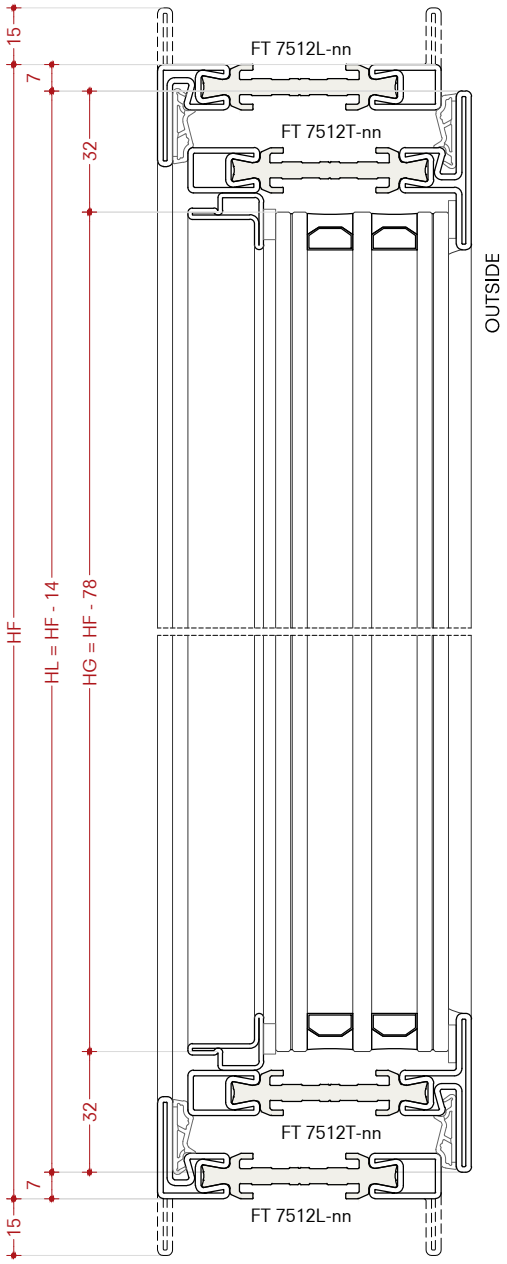


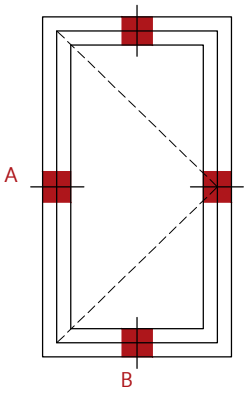


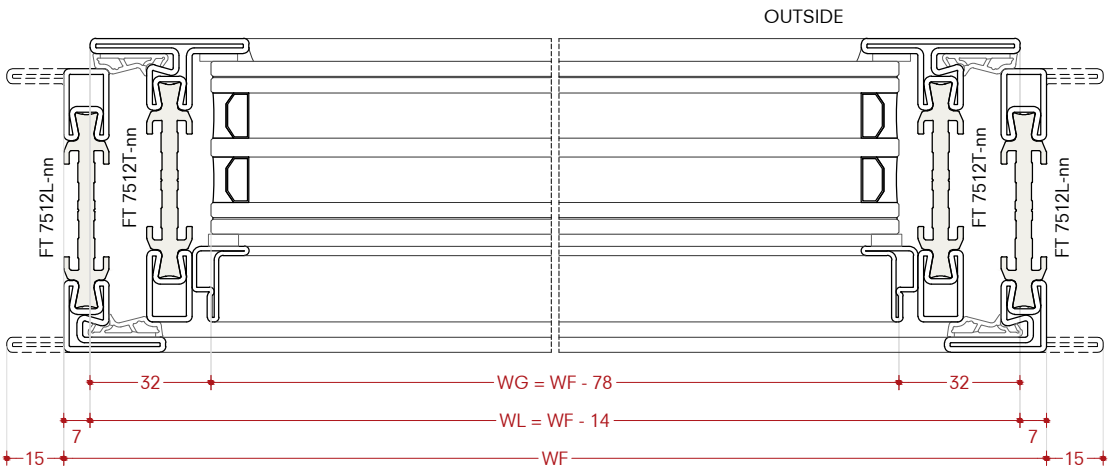
Cutting length
Single leaf window
Open out
Overlapped profiles

Zuschnitt
Einflüglige Fenster
Nach außen öffnend
Überlappende profile

Découpe
Fenêtre à un vantail
Ouverture extérieure
Profilés superposés



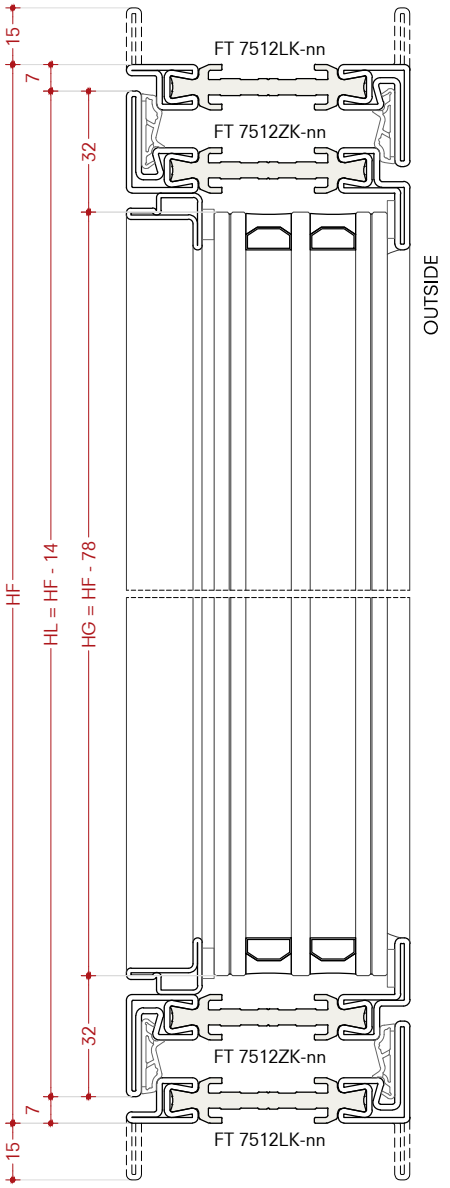


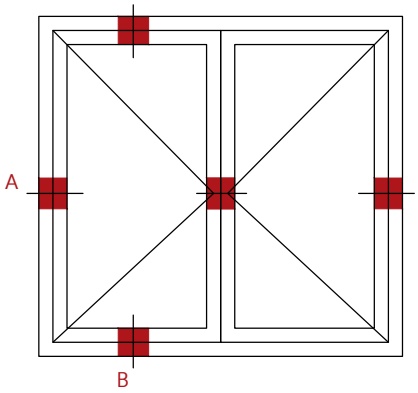


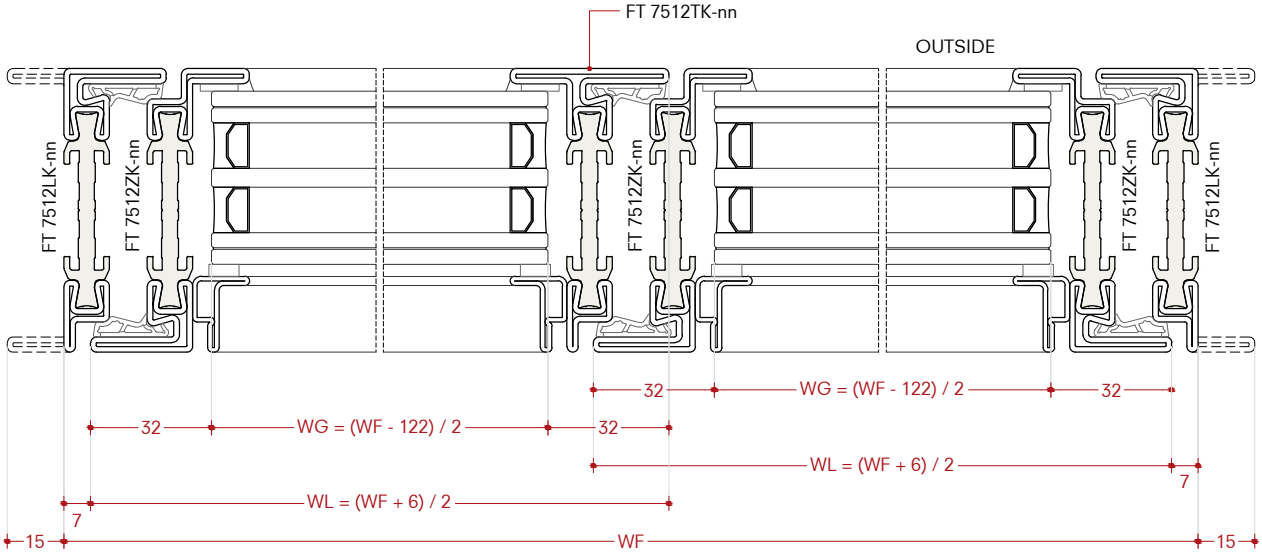
Cutting length
Double leaf window
Open in
Flush profiles

Zuschnitt
Zweiflüglige Fenster
Nach innen öffnend
Flächenbündige profile

Découpe
Fenêtre à deux vantaux
Ouverture intérieure
Profilés coplanaires



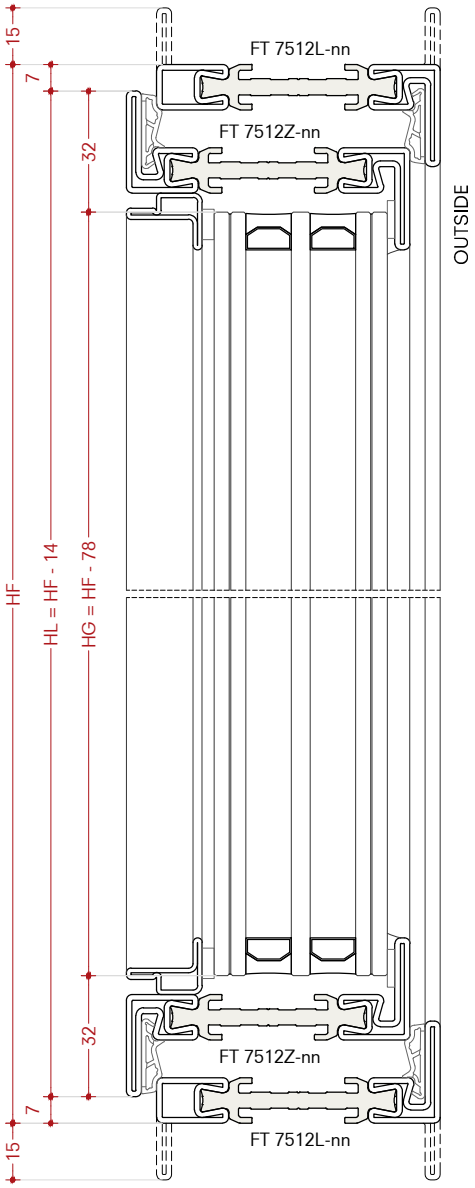


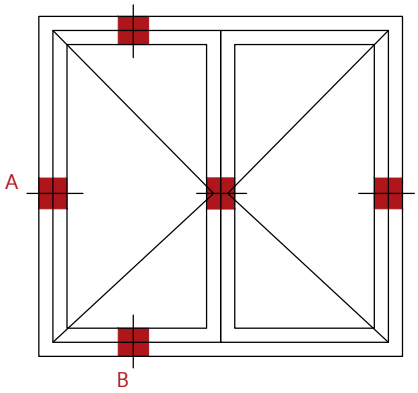


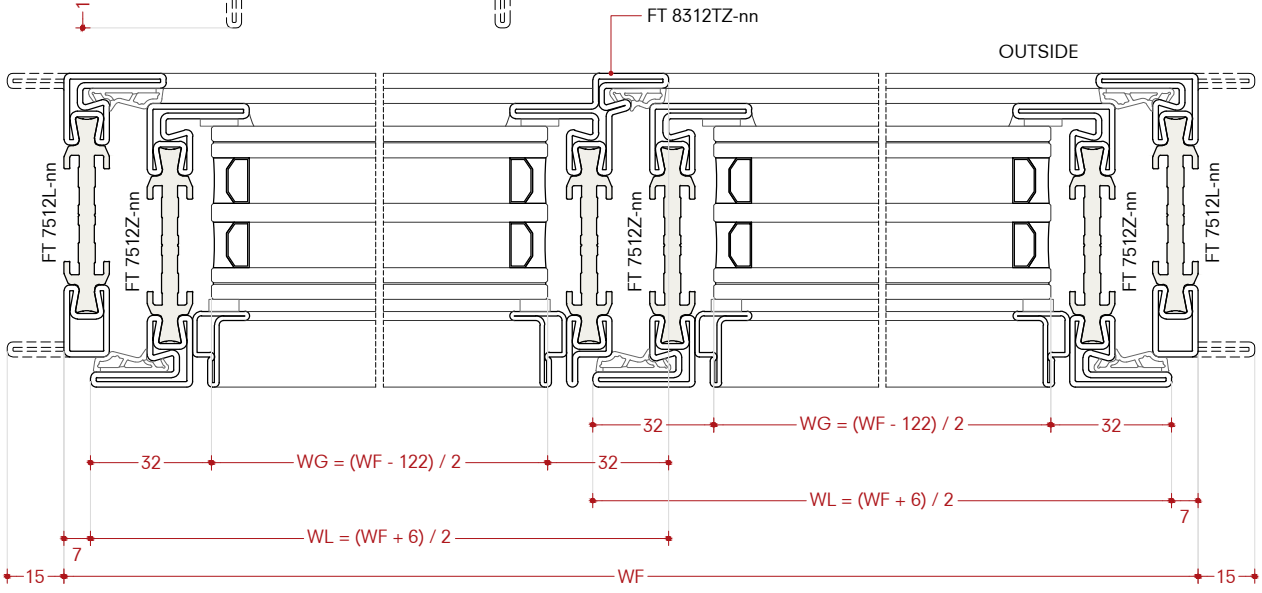
Cutting length
Double leaf window
Open in
Overlapped profiles

Zuschnitt
Zweiflüglige Fenster
Nach innen öffnend
Überlappende profile

Découpe
Fenêtre à deux vantaux
Ouverture intérieure
Profilés superposés



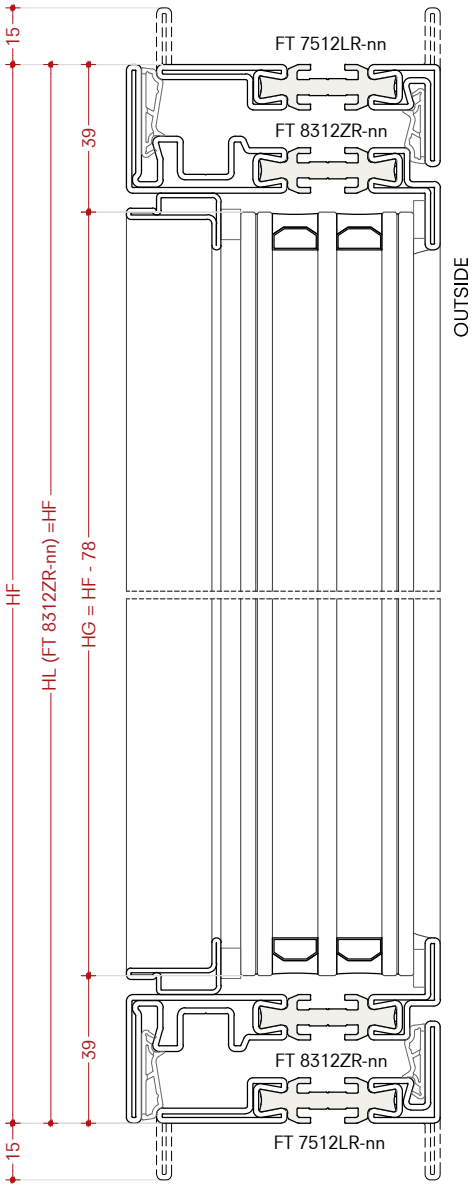


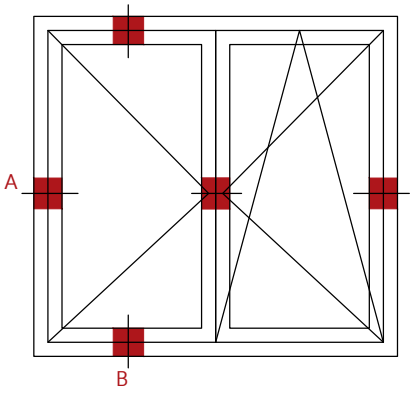


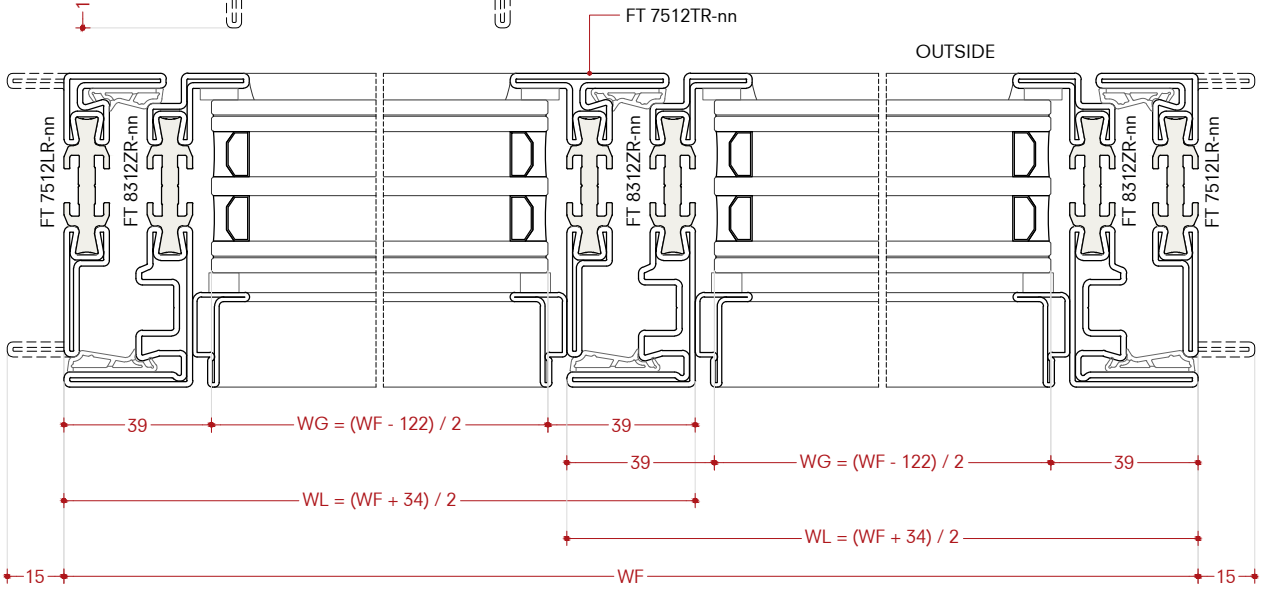
Cutting length
Double leaf and Tilt&Turn window
Open in
Overlapped profiles

Zuschnitt
Zweiflüglige und Dreh-Kippfenster
Nach innen öffnend
Überlappende profile

Découpe
Fenêtre à deux vantaux et oscillo-battant - Ouverture intérieure
Profilés superposés



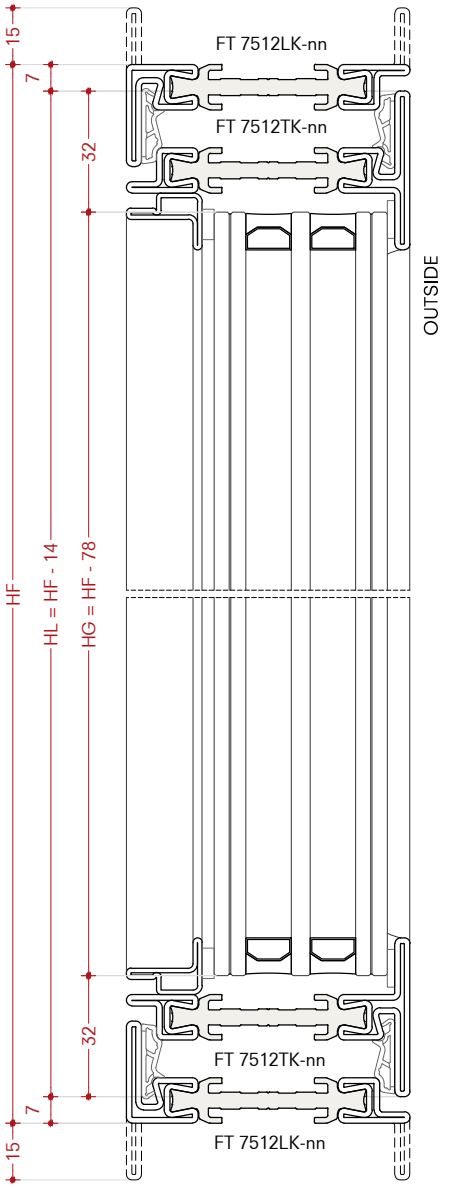


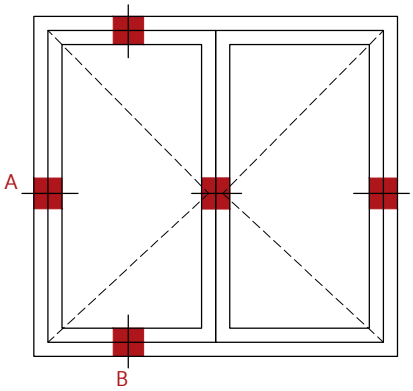


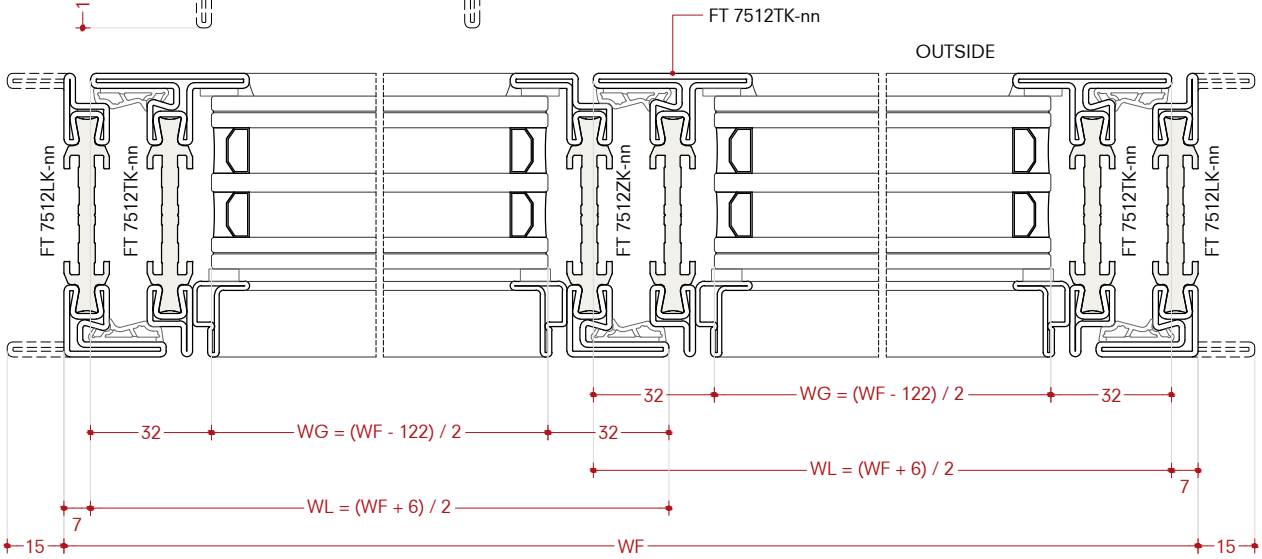
Cutting length
Double leaf window
Open out
Flush profiles

Zuschnitt
Zweiflüglige Fenster
Nach außen öffnend
Flächenbündige profile

Découpe
Fenêtre à deux vantaux
Ouverture extérieure
Profilés coplanaires



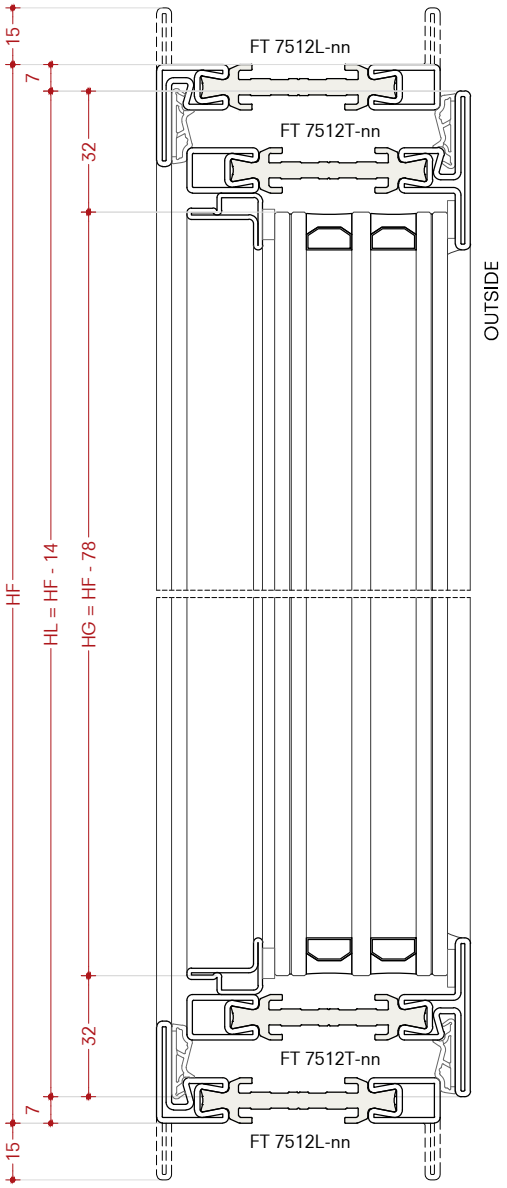


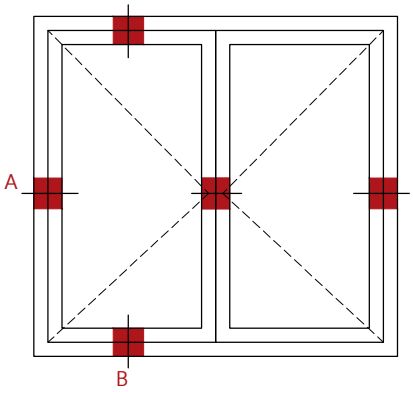


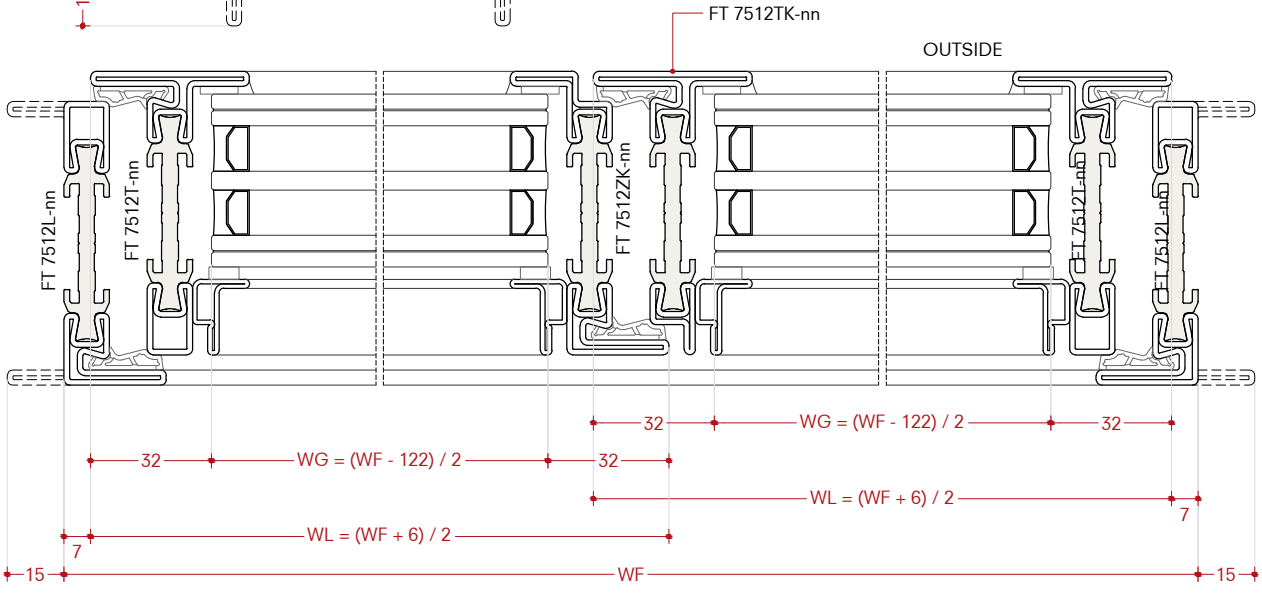
Cutting length
Double leaf window
Open out
Overlapped profiles

Zuschnitt
Zweiflüglige Fenster
Nach außen öffnend
Überlappende profile

Découpe
Fenêtre à deux vantaux
Ouverture extérieure
Profilés superposés



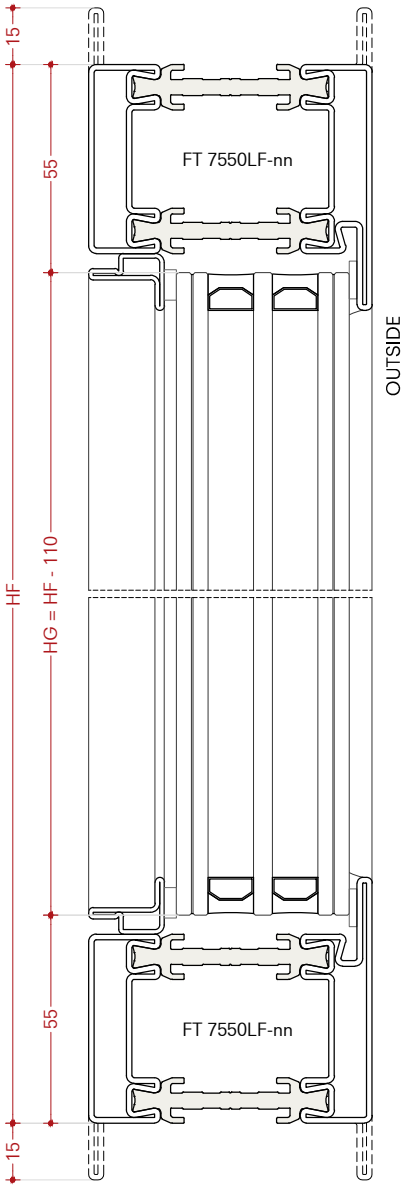


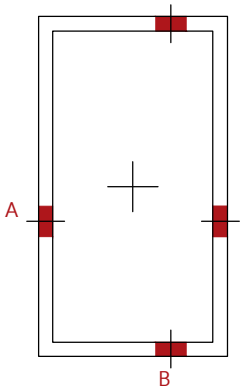


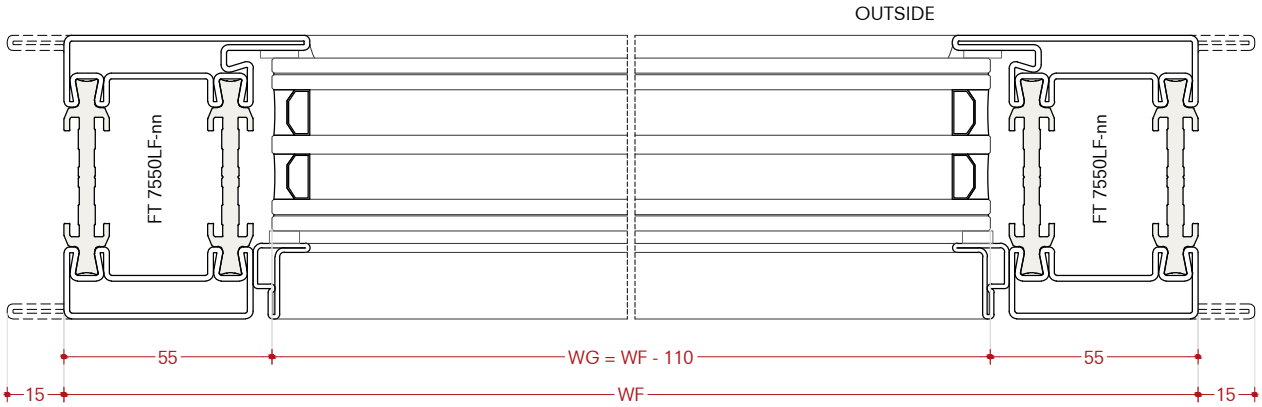
Cutting length
FT 7550LF-nn
Fixed frame

Zuschnitt
FT 7550LF-nn
Festverglasung

Découpe
FT 7550LF-nn
Fenêtre fixe



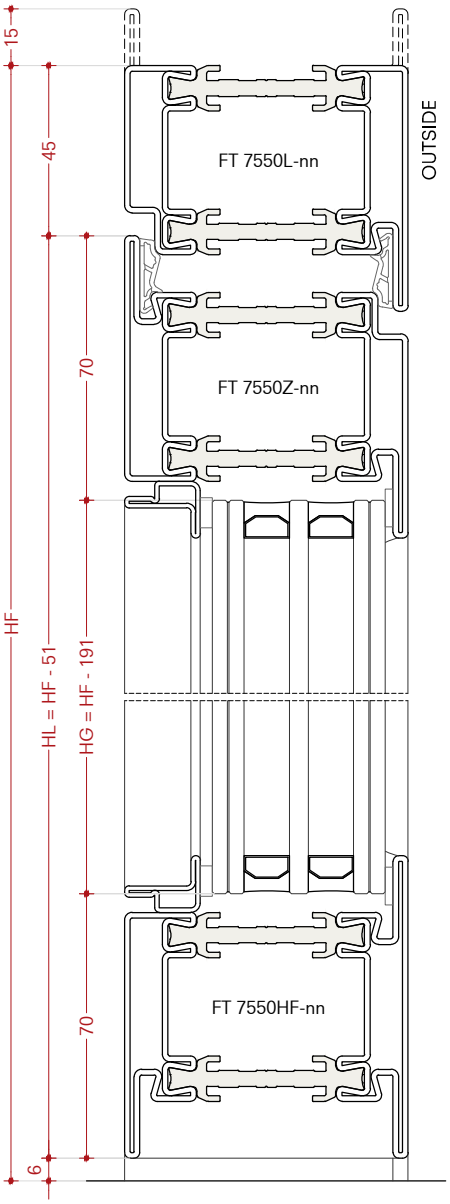


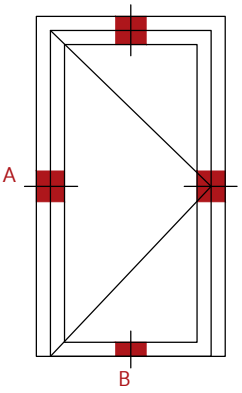


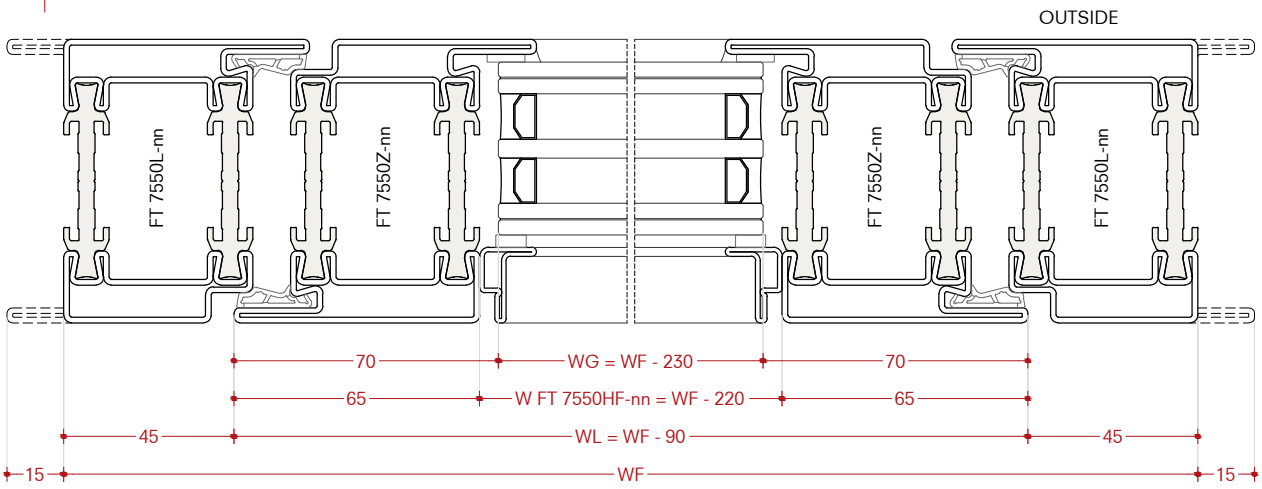
Cutting length
Single leaf door
Open in

Zuschnitt
Einflüglige Anschlagtür
Nach innen öffnend

Découpe
Porte à un vantail
Ouverture intérieure



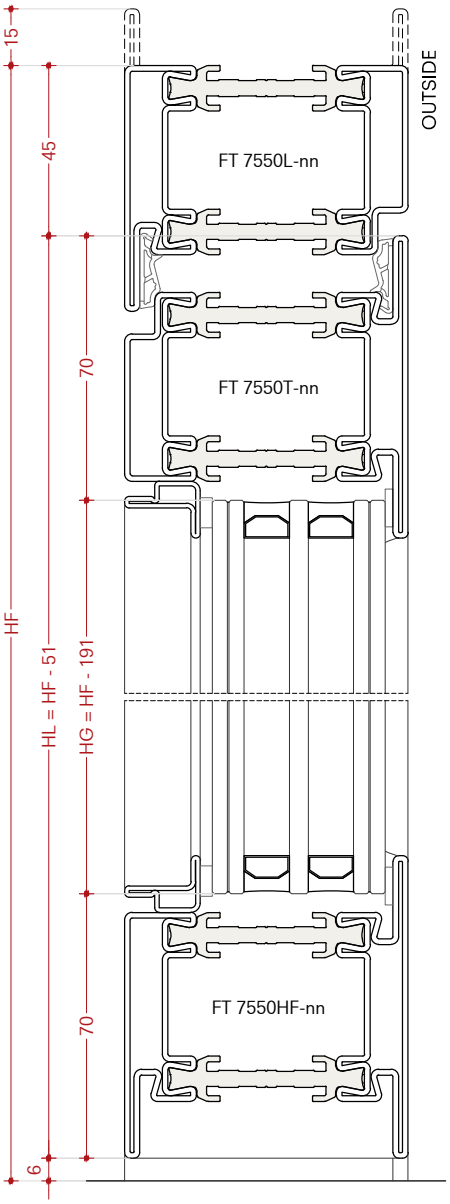


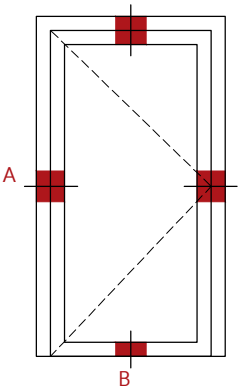


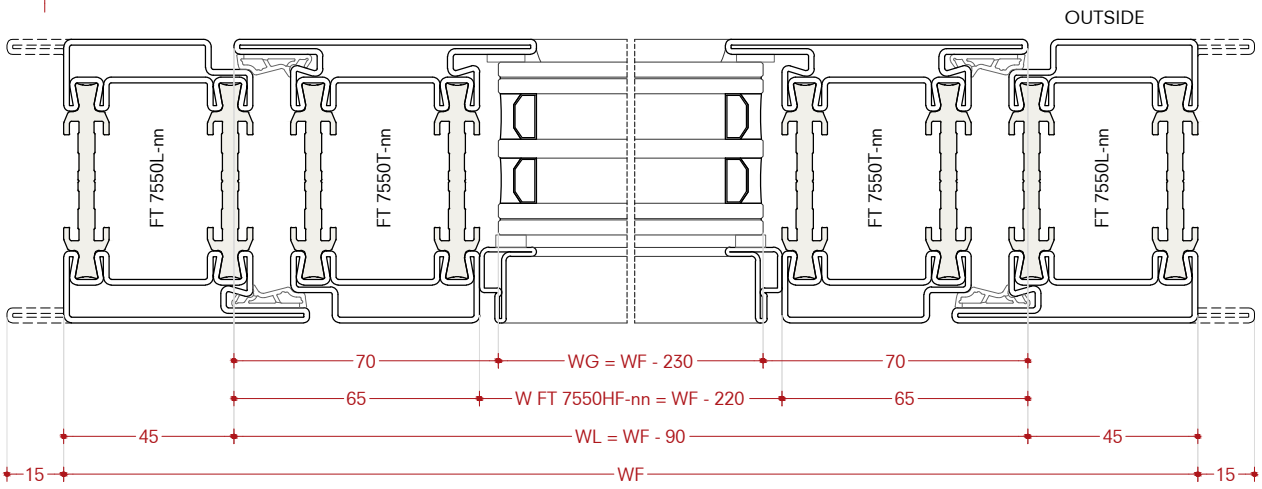
Cutting length
Single leaf door
Open out

Zuschnitt
Einflüglige Anschlagtür
Nach außen öffnend

Découpe
Porte à un vantail
Ouverture extérieure



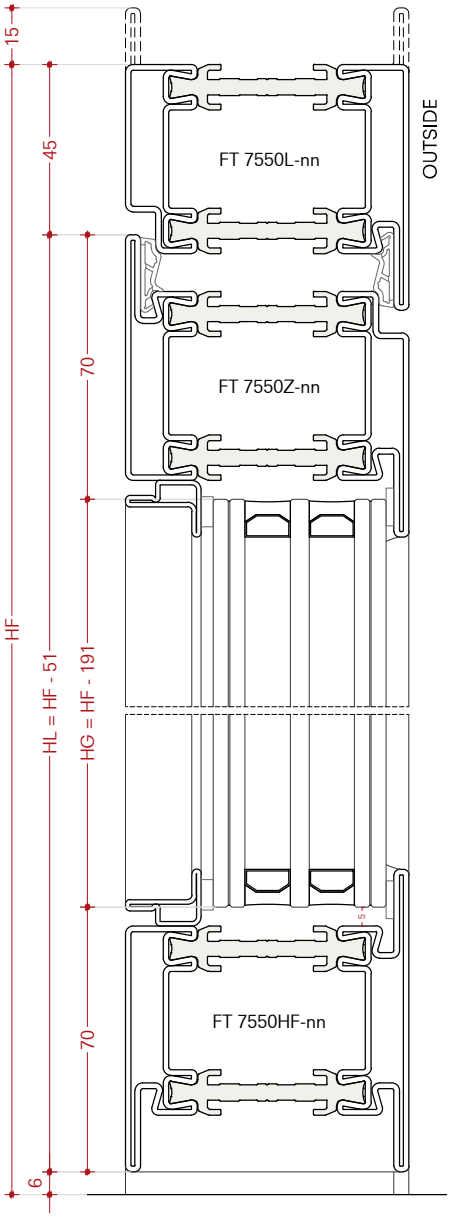


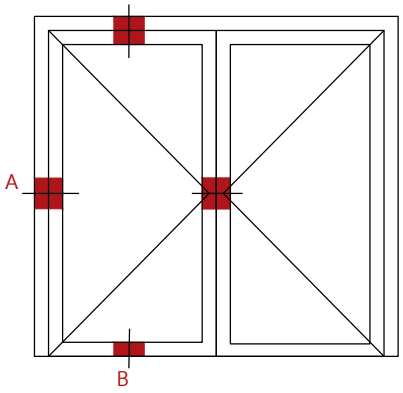


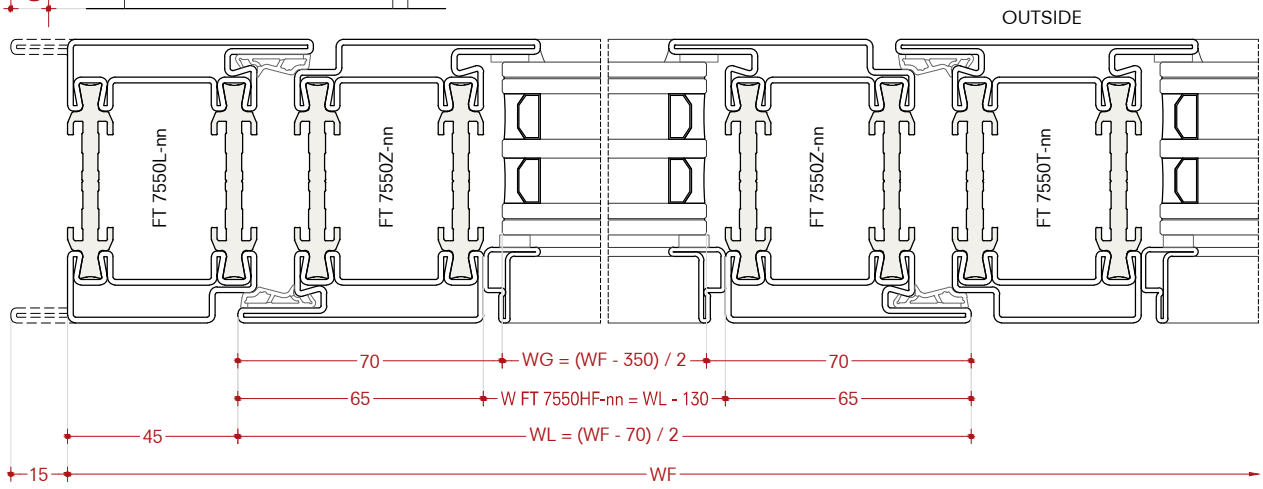
Cutting length
Double leaf door
Open in

Zuschnitt
Zweiflüglige Anschlagtür
Nach innen öffnend

Découpe
Porte à deux vantaux
Ouverture intérieure



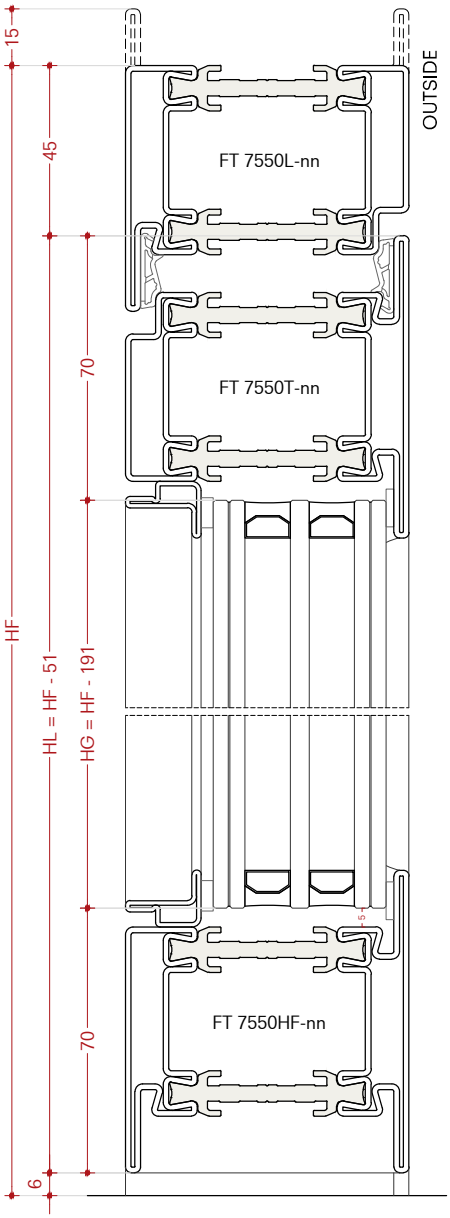


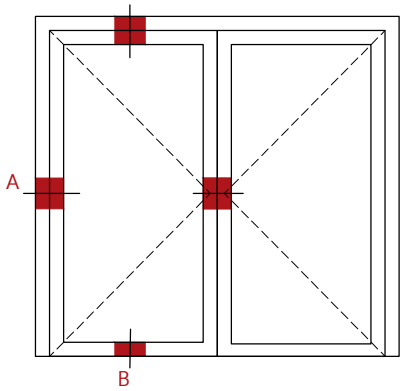


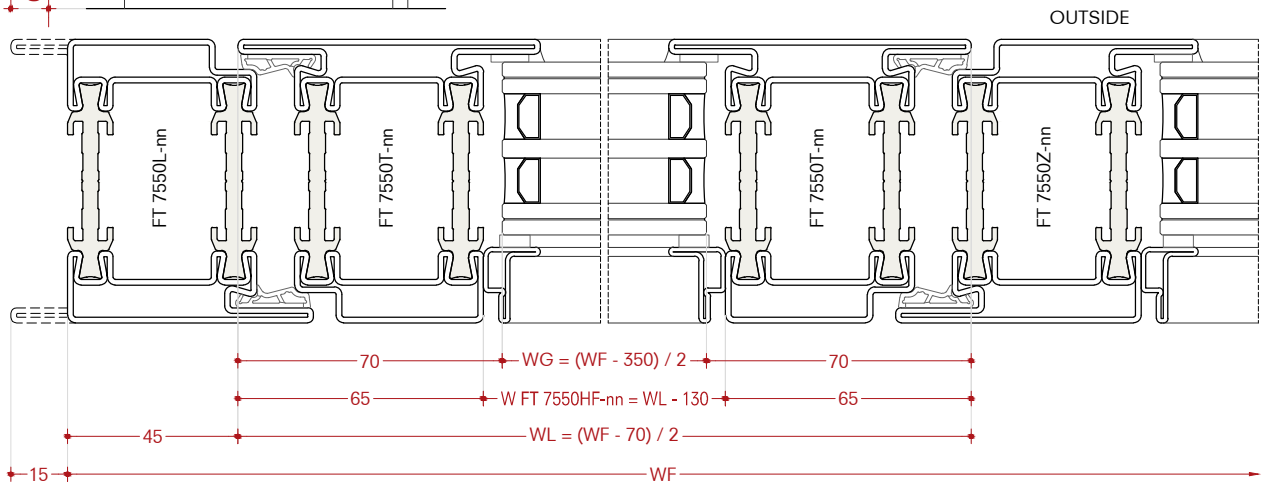
Cutting length
Double leaf door
Open out

Zuschnitt
Zweiflüglige Anschlagtür
Nach außen öffnend

Découpe
Porte à deux vantaux
Ouverture extérieure



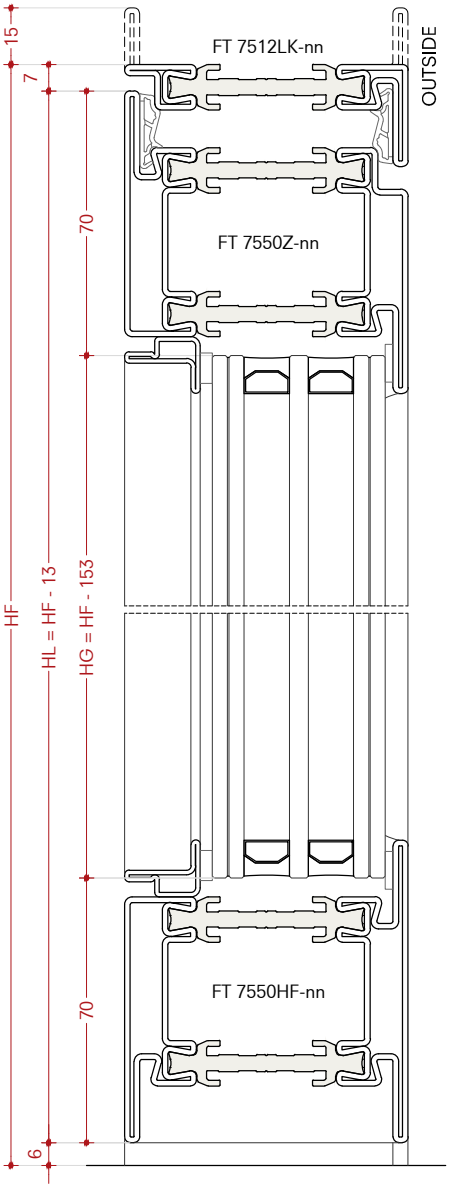


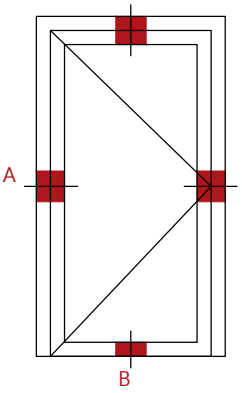


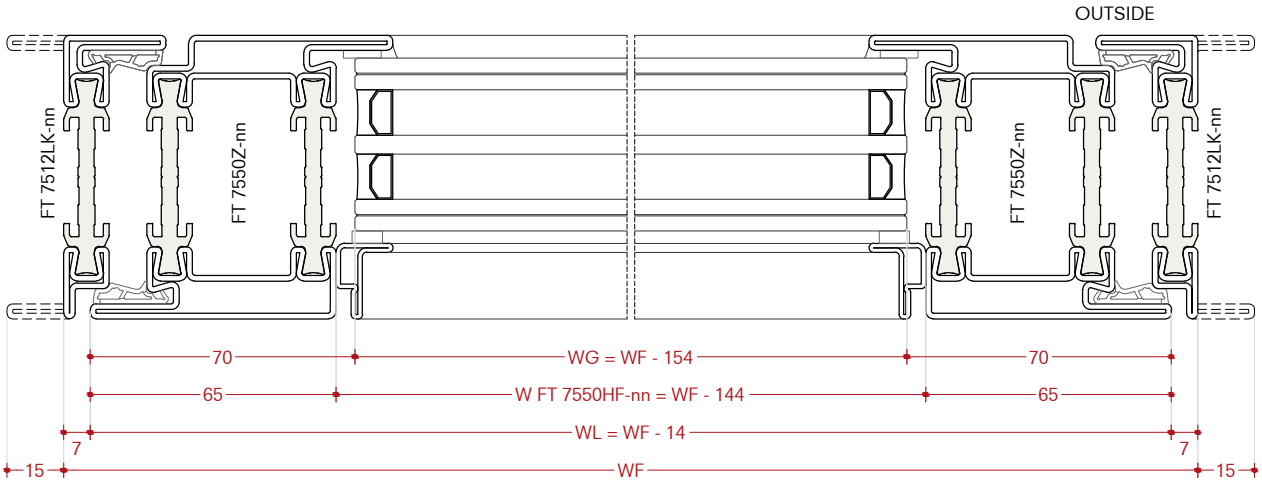
Cutting length
Single leaf door
Open in

Zuschnitt
Einflüglige Anschlagtür
Nach innen öffnend

Découpe
Porte à un vantail
Ouverture intérieure



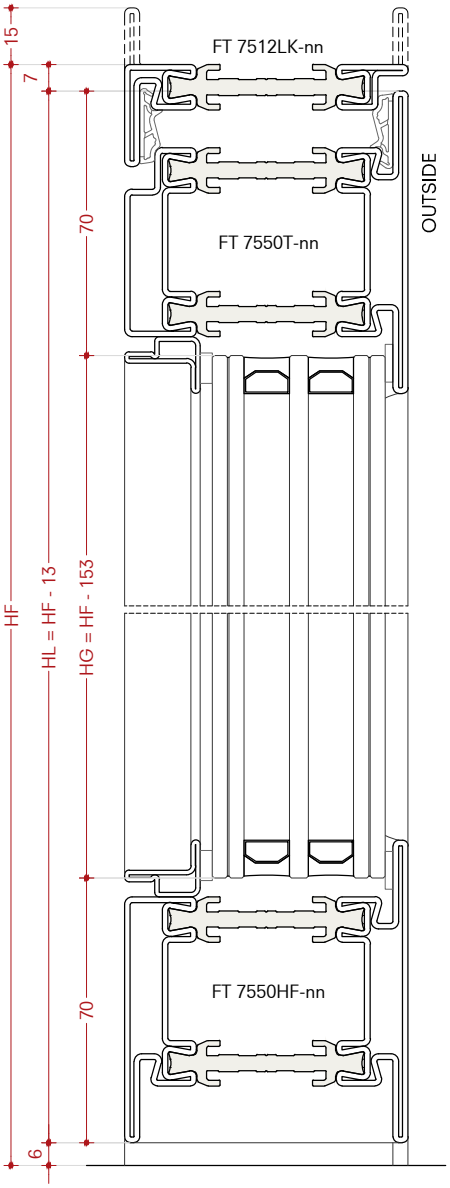


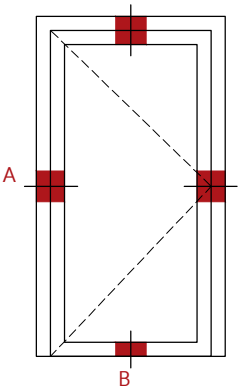


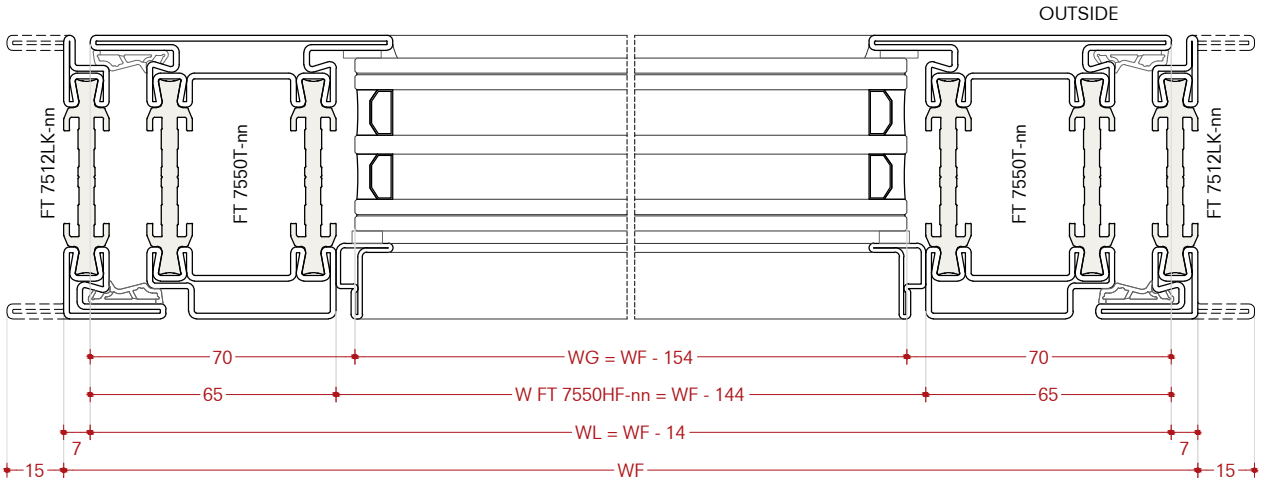
Cutting length
Single leaf door
Open out

Zuschnitt
Einflüglige Anschlagtür
Nach außen öffnend

Découpe
Porte à un vantail
Ouverture extérieure



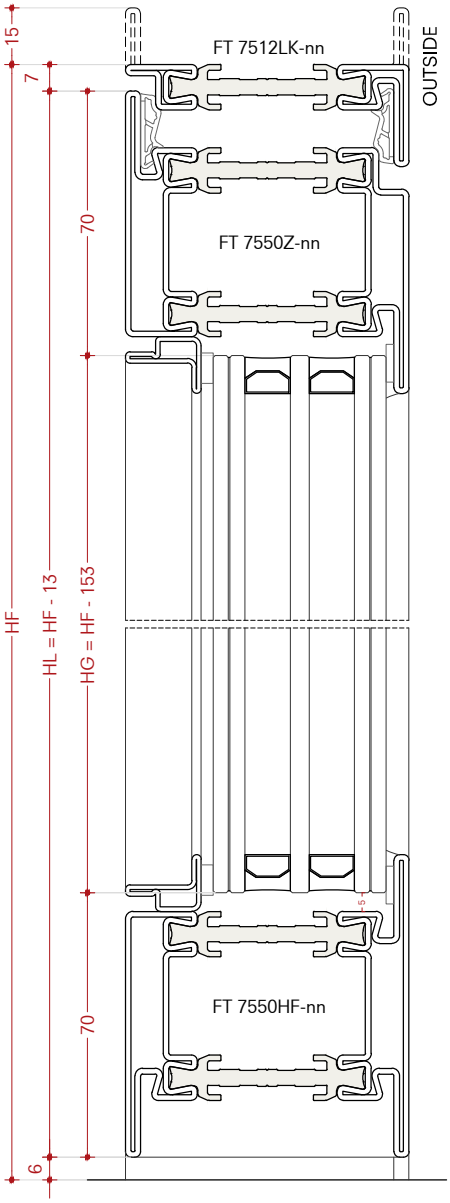


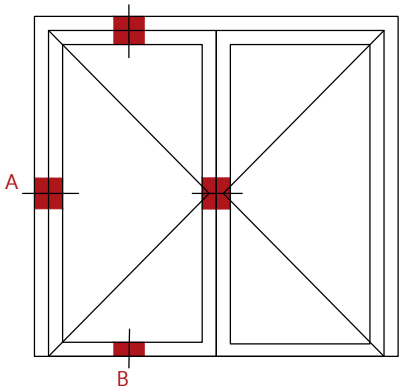


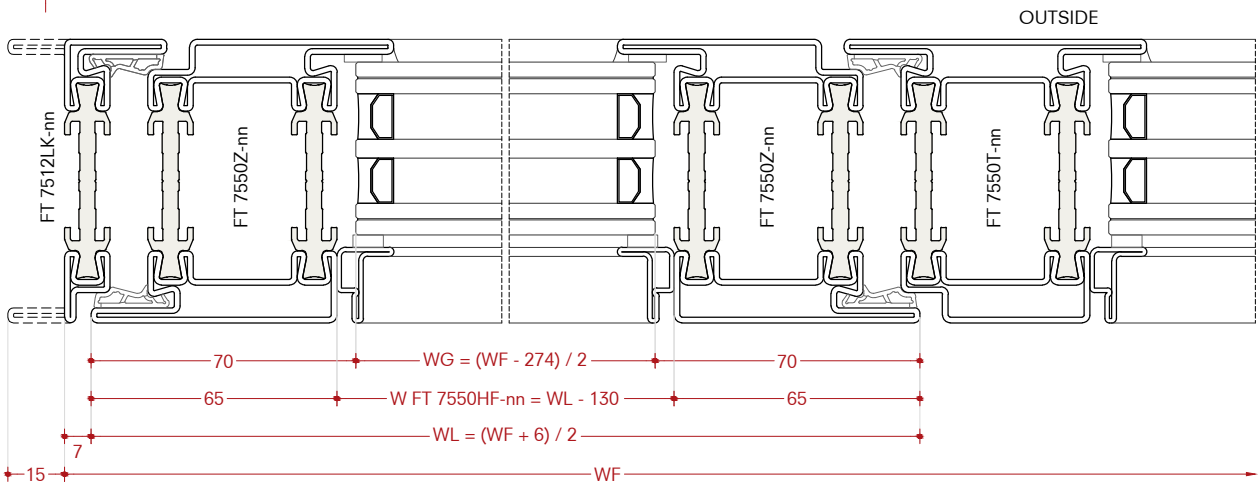
Cutting length
Double leaf door
Open in

Zuschnitt
Zweiflüglige Anschlagtür
Nach innen öffnend

Découpe
Porte à deux vantaux
Ouverture intérieure



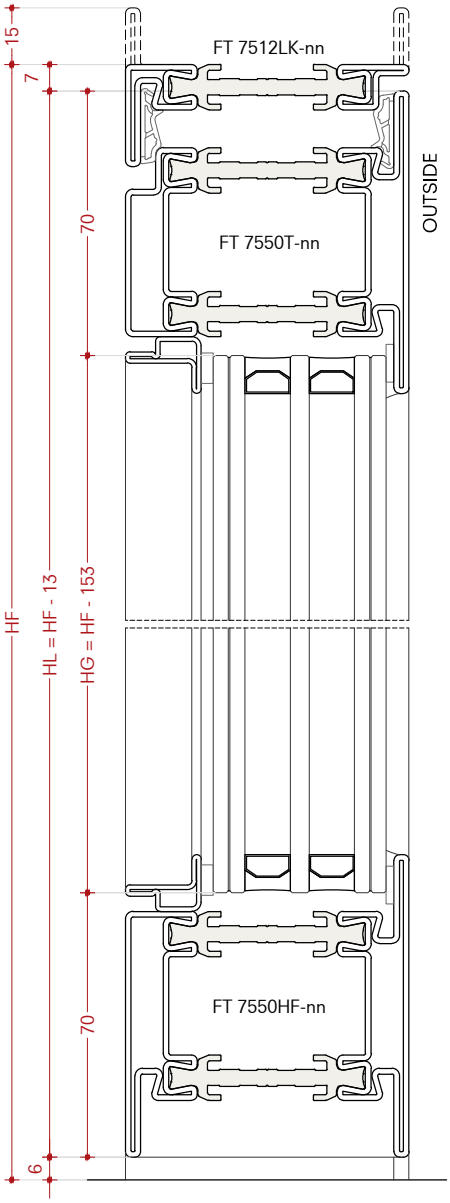


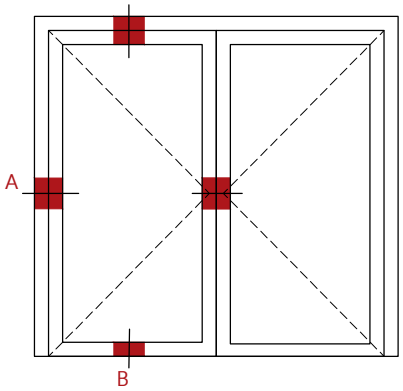


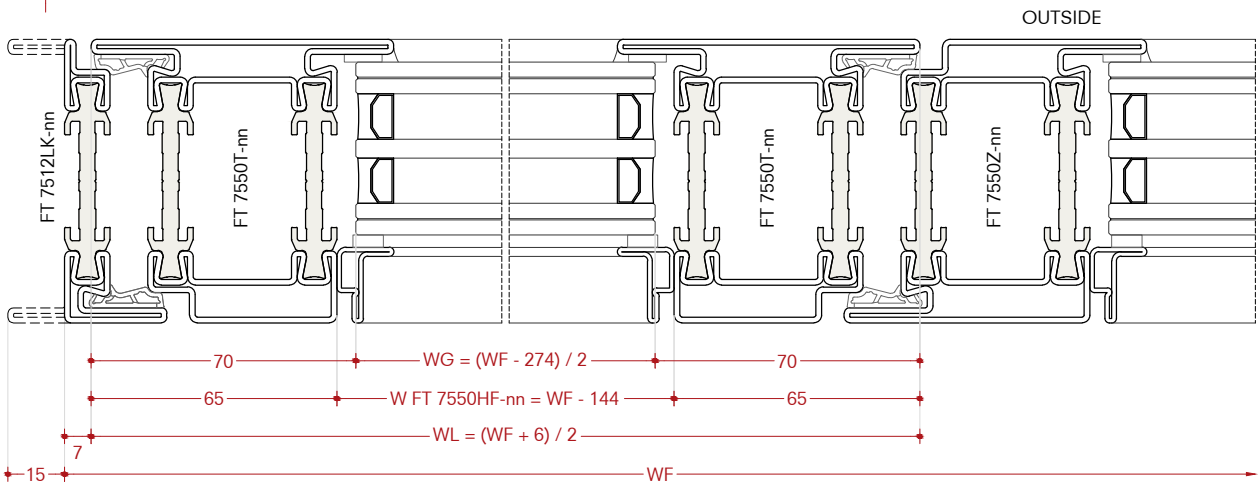
Cutting length
Double leaf door
Open out

Zuschnitt
Zweiflüglige Anschlagtür
Nach außen öffnend

Découpe
Porte à deux vantaux
Ouverture extérieure



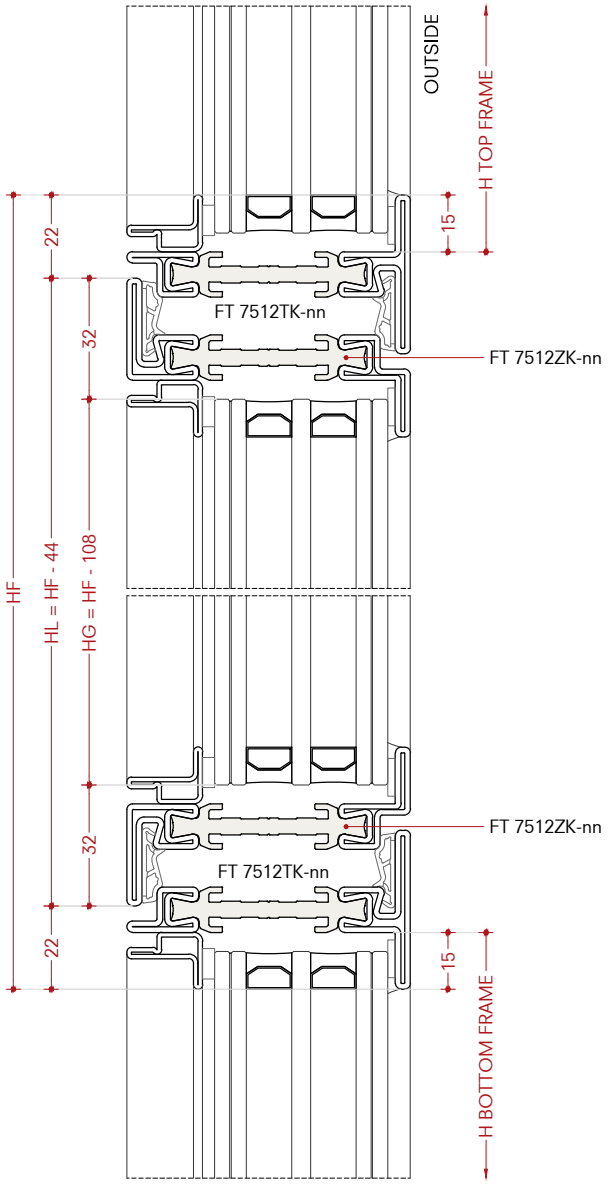


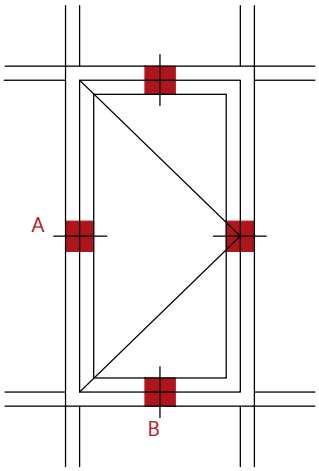


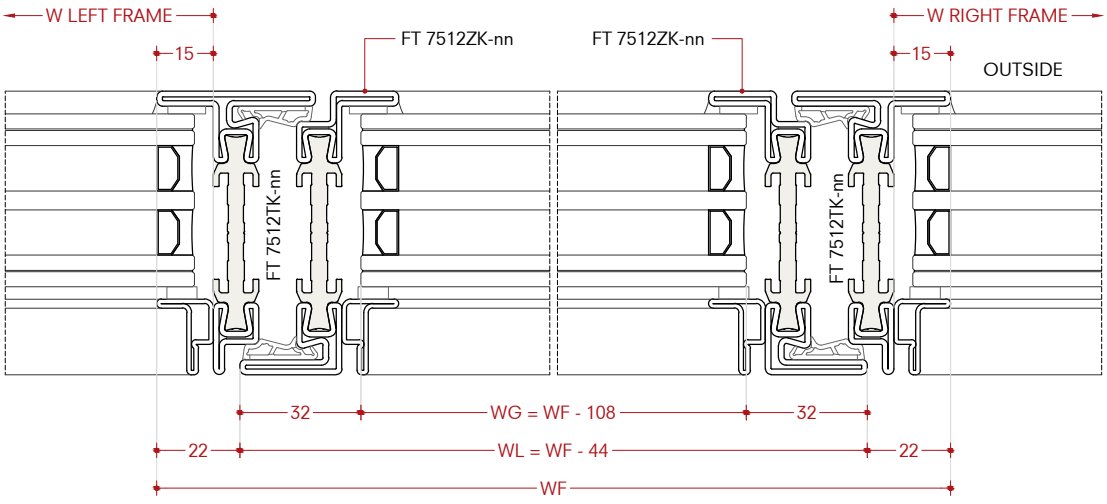
Cutting length
Single leaf in fixed frame
Open in
Flush profiles

Zuschnitt
Flügel in Festfeld
Nach innen öffnend
Flächenbündige profile

Découpe
Vantail dans le cadre fixe
Ouverture intérieure
Profilés coplanaires



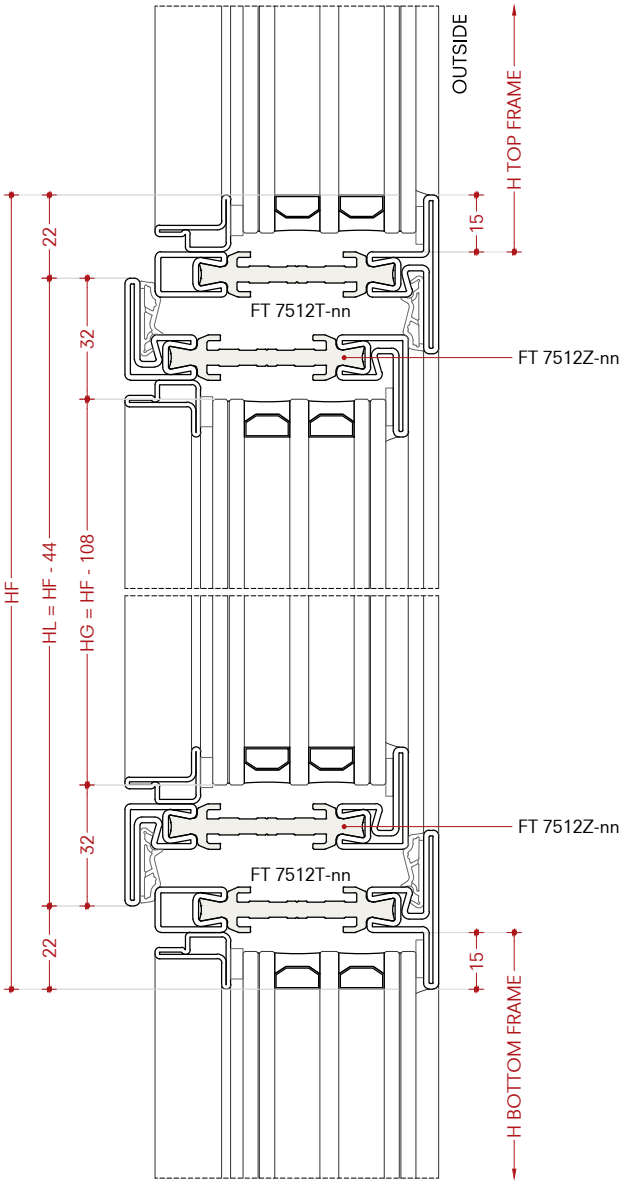


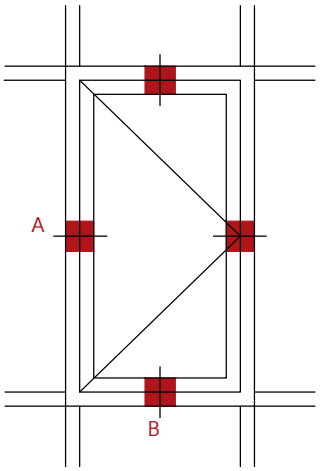


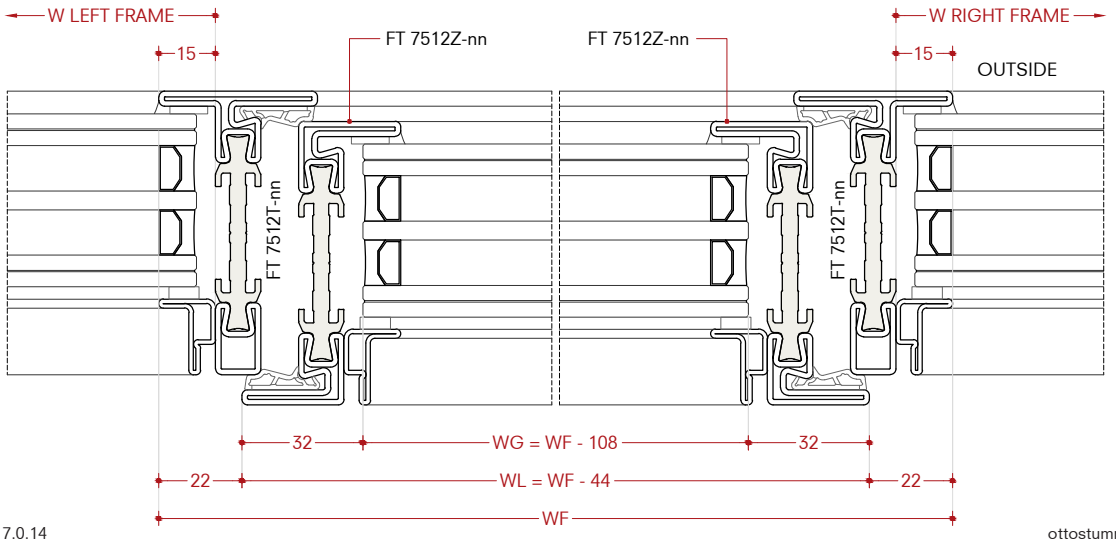
Cutting length
Single leaf in fixed frame
Open in
Overlapped profiles

Zuschnitt
Flügel in Festfeld
Nach innen öffnend
Überlappende profile

Découpe
Vantail dans le cadre fixe
Ouverture intérieure
Profilés superposés



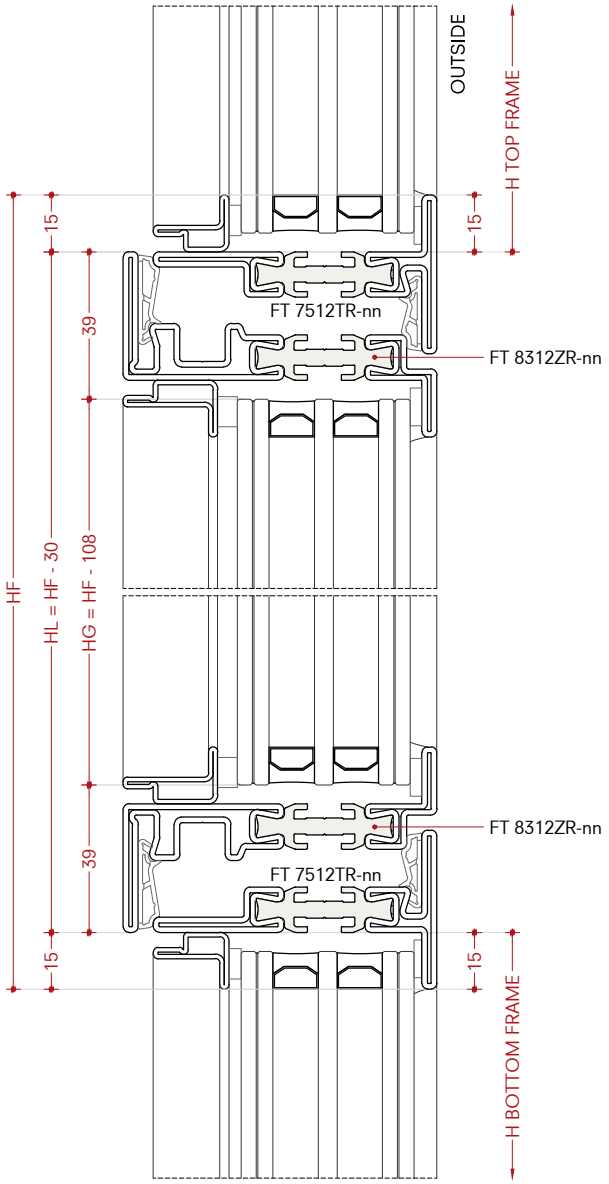


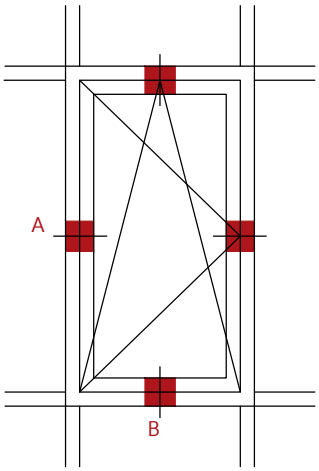


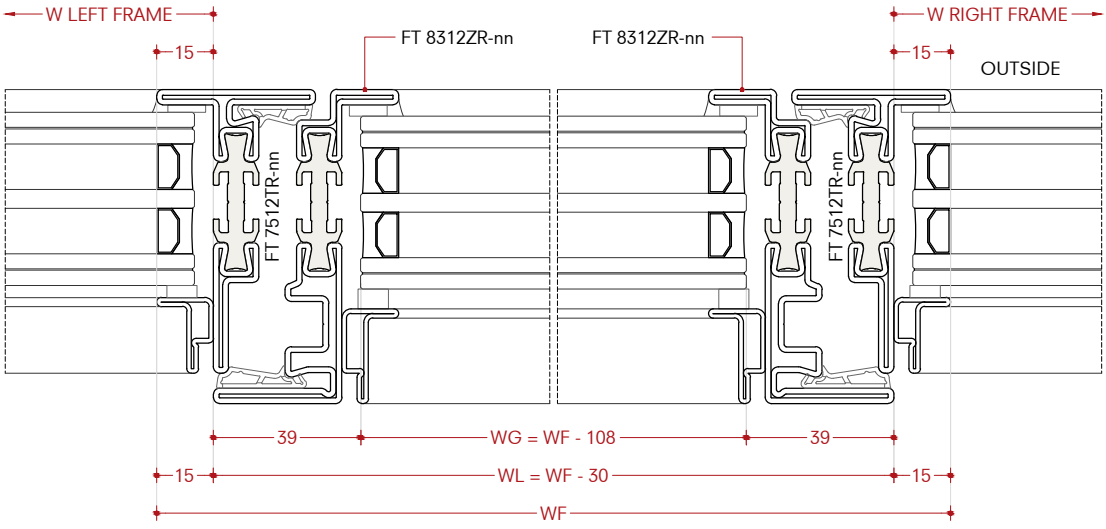
Cutting length
Single leaf in fixed frame and Tilt&Turn window - Open in
Overlapped profiles

Zuschnitt
Flügel in Festfeld und Dreh-Kippfenster
Nach innen öffnend
Überlappende profile

Découpe
Vantail dans le cadre fixe et oscillo-battant - Ouverture intérieure
Profilés superposés



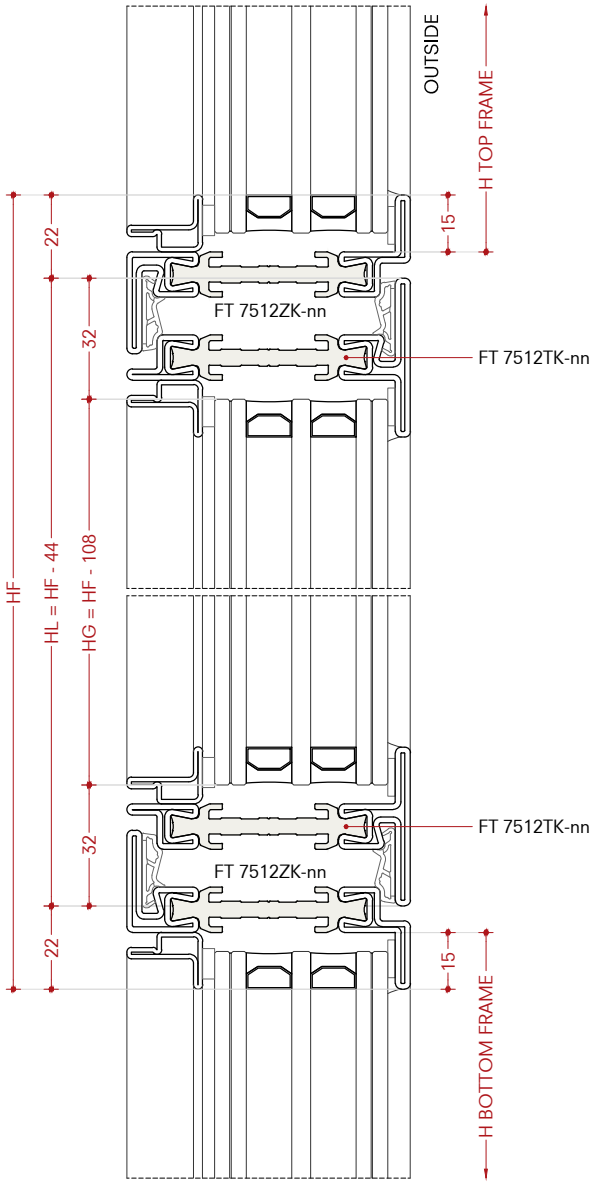


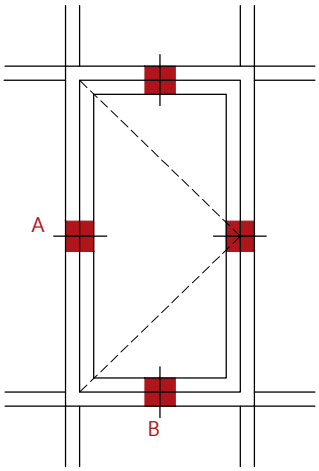


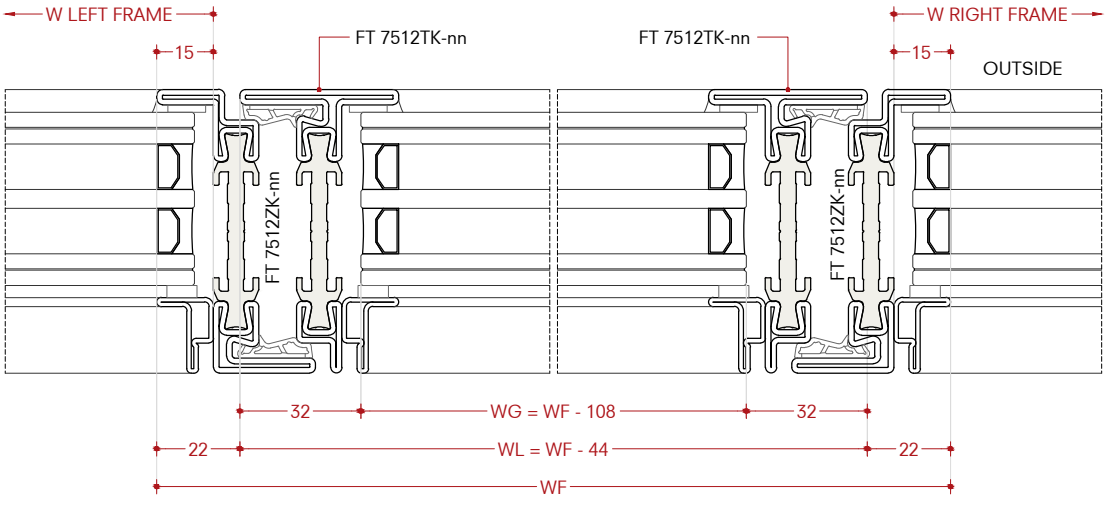
Cutting length
Single leaf in fixed frame
Open out
Flush profiles

Zuschnitt
Flügel in Festfeld
Nach außen öffnend
Flächenbündige profile

Découpe
Vantail dans le cadre fixe
Ouverture extérieure
Profilés coplanaires



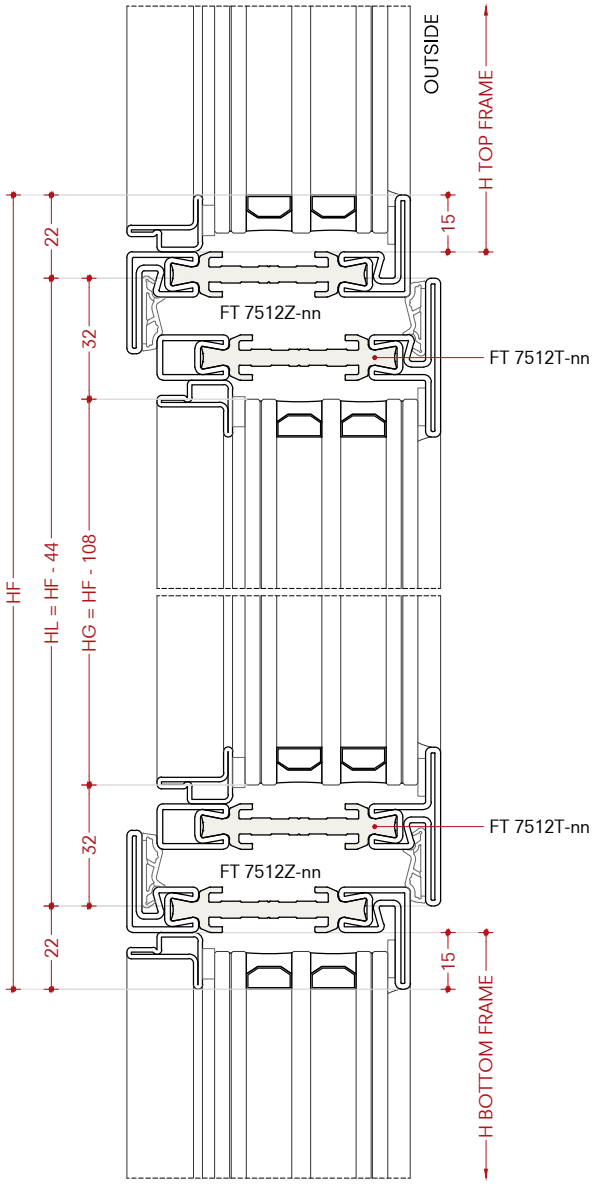


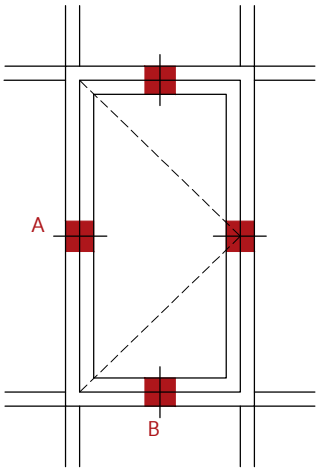


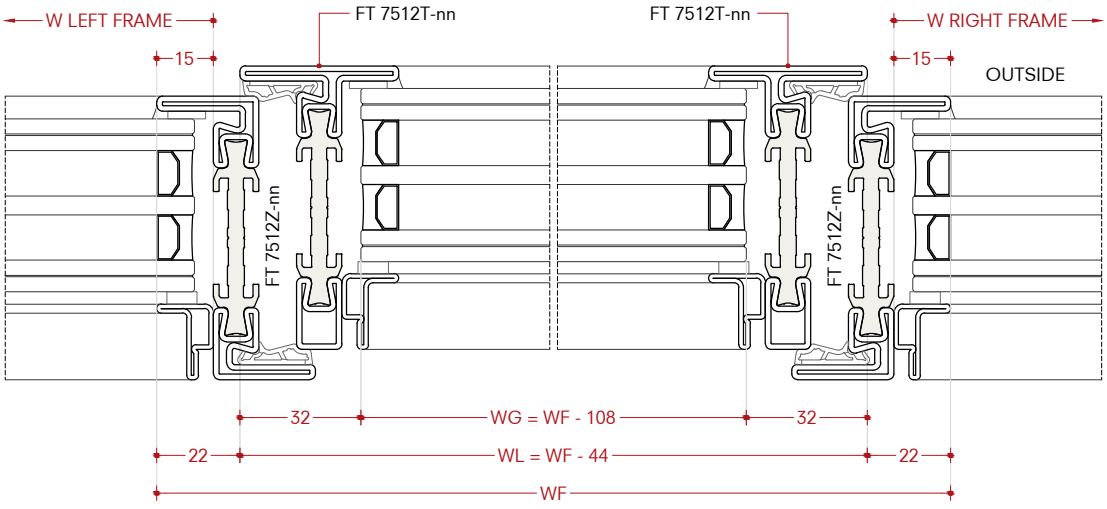
Cutting length
Single leaf in fixed frame
Open out
Overlapped profiles

Zuschnitt
Flügel in Festfeld
Nach außen öffnend
Überlappende profile

Découpe
Vantail dans le cadre fixe
Ouverture extérieure
Profilés superposés







Welding

Schweißen

Soudage

5.3

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

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:1 - 1:2
= Punktschweissung
= Schweissen
CL = Zuschnitt
HF = Höhe Rahmen
HG = Höhe Glas
HL = Höhe Flügel
WF = Länge Rahmen
WG = Länge Glas
WL = Länge Flügel

Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:1 - 1:2
= Soudage par points
= Souder
CL = Découpe
HF = Hauteur dormant
HG = Hauteur vitre
HL = Hauteur ouvrant
WF = Largeur dormant
WG = Largeur vitre
WL = Largeur ouvrant

Welding

W75 TB - D75 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 W75 TB - D75 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.

Schweißen

W75 TB - Profil D75 TB kann mit Schweißverfahren je nach zu schweißendem Material verwendet werden:
- Verwenden Sie für verzinkten Stahl MAG- oder CMT-Schweißen.
- Verwenden Sie für Edelstahl das WIG-Schweißen.
- Verwenden Sie für Cor-Ten- und Stahl blank das MAG-Schweißen.

Wir empfehlen beim Schweißen eine Rauchabzugsanlage zu verwenden und für eine ausreichende Raumbelüftung zu sorgen. Es sollte auf eine besonders gründliche und saubere Schweißung geachtet werden.

Nur verzinkte W75 TB - D75 TB Profile (Oberflächenausführungen -02) haben eine besondere Zink-Magnesium Beschichtung, die schweiß freundlich ist und unerwünschte Porenbildung unterbindet.

Die beim Schweißen von Profilen und Bänder entstehende Wärme muss mit Schweißzusätzen aus Messing, Kupfer und Aluminium abgeführt werden.

Halten Sie einen Mindestabstand von 3 mm zwischen Schweißnaht und Polyamid-Isolator ein.

Soudage

Les profilés W75 TB - D75 TB peuvent être soudés sans précautions particulières utilisant le mode opératoire de soudage en fonction du matériau à souder:
- Pour l'acier galvanisé, utilisez le soudage MAG ou CMT.
- Pour l'acier inoxydable, utilisez le soudage TIG.
- Pour l'acier Cor-Ten et décapé, utilisez le soudage MAG.

Nous recommandons d'utiliser un système de désenfumage lors du soudage et d'assurer une ventilation adéquate de la pièce. Il convient de veiller à ce que le processus de soudage soit exécuté de manière particulièrement minutieuse et propre.

Seulement profils galvanisés W75 TB - D75 TB (finition -02) ont un revêtement zinc-magnésium particulier réduisant les porosités.

La chaleur générée lors du soudage des profilés et des charnières doit être dissipée à l'aide d'accessoires de soudage en laiton, cuivre et aluminium.

Gardez une distance minimale de 3 mm entre le joint de soudure et la bande de polyamide.

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.

Schweißen der Rahmen

1. Profilenden entgraten und anfasen.
2. Rahmen auf dem Schweißtisch zusammensetzen.
3. Rahmenabmessungen überprüfen.
4. Winkligkeit überprüfen.
5. Diagonalen überprüfen.
6. Rahmenposition mit kleinen Schweißpunkten fixieren.
7. Diagonale erneut kontrollieren.
8. Schweißung von der Innenseite zur Außenseite abwechselnd durchführen.
9. Diagonale erneut kontrollieren.
10. Schweißnähte auf Ecken planschleifen.

Soudage des châssis

1. Ébavurer et biseauter l'embout des profilés.
2. Assembler le châssis sur la table de soudure.
3. Contrôler les dimensions du châssis.
4. Contrôler les angles.
5. Contrôler les diagonales.
6. Fixer la position du châssis avec de petits points de soudure.
7. Vérifier à nouveau les diagonales.
8. Exécuter le soudage en alternance, en commençant du coté intérieur pour aller vers l'extérieur.
9. Vérifier à nouveau les diagonales.
10. Mouler les soudures des coins.

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. 1-1.5 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. 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. 1-1.5 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.

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. 1-1.5 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.

disclaimer see 7.0.14

Verschweißen von thermisch getrennten profilen aus Zink-Magnesium Stahl, Edelstahl, Cor-Ten-Stahl.

Mit folgenden Schweißverfahren wurden die besten Ergebnisse erzielt:

MAG (metal-arc active gas)

Schutzgas: CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Schweißdraht für Stahl bandverzinkt Profile (-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).

Vorbereitung der Profilzuschnitte: Stabenden anfasen (ca. 1-1.5 mm x 45°). Die letzten 5 mm der außen liegenden Spitze nicht anfasen, um ein Wegbrennen der scharfen Kanten zu vermeiden. Die außen und innen liegende Ecken anpunkten, dann von innen nach außen Schweißnaht ziehen. Beim Verschweißen von verzinktem Stahl, können gelegentlich winzige Schweißporen auftreten. Falls diese Poren aus Gründen der Ästhetik geschlossen werden sollen, empfehlen wie diese nicht durch ein Nachschweißen mit MAG zu füllen sondern mit dem TIG verfahren oder mit einem temperaturbeständigen Polyester-Spachtel (200°C) zu verschließen. Übermäßige Schweißtemperaturen können vermieden werden, indem spezielle Kupfer-, Messing- oder Aluminiumplatten in die Umgebung des Schweißbereichs gelehnt werden.

MAG (metal-arc active gas)

Schutzgas: CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Schweißdraht für Stahl blank Profile (-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).

Vorbereitung der Profilzuschnitte: Stabenden anfasen (ca. 1-1.5 mm x 45°). Die letzten 5 mm der außen liegenden Spitze nicht anfasen, um ein Wegbrennen der scharfen Kanten zu vermeiden. Die außen und innen liegende Ecken anpunkten, dann von innen nach außen Schweißnaht ziehen. Übermäßige Schweißtemperaturen können vermieden werden, indem spezielle Kupfer-, Messing- oder Aluminiumplatten in die Umgebung des Schweißbereichs gelehnt werden.

MAG (metal-arc active gas)

Schutzgas: CAR 18 (18% CO_2 e 82% Argon sec. EN 439 M21)
Schweißdraht für Cor-Ten-Stahl Profile (-07):
- CORTEN, Ø0.8 mm - Arroweld (C: 0.080; Si: 0.800; Mn: 1.500; Cr: 0.300; Ni: 0.400; Cu: 0.500).

Vorbereitung der Profilzuschnitte: Stabenden anfasen (ca. 1-1.5 mm x 45°). Die letzten 5 mm der außen liegenden Spitze nicht anfasen, um ein Wegbrennen der scharfen Kanten zu vermeiden. Die außen und innen liegende Ecken anpunkten, dann von innen nach außen Schweißnaht ziehen. Übermäßige Schweißtemperaturen können vermieden werden, indem spezielle Kupfer-, Messing- oder Aluminiumplatten in die Umgebung des Schweißbereichs gelehnt werden.

Soudage des profilés rupture thermique en acier à revêtement zinc-magnésium, inoxydable, Cor-Ten.

Les procédés de soudage suivants ont permis d'obtenir les meilleurs résultats:

MAG (metal-arc active gas)

Protection gazeuse: CAR 18 (18% de CO_2 et 82% d'argon selon EN 439 M21).
Fil à souder pour profilés en acier galvanisé (-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).

Préparation de la découpe de profilé: biseauter les extrémités de barre (env. 1-1.5 mm x 45°). Ne pas biseauter les 5 derniers millimètres de l'extrémité externe afin d'éviter de détruire l'arête vive. Souder par point les coins intérieurs et extérieurs puis appliquer le joint de soudure de l'intérieur vers l'extérieur.
Lors du soudage d'acier galvanisé, il peut se produire à l'occasion de minuscules porosités. Si les porosités sont à exclure pour des raisons esthétiques, nous recommandons de les combler par reprise du soudage non pas selon le procédé MAG, mais selon le procédé TIG ou avec une spatule en polyester thermorésistante (200°C). Des températures de soudage excessives peuvent être évitées en plaçant des plaques spéciales en cuivre, en laiton ou en aluminium dans les zones entourant la zone de soudage.

MAG (metal-arc active gas)

Protection gazeuse: CAR 18 (18% de CO_2 et 82% d'argon selon EN 439 M21).
Fil à souder pour profilés en acier décapé (-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).

Préparation de la découpe de profilé: biseauter les extrémités de barre (env. 1 -1.5mm x 45°). Ne pas biseauter les 5 derniers millimètres de l'extrémité externe afin d'éviter de détruire l'arête vive. Souder par point les coins intérieurs et extérieurs puis appliquer le joint de soudure de l'intérieur vers l'extérieur. Des températures de soudage excessives peuvent être évitées en plaçant des plaques spéciales en cuivre, en laiton ou en aluminium dans les zones entourant la zone de soudage.

MAG (metal-arc active gas)

Protection gazeuse: CAR 18 (18% de CO_2 et 82% d'argon selon EN 439 M21).
Fil à souder pour profilés en acier 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).

Préparation de la découpe de profilé: biseauter les extrémités de barre (env. 1-1.5 mm x 45°). Ne pas biseauter les 5 derniers millimètres de l'extrémité externe afin d'éviter de détruire l'arête vive. Souder par point les coins intérieurs et extérieurs puis appliquer le joint de soudure de l'intérieur vers l'extérieur. Des températures de soudage excessives peuvent être évitées en plaçant des plaques spéciales en cuivre, en laiton ou en aluminium dans les zones entourant la zone de soudage.

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. 1-1.5 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. 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.

CMT (cold metal transfer)

Schutzgas: 100% Argon
Schweißdraht für Stahl bandverzinkt Profile (-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).

Vorbereitung der Profilzuschnitte:
Stabenden anfasen (ca. 1-1.5 mm x 45°). Die letzten 5 mm der außen liegenden Spitze nicht anfasen, um ein Wegbrennen der scharfen Kanten zu vermeiden. Die außen und innen liegende Ecken anpunkten, dann von innen nach außen Schweißnaht ziehen. Das CMT Schweißverfahren eignet sich sehr gut zum Verschweißen von thermisch getrennten Stahlprofilen aus verzinktem Stahl. Bei korrekter Einstellung der Geräte (Fronius) entstehen weder Spritzer noch Poren. Der Schweißdraht $CuSi_3$ hat den Vorteil, dass sich die Schweißnähte mit einem wesentlich geringeren Zeitaufwand plan schleifen lassen. Besonders vorteilhaft erweist sich dieser weichere Draht bei stufenförmigen Flanschen. Der mechanische Kraftschluss des $CuSi_3$ Füllstoffs ist im Vergleich zum DT-ZiRo/TS Zn Al Füllstoff geringer, so dass dieser nicht bei sehr großen Fenster-oder Türflügeln verwendet werden soll. Der Kraftschluss der Ecken entspricht in etwa dem von geschweißten Baubronze bzw. Messing Fenstern. Kleinere und mittelgroße Fensterflügel sind bedenkenlos mit $CuSi_3$ Draht verschweißbar. Stahl Bänder sollten hingegen nur mit DT-ZiRo/TS Zn Al Füllstoff verschweißt werden.

CMT (process de soudage à froid)

Protection gazeuse: 100% Argon
Fil à souder pour profilés en acier galvanisé (-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).

Préparation de la découpe de profilé: biseauter les extrémités de barre (env. 1-1.5 mm x 45°). Ne pas biseauter les 5 derniers millimètres de l'extrémité externe afin d'éviter de détruire l'arête vive.
Souder par point les coins intérieurs et extérieurs puis appliquer le joint de soudure de l'intérieur vers l'extérieur.
Le process de soudage CMT est très bien adapté à la soudure des profilés séparés thermiquement en acier galvanisé. Si les appareils (Fronius) sont correctement réglés, il n'y a ni projections ni porosités. Le fil à souder $CuSi_3$ a l'avantage de permettre de rectifier les soudures nettement plus rapidement. Ce fil plus souple se révèle particulièrement avantageux pour les ailes de recouvrement en gradins. L'adhérence mécanique de l'agent de charge $CuSi_3$ est inférieure à celle de DT-ZiRo/TS Zn Al, de sorte que celui-ci ne doit pas être utilisé pour les fenêtres à vantaux ou les portes très grandes. L'adhérence des coins correspond approximativement à celle des fenêtres soudées en bronze architectural ou en laiton. Les vantaux de petite taille ou de taille moyenne peuvent être soudés sans problème avec du fil $CuSi_3$. Les charnières en acier ne doivent en revanche être soudées qu'avec l'agent de charge DT-ZiRo/TS Zn Al.

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.

TIG (tungsten inert gas)

Schutzgas: 100% Argon
Schweißdraht für Edelstahl Profile (-05):
- Edelstahl Riegel AISI 316L, Ø1.6mm

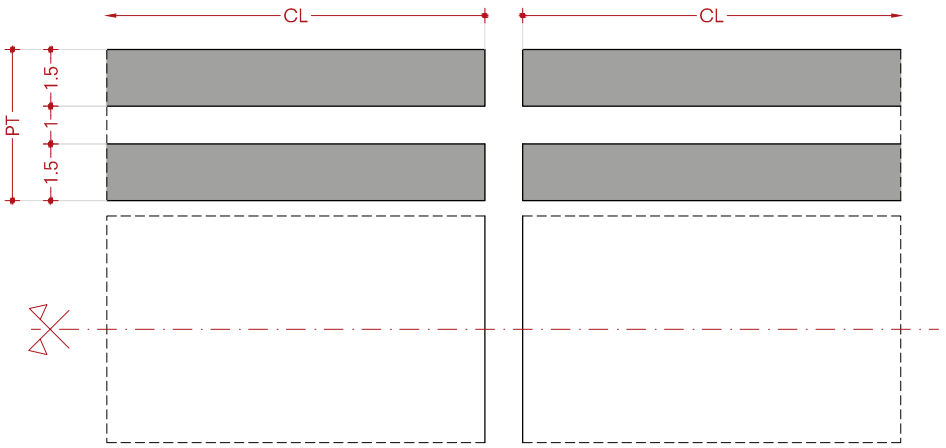
Vorbereitung der Profilzuschnitte: Stabenden anfasen (ca. 1.5 mm x 45°). Die letzten 5 mm der außen liegenden Spitze nicht anfasen, um ein Wegbrennen der scharfen Kanten zu vermeiden. Die außen und innen liegende Ecken anpunkten, dann von innen nach außen Schweißnaht ziehen. Übermäßige Schweißtemperaturen können vermieden werden, indem spezielle Kupfer-, Messing- oder Aluminiumplatten in die Umgebung des Schweißbereichs gelehnt werden.

TIG (tungsten inert gas)

Protection gazeuse: 100% Argon
Fil à souder pour profilés en acier inoxydable (-05):
- barres en acier inoxydable AISI 316L, Ø1.6mm

Préparation de la découpe de profilé: biseauter les extrémités de barre (env. 1.5 mm x 45°). Ne pas biseauter les 5 derniers millimètres de l'extrémité externe afin d'éviter de détruire l'arête vive.
Souder par point les coins intérieurs et extérieurs puis appliquer le joint de soudure de l'intérieur vers l'extérieur. Des températures de soudage excessives peuvent être évitées en plaçant des plaques spéciales en cuivre, en laiton ou en aluminium dans les zones entourant la zone de soudage.

Welding instructions **Schweissempfehlung** **Instructions de soudage**



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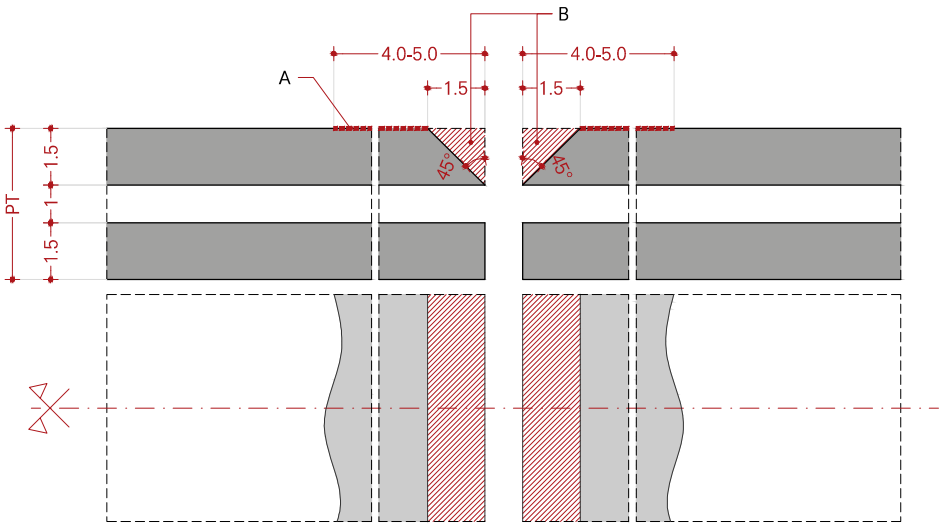

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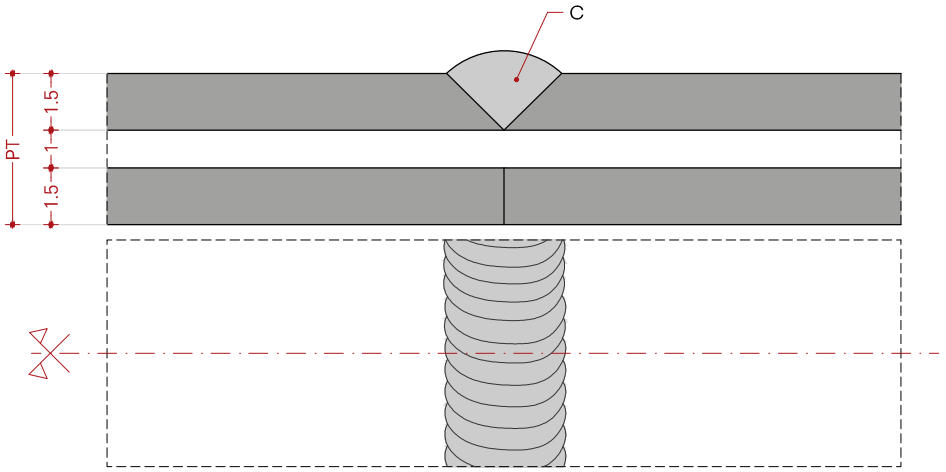

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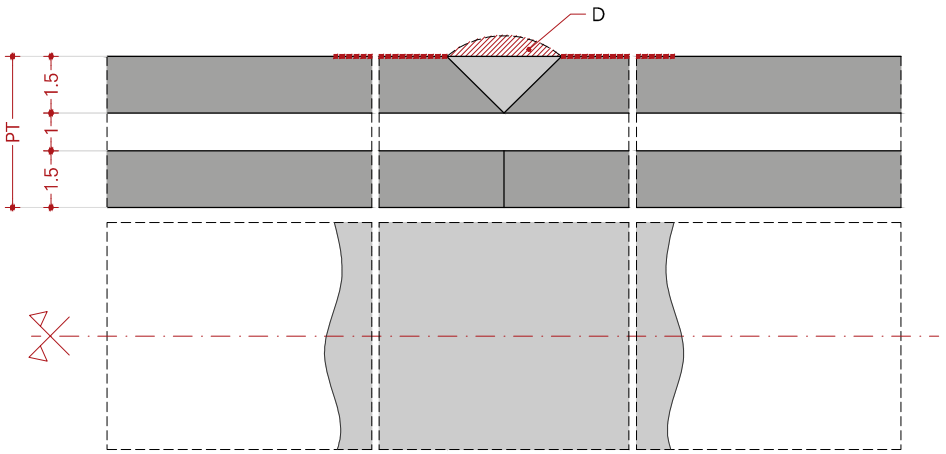


4

PT = Profile thickness

A) Grind the parts adjacent to the weld
B) Chamfer
C) Welding
D) Grind excess part

PT = Wandungsdicke

A) Schleifen Sie die Teile neben der Schweißnaht
B) Anfasung
C) Schweissen
D) überschüssiges Teil schmirgeln

PT = Epaisseur de la tôle d'acier

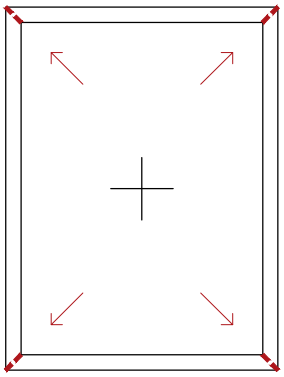
A) Meuler les pièces adjacentes à la soudure
B) Chanfreiner
C) Soudure
D) Èmeriser la partie excédentaire

FT 7512L-nn / FT 7512L-nn

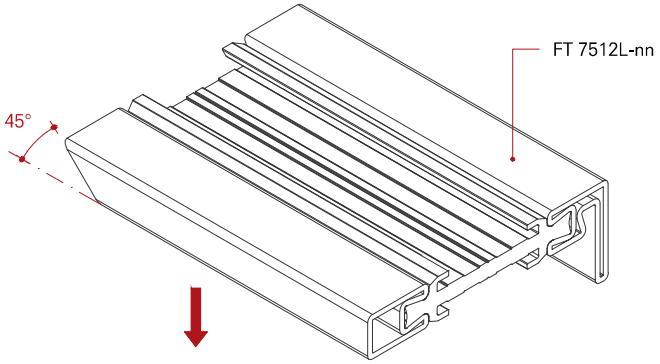
Fixed partition

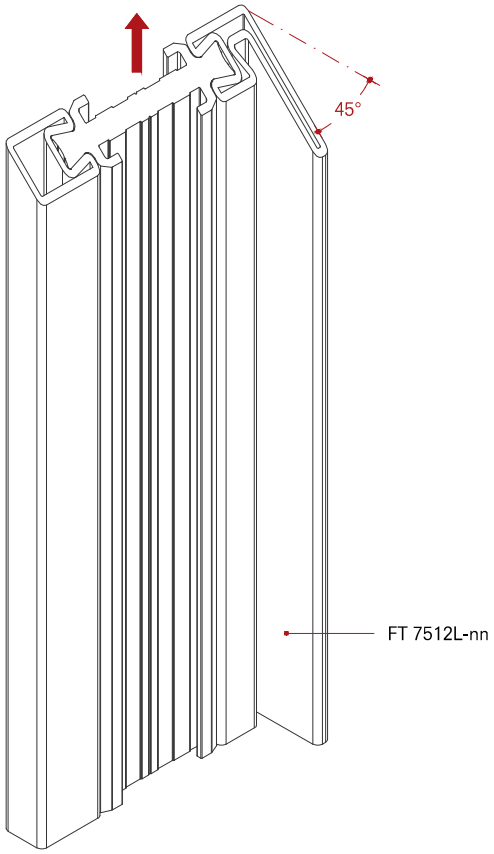
Festverglasung

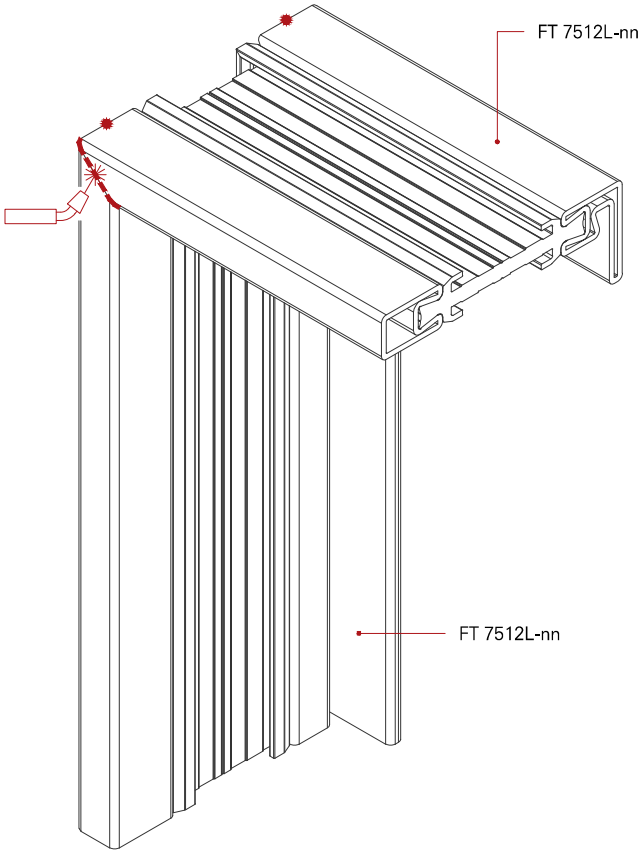
Fenêtre fixe



Internal view
Ansicht von innen
Vue intérieure





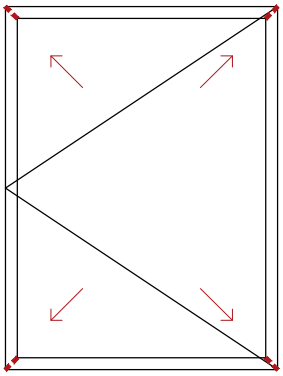


FT 7512Z-nn / FT 7512Z-nn

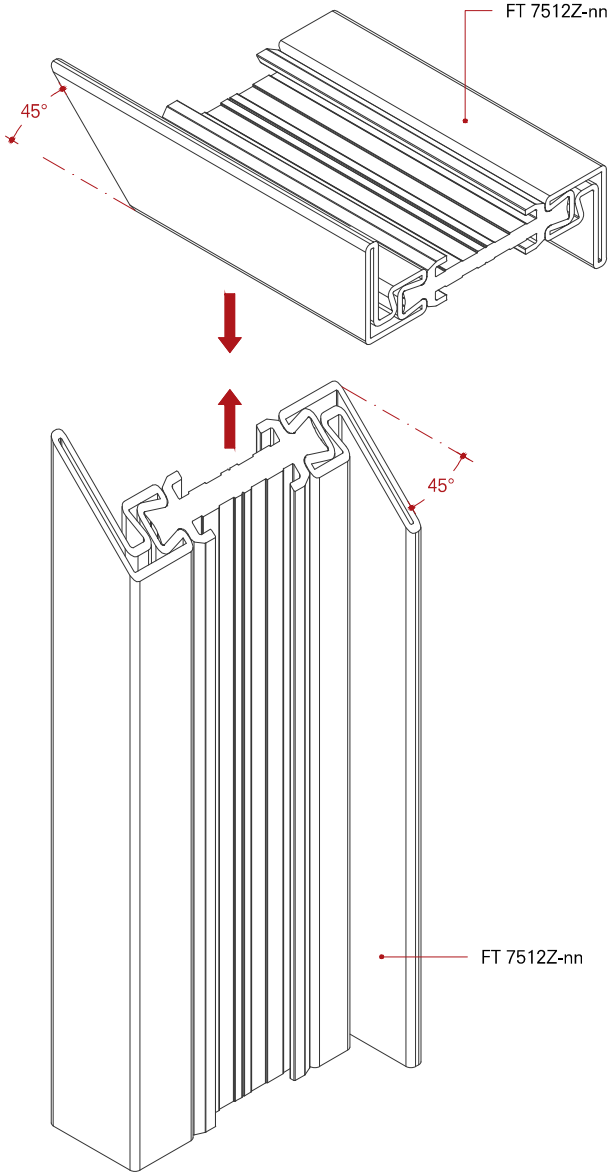
Single leaf window open in

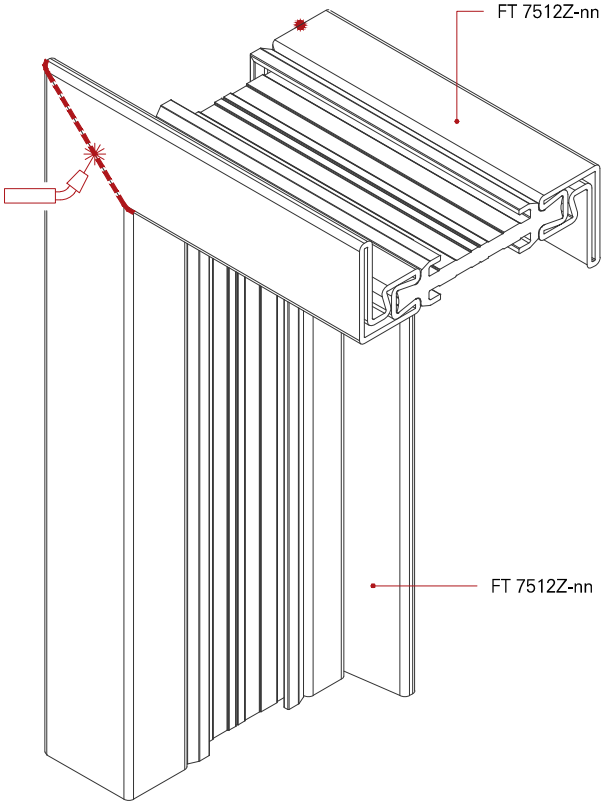
Einflüglige Fenster nach innen öffnend

Fenêtre à un vantail ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure



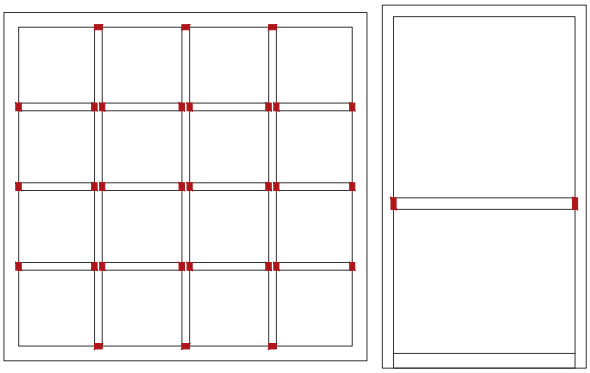


FT 7512L-nn / FT 7512T-nn

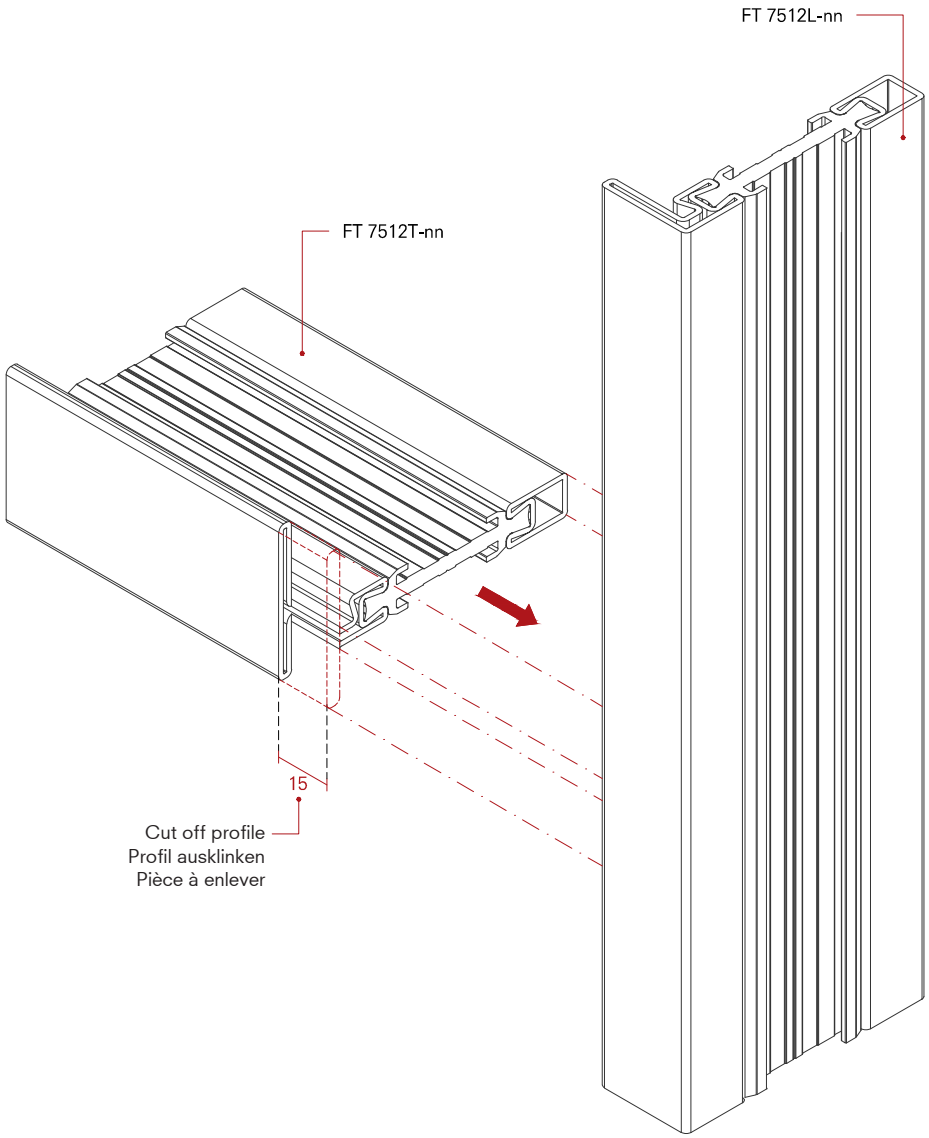
Fixed partition

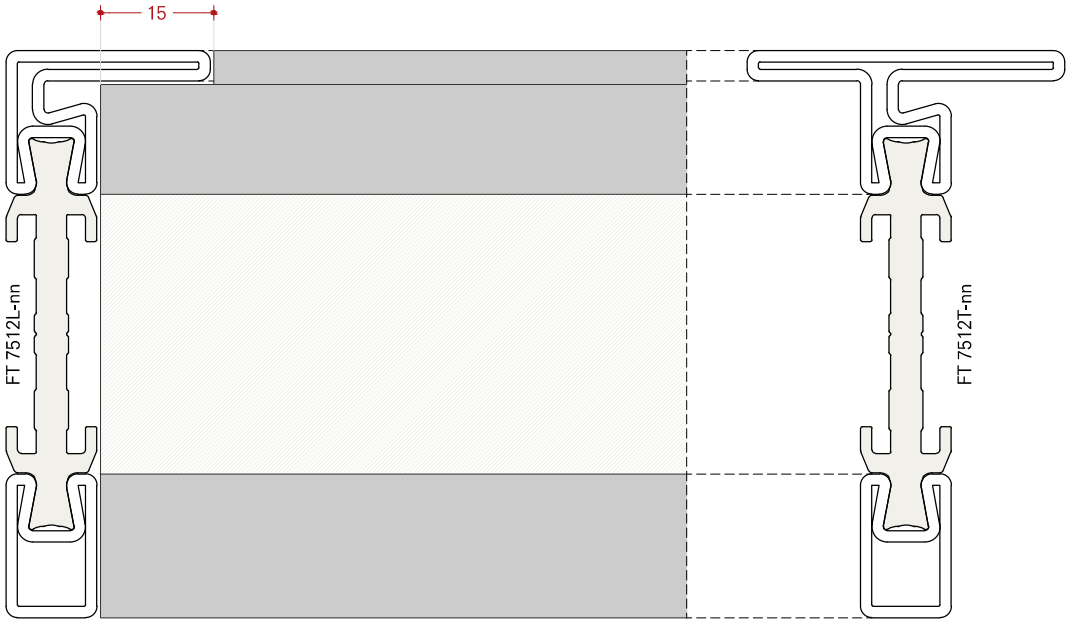
Festverglasung

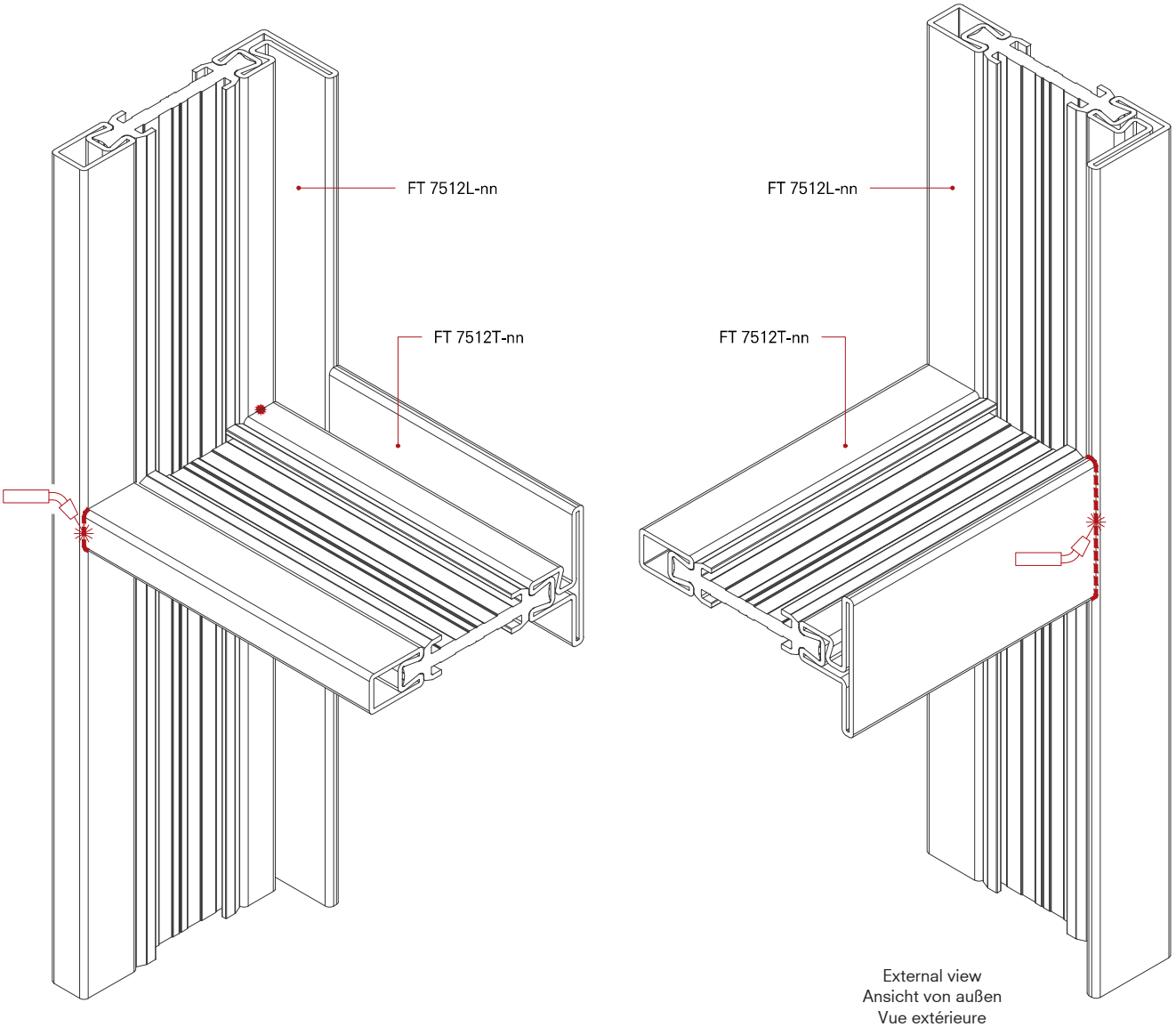
Fenêtre fixe



Internal view
Ansicht von innen
Vue intérieure







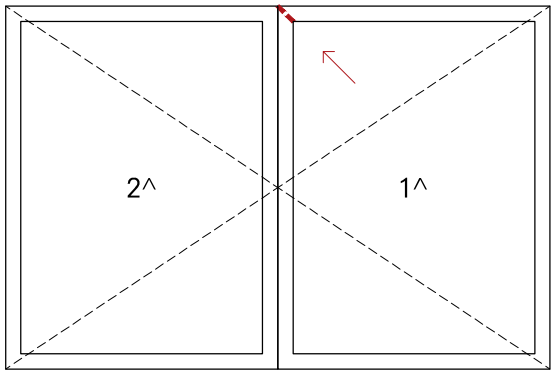
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512TK-nn

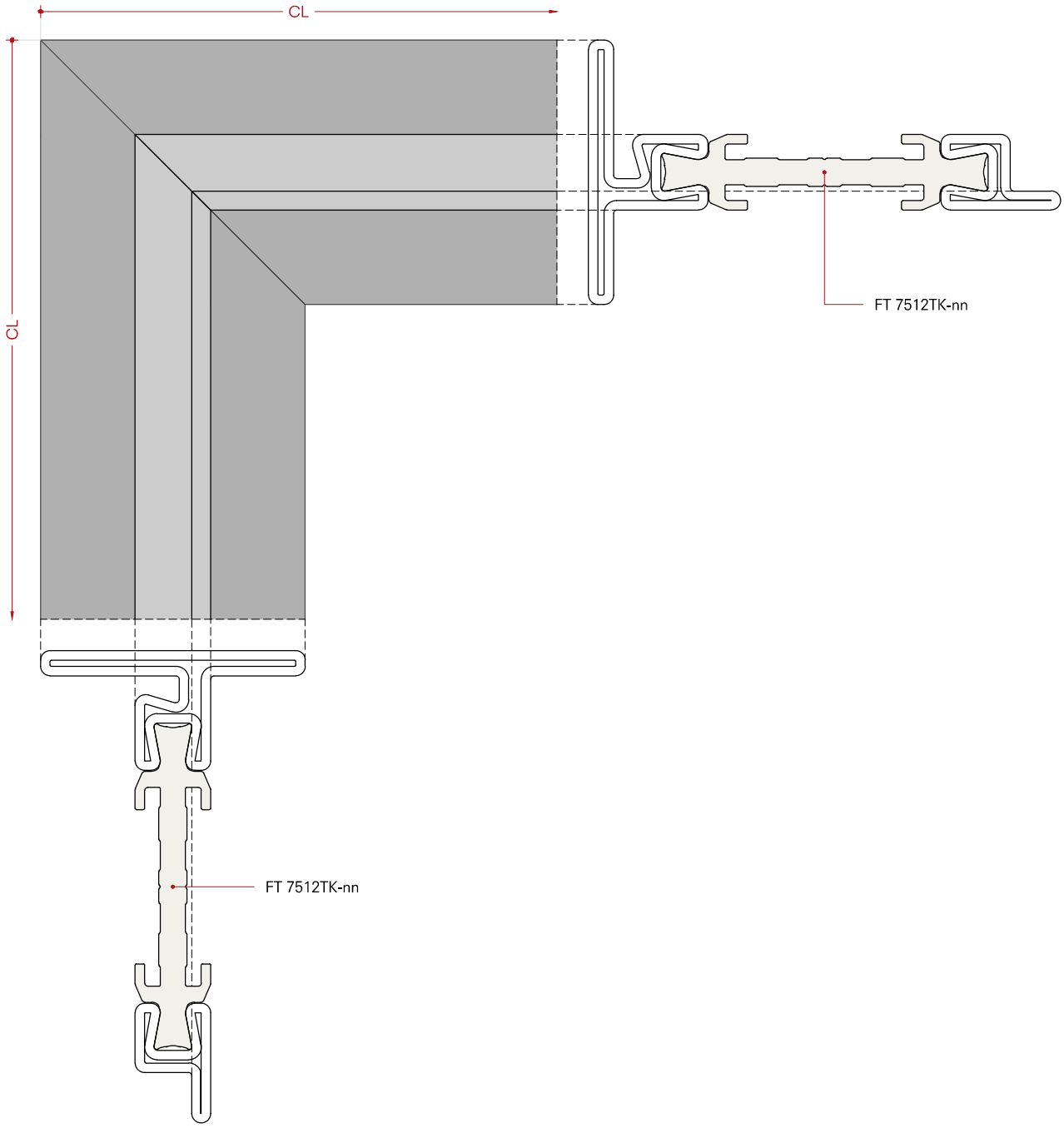
Double leaf window open out - Flush profiles

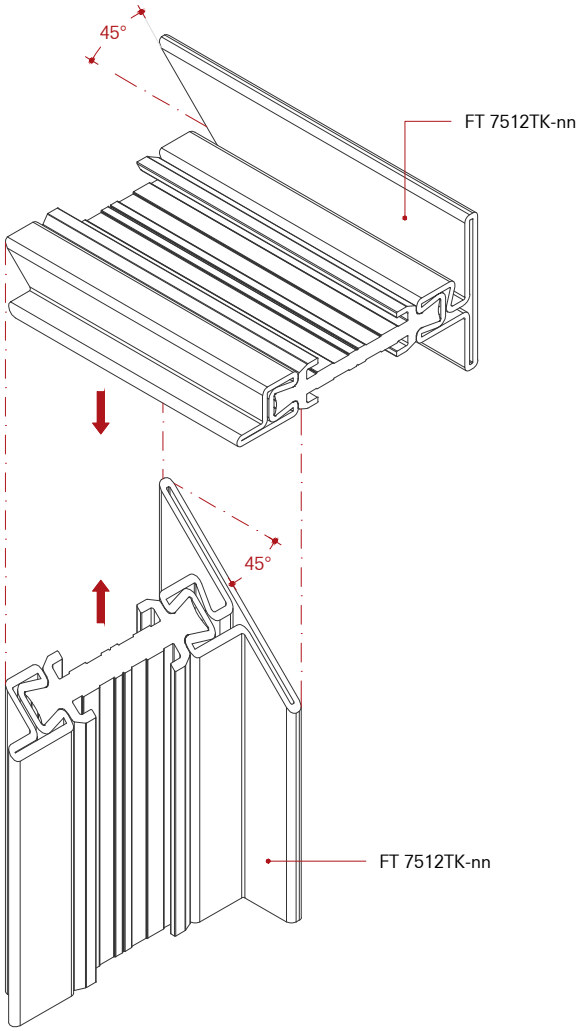
Zweiflügliges Fenster nach außen öffnend - Flächenbündige profile

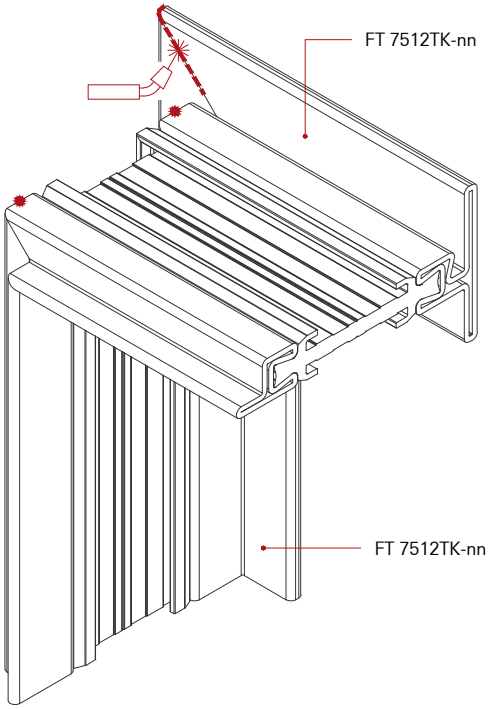
Fenêtre à deux vantaux ouverture extérieure - Profilés coplanaires

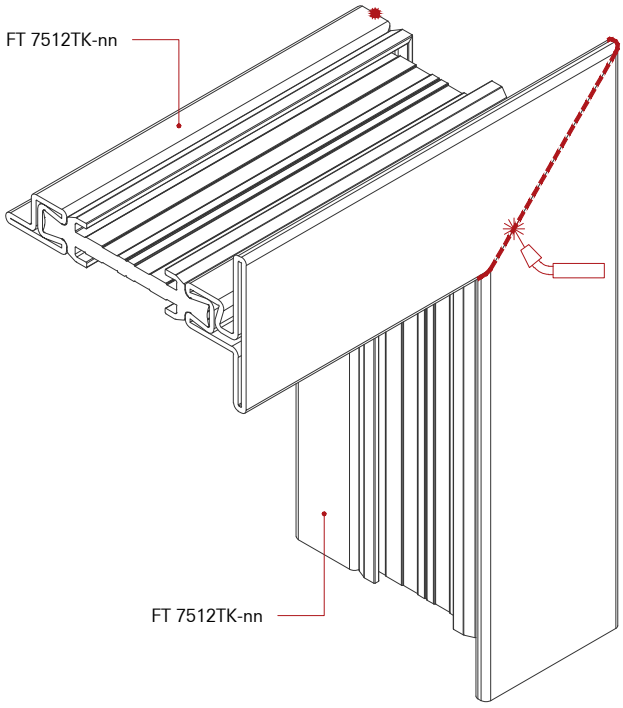


Internal view
Ansicht von innen
Vue intérieure









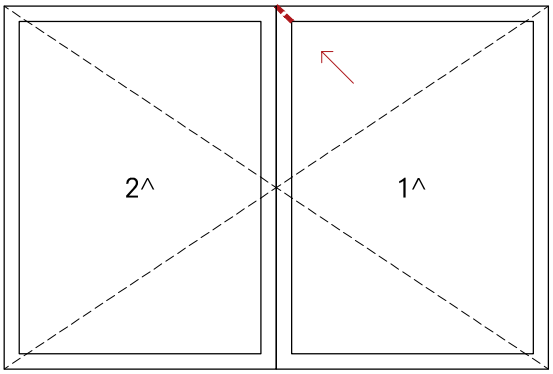
External view
Ansicht von außen
Vue extérieure

FT 7550T-nn / FT 7550T-nn

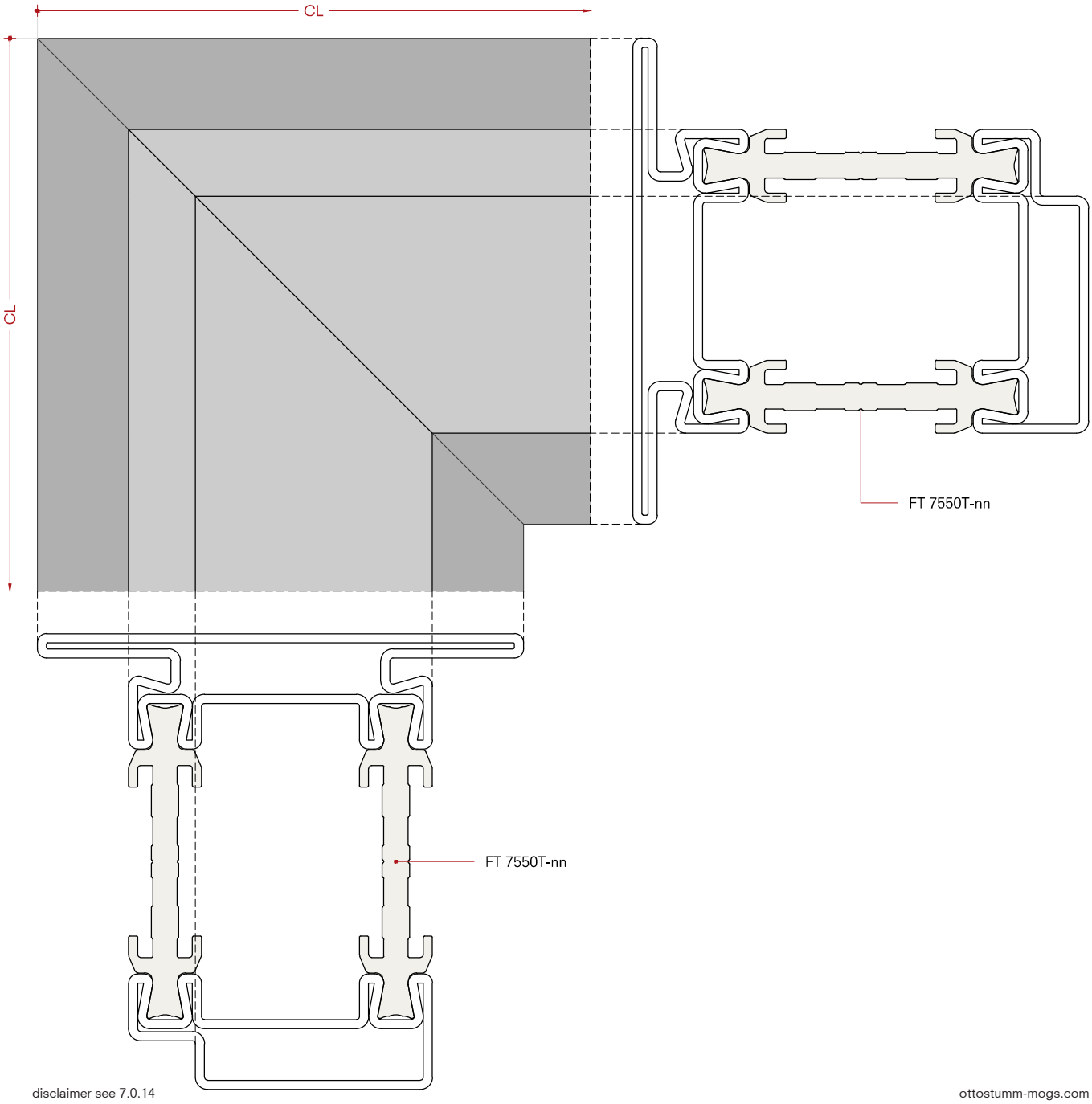
Double leaf open out - Door profiles

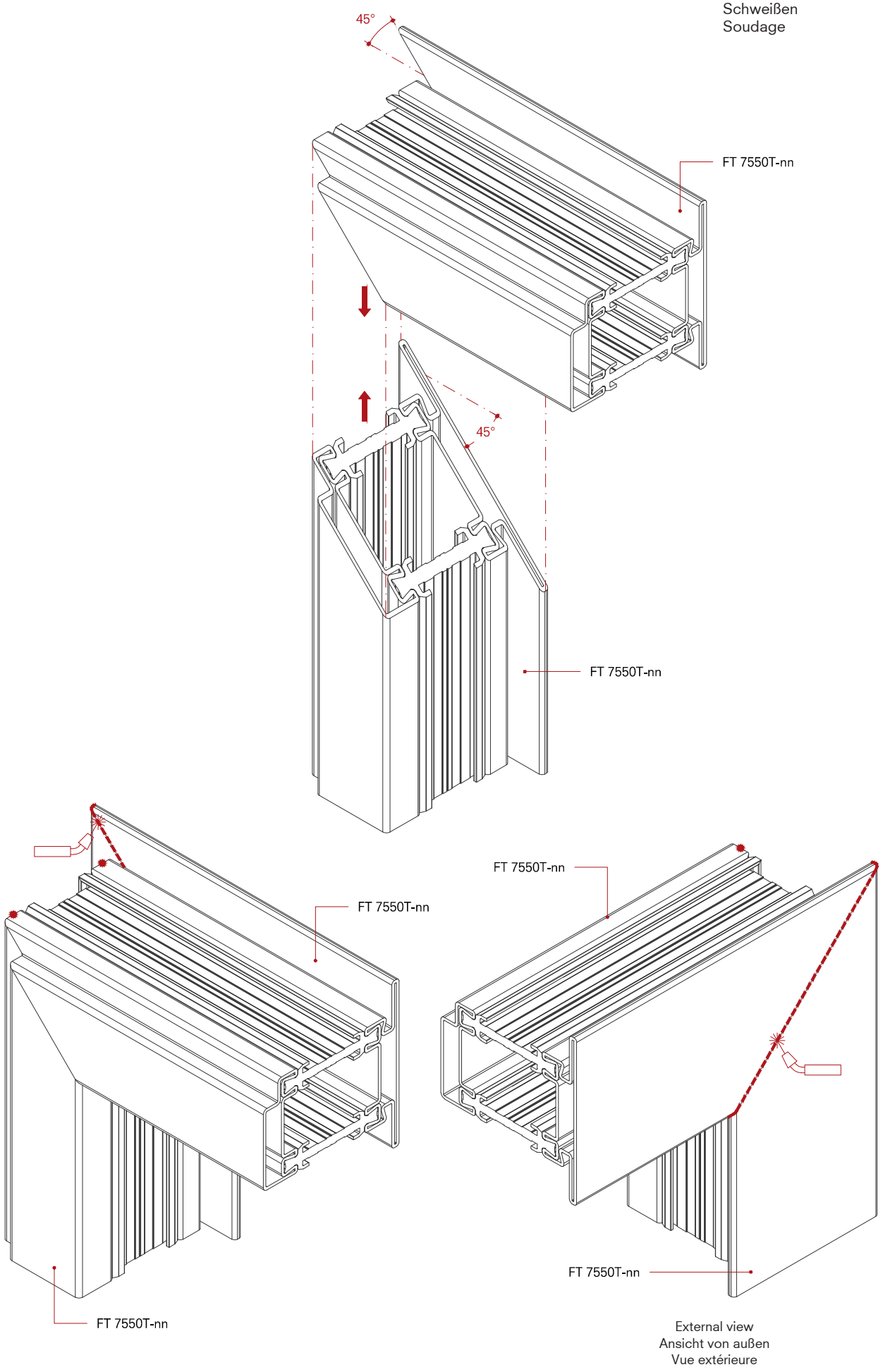
Zweiflügliges nach außen öffnend - Türprofile

Deux vantaux ouverture extérieure - Profilés porte



Internal view
Ansicht von innen
Vue intérieure





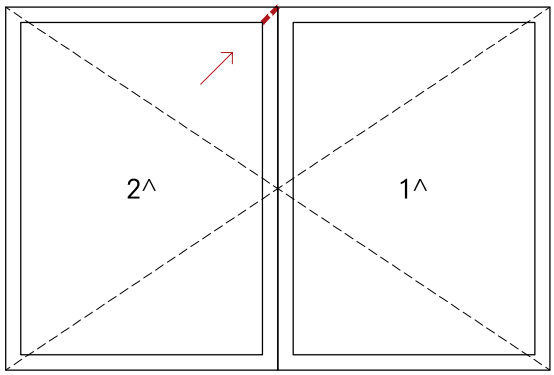
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512ZK-nn

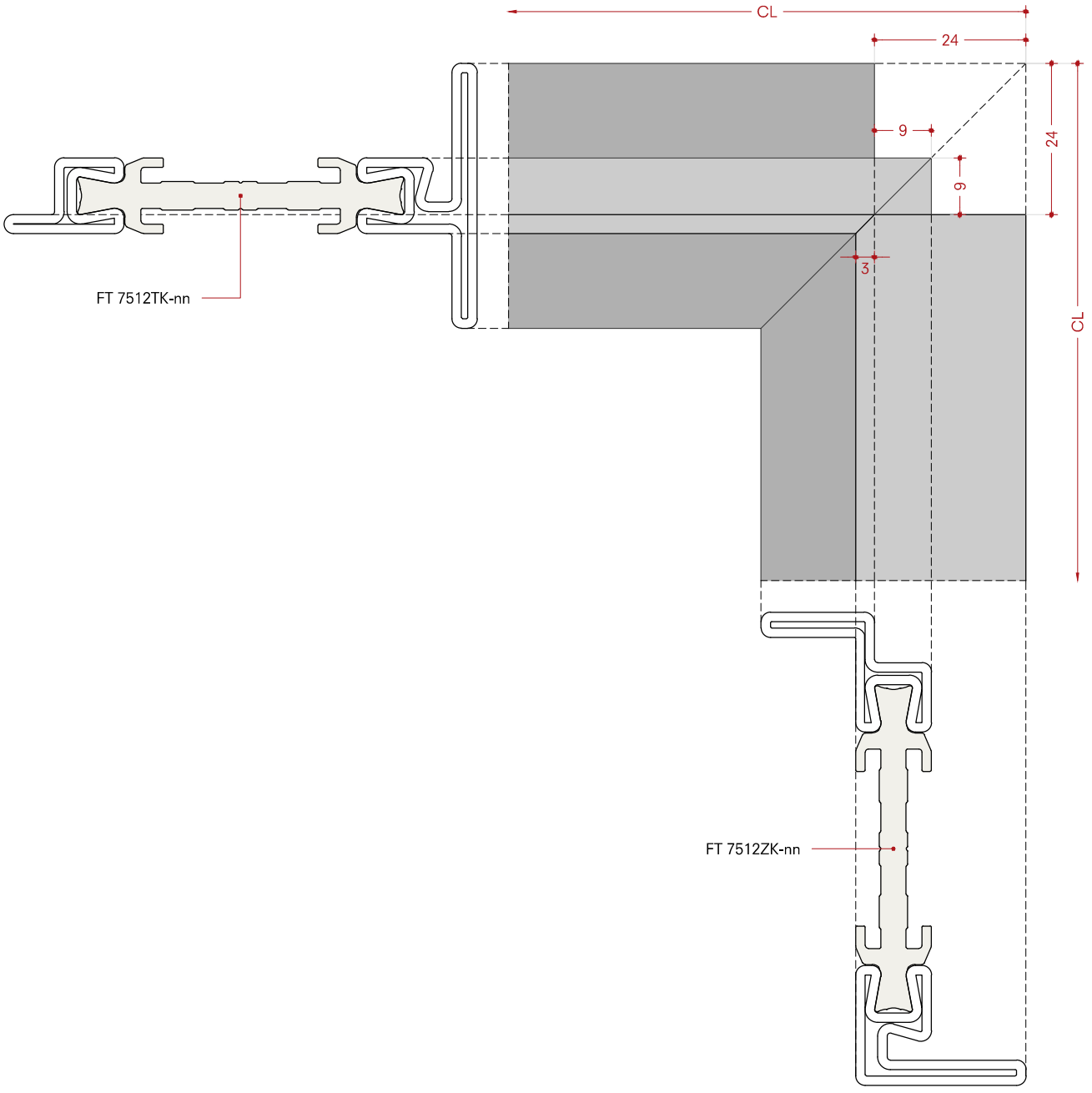
Double leaf window open out - Flush profiles

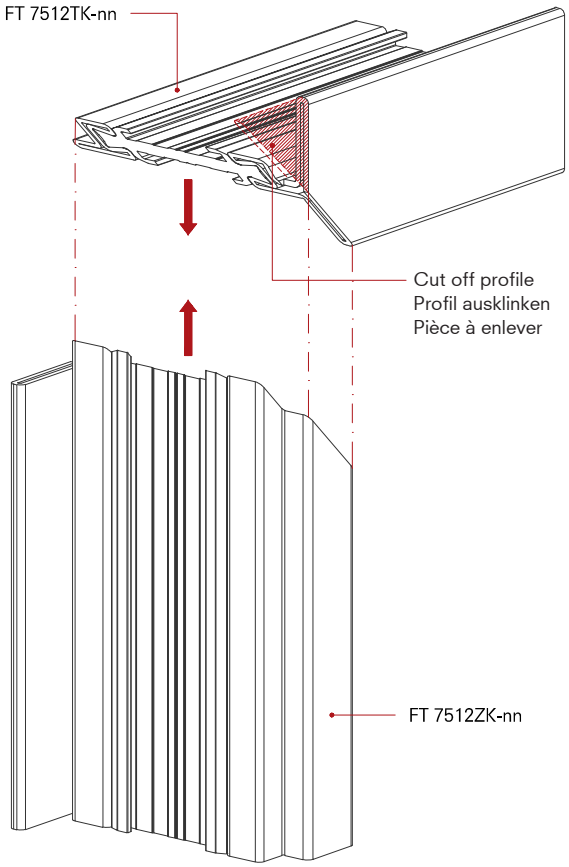
Zweiflügliges Fenster nach außen öffnend - Flächenbündige profile

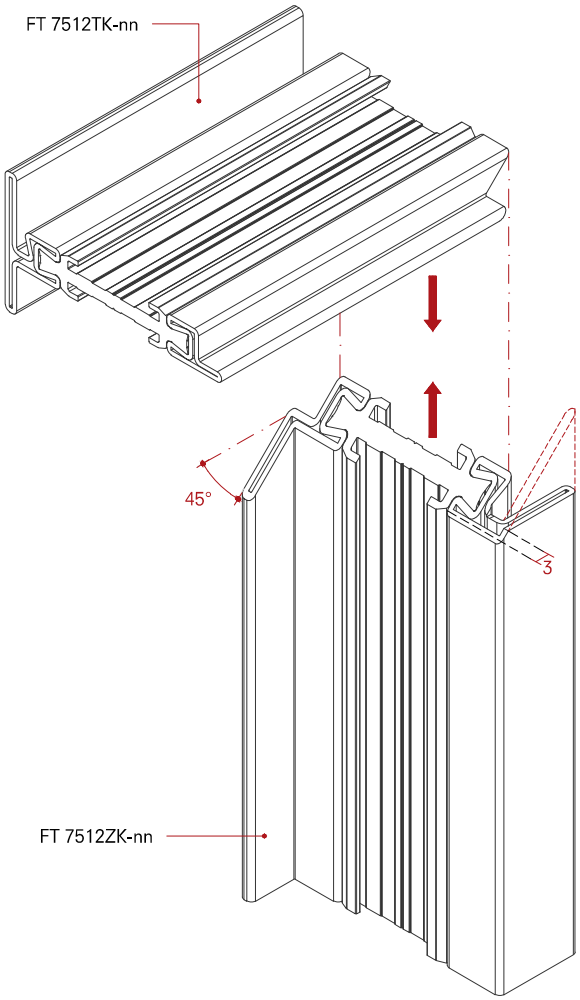
Fenêtre à deux vantaux ouverture extérieure - Profilés coplanaires

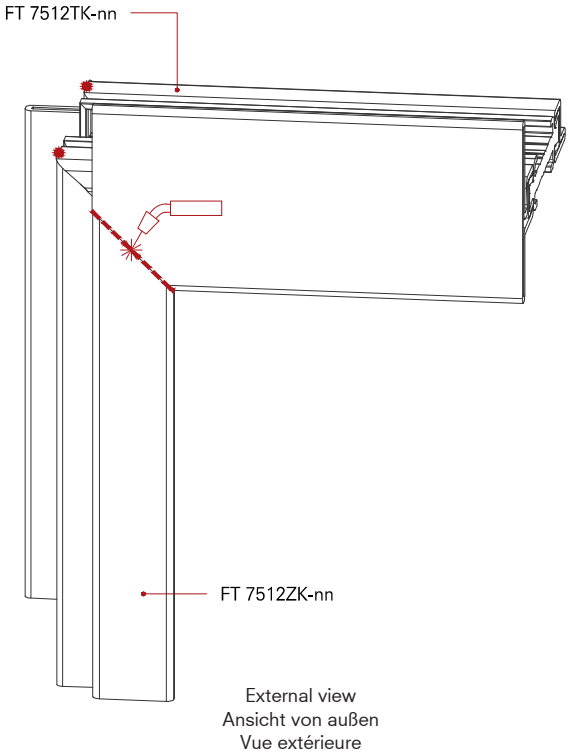


Internal view
Ansicht von innen
Vue intérieure

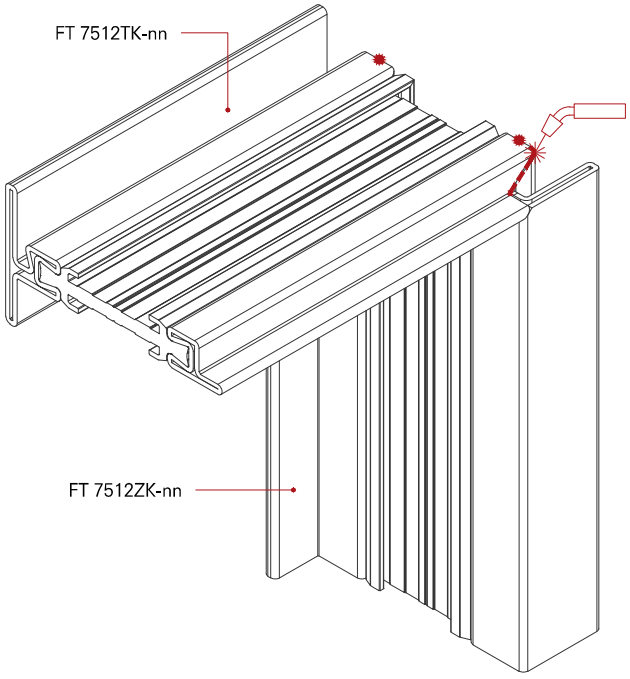








External view
Ansicht von außen
Vue extérieure

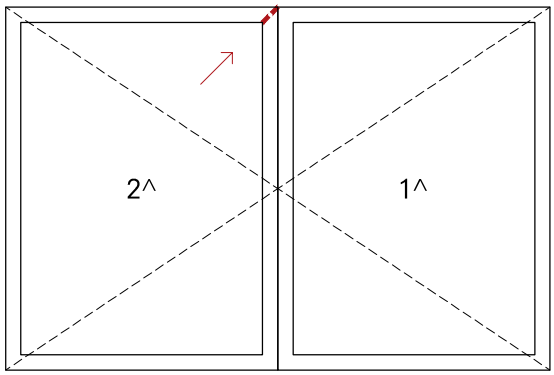


FT 7512T-nn / FT 7512Z-nn

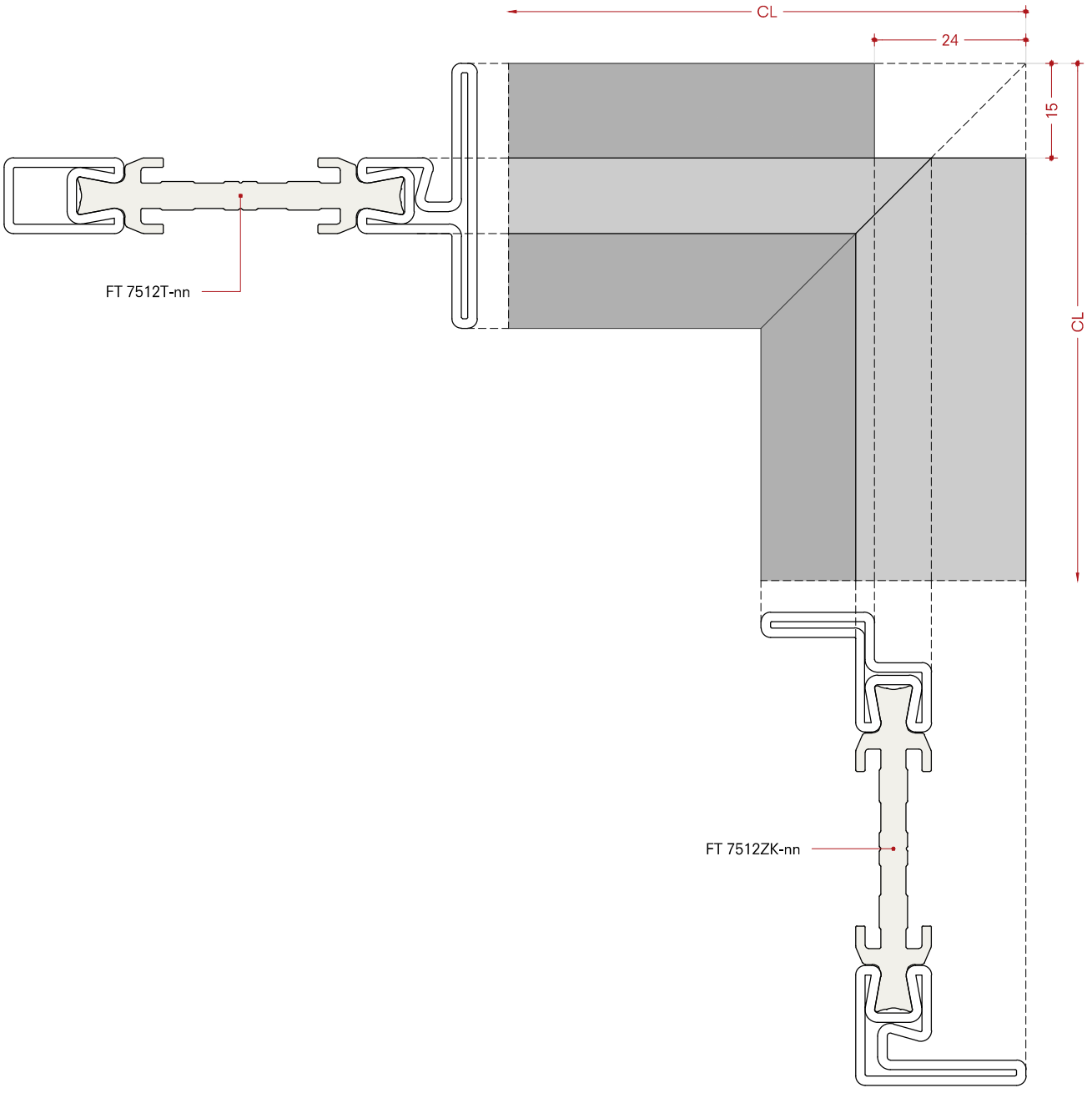
Double leaf window open out - Overlapped profiles

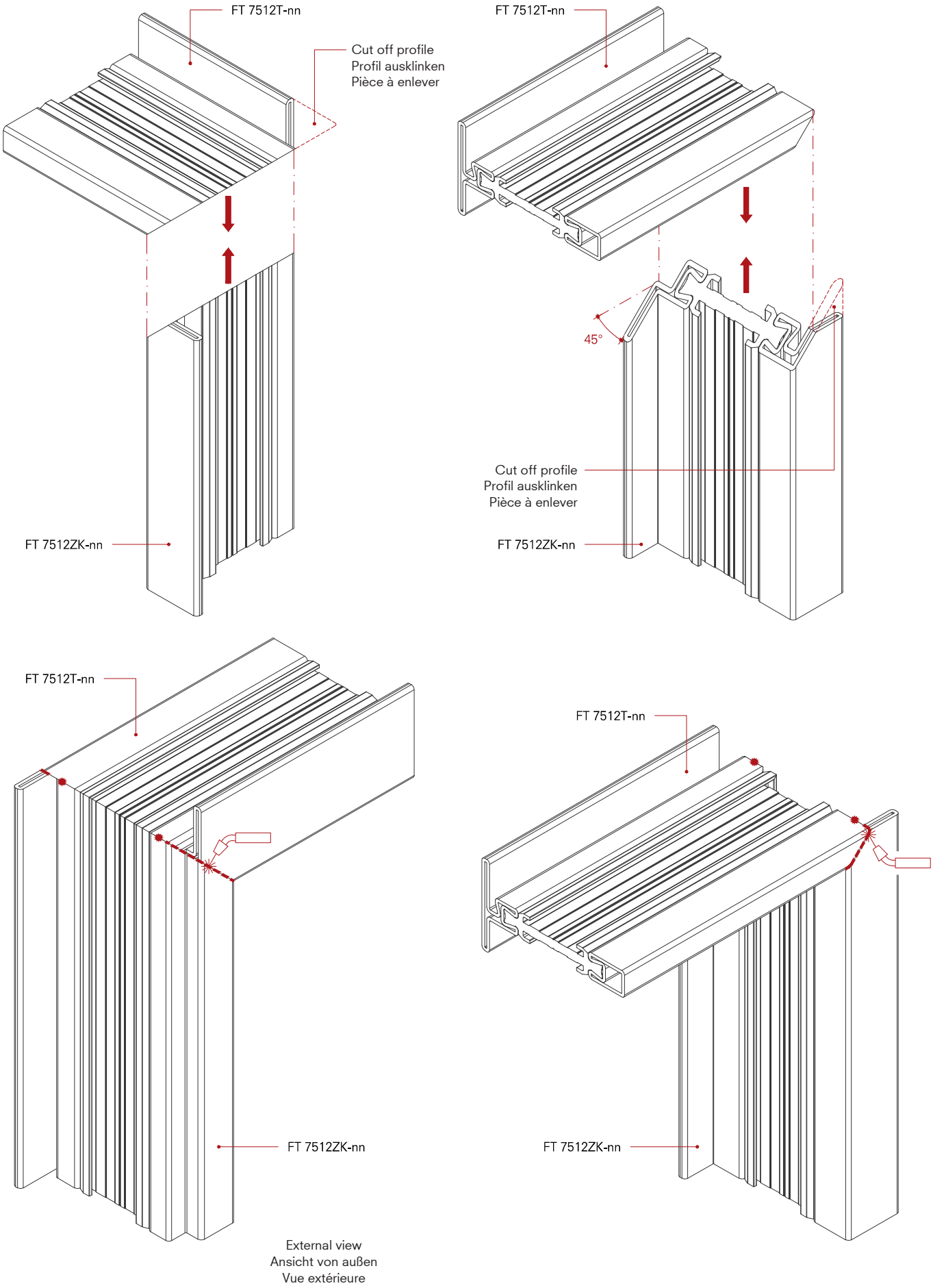
Zweiflügliges Fenster nach außen öffnend - Überlappende profile

Fenêtre à deux vantaux ouverture extérieure - Profilés superposés



Internal view
Ansicht von innen
Vue intérieure





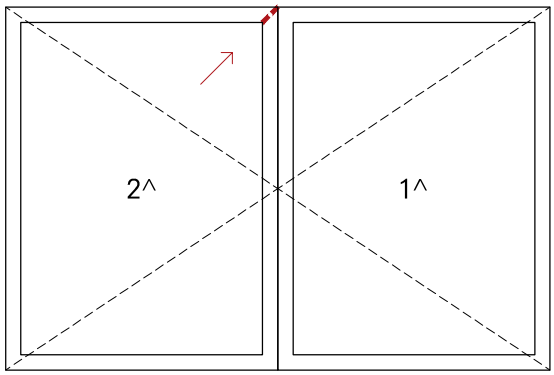
External view
Ansicht von außen
Vue extérieure

FT 7550T-nn / FT 7550Z-nn

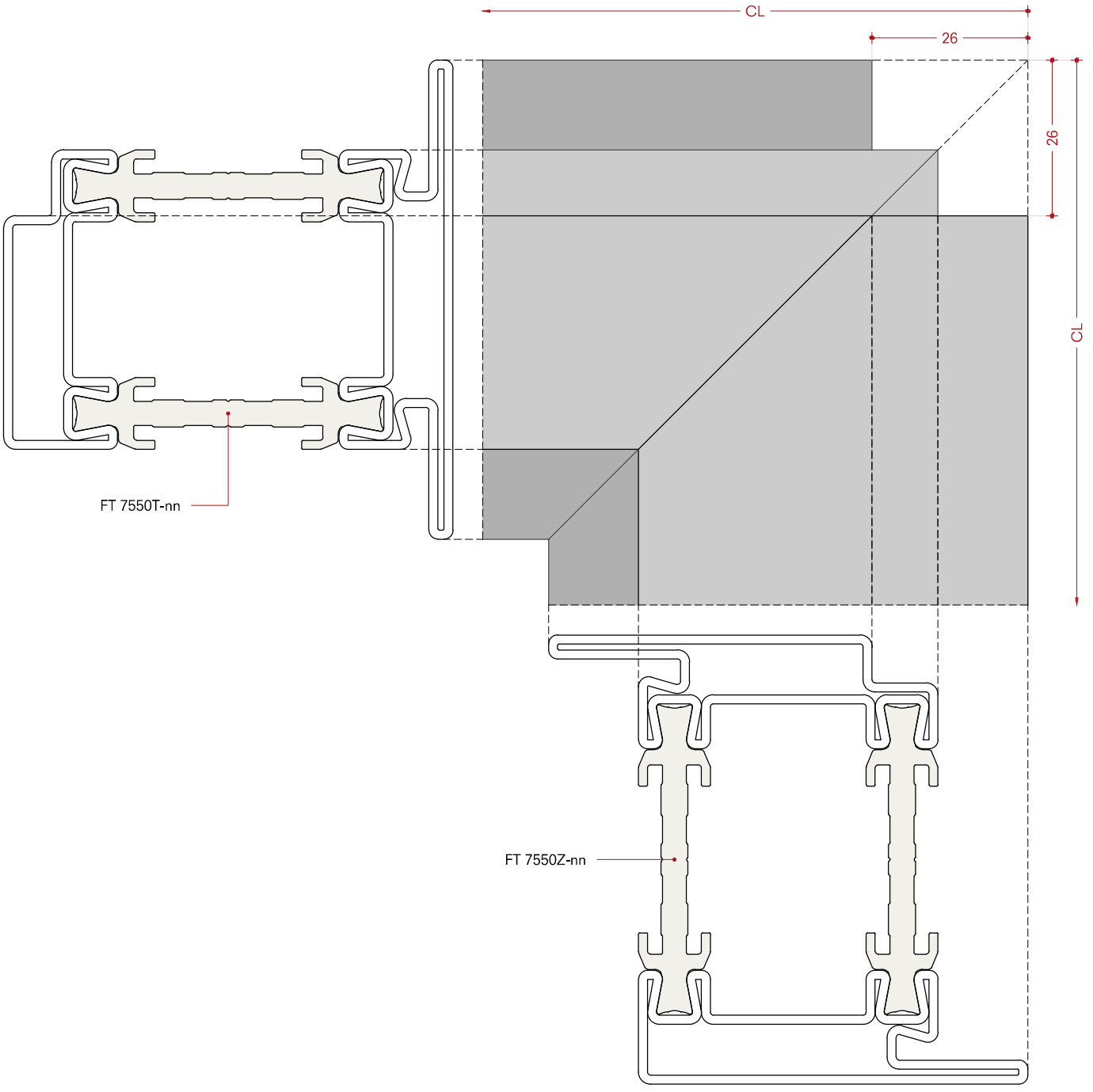
Double leaf open out - Door profiles

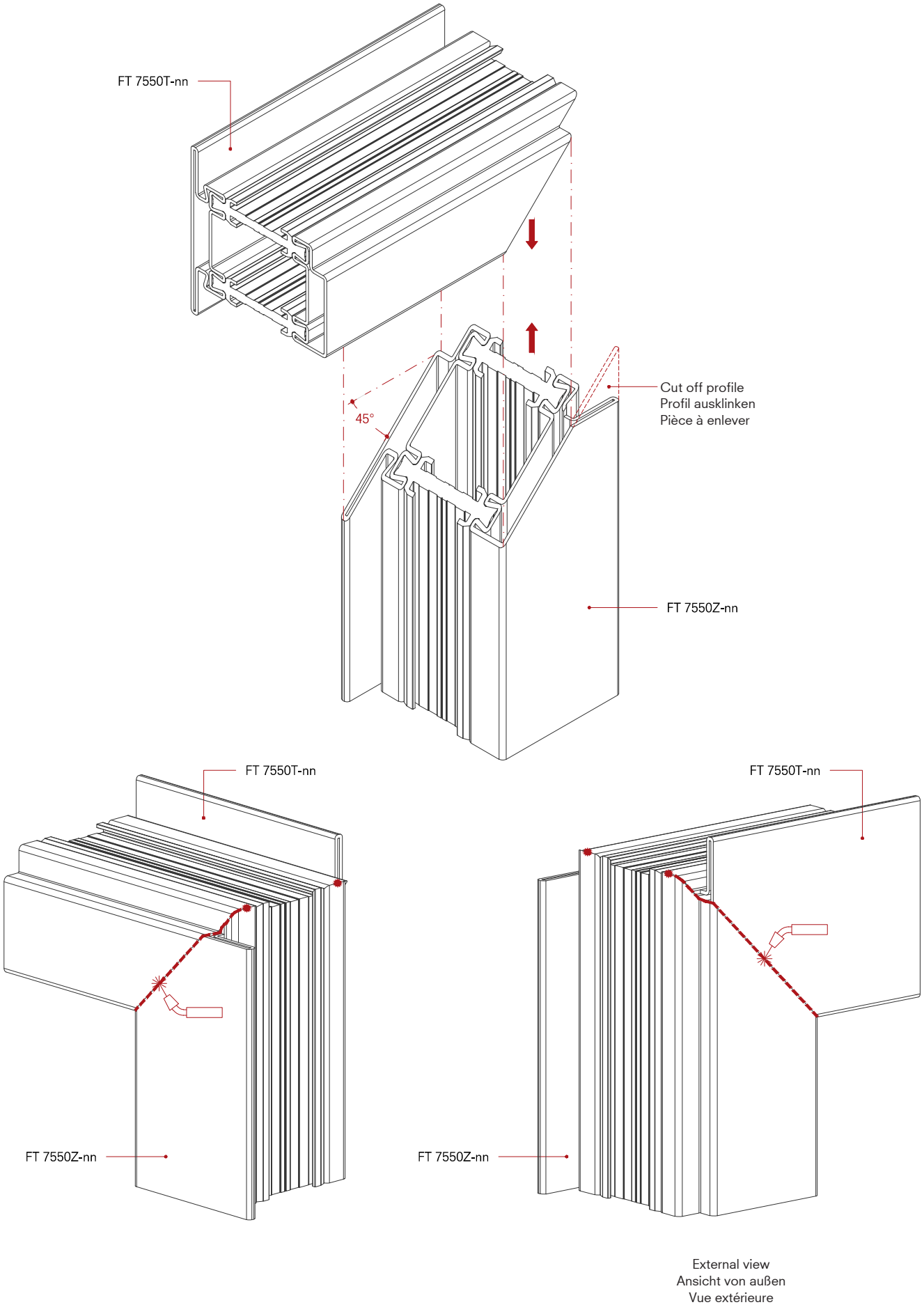
Zweiflügliges nach außen öffnend - Türprofile

Deux vantaux ouverture extérieure - Profilés porte



Internal view
Ansicht von innen
Vue intérieure





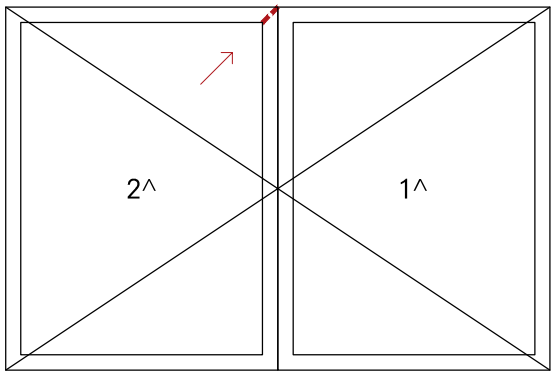
External view
Ansicht von außen
Vue extérieure

FT 7512ZK-nn / FT 7512TK-nn

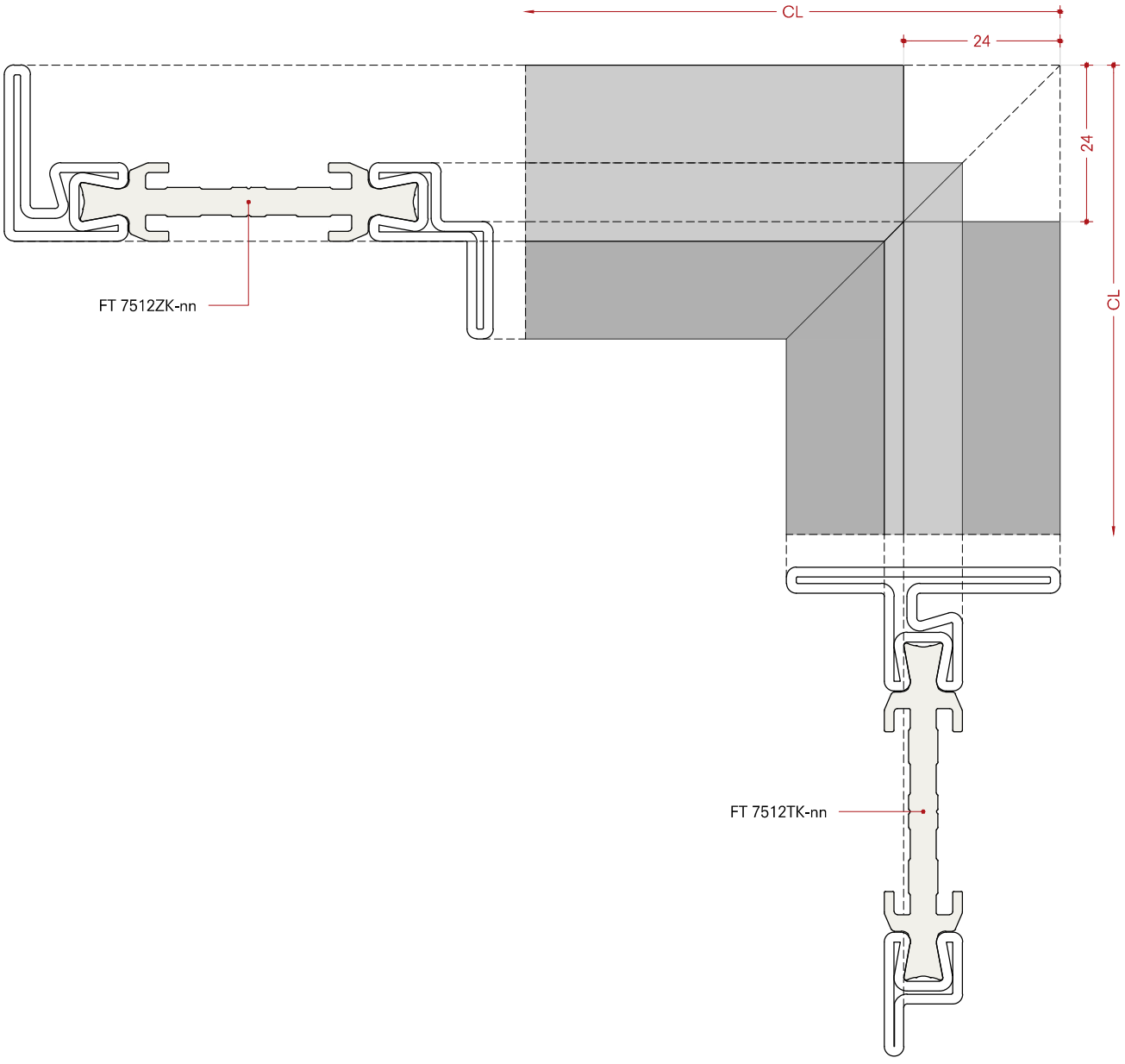
Double leaf window open in - Flush profiles

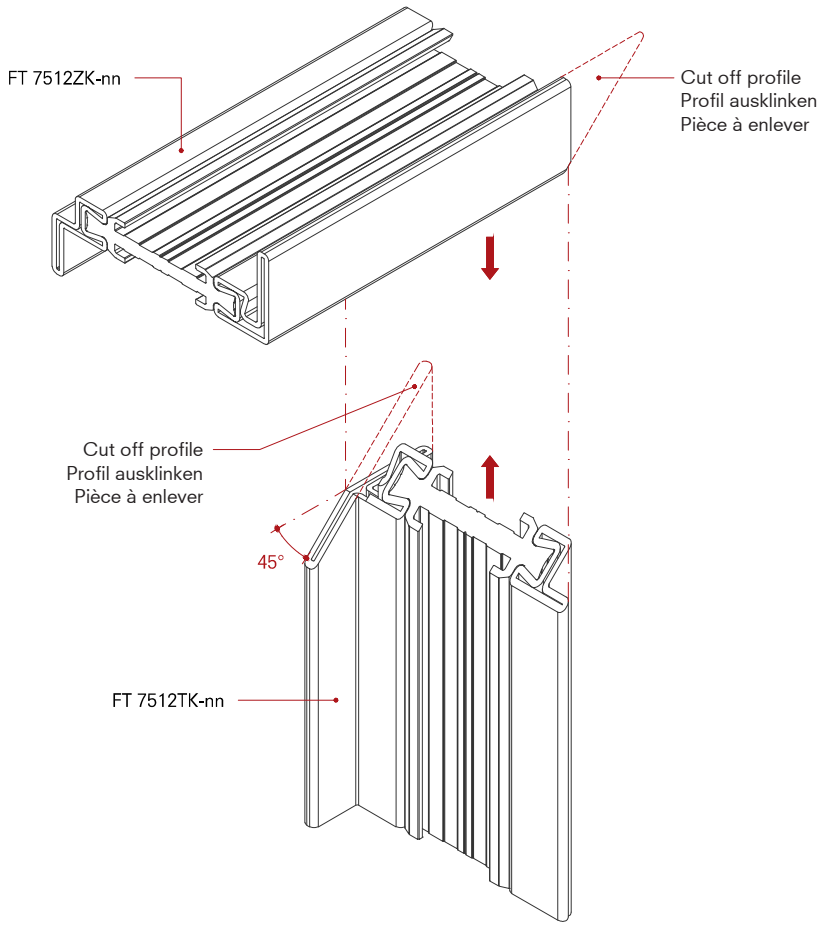
Zweiflügliges Fenster nach innen öffnend - Flächenbündige profile

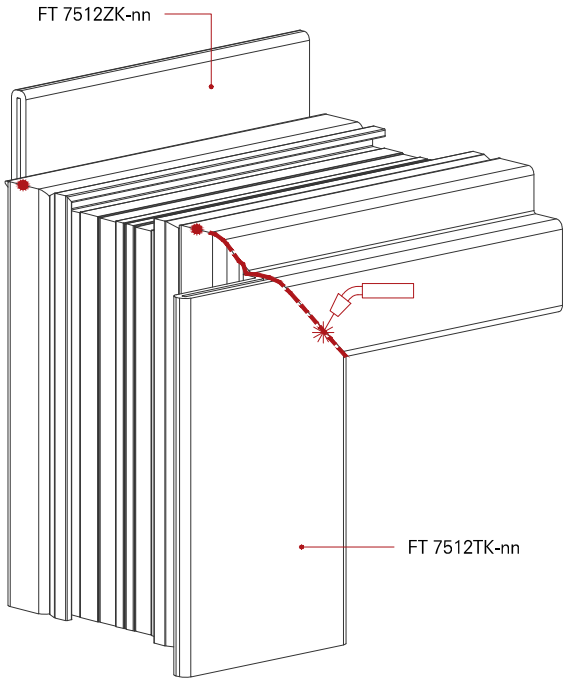
Fenêtre à deux vantaux ouverture intérieure - Profilés coplanaires

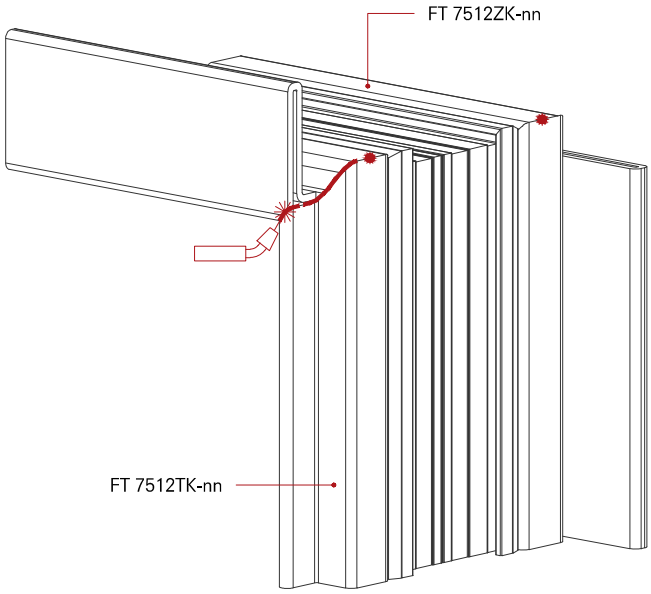


Internal view
Ansicht von innen
Vue intérieure









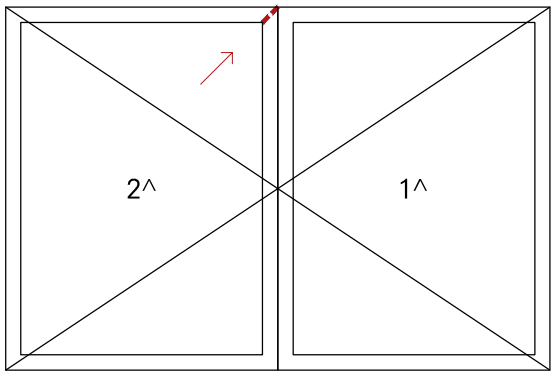
External view
Ansicht von außen
Vue extérieure

FT 7512Z-nn / FT 8312TZ-nn

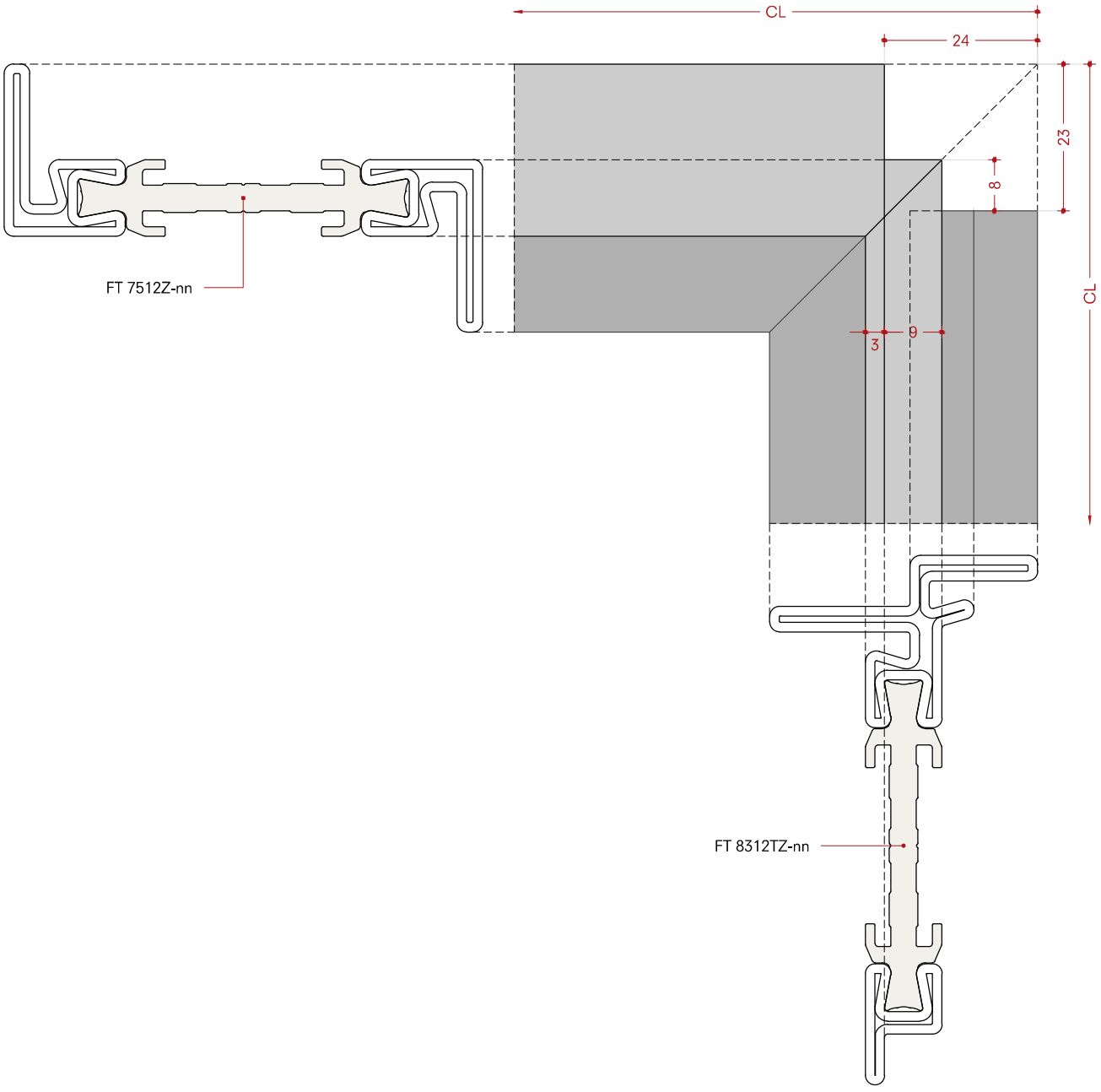
Double leaf window open in - Overlapped profiles

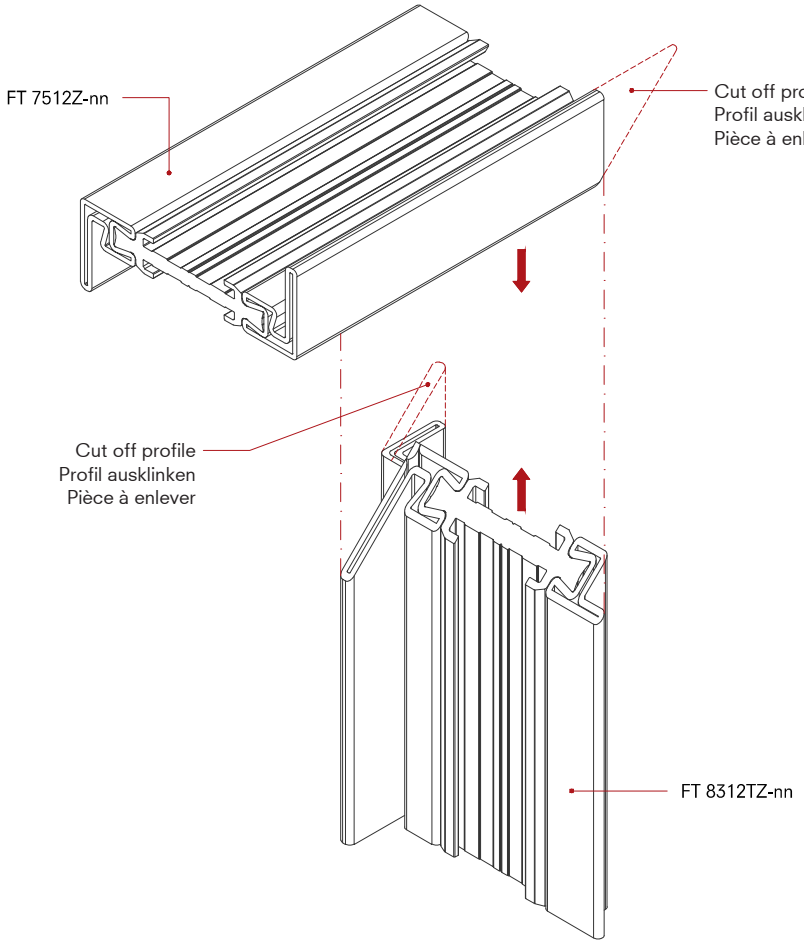
Zweiflügliges Fenster nach innen öffnend - Überlappende profile

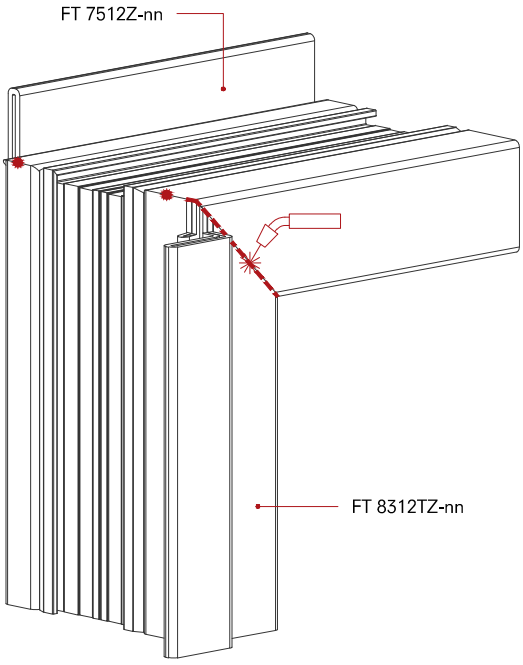
Fenêtre à deux vantaux ouverture intérieure - Profilés superposés

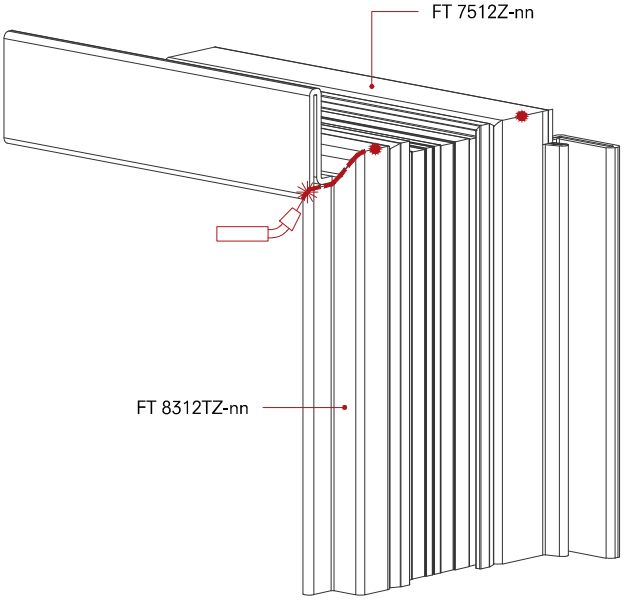


Internal view
Ansicht von innen
Vue intérieure









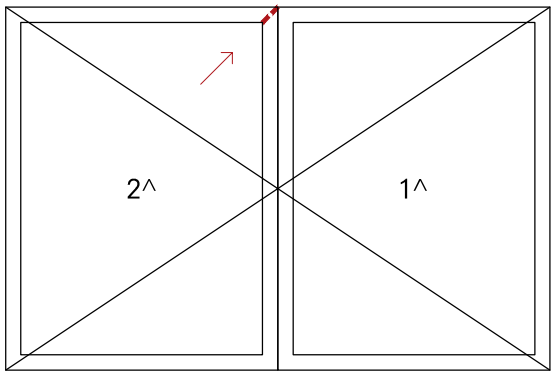
External view
Ansicht von außen
Vue extérieure

FT 8312ZR-nn / FT 7512TR-nn

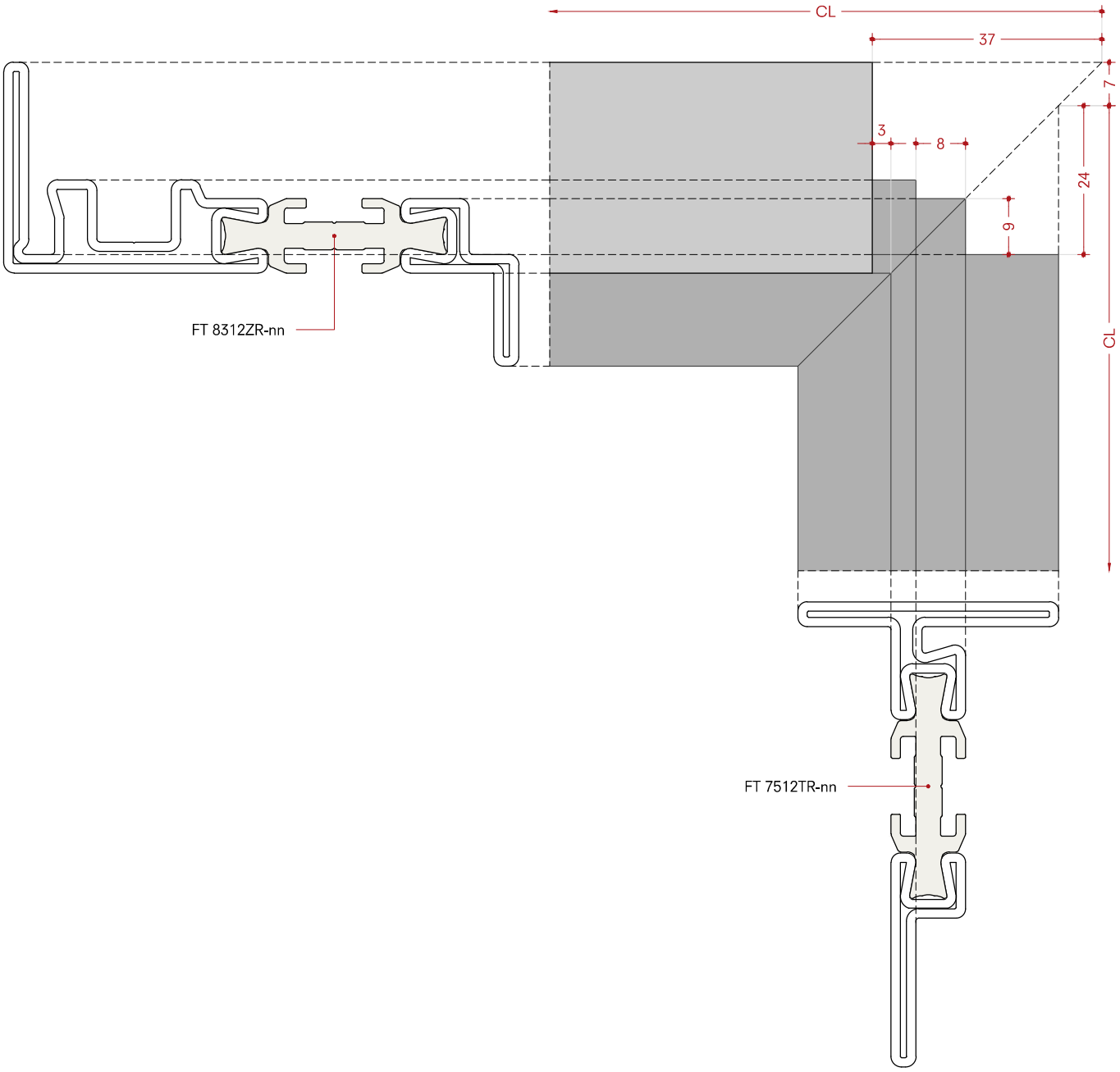
Double leaf window open in - Tilt&Turn window

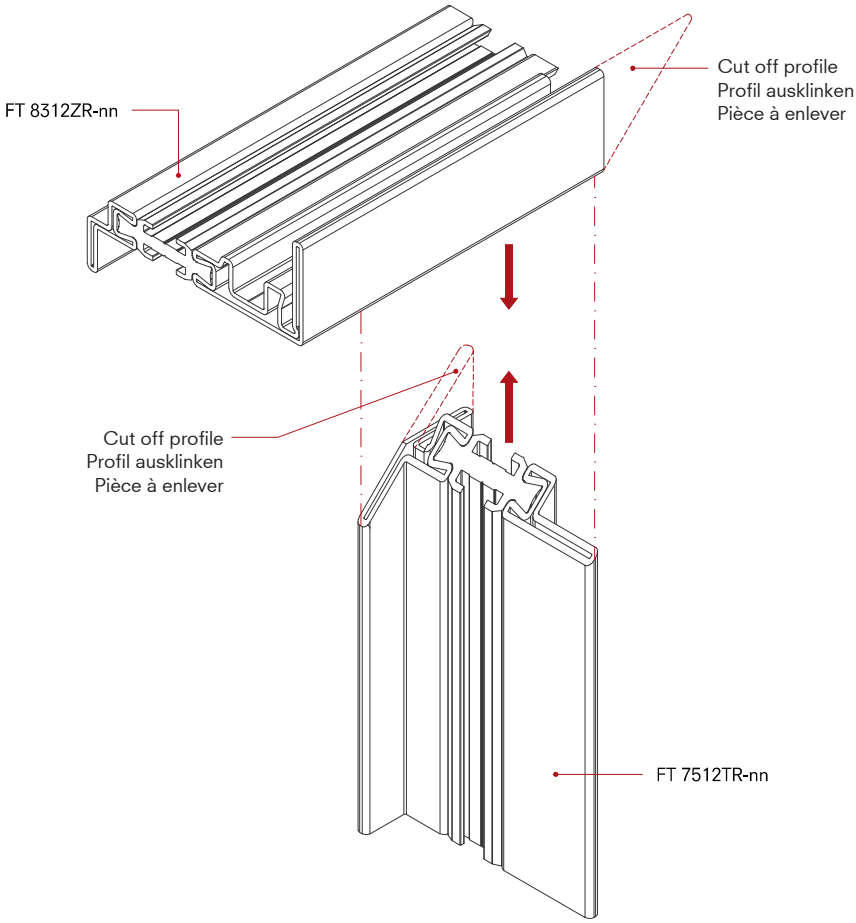
Zweiflügliges Fenster nach innen öffnend - Kipp-Fenster

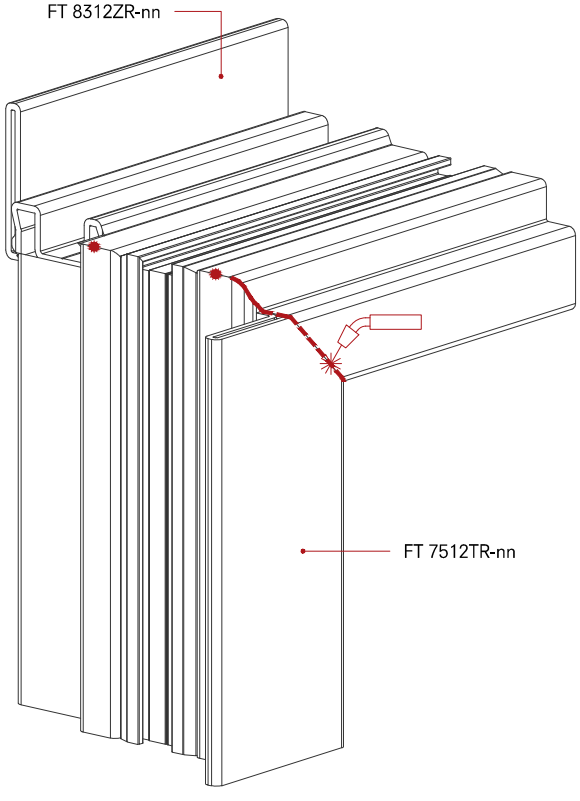
Fenêtre à deux vantaux ouverture intérieure - Fênetre oscillo-battant



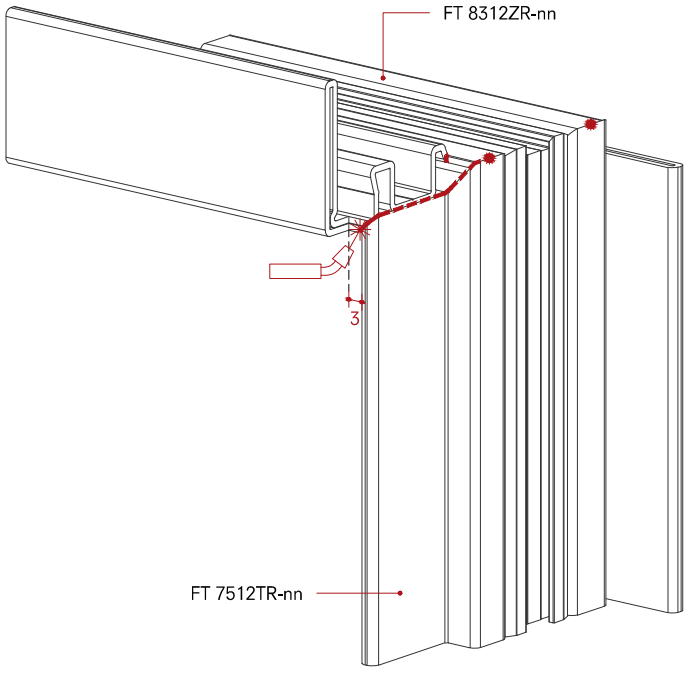
Internal view
Ansicht von innen
Vue intérieure







External view
Ansicht von außen
Vue extérieure

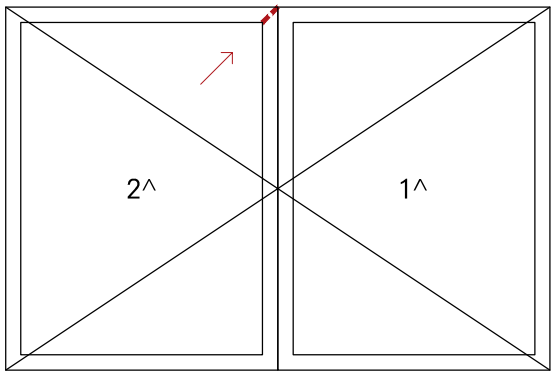


FT 7550Z-nn / FT 7550T-nn

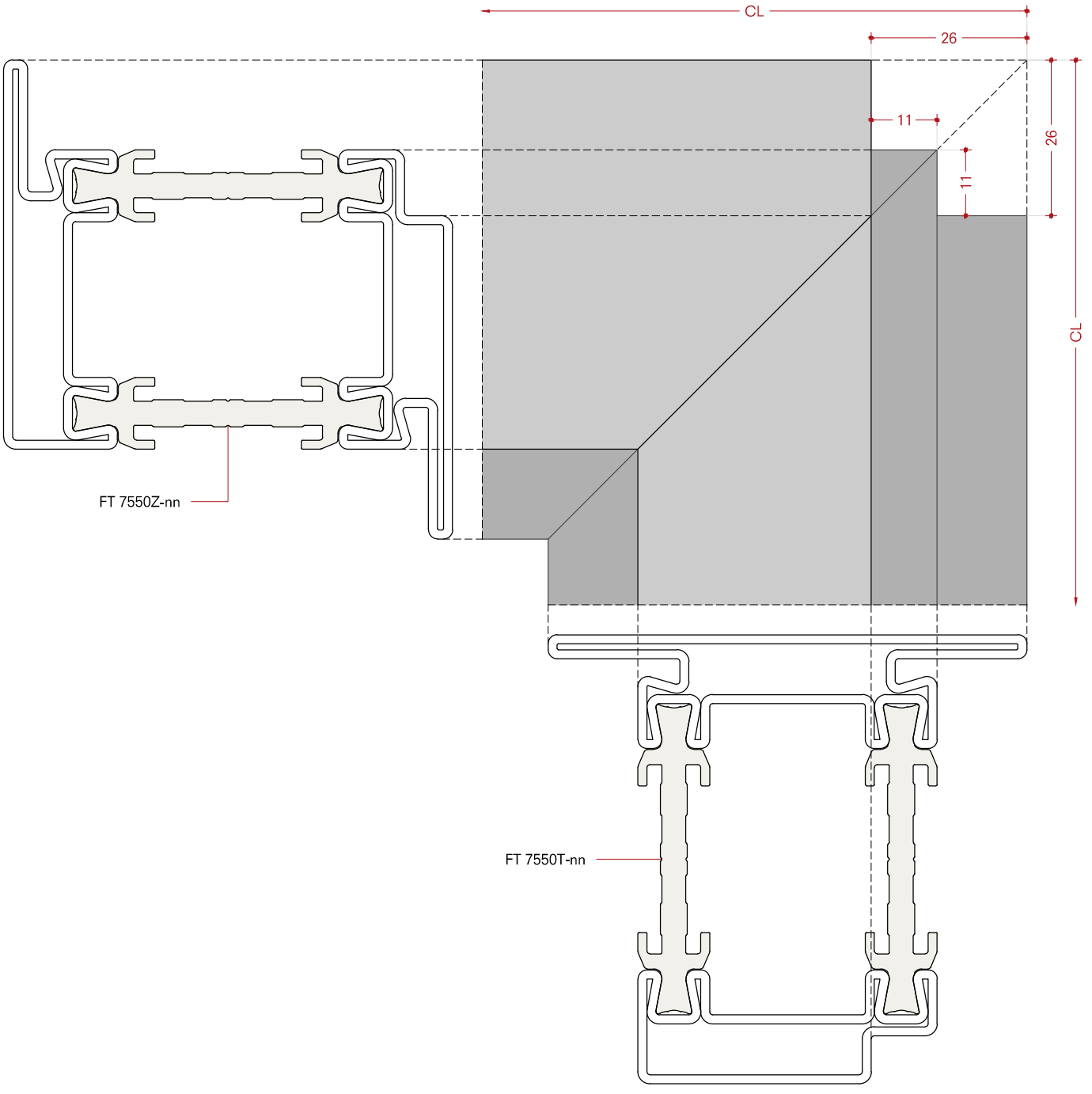
Double leaf open in - Door profiles

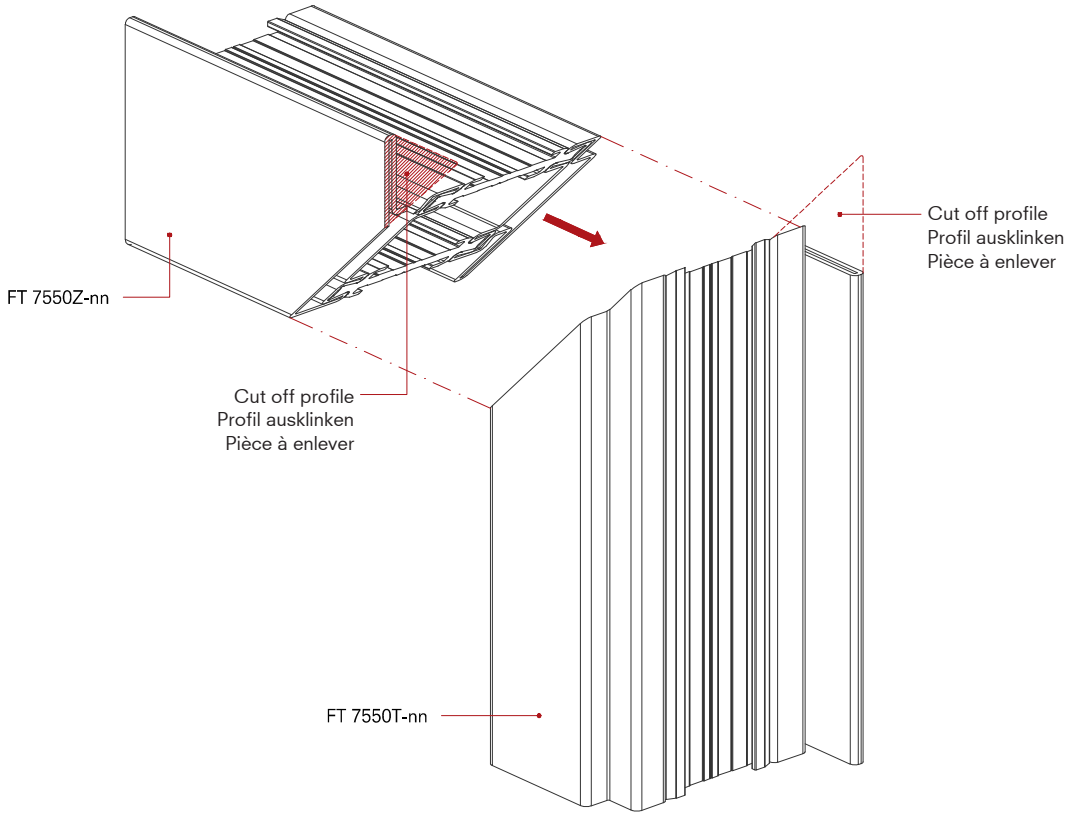
Zweiflügliges nach innen öffnend - Türprofile

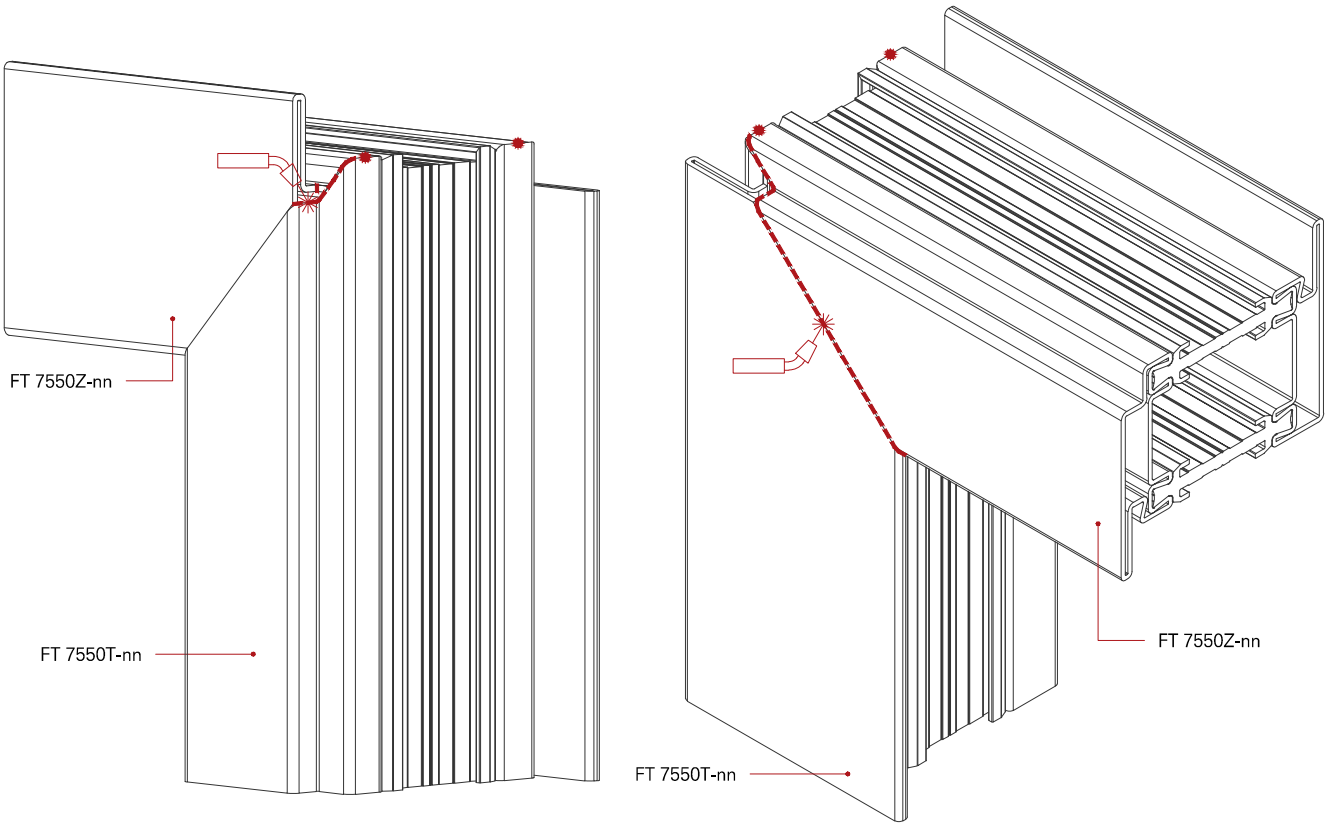
Deux vantaux ouverture intérieure - Profilés porte



Internal view
Ansicht von innen
Vue intérieure







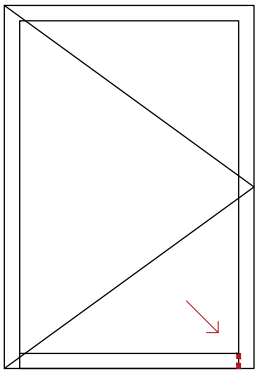
External view
Ansicht von außen
Vue extérieure

FT 7512ZK-nn / FT 7512H-nn

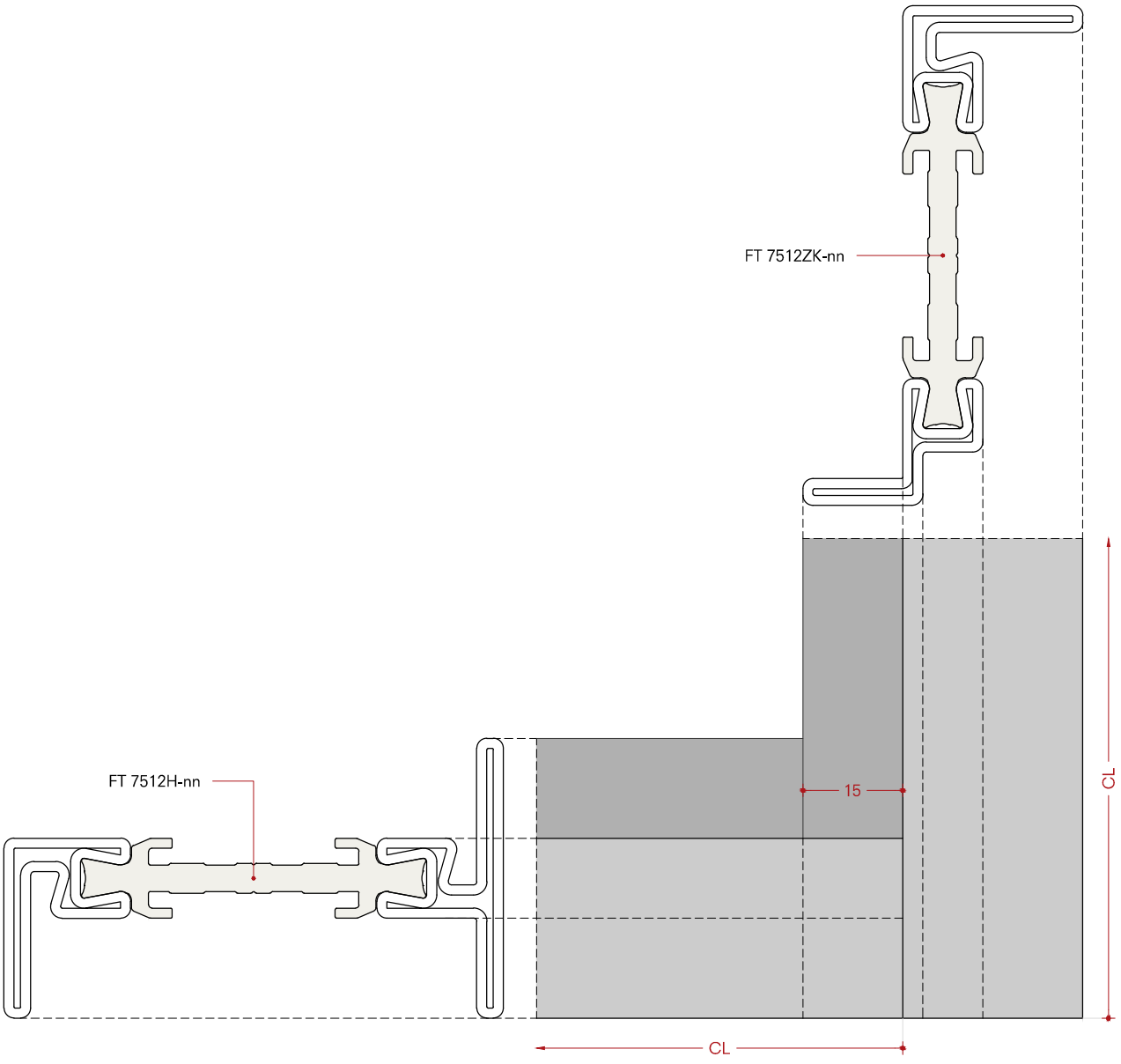
Single leaf door open in

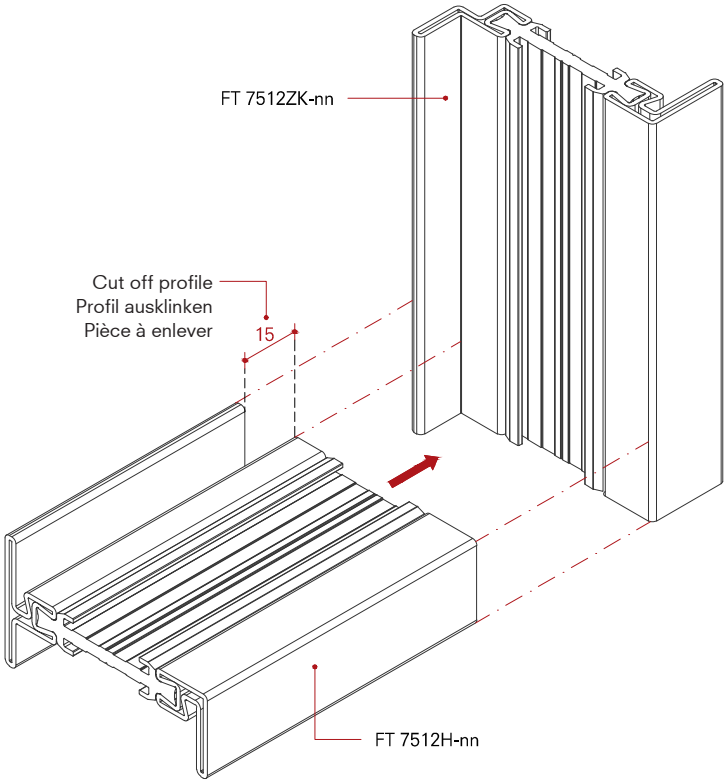
Einflüglige Tür nach innen öffnend

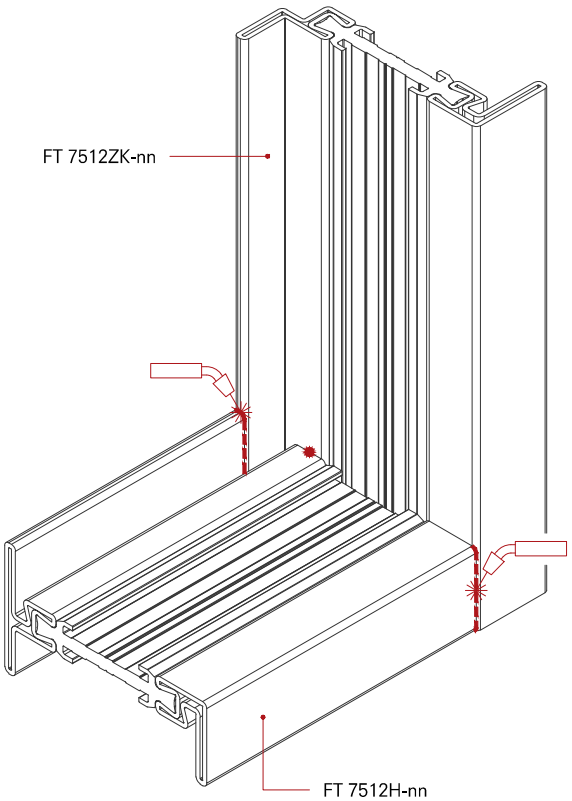
Porte à un vantail ouverture intérieure

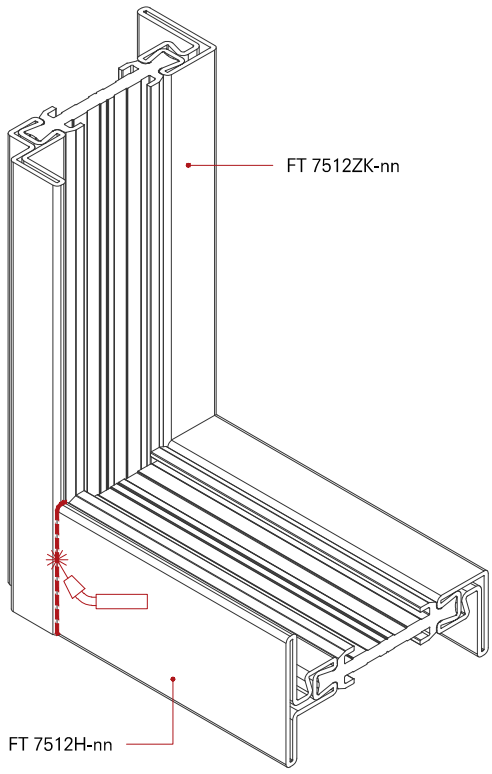


Internal view
Ansicht von innen
Vue intérieure









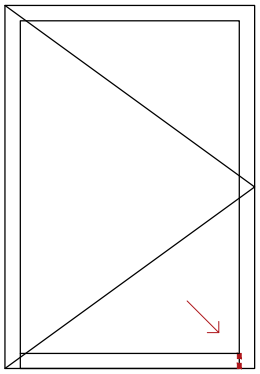
External view
Ansicht von außen
Vue extérieure

FT 7550Z-nn / FT 7550HF-nn

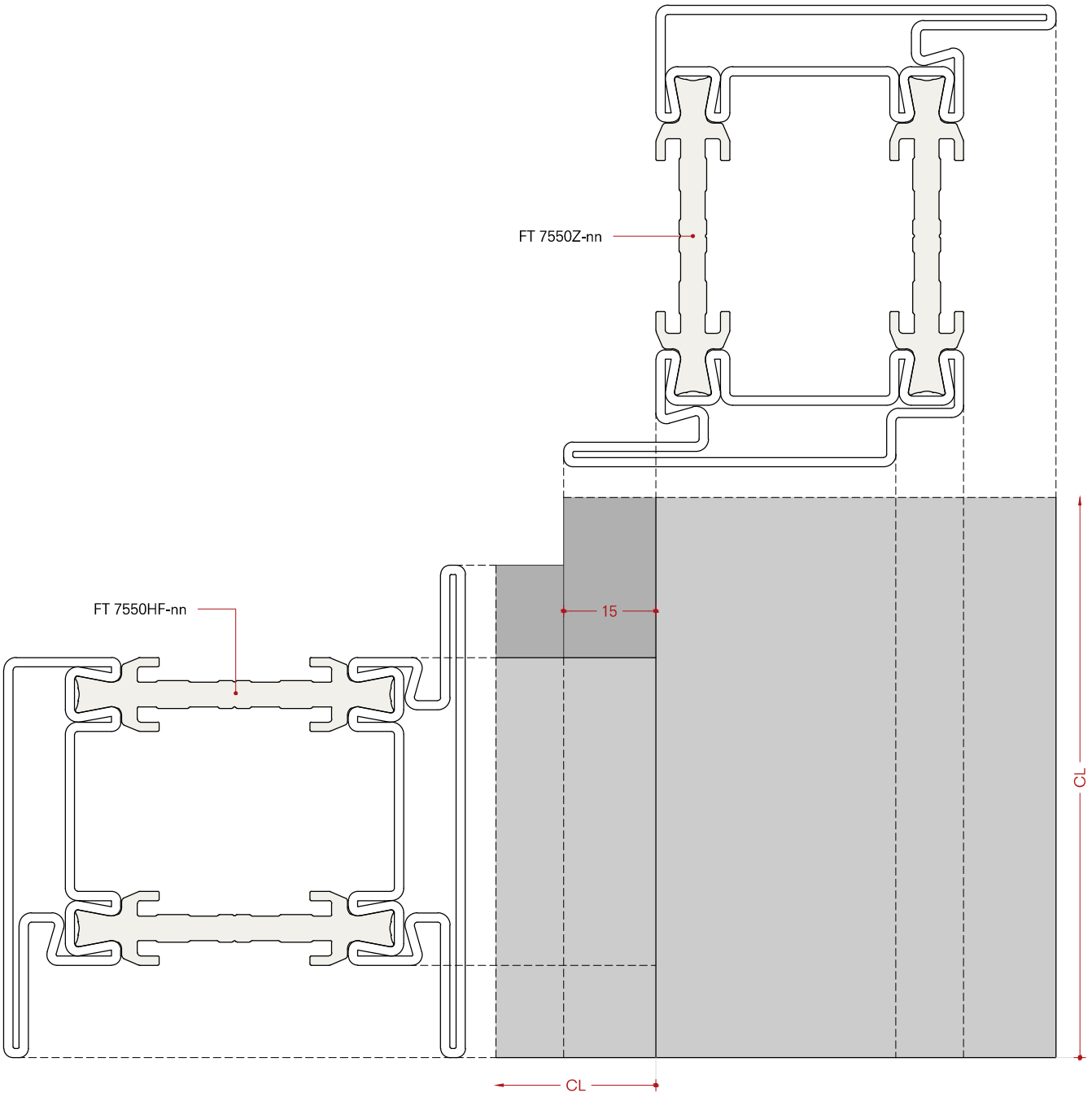
Single leaf door open in

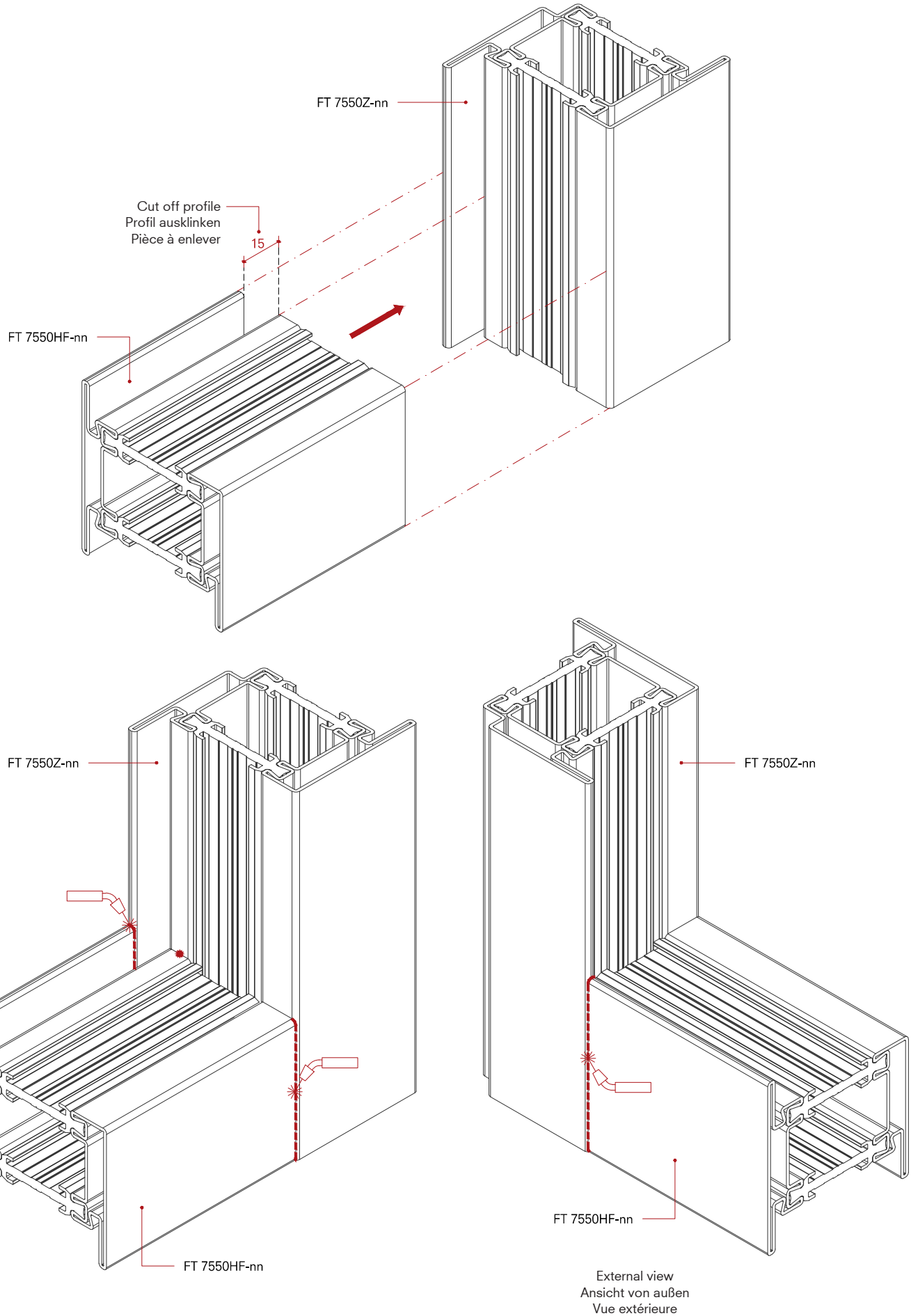
Einflüglige Tür nach innen öffnend

Porte à un vantail ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure





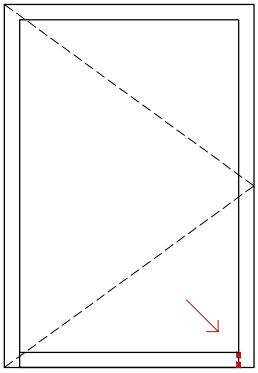
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512H-nn

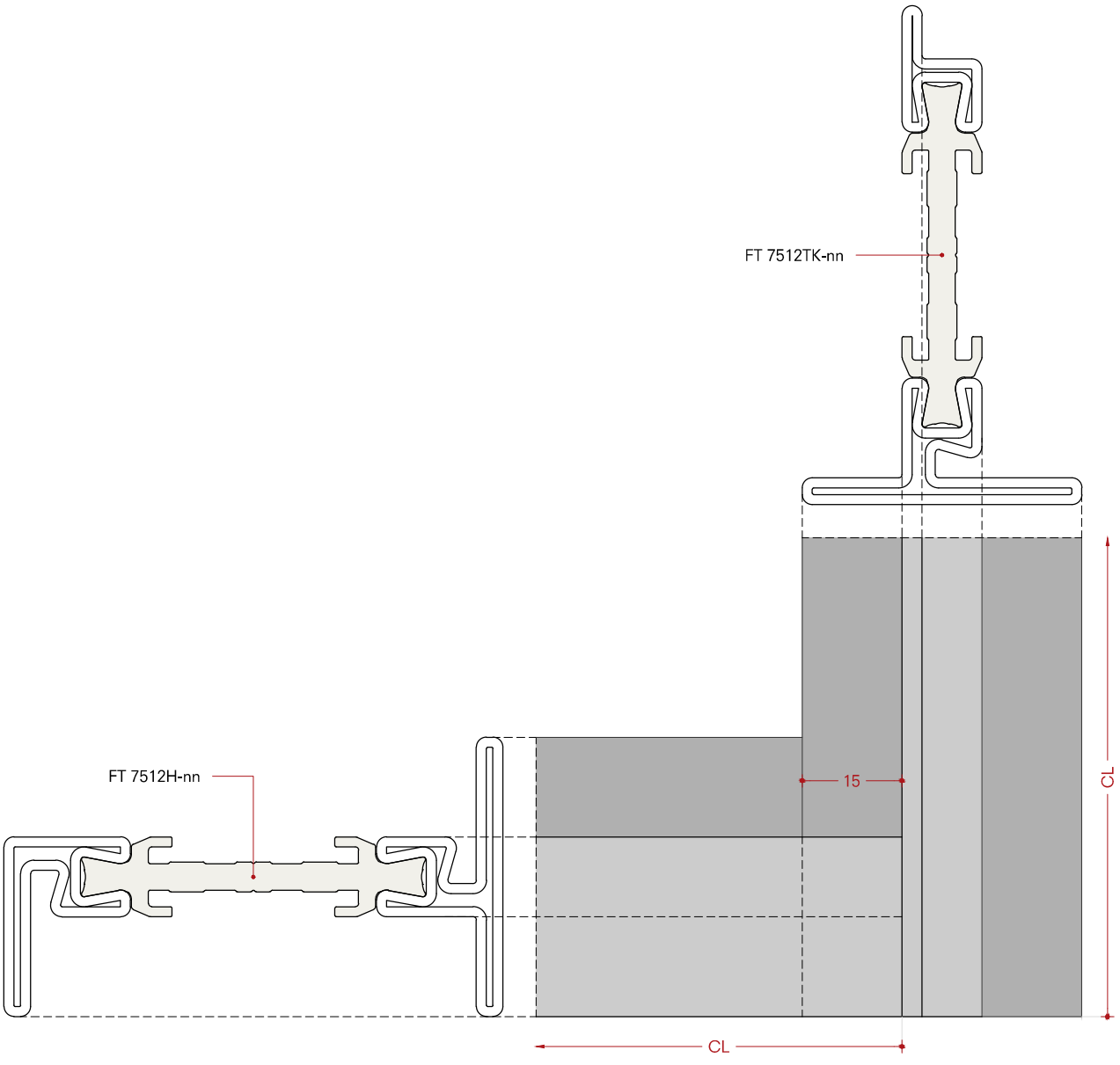
Single leaf door open out

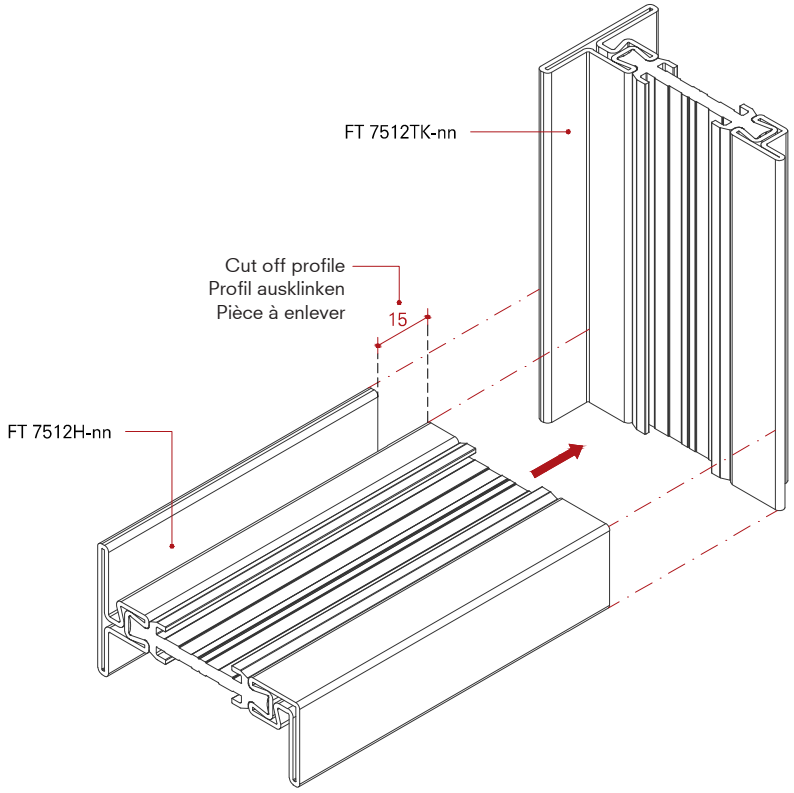
Einflüglige Tür nach außen öffnend

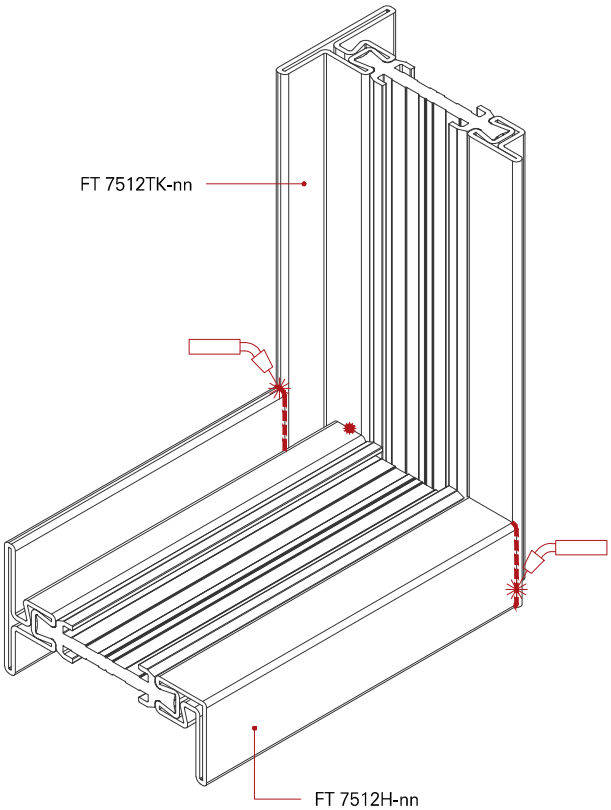
Porte à un vantail ouverture extérieure

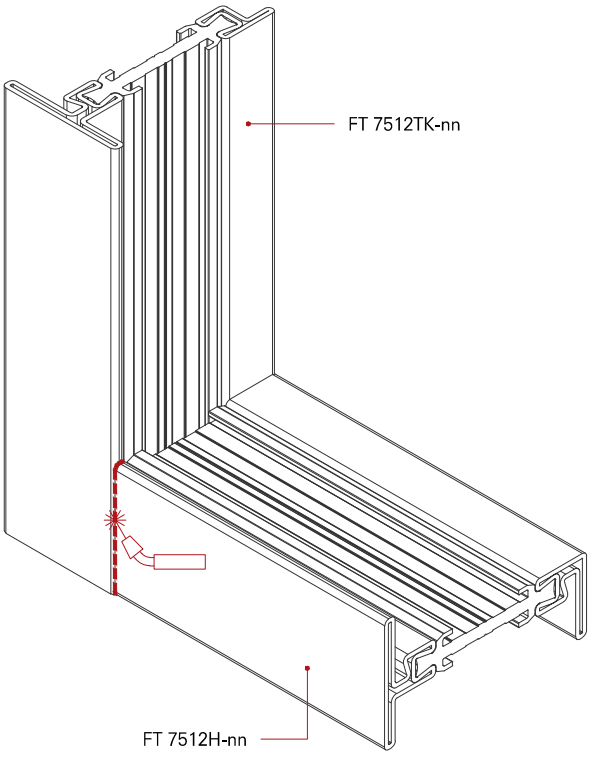


Internal view
Ansicht von innen
Vue intérieure









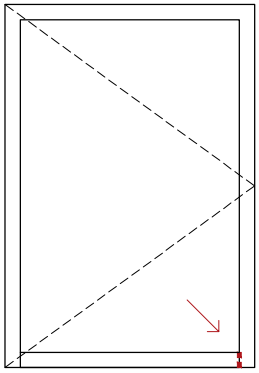
External view
Ansicht von außen
Vue extérieure

FT 7550T-nn / FT 7550HF-nn

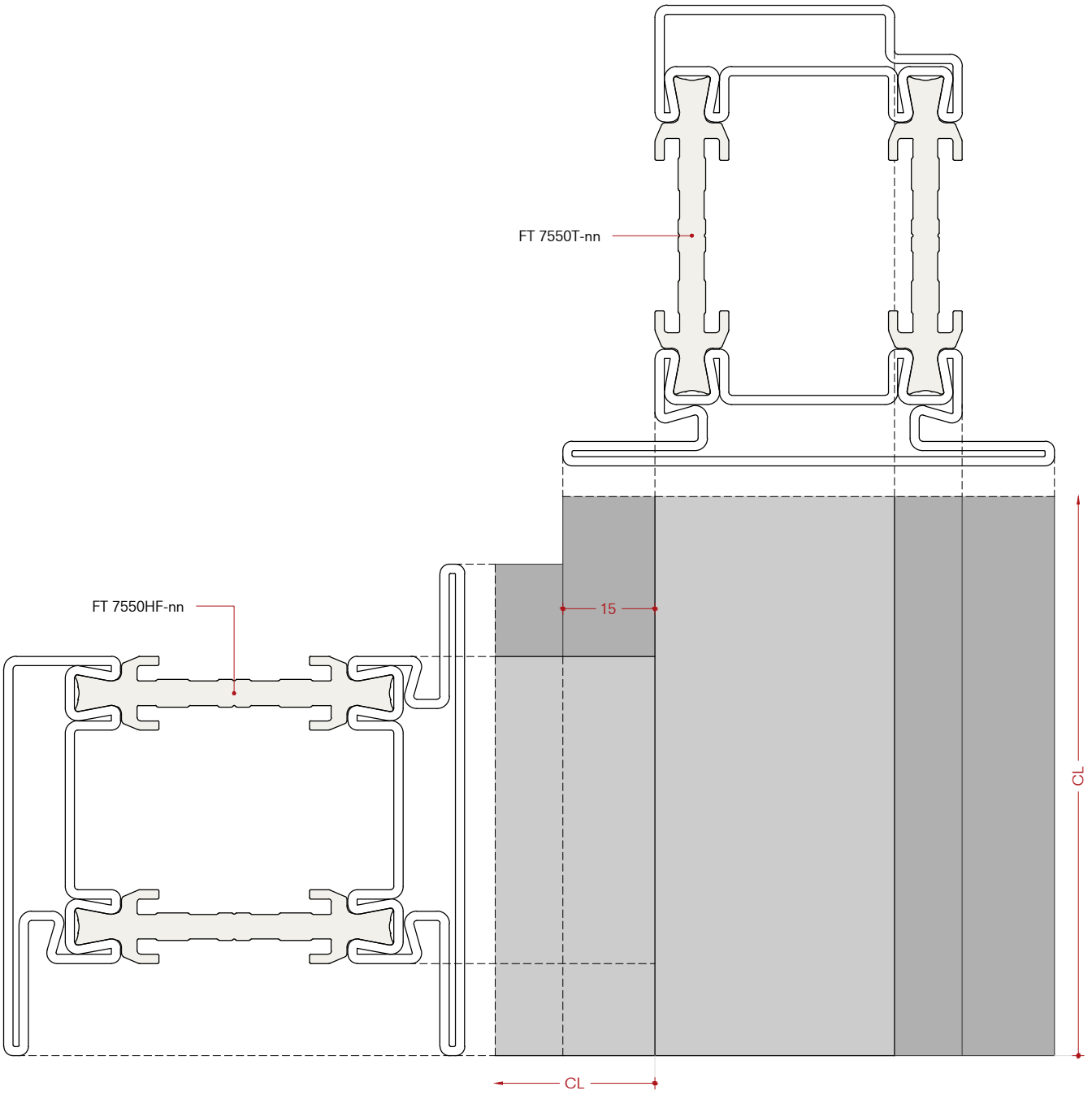
Single leaf door open out

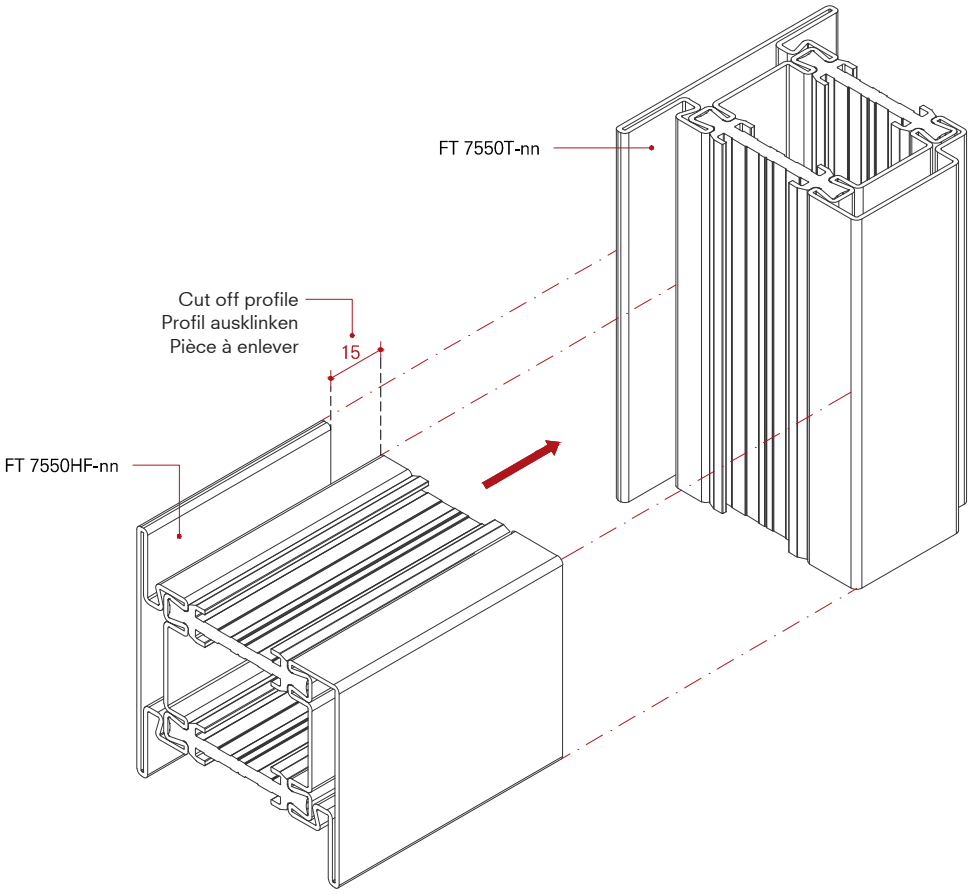
Einflüglige Tür nach außen öffnend

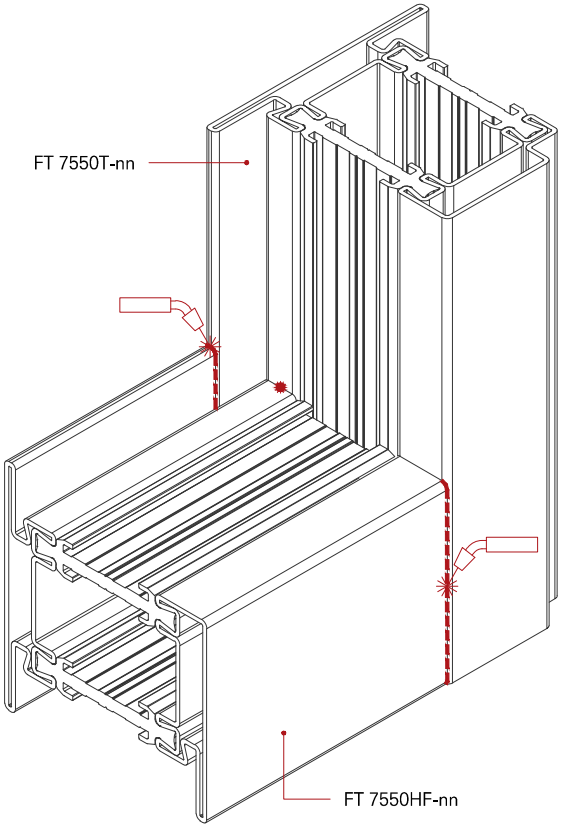
Porte à un vantail ouverture extérieure

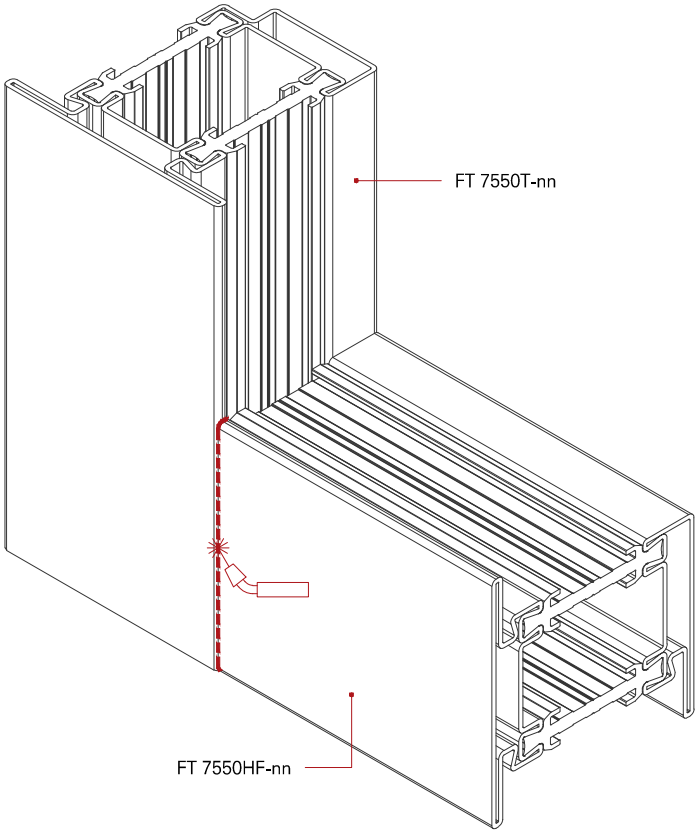


Internal view
Ansicht von innen
Vue intérieure









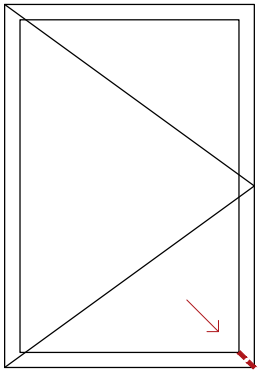
External view
Ansicht von außen
Vue extérieure

FT 7550Z-nn / FT 7550Z-nn

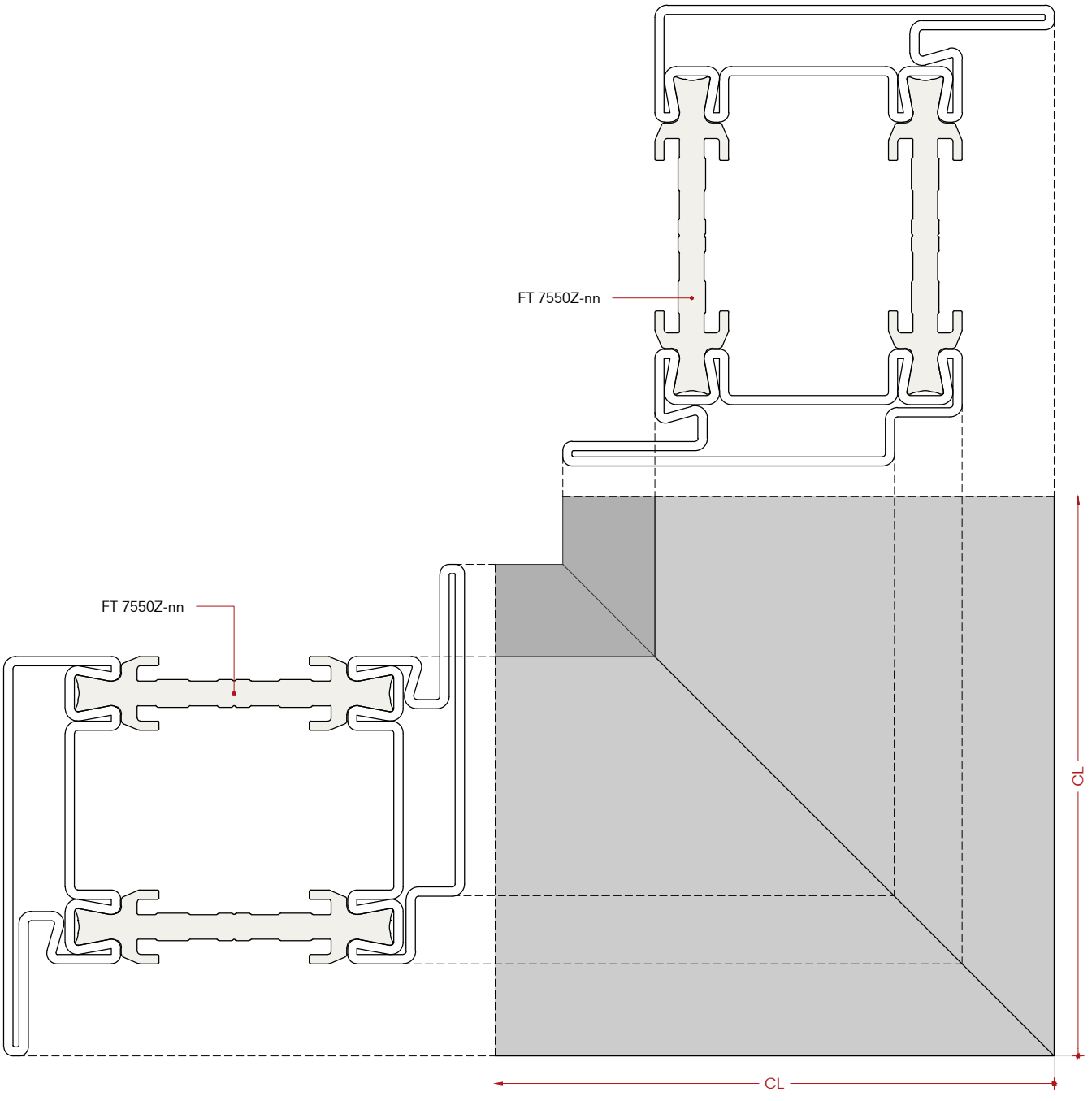
Single leaf door open in

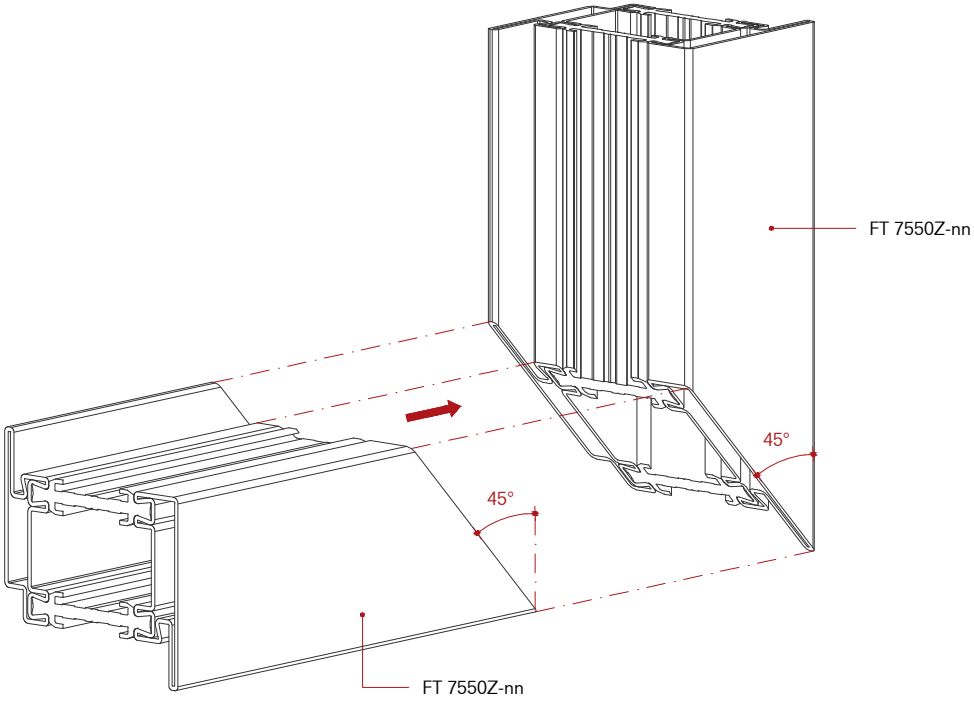
Einflüglige Tür nach innen öffnend

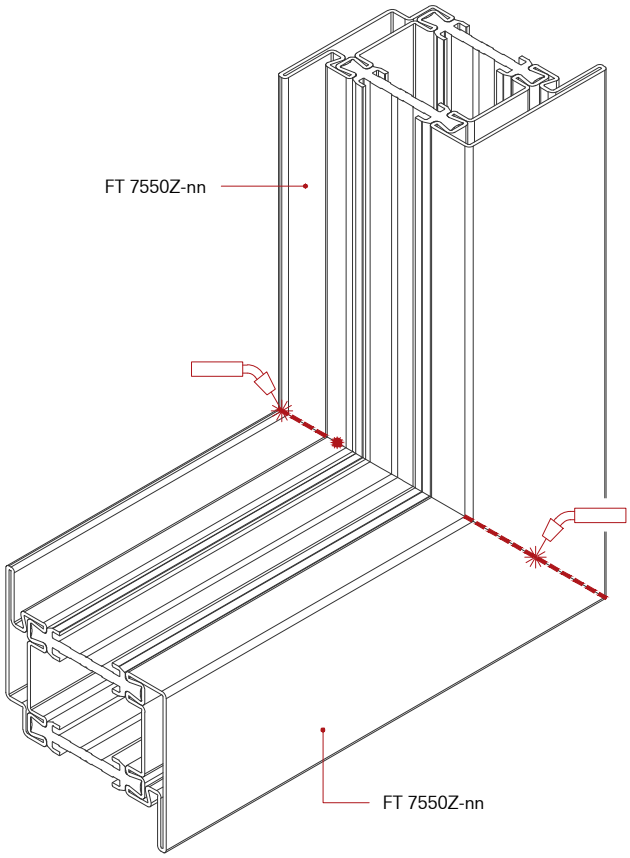
Porte à un vantail ouverture intérieure

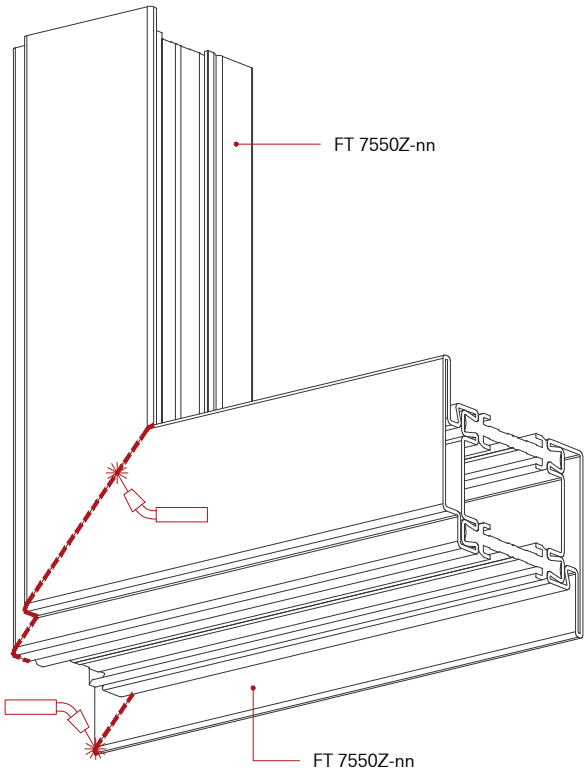


Internal view
Ansicht von innen
Vue intérieure









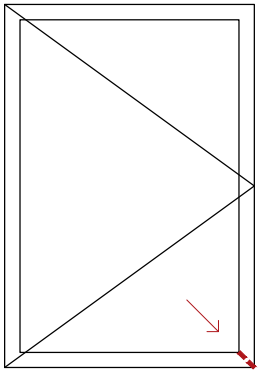
External view
Ansicht von außen
Vue extérieure

FT 7550Z-nn / FT 7550ZF-nn

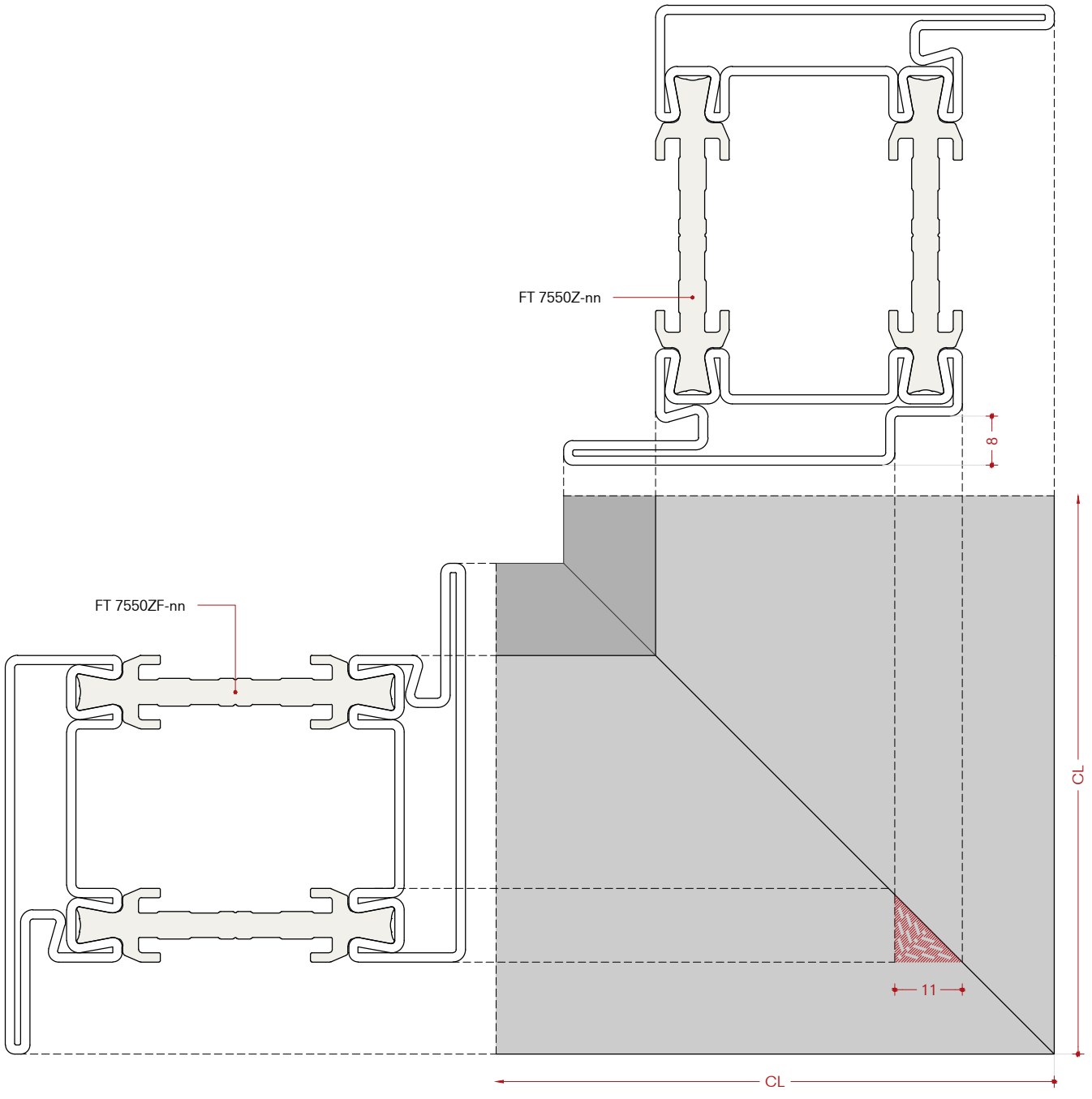
Single leaf door open in

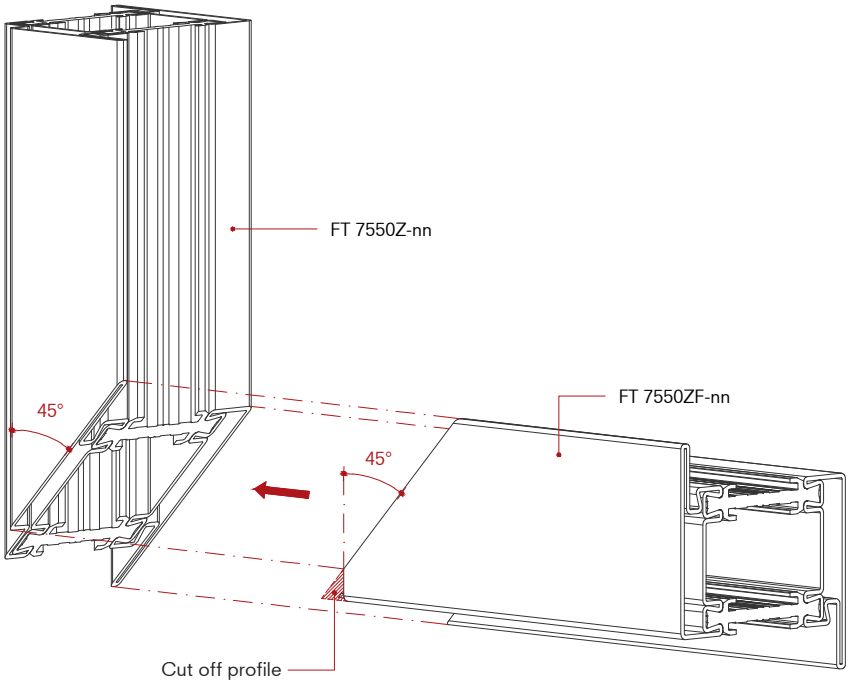
Einflüglige Tür nach innen öffnend

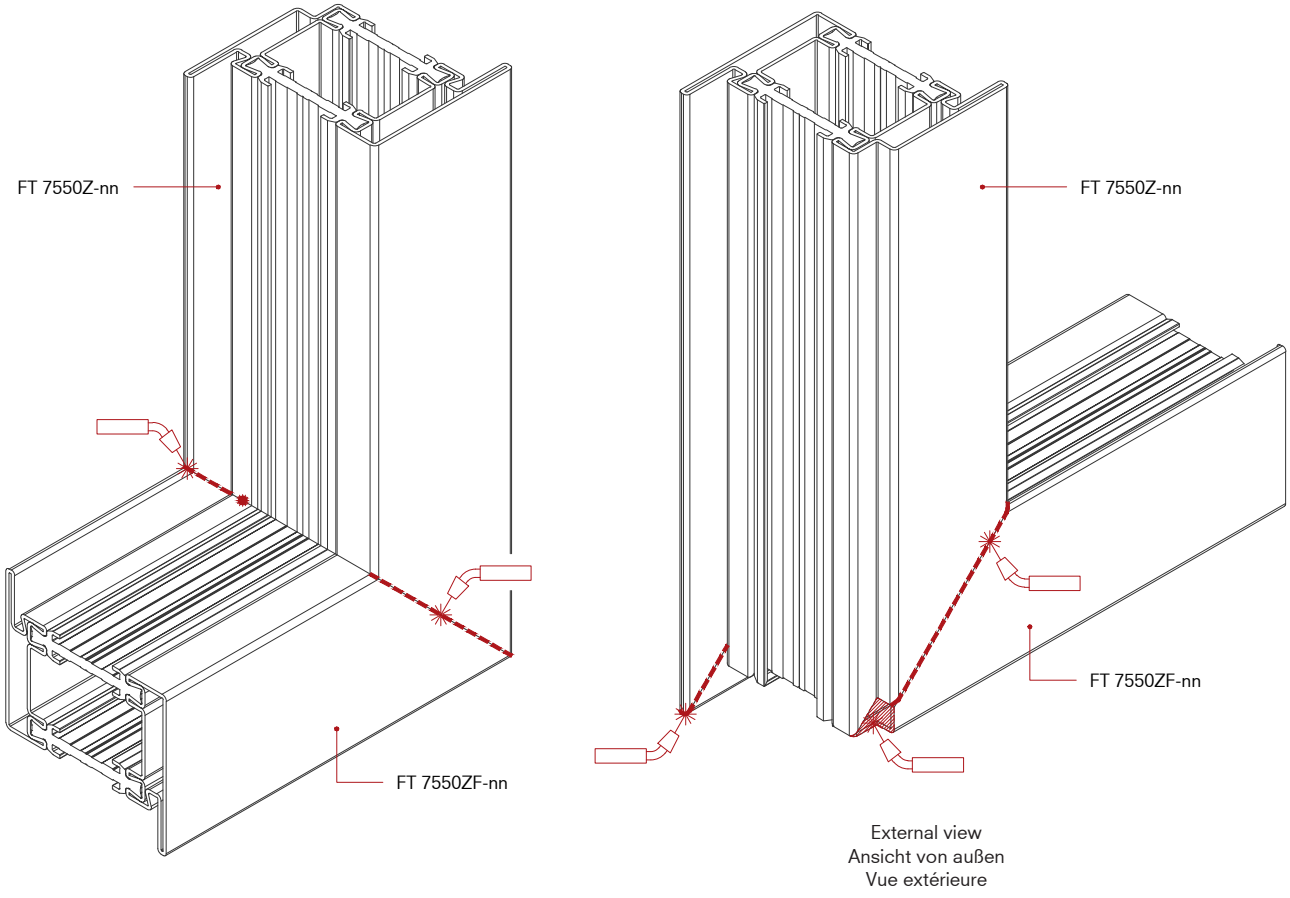
Porte à un vantail ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure




FT 7550Z-nn
45°
45°
FT 7550ZF-nn
Cut off profile
Profil ausklinken
Pièce à enlever
External view
Ansicht von außen
Vue extérieure

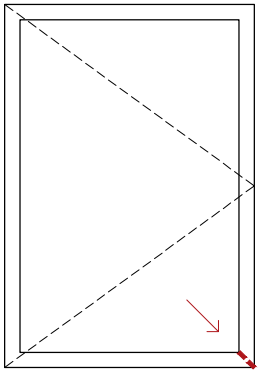

FT 7550Z-nn
FT 7550ZF-nn
FT 7550Z-nn
FT 7550ZF-nn
External view
Ansicht von außen
Vue extérieure

FT 7550T-nn / FT 7550T-nn

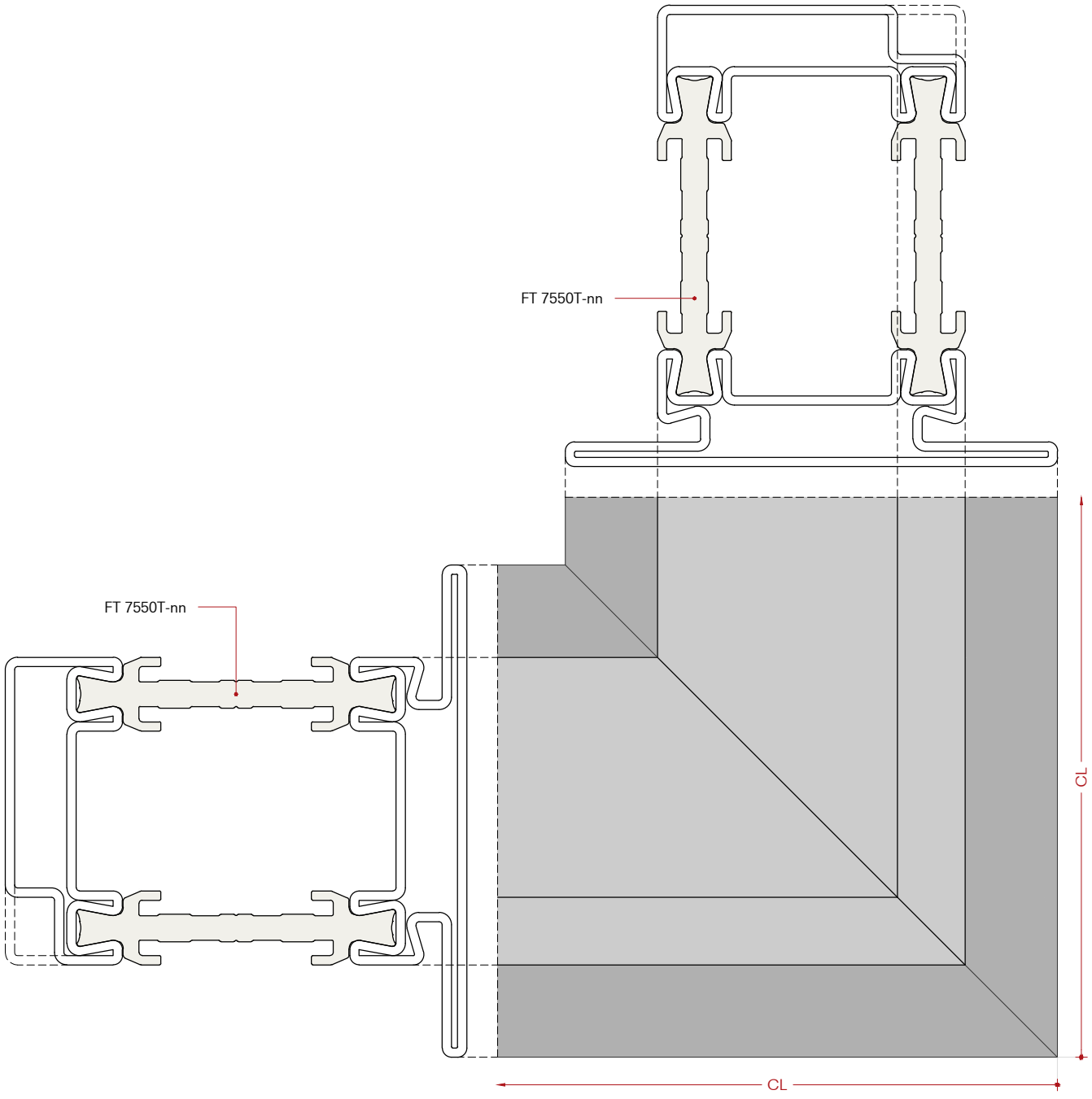
Single leaf door open out

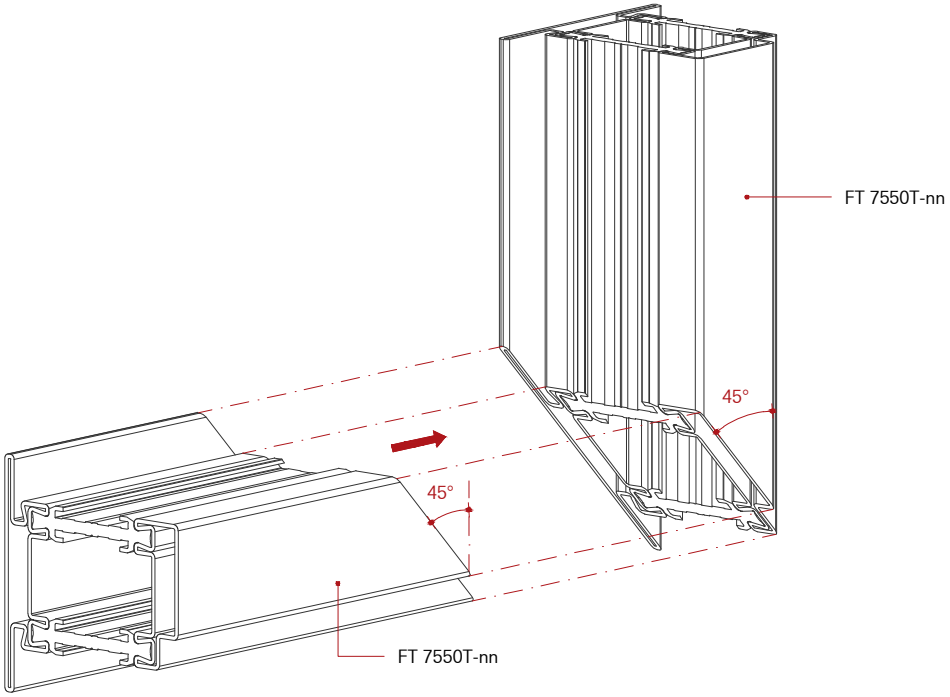
Einflüglige Tür nach außen öffnend

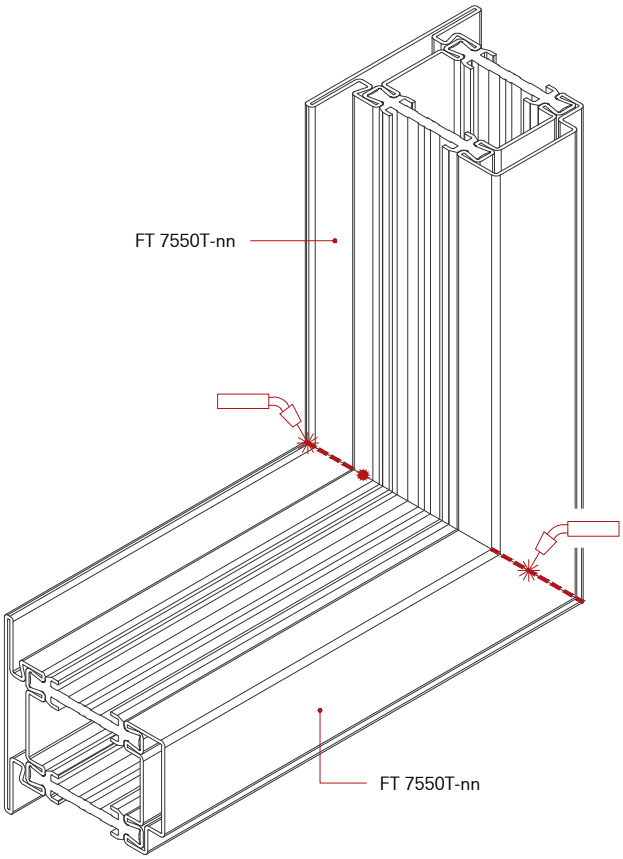
Porte à un vantail ouverture extérieure

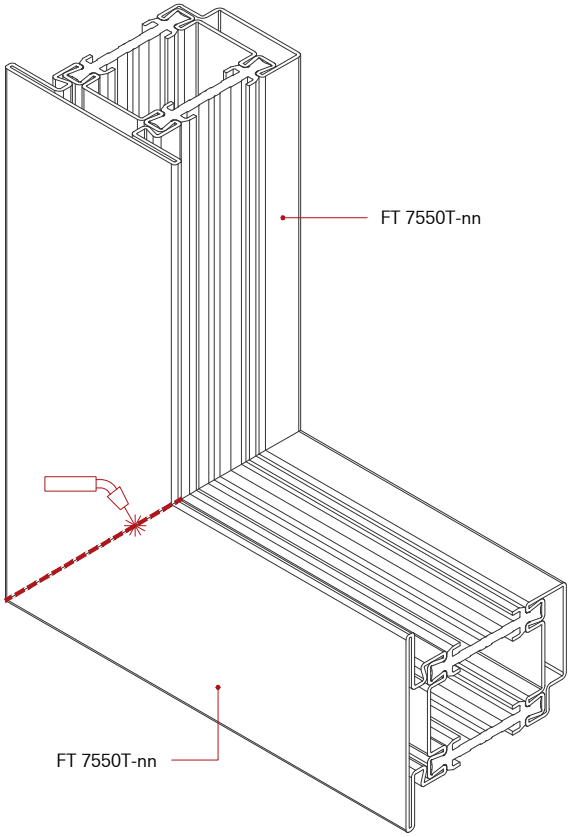


Internal view
Ansicht von innen
Vue intérieure









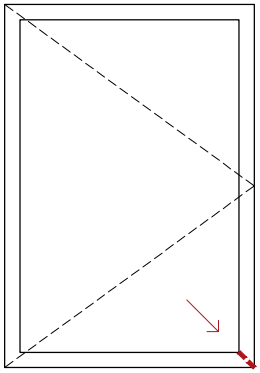
External view
Ansicht von außen
Vue extérieure

FT 7550T-nn / FT 7550TF-nn

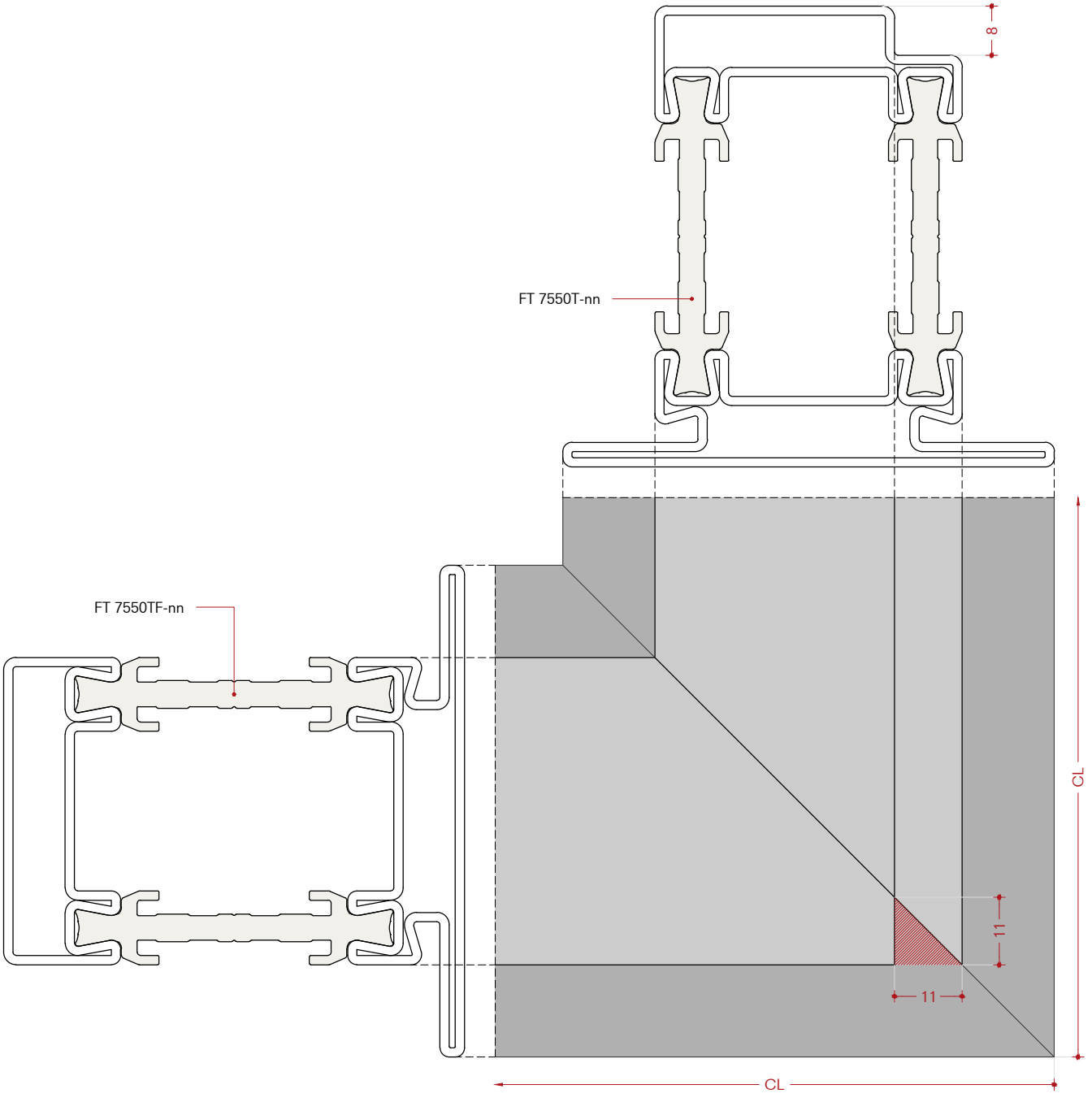
Single leaf door open out

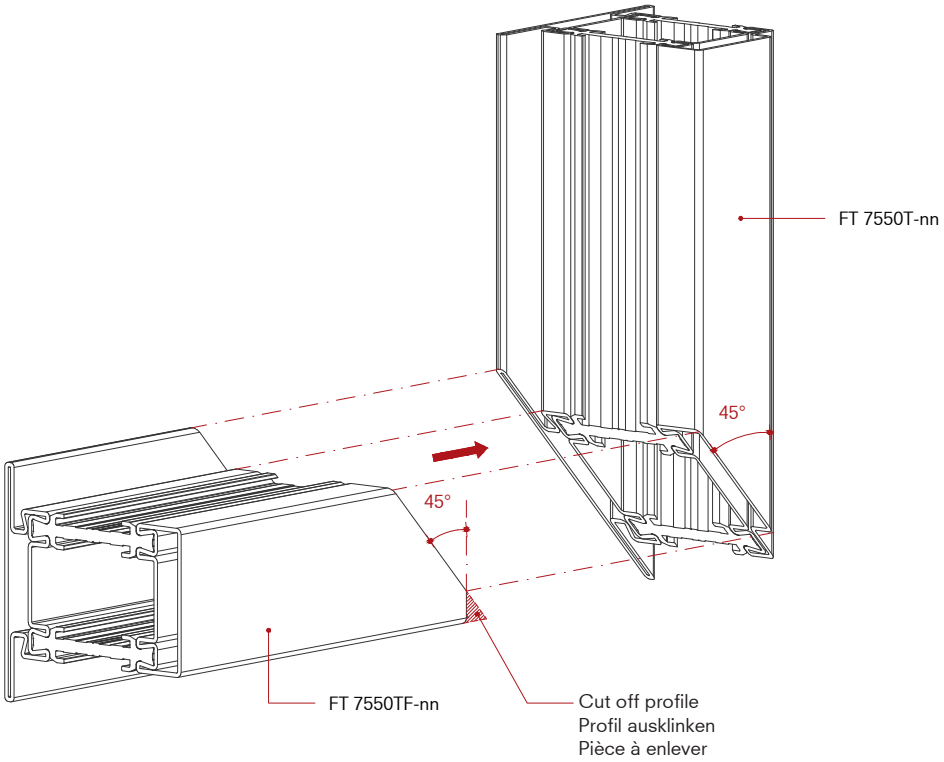
Einflüglige Tür nach außen öffnend

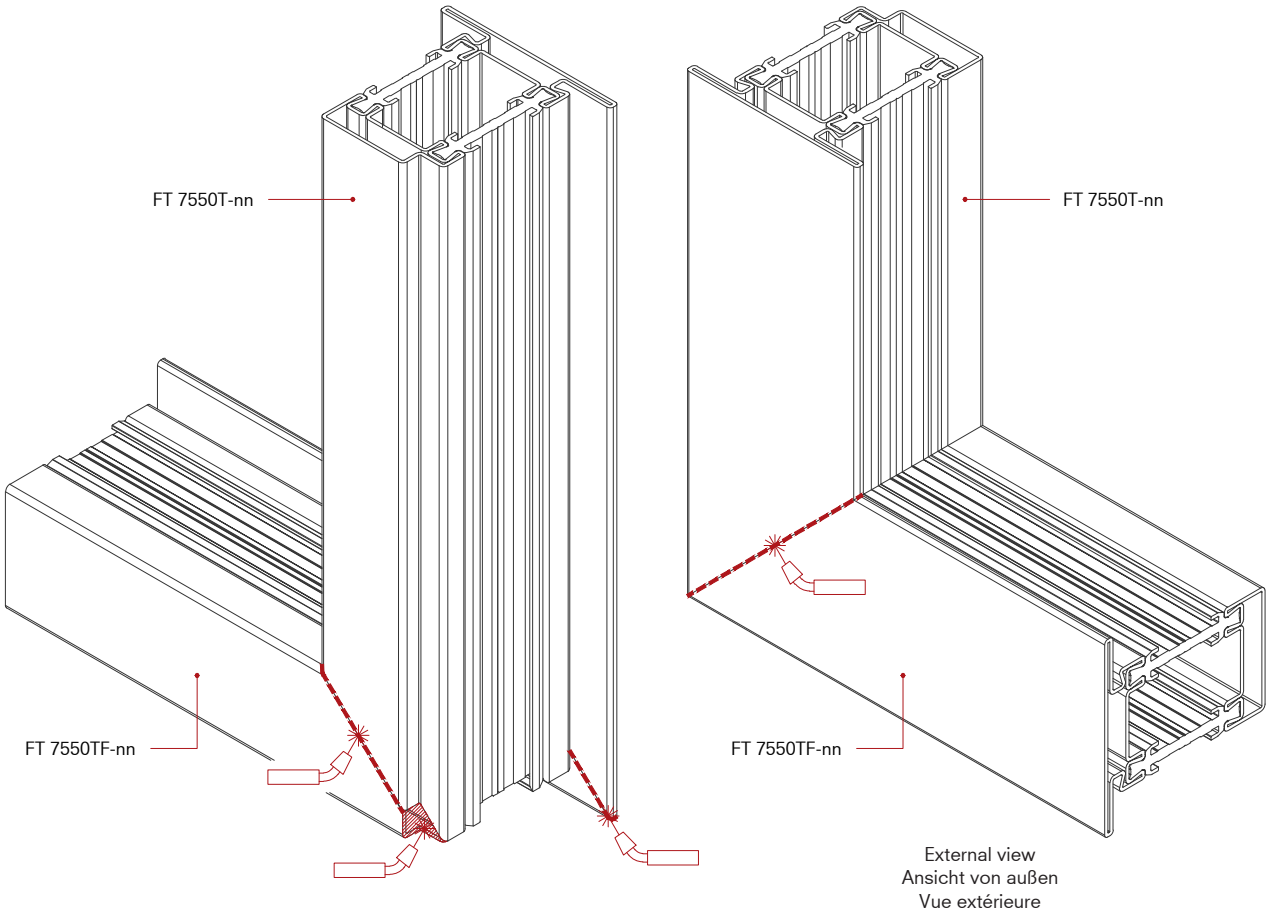
Porte à un vantail ouverture extérieure



Internal view
Ansicht von innen
Vue intérieure




FT 7550T-nn
45°
45°
FT 7550TF-nn
Cut off profile
Profil ausklinken
Pièce à enlever

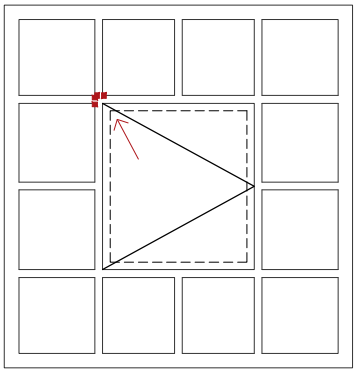

FT 7550T-nn
FT 7550TF-nn
FT 7550T-nn
FT 7550TF-nn
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512T-nn

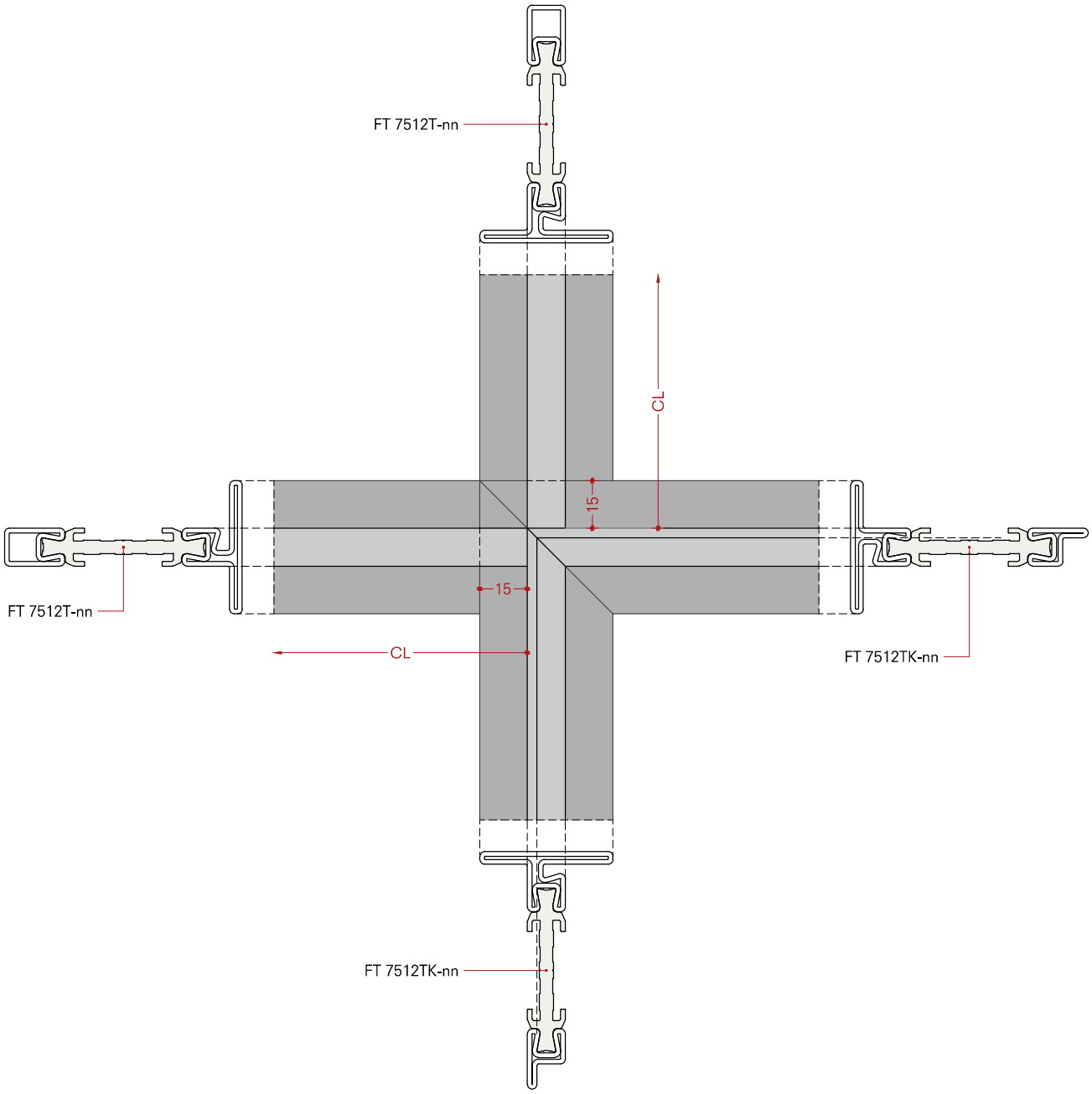
Window open in fixed partitions

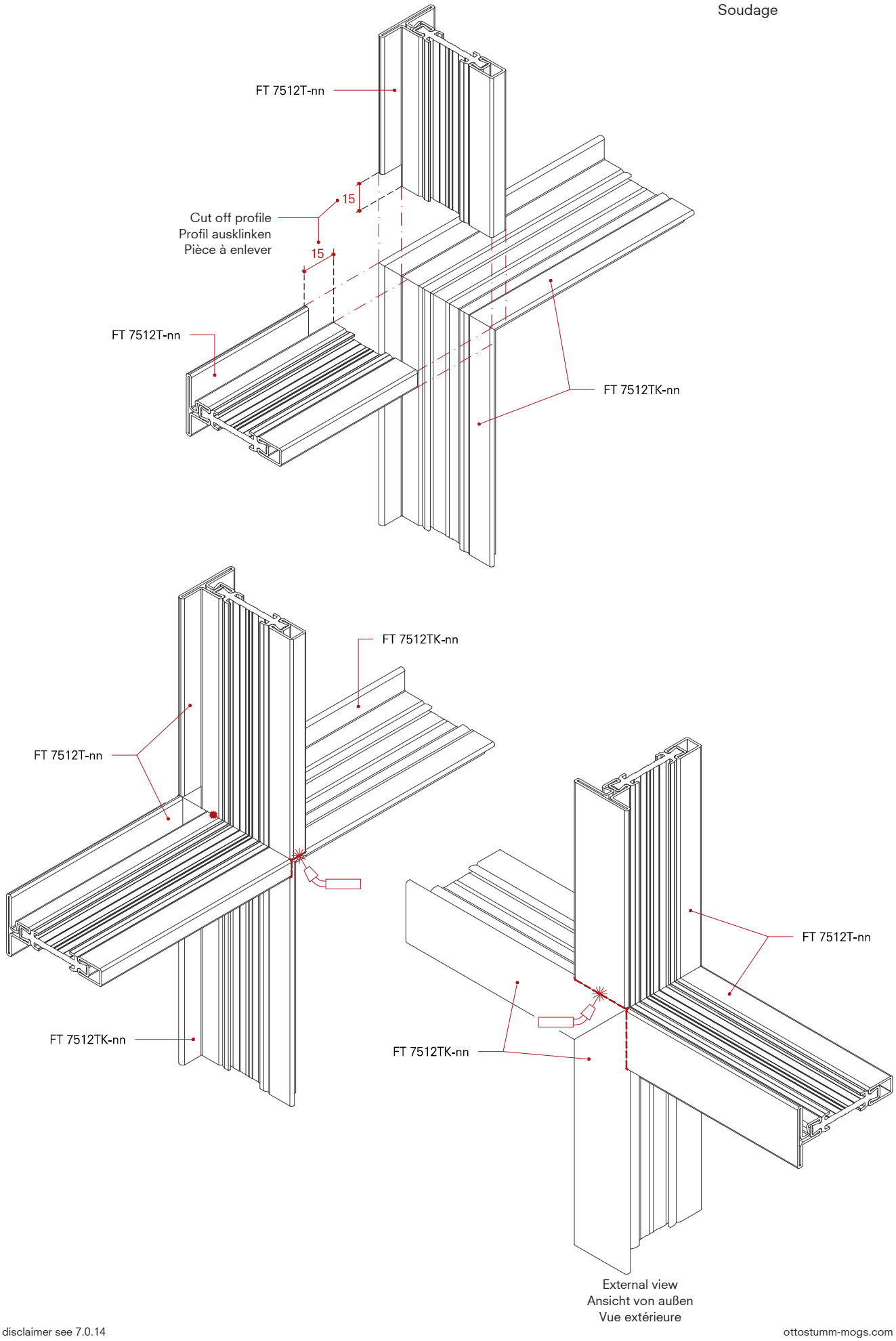
Fenster nach innen öffnend in Festfeld

Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure




FT 7512T-nn
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Cut off profile
Profil ausklinken
Pièce à enlever
15
FT 7512T-nn
FT 7512TK-nn
FT 7512TK-nn
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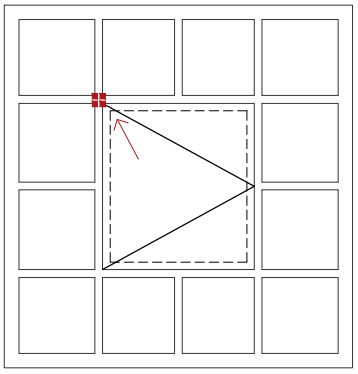
FT 7512TK-nn
FT 7512T-nn
FT 7512TK-nn
External view
Ansicht von außen
Vue extérieure

FT 7512T-nn / FT 7512T-nn

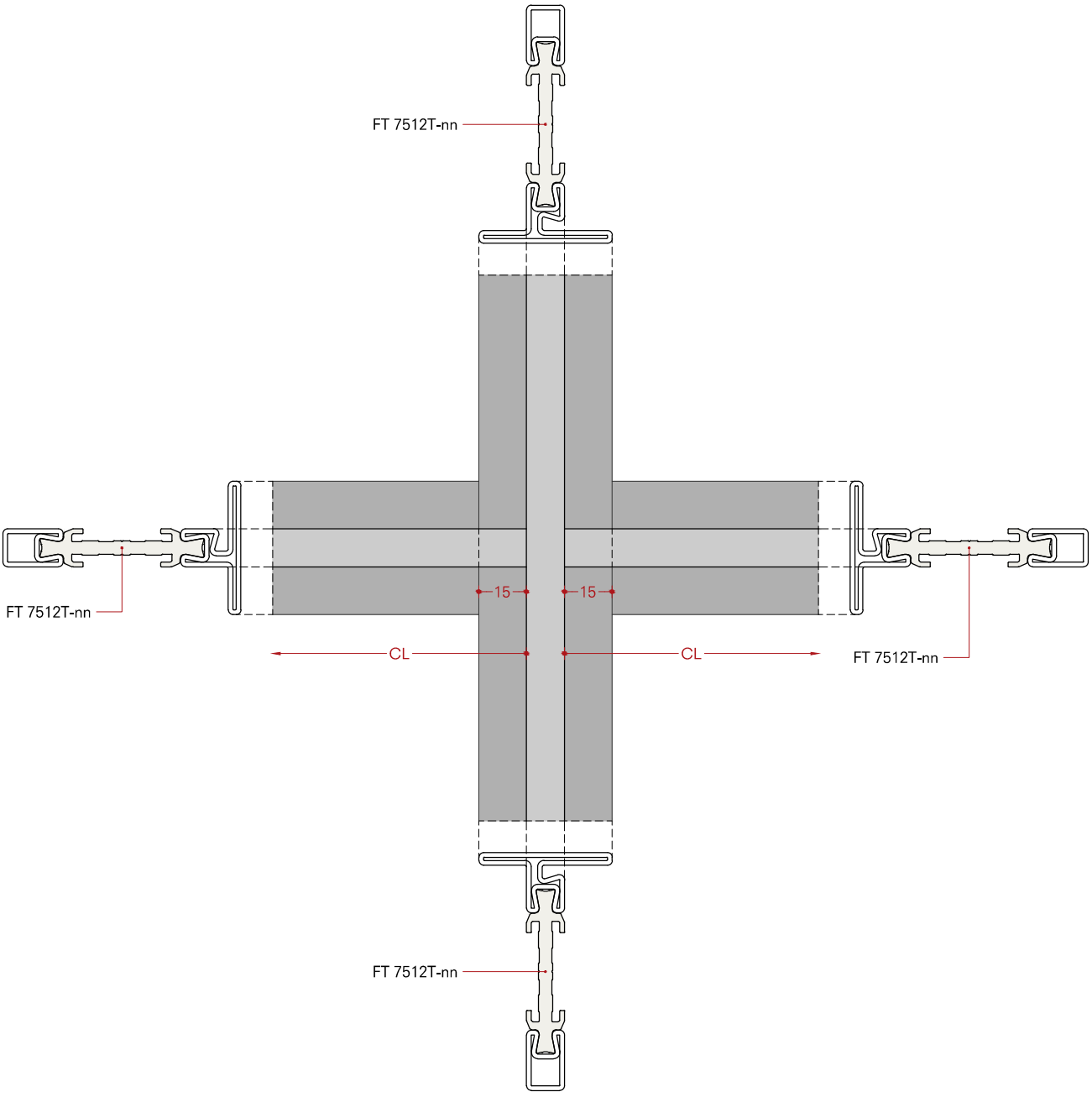
Window open in fixed partitions

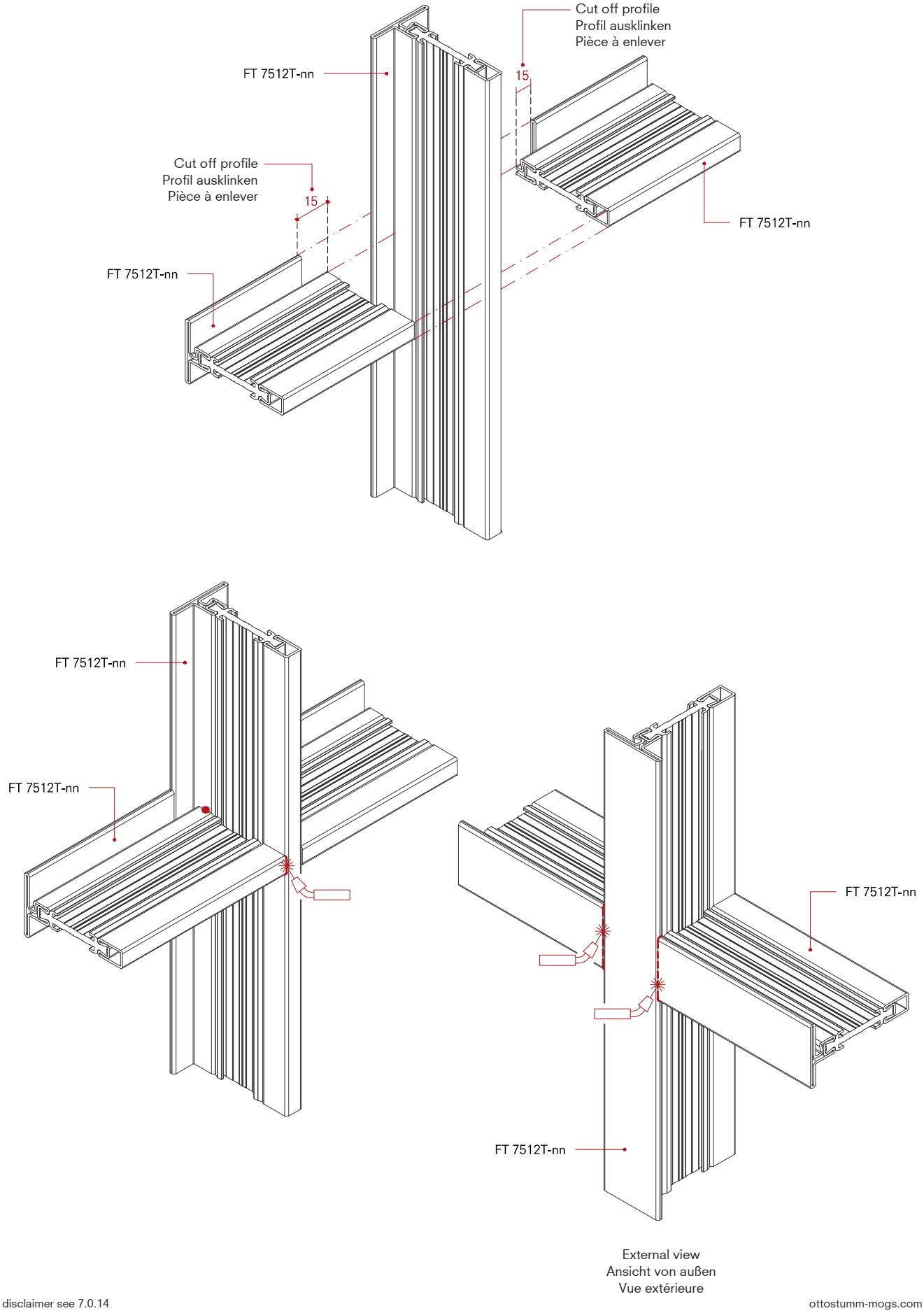
Fenster nach innen öffnend in Festfeld

Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure





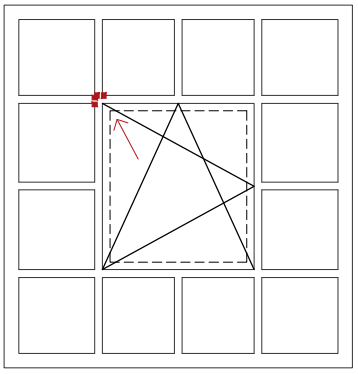
External view
Ansicht von außen
Vue extérieure

FT 7512TR-nn / FT 7512T-nn

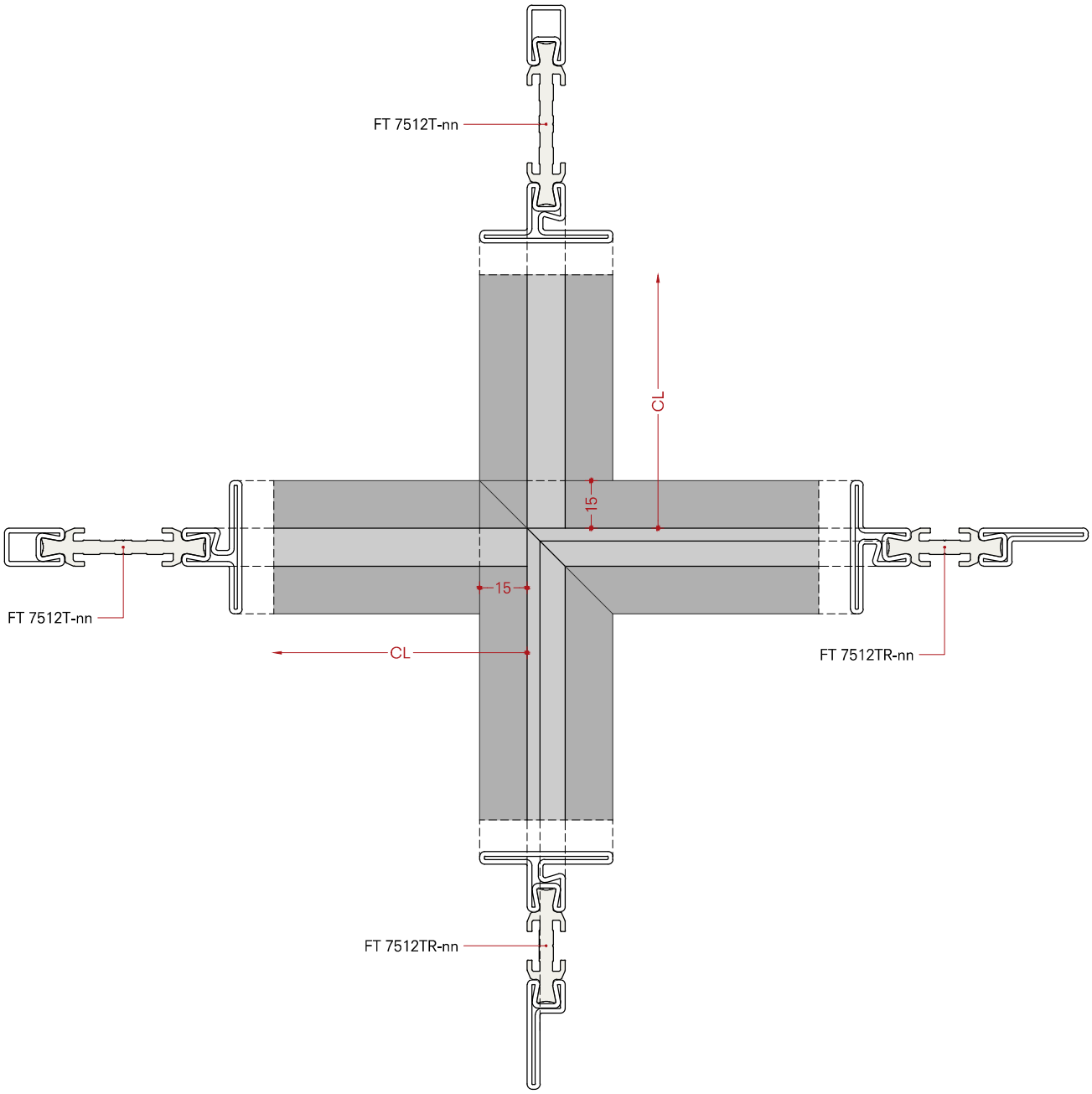
Window open in fixed partitions

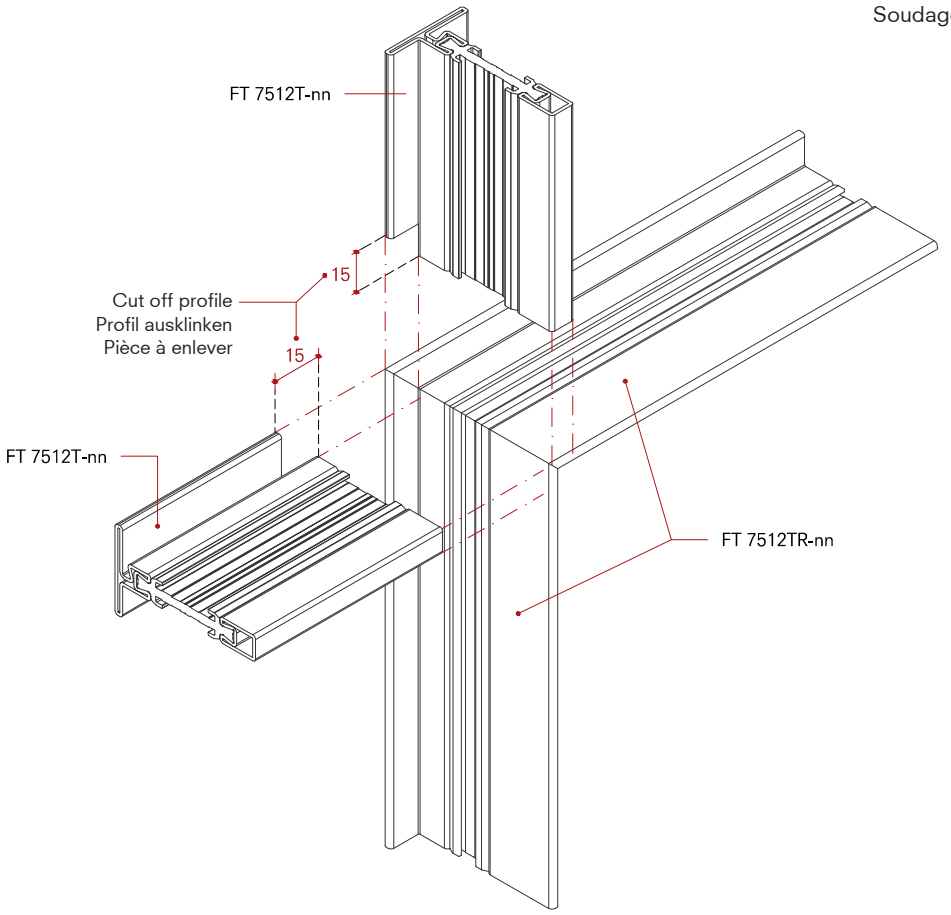
Fenster nach innen öffnend in Festfeld

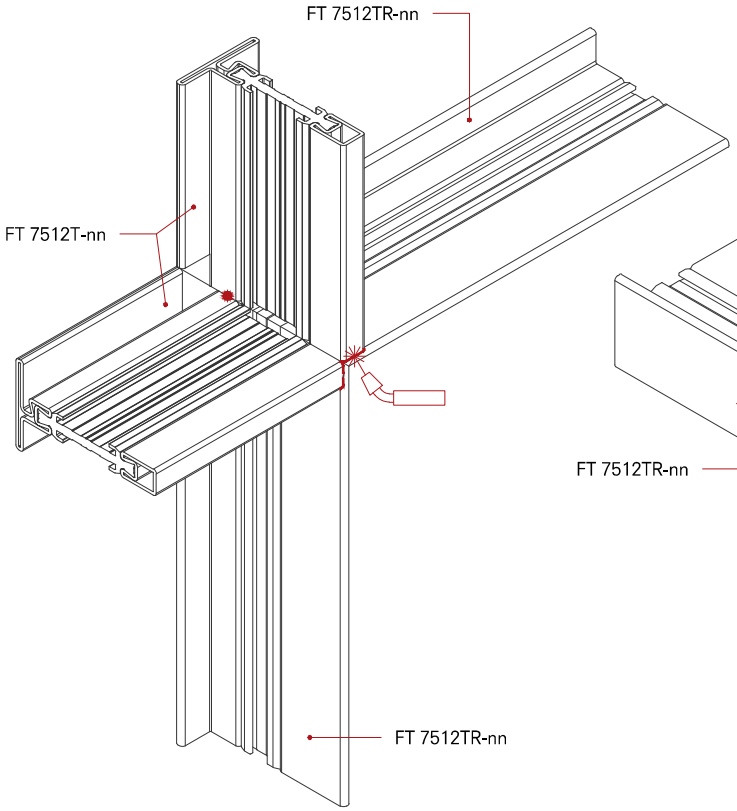
Fenêtre ouverture intérieure

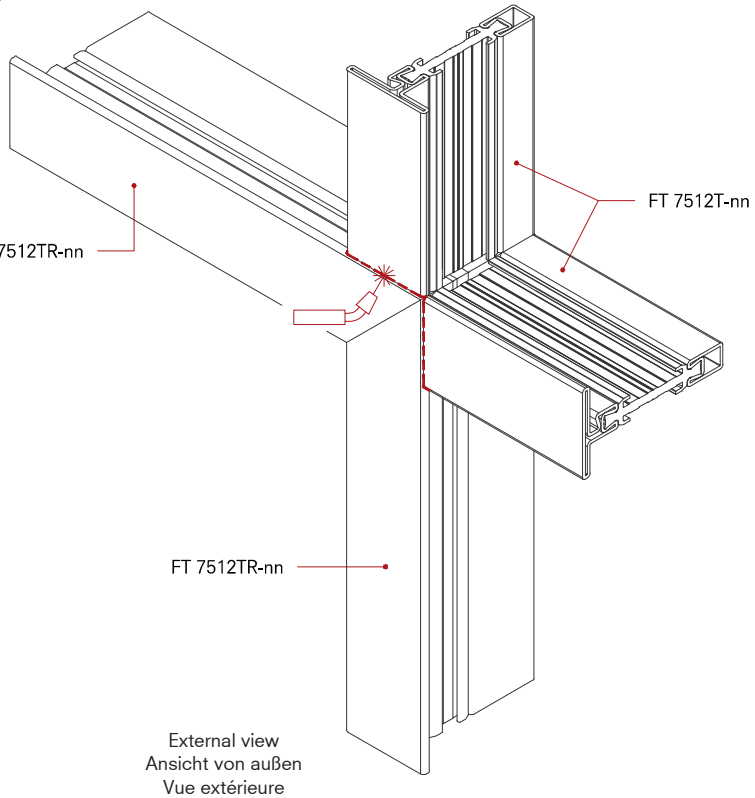


Internal view
Ansicht von innen
Vue intérieure









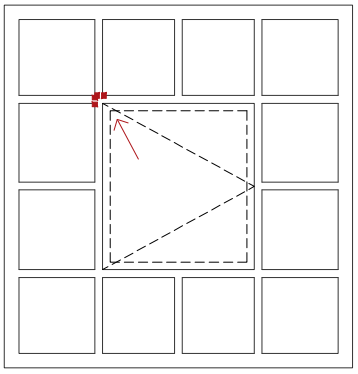
External view
Ansicht von außen
Vue extérieure

FT 7512ZK-nn / FT 7512T-nn

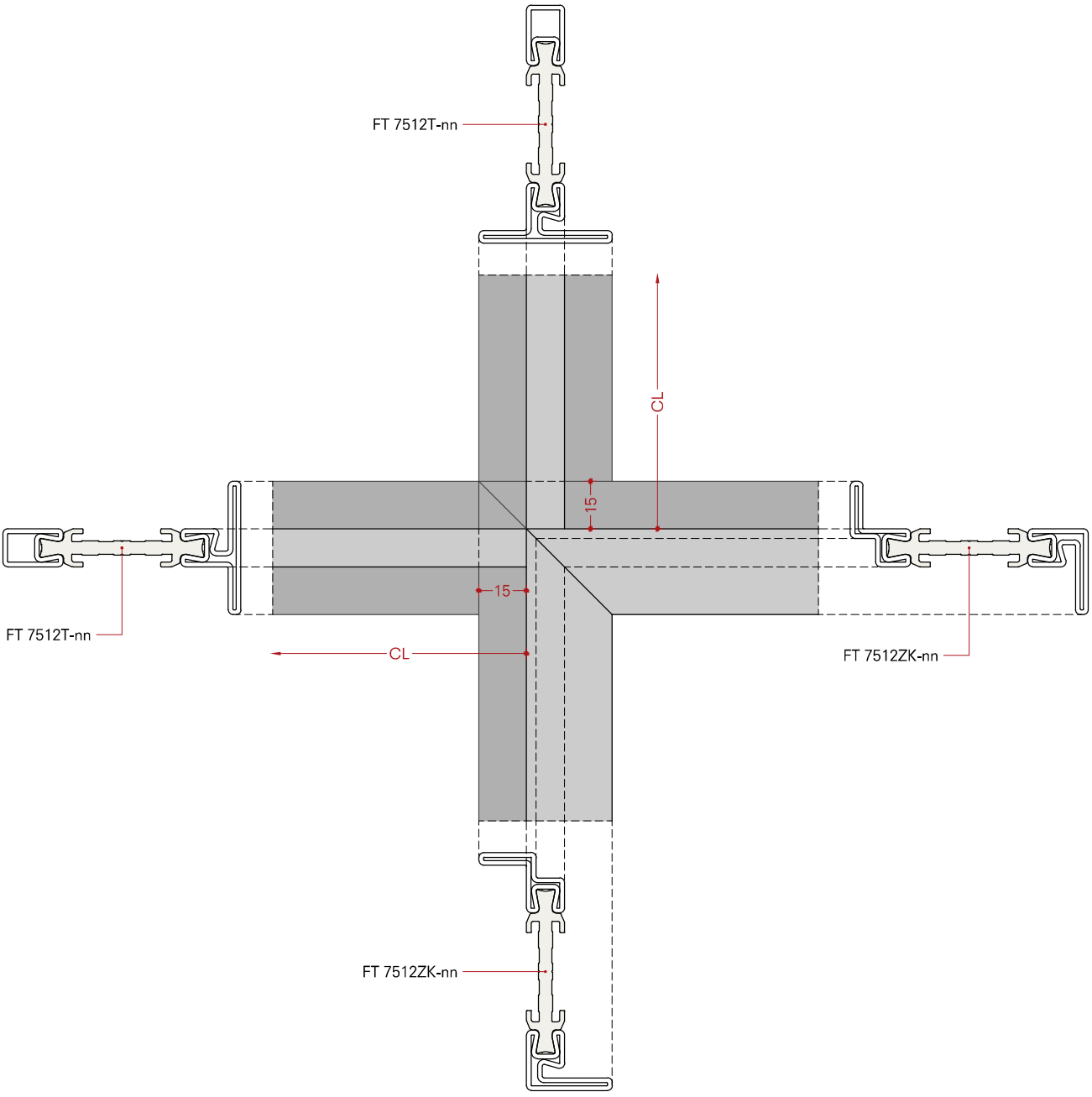
Window open out fixed partitions

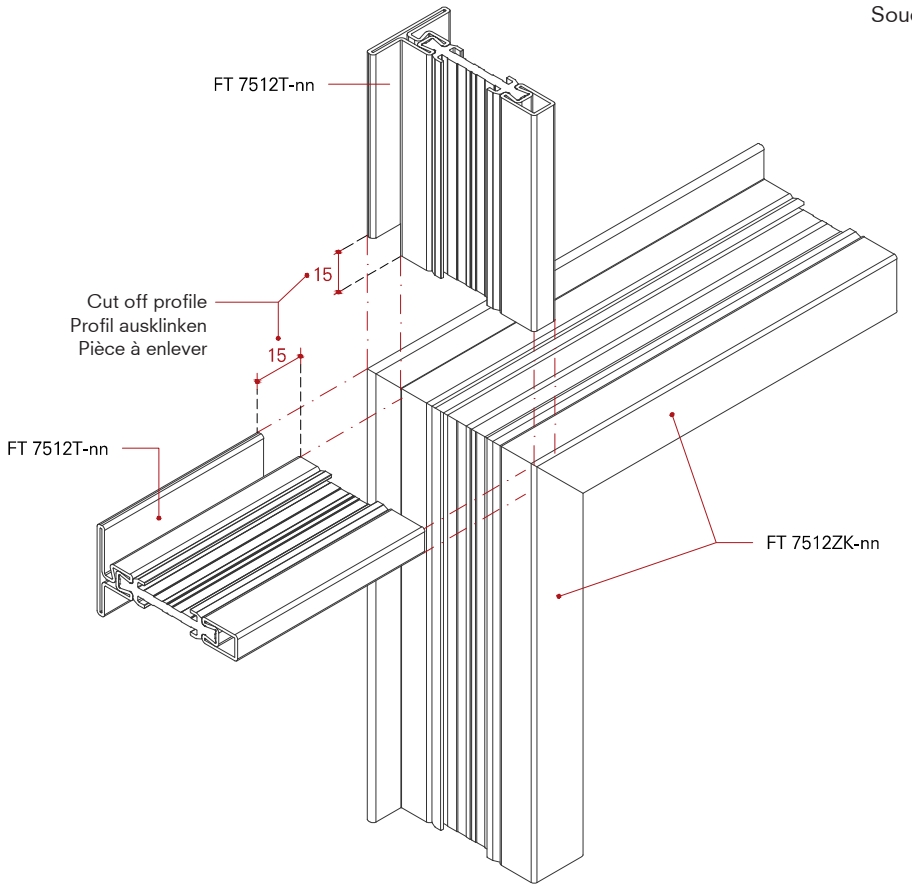
Fenster nach außen öffnend in Festfeld

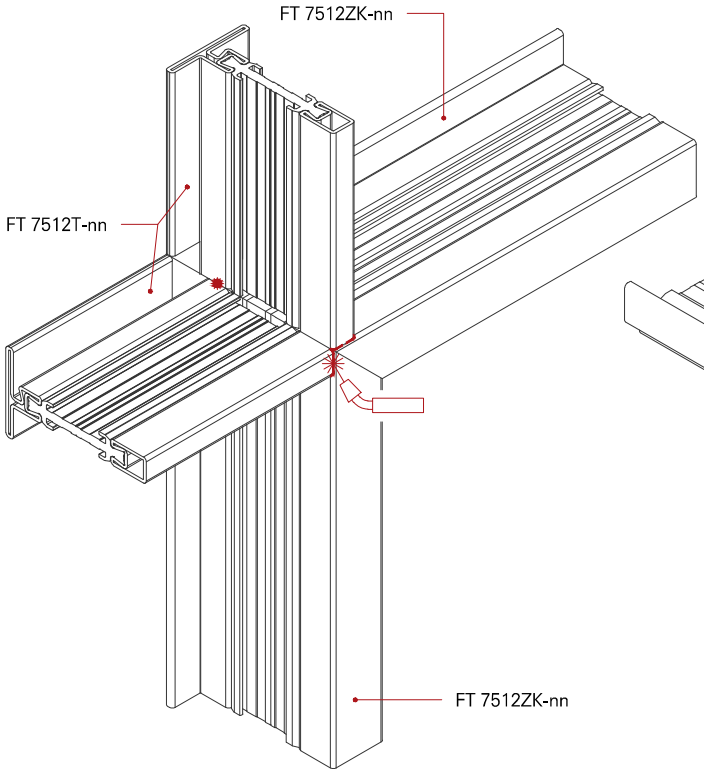
Fenêtre ouverture extérieure

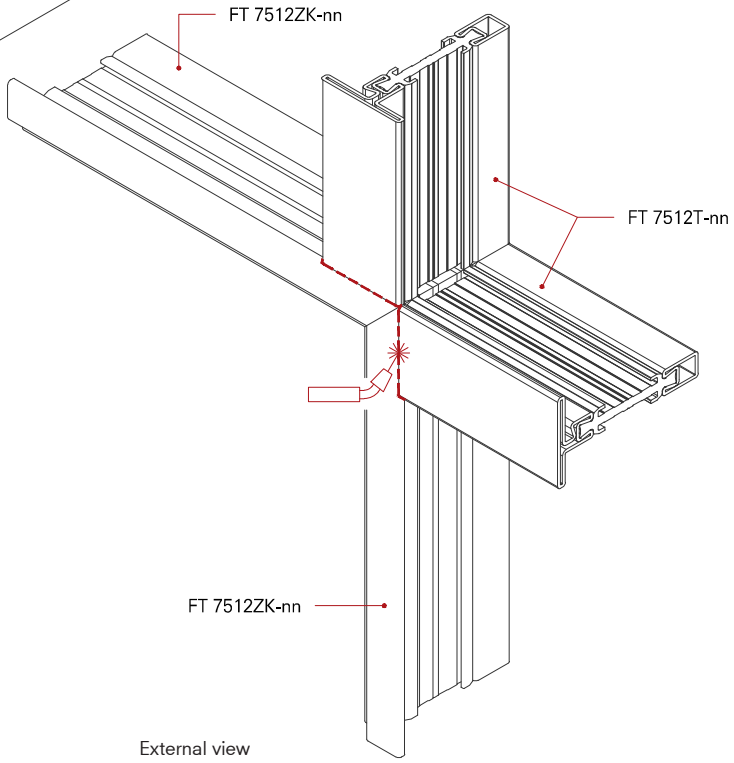


Internal view
Ansicht von innen
Vue intérieure









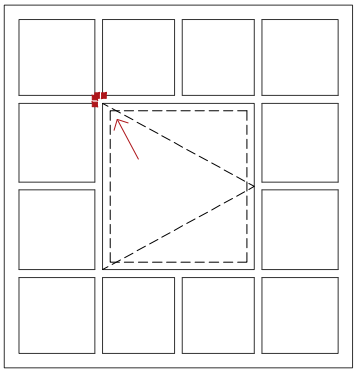
External view
Ansicht von außen
Vue extérieure

FT 7512Z-nn / FT 7512T-nn

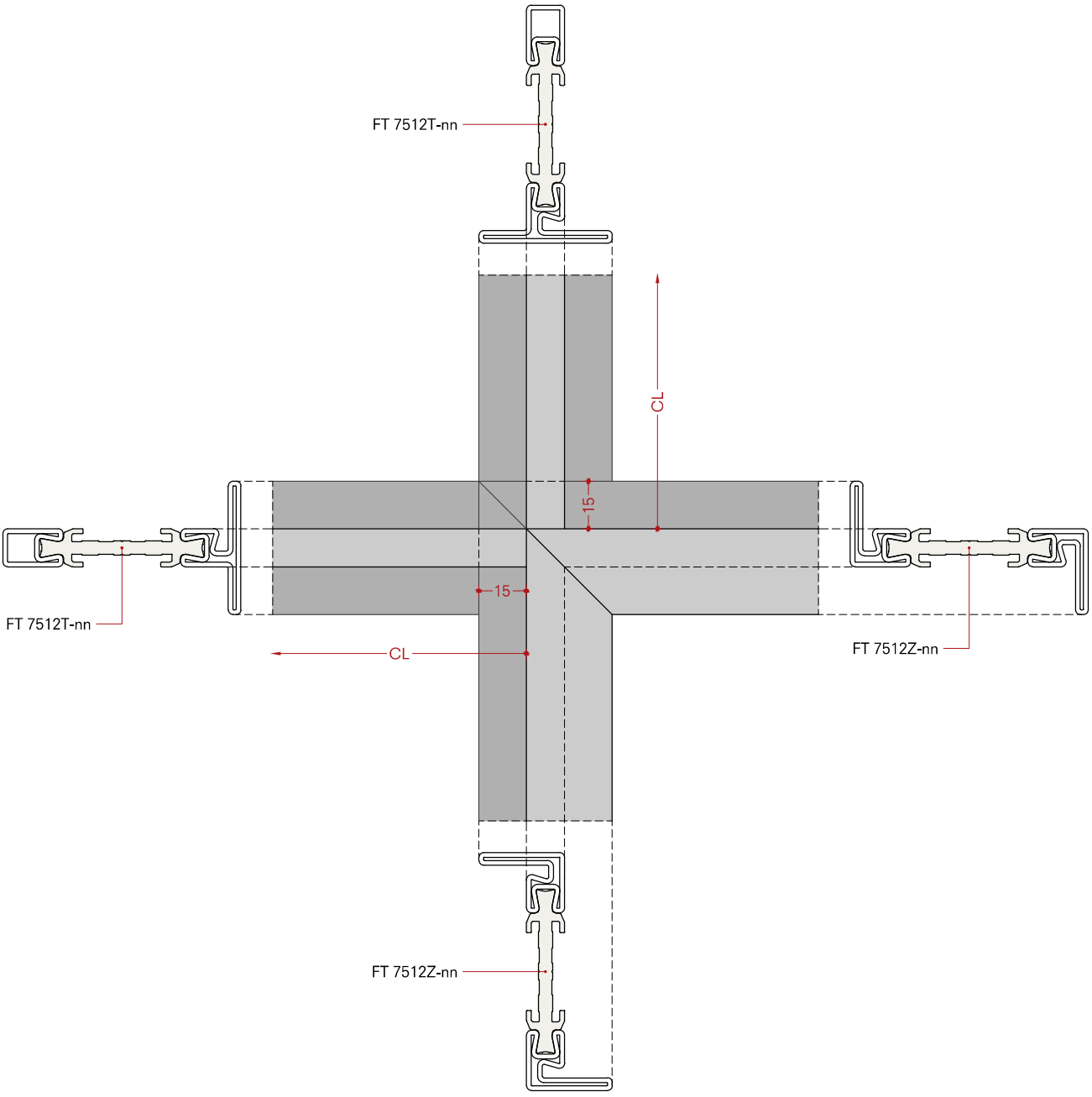
Window open out fixed partitions

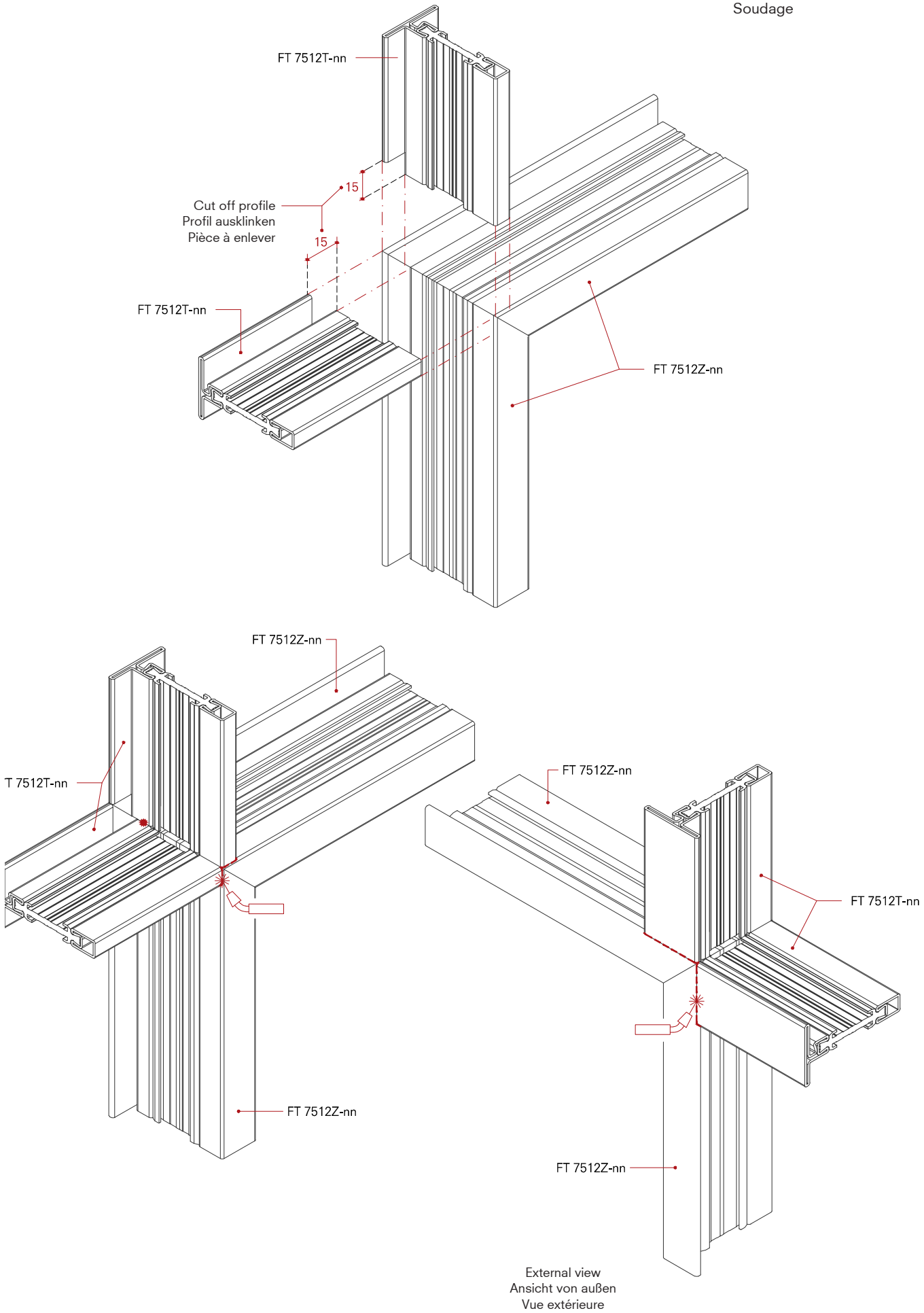
Fenster nach außen öffnend in Festfeld

Fenêtre ouverture extérieure



Internal view
Ansicht von innen
Vue intérieure



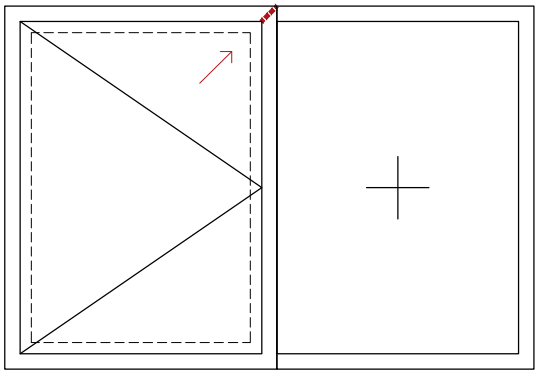

FT 7512T-nn
15
Cut off profile
Profil ausklinken
Pièce à enlever
15
FT 7512T-nn
FT 7512Z-nn
FT 7512Z-nn
T 7512T-nn
FT 7512Z-nn
FT 7512Z-nn
FT 7512T-nn
FT 7512Z-nn
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512LK-nn / FT 7512L-nn

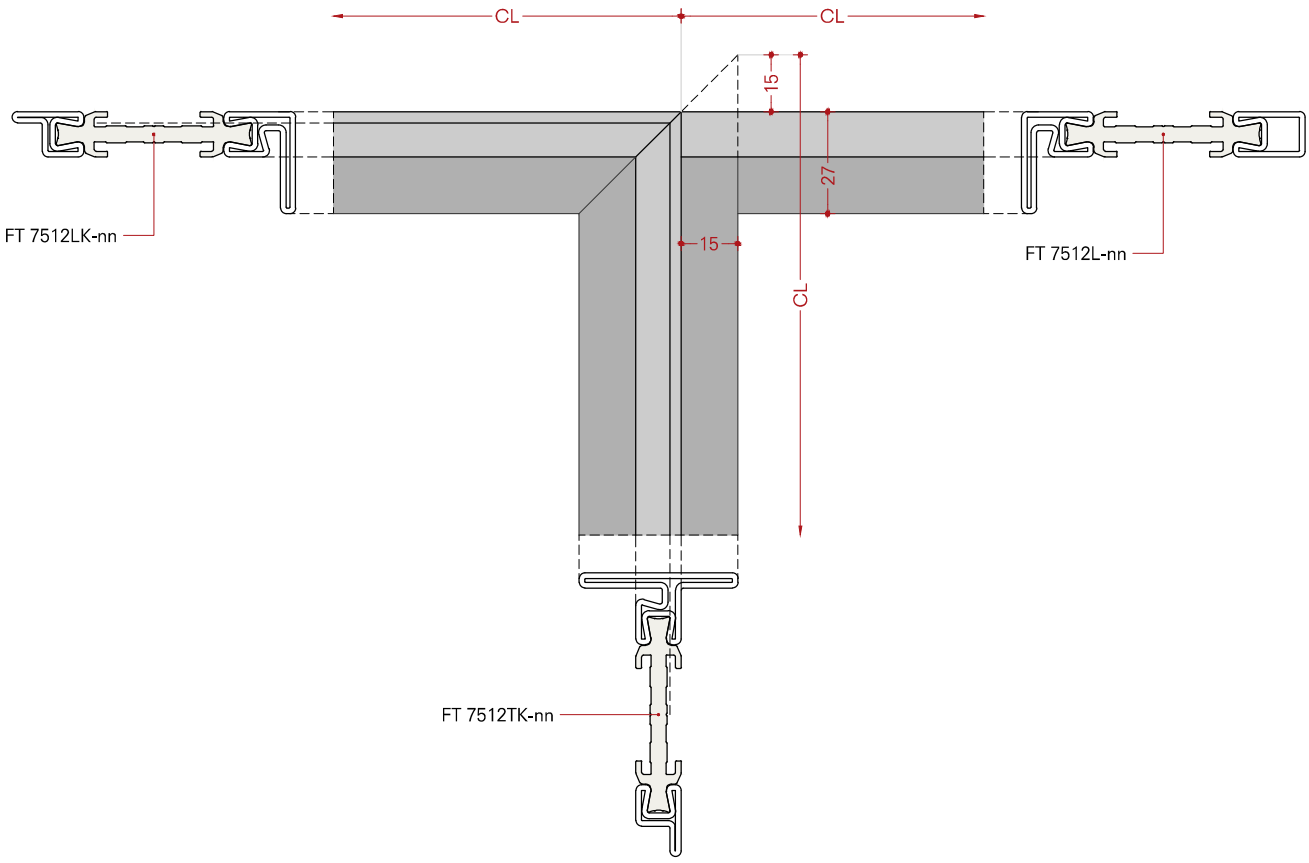
Window open in fixed partitions

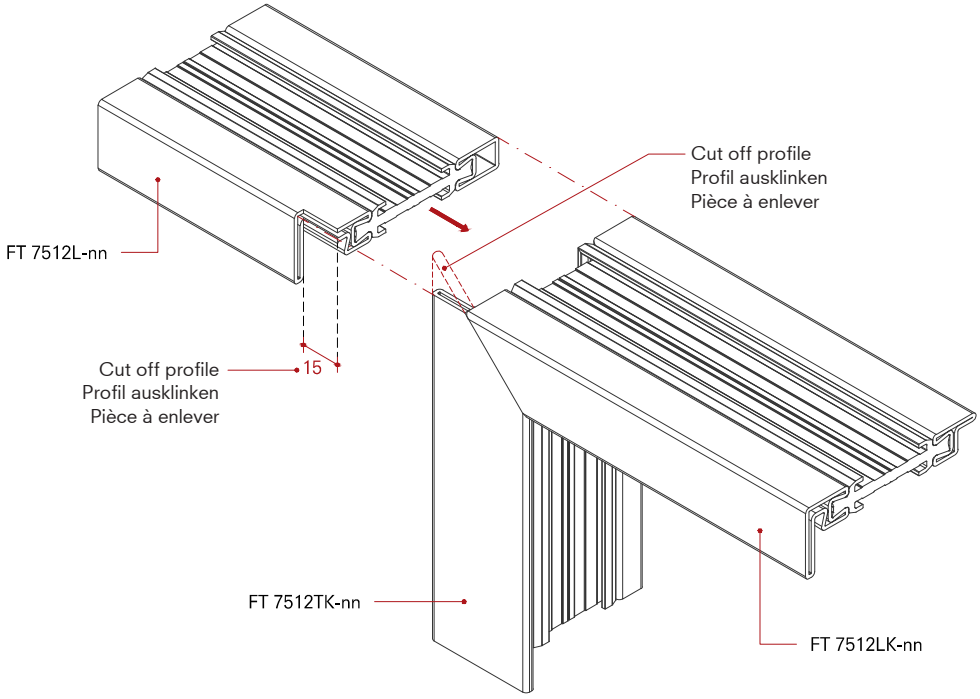
Fenster nach innen öffnend in Festfeld

Fenêtre ouverture intérieure

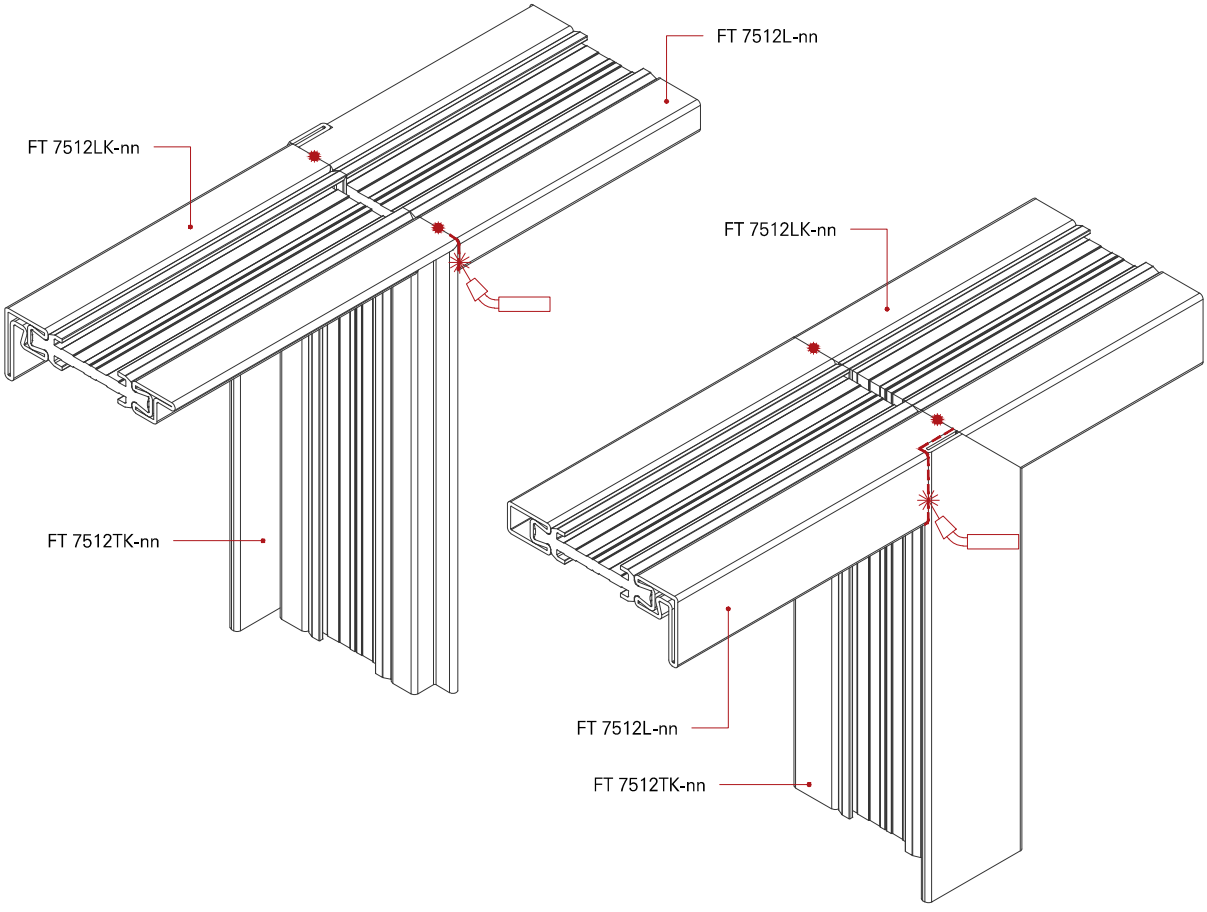


Internal view
Ansicht von innen
Vue intérieure





External view
Ansicht von außen
Vue extérieure



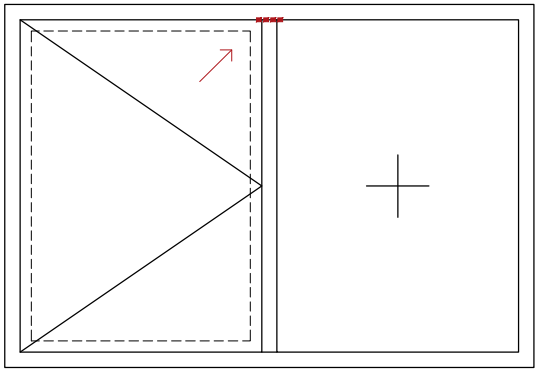
External view
Ansicht von außen
Vue extérieure

FT 7512T-nn / FT 7512L-nn

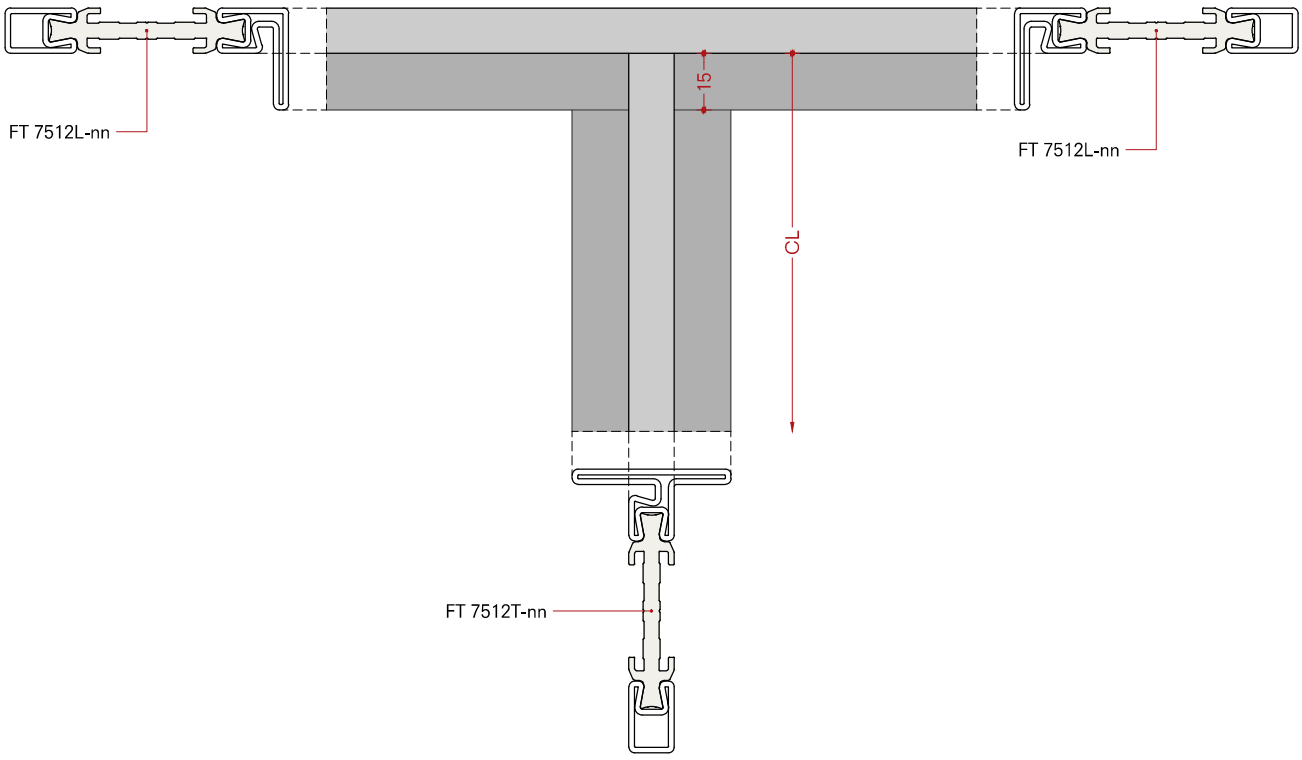
Window open in fixed partitions

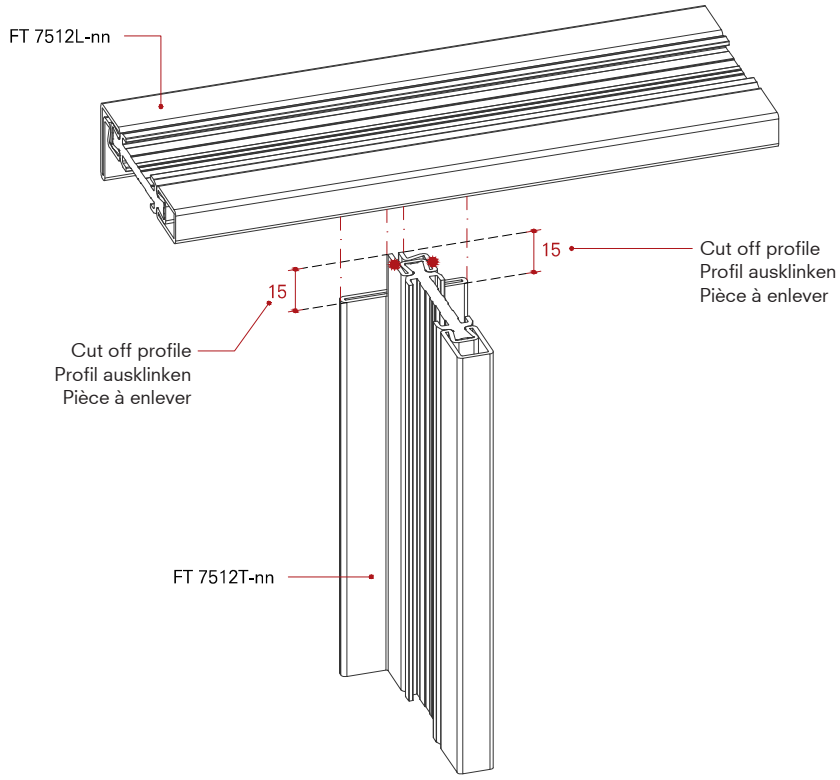
Fenster nach innen öffnend in Festfeld

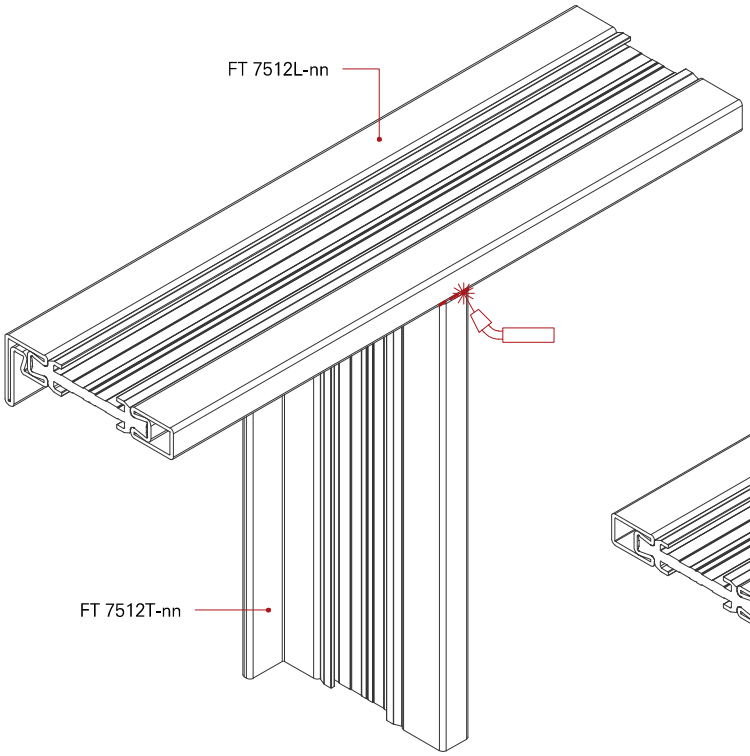
Fenêtre ouverture intérieure

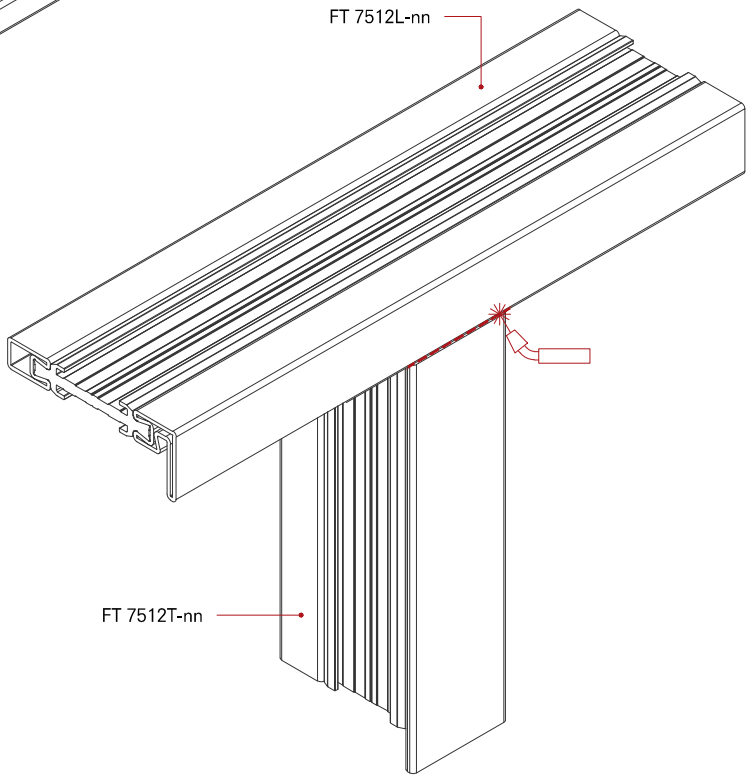


Internal view
Ansicht von innen
Vue intérieure









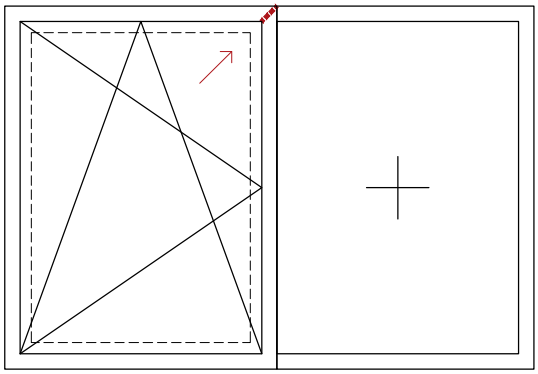
External view
Ansicht von außen
Vue extérieure

FT 7512TR-nn / FT 7512LR-nn / FT 7512L-nn

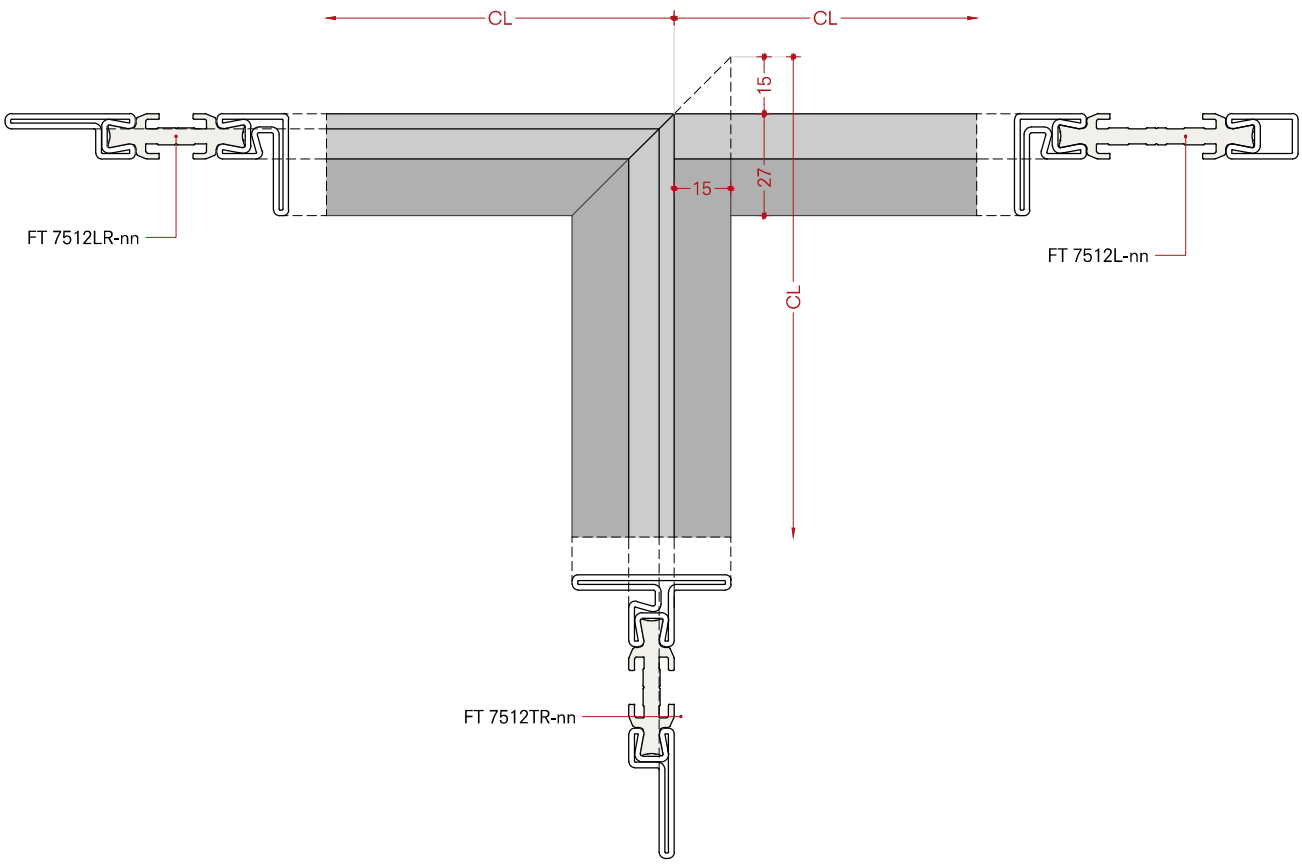
Window open in fixed partitions

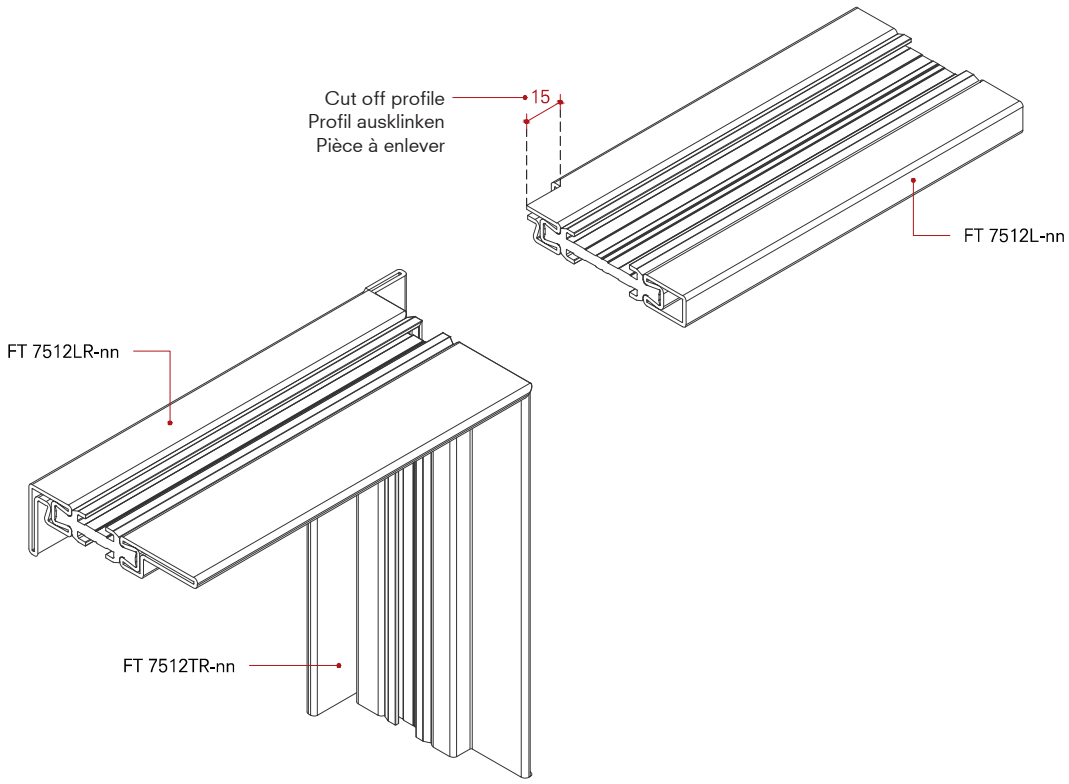
Fenster nach innen öffnend in Festfeld

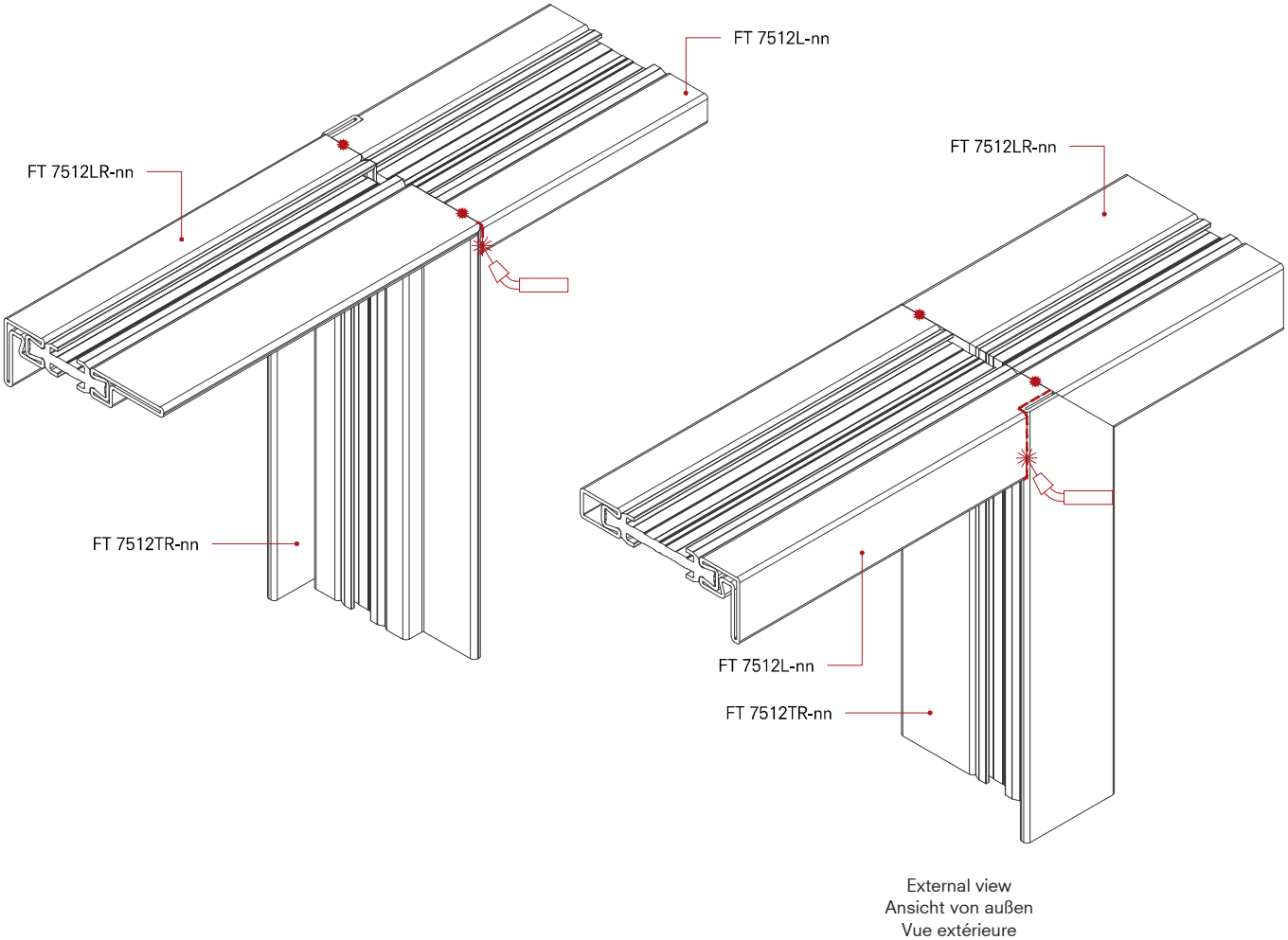
Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure







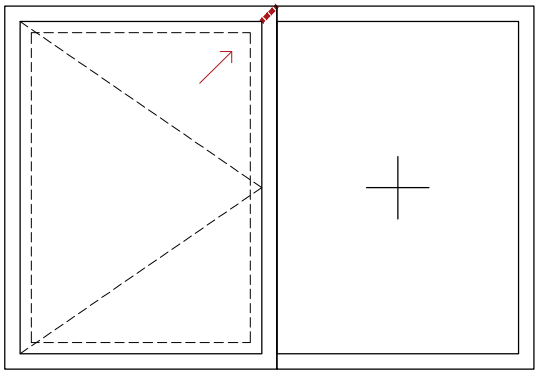
External view
Ansicht von außen
Vue extérieure

FT 7512ZK-nn / FT 7512LK-nn / FT 7512L-nn

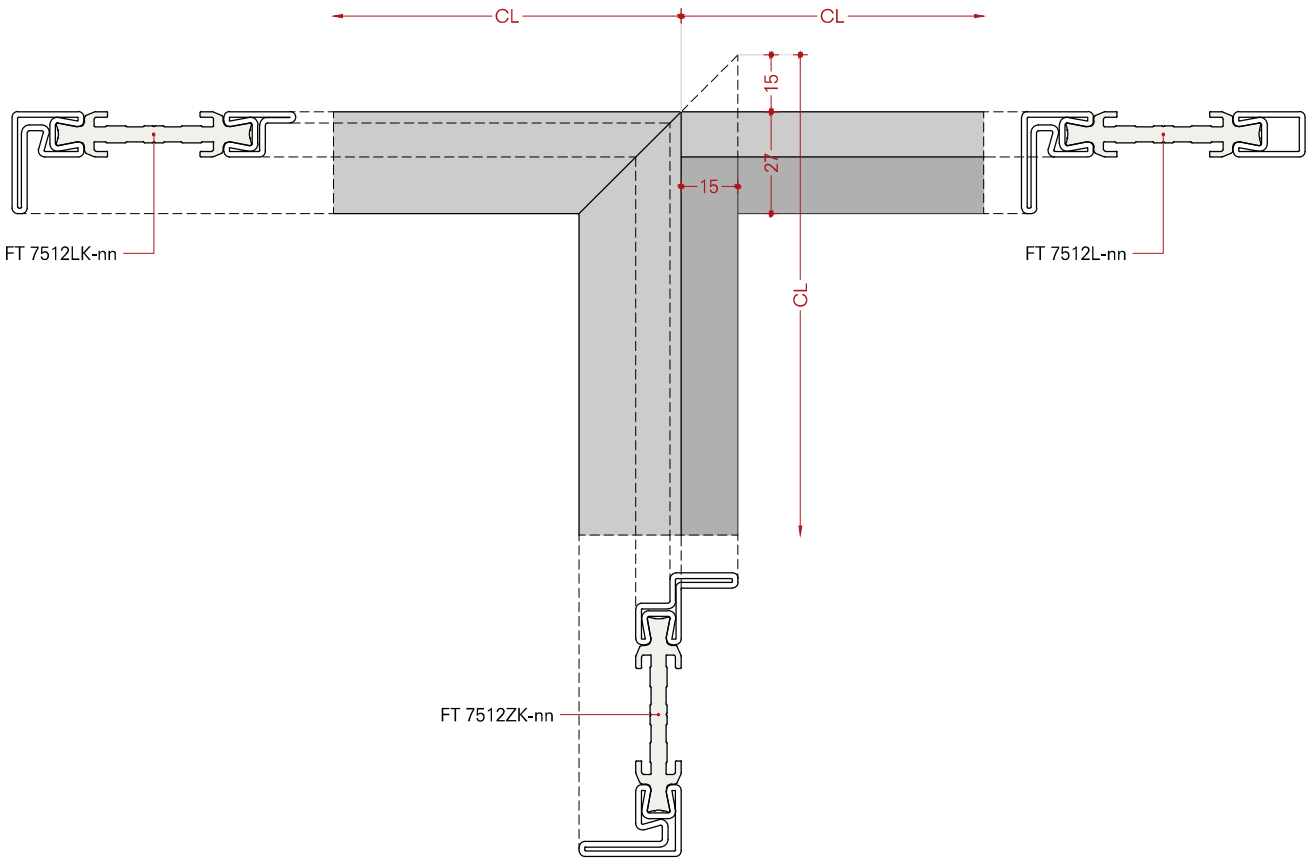
Window open out fixed partitions

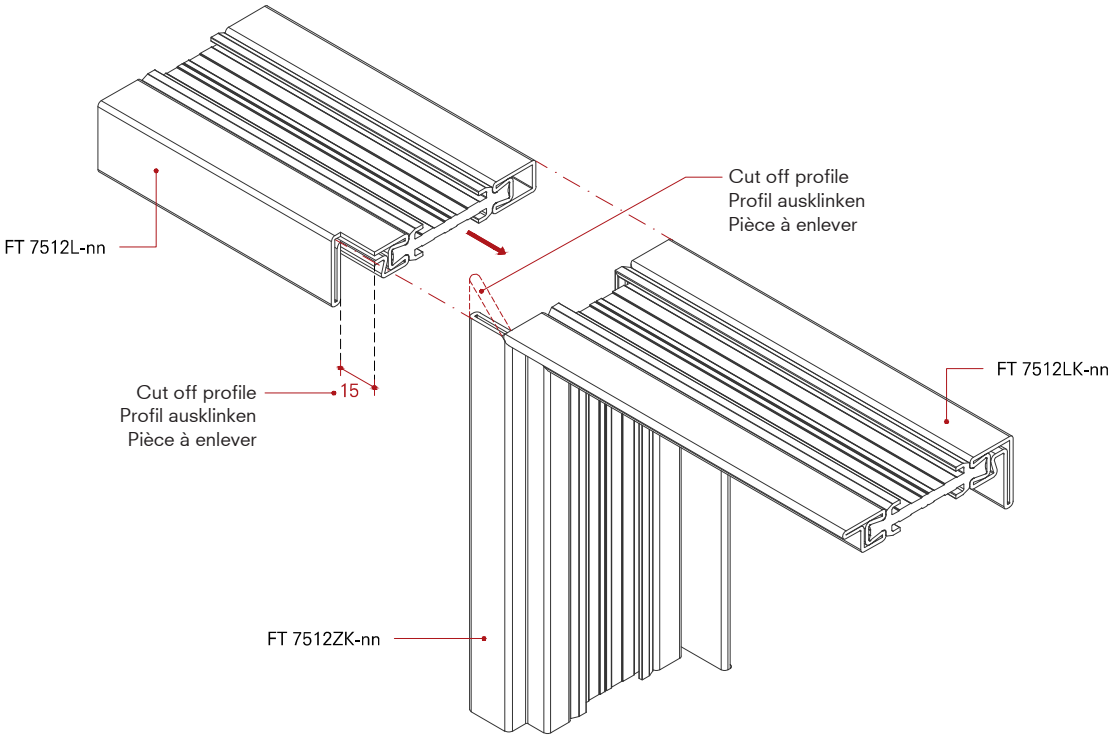
Fenster nach außen öffnend in Festfeld

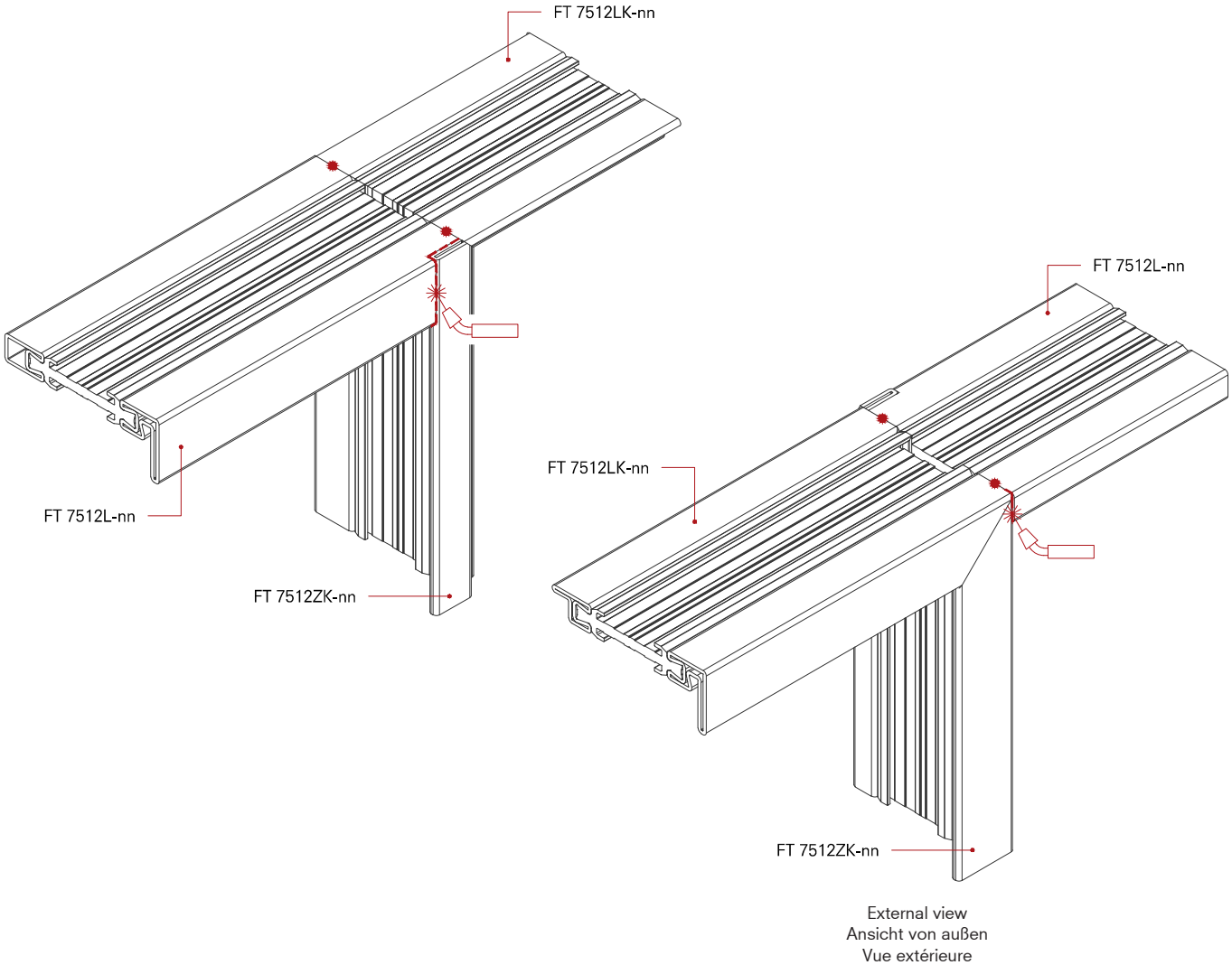
Fenêtre ouverture extérieure



Internal view
Ansicht von innen
Vue intérieure







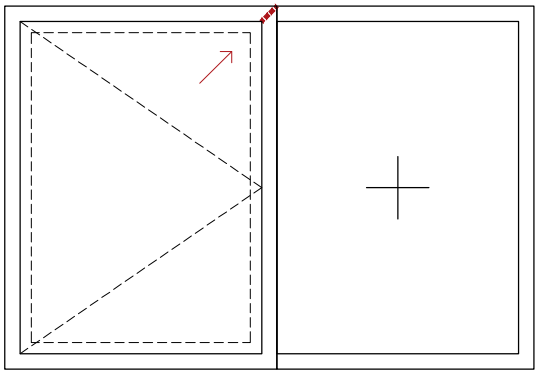
External view
Ansicht von außen
Vue extérieure

FT 7512Z-nn / FT 7512L-nn / FT 7512L-nn

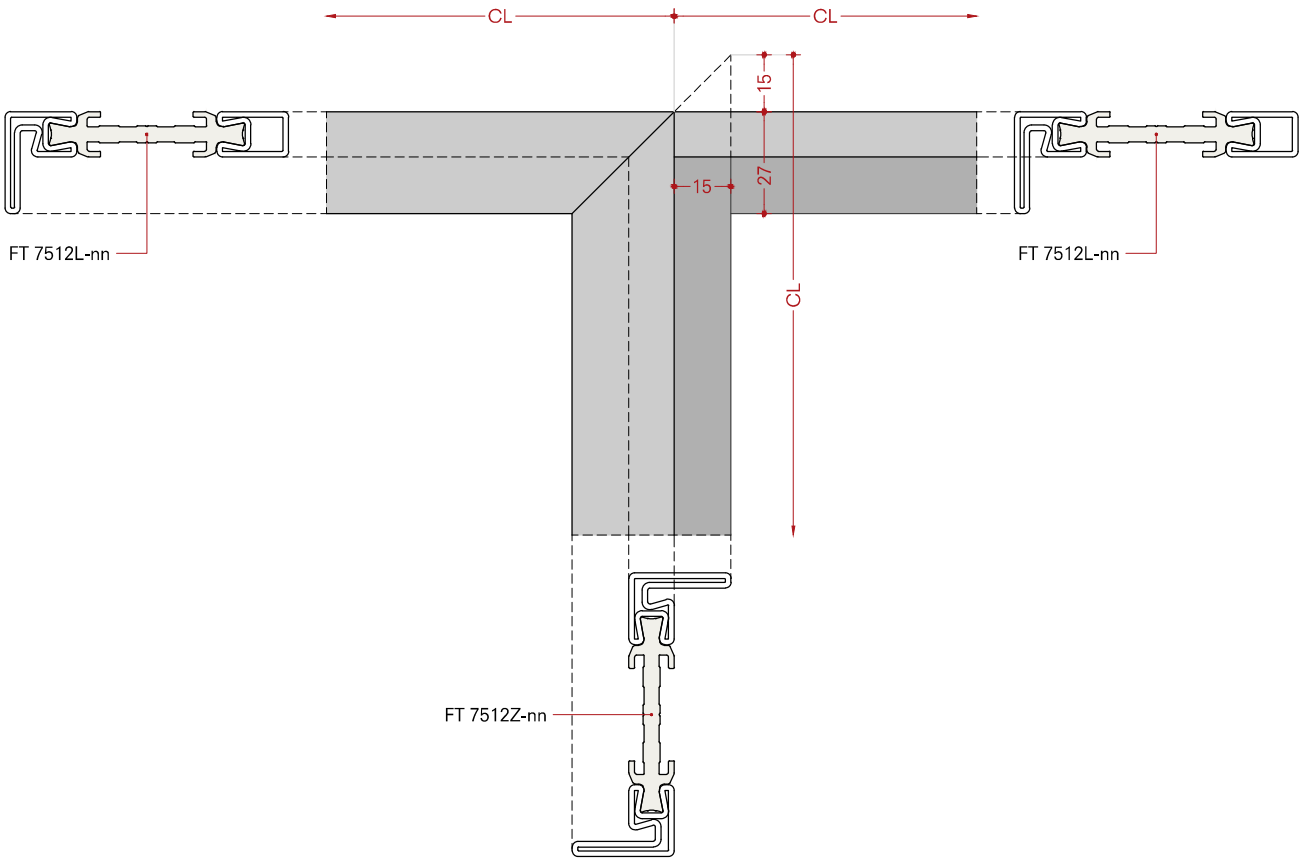
Window open out fixed partitions

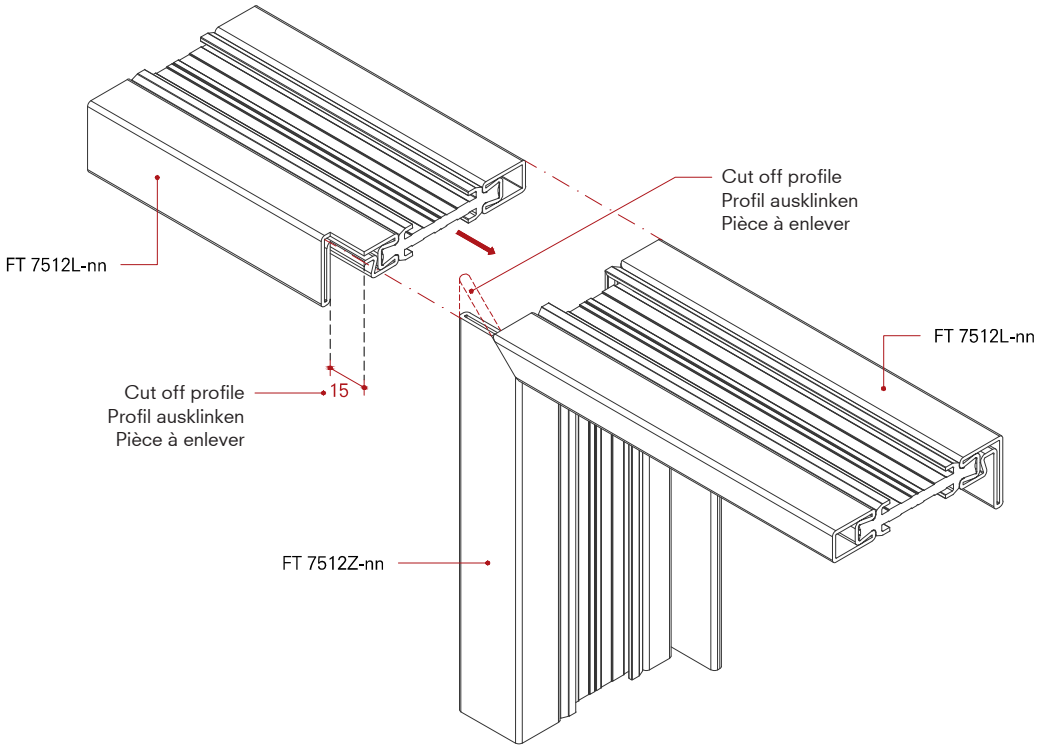
Fenster nach außen öffnend in Festfeld

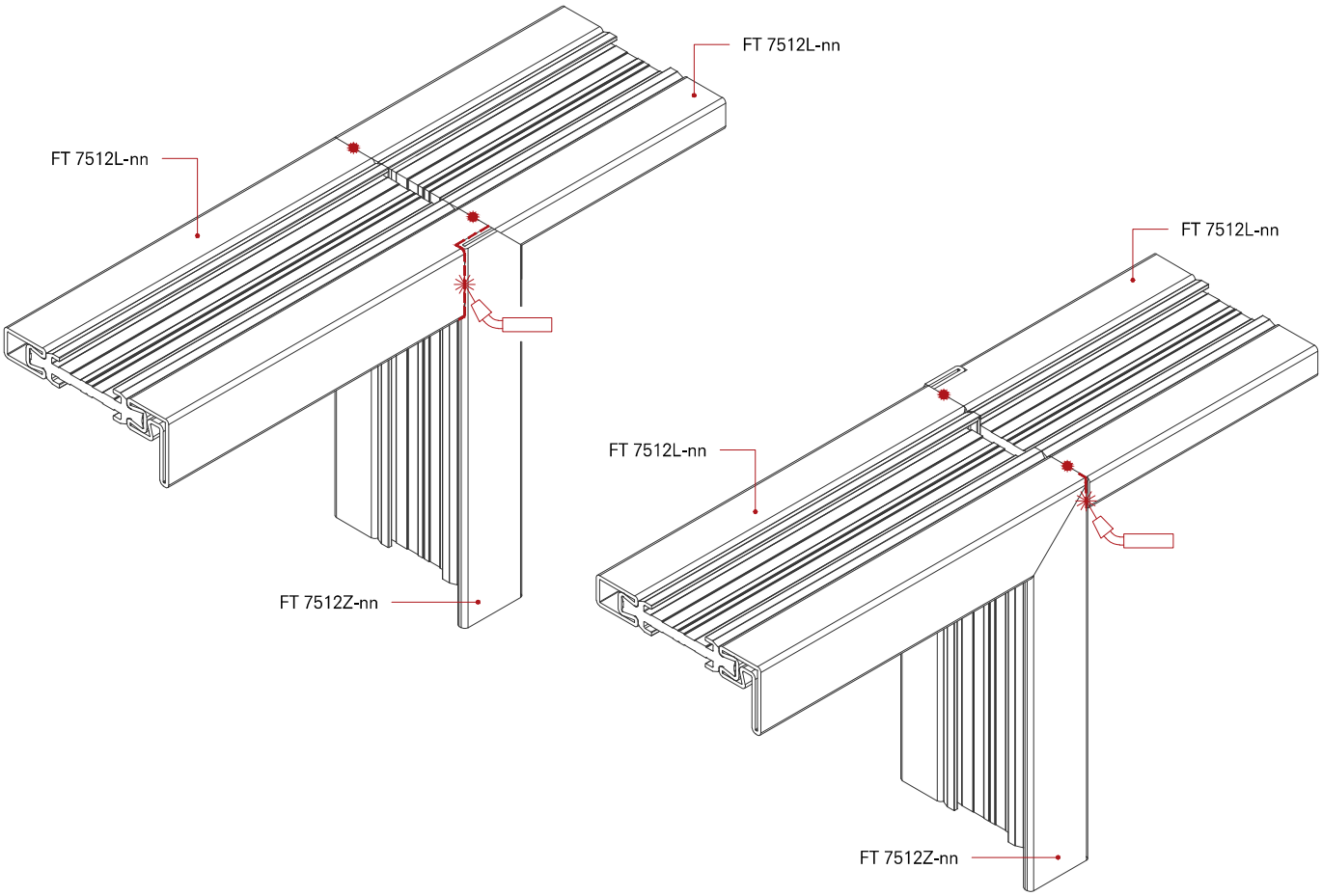
Fenêtre ouverture extérieure



Internal view
Ansicht von innen
Vue intérieure







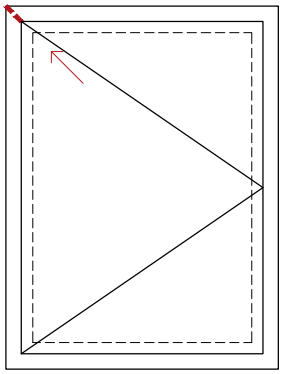
External view
Ansicht von außen
Vue extérieure

FT 7512LK-nn / FT 7512LK-nn

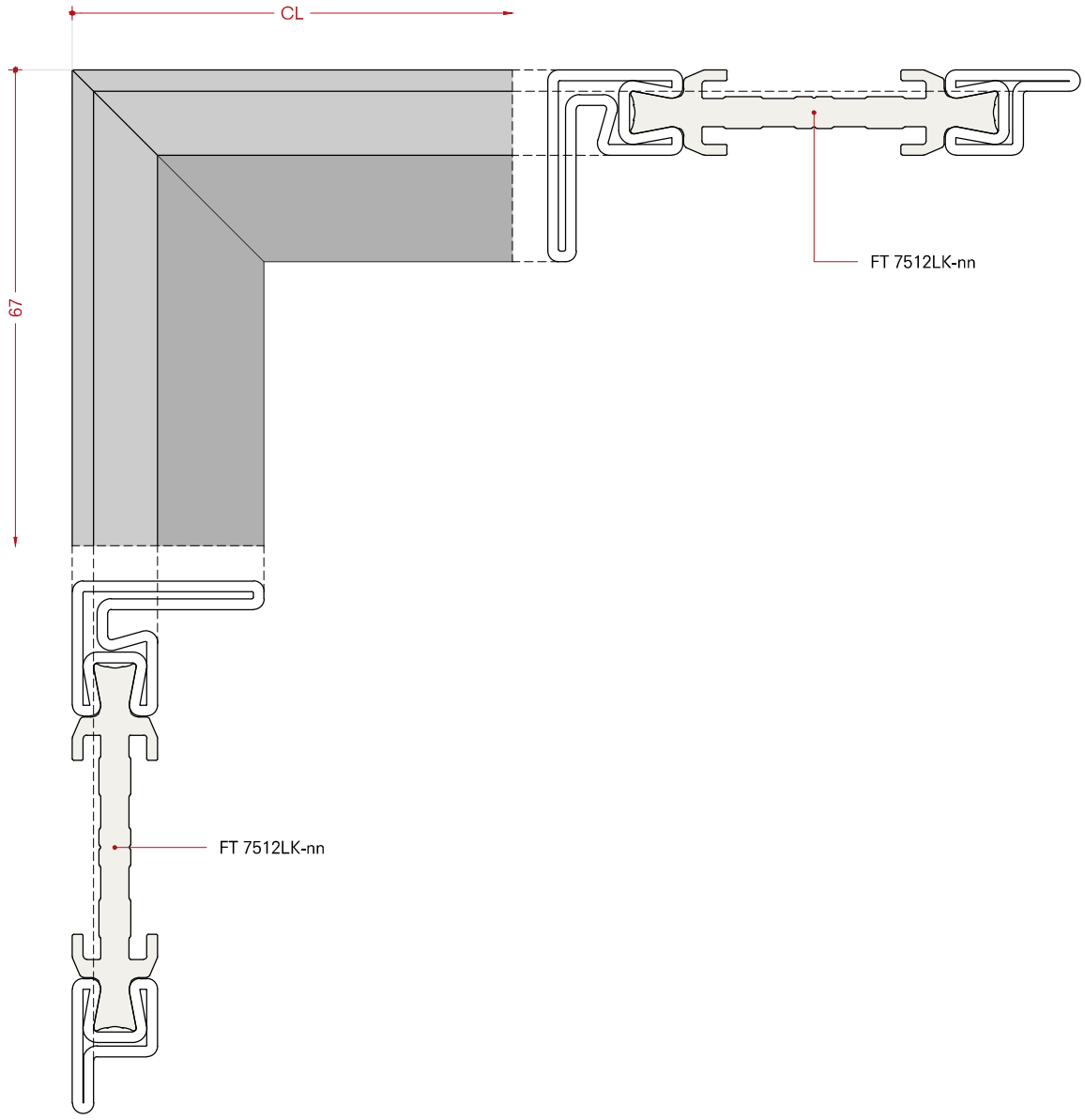
Window open in

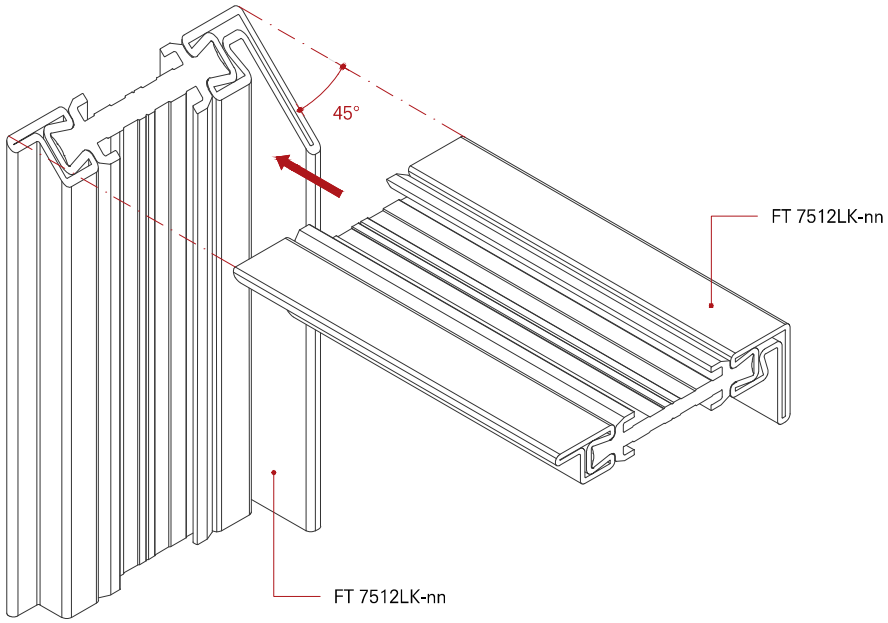
Fenster nach innen öffnend

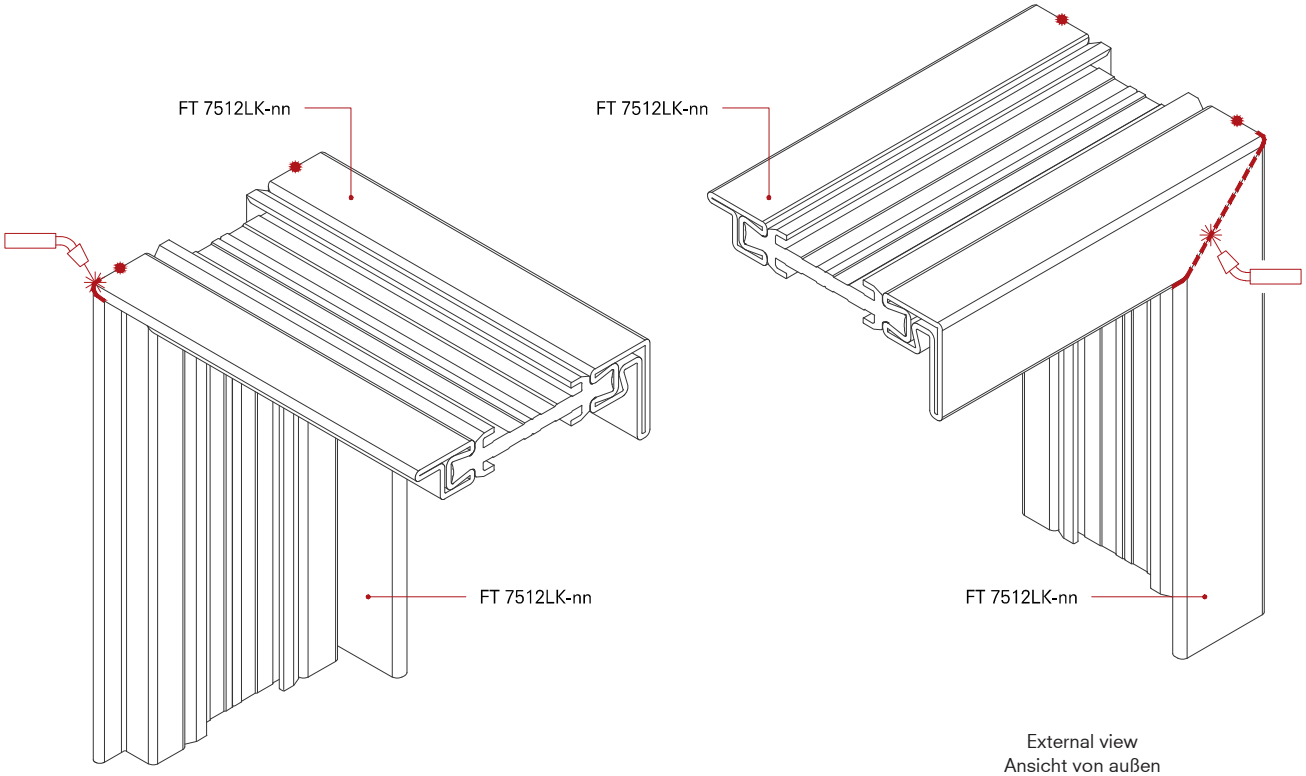
Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure







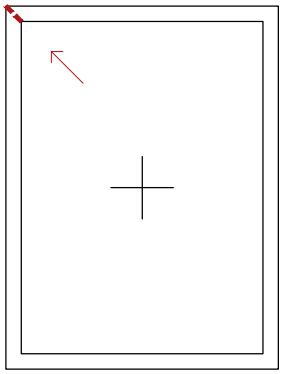
External view
Ansicht von außen
Vue extérieure

FT 7512L-nn / FT 7512L-nn

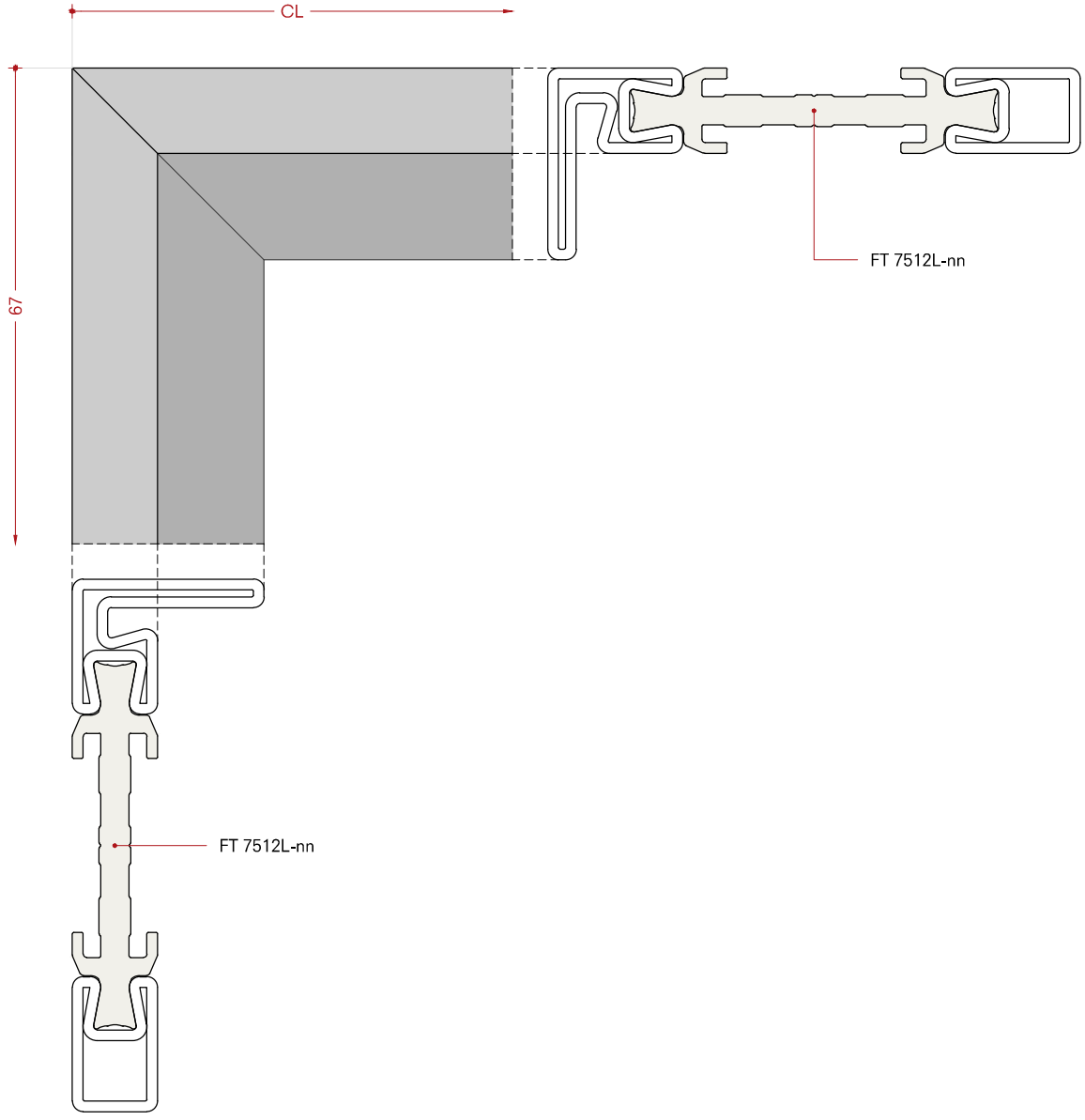
Fixed partition

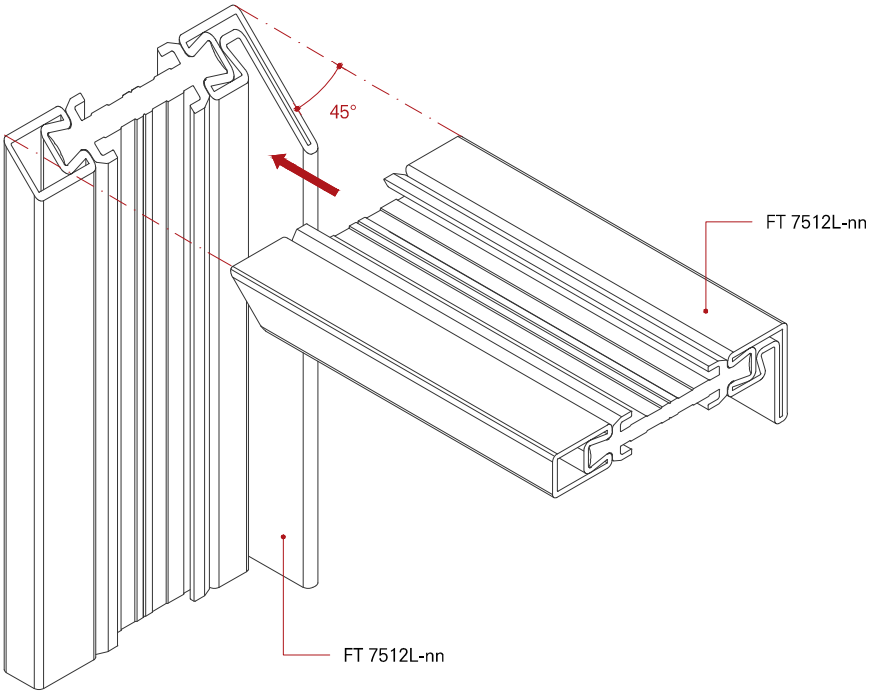
Festverglasung

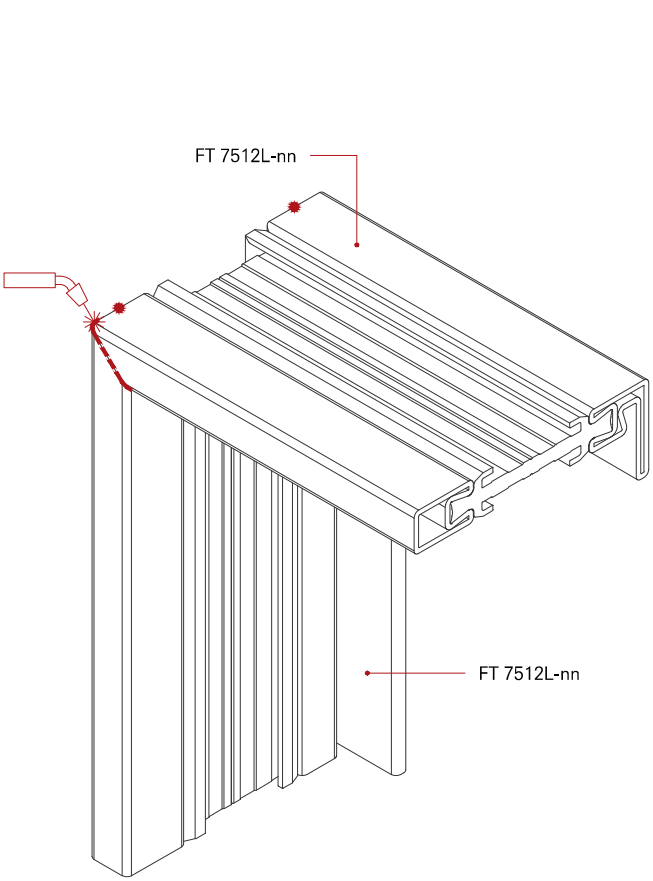
Fenêtre fixe

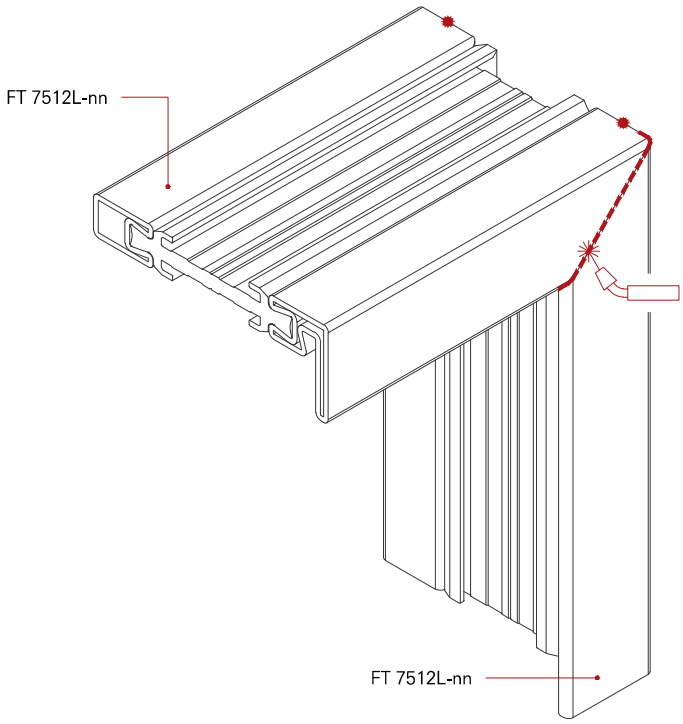


Internal view
Ansicht von innen
Vue intérieure









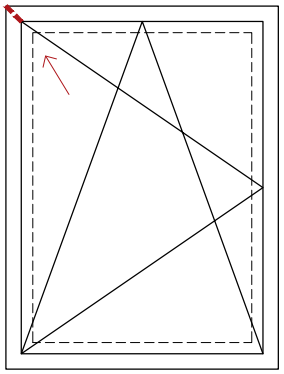
External view
Ansicht von außen
Vue extérieure

FT 7512LR-nn / FT 7512LR-nn

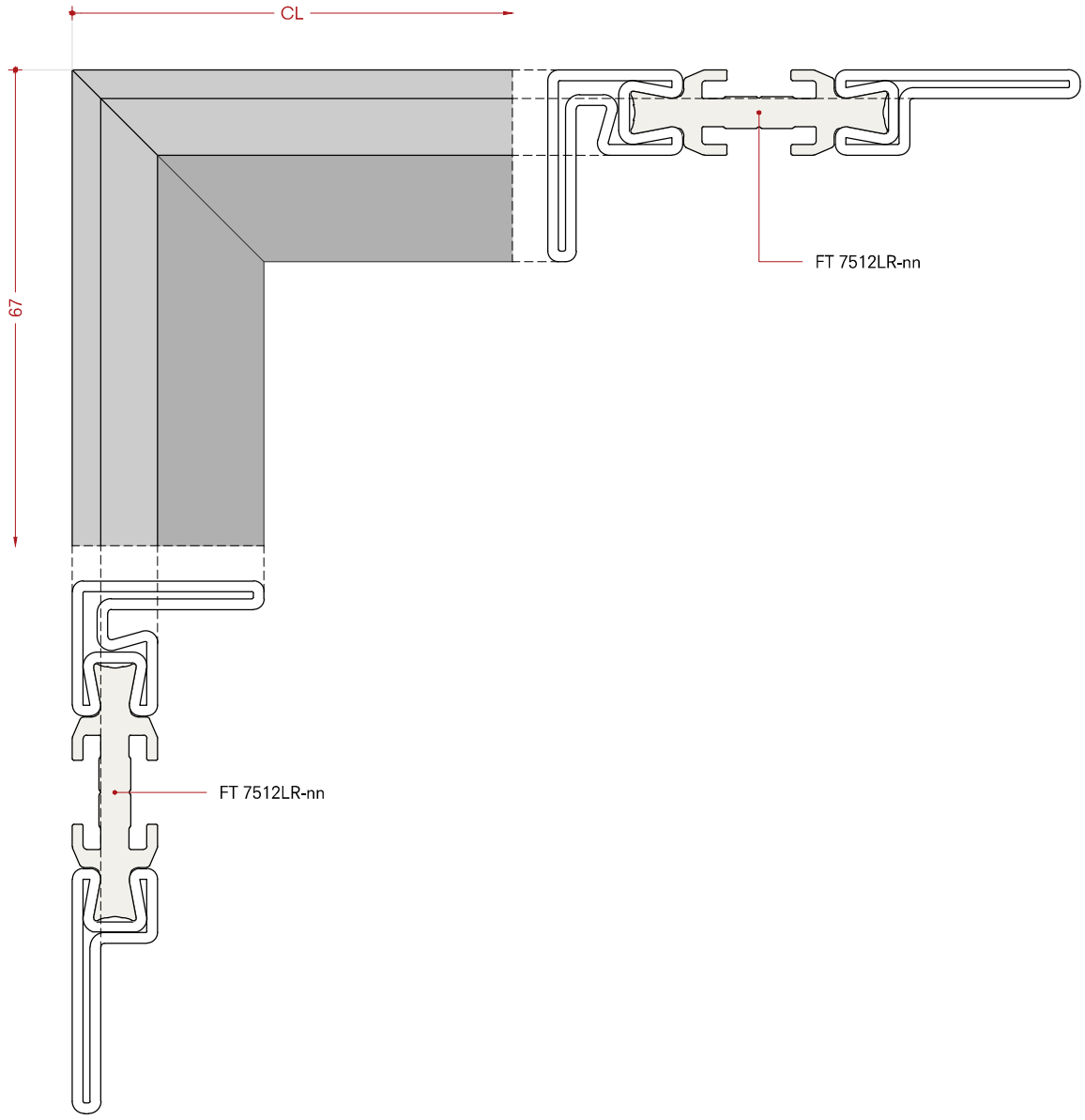
Window open in

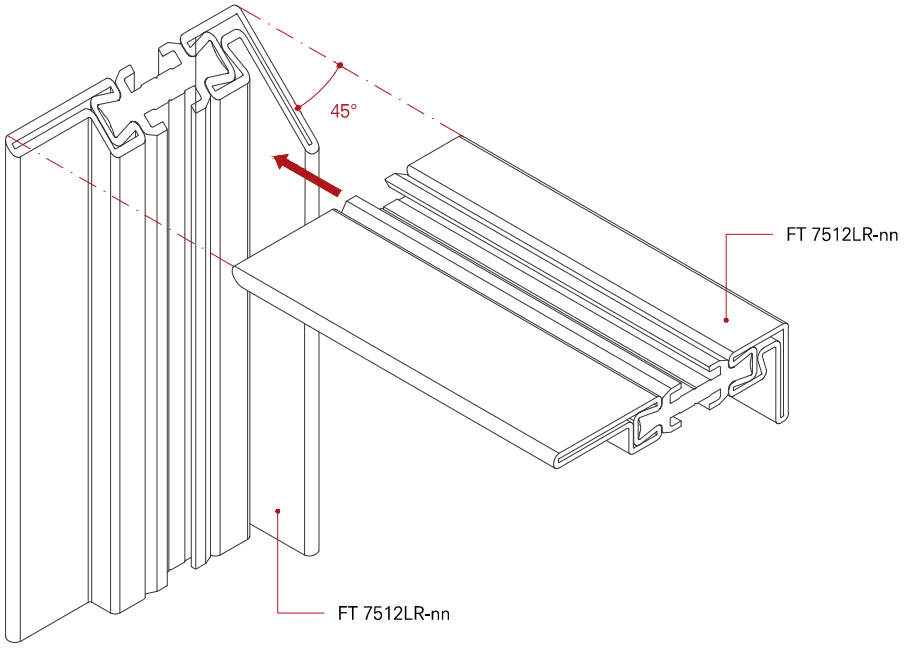
Fenster nach innen öffnend

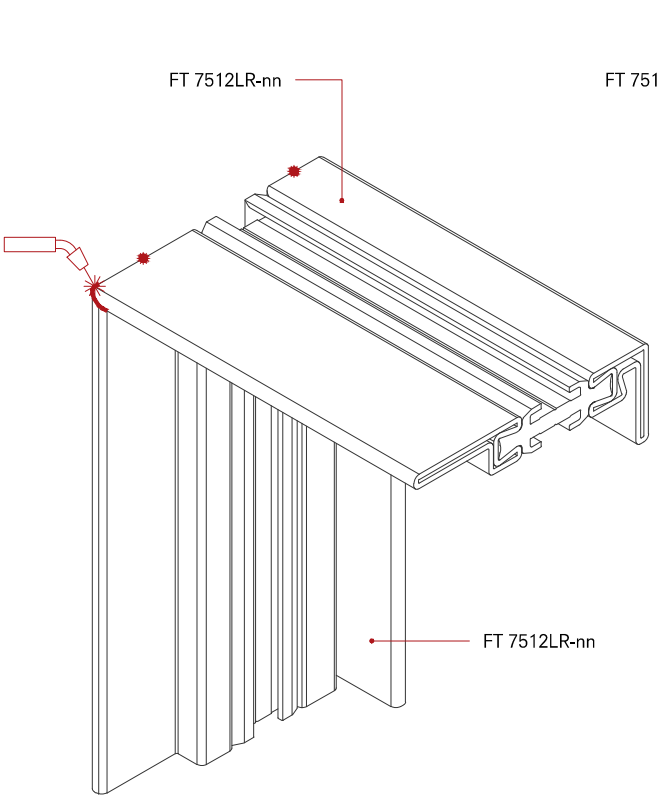
Fenêtre ouverture intérieure

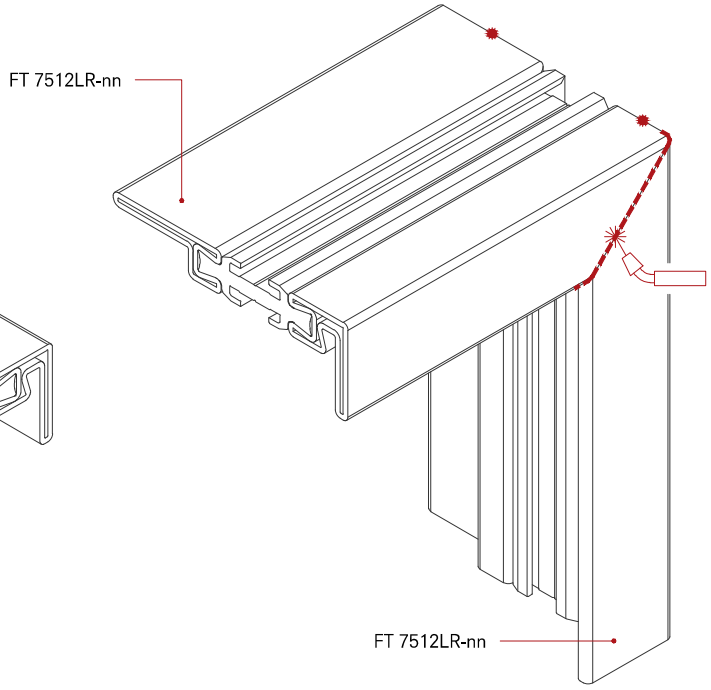


Internal view
Ansicht von innen
Vue intérieure









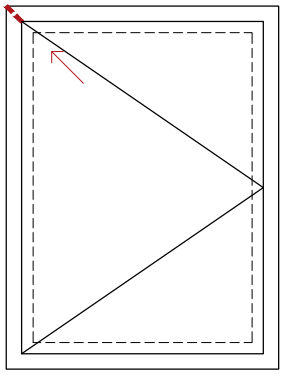
External view
Ansicht von außen
Vue extérieure

FT 7512TK-nn / FT 7512LK-nn

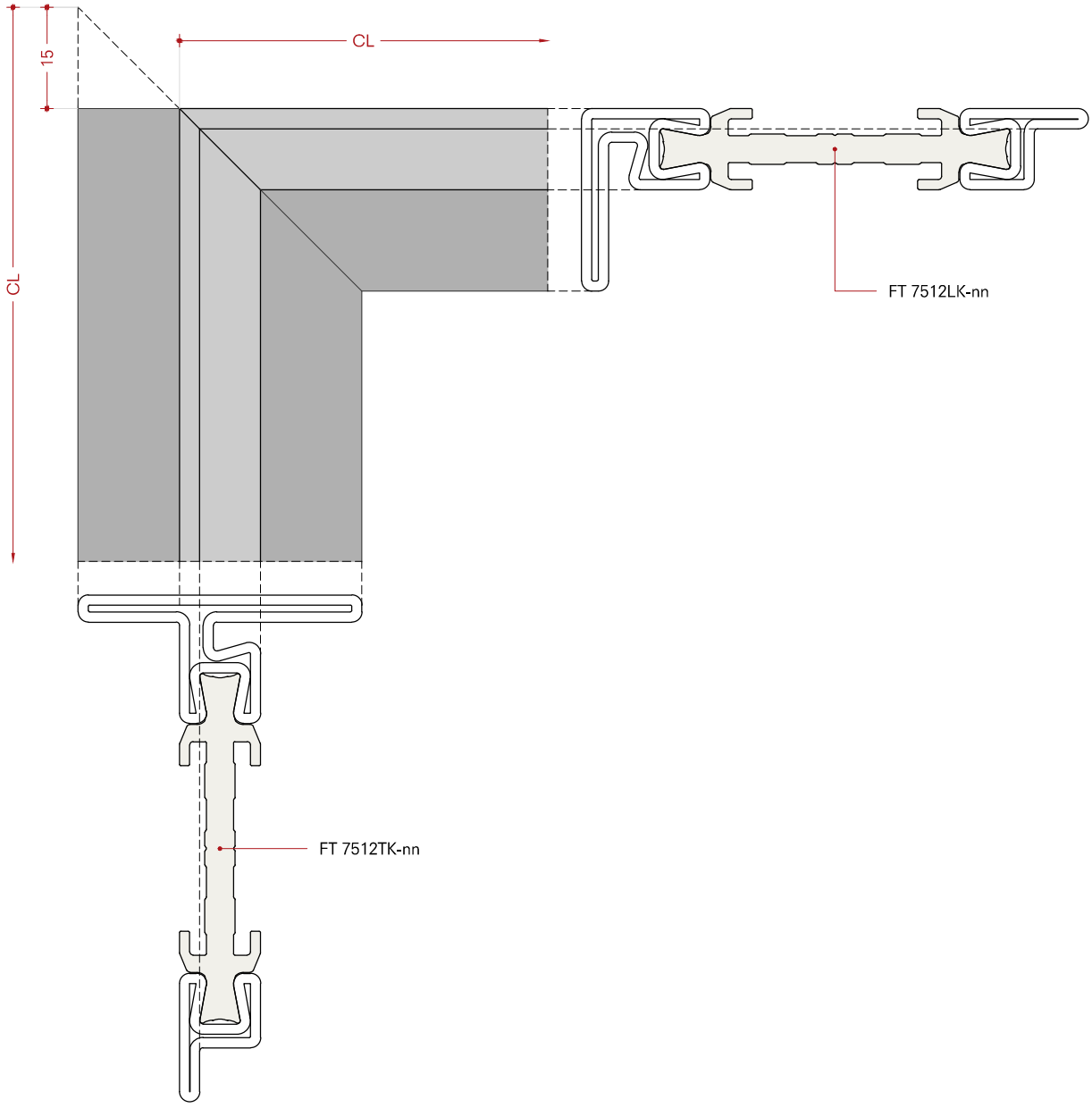
Window open in

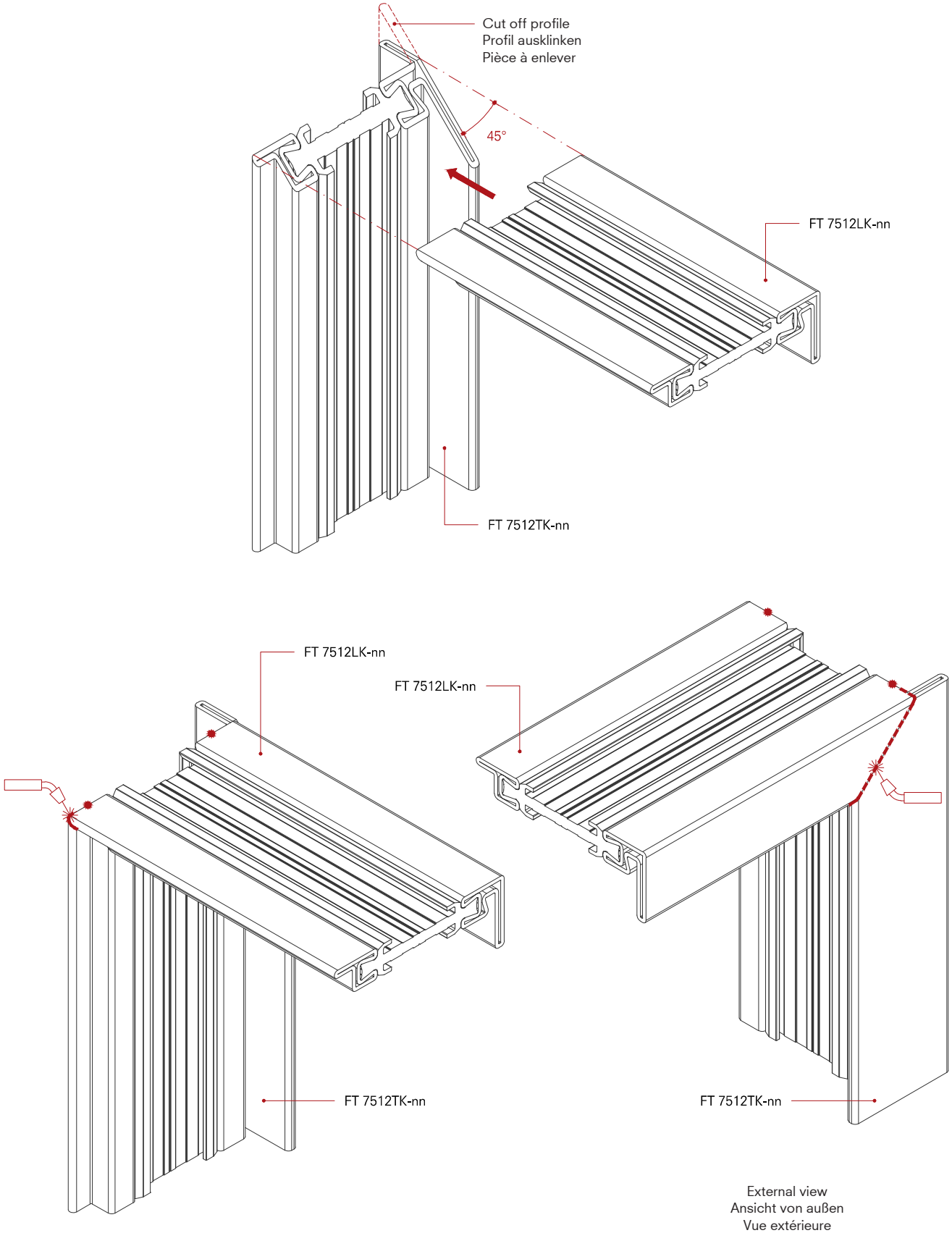
Fenster nach innen öffnend

Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure





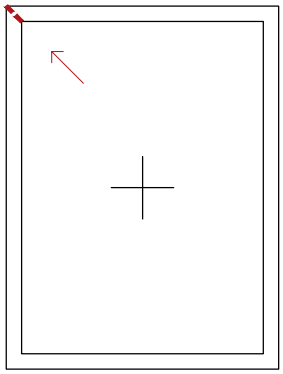
External view
Ansicht von außen
Vue extérieure

FT 7512T-nn / FT 7512L-nn

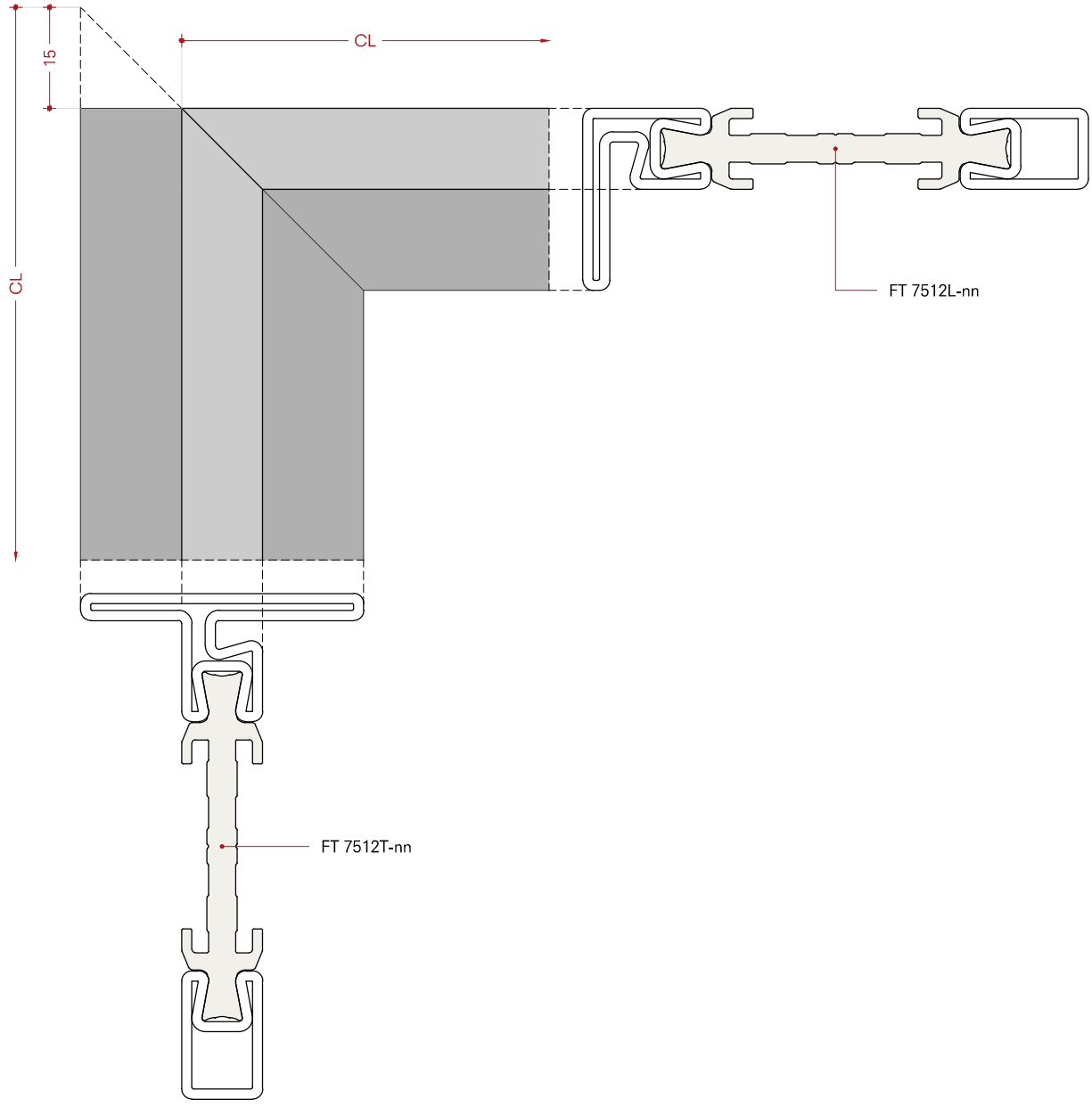
Fixed partition

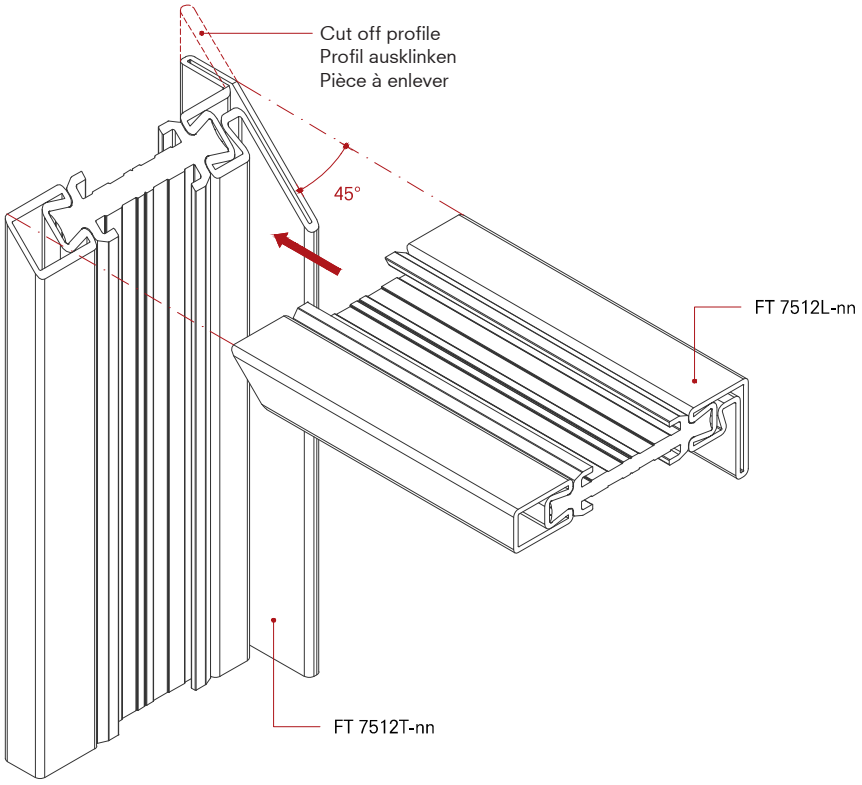
Festverglasung

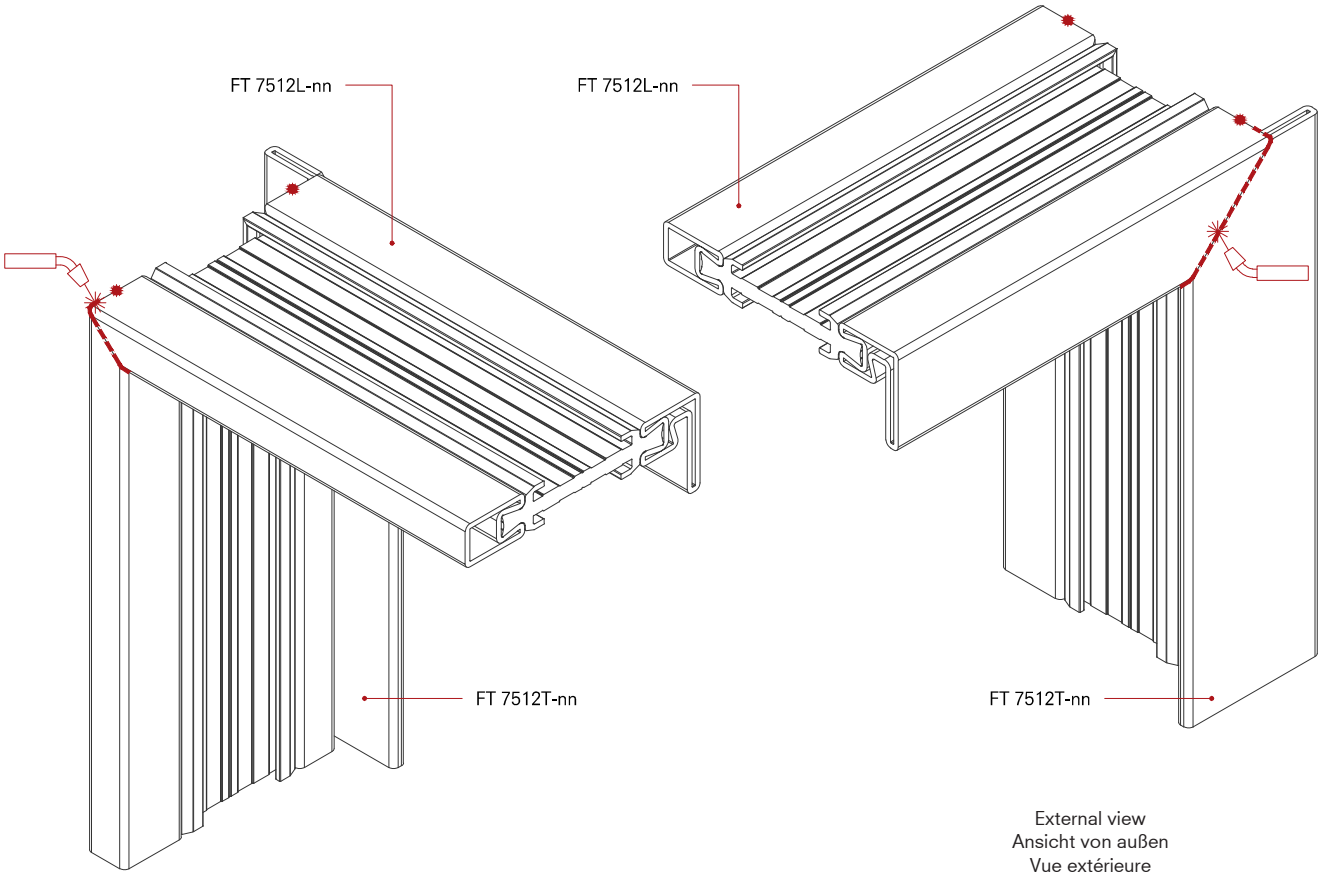
Fenêtre fixe



Internal view
Ansicht von innen
Vue intérieure







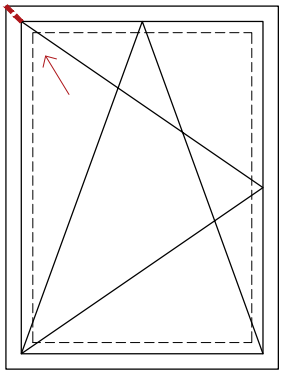
External view
Ansicht von außen
Vue extérieure

FT 7512LR-nn / FT 7512LR-nn

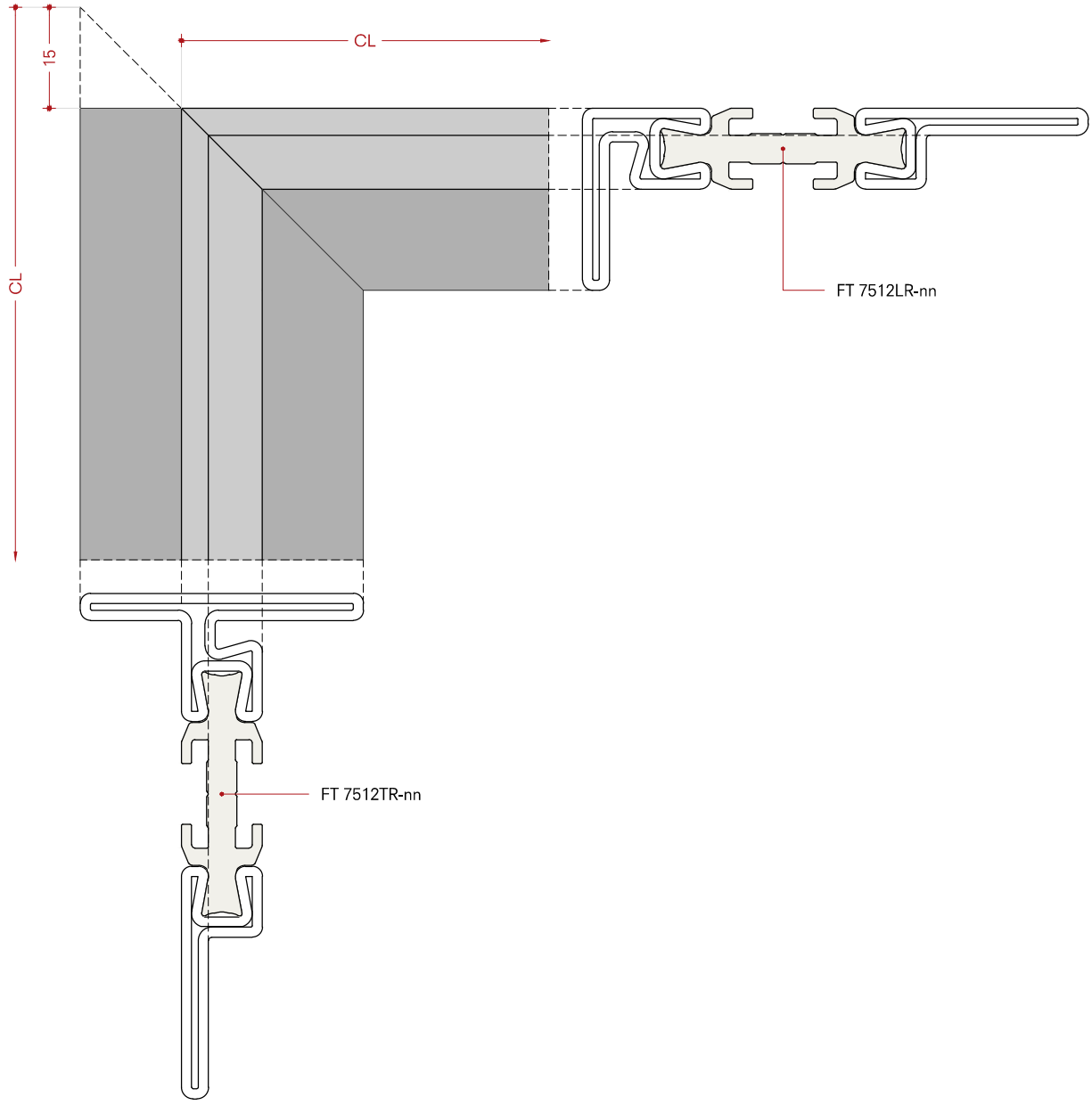
Window open in

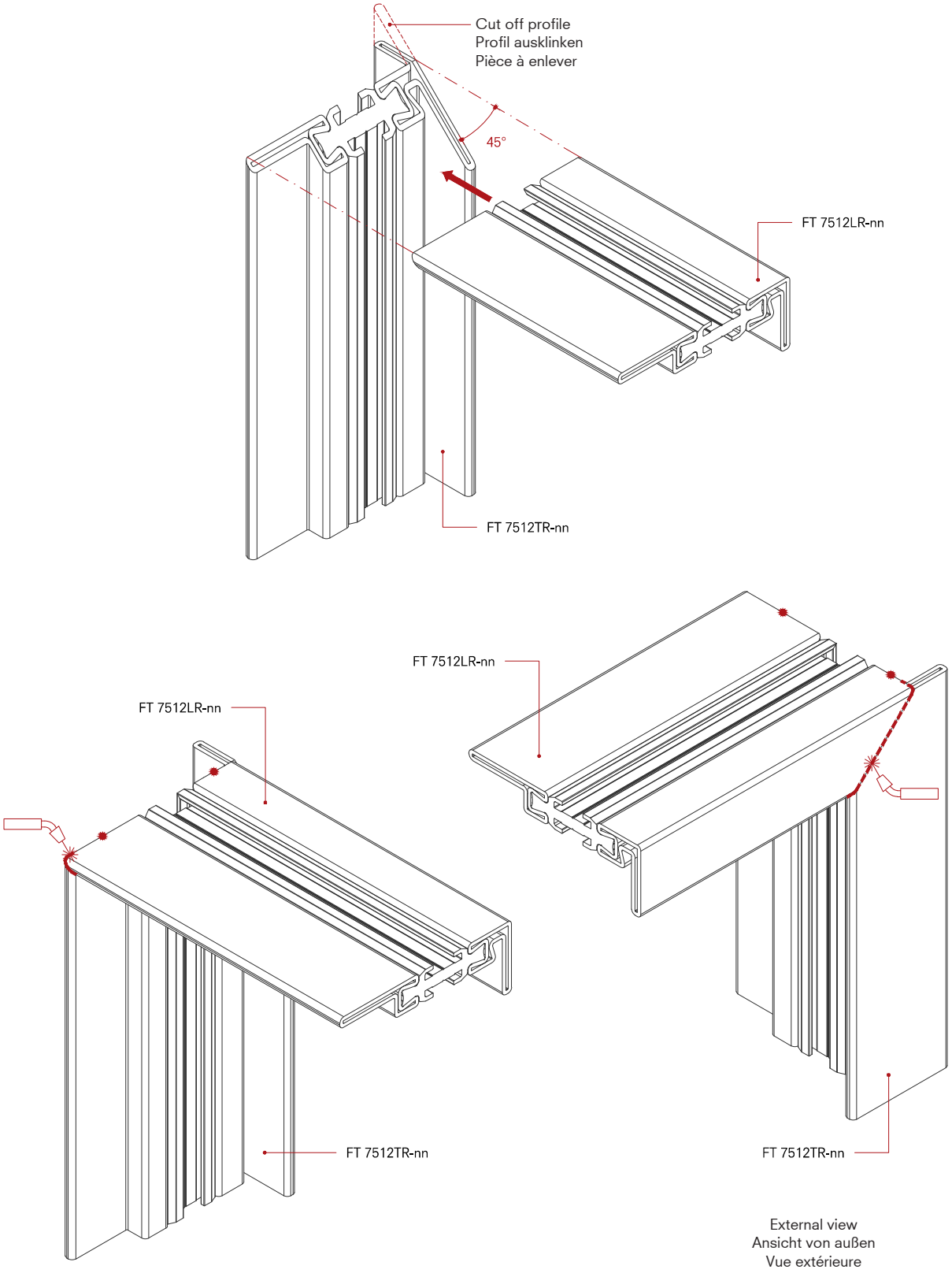
Fenster nach innen öffnend

Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure





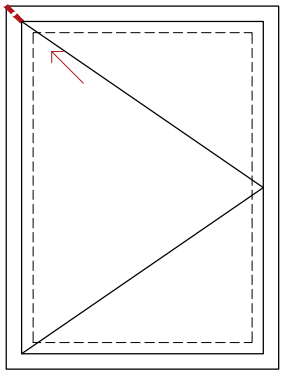
External view
Ansicht von außen
Vue extérieure

FT 7512ZK-nn / FT 7512LK-nn

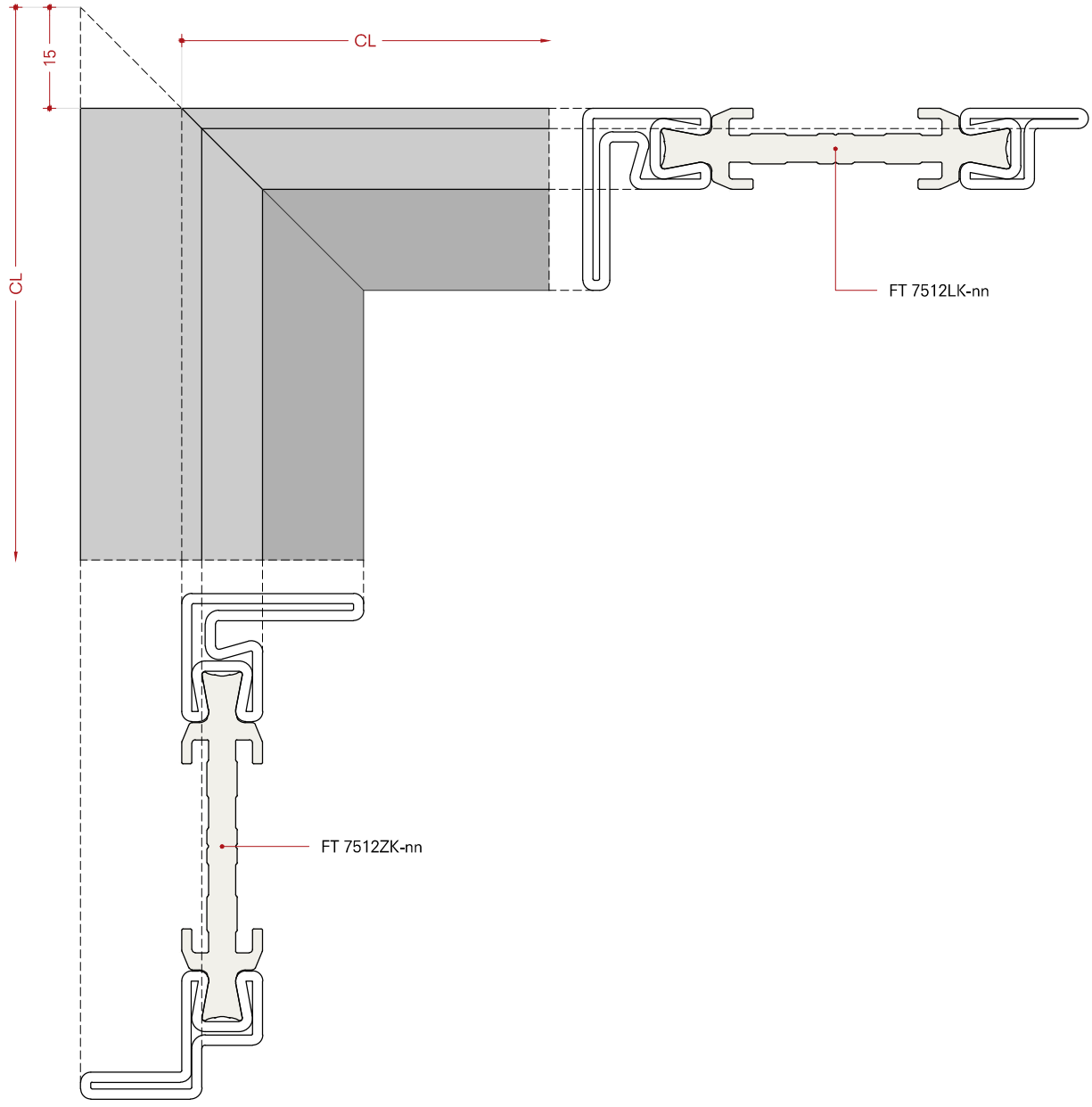
Window open in

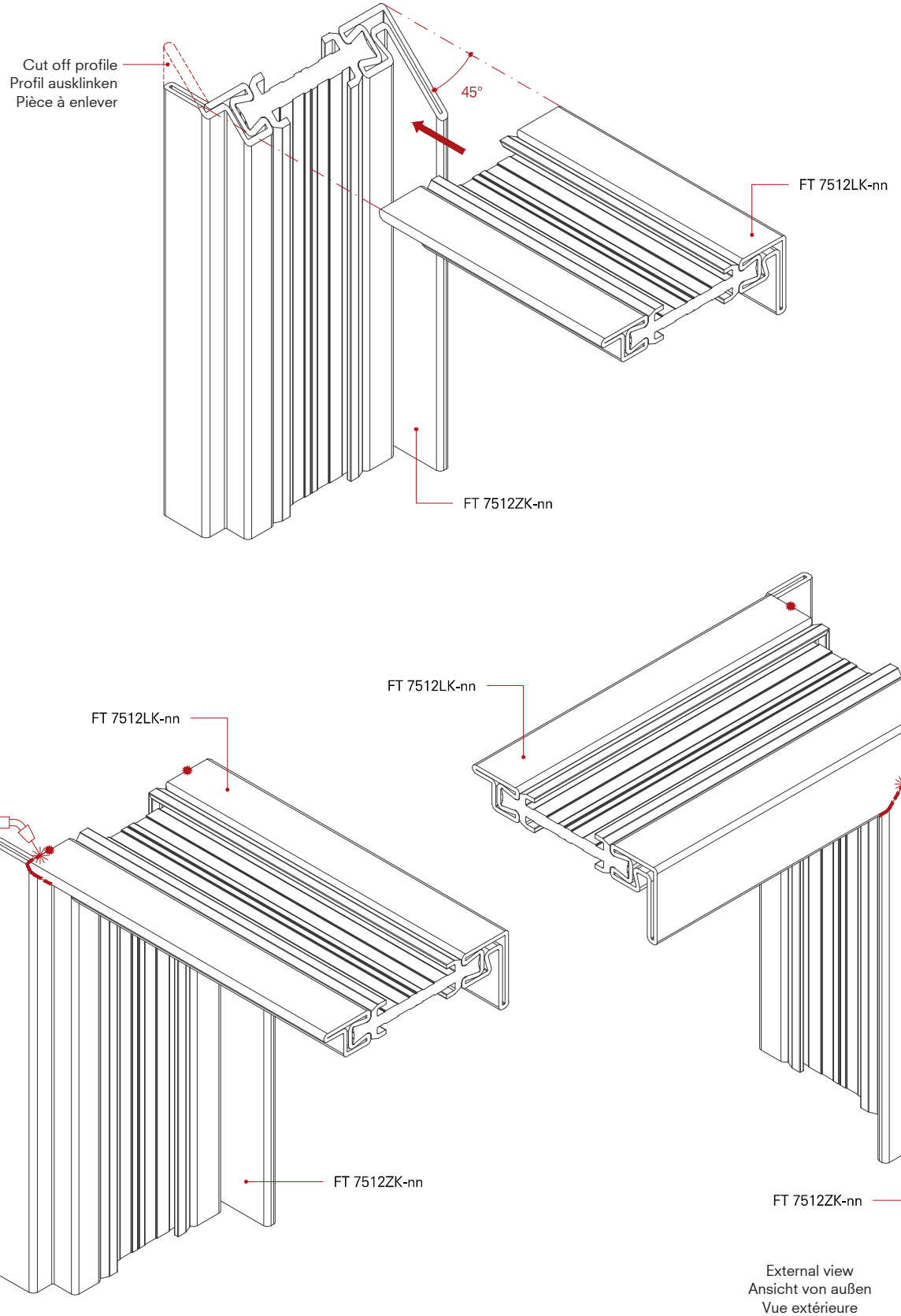
Fenster nach innen öffnend

Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure





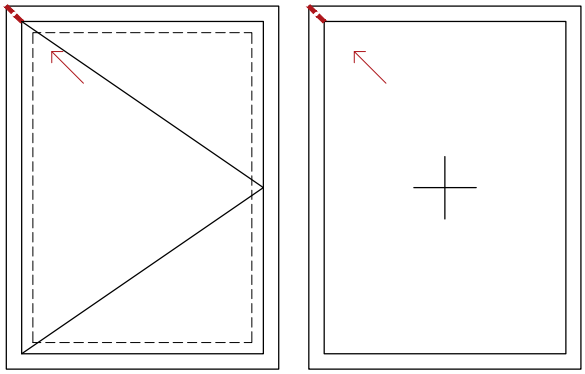
External view
Ansicht von außen
Vue extérieure

FT 7512Z-nn / FT 7512L-nn

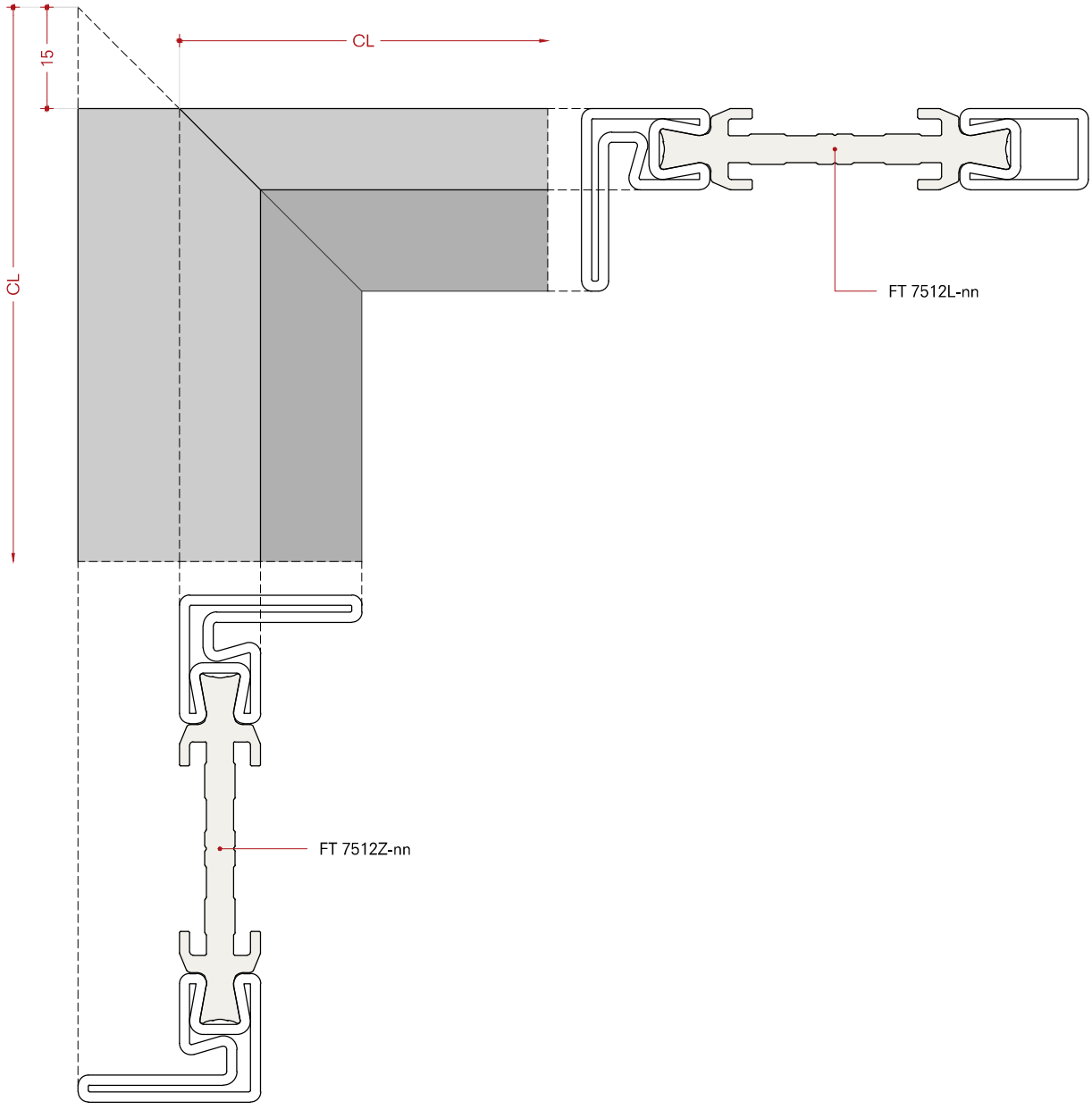
Window open in, fixed partition

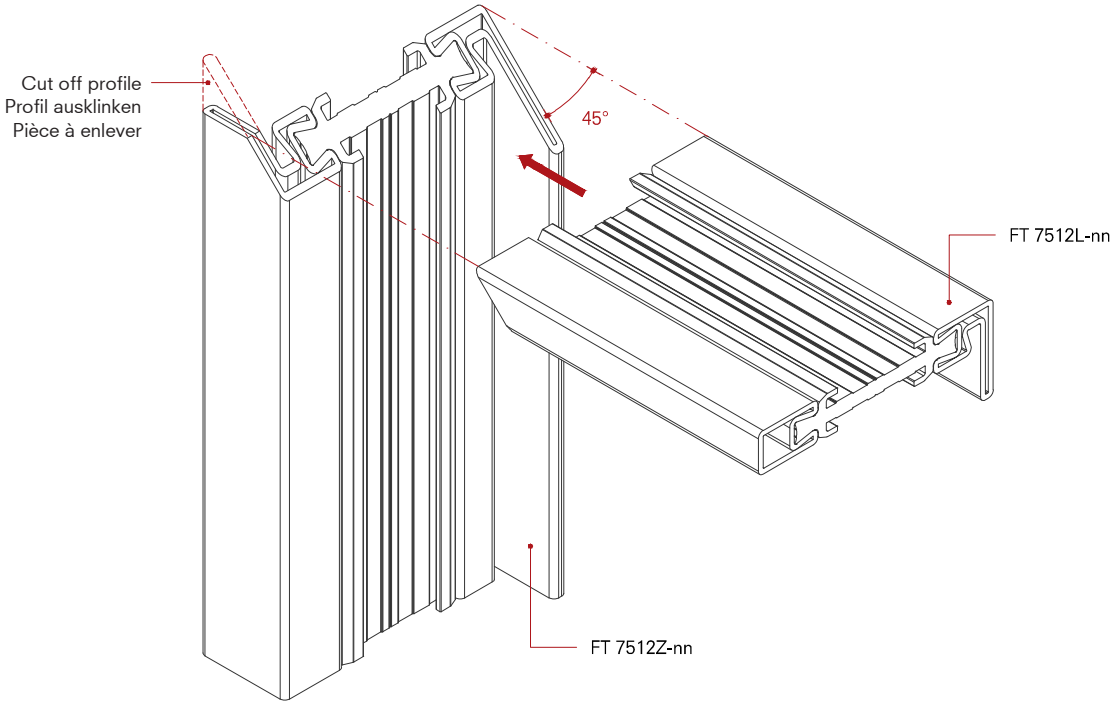
Fenster nach innen öffnend, Festverglasung

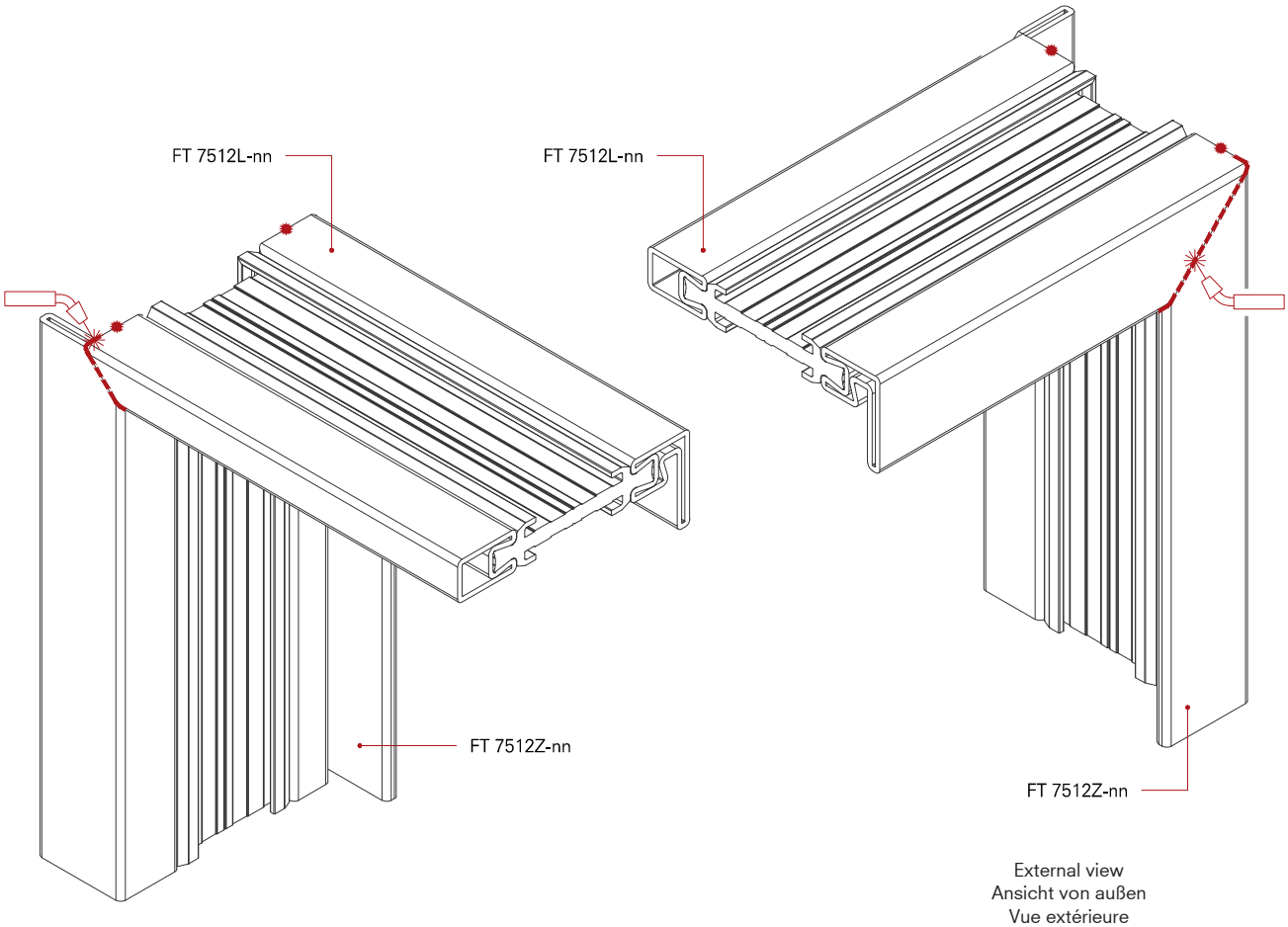
Fenêtre ouverture intérieure, fenêtre fixe



Internal view
Ansicht von innen
Vue intérieure







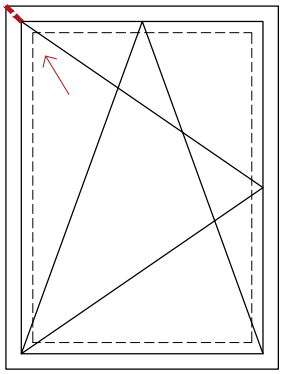
External view
Ansicht von außen
Vue extérieure

FT 7512ZR-nn / FT 7512LR-nn

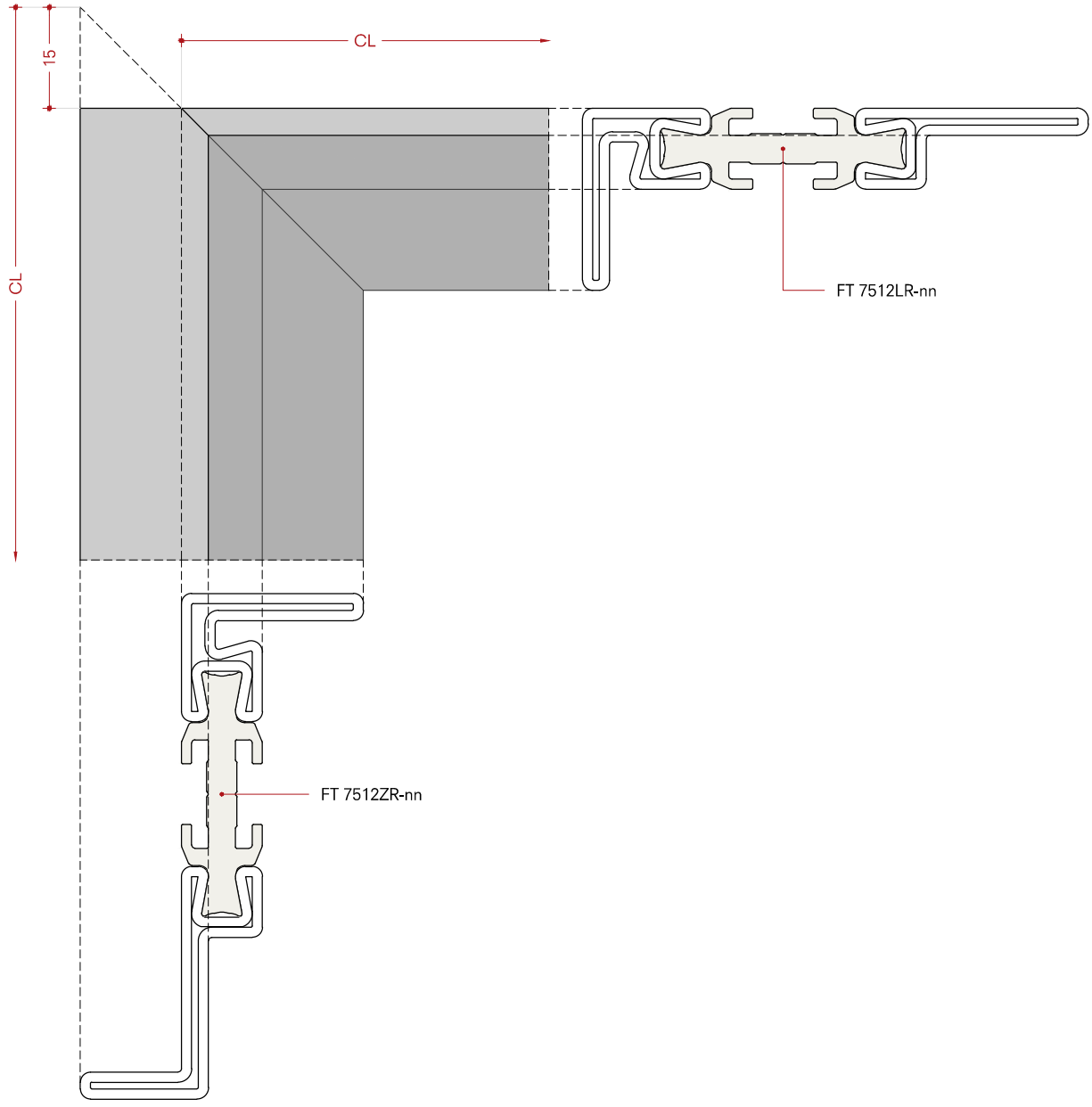
Window open in

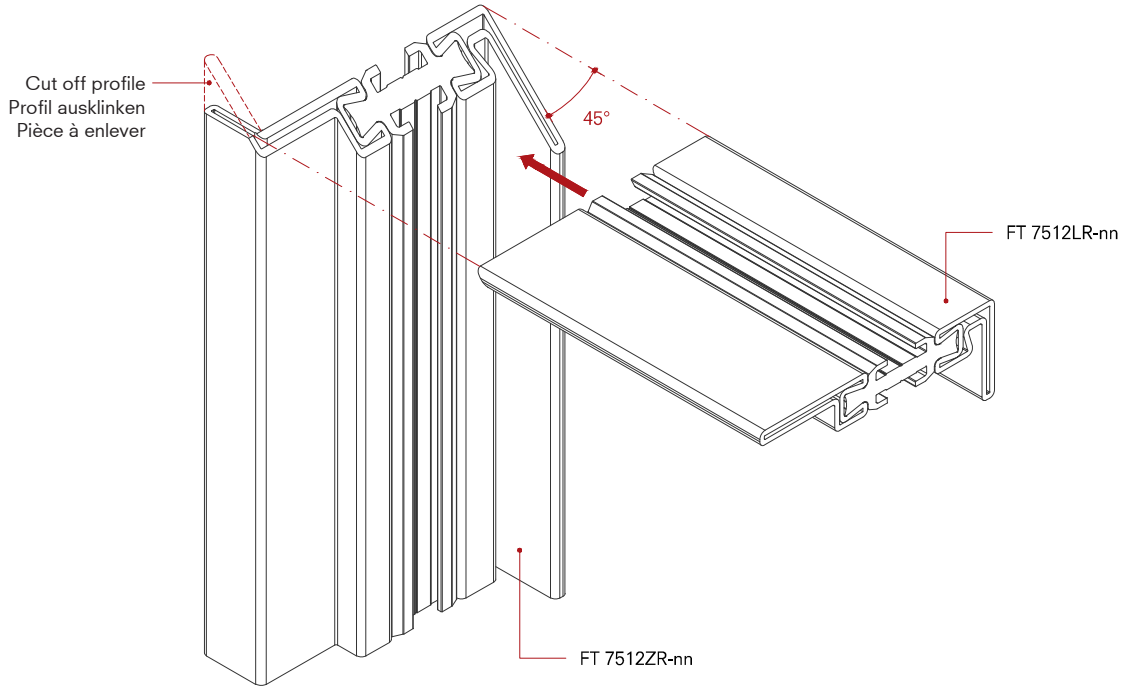
Fenster nach innen öffnend

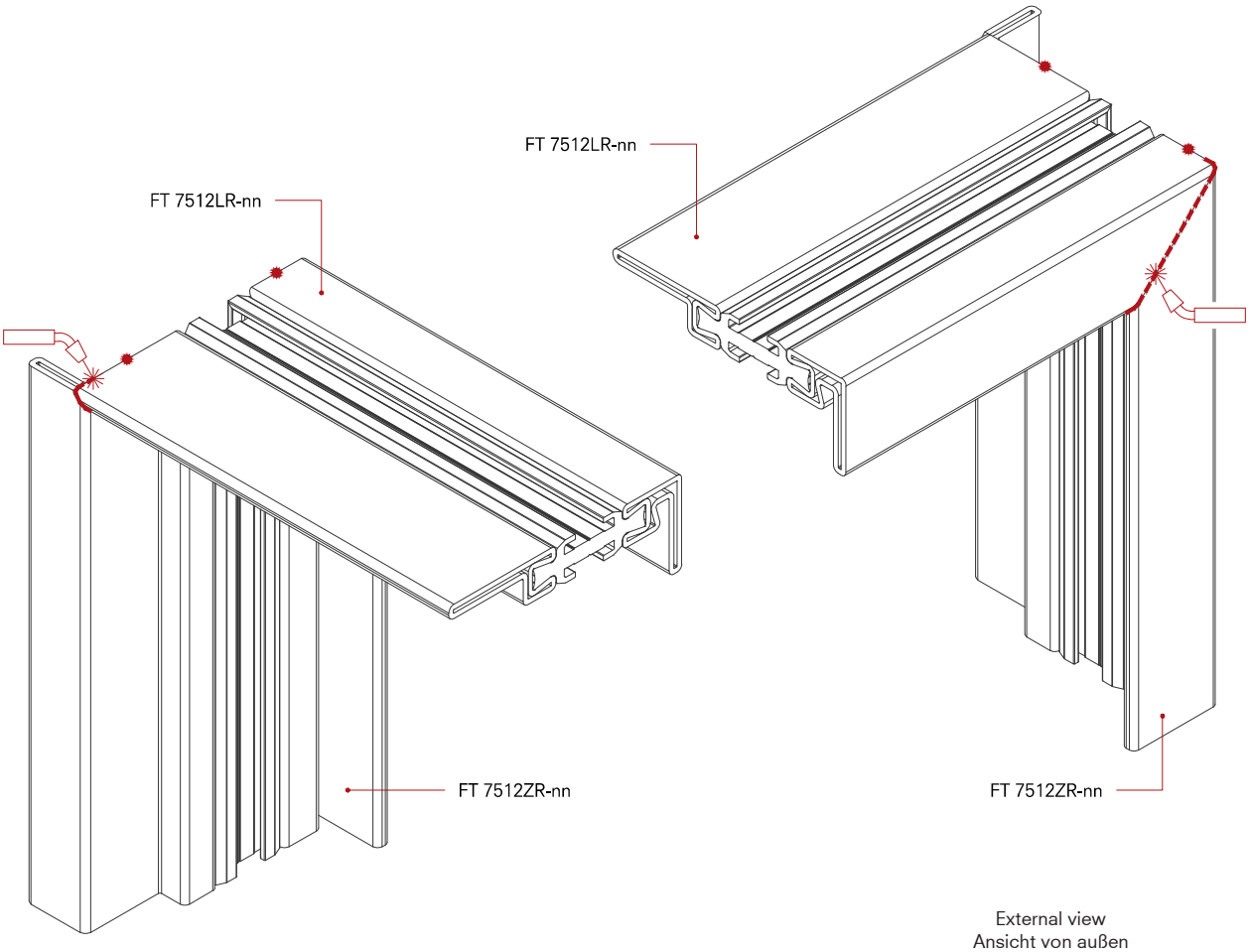
Fenêtre ouverture intérieure



Internal view
Ansicht von innen
Vue intérieure







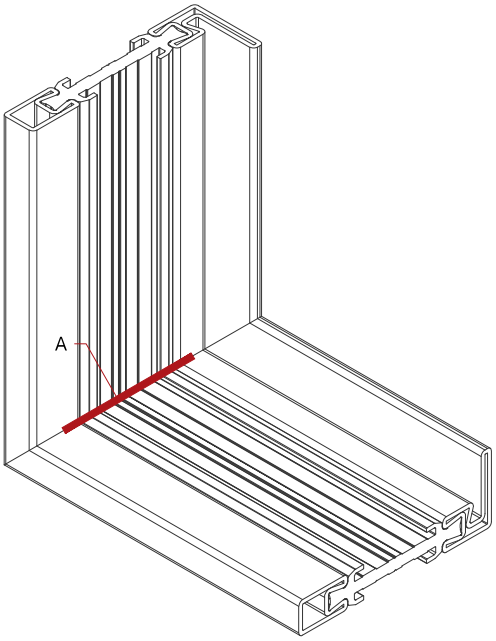
External view
Ansicht von außen
Vue extérieure

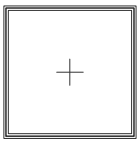
Accessories installation | Montage Zubehör | Montage accessoires 5.4

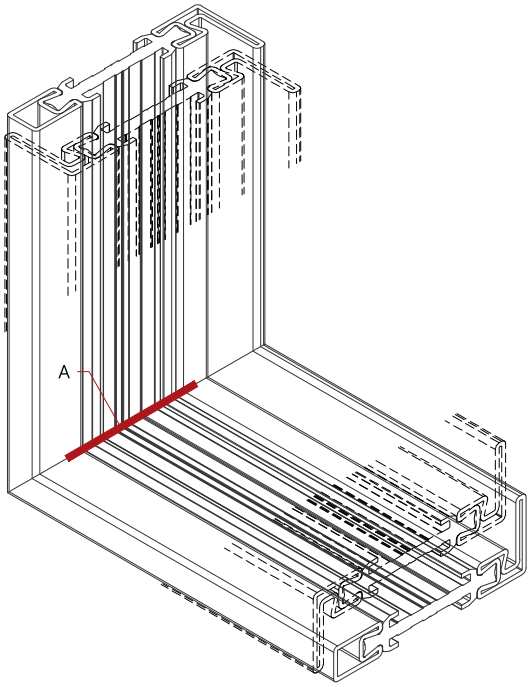
Sealing frame connections
Examples

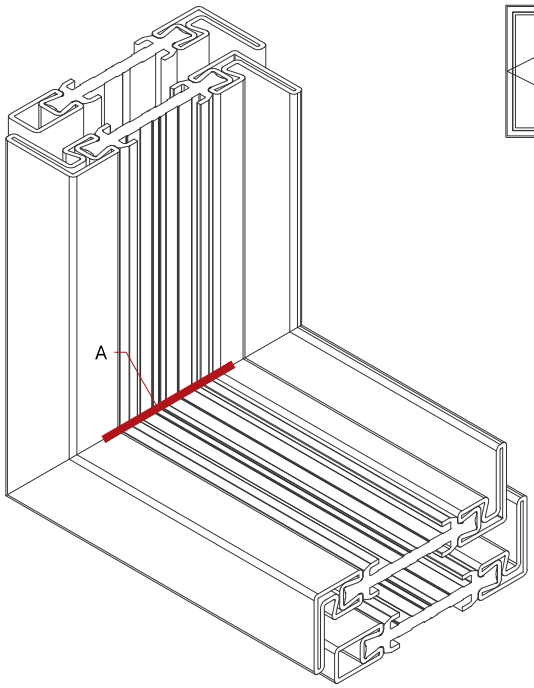
Abdichtung Rahmenverbindungen
Beispiele

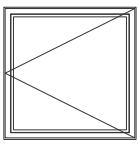
Étanchéité de profilés
Exemples







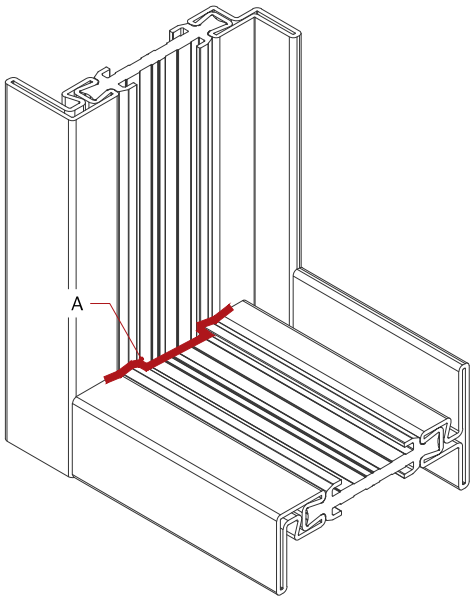


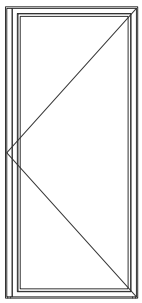


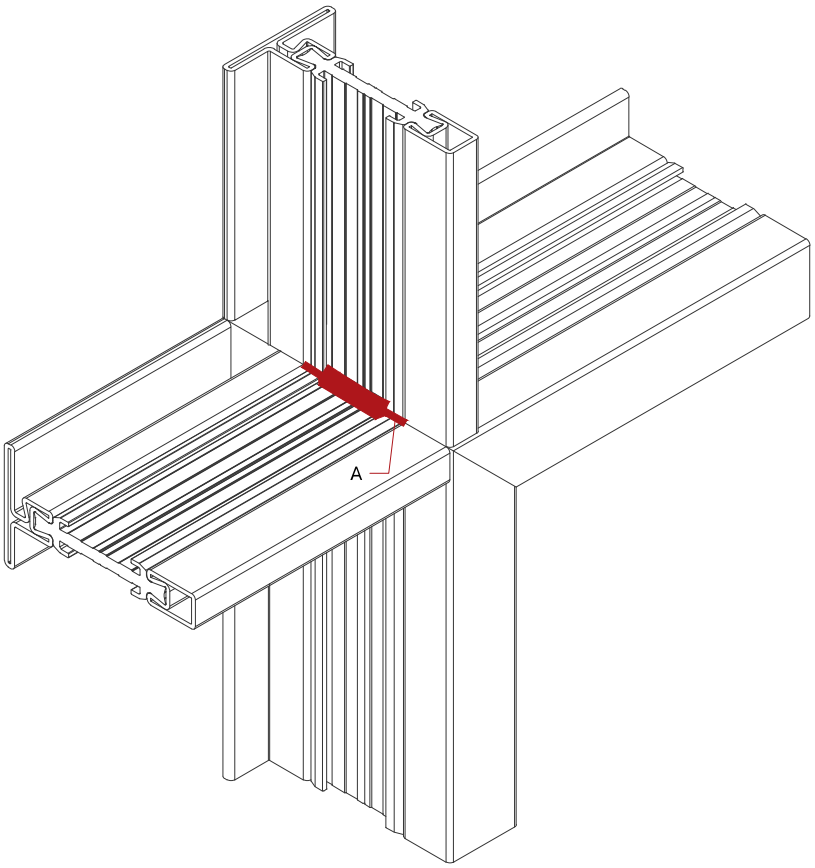
A) For the sealing of the zones not closed by welding in joined frame connections, we strongly recommend using a narrow joint sealant on thermal break, for 45° and 90° cuttings after the painting.

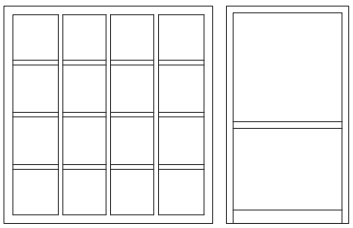
A) Für die Abdichtung der Zonen von nicht durch Schweissen geschlossenen Fügezonen bei Rahmenverbindungen (90° stumpf und 45° auf Gehrung) empfehlen wir dringend die Verwendung eines geeigneten dünnflüssigen Dichtstoffes im Bereich der PA Isolators nach dem Beschichten.

A) Pour la fermeture des zones de joint qui ne sont pas fermées par soudage lors de l'assemblage (45° et 90°) des cadres, nous vous recommandons instamment d'utiliser le produit d'étanchéité sur polyamide, après la peinture.









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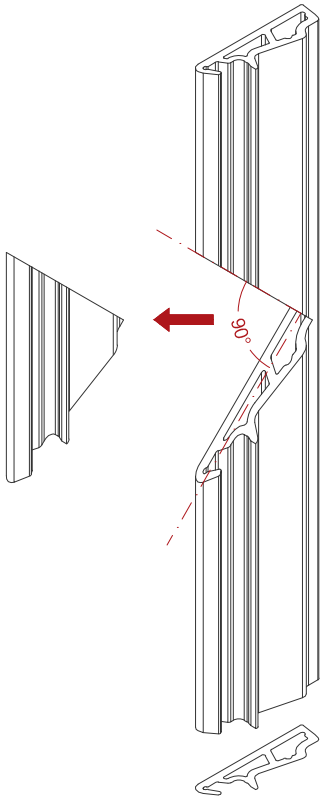
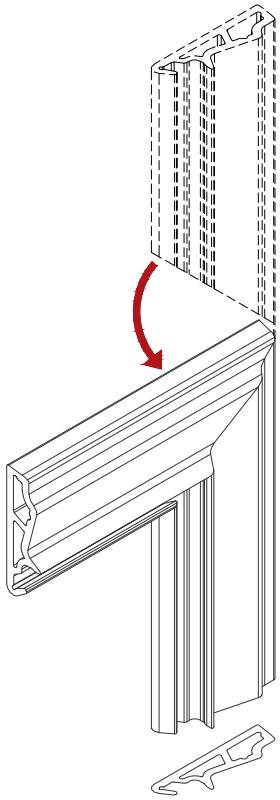
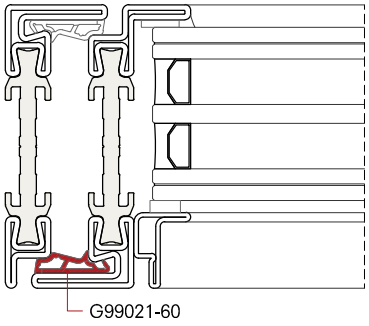
Cutting
Rebate gasket G04021-60,
G04022-60, G04023-60 at 45°
Open in and open out

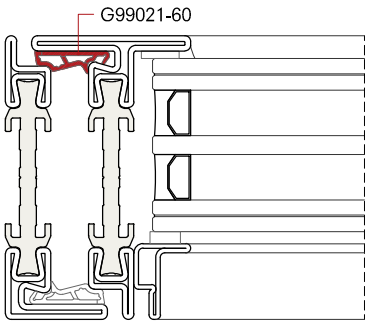
Ausklinkung
Anschlagdichtung G04021-60,
G04022-60, G04023-60 auf 45°
Nach innen und außen öffnend

Découpe
Joint de butée G04021-60,
G04022-60, G04023-60 a 45°
Ouverture intérieure et extérieure









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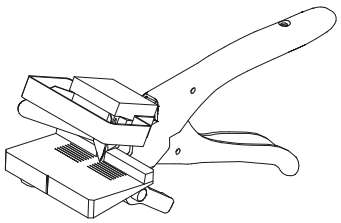


3

1) Clean surface and apply primer I99005-75
2) Use seal scissor D99543-02
3) Glue with sealant OS 364991

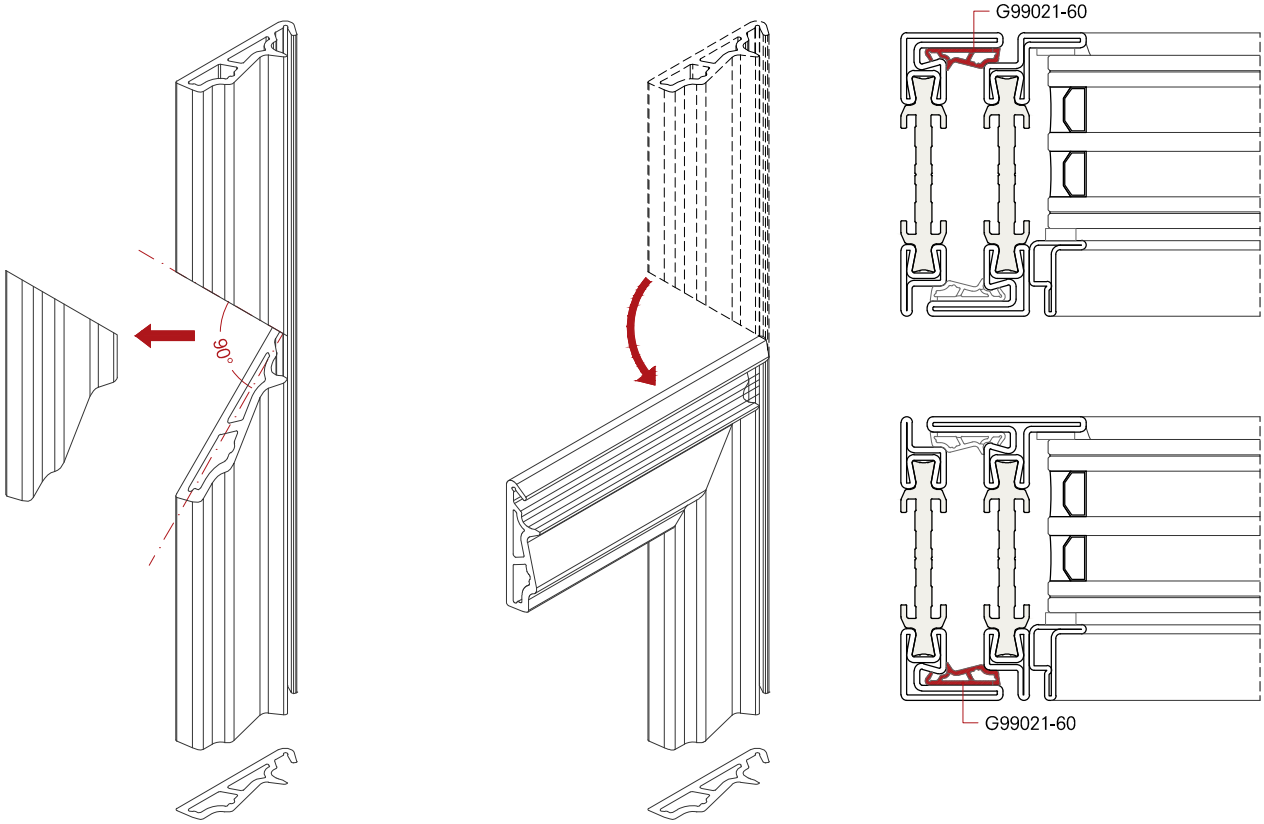
1) Oberfläche reinigen und Primer I99005-75 auftragen.
2) Verwenden sie die Dichtungsschere D99543-02
3) Mit Dichtstoff OS 364991 verkleben

1) Nettoyer la surface et appliquer le primaire I99005-75
2) Utiliser pinces pour joint d'etancheite D99543-02
3) Sceller avec adhesif OS 364991

Cutting
Rebate gasket G04021-60,
G04022-60, G04023-60 at 45°
Open in and open out

Ausklinkung
Anschlagdichtung G04021-60,
G04022-60, G04023-60 auf 45°
Nach innen und außen öffnend

Découpe
Joint de butée G04021-60,
G04022-60, G04023-60 a 45°
Ouverture intérieure et extérieure



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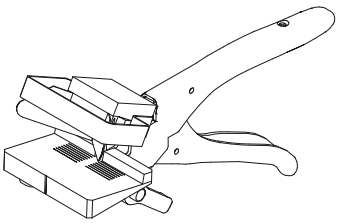


3

1) Clean surface and apply primer I99005-75
2) Use seal scissor D99543-02
3) Glue with sealant OS 364991

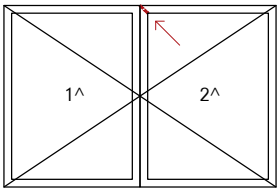
1) Oberfläche reinigen und Primer I99005-75 auftragen.
2) Verwenden sie die Dichtungsschere D99543-02
3) Mit Dichtstoff OS 364991 verkleben

1) Nettoyer la surface et appliquer le primaire I99005-75
2) Utiliser pinces pour joint d'etancheite D99543-02
3) Sceller avec adhesif OS 364991

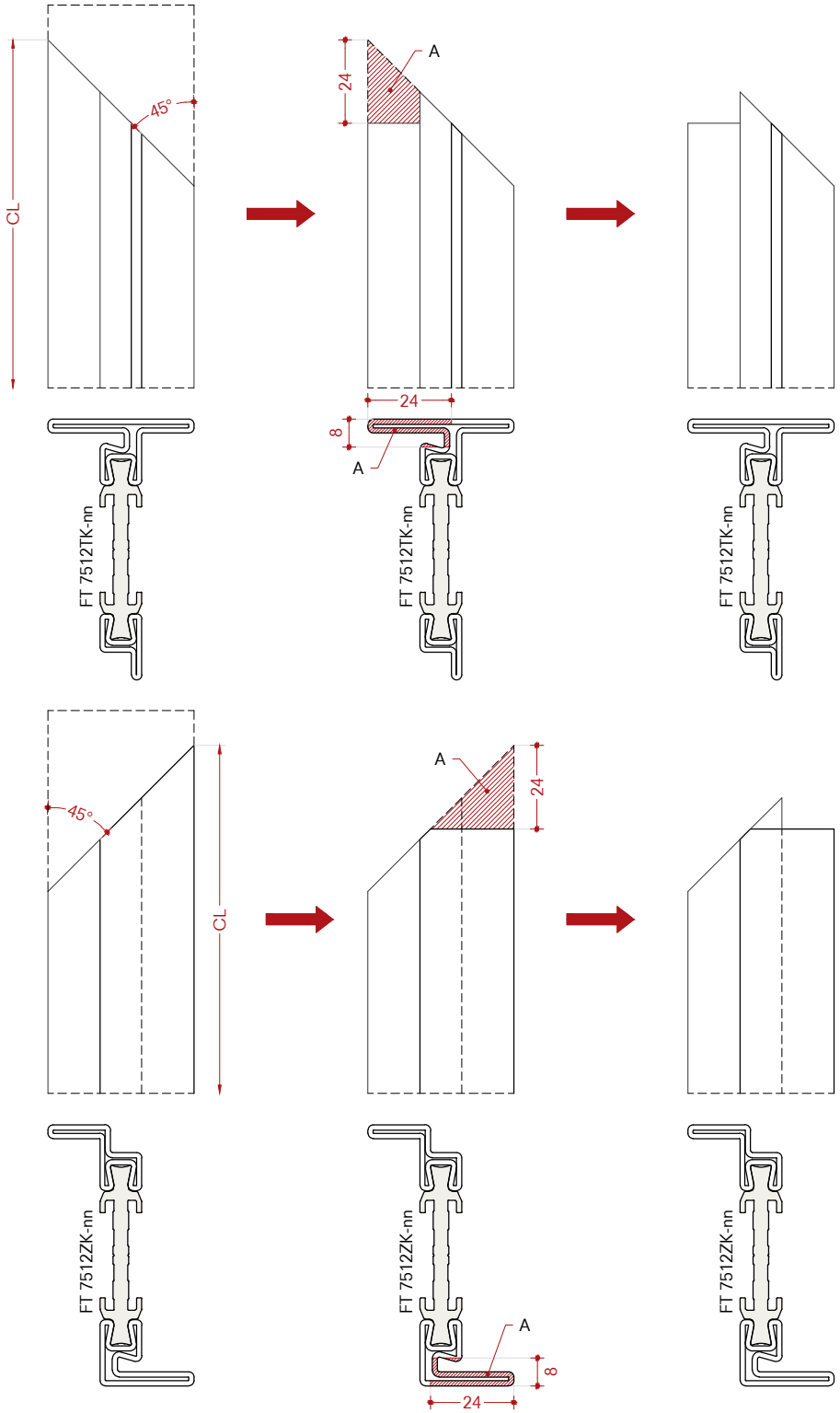
Profile processing
FT 7512TK-nn + FT 7512ZK-nn
Double leaf window
Open in
Flush profiles

Profilbearbeitung
FT 7512TK-nn + FT 7512ZK-nn
Zweiflüglige Fenster
Nach innen öffnend
Flächenbündige profile

Usinages des profilés
FT 7512TK-nn + FT 7512ZK-nn
Fenêtre à deux vantaux
Ouverture intérieure
Profilés coplanaires



Internal view
Ansicht von innen
Vue intérieure



CL = Cutting length

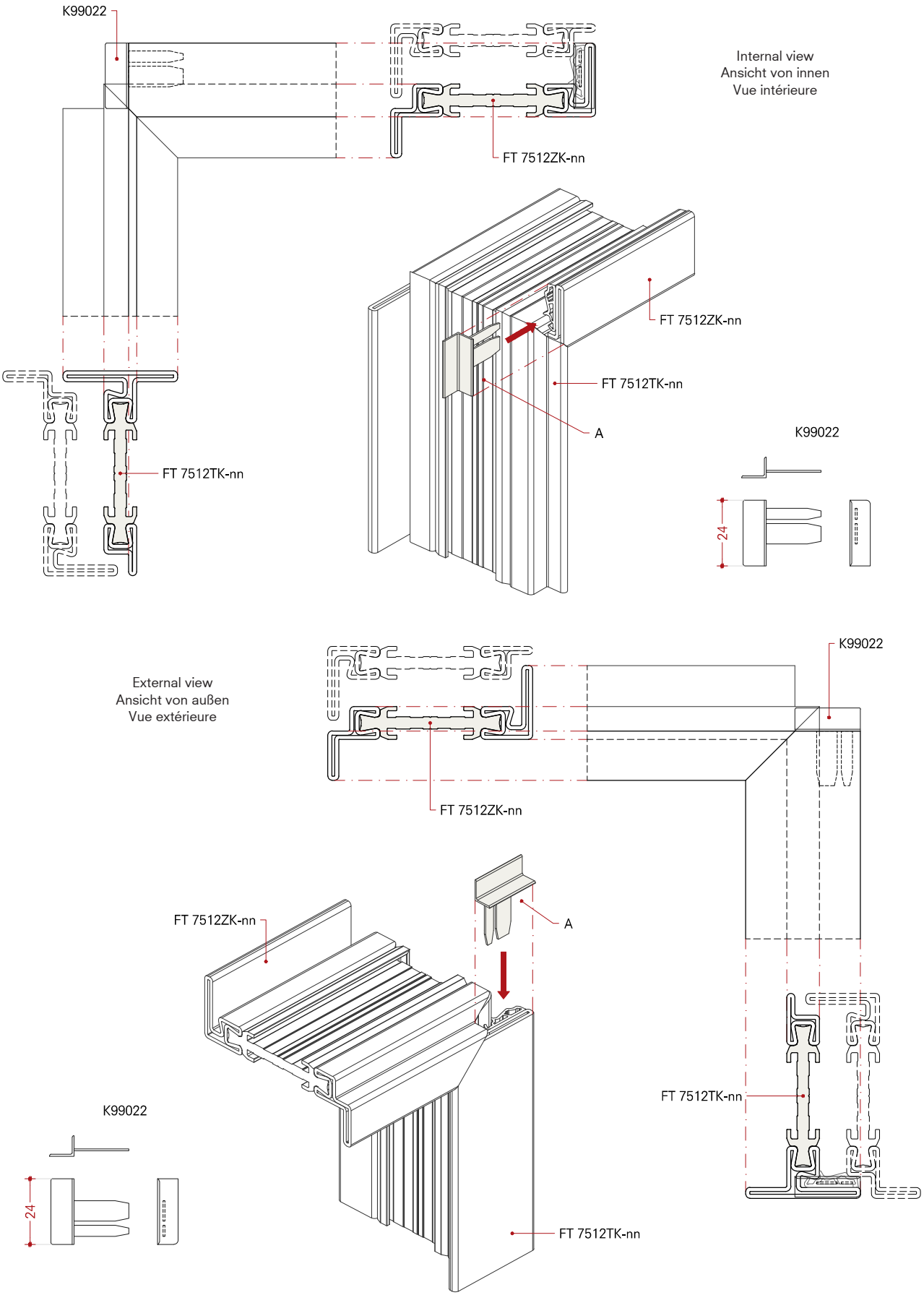
A) Cut outs

CL = Zuschnitt

A) Fräsung

CL = Longueur de coupe

A) Fraisages



A) Provide sealant for thin joints also on surfaces in support of K99022

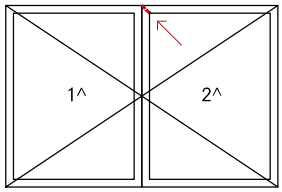
A) Dichtmittel für dünne Fugen auch auf Oberflächen zur Unterstützung von K99022 bereitstellen

A) Fournir un scellant pour les joints minces également sur les surfaces à l'appui de K99022

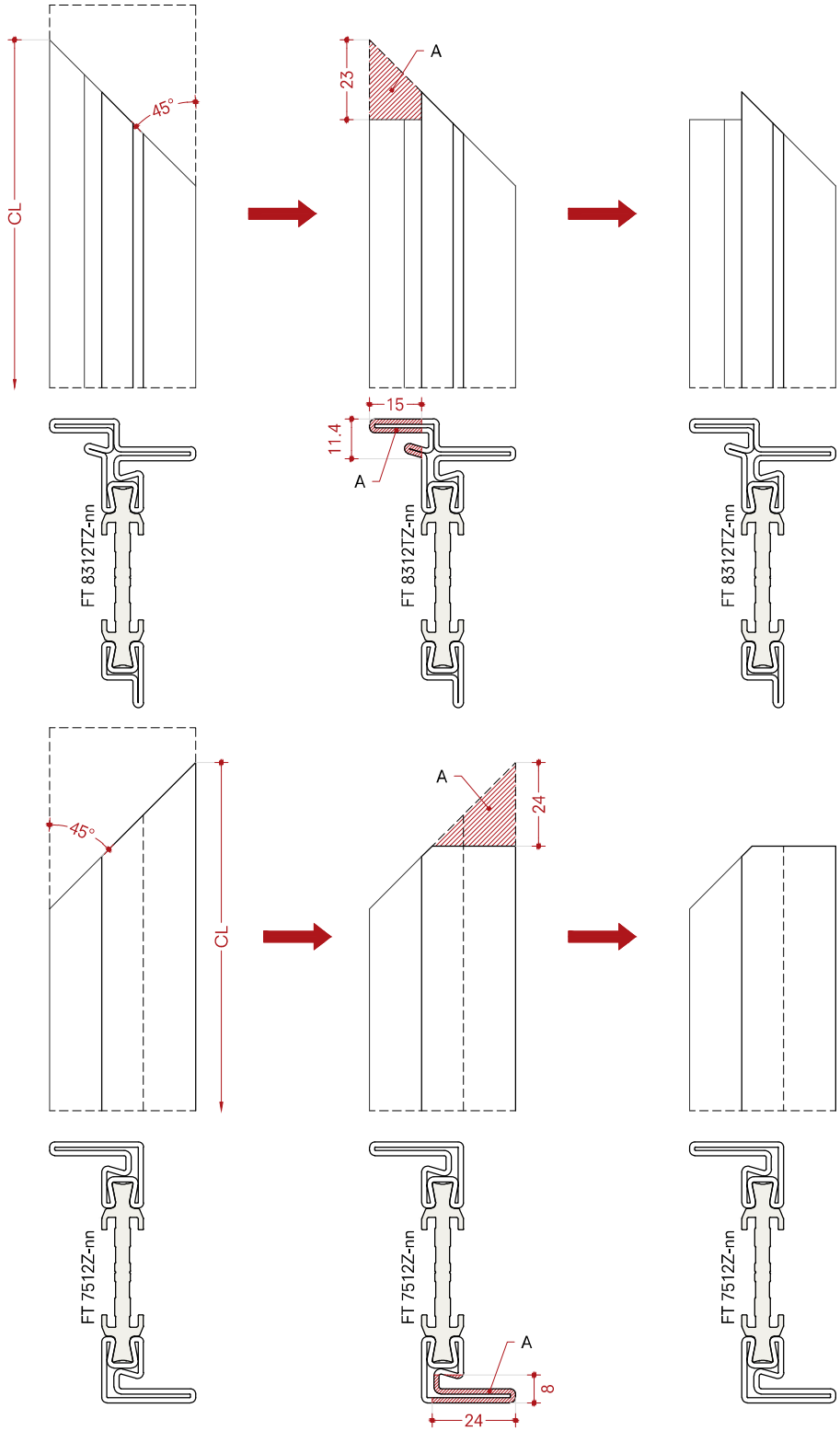
Profile processing
FT 8312TZ-nn + FT 7512Z-nn
Double leaf window
Open in
Overlapped profiles

Profilbearbeitung
FT 8312TZ-nn + FT 7512Z-nn
Zweiflüglige Fenster
Nach innen öffnend
Überlappende profile

Usinages des profilés
FT 8312TZ-nn + FT 7512Z-nn
Fenêtre à deux vantaux
Ouverture intérieure
Profilés superposés



Internal view
Ansicht von innen
Vue intérieure



CL = Cutting length

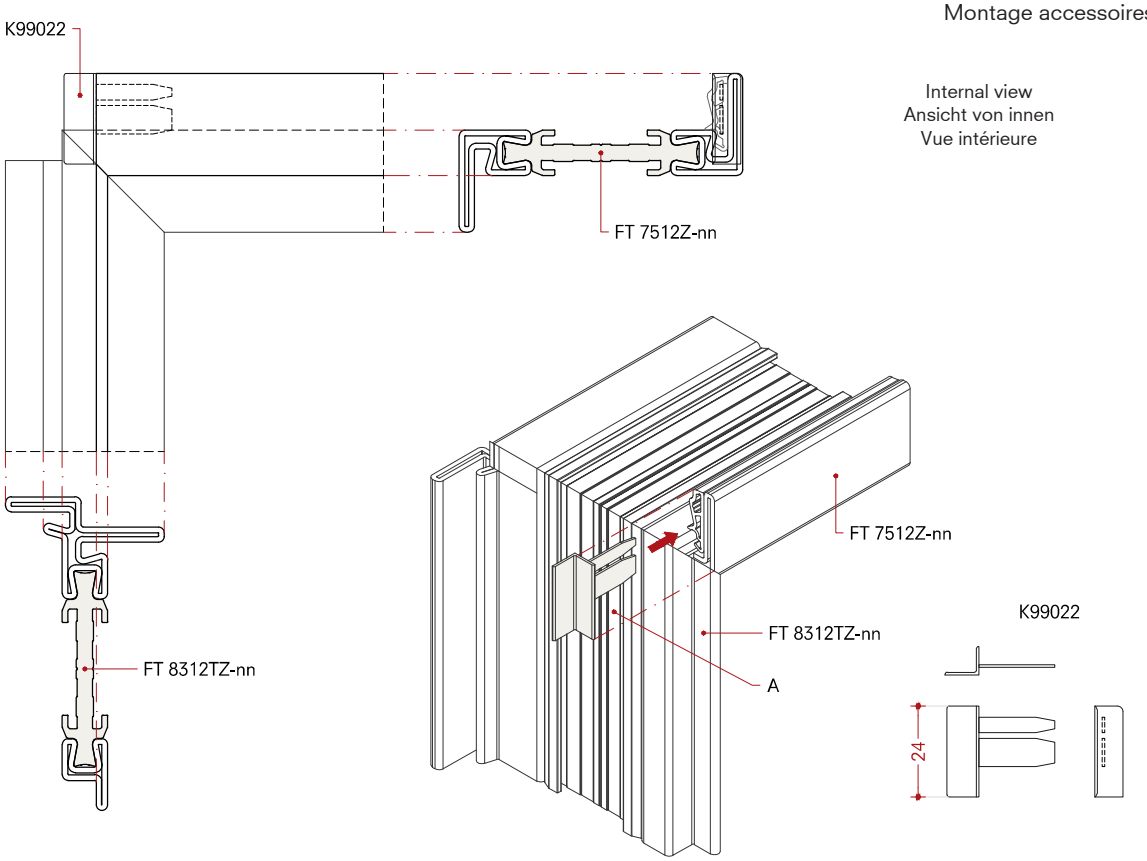
A) Cut outs

CL = Zuschnitt

A) Fräsung

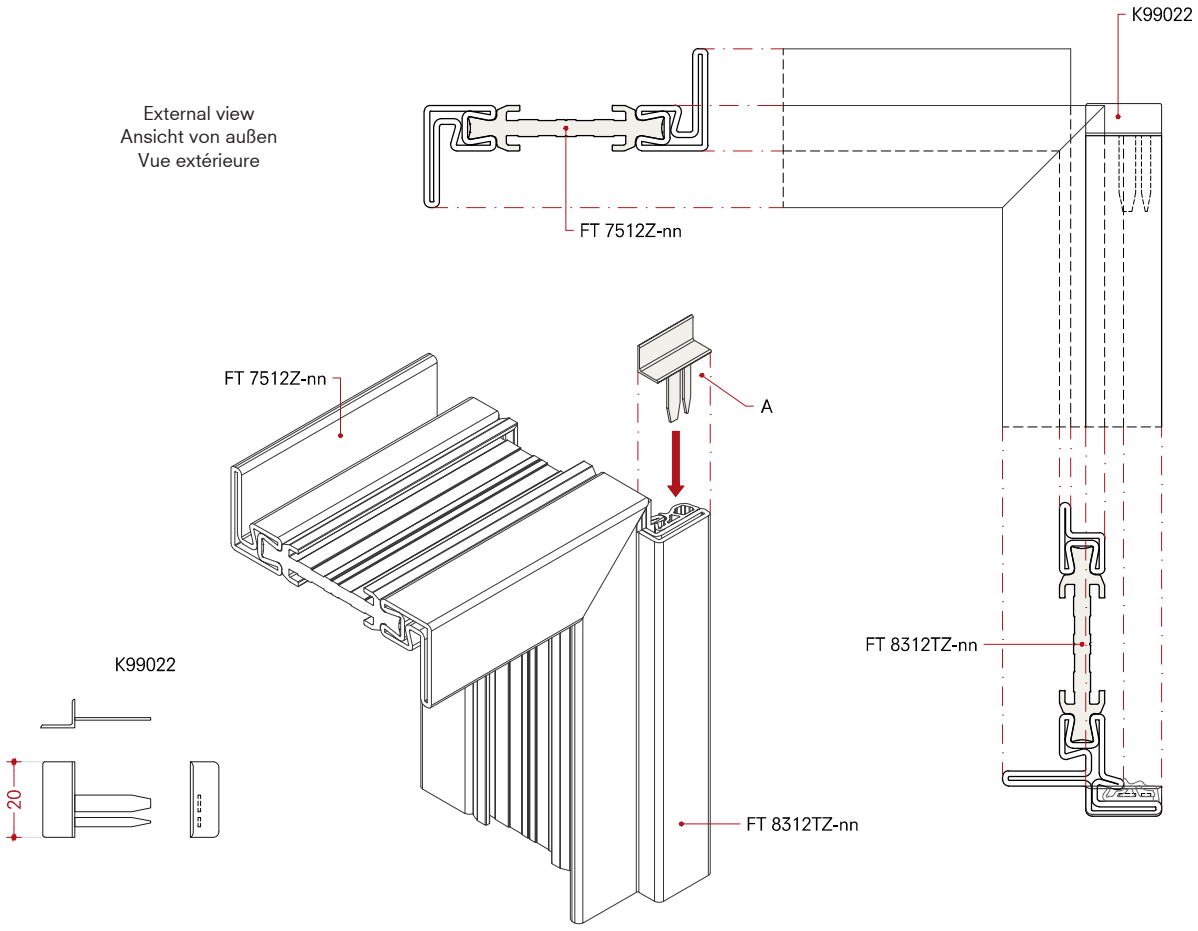
CL = Longueur de coupe

A) Fraisages



Internal view
Ansicht von innen
Vue intérieure

External view
Ansicht von außen
Vue extérieure



A) Provide sealant for thin joints also on surfaces in support of K99022

A) Dichtmittel für dünne Fugen auch auf Oberflächen zur Unterstützung von K99022 bereitstellen

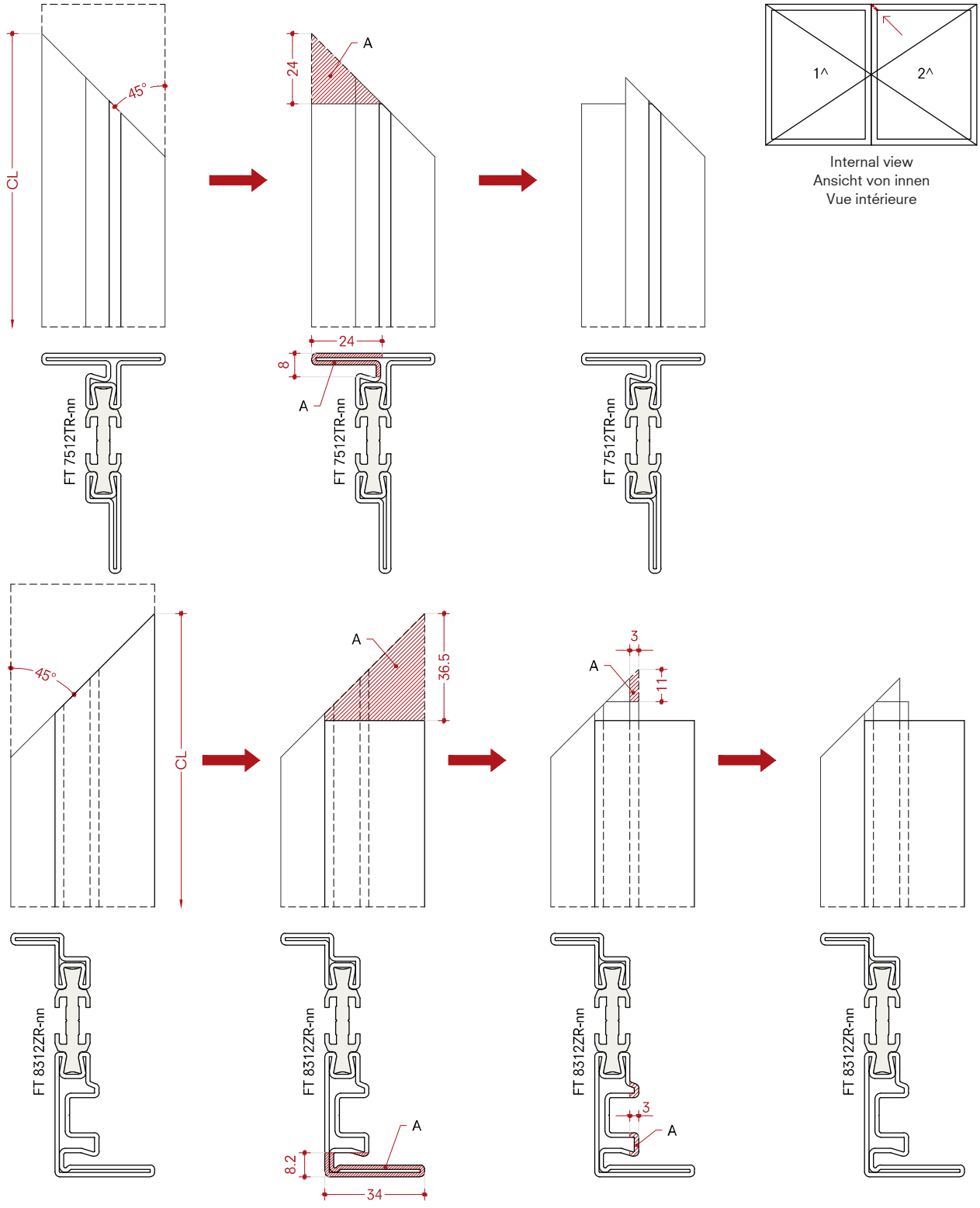
A) Fournir un scellant pour les joints minces également sur les surfaces à l'appui de K99022

Profile processing
FT 7512TR-nn + FT 8312ZR-nn
Double leaf window
Open in
Tilt&Turn window

Profilbearbeitung
FT 7512TR-nn + FT 8312ZR-nn
Zweiflüglige Fenster
Nach innen öffnend
Kipp-Fenster

Usinages des profilés
FT 7512TR-nn + FT 8312ZR-nn
Fenêtre à deux vantaux
Ouverture intérieure
Fênetre oscillo-battant

Internal view
Ansicht von innen
Vue intérieure



CL = Cutting length

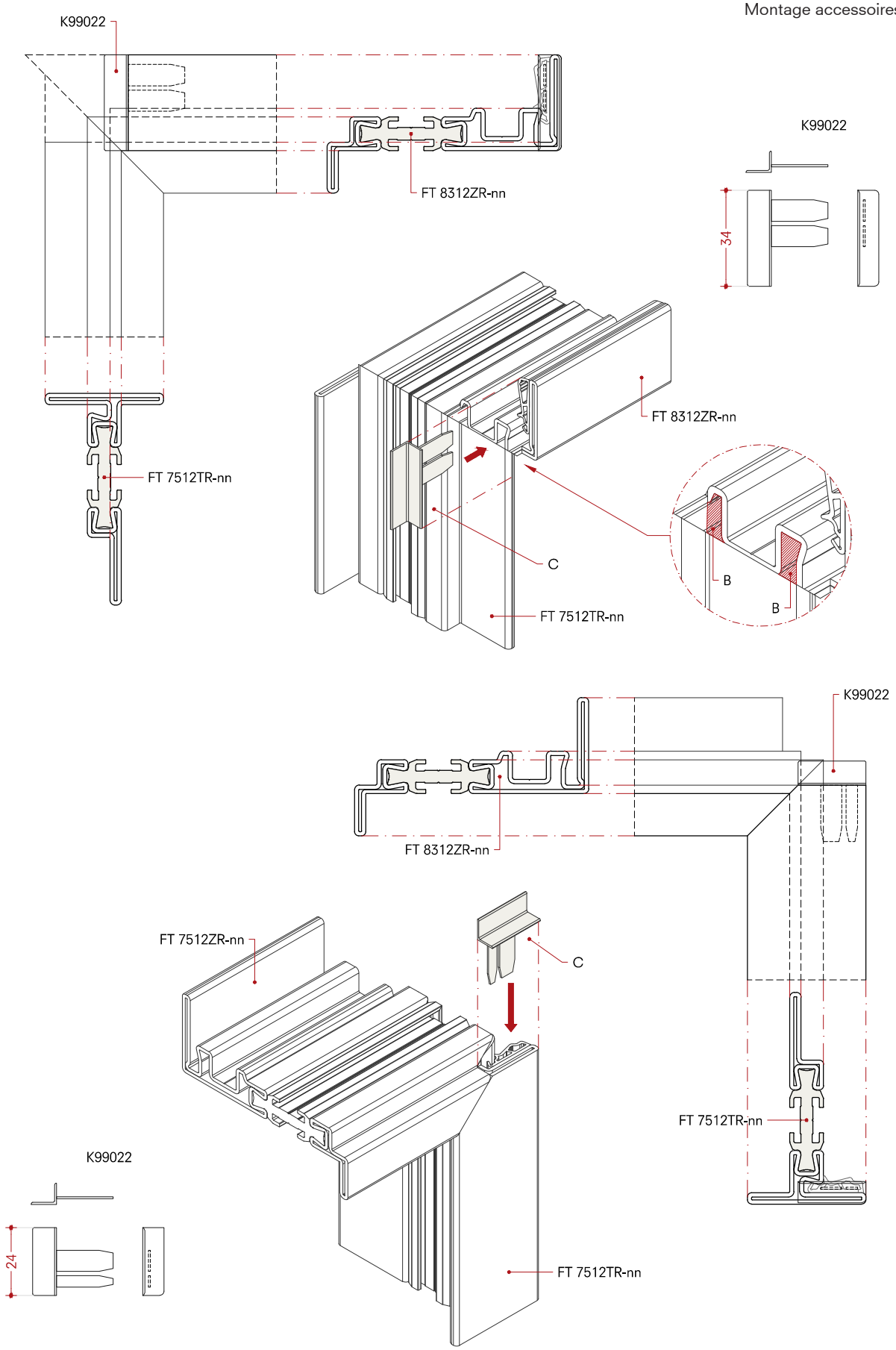
A) Cut outs

CL = Zuschnitt

A) Fräsung

CL = Longueur de coupe

A) Fraisages



B) Sealant at corners
C) Provide sealant for thin joints also on surfaces in support of K99022

B) Dichtstoff an den ecken
C) Dichtmittel für dünne Fugen auch auf Oberflächen zur Unterstützung von K99022 bereitstellen

B) Silicon aux coins
C) Fournir un scellant pour les joints minces également sur les surfaces à l'appui de K99022

Installation
Weather bar A99001-00
Open in
Single-leaf and double-leaf windows

Installation only for galvanized steel (-02) and bright steel (-12) profiles

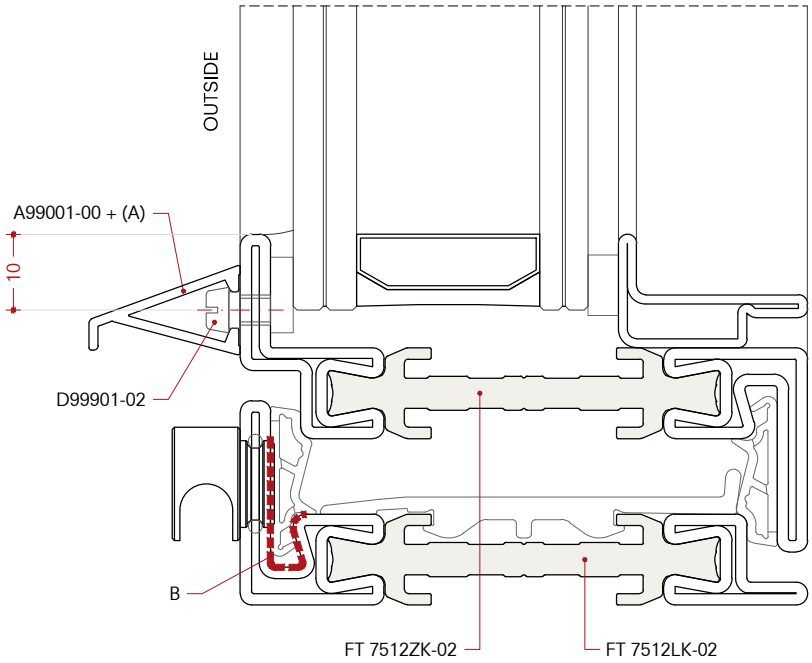
Einbau
Wetterschenkel A99001-00
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Anwendung nur für stahl bandverzinkt (-02) und stahl blank (-12) profilen

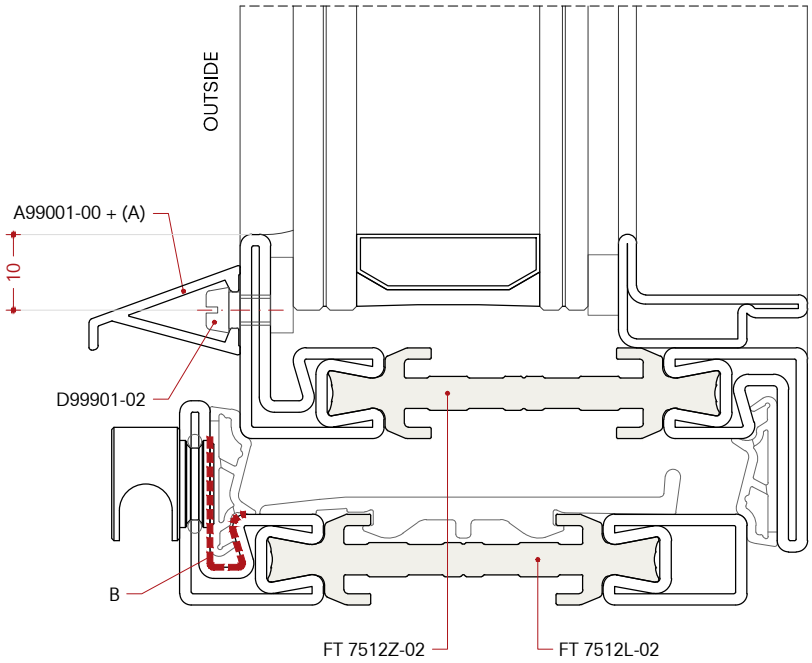
Schéma de montage
Renvoi d'eau A99001-00
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux

Montage solement sur profilés dans acier galvanisé (-02) et acier décapé (-12)

Flush profiles
Flächenbündige profile
Profilés coplanaires



Overlapped profiles
Überlappende profile
Profilés superposés



A) Cut the screw
B) Sealant

A) Schraube kürzen
B) Dichtstoff

A) Couper la vis
B) Silicon

Installation
Weather bar A99001-00
Open in
Single-leaf and double-leaf windows

Installation only for galvanized steel (-02) and bright steel (-12) profiles

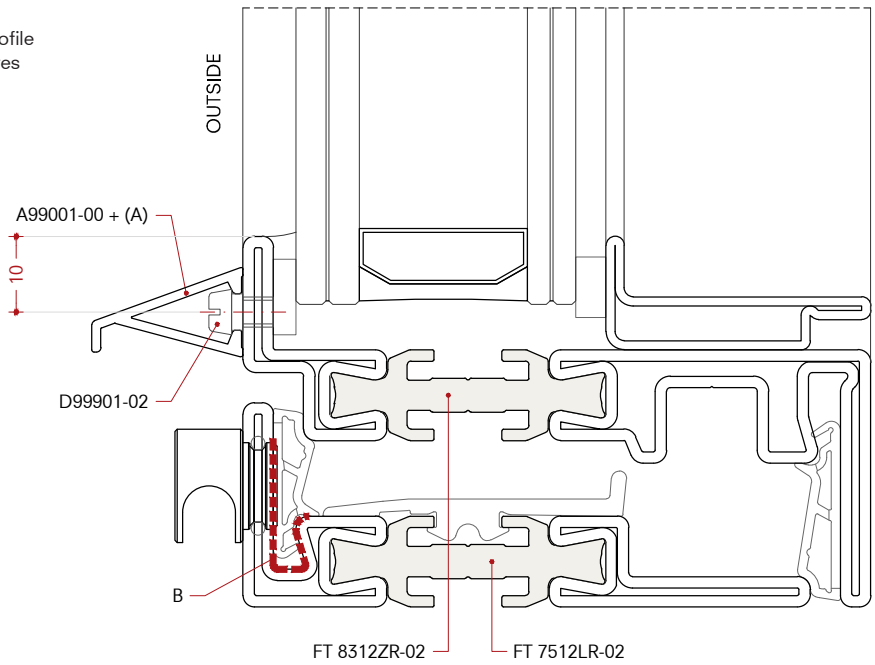
Einbau
Wetterschenkel A99001-00
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Anwendung nur für stahl bandverzinkt (-02) und stahl blank (-12) profilen

Schéma de montage
Renvoi d'eau A99001-00
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux

Montage solement sur profilés dans acier galvanisé (-02) et acier décapé (-12)

Flush profiles
Flächenbündige profile
Profilés coplanaires



A) Cut the screw
B) Sealant

A) Schraube kürzen
B) Dichtstoff

A) Couper la vis
B) Silicon

Installation
Weather bar A99001-00
Open in
Single-leaf and double-leaf windows

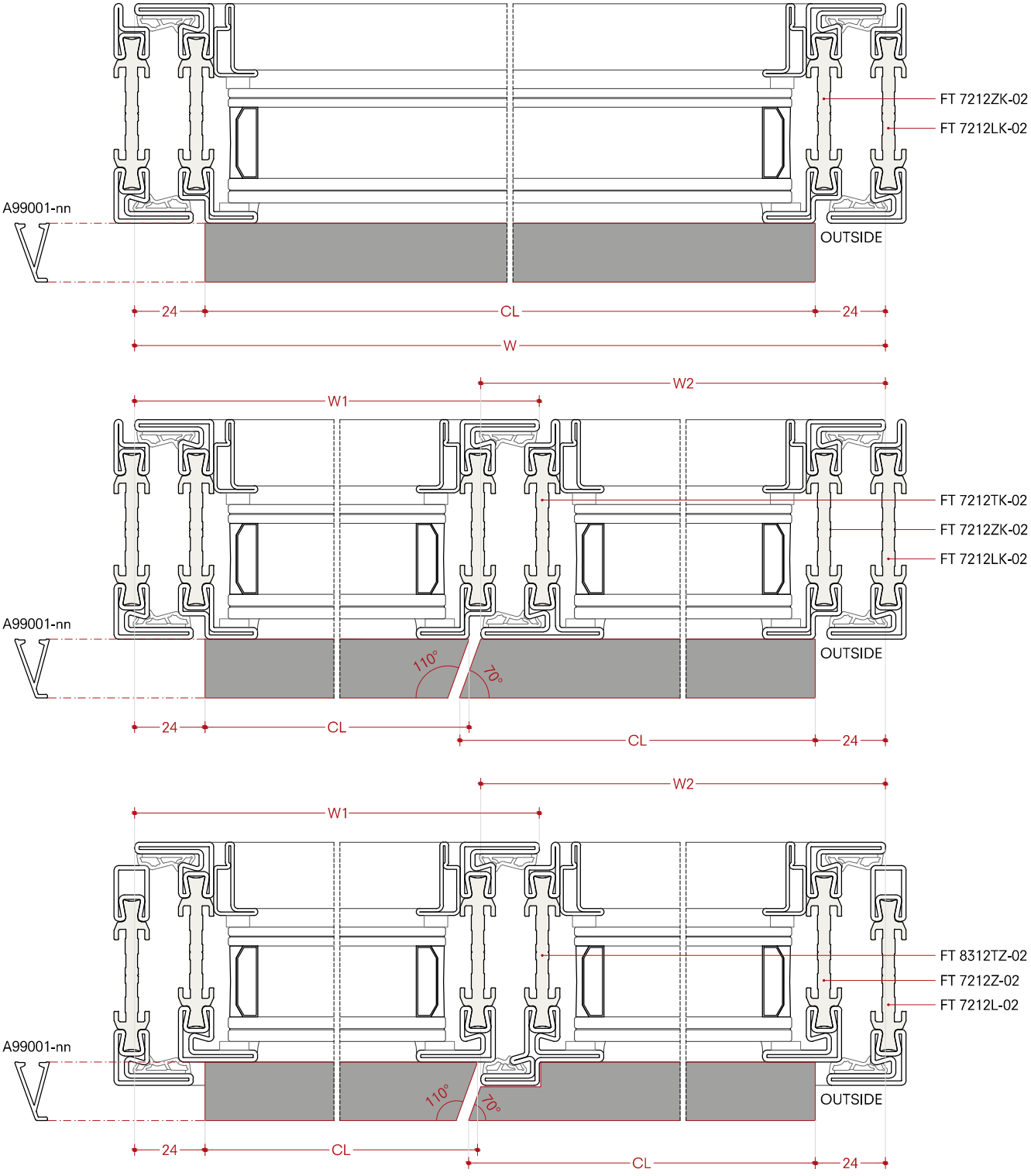
Installation only for galvanized steel (-02) and bright steel (-12) profiles

Einbau
Wetterschenkel A99001-00
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Anwendung nur für stahl bandverzinkt (-02) und stahl blank (-12) profilen

Schéma de montage
Renvoi d'eau A99001-00
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux

Montage solement sur profilés dans acier galvanisé (-02) et acier décapé (-12)

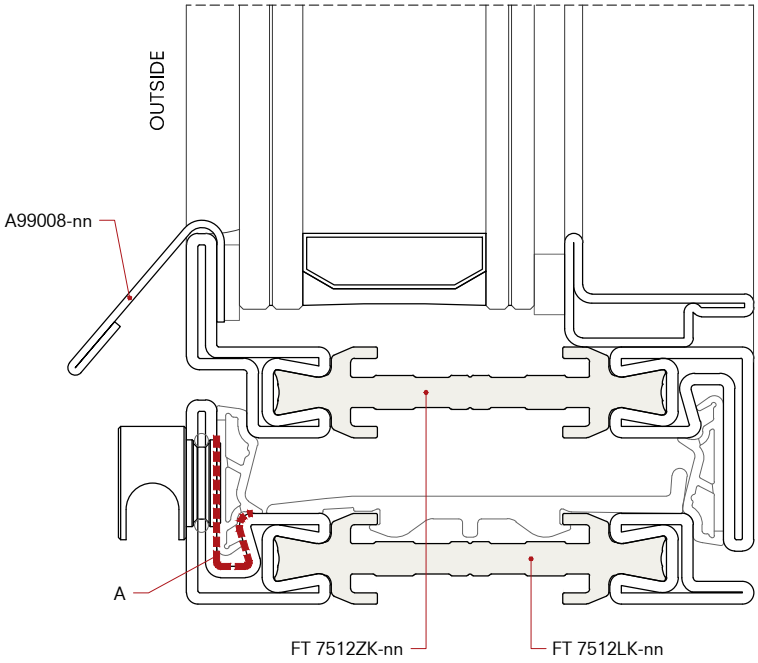


Installation
Weather bar A99008-nn
Open in
Single-leaf and double-leaf windows

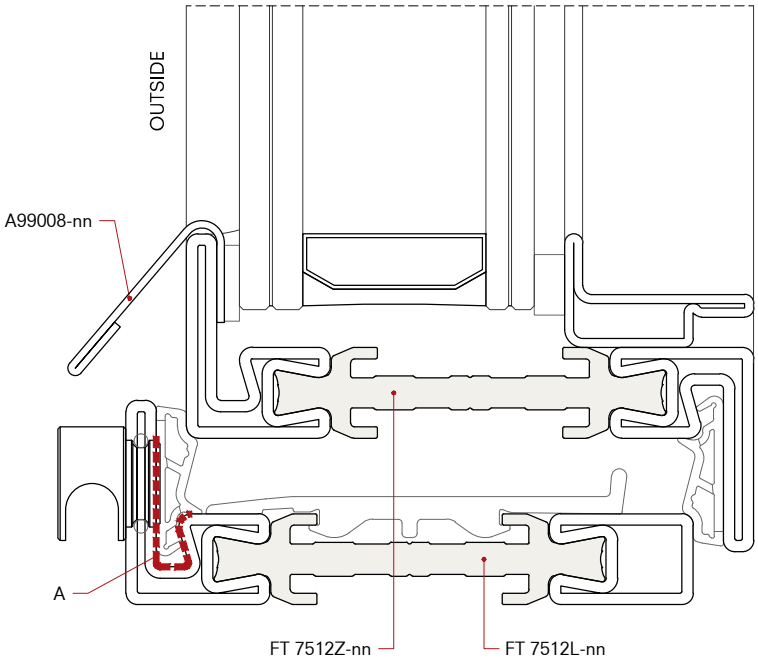
Einbau
Wetterschenkel A99008-nn
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Schéma de montage
Renvoi d'eau A99008-nn
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux

Flush profiles
Flächenbündige profile
Profilés coplanaires



Overlapped profiles
Überlappende profile
Profilés superposés

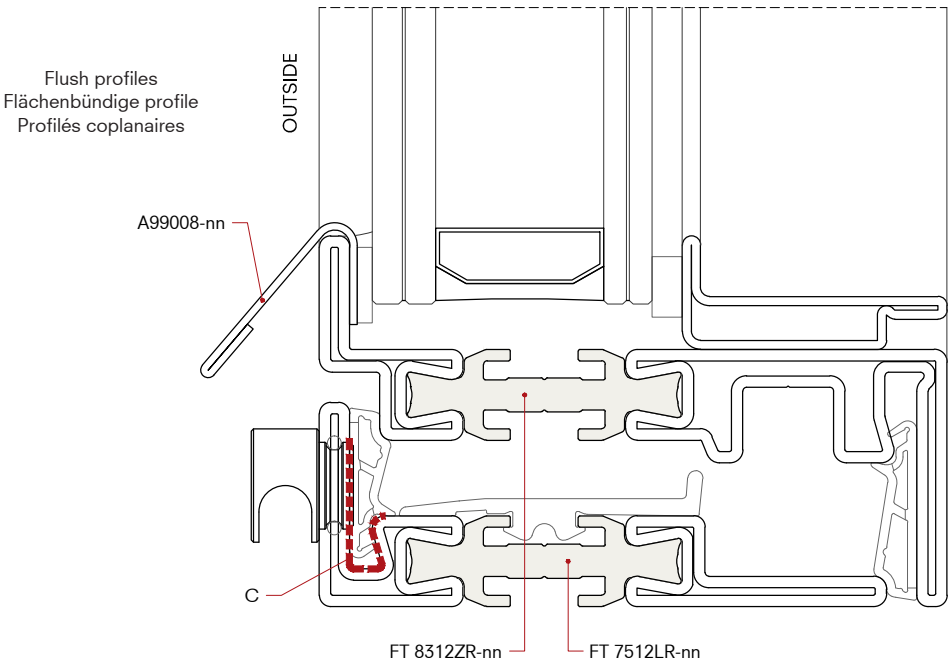


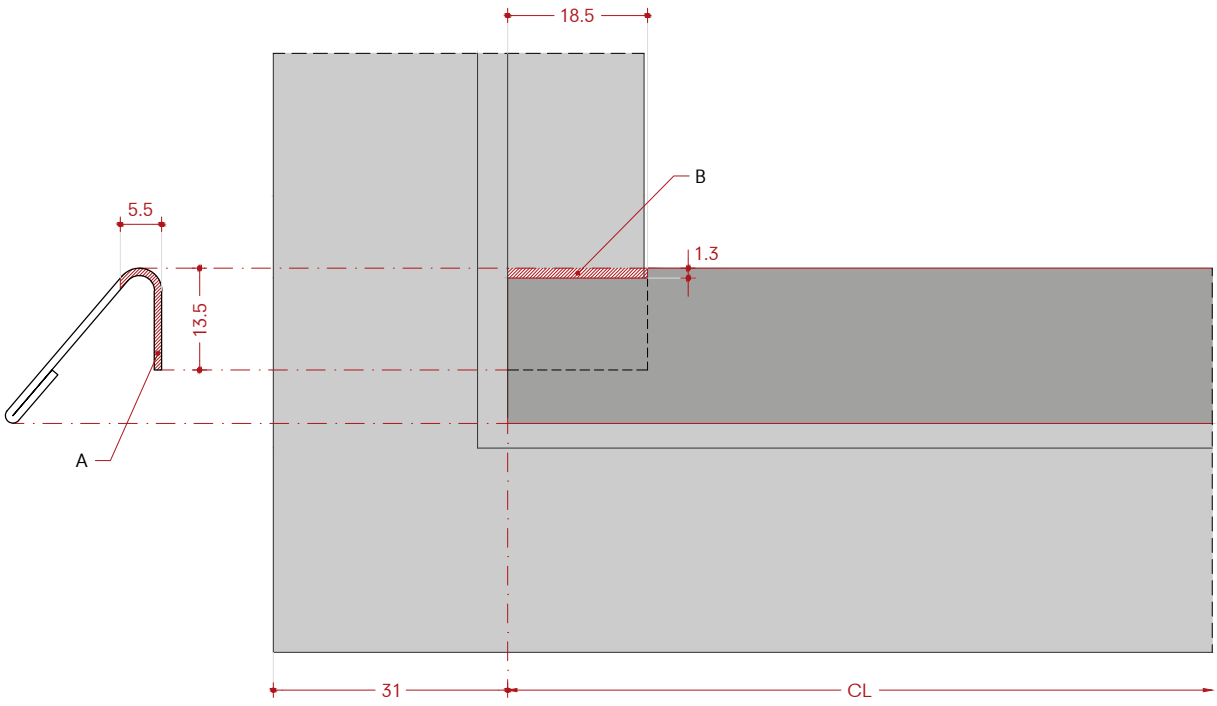
A) Sealant
A) Dichtstoff
A) Silicon

Installation
Weather bar A99008-nn
Open in
Single-leaf and double-leaf windows

Einbau
Wetterschenkel A99008-nn
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Schéma de montage
Renvoi d'eau A99008-nn
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux





CL = Cutting length

A) Cut out 5.5x13.5 mm
B) 18.5x1.3 mm cut out of weather bar A99008-nn
C) Sealant

CL = Zuschnitt

A) Fräsung 5.5x13.5 mm
B) Ausfräsung 18.5x1.3 mm Wetterschenkel A99008-nn
C) Dichtstoff

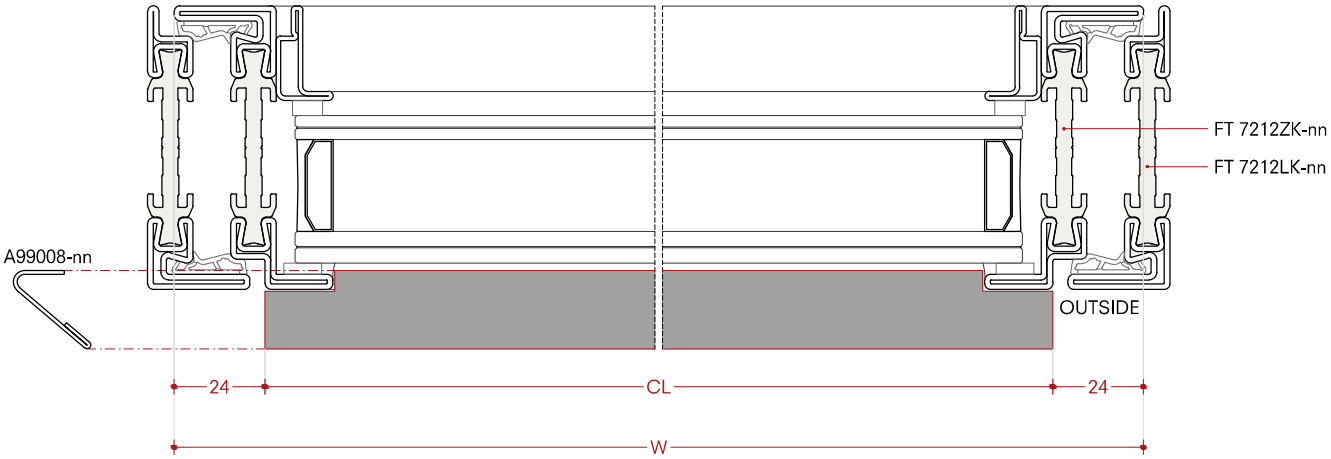
CL = Longueur de coupe

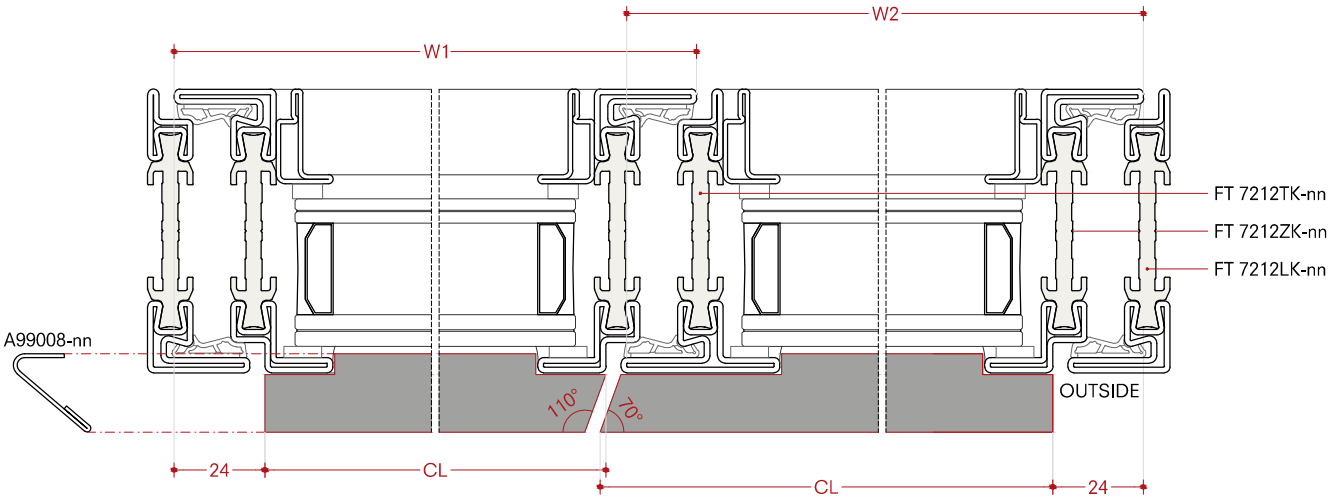
A) Fraisage 5.5x13.5 mm
B) Fraisage 18.5x1.3 mm sur renvoi d'eau A99008-nn
C) Silicon

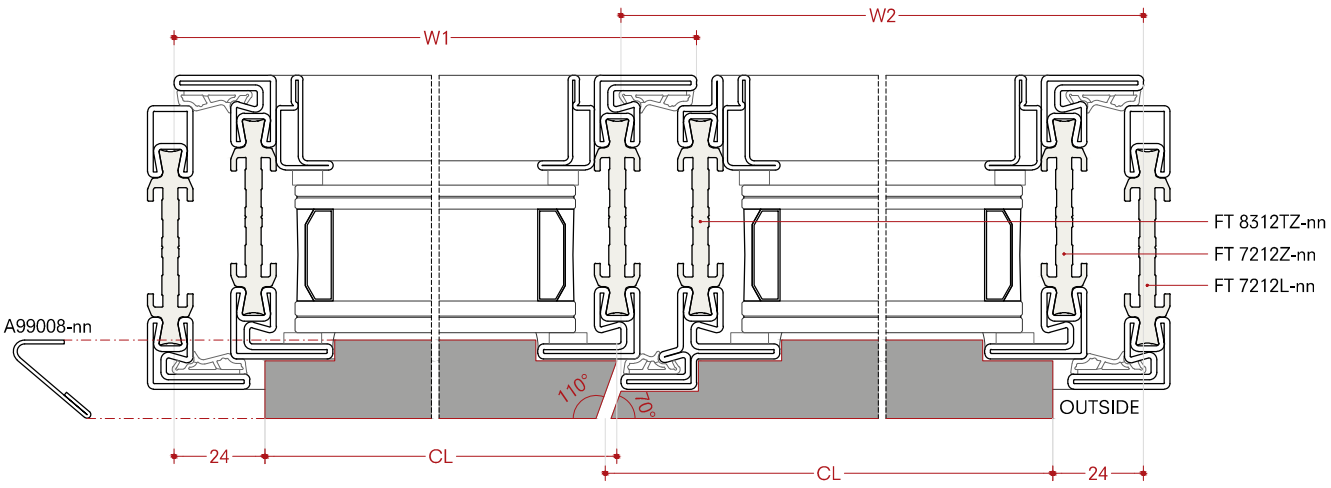
Installation
Weather bar A99008-nn
Open in
Single-leaf and double-leaf windows

Einbau
Wetterschenkel A99008-nn
Nach innen öffnend
Ein-und Zweiflüglige Fenster

Schéma de montage
Renvoi d'eau A99008-nn
Ouvrant vers l'intérieur
Fenêtres un et deux vantaux





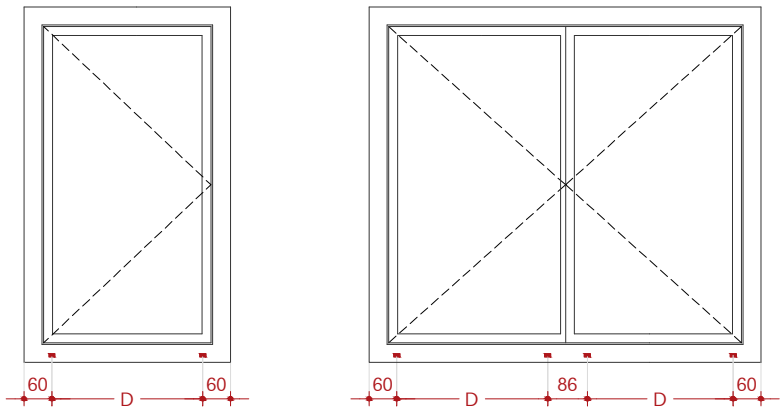


Assembling
Cover cap A99201-35
Open in
Flush profiles
Drain holes with cover caps.

Montage
Abdeckkappe A99201-35
Nach innen öffnend
Flächenbündige profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon A99201-35
Ouverture intérieure
Profilés coplanaires
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

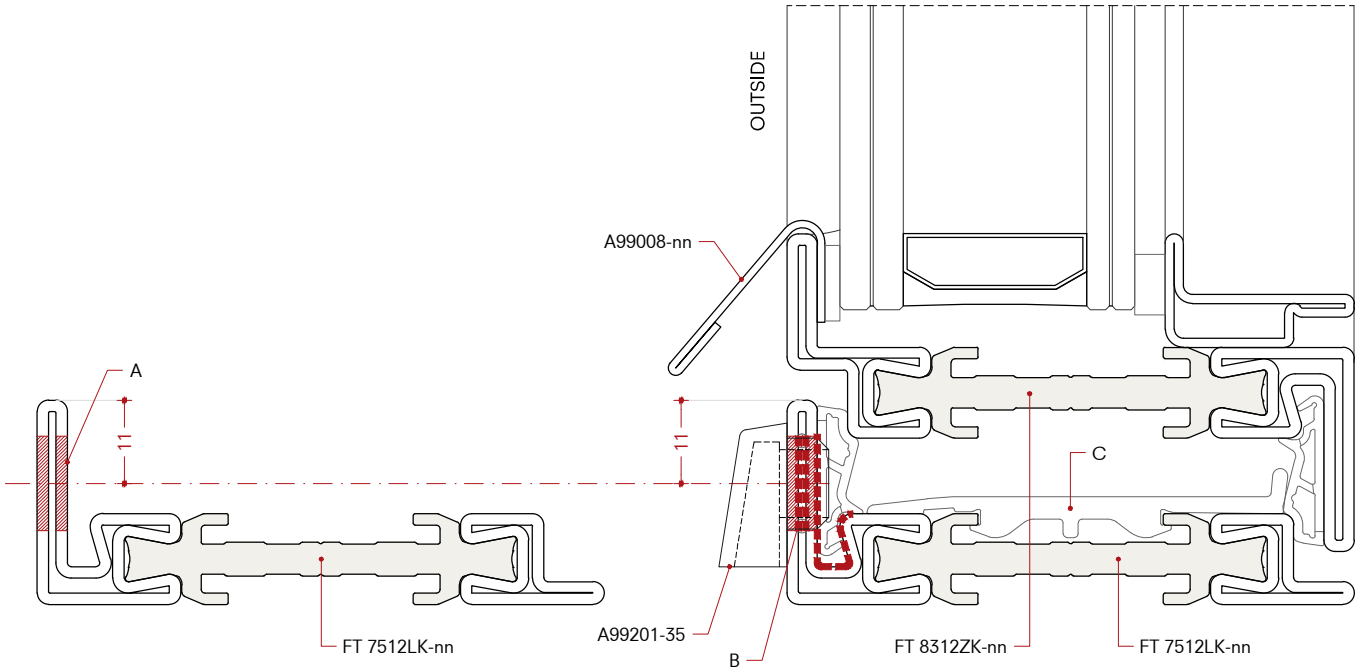
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

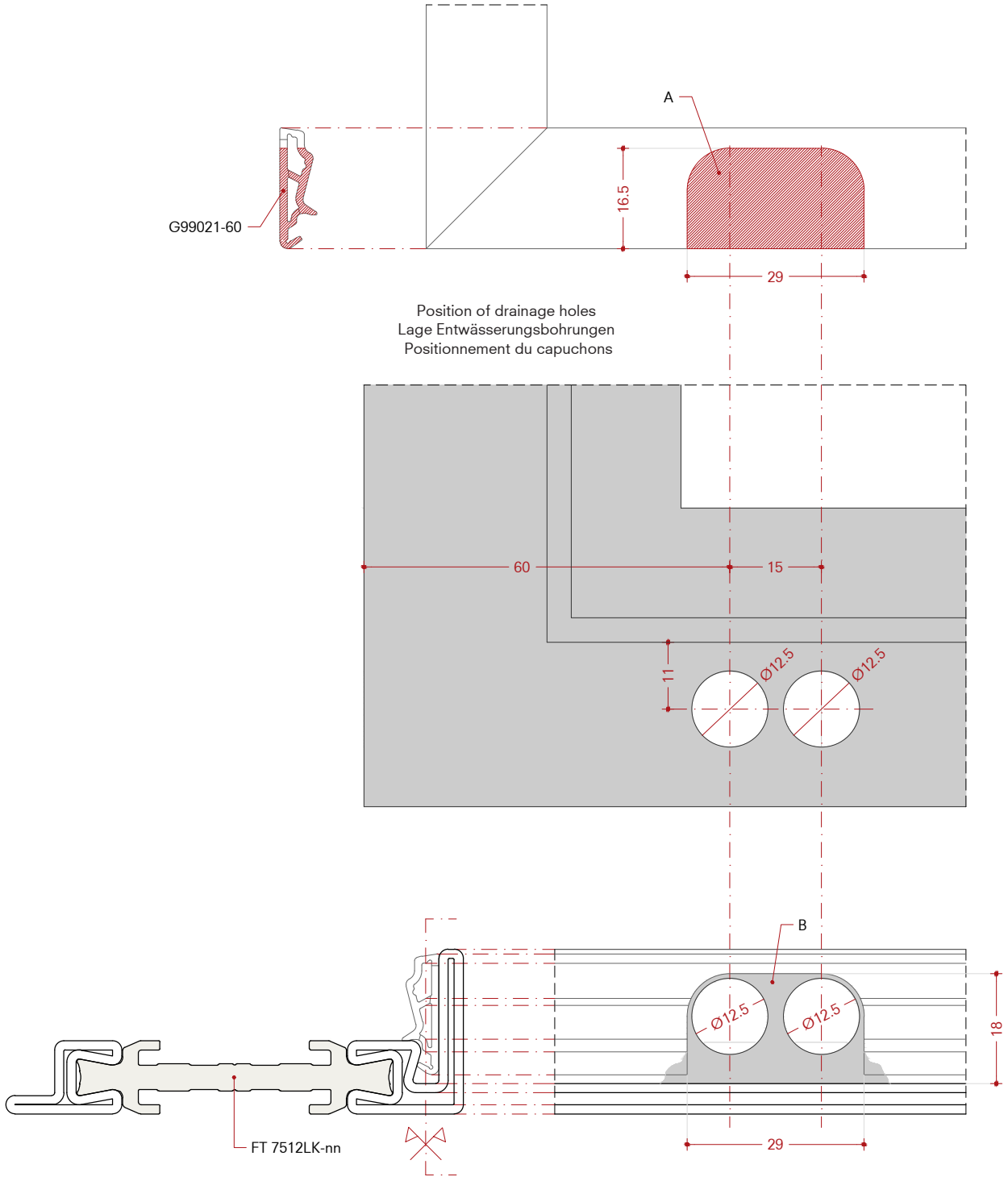
A) n°02 holes Ø12.5 mm frame profile
B) Sealing between cover cap and frame profile
C) G99313-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12.5 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99313-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12.5 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 29x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 29x16.5 mm bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

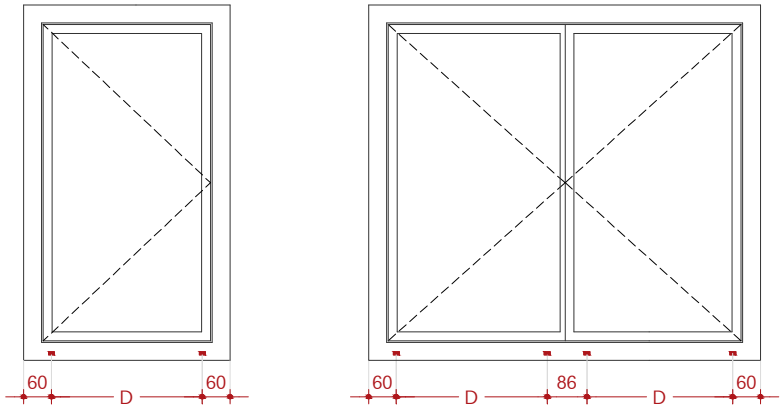
A) Fraisage 29x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Cover cap A99201-35
Open in
Overlapped profiles
Drain holes with cover caps.

Montage
Abdeckkappe A99201-35
Nach innen öffnend
Überlappende profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon A99201-35
Ouverture intérieure
Profilés superposés
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

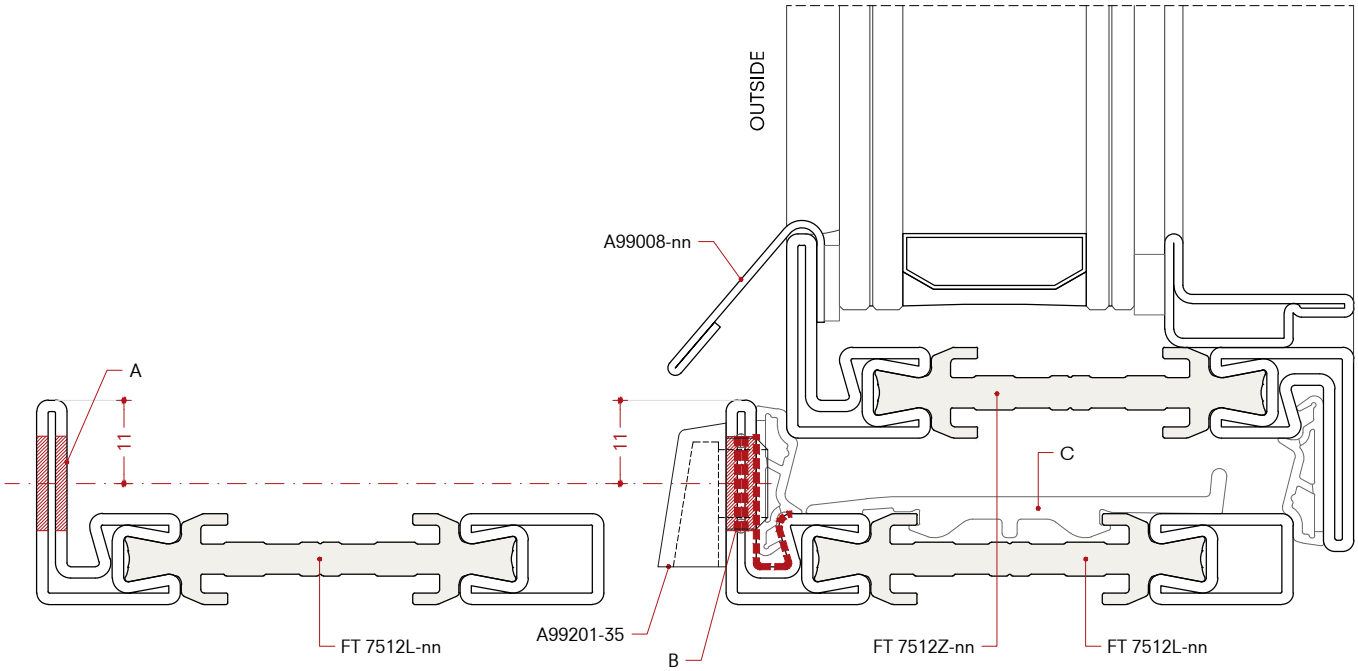
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

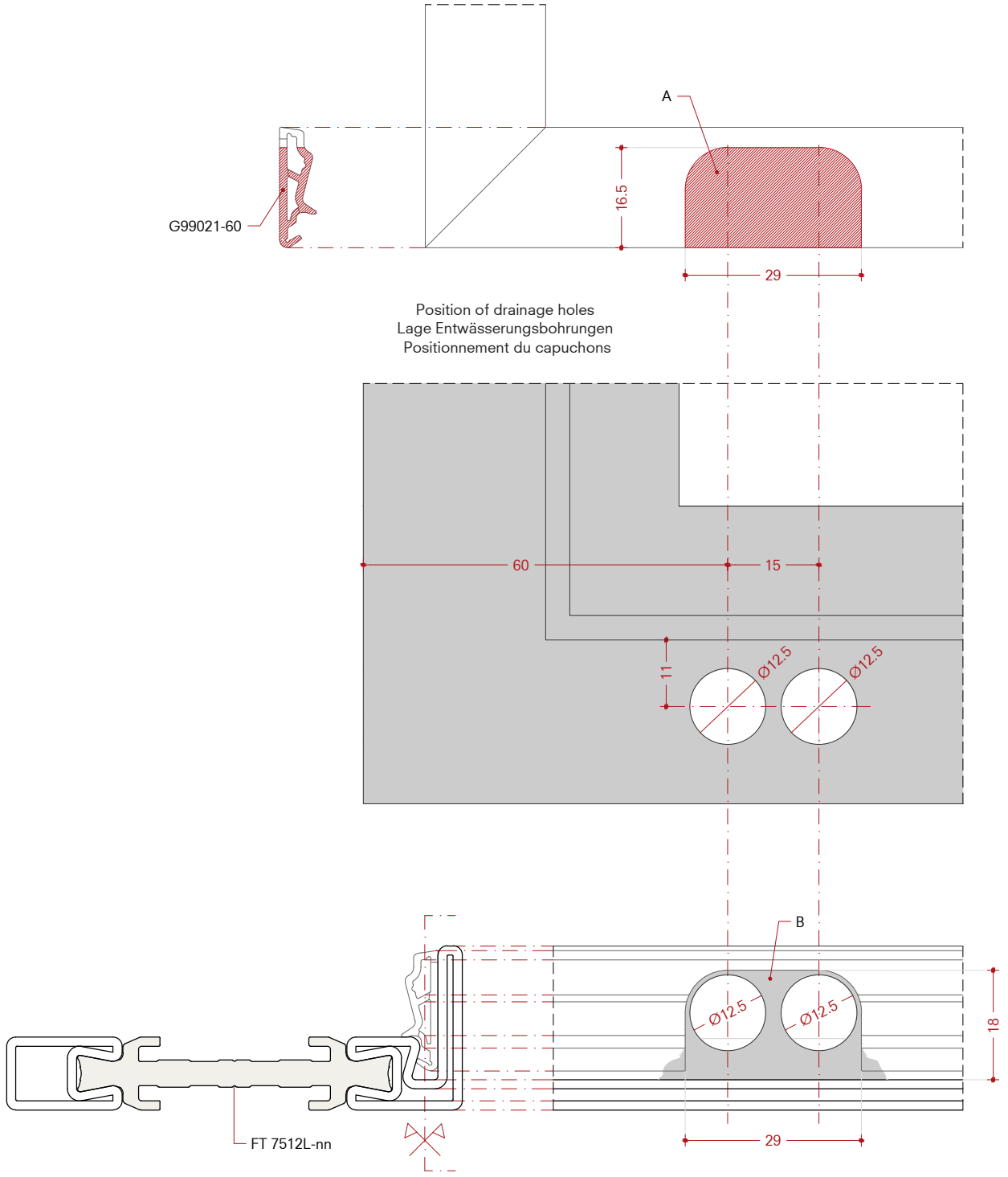
A) n°02 holes Ø12.5 mm frame profile
B) Sealing between cover cap and frame profile
C) G99313-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12.5 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99313-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12.5 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 29x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 29x16.5 mm bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

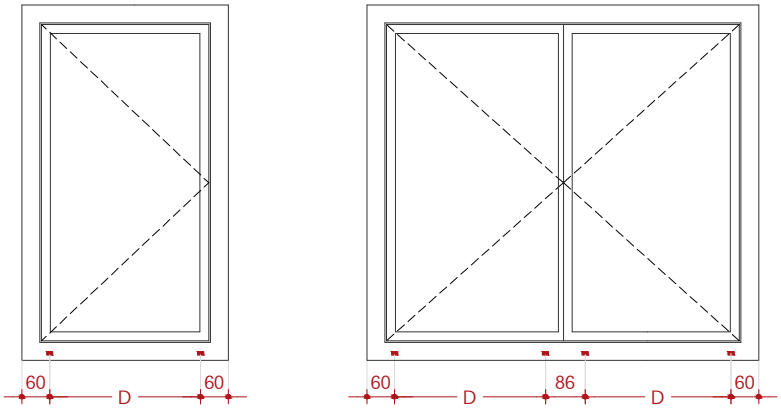
A) Fraisage 29x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Cover cap A99201-35
Open in
Flush profiles
Drain holes with cover caps.

Montage
Abdeckkappe A99201-35
Nach innen öffnend
Flächenbündige profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon A99201-35
Ouverture intérieure
Profilés coplanaires
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

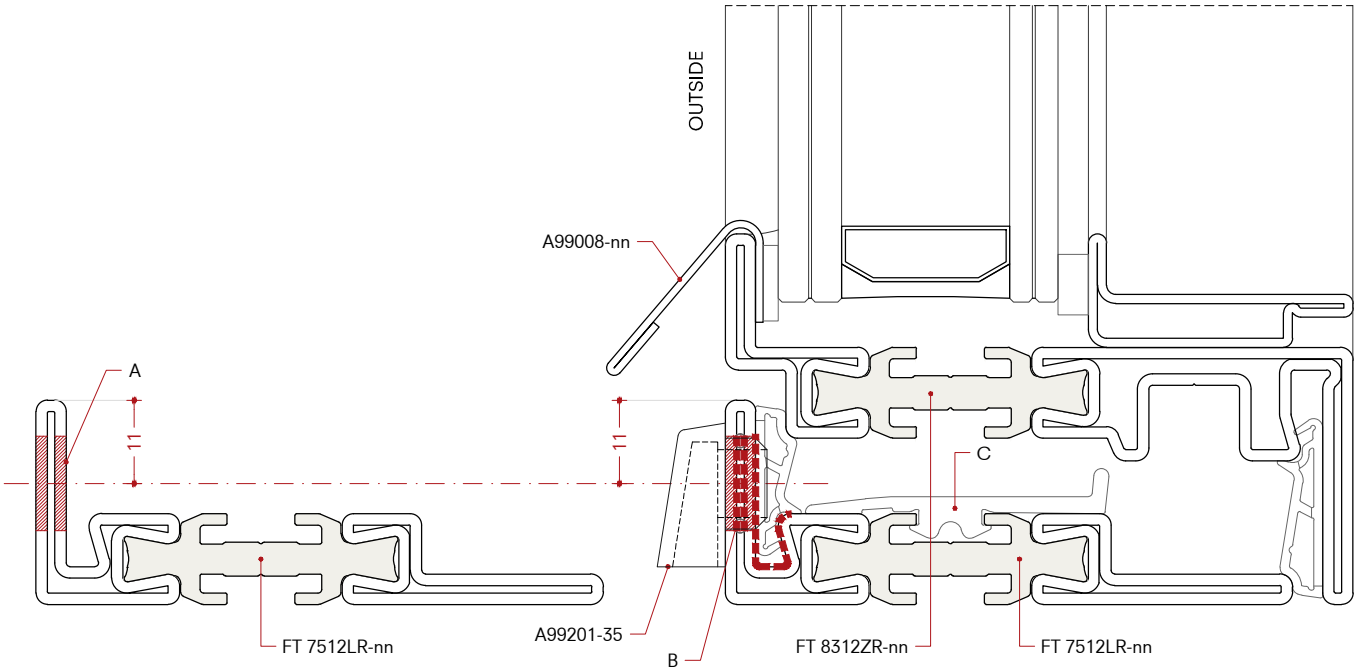
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

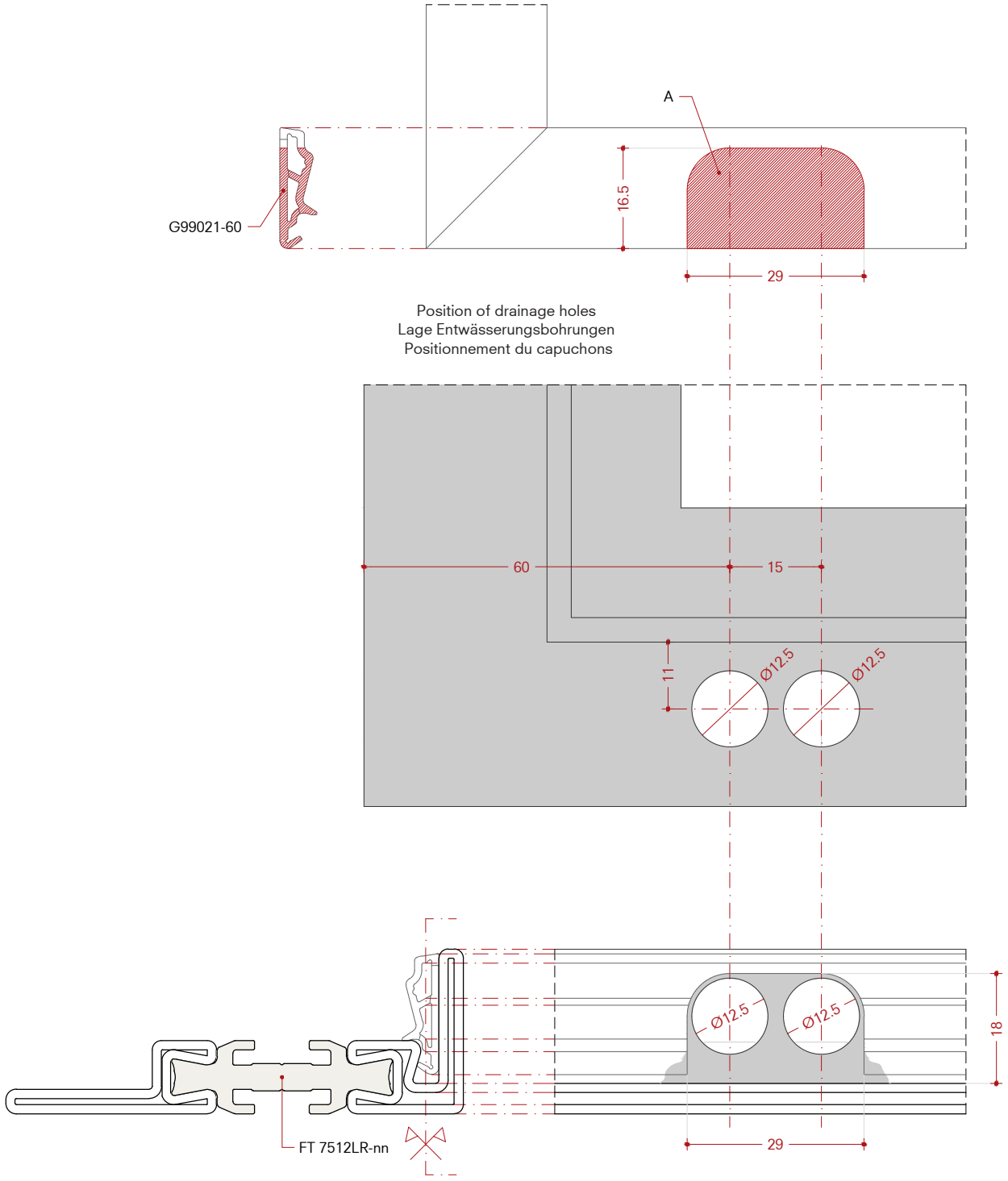
A) n°02 holes Ø12.5 mm frame profile
B) Sealing between cover cap and frame profile
C) G99312-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12.5 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99312-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12.5 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99312-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 29x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 29x16.5 mm bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

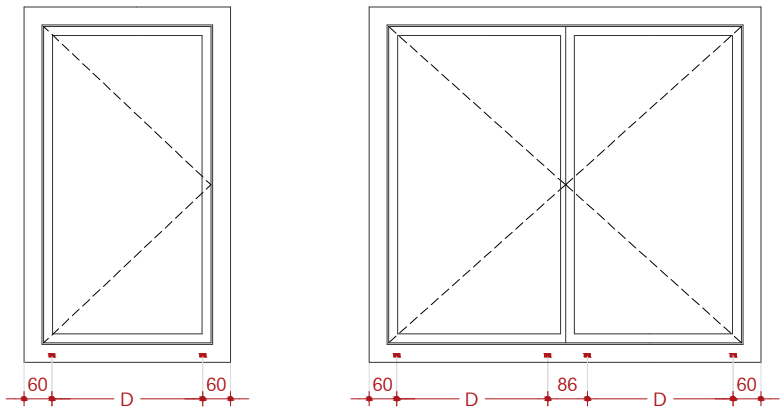
A) Fraisage 29x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Cover cap K99071
Open in
Flush profiles
Drain holes with cover caps.

Montage
Abdeckkappe K99071
Nach innen öffnend
Flächenbündige profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon K99071
Ouverture intérieure
Profilés coplanaires
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

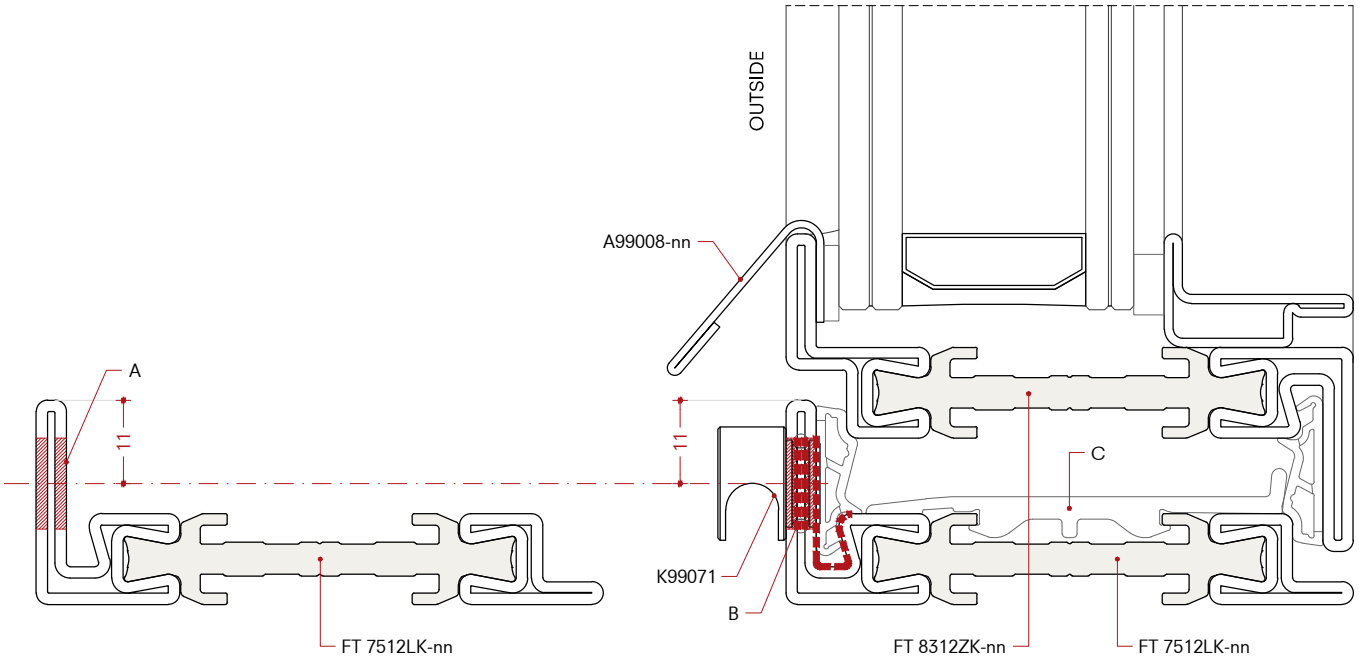
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

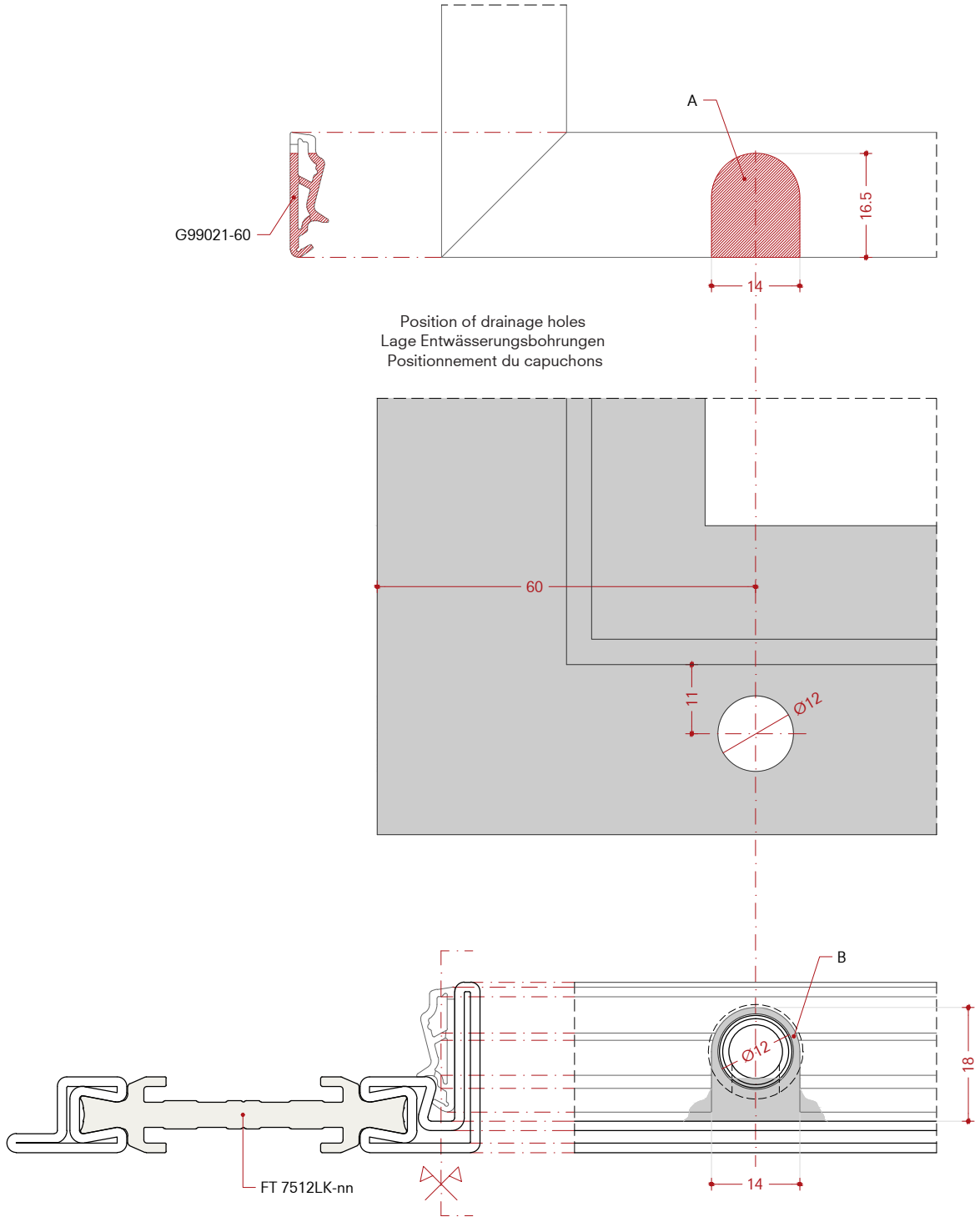
A) n°02 holes Ø12 mm frame profile
B) Sealing between cover cap and frame profile
C) G99313-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99313-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 14x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 14x16.5 mm bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

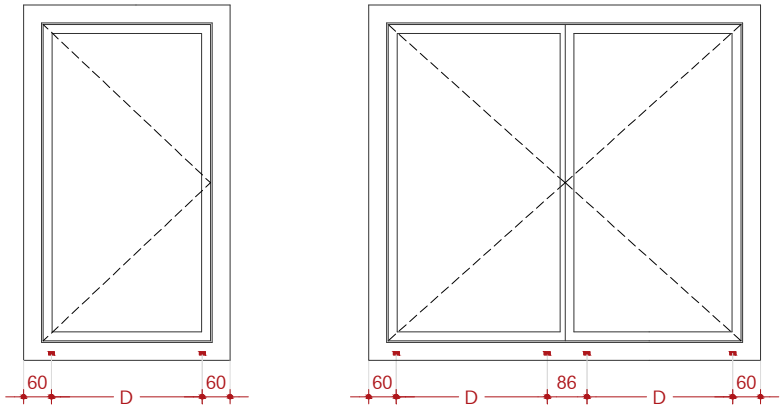
A) Fraisage 14x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Cover cap K99071
Open in
Overlapped profiles
Drain holes with cover caps.

Montage
Abdeckkappe K99071
Nach innen öffnend
Überlappende profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon K99071
Ouverture intérieure
Profilés superposés
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

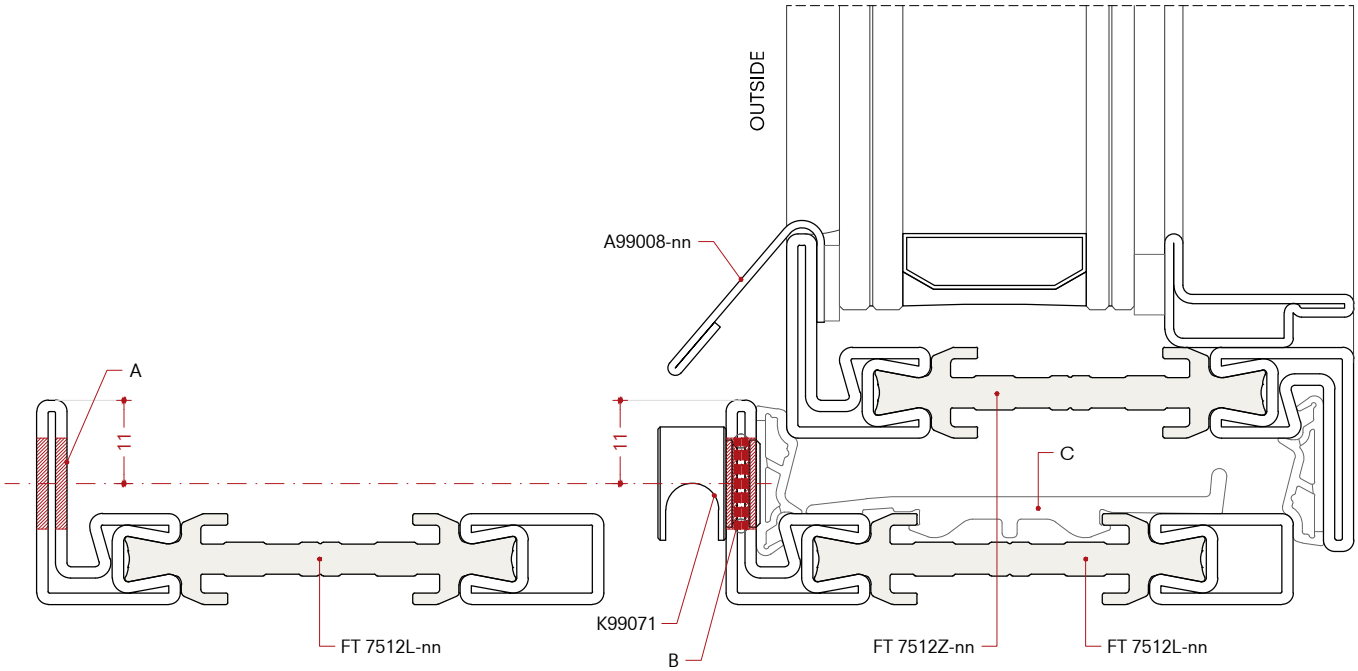
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

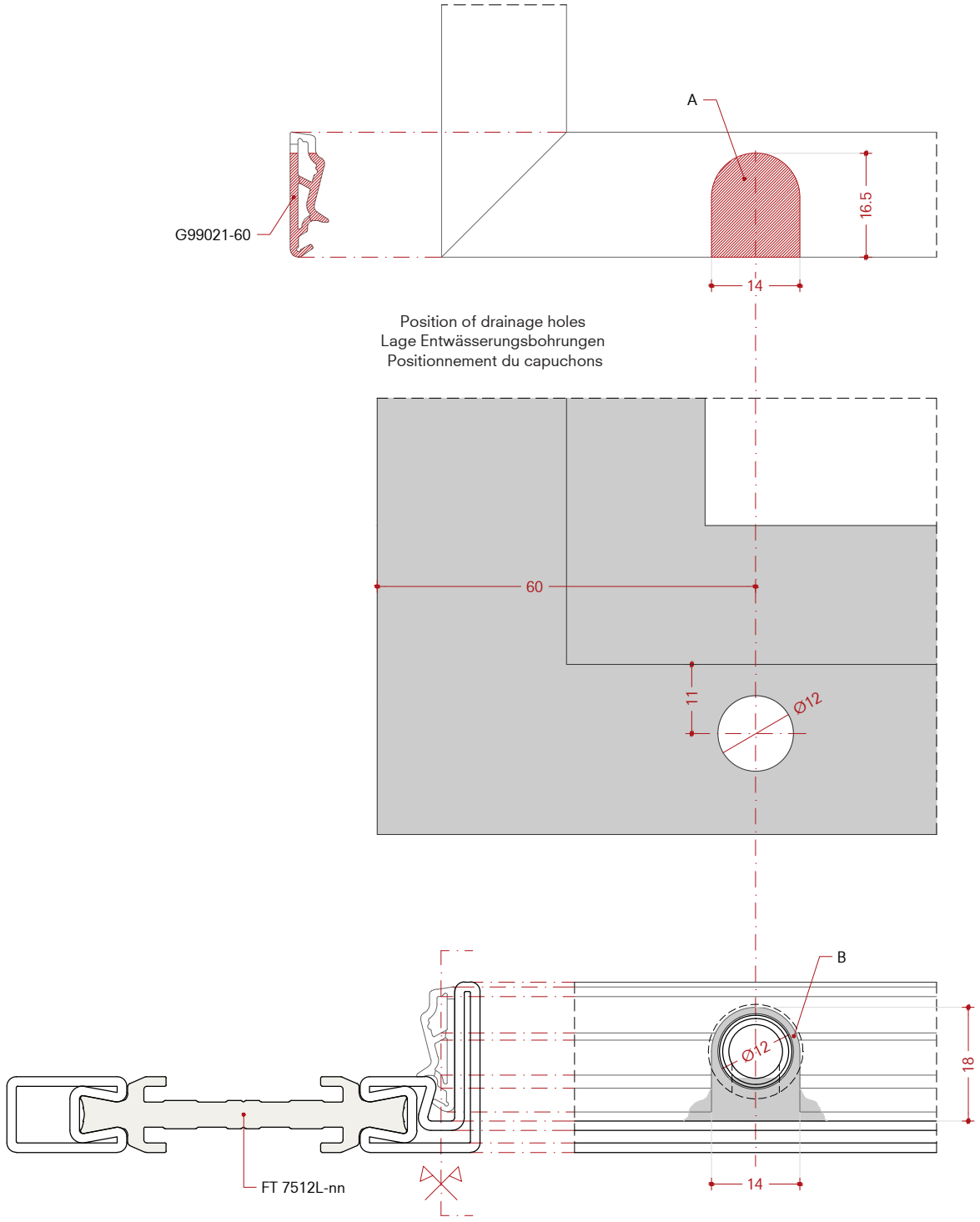
A) n°02 holes Ø12 mm frame profile
B) Sealing between cover cap and frame profile
C) G99313-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99313-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 14x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 14x16.5 mm bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

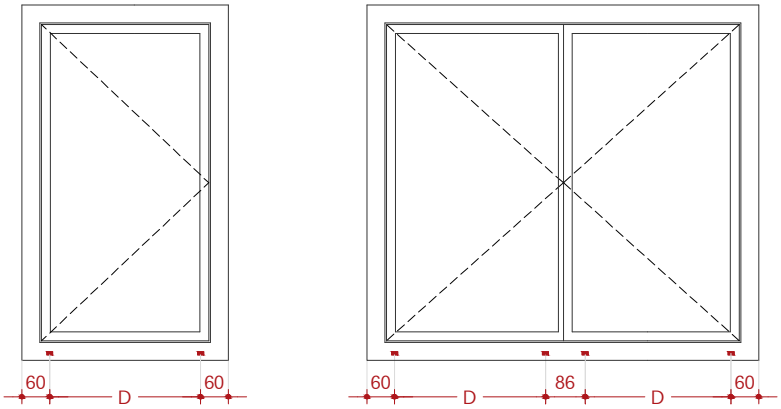
A) Fraisage 14x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Cover cap K99071
Open in
Flush profiles
Drain holes with cover caps.

Montage
Abdeckkappe K99071
Nach innen öffnend
Flächenbündige profile
Entwässerungsbohrungen mit abdeckkappen.

Schéma de montage
Capuchon K99071
Ouverture intérieure
Profilés coplanaires
Trous de drainage.

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes/cover caps
For single leaf window

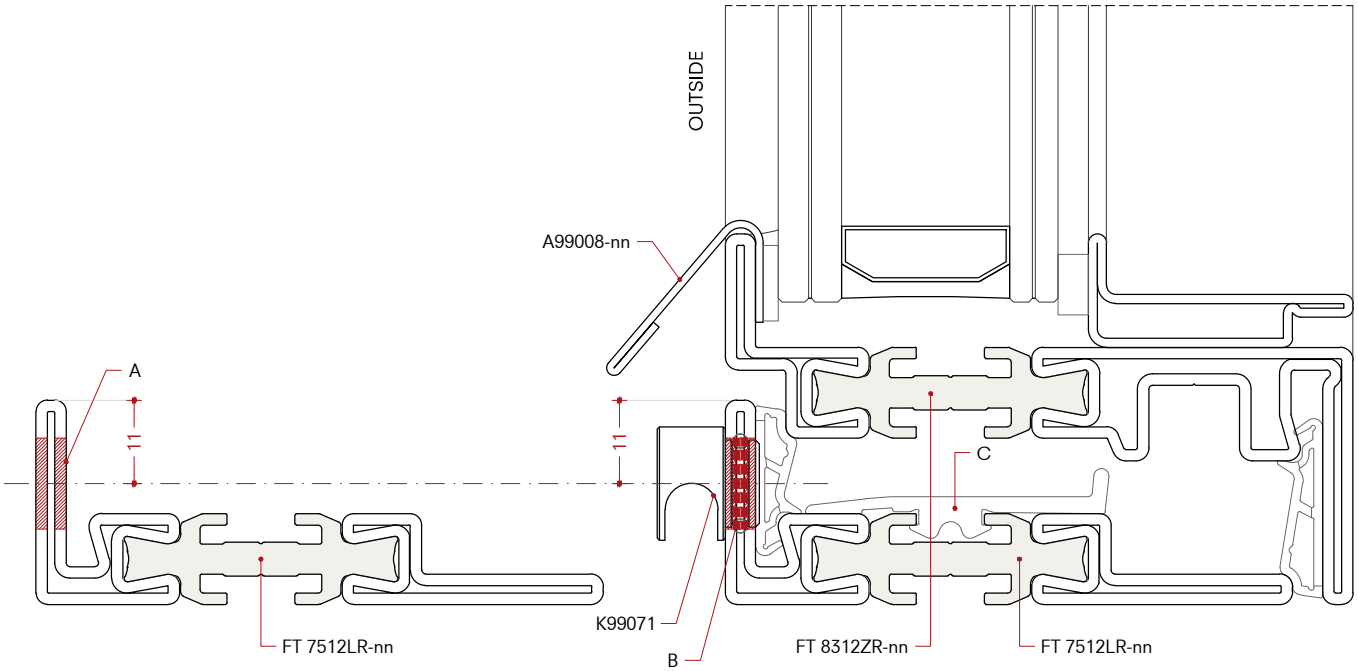
Min. n°04 drain holes/cover caps
For double leaf window

Mind 2x Entwässerungsbohrungen/
Abdeckkappe bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen/
Abdeckkappe bei zweiflügeligen Fenster

Installer n°02 trous/capuchons min.
Pour fenêtre à un vantail

Installer n°04 trous/capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

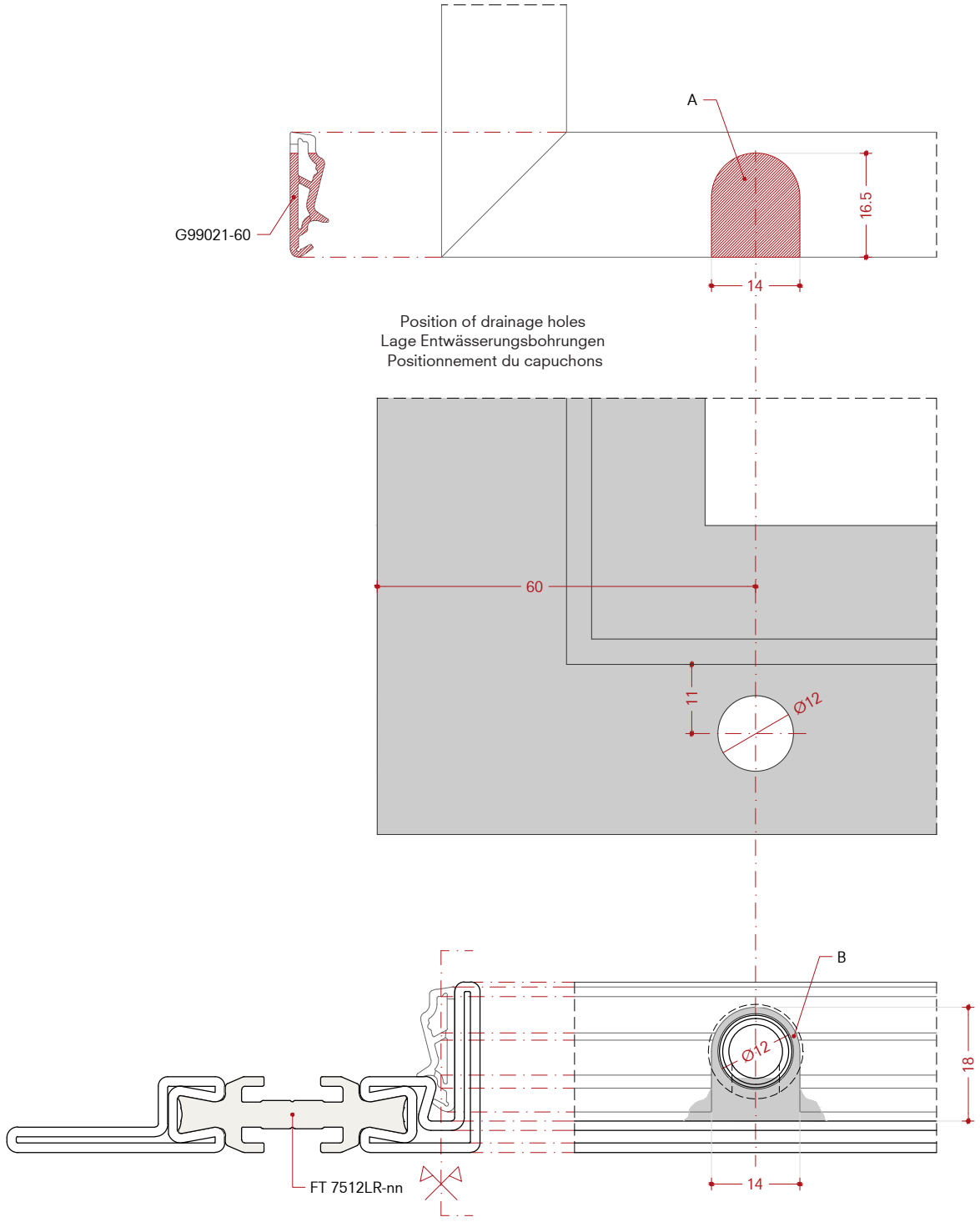
A) n°02 holes Ø12 mm frame profile
B) Sealing between cover cap and frame profile
C) G99312-60 water drainage gasket
D) Max. distance between cover caps 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) 2x Bohrungen Ø12 mm Rahmenprofil
B) Abdichtung zwischen Abdeckkappe und Rahmenprofil
C) G99312-60 Entwässerungdichtung
D) Max. Abstand der Abdeckkappe 1000 mm

Remarque:
Être scellé après avoir peint.

A) n°02 trous Ø12 mm profilé cadre
B) Sceau entre capuchon et profilé
C) G99312-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm



Note:

At least 2 cover caps up to leaf width of 1000 mm
At least 4 cover caps up to leaf of 2000 mm

A) Cut out 14x16.5 mm on gasket G99021-60
B) Sealant

Anmerkung:

Mindestens 2x Abdeckkappen bis 1000 mm Flügelbreite
Mindestens 4x Abdeckkappen bis 2000 mm Flügelbreite

A) Ausfräsung 14x16.5 mm
bei Dichtung G99021-60
B) Dichtstoff

Remarque:

Au moins 2 capuchons pour des largeurs de vantail jusqu'à 1000 mm
Au moins 4 capuchons jusqu'à 2000 mm de largeur d'aile

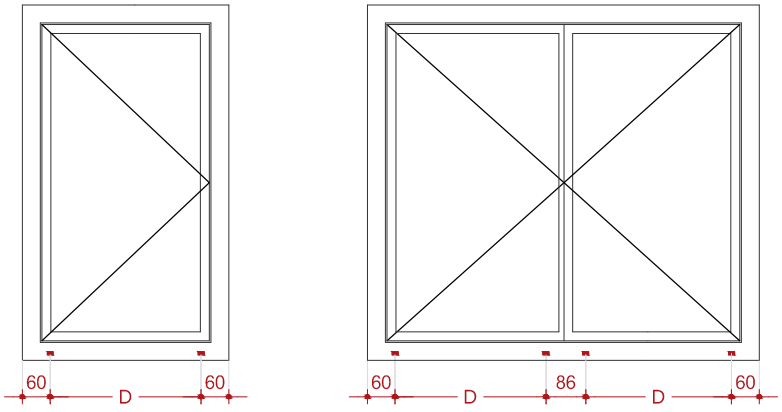
A) Fraisage 14x16.5 mm sur joint G99021-60
B) Silicon

Assembling
Drains
Open out
Flush profiles

Montage
Entwässerung
Nach außen öffnend
Flächenbündige profile

Assembling
Drainage
Ouverture extérieure
Profilés coplanaires

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes
For single leaf window

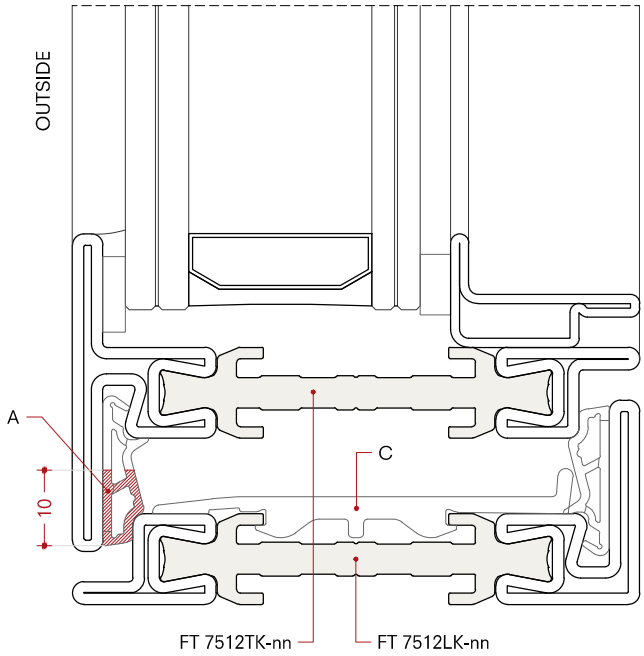
Min. n°04 drain holes
For double leaf window

Mind 2x Entwässerungsbohrungen bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen bei zweiflügeligen Fenster

Installer n°02 capuchons min.
Pour fenêtre à un vantail

Installer n°04 capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

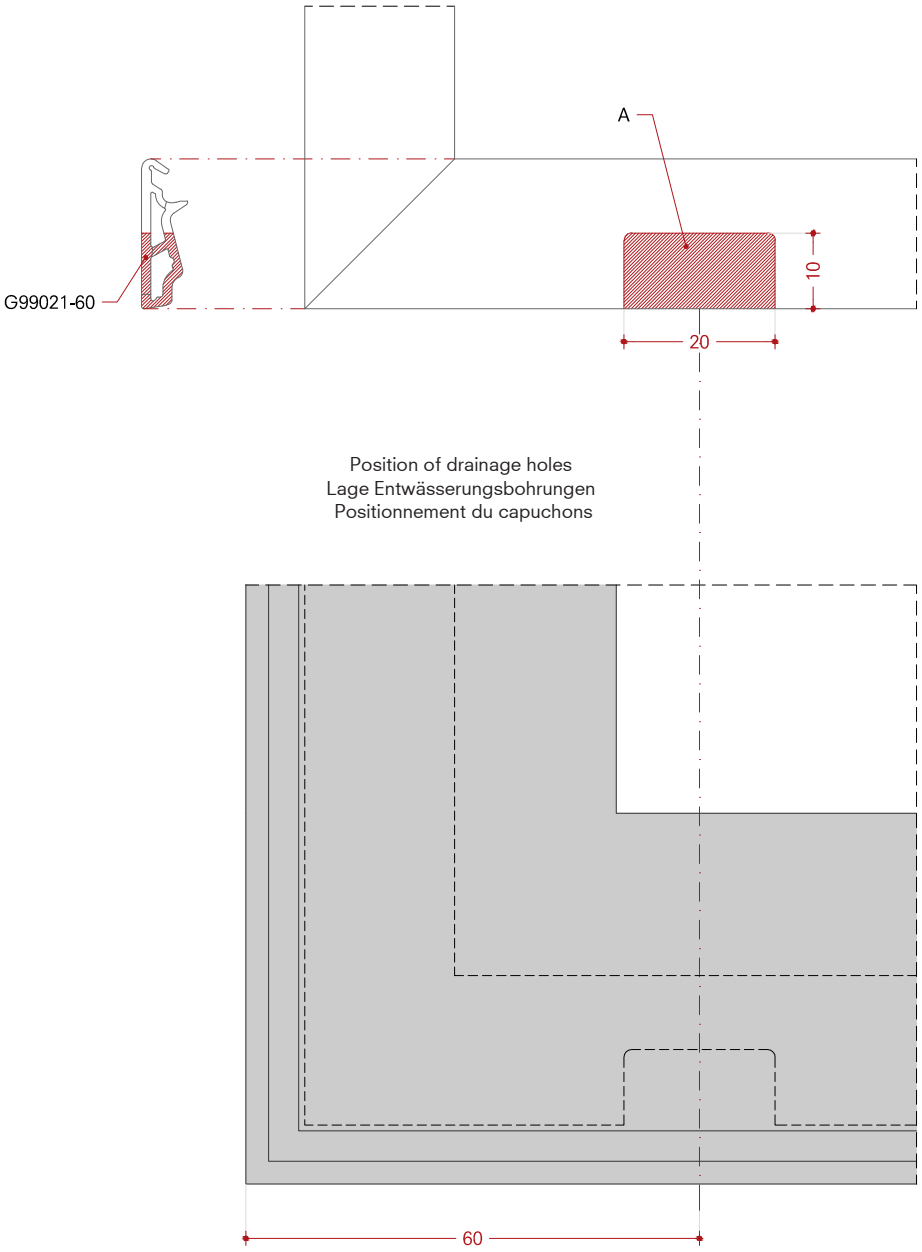
A) Cut out 20x10 mm on gasket G99021-60
B) G99313-60 water drainage gasket
D) Max. distance between drainage holes 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

A) Ausfräsung 20x10 mm bei Dichtung G99021-60
B) G99313-60 Entwässerungdichtung
D) Max. Abstand der Entwässerungsbohrungen 1000 mm

Remarque:
Être scellé après avoir peint.

A) Fraisage 20x10 mm sur joint G99021-60
B) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm

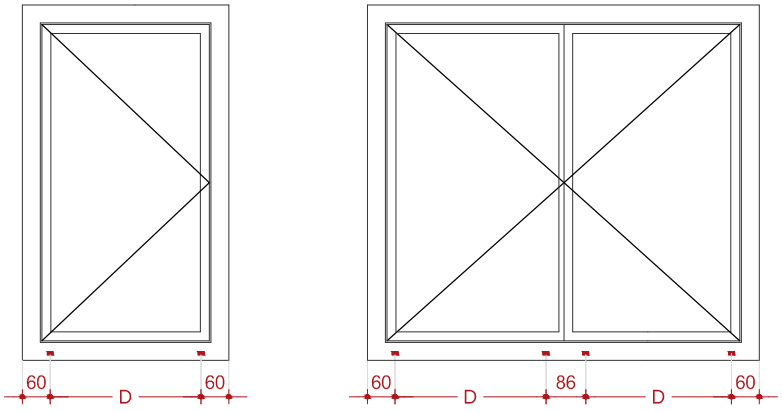

A
G99021-60
10
20
Position of drainage holes
Lage Entwässerungsbohrungen
Positionnement du capuchons
60

Assembling
Drains
Open out
Overlapped profiles

Montage
Entwässerung
Nach außen öffnend
Überlappende profile

Assembling
Drainage
Ouverture extérieure
Profilés superposés

Outside view / Ansicht von außen / Vue de l'extérieur



Min. n°02 drain holes
For single leaf window

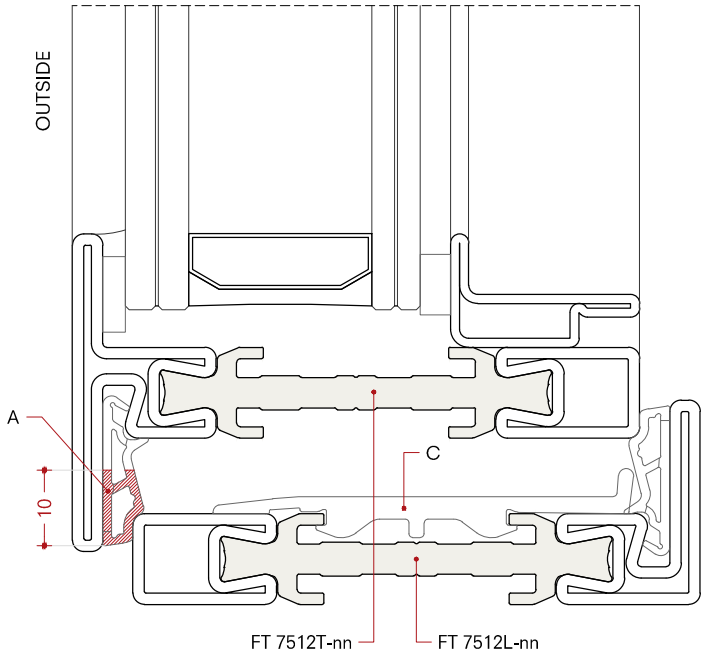
Min. n°04 drain holes
For double leaf window

Mind 2x Entwässerungsbohrungen bei einflügligem Fenster

Mind 4x Entwässerungsbohrungen bei zweiflügeligen Fenster

Installer n°02 capuchons min.
Pour fenêtre à un vantail

Installer n°04 capuchons min.
Pour fenêtre à deux vantaux



Note:
To be sealed after coating.

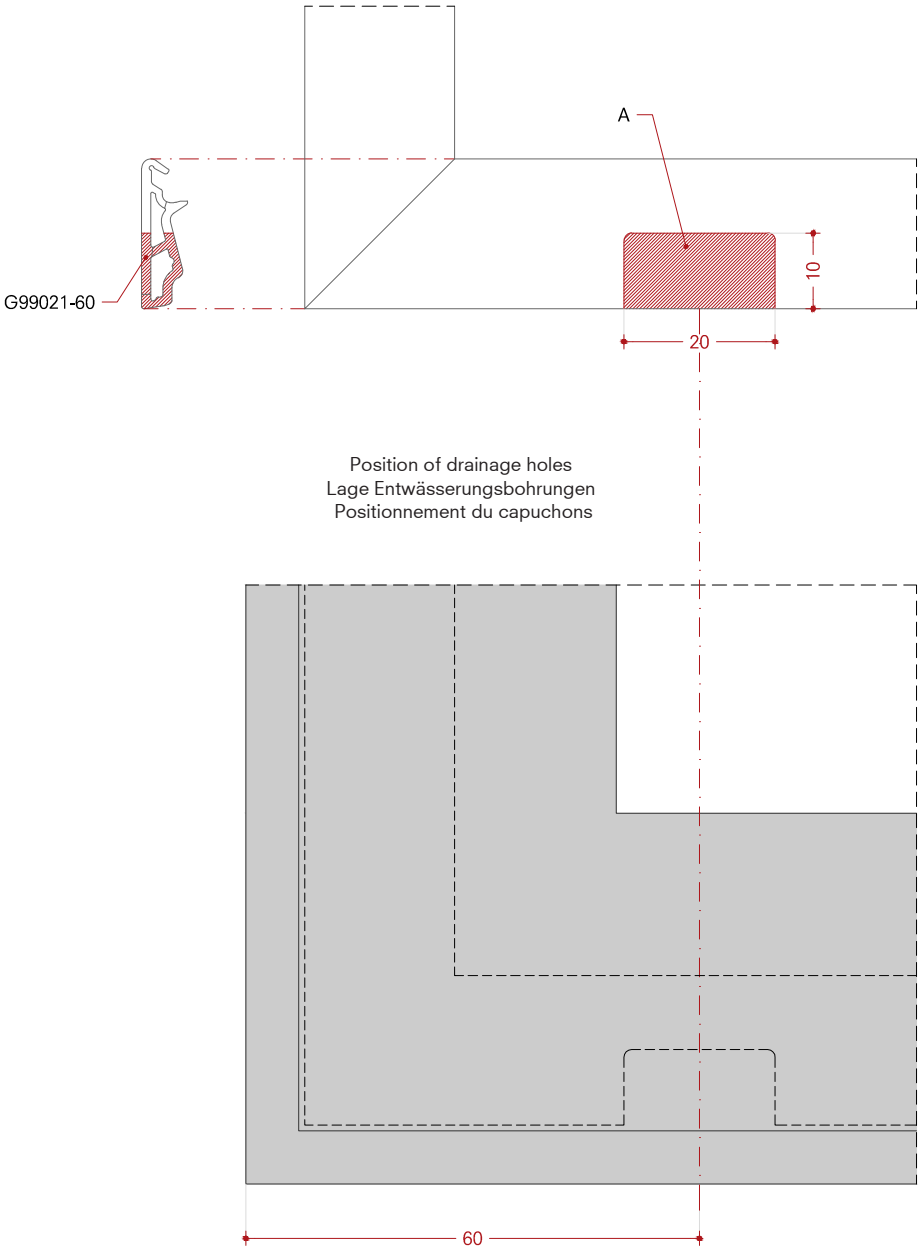
A) Cut out 20x10 mm on gasket G99021-60
B) G99313-60 water drainage gasket
D) Max. distance between drainage holes 1000 mm

Anmerkung:
Nach dem beschichten abdichten.

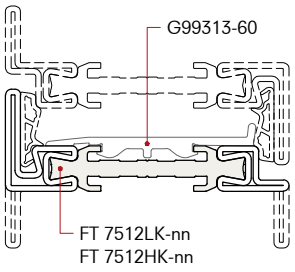
A) Ausfräsung 20x10 mm bei Dichtung G99021-60
B) G99313-60 Entwässerungdichtung
D) Max. Abstand der Entwässerungsbohrungen 1000 mm

Remarque:
Être scellé après avoir peint.

A) Fraisage 20x10 mm sur joint G99021-60
B) G99313-60 joint renvoi d'eau
D) Espacement max. du capuchons 1000 mm

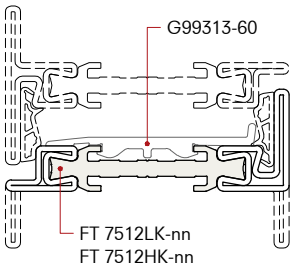

A
G99021-60
10
20
Position of drainage holes
Lage Entwässerungsbohrungen
Positionnement du capuchons
60

Installation
Condensate collection tray
G99313-60
Flush profiles



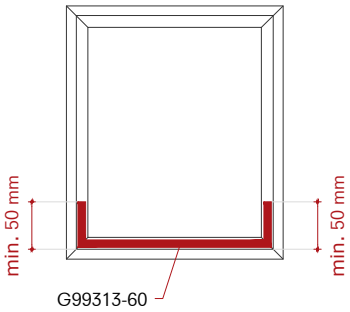
Open in
Nach innen öffnend
Ouverture intérieure

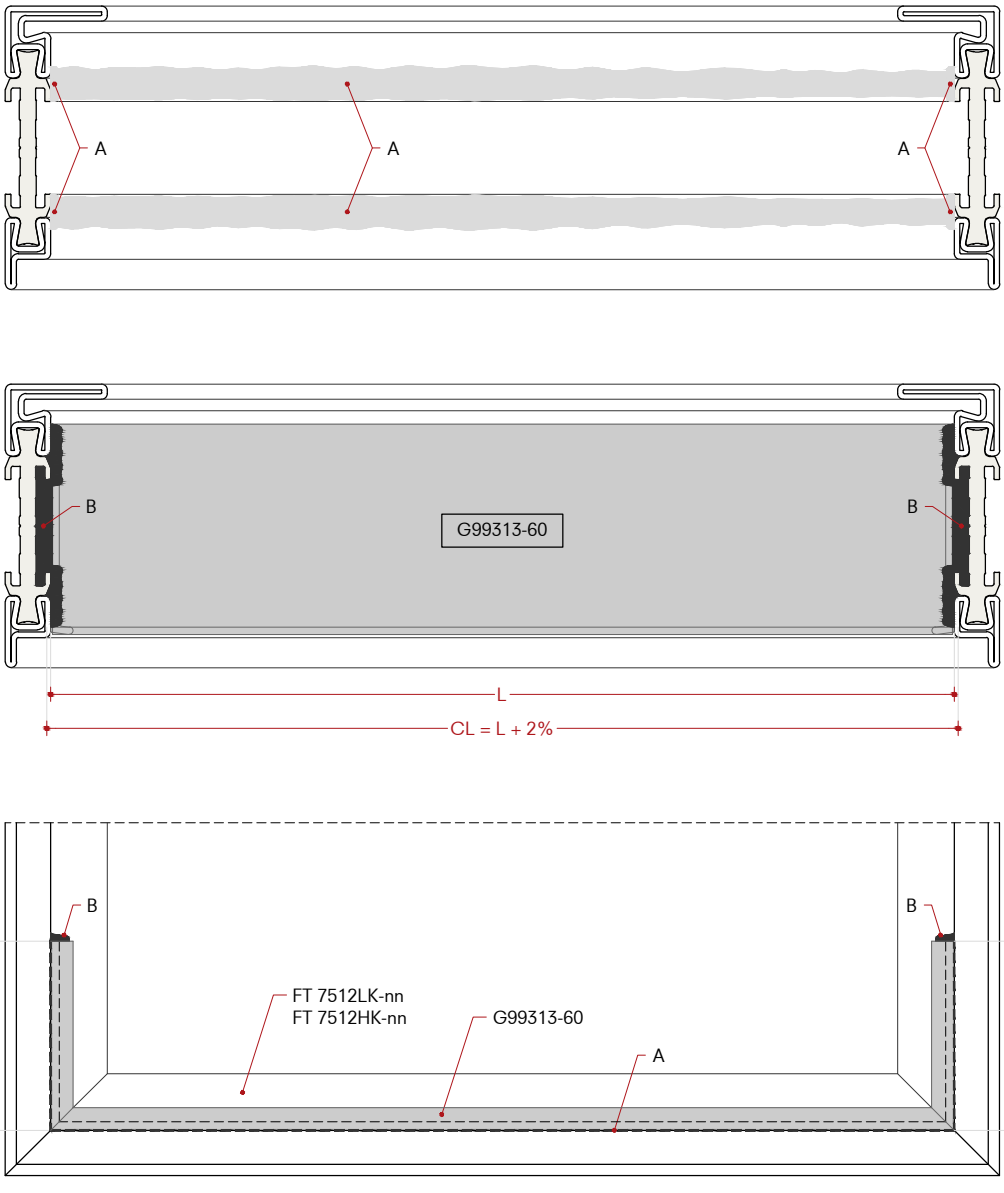
Einbau
Kondensatsammelschale
G99313-60
Flächenbündige profile



Open out
Nach außen öffnend
Ouverture extérieure

Schéma de montage
Bac de récupération des condensats
G99313-60
Profilés coplanaires



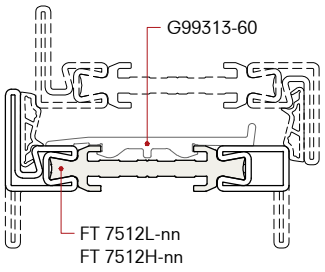


A) Sealant under the gasket
B) Sealant

A) Dichtstoff unter der Dichtung
B) Dichtstoff

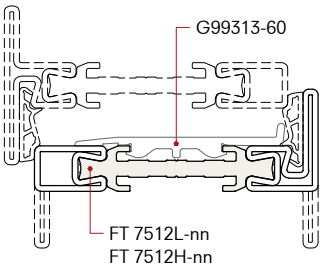
A) Silicon sous le joint
B) Silicon

Installation
Condensate collection tray
G99313-60
Overlapped profiles



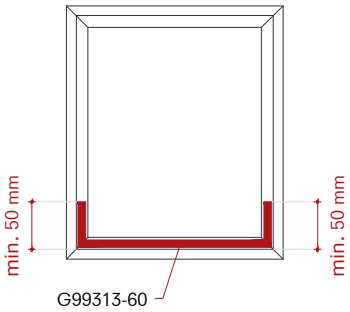
Open in
Nach innen öffnend
Ouverture intérieure

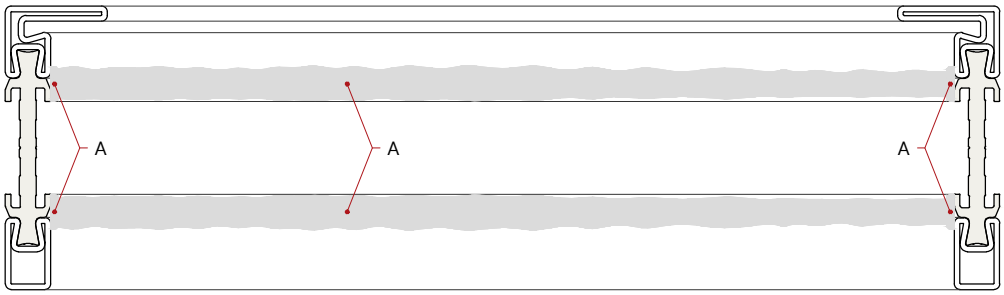
Einbau
Kondensatsammelschale
G99313-60
Überlappende profile

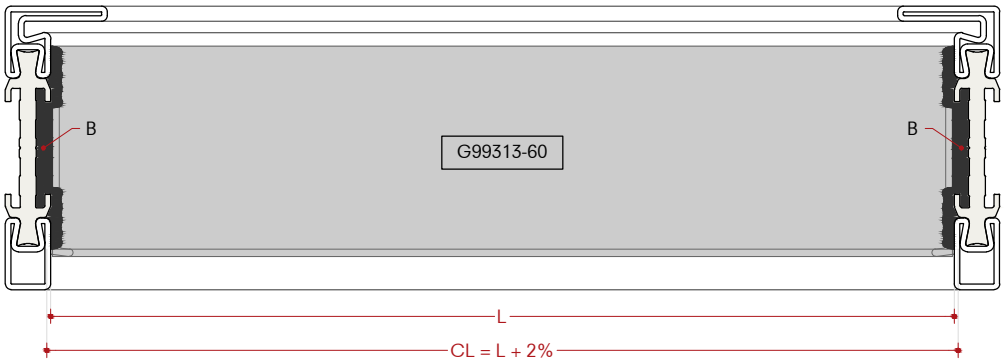


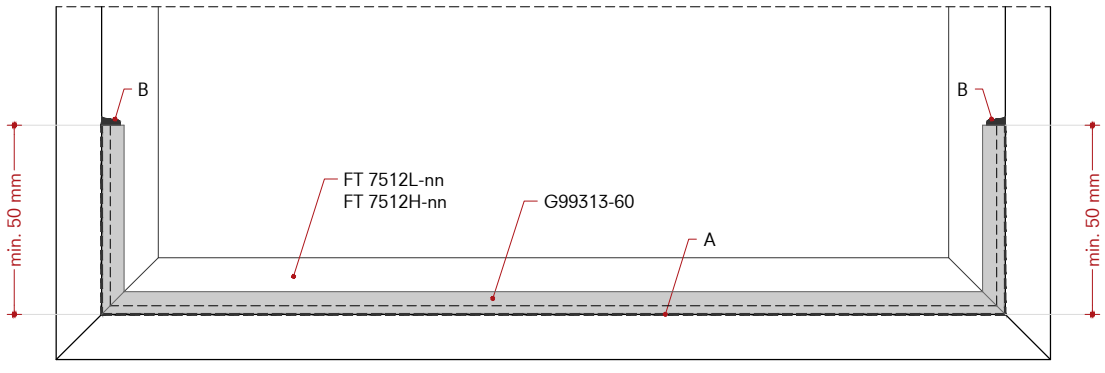
Open out
Nach außen öffnend
Ouverture extérieure

Schéma de montage
Bac de récupération des condensats
G99313-60
Profilés superposés









A) Sealant under the gasket
B) Sealant

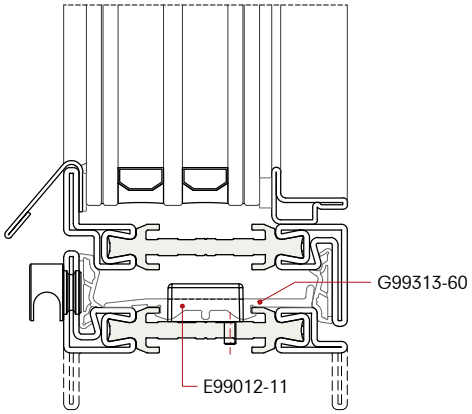
A) Dichtstoff unter der Dichtung
B) Dichtstoff

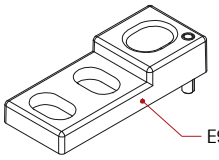
A) Silicon sous le joint
B) Silicon

Installation
Condensate collection tray
G99313-60 on strike plate E99012-11

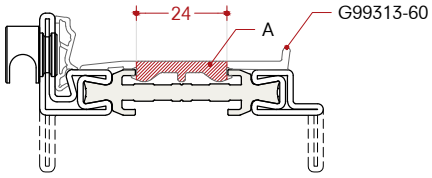
Einbau
Kondensatsammelschale G99313-60
an Schließblech E99012-11

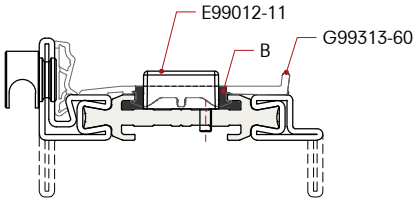
Schéma de montage
Bac de récupération des condensats
G99313-60 sur gâche E99012-11

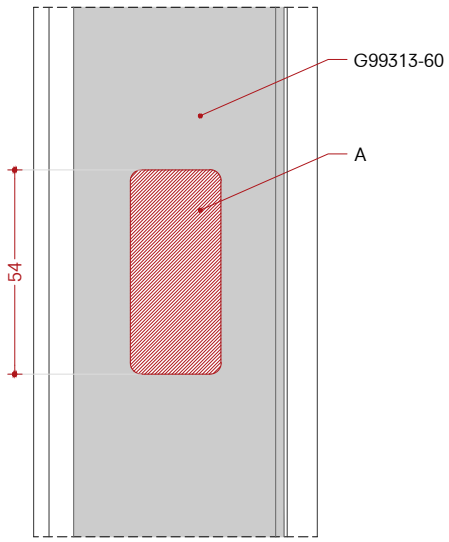


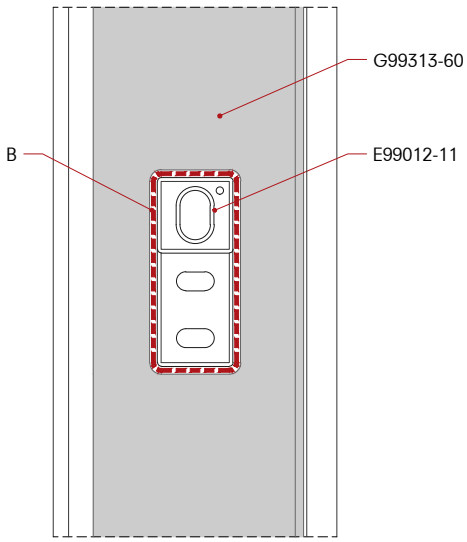


Open in
Nach innen öffnend
Ouverture intérieure









A) Cut out 54x24 mm on gasket G99313-60
B) Sealant

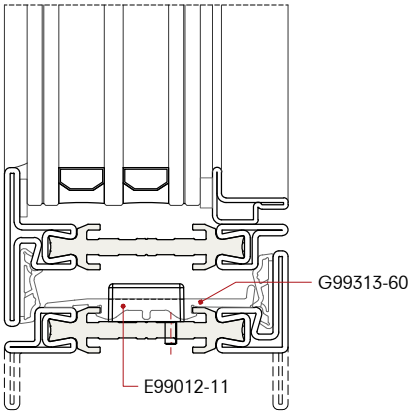
A) Ausfräsung 54x24 mm bei Dichtung G99313-60
B) Dichtstoff

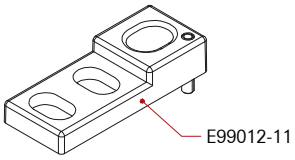
A) Fraisage 54x24 mm sur joint G99313-60
B) Silicon

Installation
Condensate collection tray
G99313-60 on strike plate E99012-11

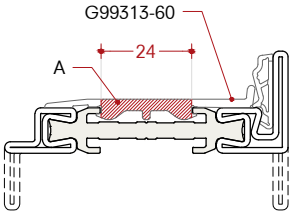
Einbau
Kondensatsammelschale G99313-60
an Schließblech E99012-11

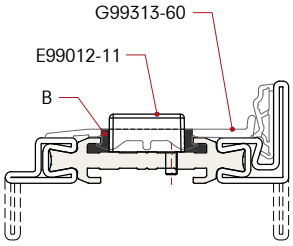
Schéma de montage
Bac de récupération des condensats
G99313-60 sur gâche E99012-11

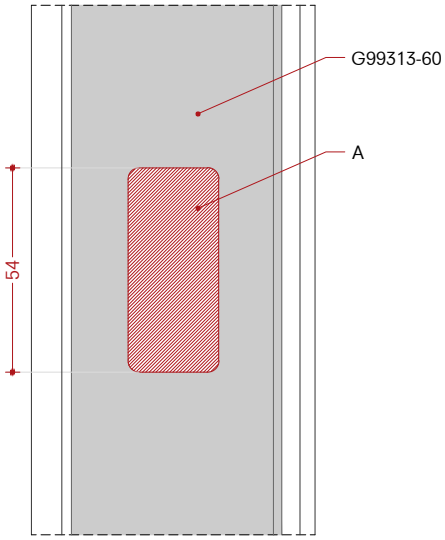


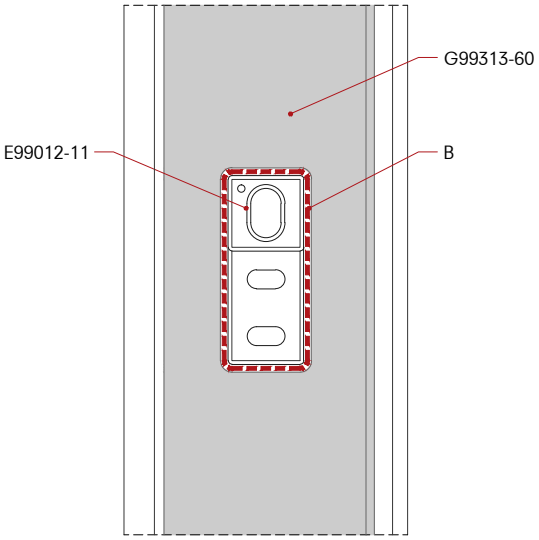


Open out
Nach außen öffnend
Ouverture extérieure









A) Cut out 54x24 mm on gasket G99313-60
B) Sealant

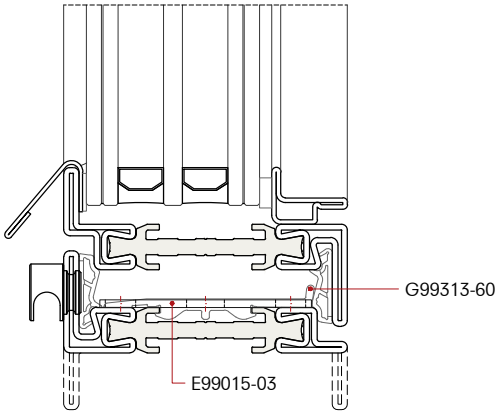
A) Ausfräsung 54x24 mm bei Dichtung G99313-60
B) Dichtstoff

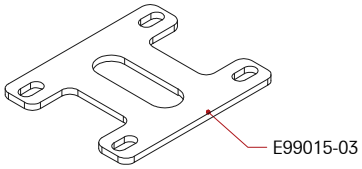
A) Fraisage 54x24 mm sur joint G99313-60
B) Silicon

Installation
Condensate collection tray
G99313-60 on plate E99015-03

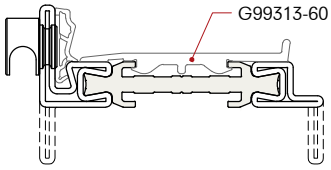
Einbau
Kondensatsammelschale G99313-60
an Abdeckblech E99015-03

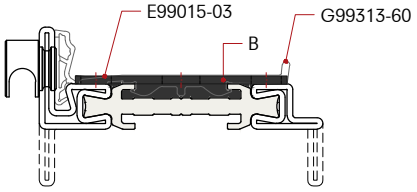
Schéma de montage
Bac de récupération des condensats
G99313-60 sur couverture de coupé
E99015-03

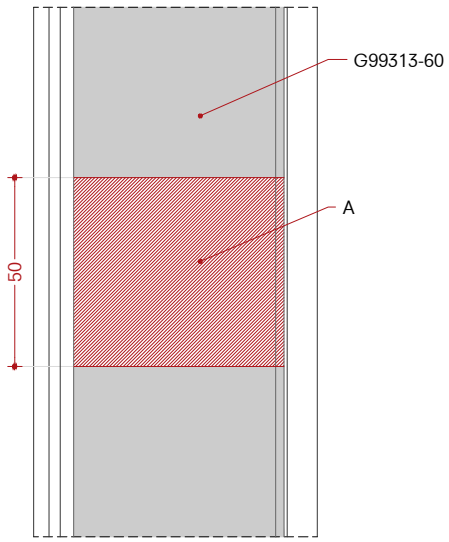


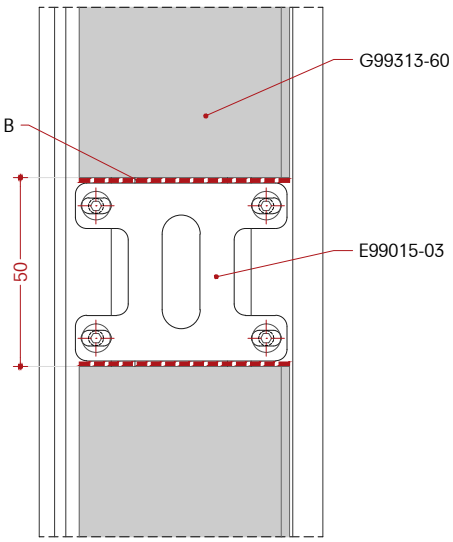


Open in
Nach innen öffnend
Ouverture intérieure









A) Cut out 50 mm on gasket G99313-60
B) Sealant

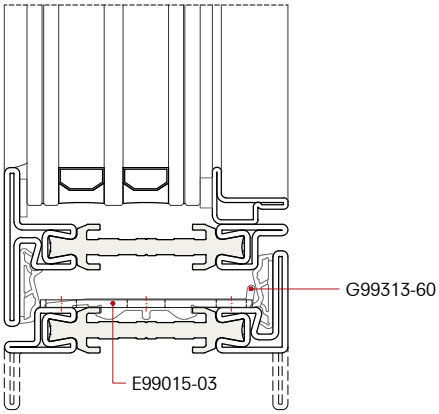
A) Ausfräsung 50 mm bei Dichtung G99313-60
B) Dichtstoff

A) Fraisage 50 mm sur joint G99313-60
B) Silicon

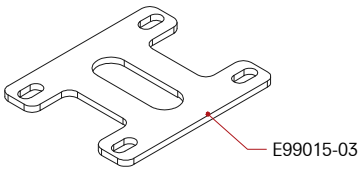
Installation
Condensate collection tray G99313-60 on plate E99015-03

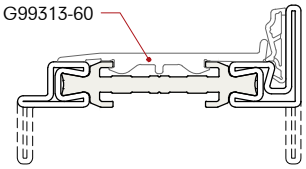
Einbau
Kondensatsammelschale G99313-60 an Abdeckblech E99015-03

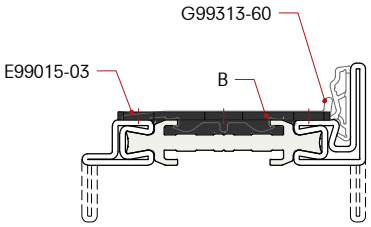
Schéma de montage
Bac de récupération des condensats G99313-60 sur couverture de coupé E99015-03

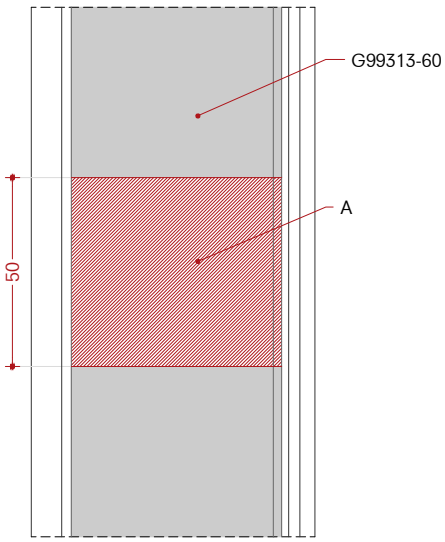


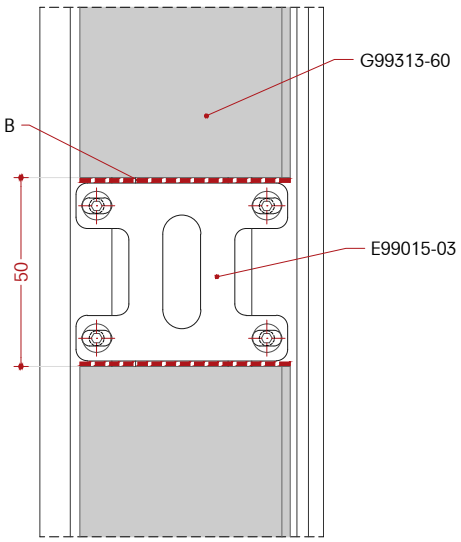
Open out
Nach außen öffnend
Ouverture extérieure











A) Cut out 50 mm on gasket G99313-60
B) Sealant

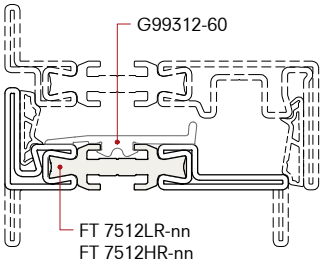
A) Ausfräsung 50 mm bei Dichtung G99313-60
B) Dichtstoff

A) Fraisage 50 mm sur joint G99313-60
B) Silicon

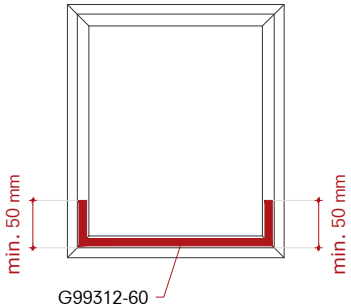
Installation
Condensate collection tray
G99312-60

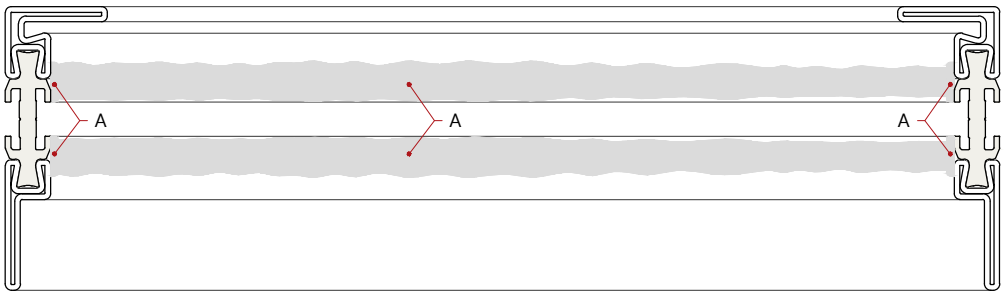
Einbau
Kondensatsammelschale
G99312-60

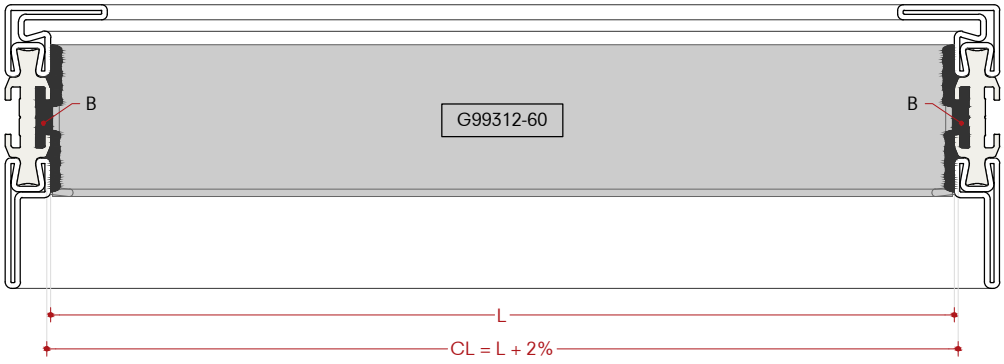
Schéma de montage
Bac de récupération des condensats
G99312-60

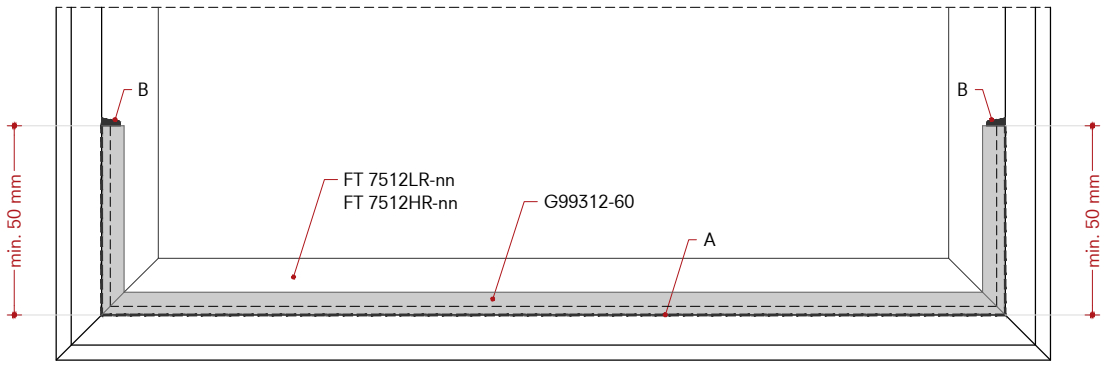


Tilt&Turn window
Kipp-Fenster
Fênetre oscillo-battant









A) Sealant under the gasket
B) Sealant

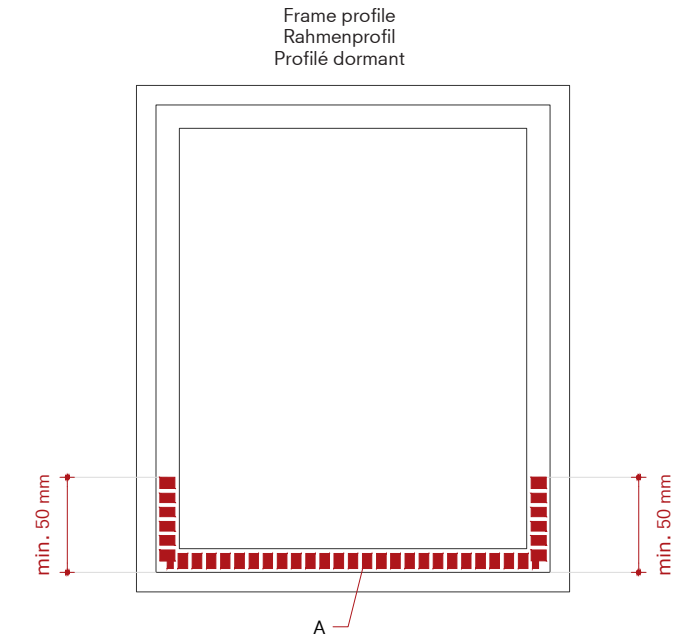
A) Dichtstoff unter der Dichtung
B) Dichtstoff

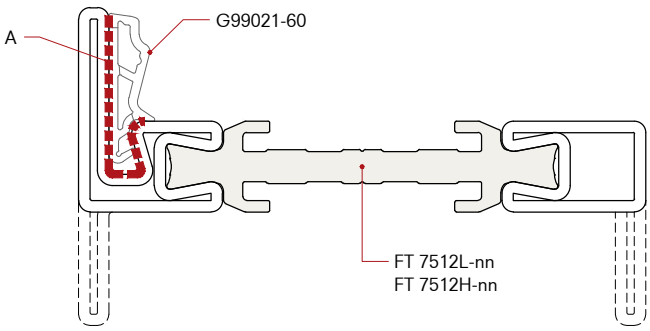
A) Silicon sous le joint
B) Silicon

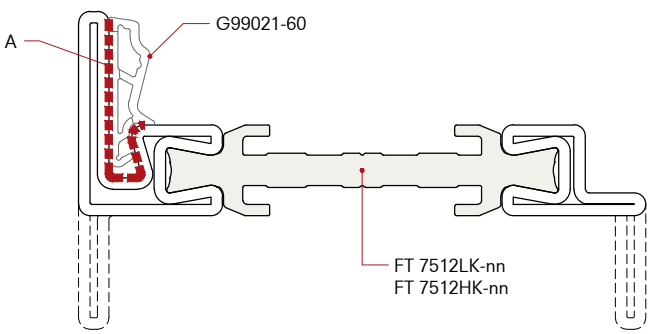
Installation
Rebate gasket G99021-60
on frame profile

Einbau
Anschlagdichtung G99021-60
am Rahmenprofil

Schéma de montage
Joint de butée G99021-60
sur profilé dormant







A) Sealant under the gasket also vertically at least 50 mm on both sides

A) Dichtstoff unter der Fuge auch die Vertikale auf beiden Seiten mindestens 50 mm

A) Silicon sous le joint de butée pour la verticale sur au moins 50 mm des deux côtés

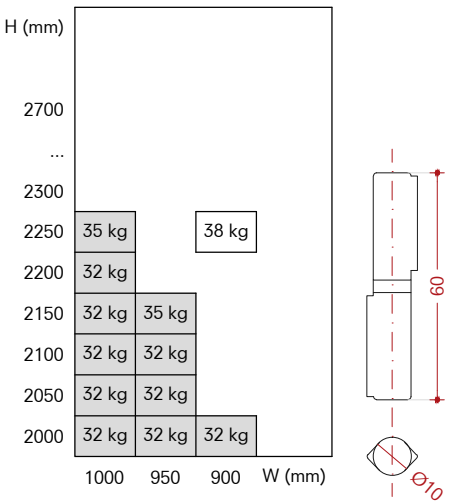
Load capacity tables
Weld-on hinges

Gewichtstabellen
Anschweißbänder

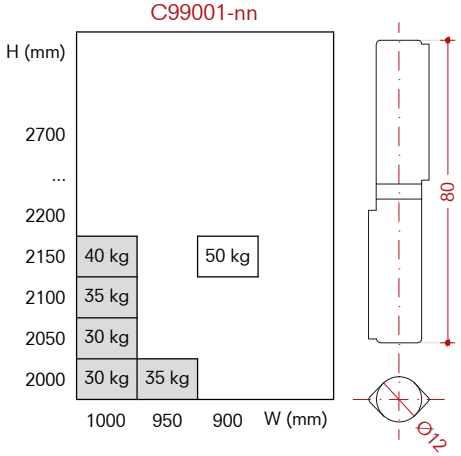
Capacité maximale
Paumelles a souder

	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99000-12	Bright steel Stahl blank Acier décapé	Ø = 10 mm	60 mm	38 kg
C99001-nn	-03 Stainless steel -03 Edelstahl -03 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 12 mm	80 mm	50 kg
C99002-12	Bright steel Stahl blank Acier décapé	Ø = 14 mm	100 mm	80 kg
C99003-12	Bright steel Stahl blank Acier décapé	Ø = 16 mm	120 mm	100 kg
C99004-12	Bright steel Stahl blank Acier décapé	Ø = 16 mm	140 mm	140 kg

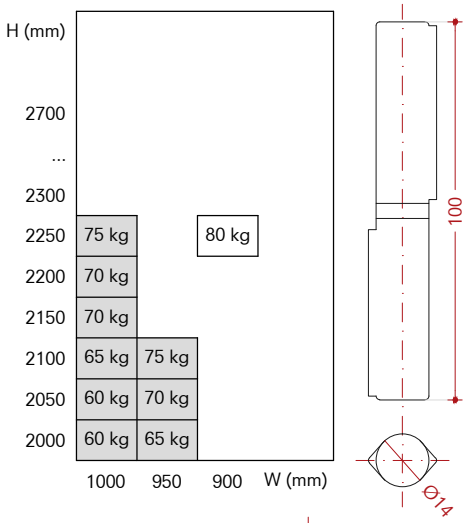
C99000-12



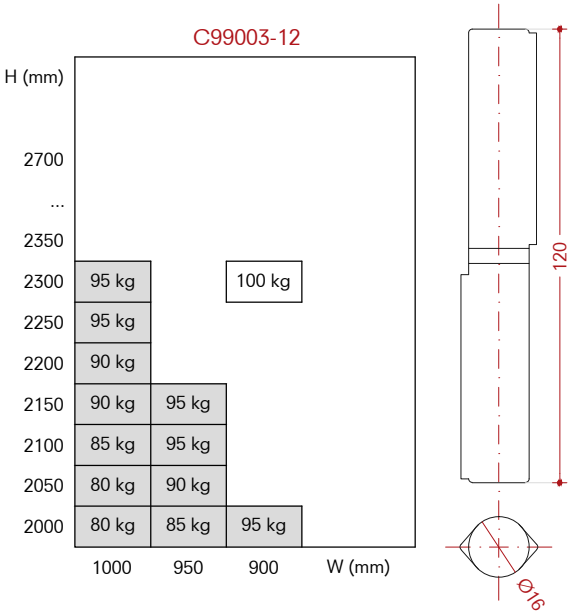
C99001-nn



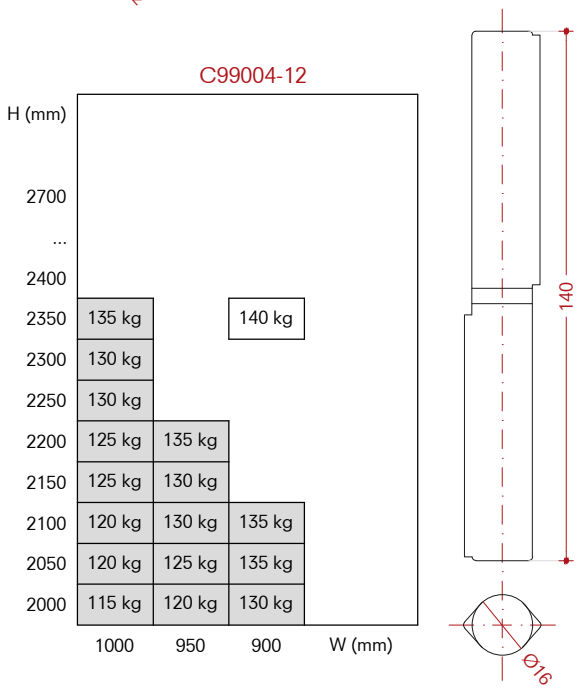
C99002-12

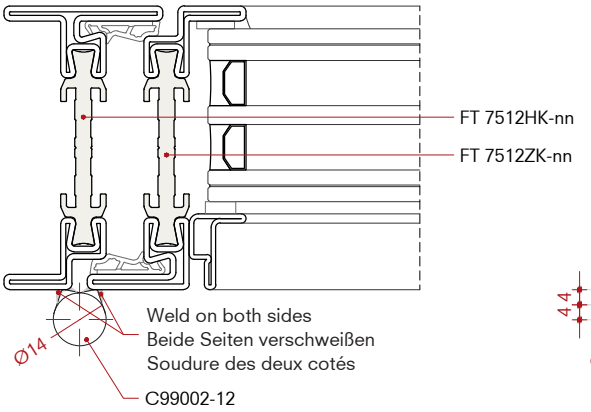


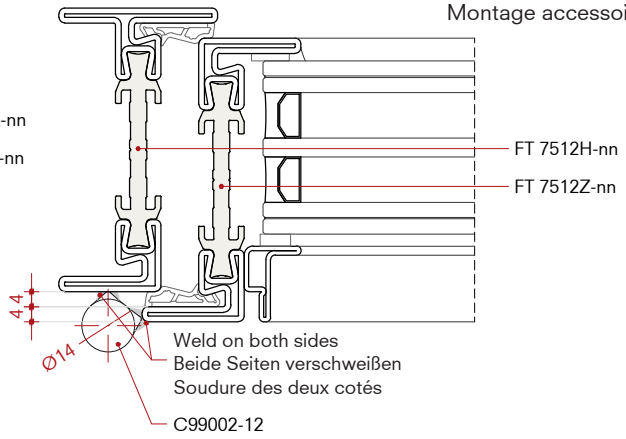
C99003-12

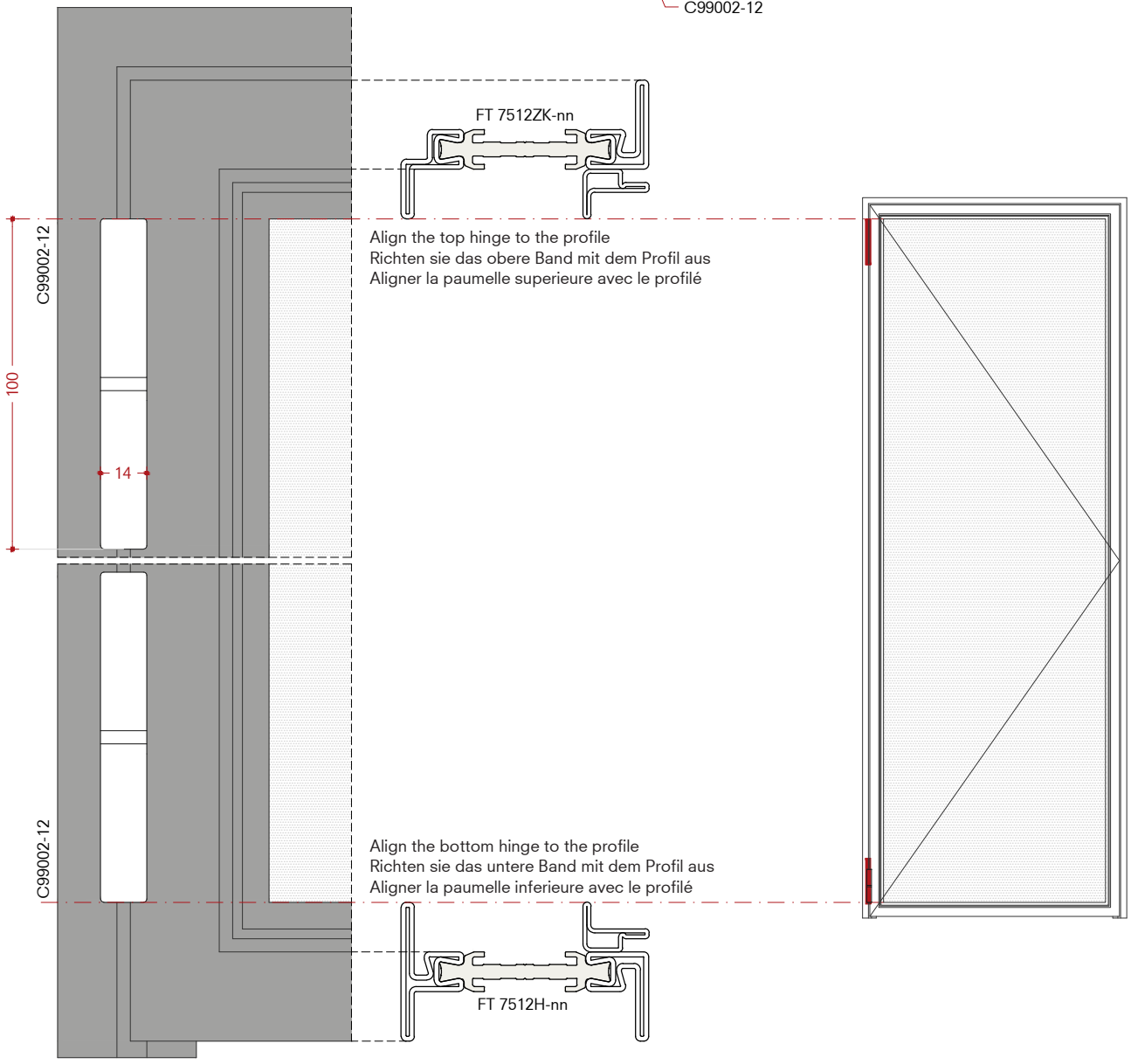


C99004-12









Note
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.

Hinweis
Beim Schweißen muss darauf geachtet werden, dass die Profile nicht überhitzt werden. Wir empfehlen die Verwendung von Kühlkörpern, die sich in unmittelbarer Nähe des geschweißten Bereichs befinden, sowie in kleinenAbschnitten vorzugehen und immer zu warten, bis das Profil abgekühlt ist. Die beim Schweißen von Profilen und Bänder entstehende Wärme muss mit Schweißzusätzen aus Messing, Kupfer und Aluminium abgeführtwerden. Halten Sie einen Mindestabstand von 3 mm zwischen Schweißnaht und Polyamid-Isolator ein.

Remarque
Lors du soudage, il faut veiller à ne pas surchauffer les profilés. Nous recommandons l'utilisation de dissipateurs thermiques situés à proximité de la zone soudée, ainsi que de procéder par petits segments,en attendant toujours que le profilé refroidisse. La chaleur générée lors du soudage des profilés et des charnières doit être dissipée à l'aide d'accessoires de soudage en laiton, cuivre etaluminium. Gardez une distance minimale de 3 mm entre le joint de soudure et la bande de polyamide.

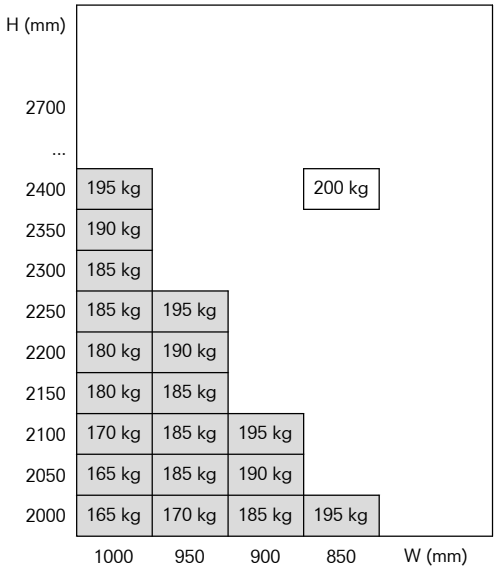
Load capacity tables
Weld-on hinges

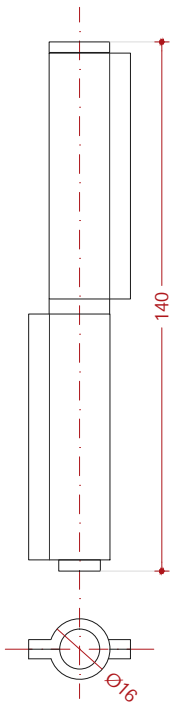
Gewichtstabellen
Anschweißbänder

Capacité maximale
Paumelles a souder

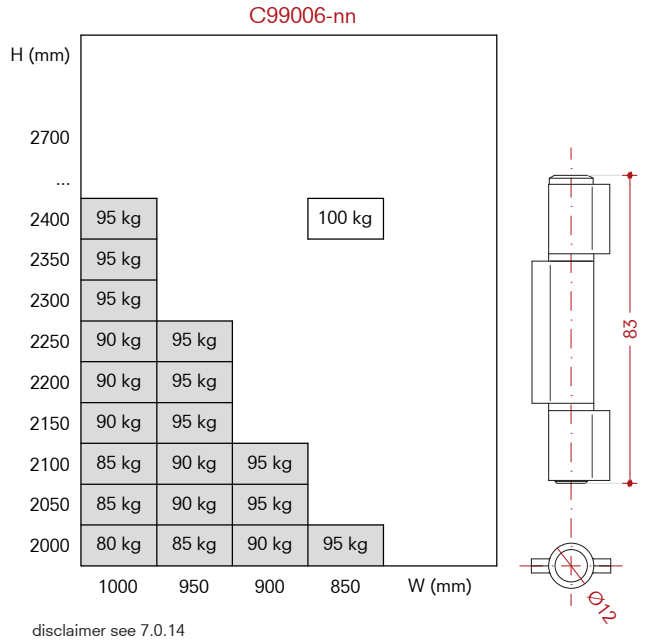
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99005-02	Galvanized steel Stahl bandverzinkt Acier galvanisé	Ø = 16 mm	140 mm	200 kg
C99006-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -03 Stainless steel -03 Edelstahl -03 Acier inoxydable	Ø = 12 mm	83 mm	100 kg
C99007-02	Galvanized steel Stahl bandverzinkt Acier galvanisé	Ø = 16 mm	140 mm	230 kg

C99005-02

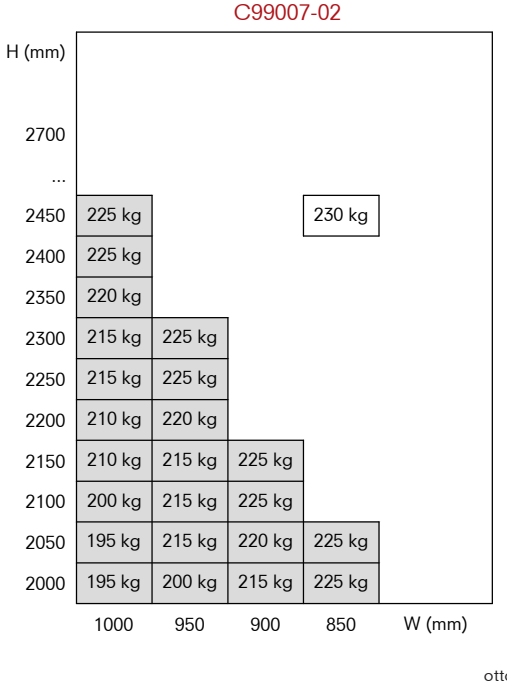


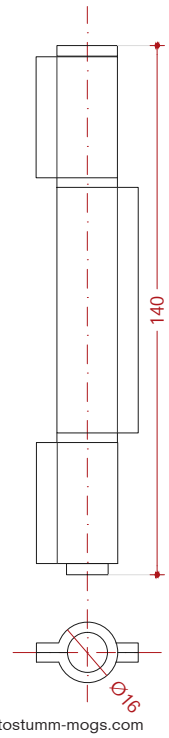


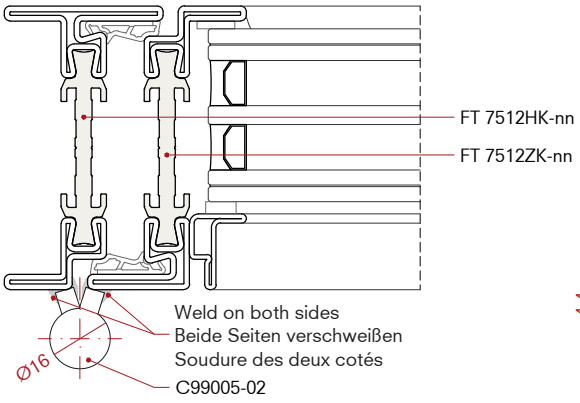
C99006-nn

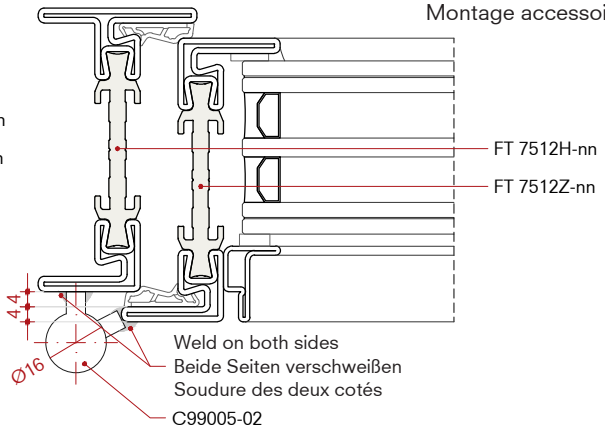


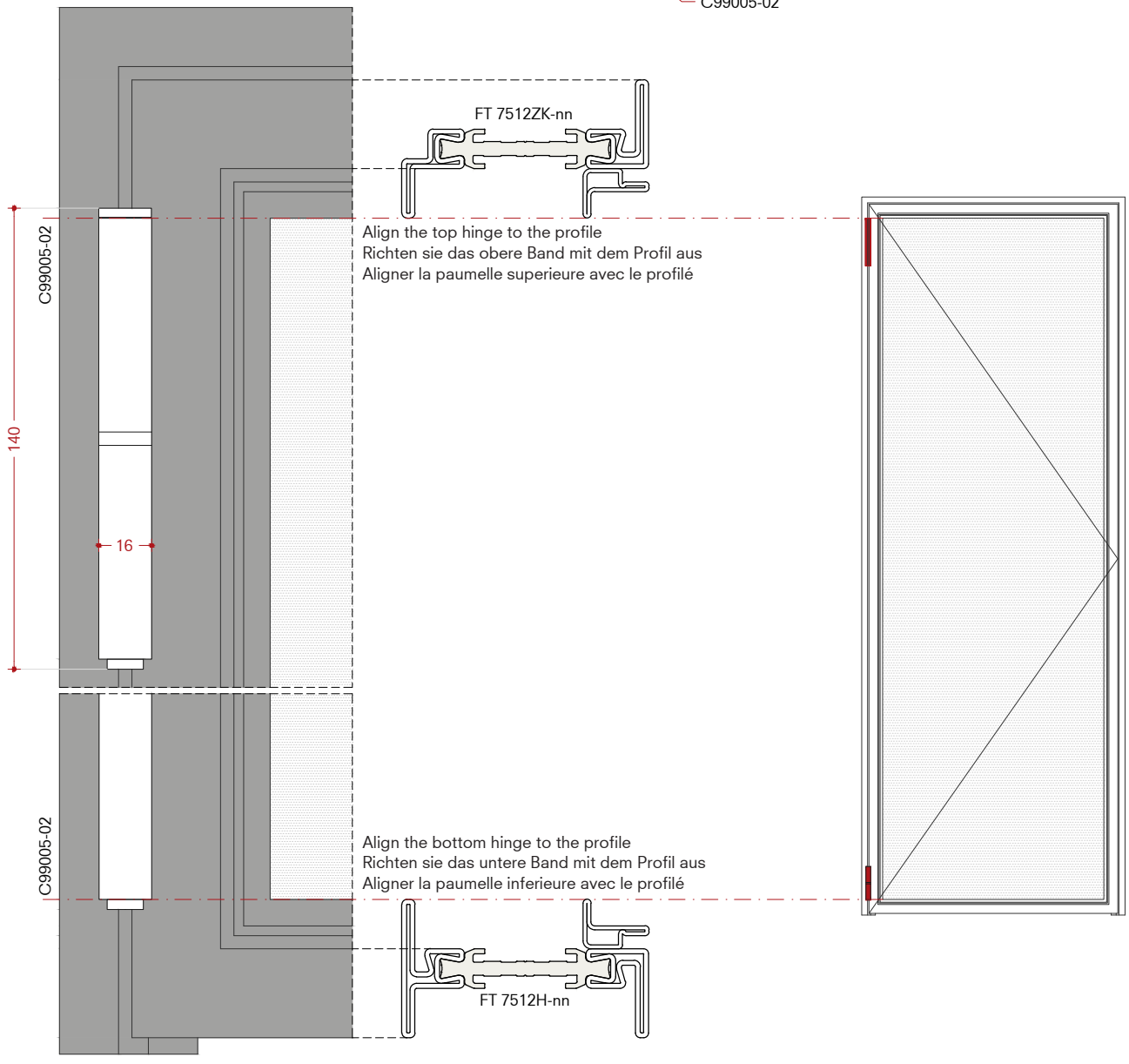
C99007-02











Note
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.

Hinweis
Beim Schweißen muss darauf geachtet werden, dass die Profile nicht überhitzt werden. Wir empfehlen die Verwendung von Kühlkörpern, die sich in unmittelbarer Nähe des geschweißten Bereichs befinden, sowie in kleinenAbschnitten vorzugehen und immer zu warten, bis das Profil abgekühlt ist. Die beim Schweißen von Profilen und Bänder entstehende Wärme muss mit Schweißzusätzen aus Messing, Kupfer und Aluminium abgeführtwerden. Halten Sie einen Mindestabstand von 3 mm zwischen Schweißnaht und Polyamid-Isolator ein.

Remarque
Lors du soudage, il faut veiller à ne pas surchauffer les profilés. Nous recommandons l'utilisation de dissipateurs thermiques situés à proximité de la zone soudée, ainsi que de procéder par petits segments,en attendant toujours que le profilé refroidisse. La chaleur générée lors du soudage des profilés et des charnières doit être dissipée à l'aide d'accessoires de soudage en laiton, cuivre etaluminium. Gardez une distance minimale de 3 mm entre le joint de soudure et la bande de polyamide.

Load capacity tables
Weld-on hinges

Gewichtstabellen
Anschweißbänder

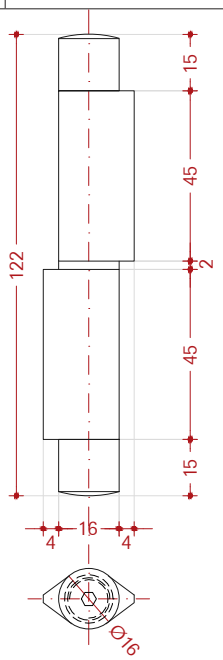
Capacité maximale
Paumelles a souder

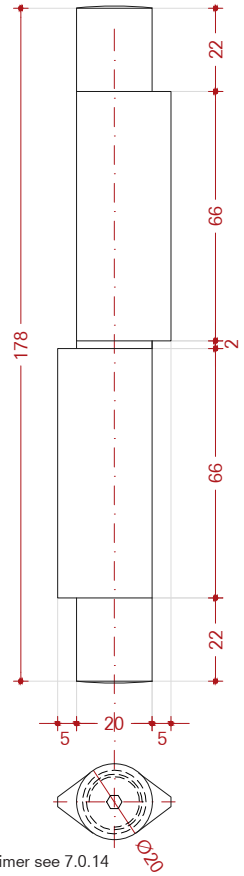
	Material Werkstoff Matériel	Diameter Durchmesser ~~Diamètre~~	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99008-04 C99008-12 ADJUSTABLE 3D 3D EINSTELLBAR 3D RÉGLABLE	-04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 16 mm	122 mm	160 kg
C99009-04 C99009-12 ADJUSTABLE 3D 3D EINSTELLBAR 3D RÉGLABLE	-04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 20 mm	178 mm	210 kg

C99008-nn

Available templates for installation.
See page 3.8.9
Schweißschablone zur Einbau verfügbar.
Siehe Seite 3.8.9
Gabarites disponibles pour l'installation.
Page 3.8.9

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	

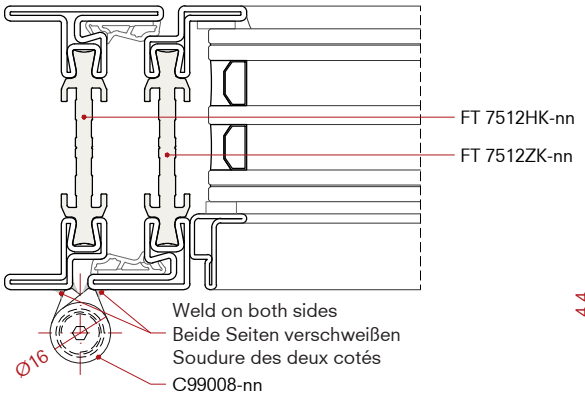


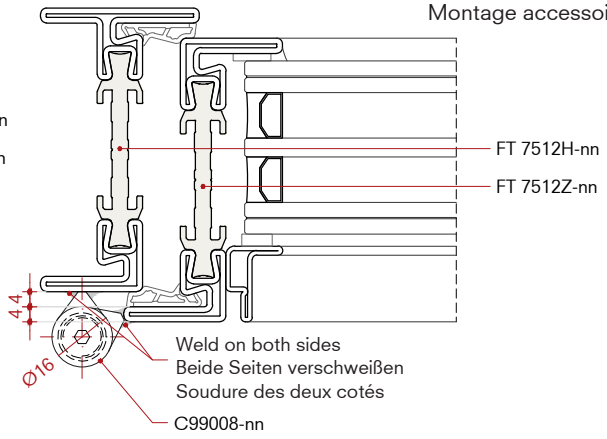


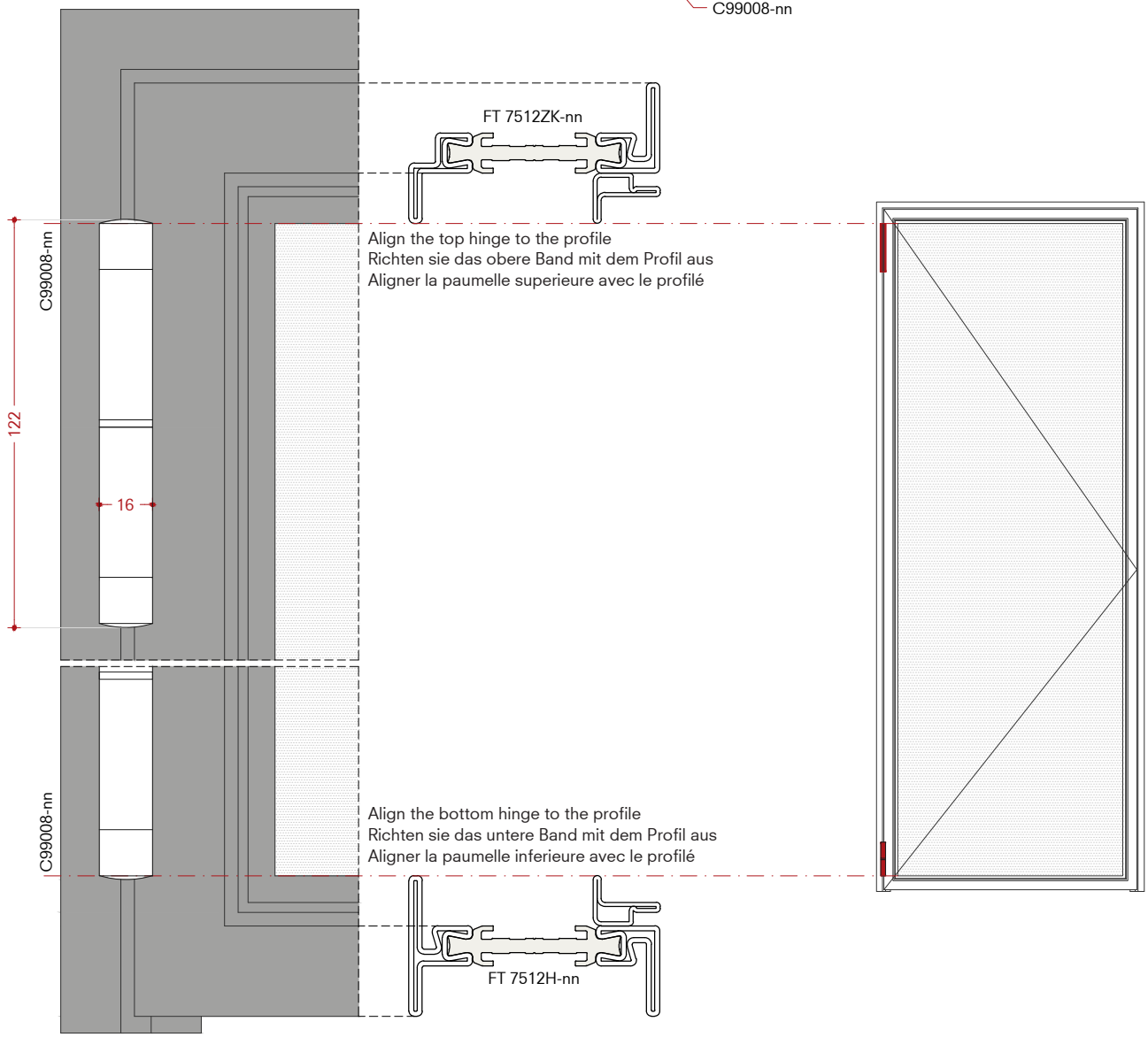
C99009-nn

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	

Available templates for installation.
See page 3.8.9
Schweißschablone zur Einbau verfügbar.
Siehe Seite 3.8.9
Gabarites disponibles pour l'installation.
Page 3.8.9







Note
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.

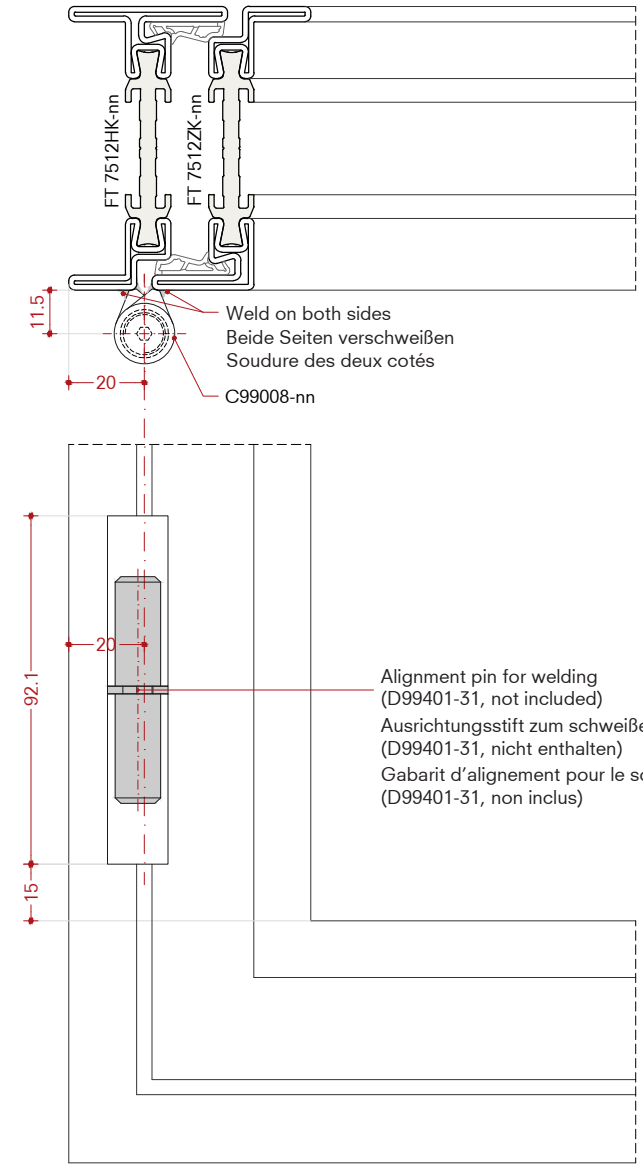
Hinweis
Beim Schweißen muss darauf geachtet werden, dass die Profile nicht überhitzt werden. Wir empfehlen die Verwendung von Kühlkörpern, die sich in unmittelbarer Nähe des geschweißten Bereichs befinden, sowie in kleinenAbschnitten vorzugehen und immer zu warten, bis das Profil abgekühlt ist. Die beim Schweißen von Profilen und Bänder entstehende Wärme muss mit Schweißzusätzen aus Messing, Kupfer und Aluminium abgeführtwerden. Halten Sie einen Mindestabstand von 3 mm zwischen Schweißnaht und Polyamid-Isolator ein.

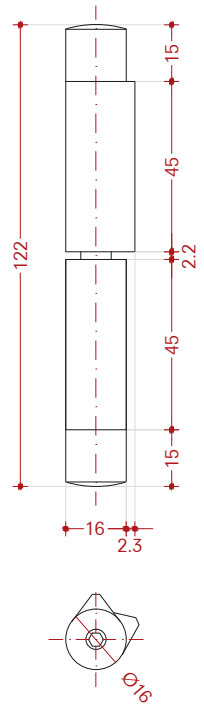
Remarque
Lors du soudage, il faut veiller à ne pas surchauffer les profilés. Nous recommandons l'utilisation de dissipateurs thermiques situés à proximité de la zone soudée, ainsi que de procéder par petits segments,en attendant toujours que le profilé refroidisse. La chaleur générée lors du soudage des profilés et des charnières doit être dissipée à l'aide d'accessoires de soudage en laiton, cuivre etaluminium. Gardez une distance minimale de 3 mm entre le joint de soudure et la bande de polyamide.

Installation
Adjustable 3D weld-on hinge
C99008-nn
Flush profiles

Einbau
Einstellbares 3D Band
C99008-nn
Flächenbündige profile

Schéma de montage
Paumelle reglable 3D
C99008-nn
Profilés coplanaires

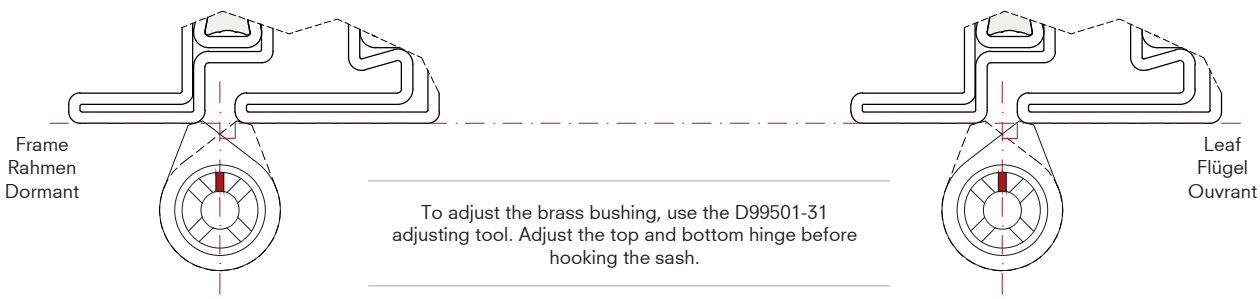




The hinge may only be welded on without brass bushings.

Das Band darf nur ohne Buchsen angeschweißt werden.

la paumelle ne peut être soudée sans bagues, sinon la couche anti-blocage peut être endommagée.



To adjust the brass bushing, use the D99501-31 adjusting tool. Adjust the top and bottom hinge before hooking the sash.

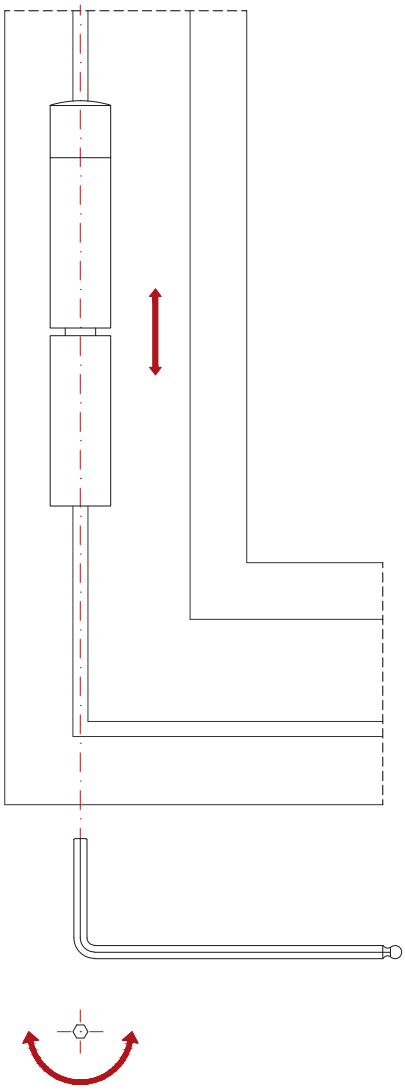
Um die Bronzebuchse zu verstellen den justierschlüssel D99501-31 verwenden. Oberes und unteres Band einstellen bevor der Flügel eingehängt wird.

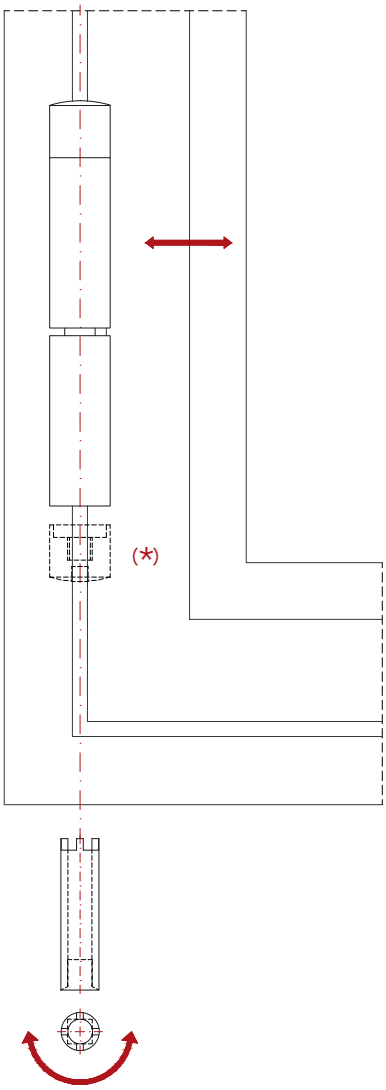
Aligner la douille en laiton en utilisant la clé D99501-31 sur la ligne marchee sur les paumelles (en haut et en bas) avant l'installation du vantail.

Setting on site

Einstellung vor Ort

Ajustement en chantier





Use an allen key (4 mm, not included)
for the upward and downward setting

Verwenden Sie den Inbusschlüssel
(4 mm, nicht enthalten) für die
Einstellung nach oben und unten

Utiliser la clé hexagonale allen
(4 mm, non inclus) pour le réglage haut et bas

Use 1/4" allen key adjusting tool D99501-31
(Not included) for left and right setting

Verwenden Sie für die linke und rechte Einstellung einen 1/4"
Inbusschlüssel auf D99501-31 (Eigenfertigung)

Utiliser la clé 1/4" D99501-31 (non inclus)
pour reglage a gauche et a droite

Note:

(*) After the installation mount all of the parts of the hinges to stop the adjustments and fix the caps.

Anmerkung:

(*) Nach der Installation montieren Sie alle Teile der Bänder, Um die Einstellungen zu fixieren und befestigen sie die Kappen.

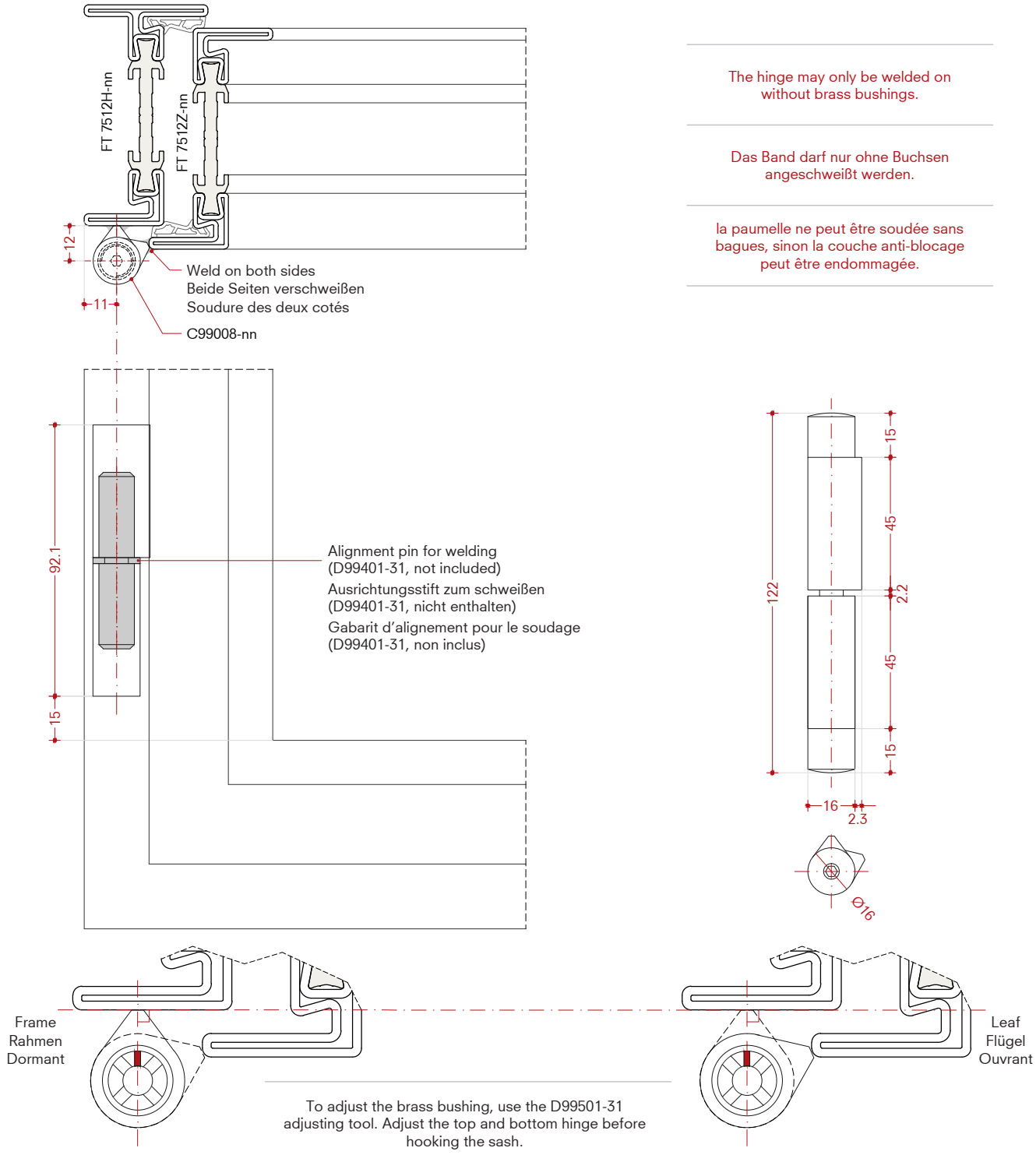
Remarque:

(*) Après l'installation, montez toutes les parties des paumelles pour arrêter les réglages et fixer les bouchons.

Installation
Adjustable 3D weld-on hinge
C99008-nn
Overlapped profiles

Einbau
Einstellbares 3D Band
C99008-nn
Überlappende profile

Schéma de montage
Paumelle reglable 3D
C99008-nn
Profilés superposés



The hinge may only be welded on without brass bushings.

Das Band darf nur ohne Buchsen angeschweißt werden.

la paumelle ne peut être soudée sans bagues, sinon la couche anti-blocage peut être endommagée.

To adjust the brass bushing, use the D99501-31 adjusting tool. Adjust the top and bottom hinge before hooking the sash.

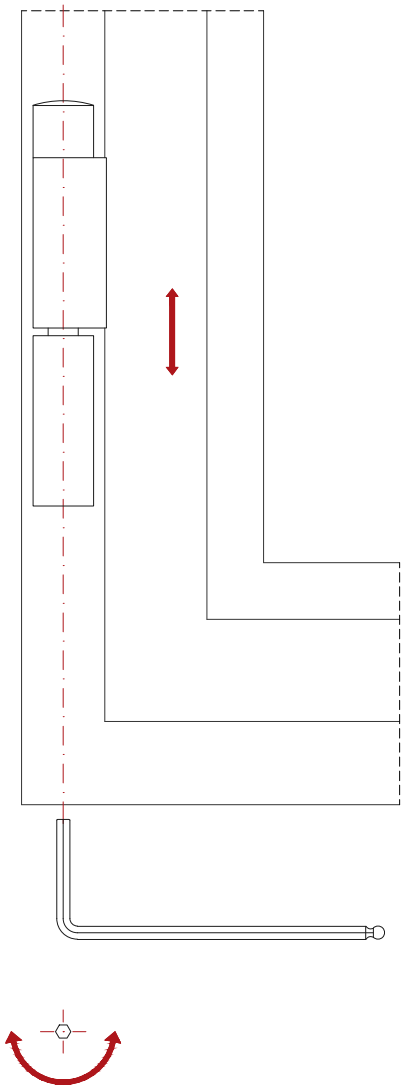
Um die Bronzebuchse zu verstellen den justierschlüssel D99501-31 verwenden. Oberes und unteres Band einstellen bevor der Flügel eingehängt wird.

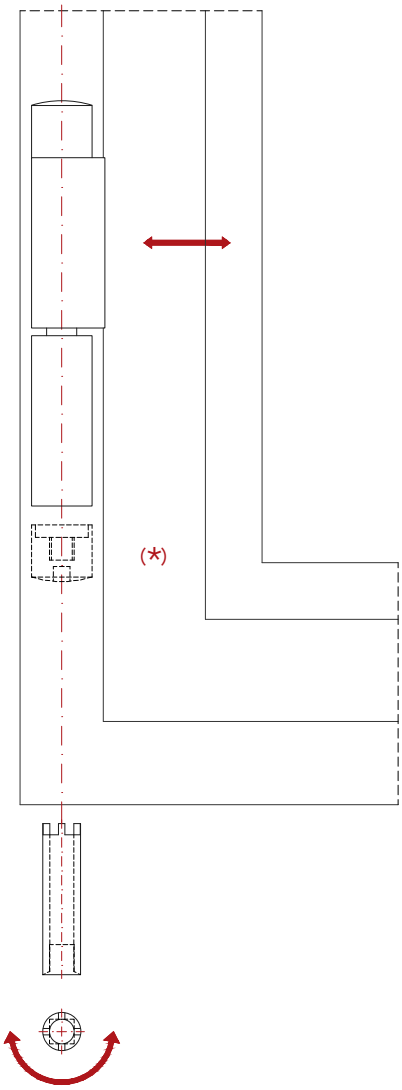
Aligner la douille en laiton en utilisant la clé D99501-31 sur la ligne marchee sur les paumelles (en haut et en bas) avant l'installation du vantail.

Setting on site

Einstellung vor Ort

Ajustement en chantier





Use an allen key (4 mm, not included)
for the upward and downward setting

Verwenden Sie den Inbusschlüssel
(4 mm, nicht enthalten) für die
Einstellung nach oben und unten

Utiliser la clé hexagonale allen
(4 mm, non inclus) pour le réglage haut et bas

Use 1/4" allen key adjusting tool D99501-31
(Not included) for left and right setting

Verwenden Sie für die linke und rechte Einstellung einen 1/4"
Inbusschlüssel auf D99501-31 (Eigenfertigung)

Utiliser la clé 1/4" D99501-31 (non inclus)
pour reglage a gauche et a droite

Note:

(*) After the installation mount all of the parts of the hinges to stop the adjustments and fix the caps.

Anmerkung:

(*) Nach der Installation montieren Sie alle Teile der Bänder, Um die Einstellungen zu fixieren und befestigen sie die Kappen.

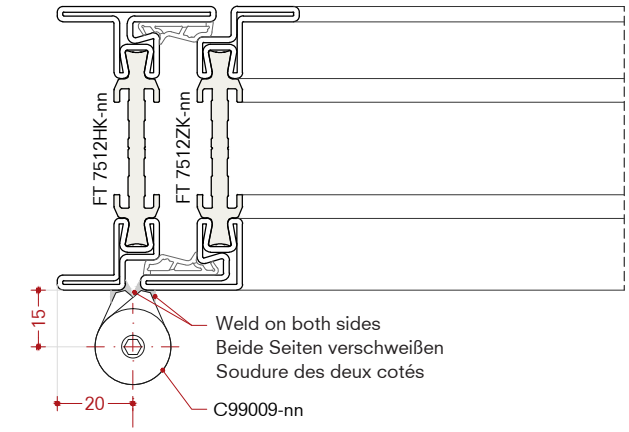
Remarque:

(*) Après l'installation, montez toutes les parties des paumelles pour arrêter les réglages et fixer les bouchons.

Installation
Adjustable 3D weld-on hinge
C99009-nn
Flush profiles

Einbau
Einstellbares 3D Band
C99009-nn
Flächenbündige profile

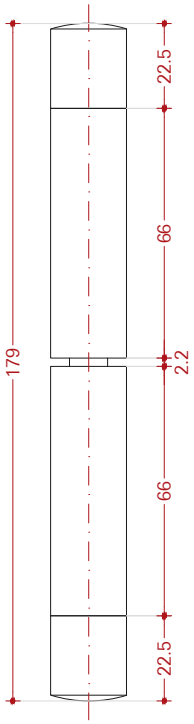
Schéma de montage
Paumelle reglable 3D
C99009-nn
Profilés coplanaires

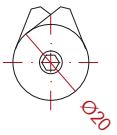


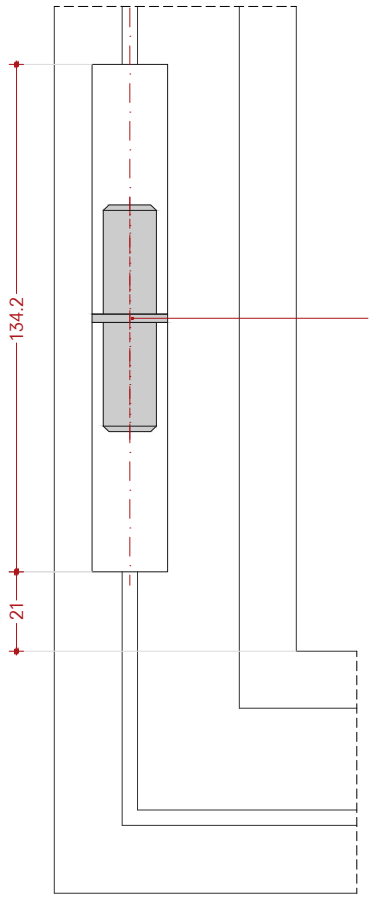
The hinge may only be welded on without brass bushings.

Das Band darf nur ohne Buchsen angeschweißt werden.

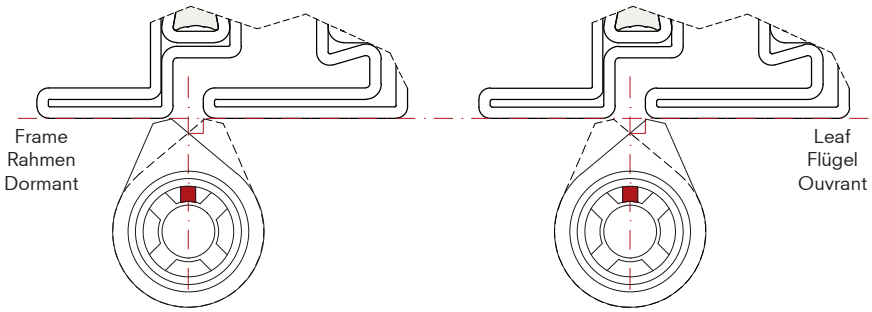
la paumelle ne peut être soudée sans bagues, sinon la couche anti-blocage peut être endommagée.







Alignment pin for welding
(D99402-31, not included)
Ausrichtungsstift zum schweißen
(D99402-31, nicht enthalten)
Gabarit d'alignement pour le soudage
(D99402-31, non inclus)



To adjust the brass bushing, use the D99502-31 adjusting tool. Adjust the top and bottom hinge before hooking the sash.

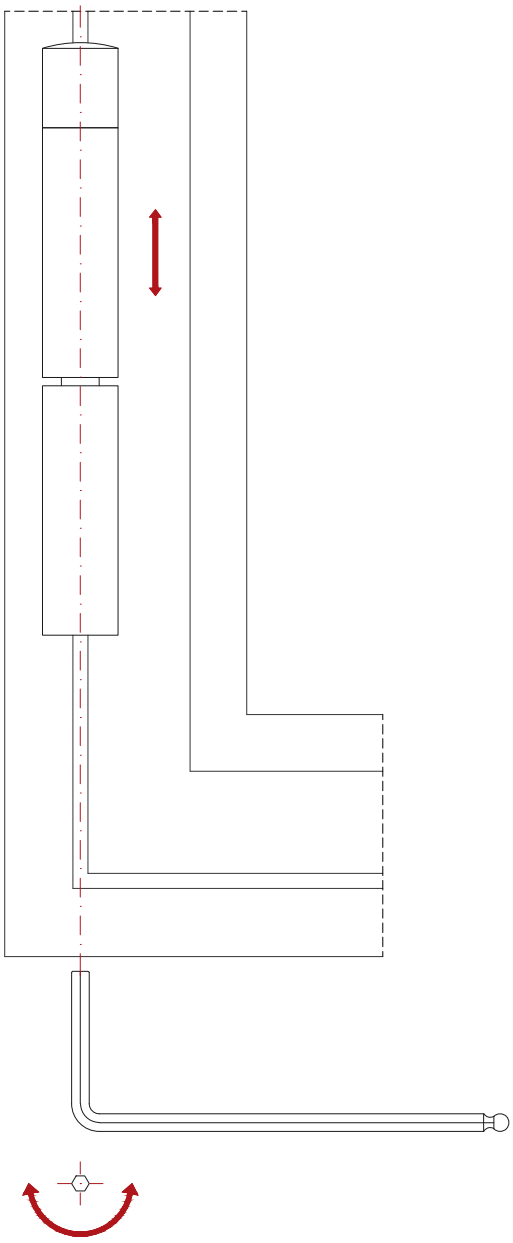
Um die Bronzebuchse zu verstellen den justierschlüssel D99502-31 verwenden. Oberes und unteres Band einstellen bevor der Flügel eingehängt wird.

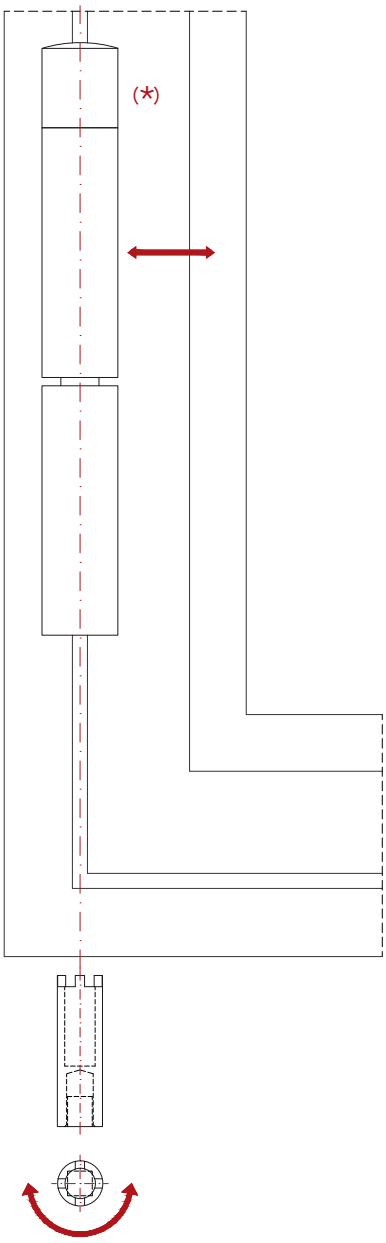
Aligner la douille en laiton en utilisant la clé D99502-31 sur la ligne marchee sur les paumelles (en haut et en bas) avant l'installation du vantail.

Setting on site

Einstellung vor Ort

Ajustement en chantier





Use an allen key (4 mm, not included)
for the upward and downward setting

Verwenden Sie den Inbusschlüssel
(4 mm, nicht enthalten) für die
Einstellung nach oben und unten

Utiliser la clé hexagonale allen
(4 mm, non inclus) pour le réglage haut et bas

Use 1/4" allen key adjusting tool D99502-31
(Not included) for left and right setting

Verwenden Sie für die linke und rechte Einstellung einen 1/4"
Inbusschlüssel auf D99502-31 (Eigenfertigung)

Utiliser la clé 1/4" D99502-31 (non inclus)
pour reglage a gauche et a droite

Note:

(*) After the installation mount all of the parts of the hinges to stop the adjustments and fix the caps.

Anmerkung:

(*) Nach der Installation montieren Sie alle Teile der Bänder, Um die Einstellungen zu fixieren und befestigen sie die Kappen.

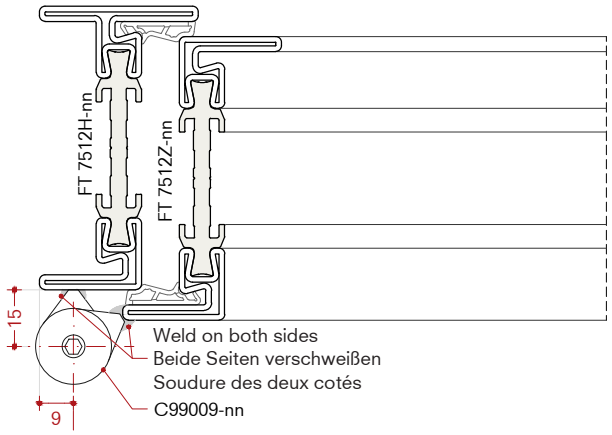
Remarque:

(*) Après l'installation, montez toutes les parties des paumelles pour arrêter les réglages et fixer les bouchons.

Installation
Adjustable 3D weld-on hinge
C99009-nn
Overlapped profiles

Einbau
Einstellbares 3D Band
C99009-nn
Überlappende profile

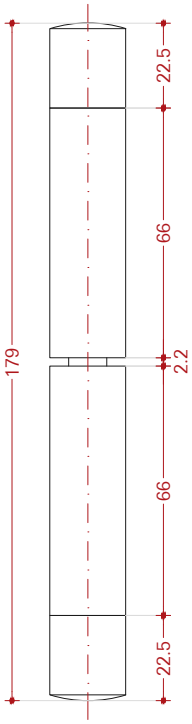
Schéma de montage
Paumelle reglable 3D
C99009-nn
Profilés superposés

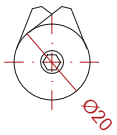


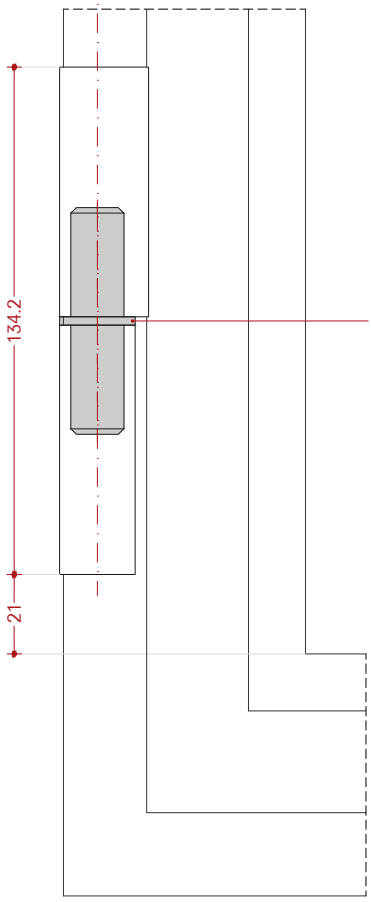
The hinge may only be welded on without brass bushings.

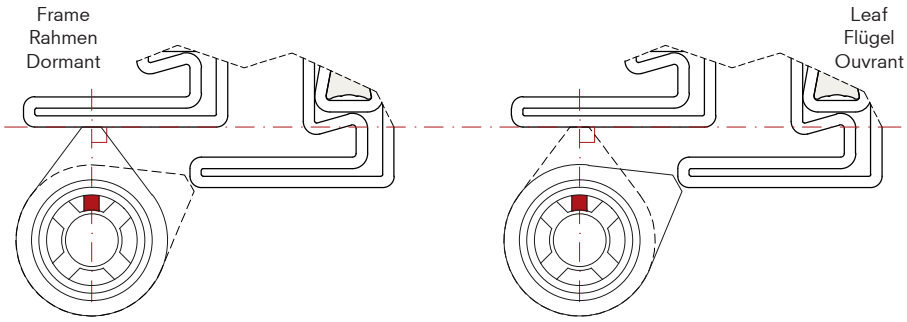
Das Band darf nur ohne Buchsen angeschweißt werden.

la paumelle ne peut être soudée sans bagues, sinon la couche anti-blocage peut être endommagée.









To adjust the brass bushing, use the D99502-31 adjusting tool. Adjust the top and bottom hinge before hooking the sash.

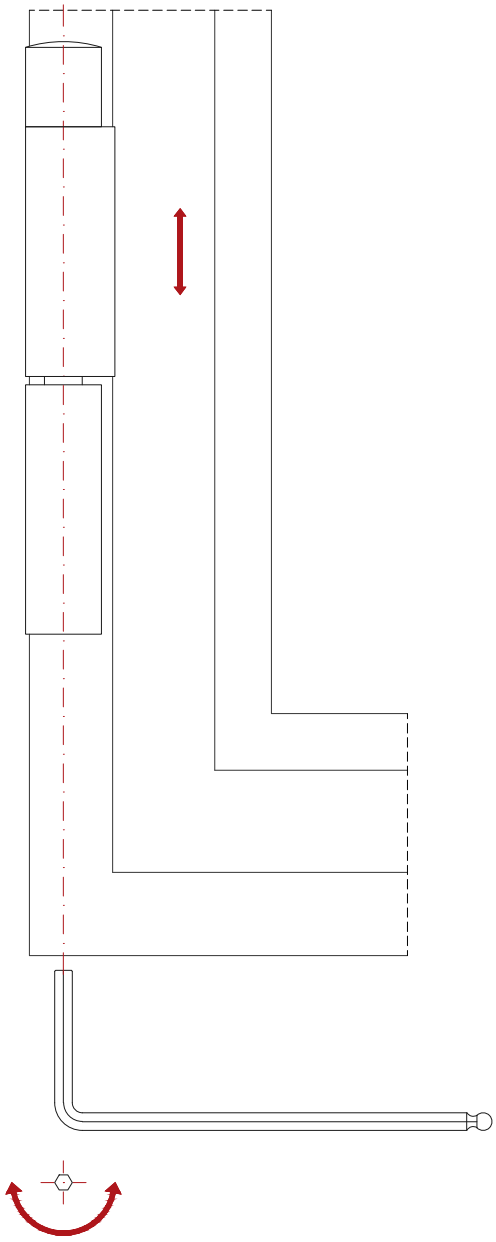
Um die Bronzebuchse zu verstellen den justierschlüssel D99502-31 verwenden. Oberes und unteres Band einstellen bevor der Flügel eingehängt wird.

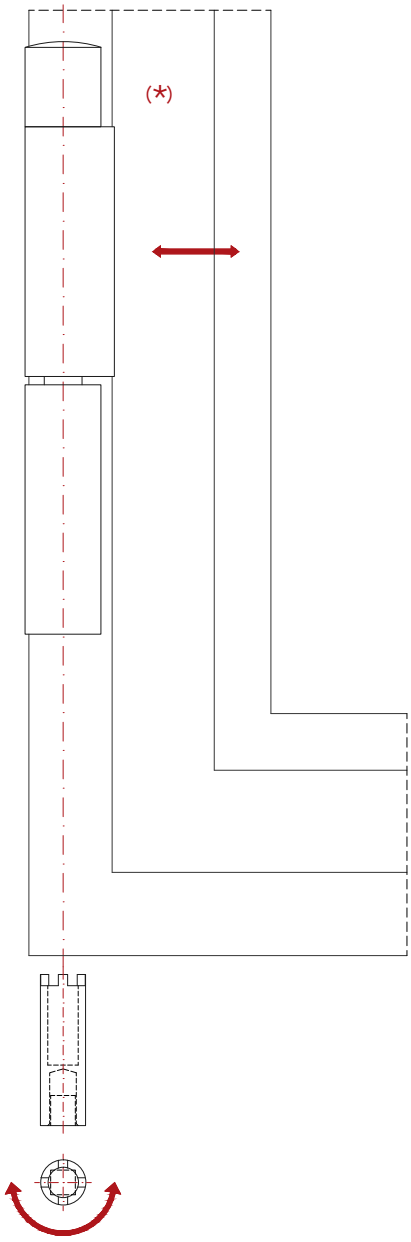
Aligner la douille en laiton en utilisant la clé D99502-31 sur la ligne marchee sur les paumelles (en haut et en bas) avant l'installation du vantail.

Setting on site

Einstellung vor Ort

Ajustement en chantier





Use an allen key (4 mm, not included)
for the upward and downward setting

Verwenden Sie den Inbusschlüssel
(4 mm, nicht enthalten) für die
Einstellung nach oben und unten

Utiliser la clé hexagonale allen
(4 mm, non inclus) pour le réglage haut et bas

Use 1/4" allen key adjusting tool D99502-31
(Not included) for left and right setting

Verwenden Sie für die linke und rechte Einstellung einen 1/4"
Inbusschlüssel auf D99502-31 (Eigenfertigung)

Utiliser la clé 1/4" D99502-31 (non inclus)
pour reglage a gauche et a droite

Note:

(*) After the installation mount all of the parts of the hinges to stop the adjustments and fix the caps.

Anmerkung:

(*) Nach der Installation montieren Sie alle Teile der Bänder, Um die Einstellungen zu fixieren und befestigen sie die Kappen.

Remarque:

(*) Après l'installation, montez toutes les parties des paumelles pour arrêter les réglages et fixer les bouchons.

Recommendations for installation
Adjustable 3D weld-on hinge
C99008-nn and C99009-nn

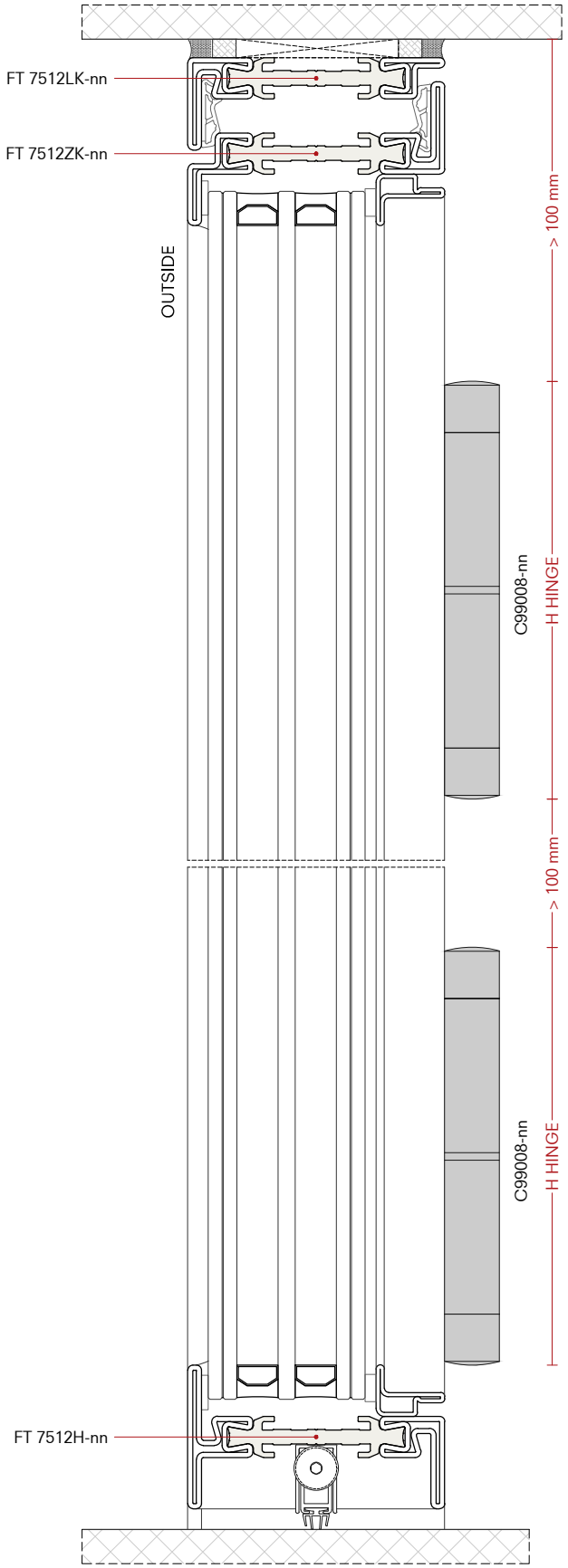
Empfehlungen für den Einbau
Einstellbares 3D Band
C99008-nn und C99009-nn

Recommandations pour l'installation
Paumelle reglable 3D
C99008-nn et C99009-nn

Leave at least 100 mm
on top to remove the leaf.
Hinges code: C99008-nn, C99009-nn

Lassen Sie mindestens 100 mm
oben Platz, um die Flügel zu entfernen.
Bandnummern: C99008-nn, C99009-nn

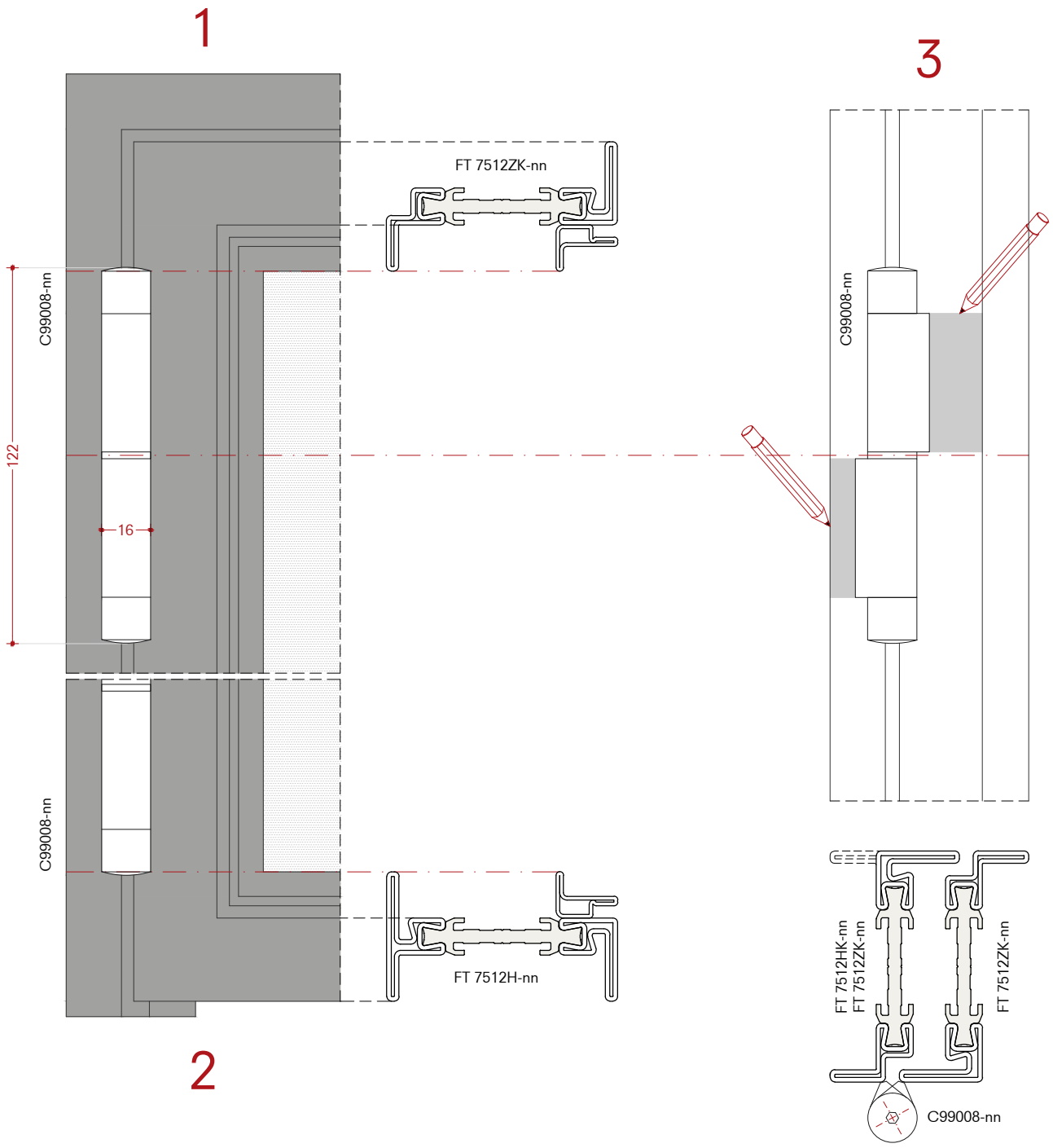
Laissez au moins 100 mm
d'espace supérieur pour enlever la ouvrant.
Ref. paumelles: C99008-nn, C99009-nn



Installation
Templates D99442-03
for weld-on hinges C99008-nn
Flush profiles

Einbau
Schweißschablone D99442-03
für Anschweißband C99008-nn
Flächenbündige profile

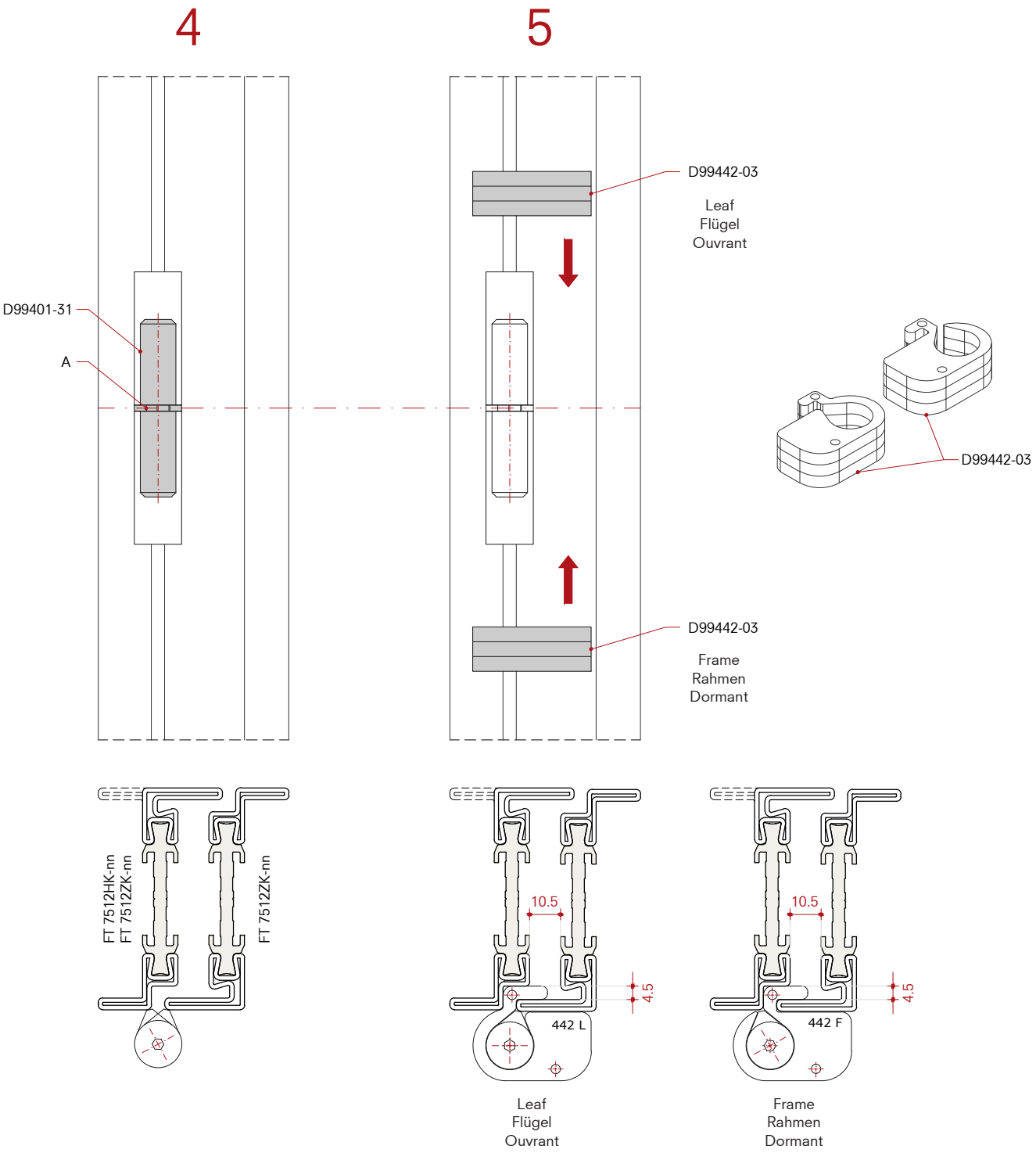
Schéma de montage
Gabarites D99442-03
pour paumelle à souder C99008-nn
Profilés coplanaires



1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle



4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99401-31, not included)

4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99401-31, nicht enthalten)

4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99401-31, non inclus)

6

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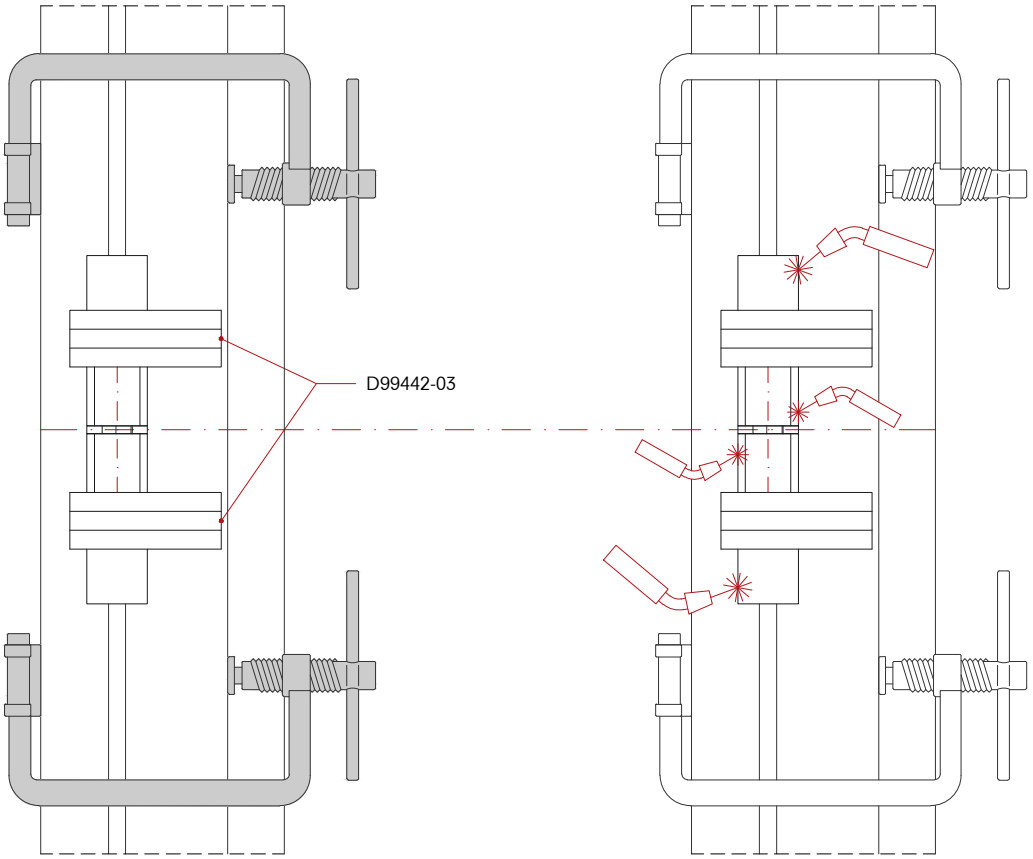
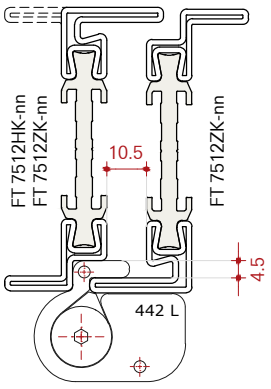
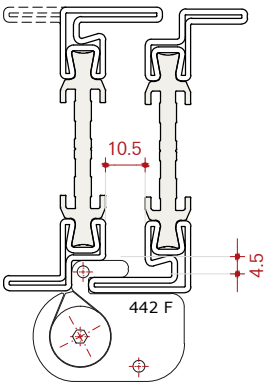
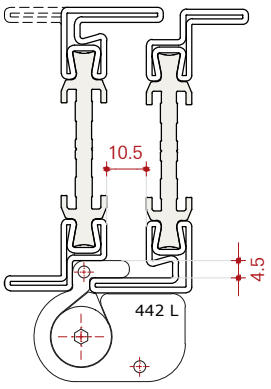




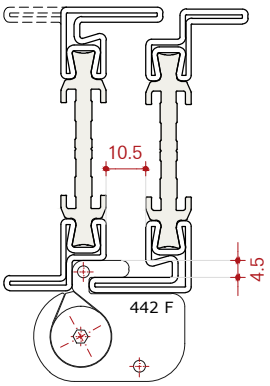
Leaf
Flügel
Ouvrant



Frame
Rahmen
Dormant



Leaf
Flügel
Ouvrant

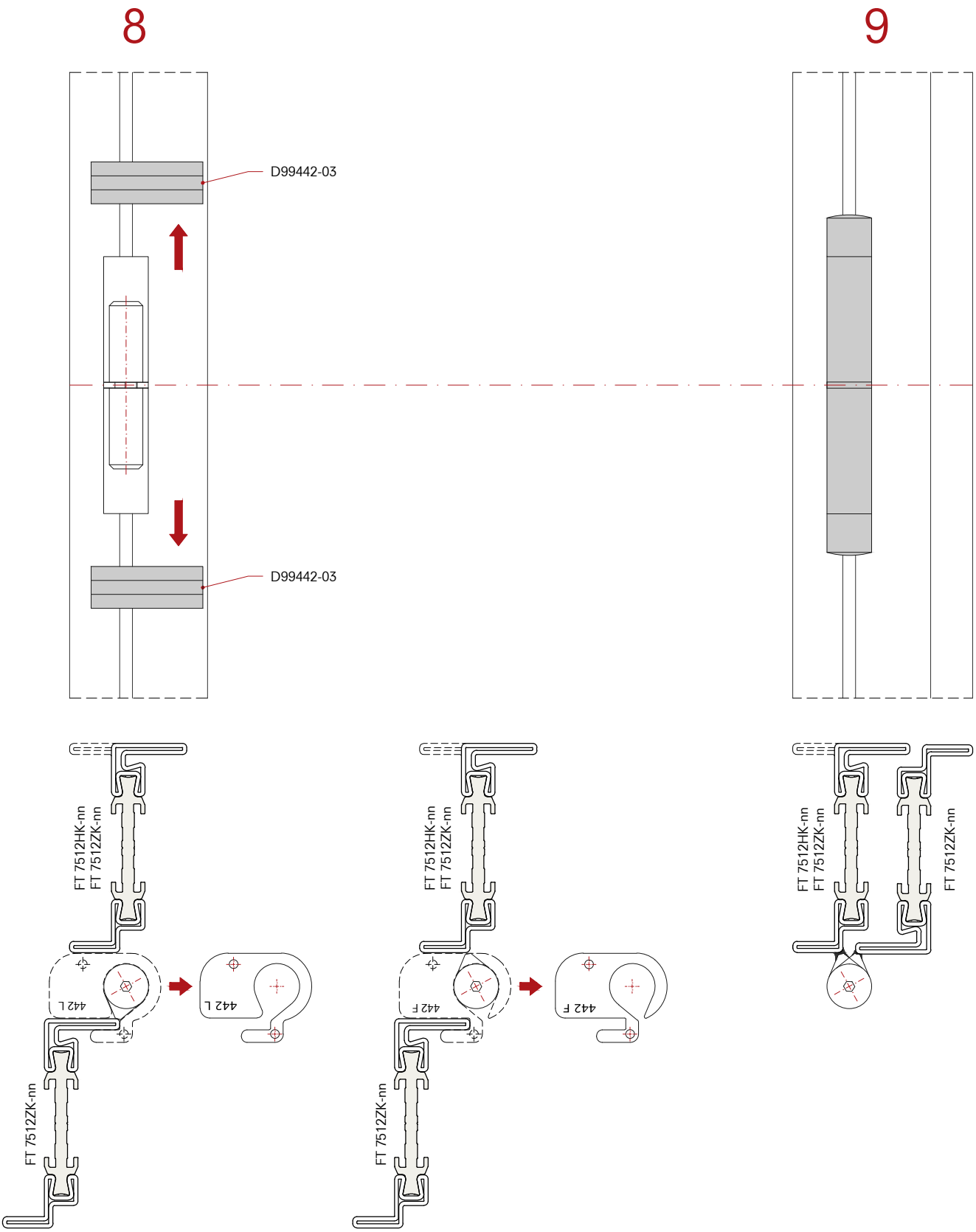


Frame
Rahmen
Dormant

6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés



8) Remove templates
9) Assembly of the hinge

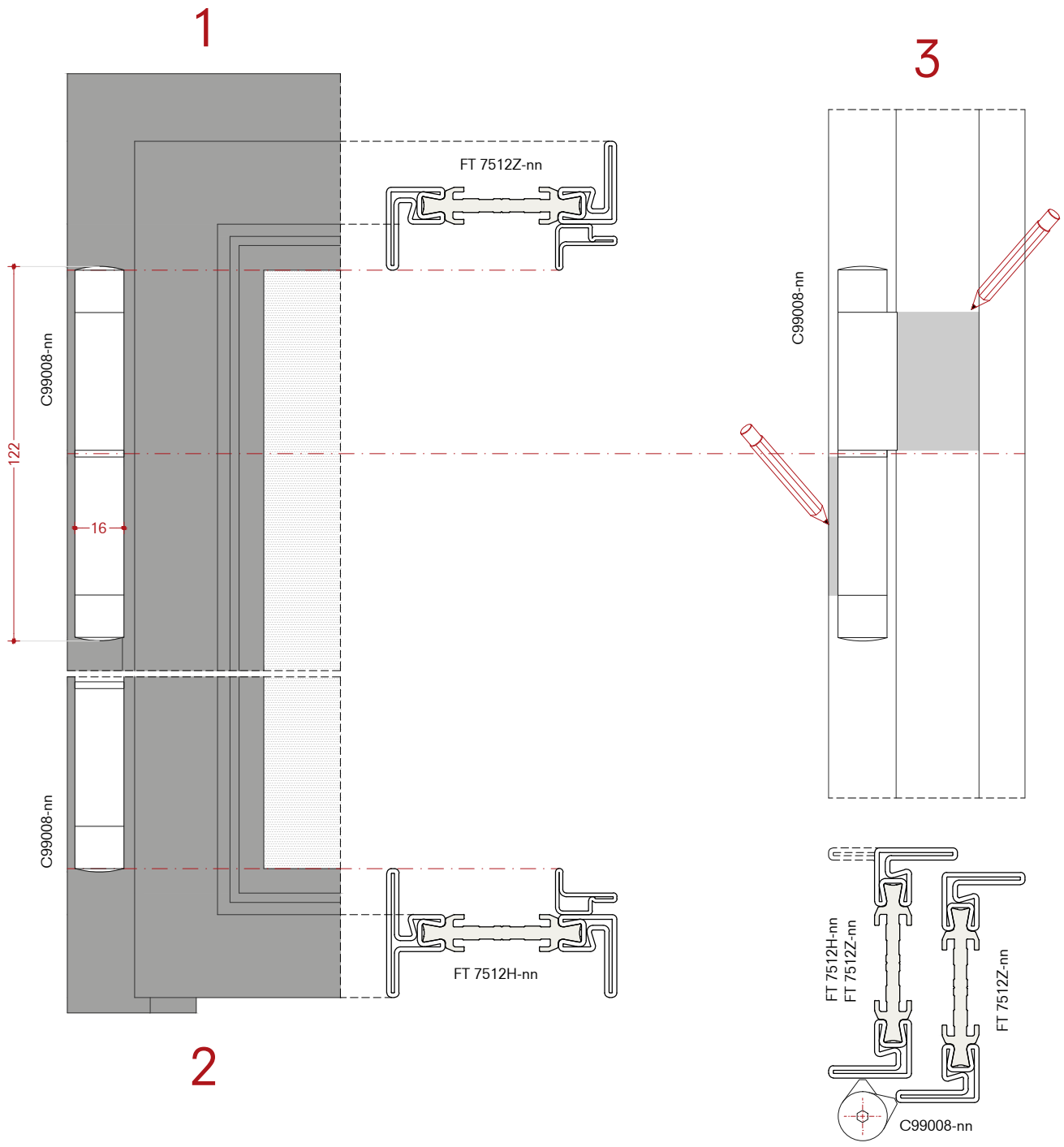
8) Schweißschablone entfernen
9) Montage Band

8) Supprimer les gabarites
9) Assemblage de la paumelle

Installation
Templates D99443-03
for weld-on hinges C99008-nn
Overlapped profiles

Einbau
Schweißschablone D99443-03
für Anschweißband C99008-nn
Überlappende profile

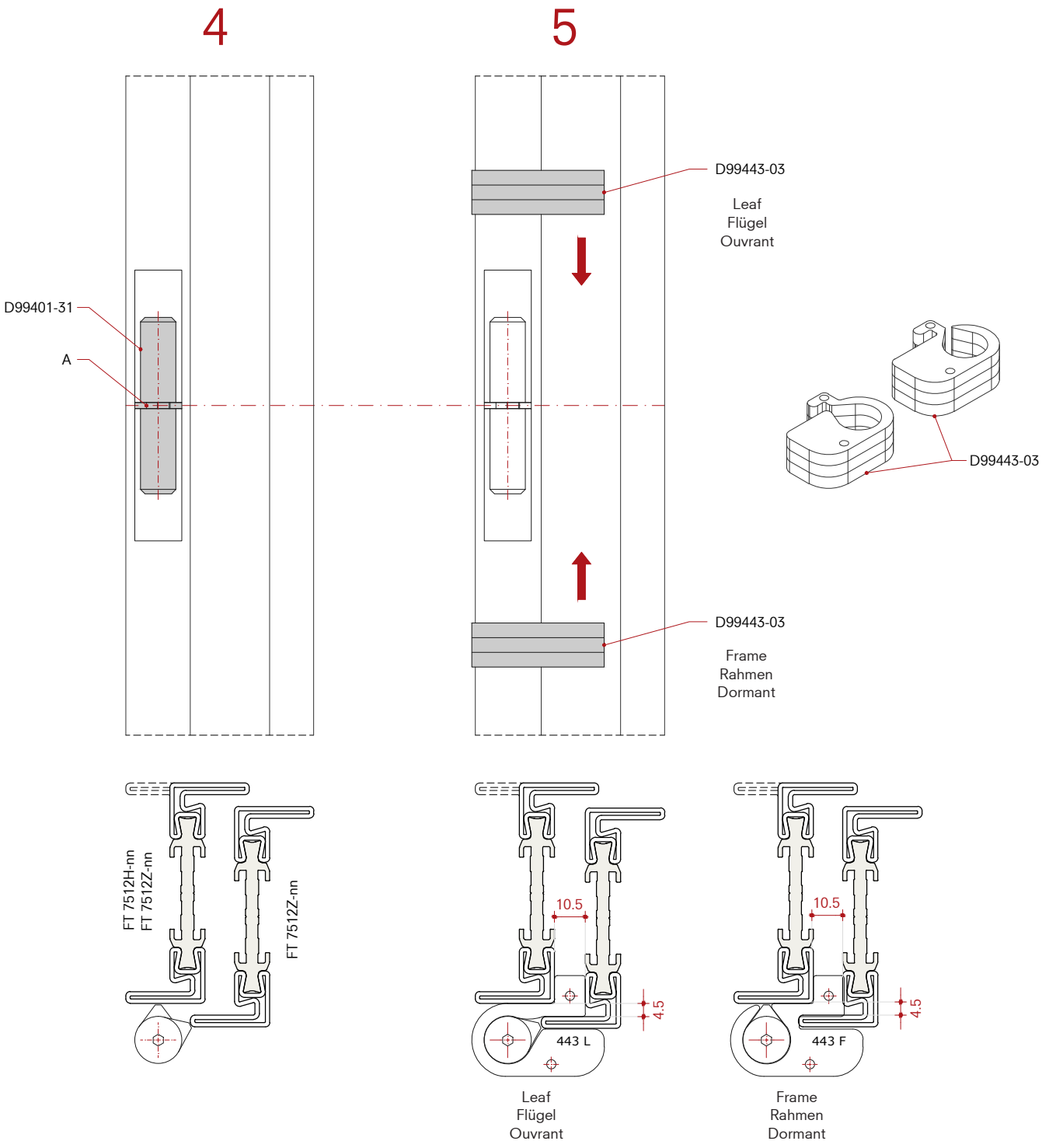
Schéma de montage
Gabarites D99443-03
pour paumelle à souder C99008-nn
Profilés superposés



1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle



4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99401-31, not included)

4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99401-31, nicht enthalten)

4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99401-31, non inclus)

6

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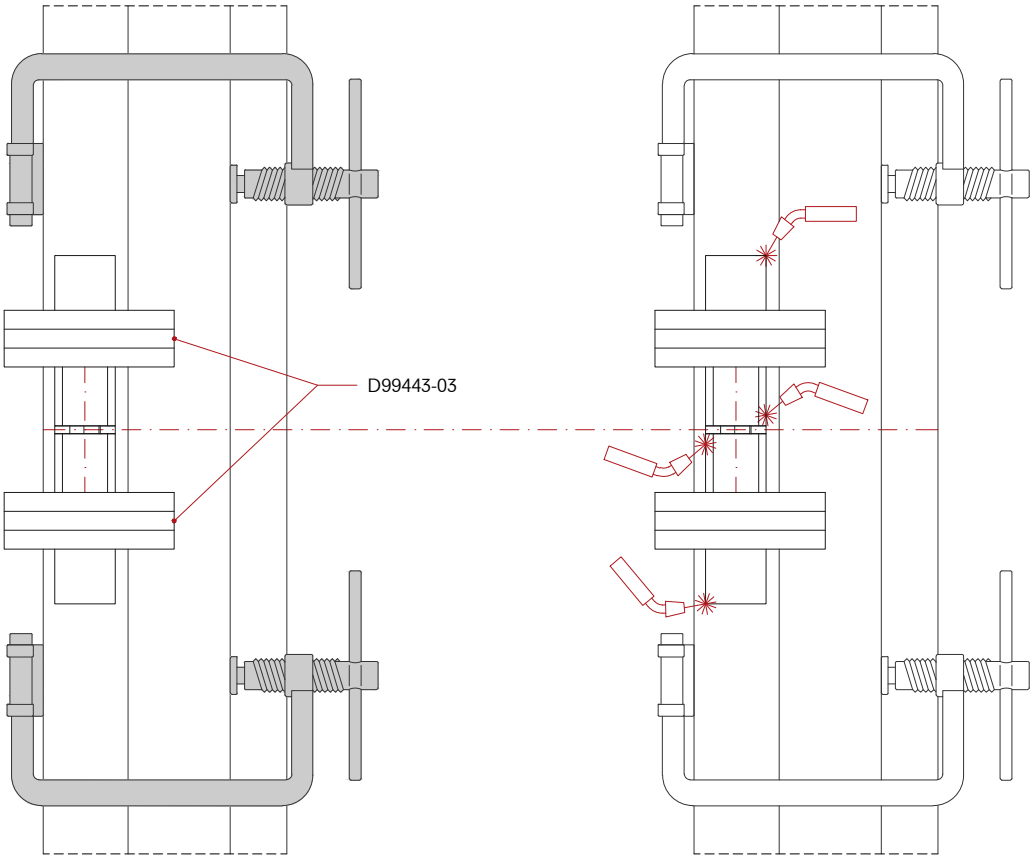
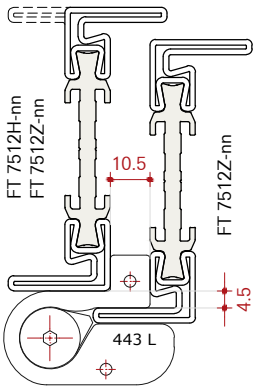
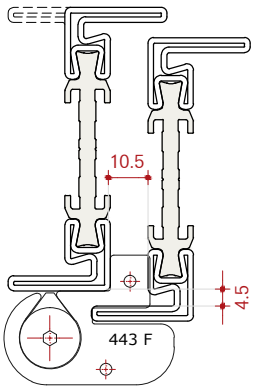
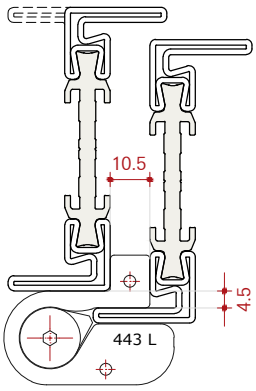




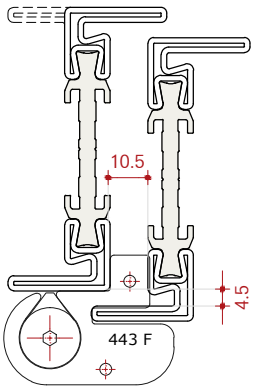
Leaf
Flügel
Ouvrant



Frame
Rahmen
Dormant



Leaf
Flügel
Ouvrant

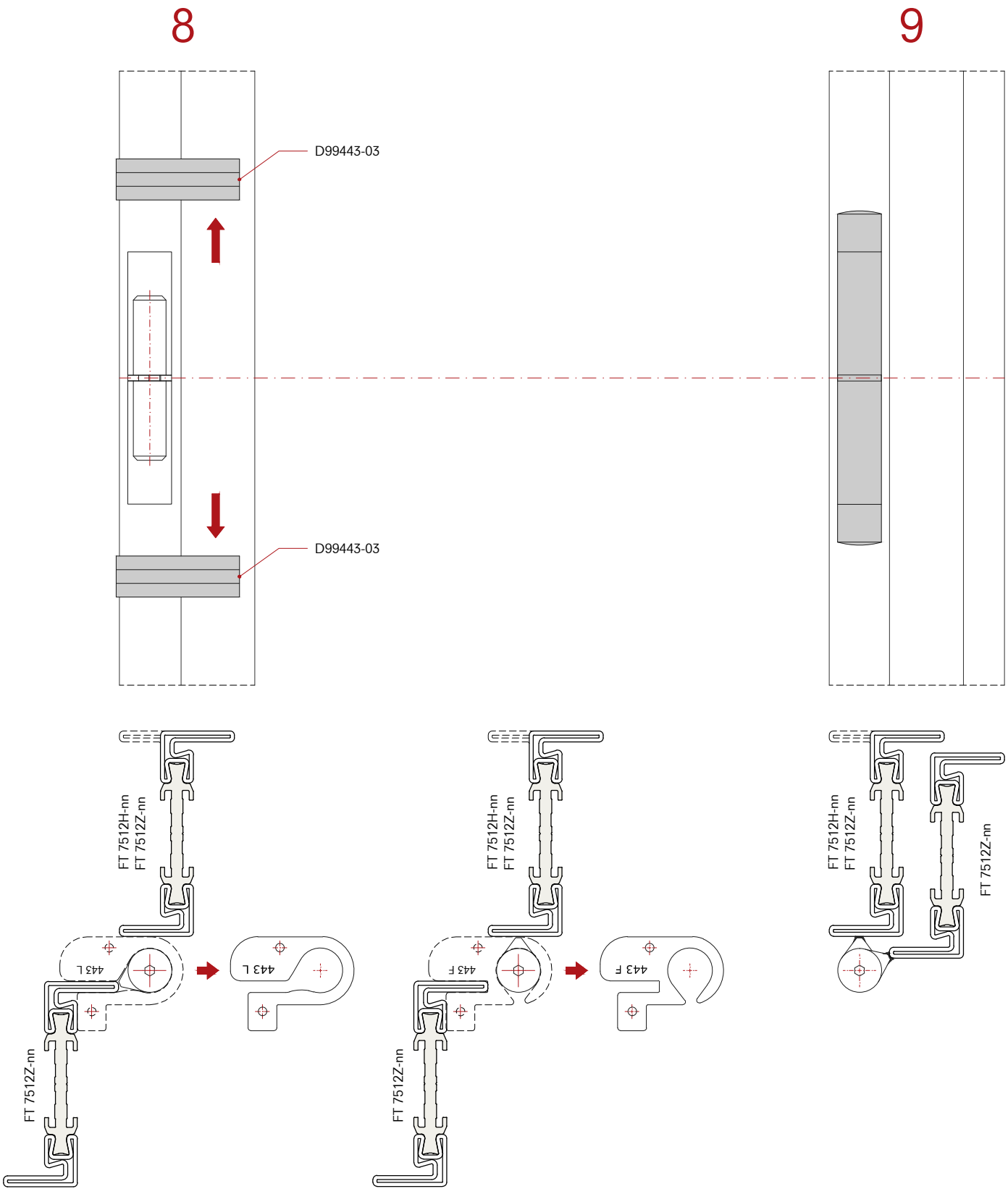


Frame
Rahmen
Dormant

6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés



8) Remove templates
9) Assembly of the hinge

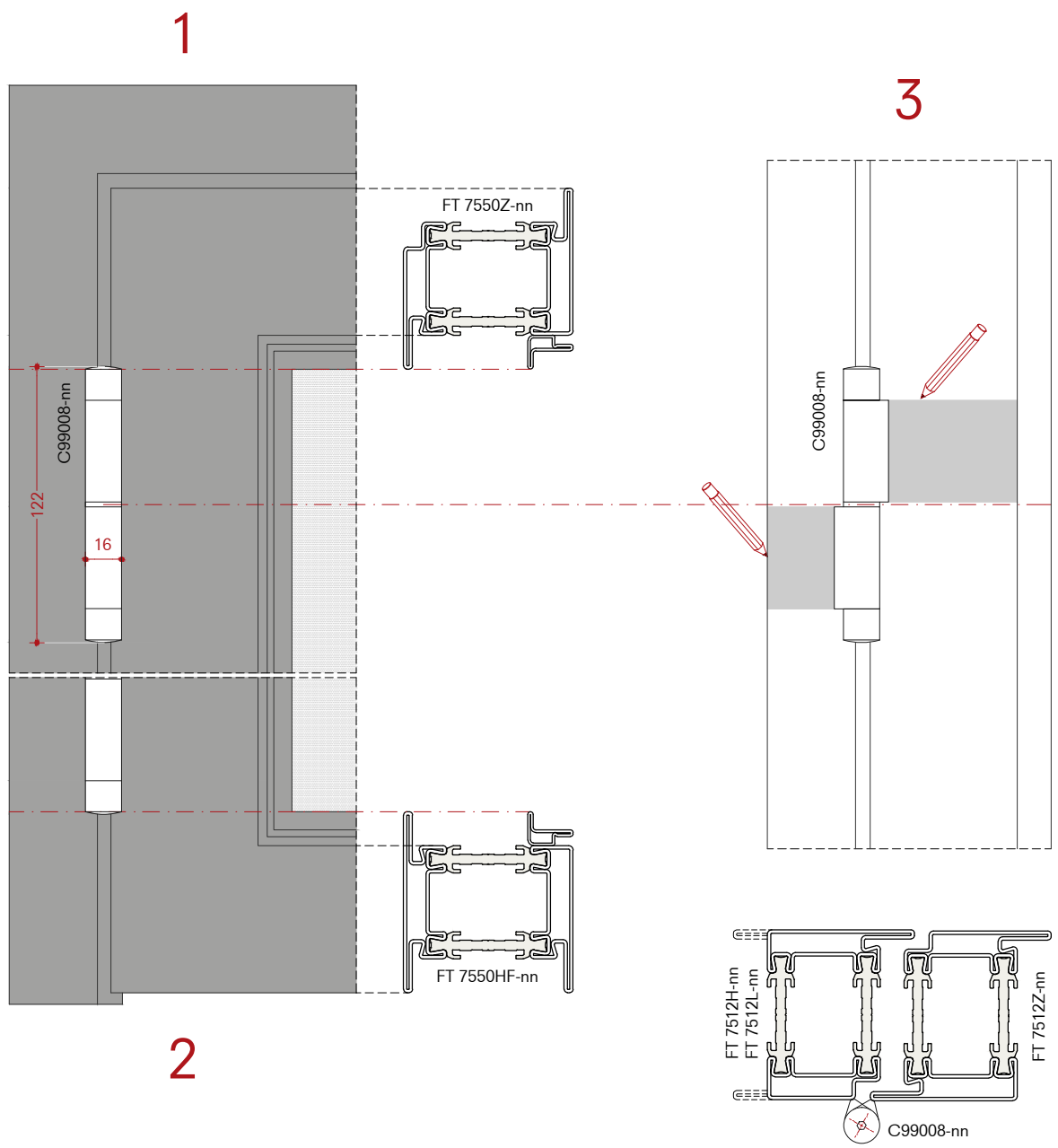
8) Schweißschablone entfernen
9) Montage Band

8) Supprimer les gabarites
9) Assemblage de la paumelle

Installation
Templates D99453-03
for weld-on hinges C99008-nn
D75 TB - Door profiles

Einbau
Schweißschablone D99453-03
für Anschweißband C99008-nn
D75 TB - Tür Profile

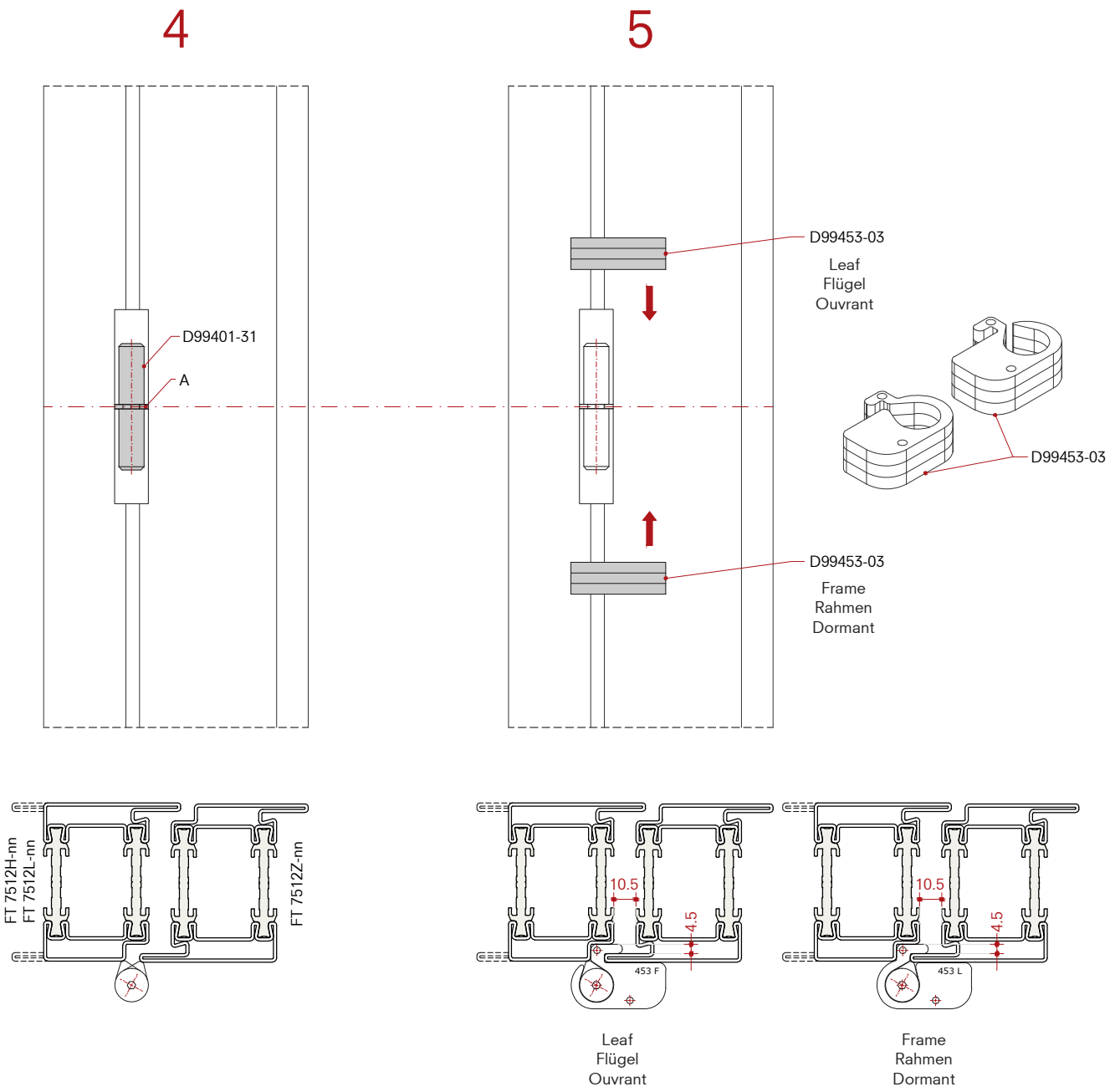
Schéma de montage
Gabarites D99453-03
pour paumelle à souder C99008-nn
D75 TB - Profilés portes



Scale 1:3
1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

Maßstab 1:3
1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

Échelle1:3
1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle



Scale 1:3
4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99401-31, not included)

Maßstab 1:3
4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99401-31, nicht enthalten)

Échelle1:3
4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99401-31, non inclus)

6

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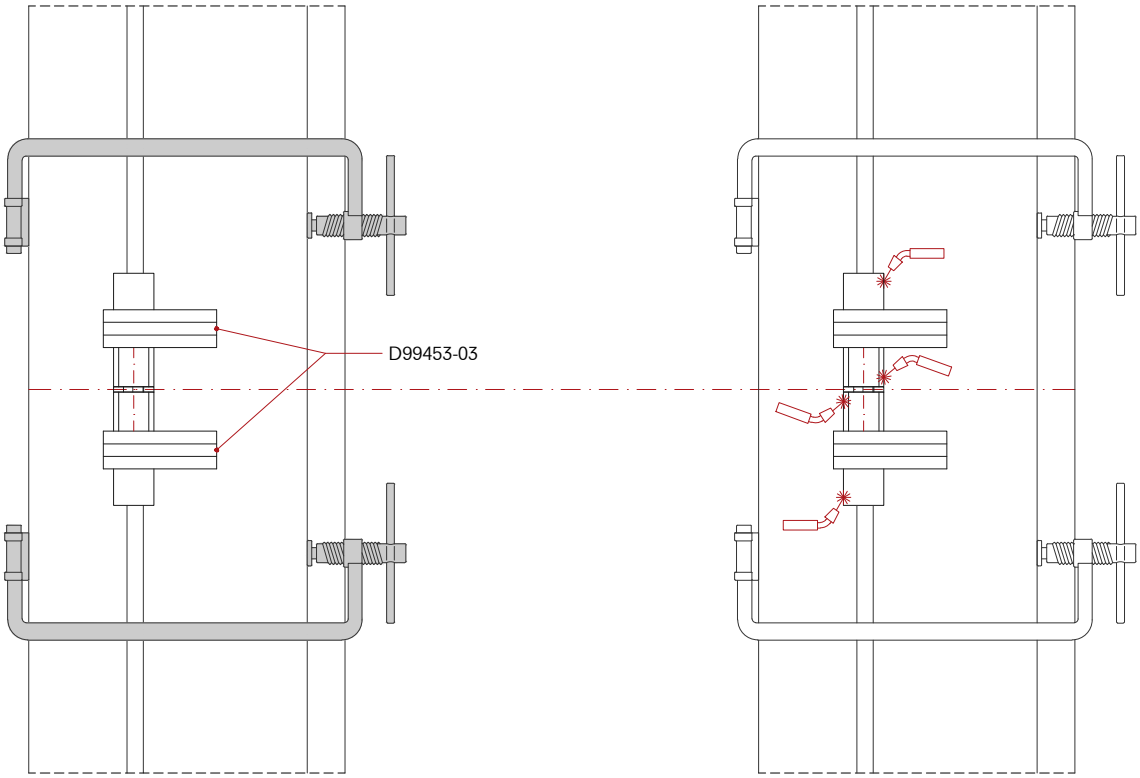
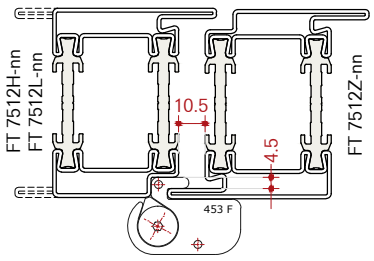
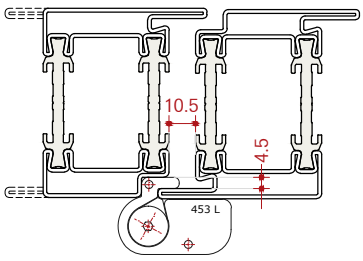




Leaf
Flügel
Ouvrant

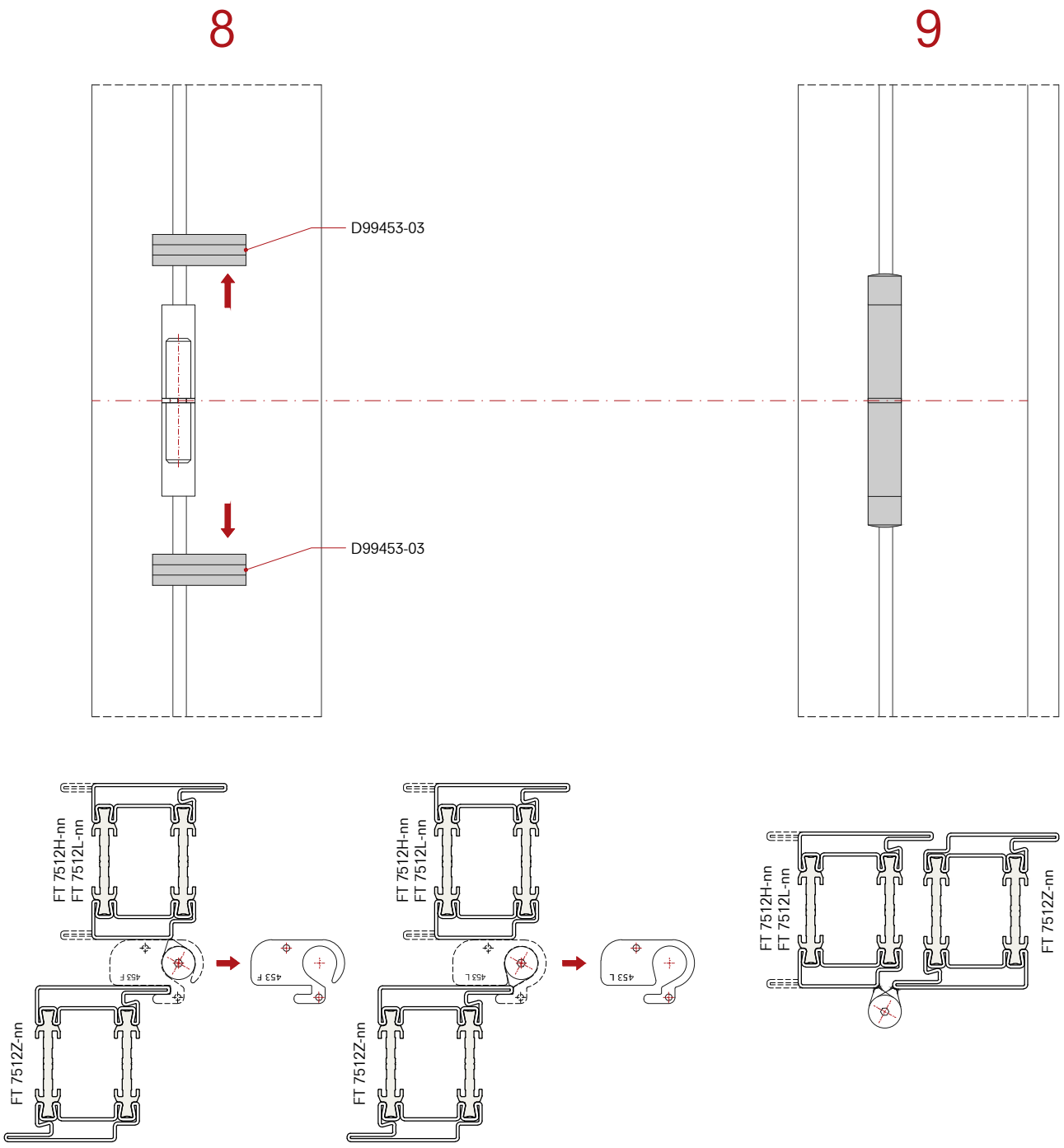


Frame
Rahmen
Dormant

Scale 1:3
6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

Maßstab 1:3
6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

Échelle1:3
6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés



Scale 1:3
8) Remove templates
9) Assembly of the hinge

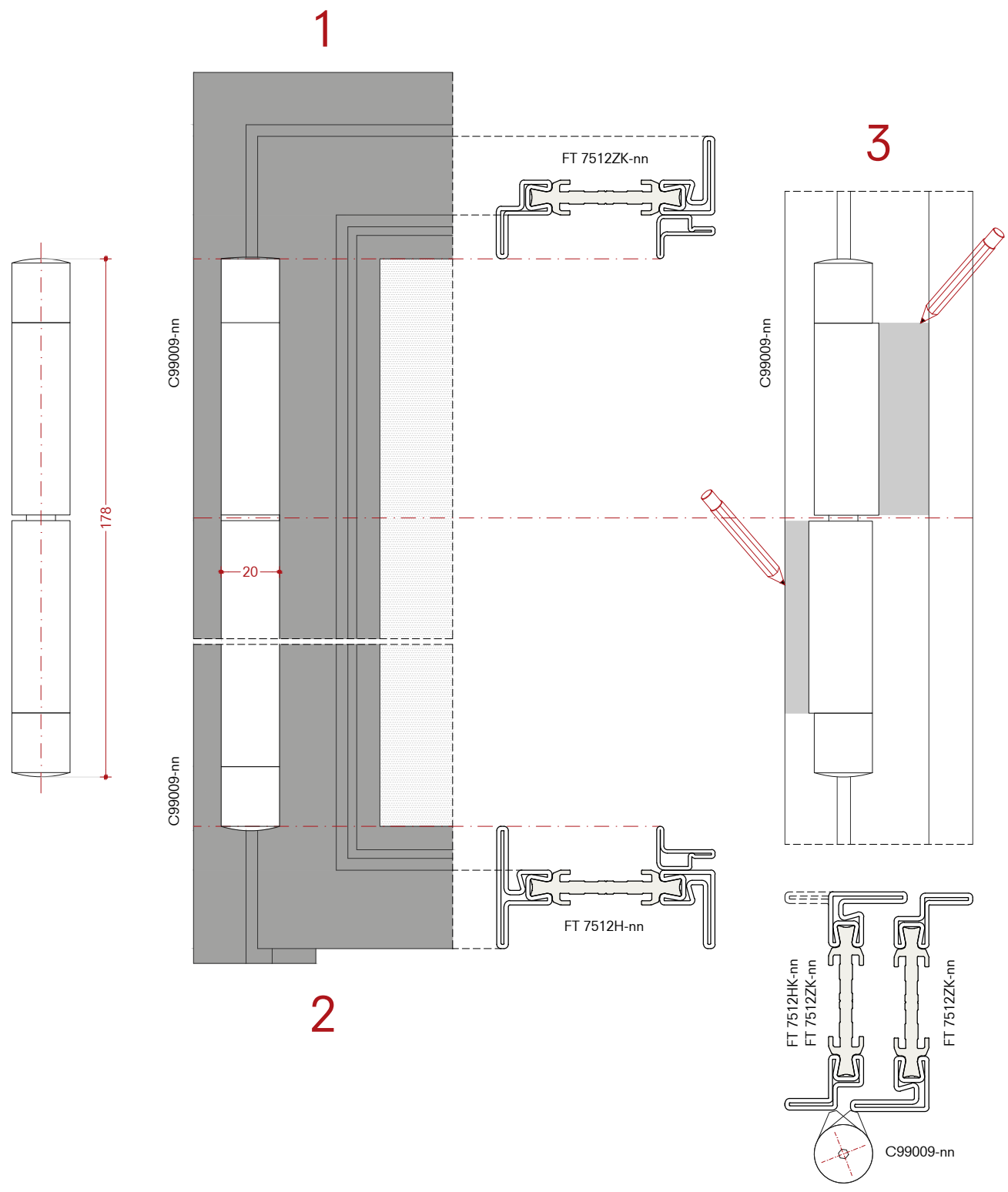
Maßstab 1:3
8) Schweißschablone entfernen
9) Montage Band

Échelle1:3
8) Supprimer les gabarites
9) Assemblage de la paumelle

Installation
Templates D99444-03
for weld-on hinges C99009-nn
Flush profiles

Einbau
Schweißschablone D99444-03
für Anschweißband C99009-nn
Flächenbündige profile

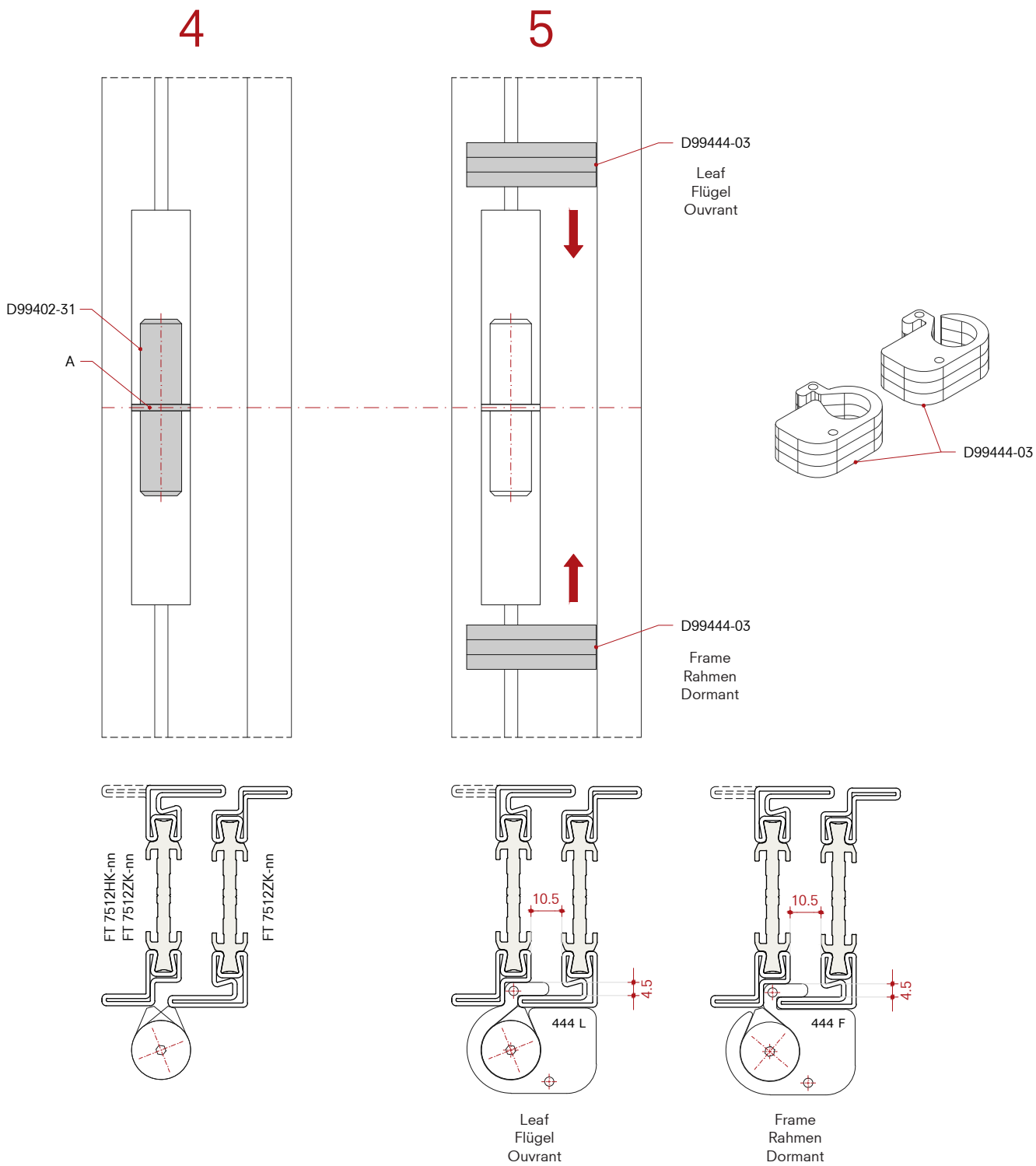
Schéma de montage
Gabarites D99444-03
pour paumelle à souder C99009-nn
Profilés coplanaires



1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle



4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99402-31, not included)

4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99402-31, nicht enthalten)

4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99402-31, non inclus)

6

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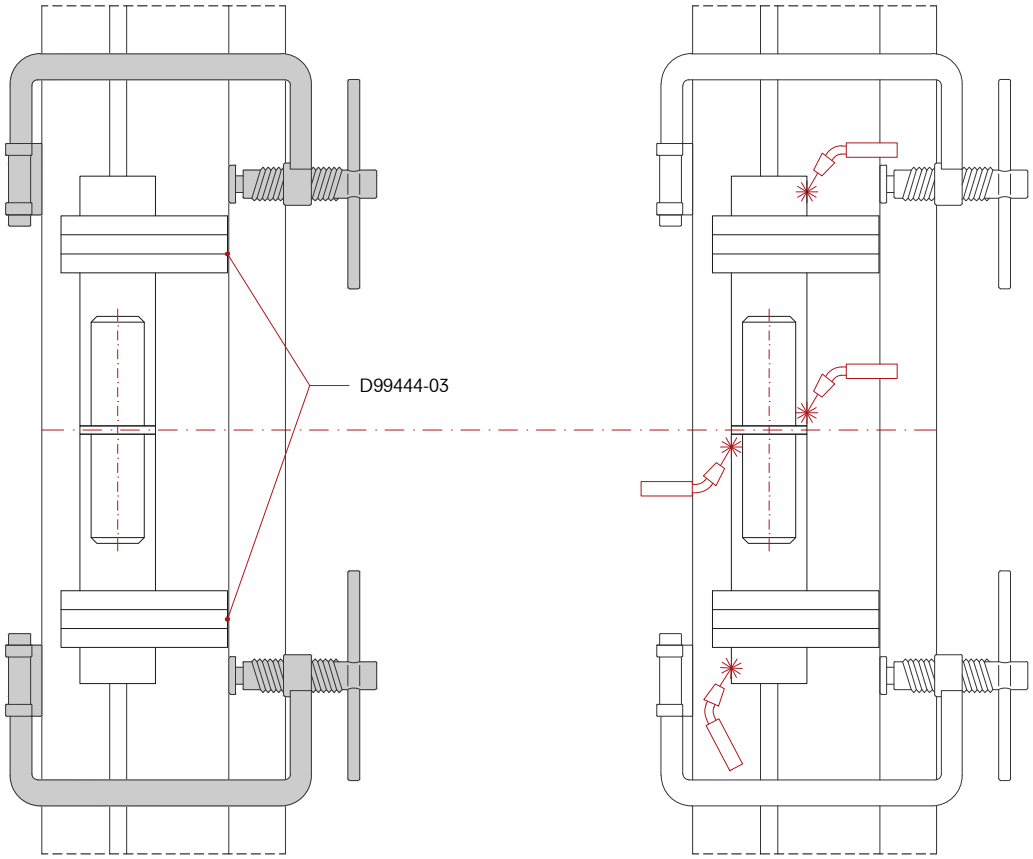
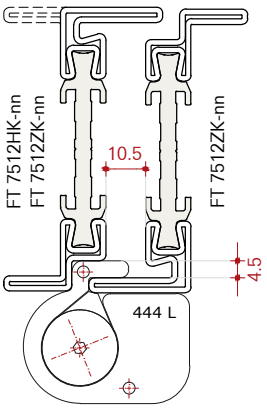
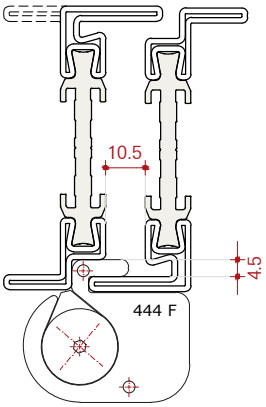
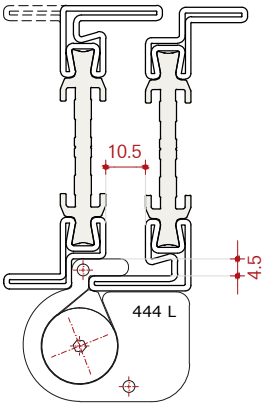




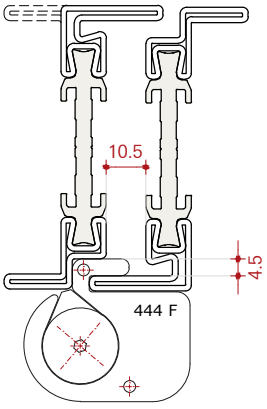
Leaf
Flügel
Ouvrant



Frame
Rahmen
Dormant



Leaf
Flügel
Ouvrant

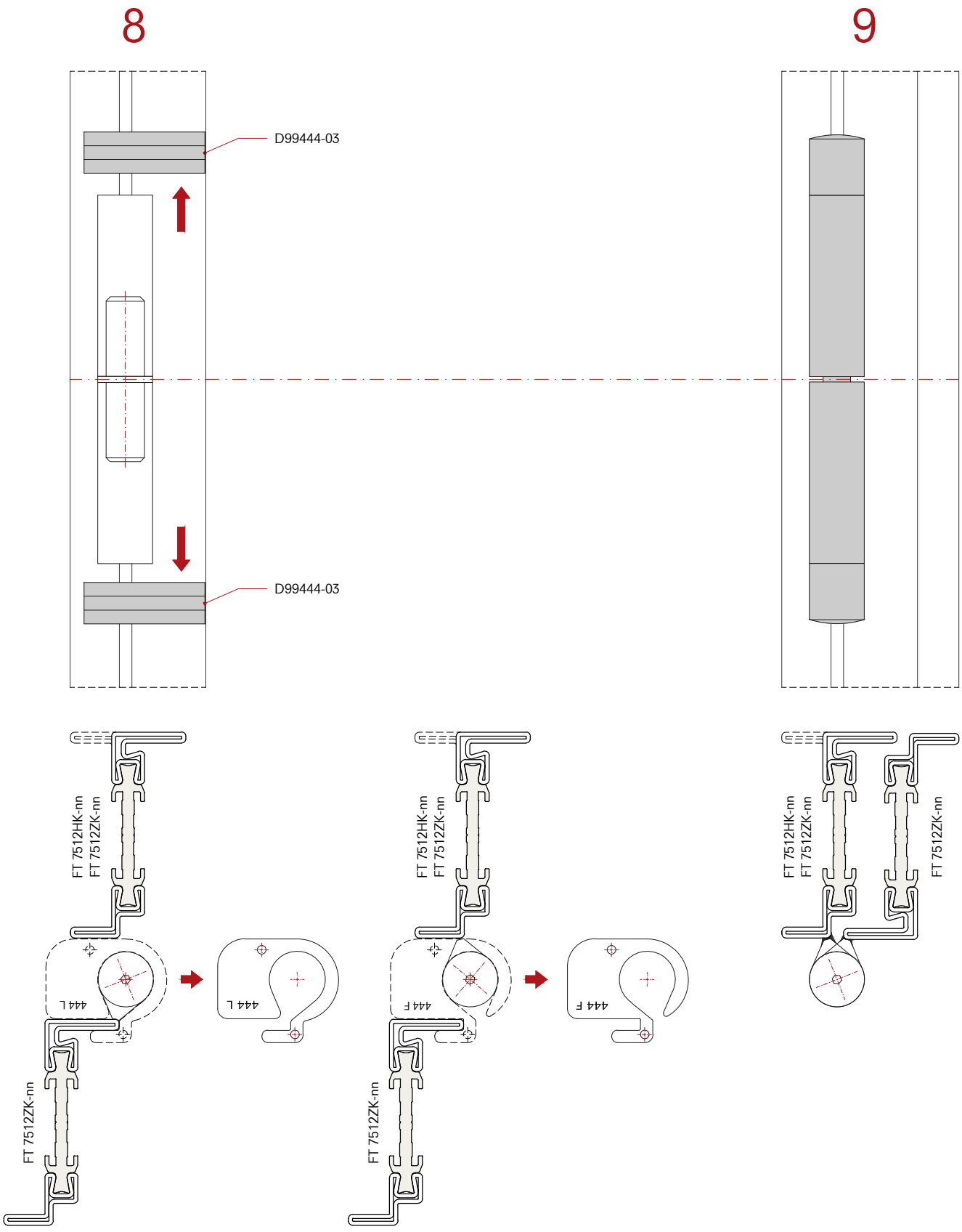


Frame
Rahmen
Dormant

6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés



8) Remove templates
9) Assembly of the hinge

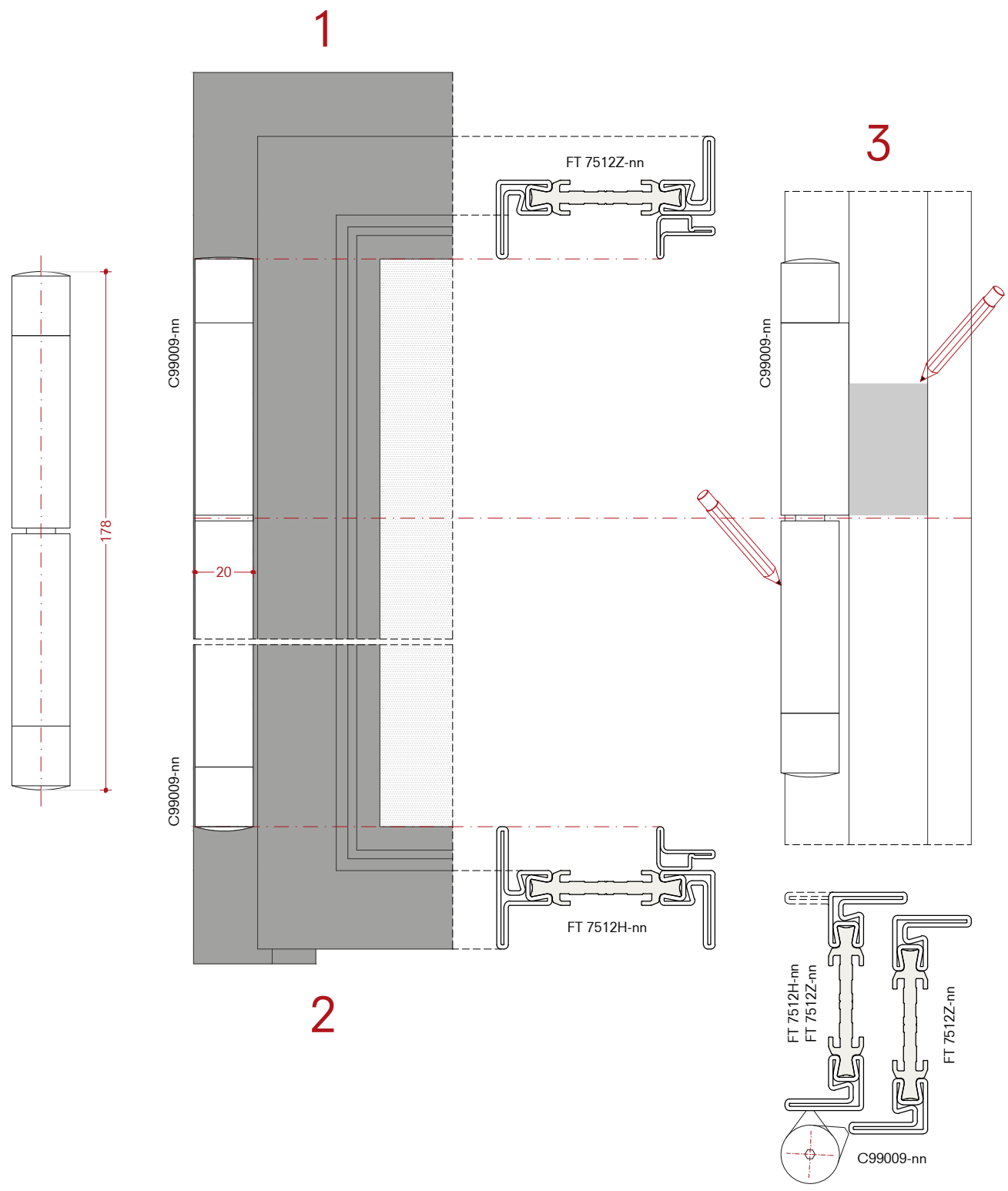
8) Schweißschablone entfernen
9) Montage Band

8) Supprimer les gabarites
9) Assemblage de la paumelle

Installation
Templates D99445-03
for weld-on hinges C99009-nn
Overlapped profiles

Einbau
Schweißschablone D99445-03
für Anschweißband C99009-nn
Überlappende profile

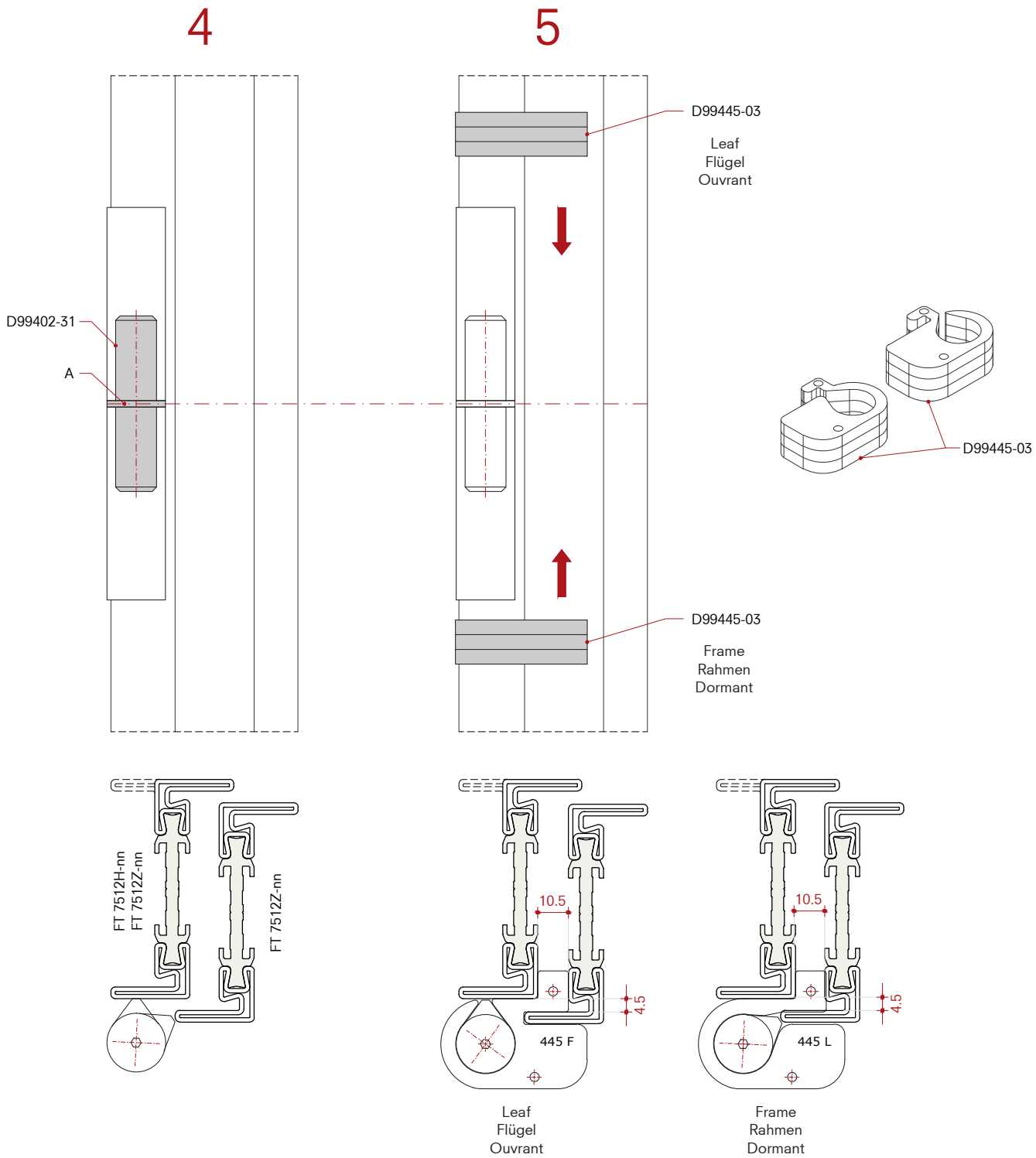
Schéma de montage
Gabarites D99445-03
pour paumelle à souder C99009-nn
Profilés superposés



1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle



4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99402-31, not included)

4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99402-31, nicht enthalten)

4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99402-31, non inclus)

6

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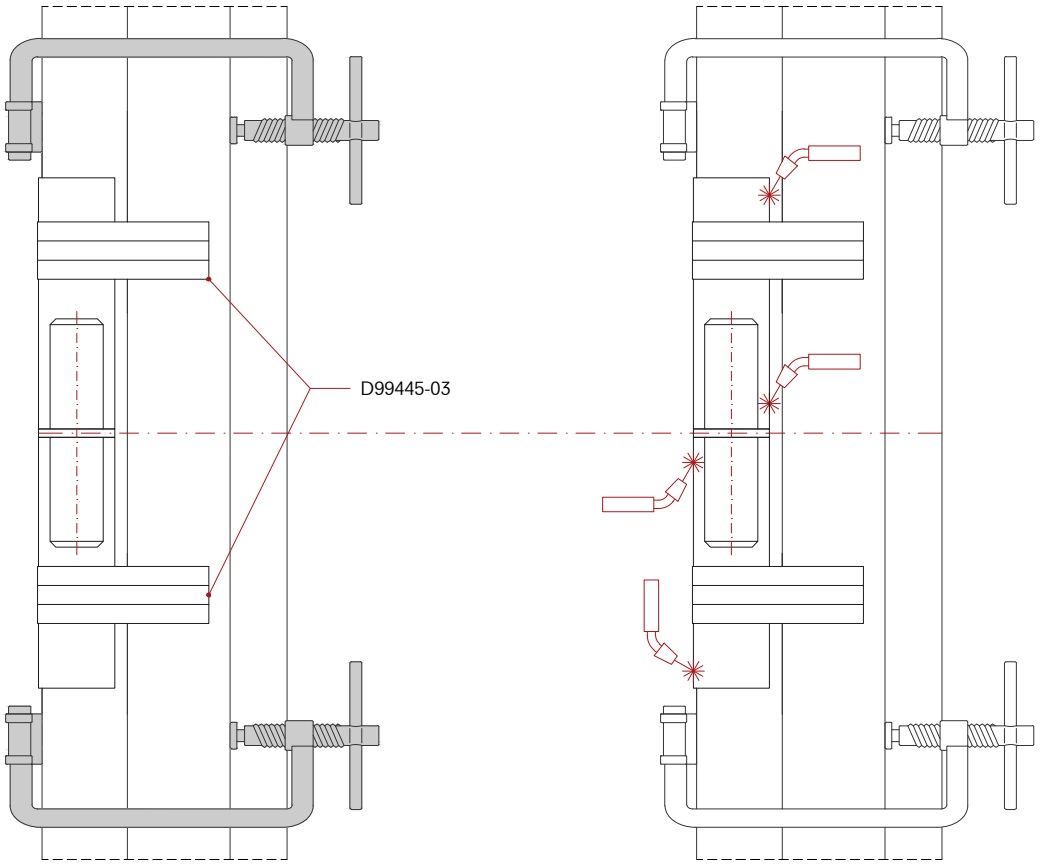
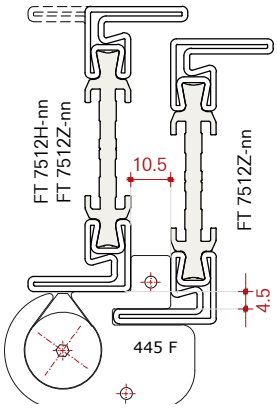
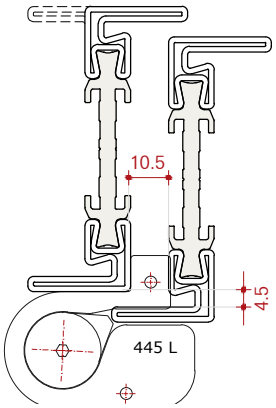
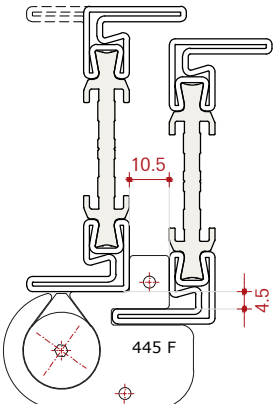




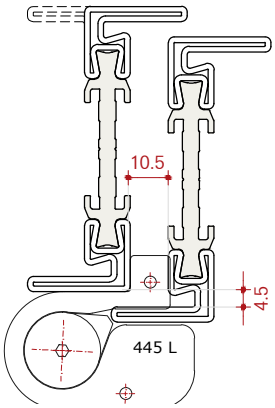
Leaf
Flügel
Ouvrant



Frame
Rahmen
Dormant



Leaf
Flügel
Ouvrant

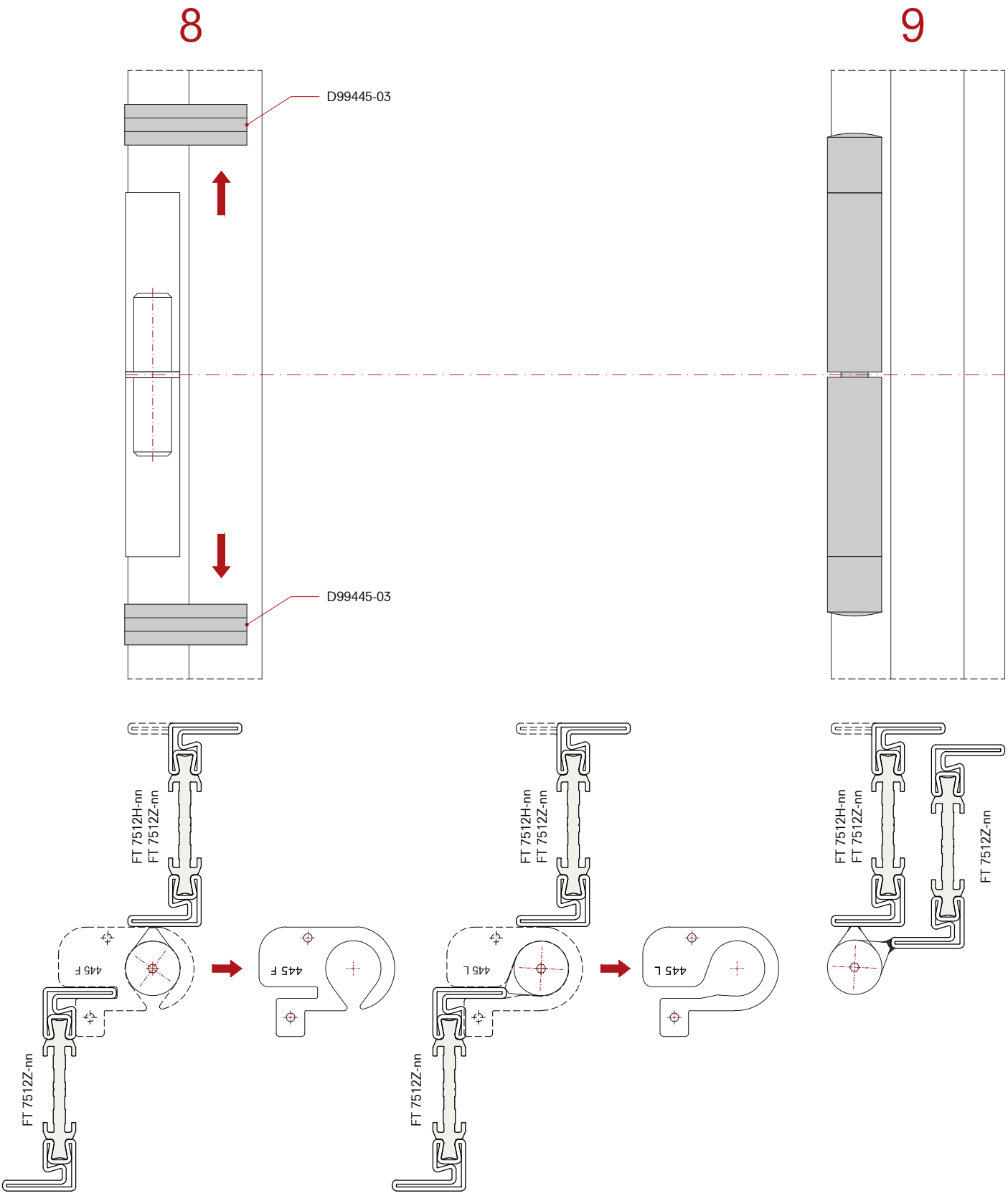


Frame
Rahmen
Dormant

6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés



8) Remove templates
9) Assembly of the hinge

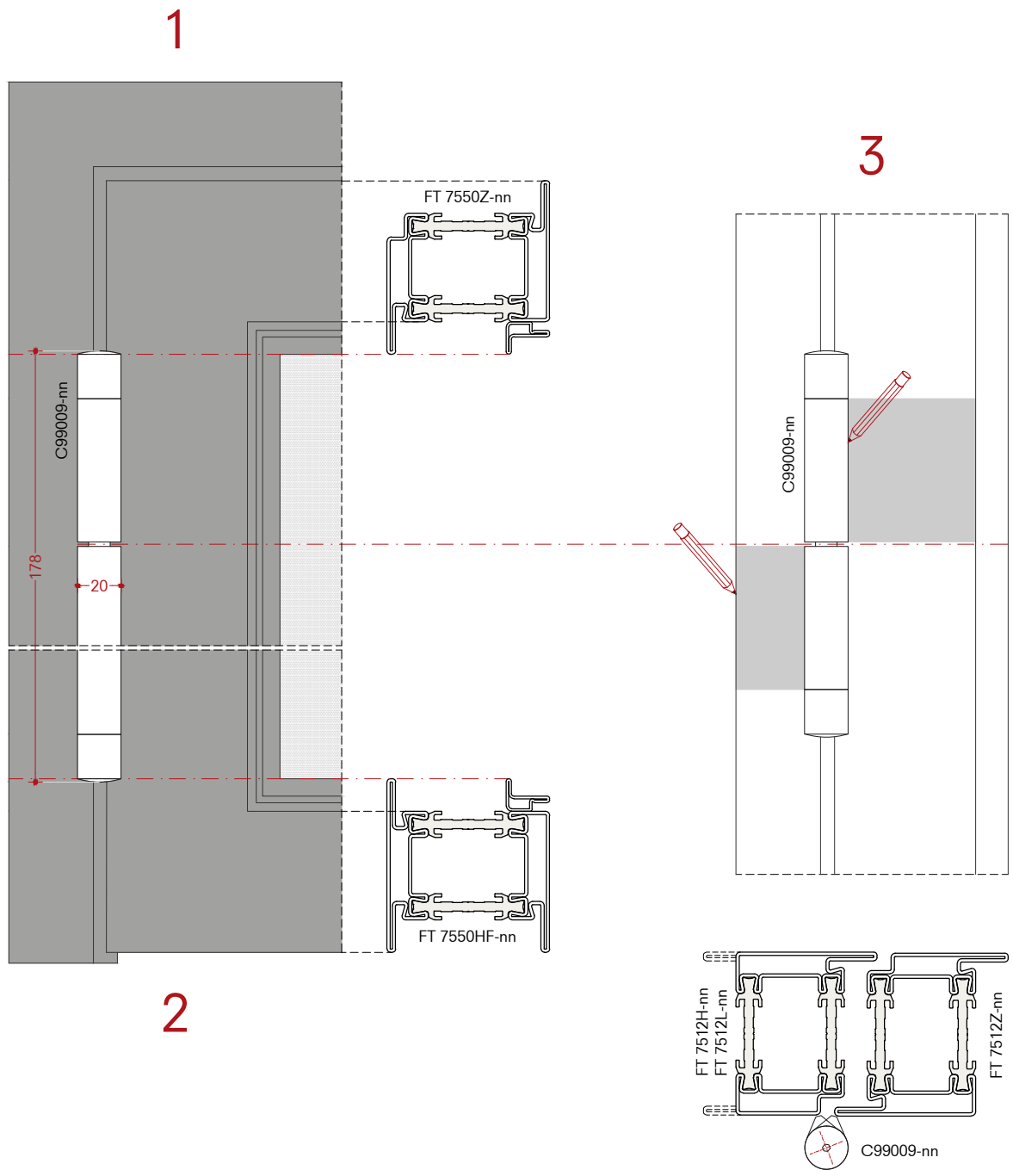
8) Schweißschablone entfernen
9) Montage Band

8) Supprimer les gabarites
9) Assemblage de la paumelle

Installation
Templates D99452-03
for weld-on hinges C99009-nn
D75 TB - Door profiles

Einbau
Schweißschablone D99452-03
für Anschweißband C99009-nn
D75 TB - Tür Profile

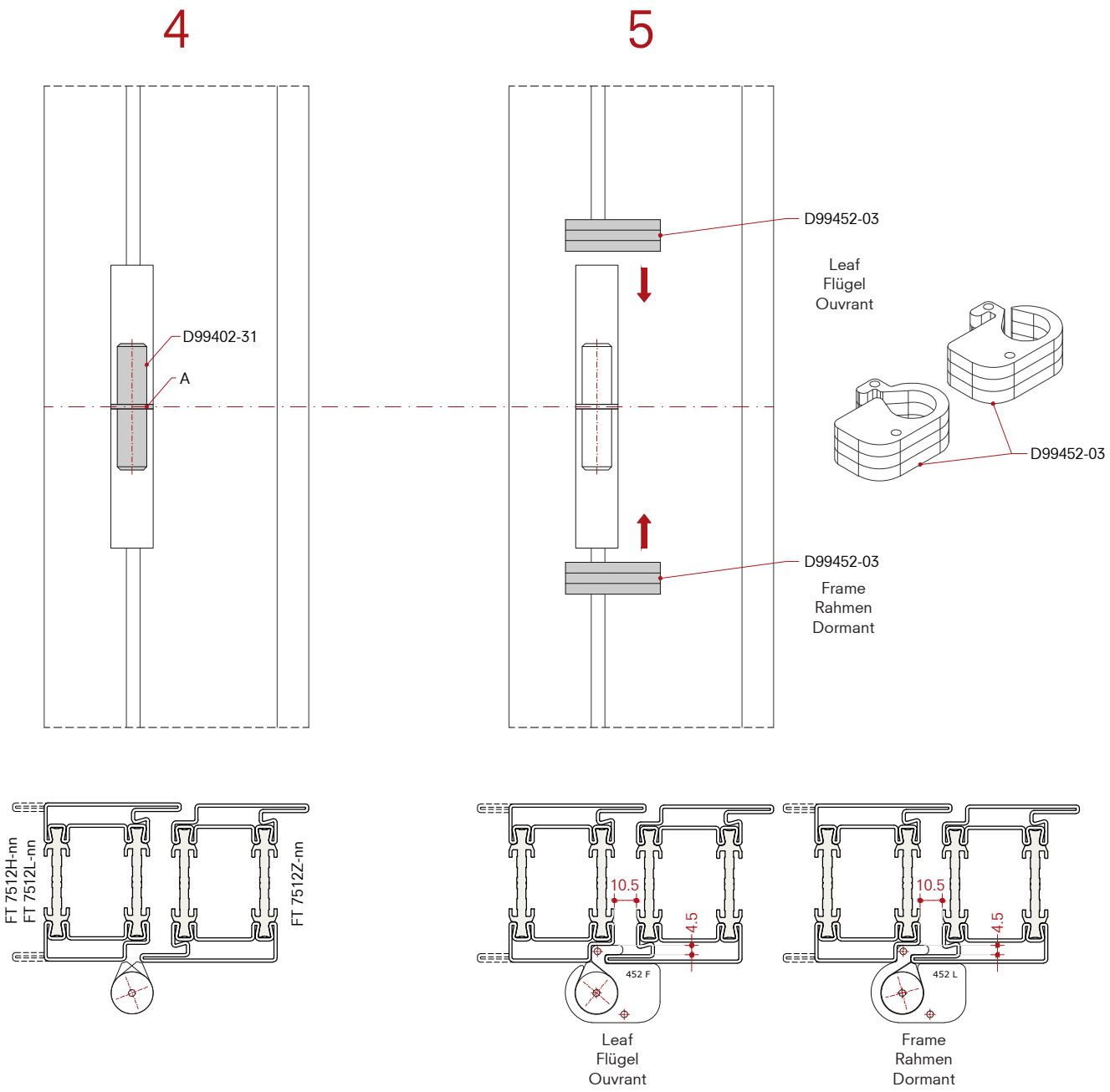
Schéma de montage
Gabarites D99452-03
pour paumelle à souder C99009-nn
D75 TB - Profilés portes



Scale 1:3
1) Align the top of hinge to the profile
2) Align the bottom of hinge to the profile
3) Mark the position of the hinge

Maßstab 1:3
1) Richten sie das obere Band mit dem Profil aus
2) Richten sie das untere Band mit dem Profil aus
3) Markieren Sie die Position des Band

Échelle1:3
1) Aligner la paumelle superieure avec le profilé
2) Aligner la paumelle inferieure avec le profilé
3) Marquez la position de la paumelle

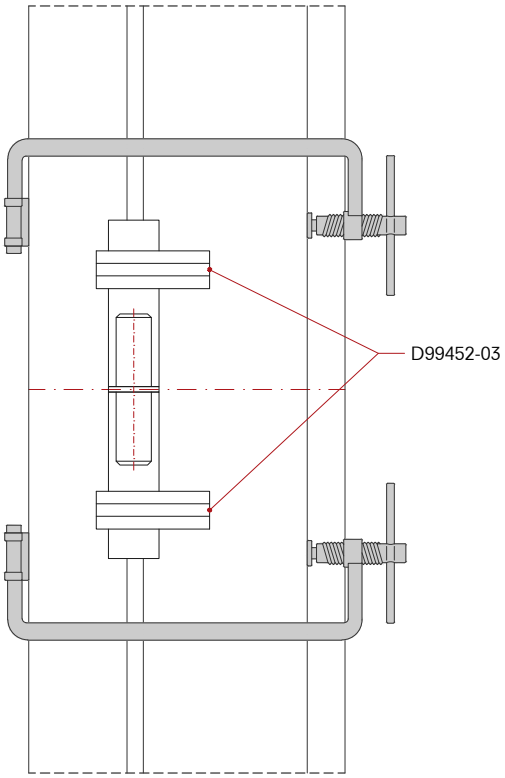


Scale 1:3
4) Remove caps, internal bush, set screw and spindles with spheres
5) Place the hinges using the templates
A) Alignment pin for welding (D99402-31, not included)

Maßstab 1:3
4) Kappen, Innenbuchse, Stellschraube und Spindeln mit Kugeln entfernen
5) Platzieren Sie die Band mithilfe der Schablonen
A) Ausrichtungsstift zum schweißen (D99402-31, nicht enthalten)

Échelle1:3
4) Retirer les capuchons, la douille interne, la vis de réglage et les broches avec les sphères
5) Placer les paumelles à l'aide des gabarites
A) Gabarit d'alignement pour le soudage (D99402-31, non inclus)

6



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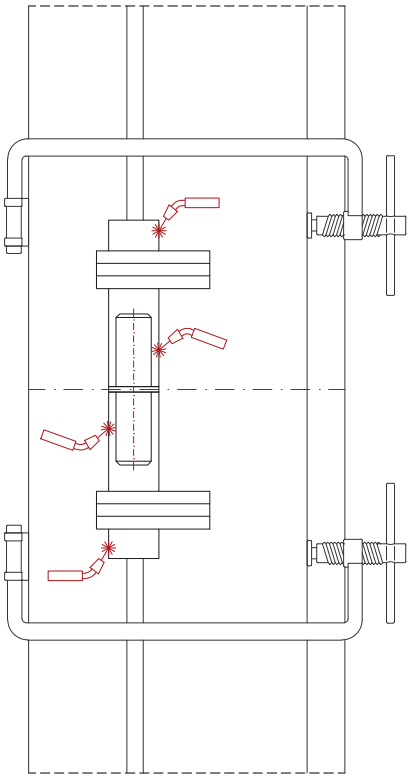
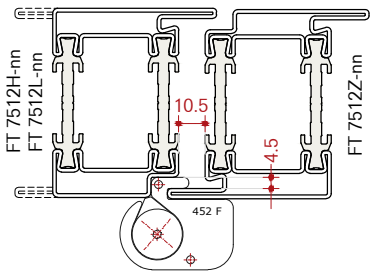
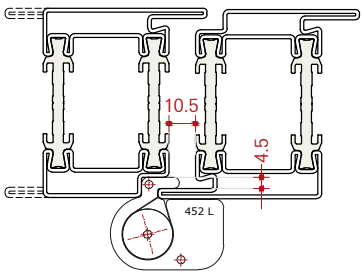




Leaf
Flügel
Ouvrant



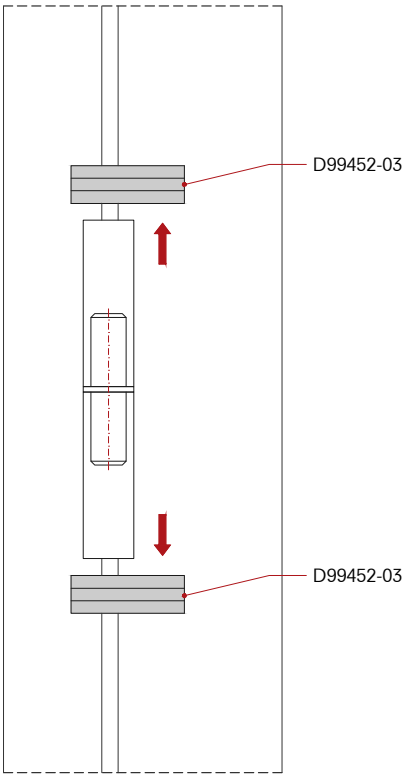
Frame
Rahmen
Dormant

Scale 1:3
6) Fix leaf and frame profiles using clamps
7) Weld hinge wings to profiles

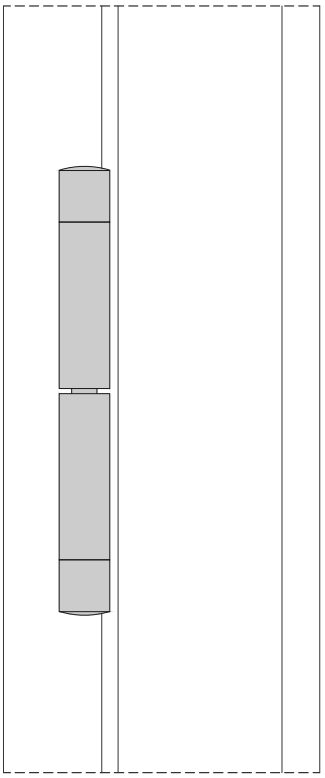
Maßstab 1:3
6) Flügel- und Rahmenprofile mit Klemmen fixieren
7) Bnadflügel an Profile schweißen

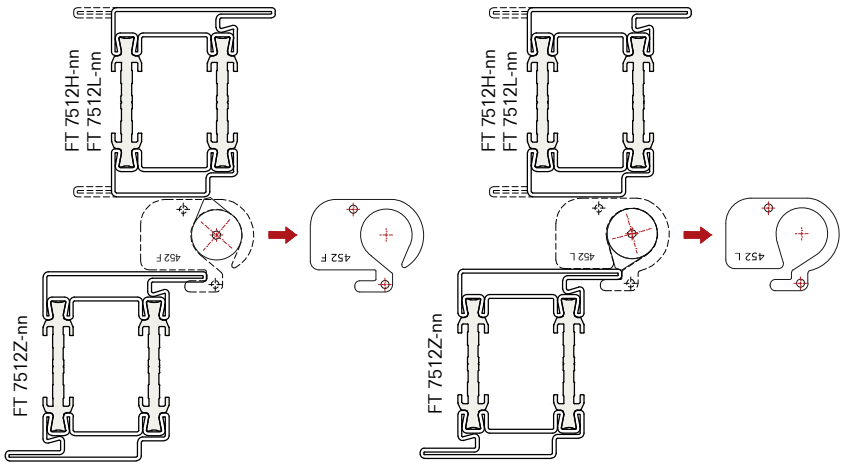
Échelle1:3
6) Fixer les profils de vantail et de cadre à l'aide de pinces
7) Souder les ailes des paumelle aux profilés

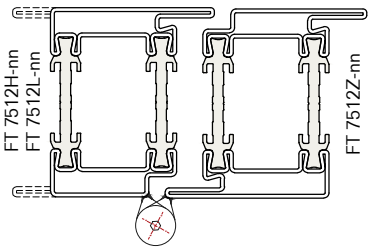
8



9







Scale 1:3
8) Remove templates
9) Assembly of the hinge

Maßstab 1:3
8) Schweißschablone entfernen
9) Montage Band

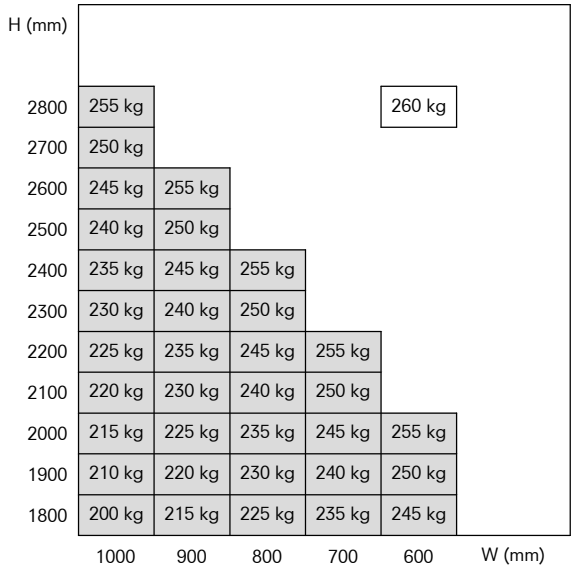
Échelle1:3
8) Supprimer les gabarites
9) Assemblage de la paumelle

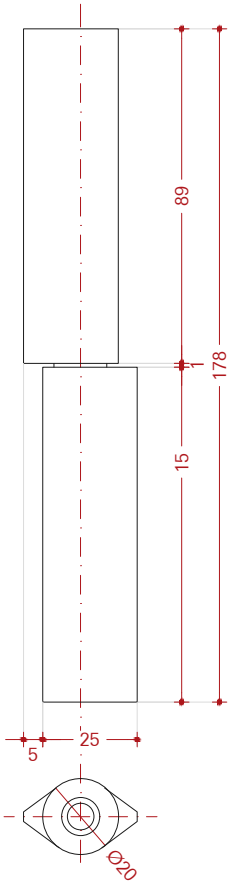
Load capacity tables
Weld-on hinges

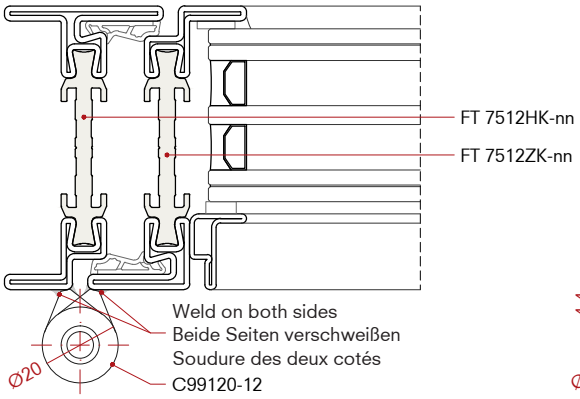
Gewichtstabellen
Anschweißbänder

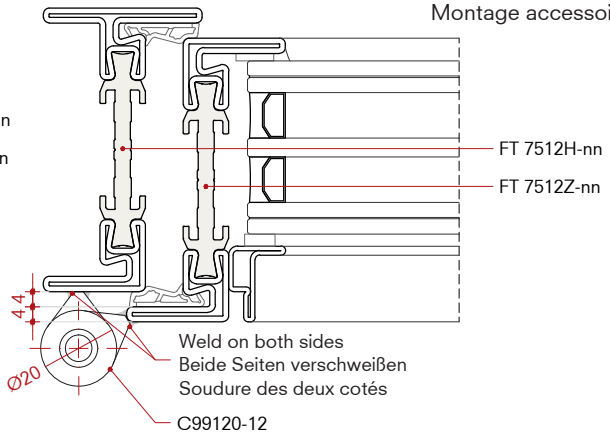
Capacité maximale
Paumelles a souder

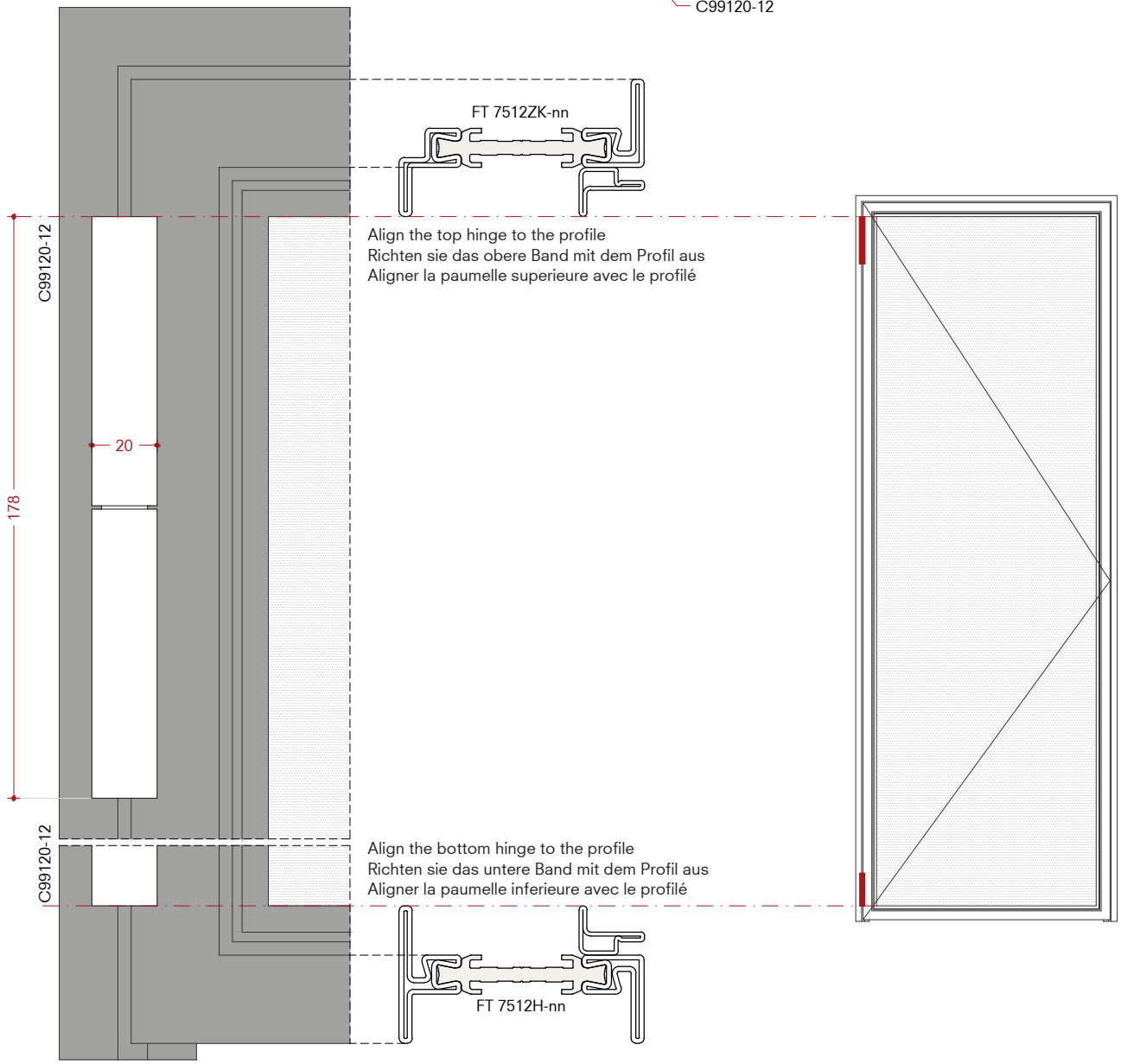
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99120-12	Bright steel Stahl blank Acier décapé	Ø = 20 mm	178 mm	260 kg











Note
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.

Hinweis
Beim Schweißen muss darauf geachtet werden, dass die Profile nicht überhitzt werden. Wir empfehlen die Verwendung von Kühlkörpern, die sich in unmittelbarer Nähe des geschweißten Bereichs befinden, sowie in kleinenAbschnitten vorzugehen und immer zu warten, bis das Profil abgekühlt ist. Die beim Schweißen von Profilen und Bänder entstehende Wärme muss mit Schweißzusätzen aus Messing, Kupfer und Aluminium abgeführtwerden. Halten Sie einen Mindestabstand von 3 mm zwischen Schweißnaht und Polyamid-Isolator ein.

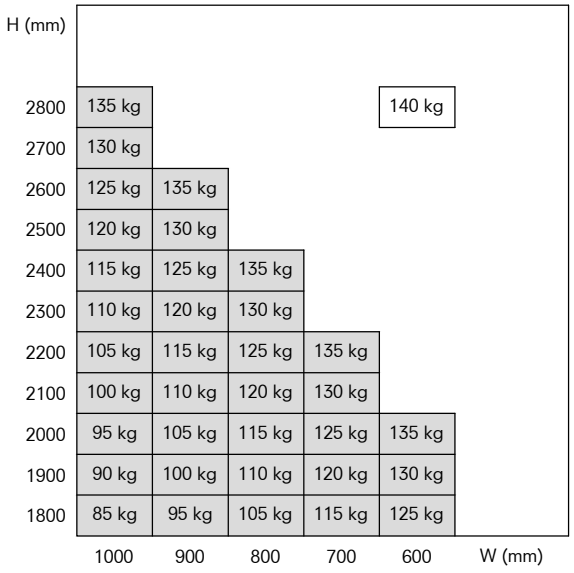
Remarque
Lors du soudage, il faut veiller à ne pas surchauffer les profilés. Nous recommandons l'utilisation de dissipateurs thermiques situés à proximité de la zone soudée, ainsi que de procéder par petits segments,en attendant toujours que le profilé refroidisse. La chaleur générée lors du soudage des profilés et des charnières doit être dissipée à l'aide d'accessoires de soudage en laiton, cuivre etaluminium. Gardez une distance minimale de 3 mm entre le joint de soudure et la bande de polyamide.

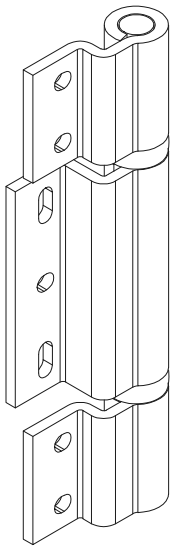
Load capacity tables
Screw-on hinges

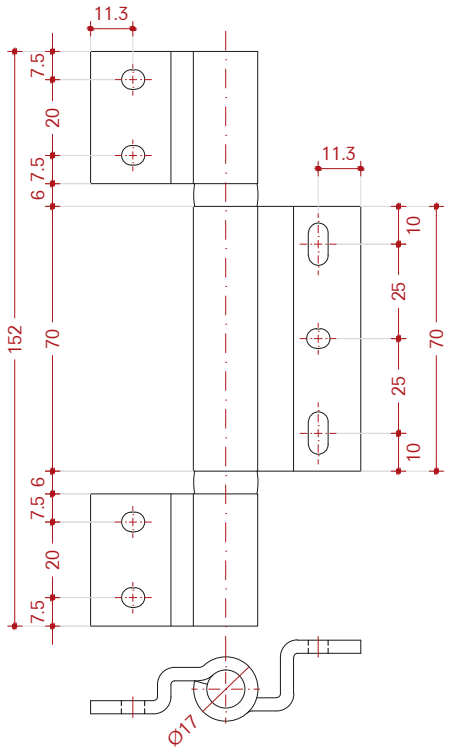
Gewichtstabellen
Anschraubband

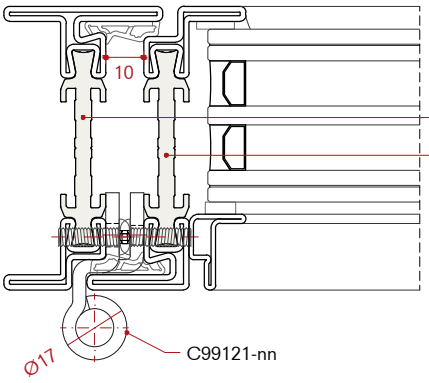
Capacité maximale
Paumelles à visser

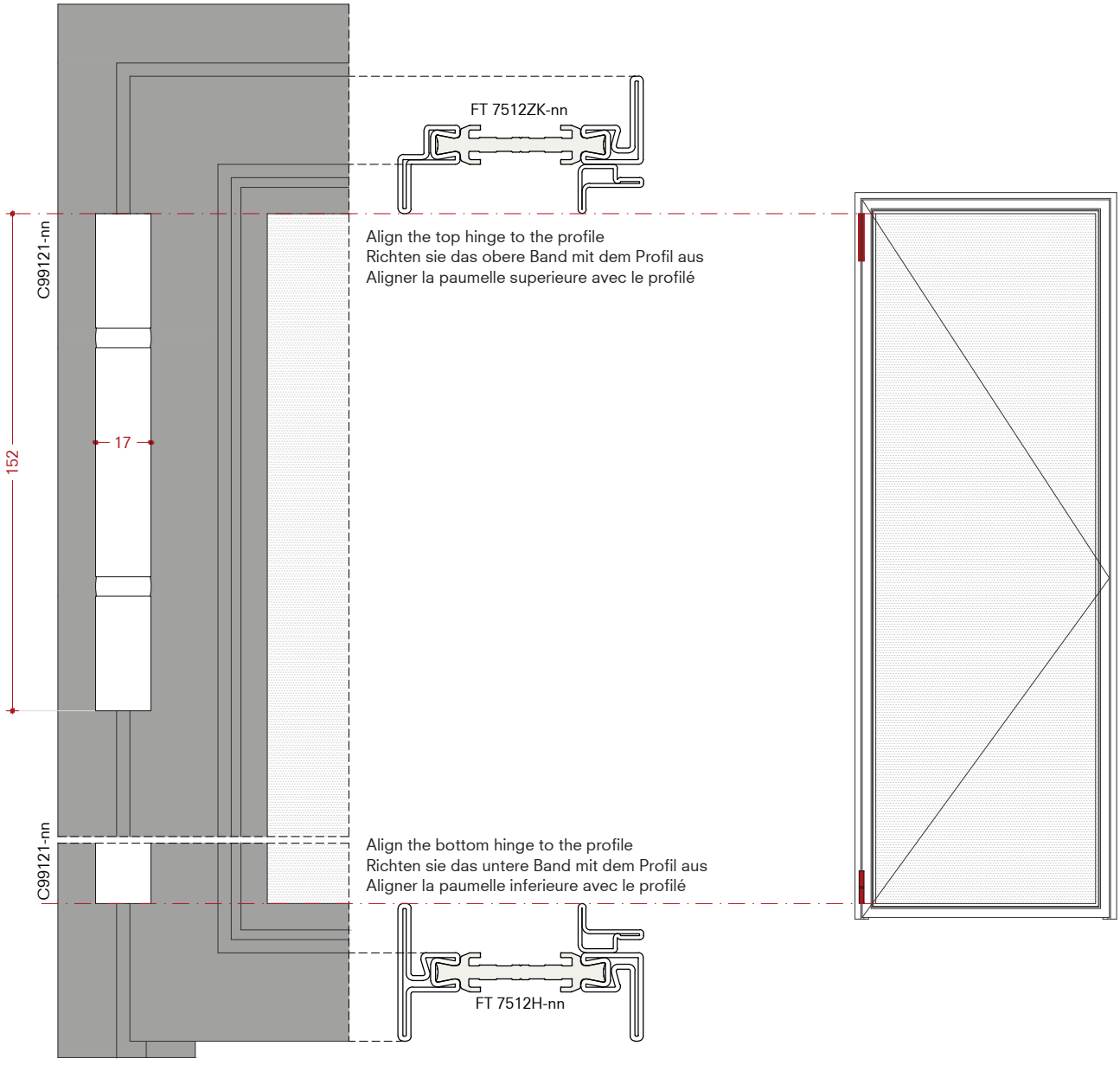
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99121-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	152 mm	140 kg








10
FT 7512HK-nn
FT 7512ZK-nn
Ø17
C99121-nn


FT 7512ZK-nn
C99121-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
152
17
C99121-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99121-nn
Flush profiles

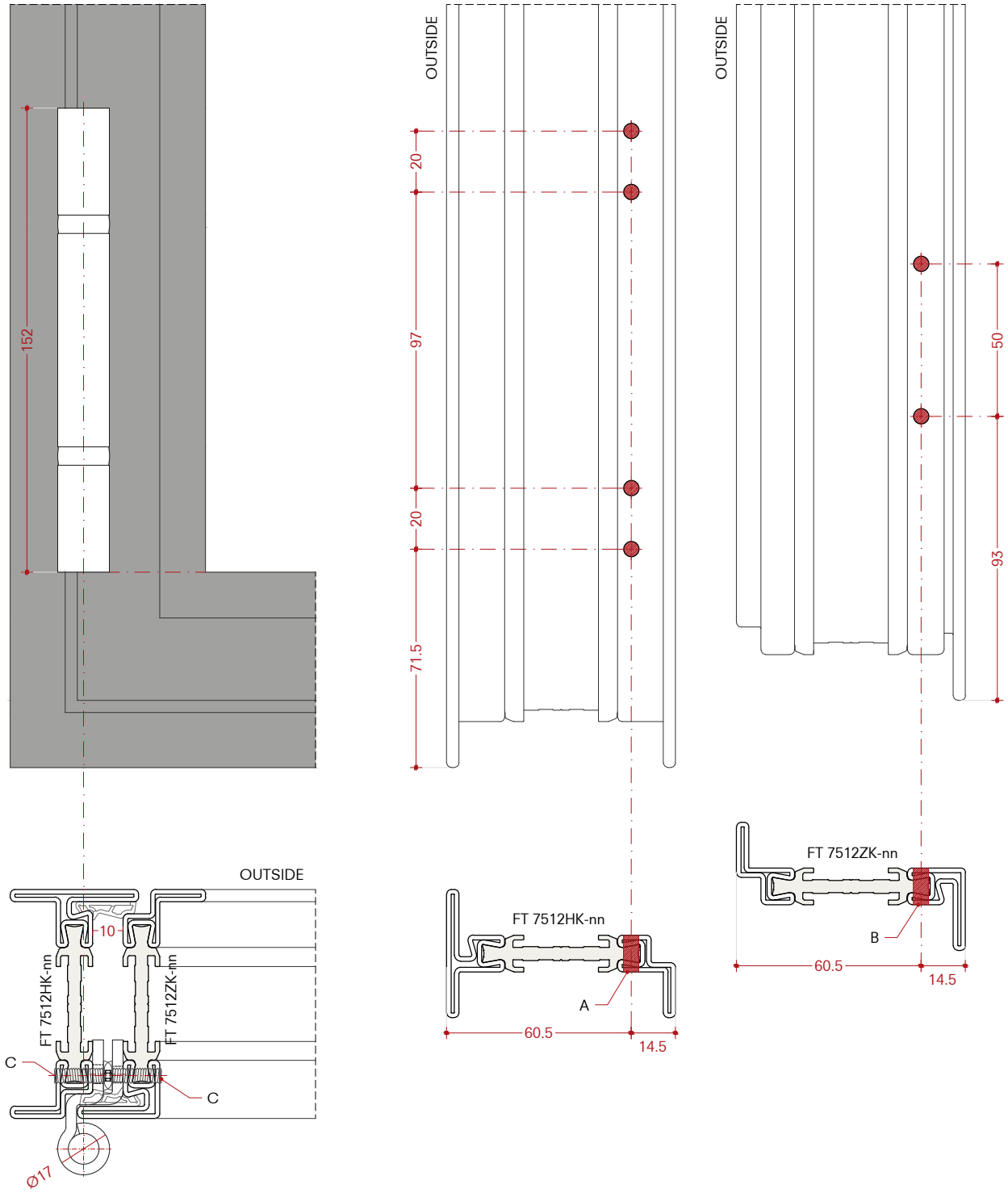
Maximum leaf weight 140 kg

Einbau
Anschraubband C99121-nn
Flächenbündige profile

Maximales Flügelgewicht 140 kg

Schéma de montage
Paumelle à visser C99121-nn
Profilés coplanaires

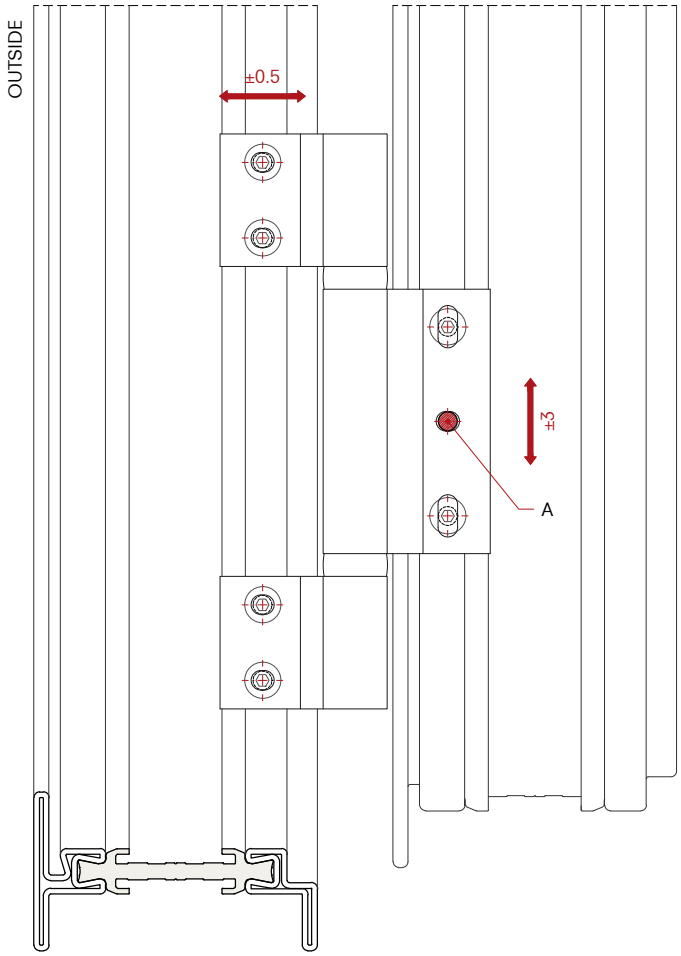
Poids maximum du ouvrant 140 kg

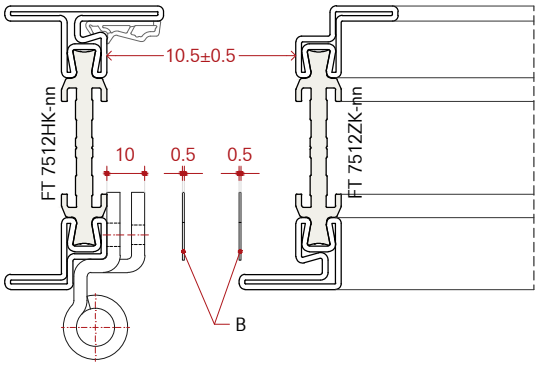


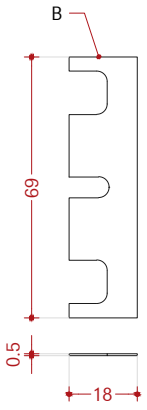
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO7380 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO7380

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO7380







A) M5 hole on profile and fastening with screw M5x16 ISO7380 after up and down adjustment.
B) Additional shims for adjustment.

A) Bohrung M5 am Profil und Befestigung mit Schrauben M5x16 ISO7380 nach der Einstellung nach oben und unten.
B) Zusätzliche Unterlegscheiben zum justieren.

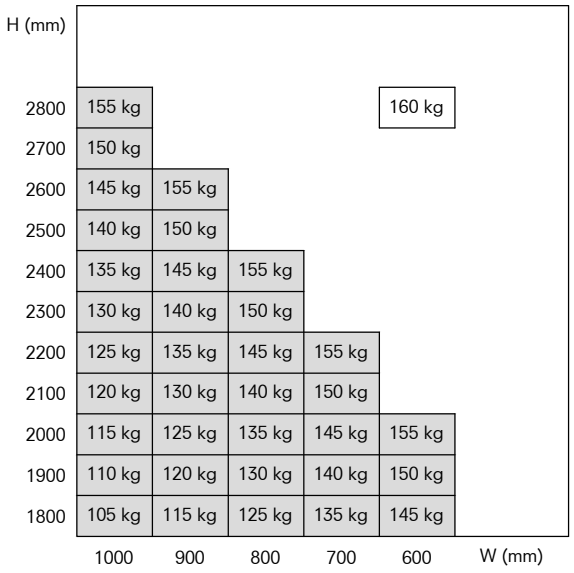
A) Trou M5 en perfil et fixation avec vis M5x16 ISO7380 après le réglage haut et bas.
B) Plates supplémentaires pour le réglage.

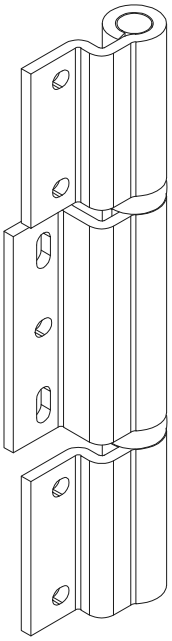
Load capacity tables
Screw-on hinges

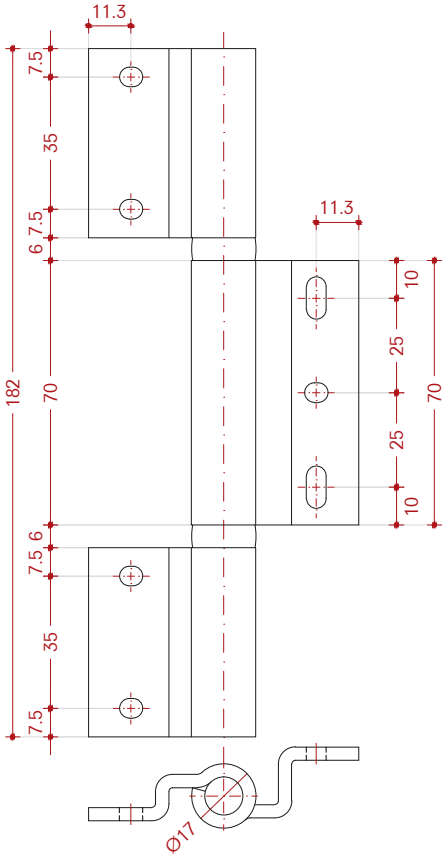
Gewichtstabellen
Anschraubband

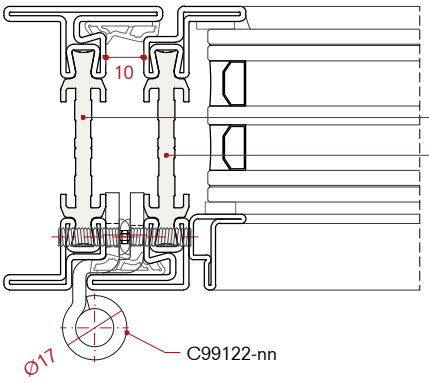
Capacité maximale
Paumelles à visser

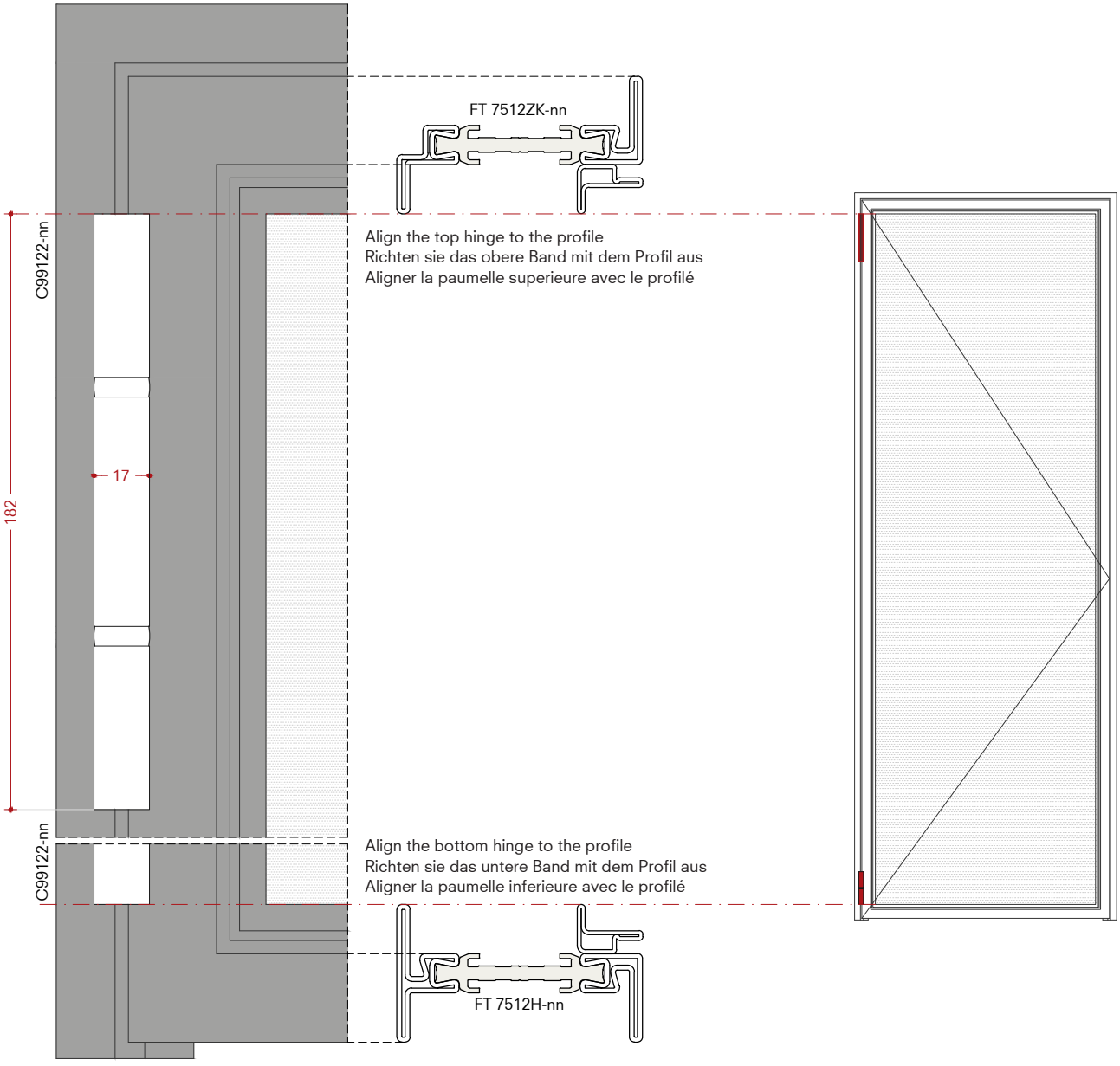
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99122-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	182 mm	160 kg








10
FT 7512HK-nn
FT 7512ZK-nn
Ø17
C99122-nn


FT 7512ZK-nn
C99122-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
17
182
C99122-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99122-nn
Flush profiles

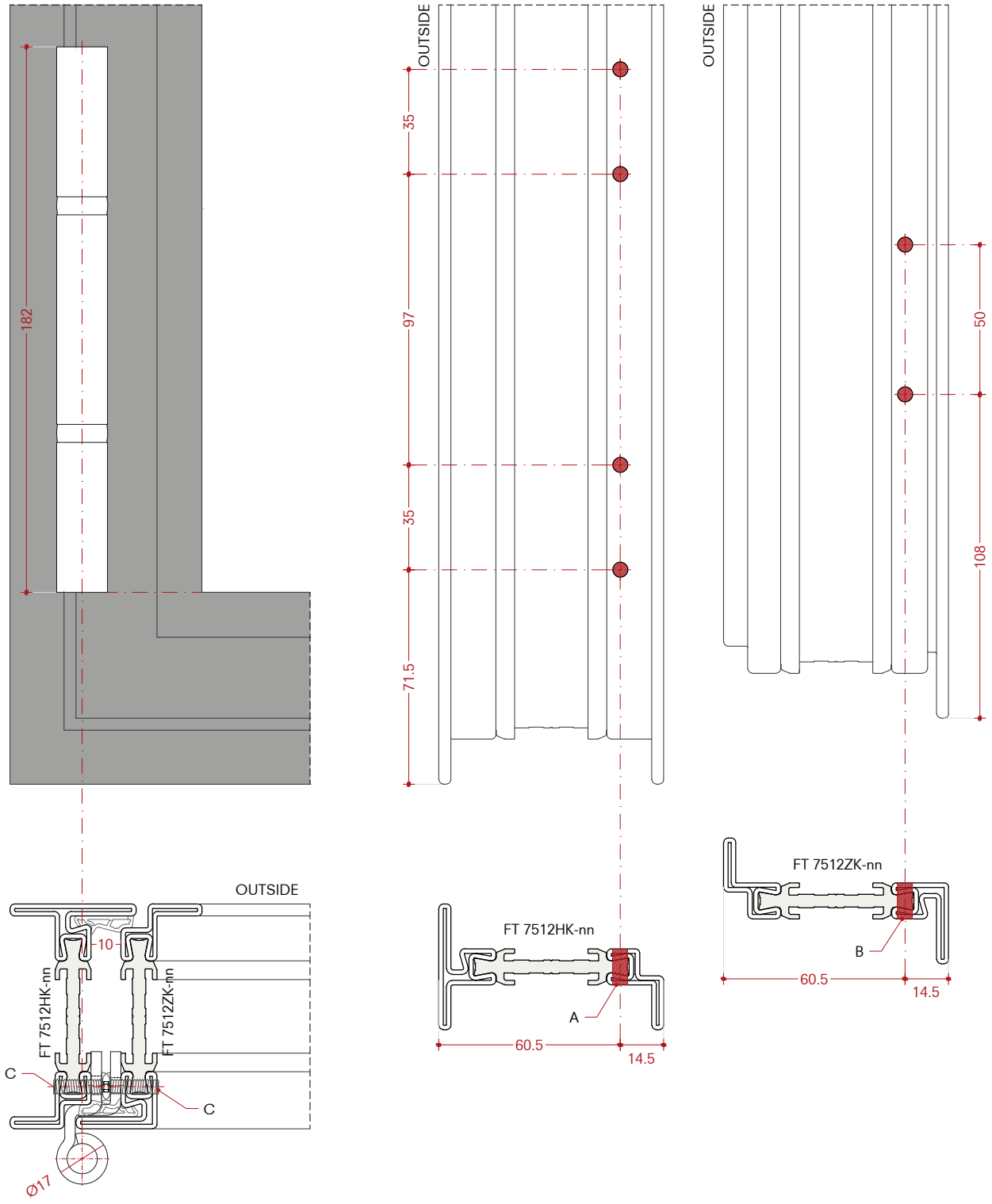
Maximum leaf weight 160 kg

Einbau
Anschraubband C99122-nn
Flächenbündige profile

Maximales Flügelgewicht 160 kg

Schéma de montage
Paumelle à visser C99122-nn
Profilés coplanaires

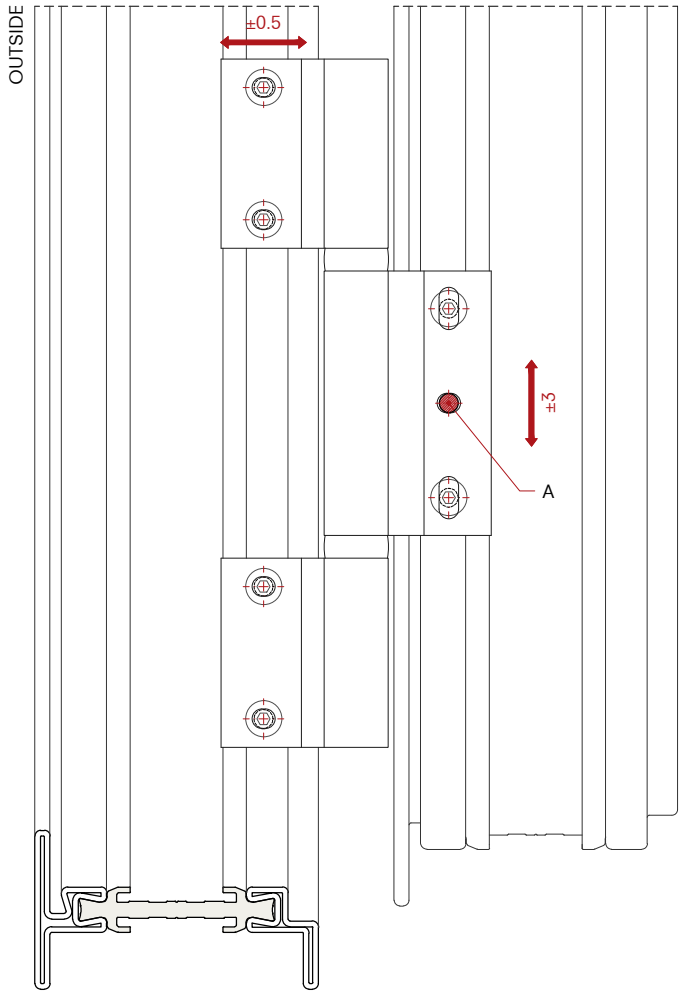
Poids maximum du ouvrant 160 kg

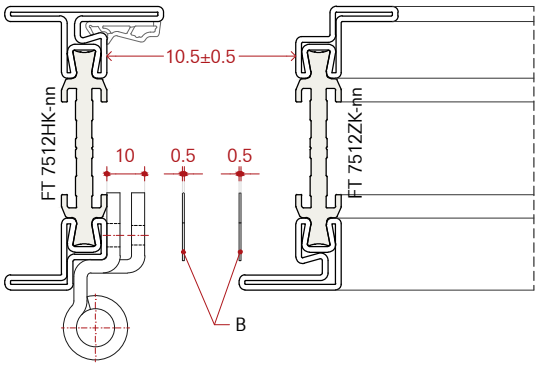


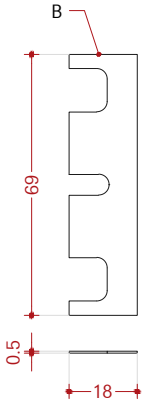
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO7380 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO7380

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO7380







A) M5 hole on profile and fastening with screw M5x16 ISO7380 after up and down adjustment.
B) Additional shims for adjustment.

A) Bohrung M5 am Profil und Befestigung mit Schrauben M5x16 ISO7380 nach der Einstellung nach oben und unten.
B) Zusätzliche Unterlegscheiben zum justieren.

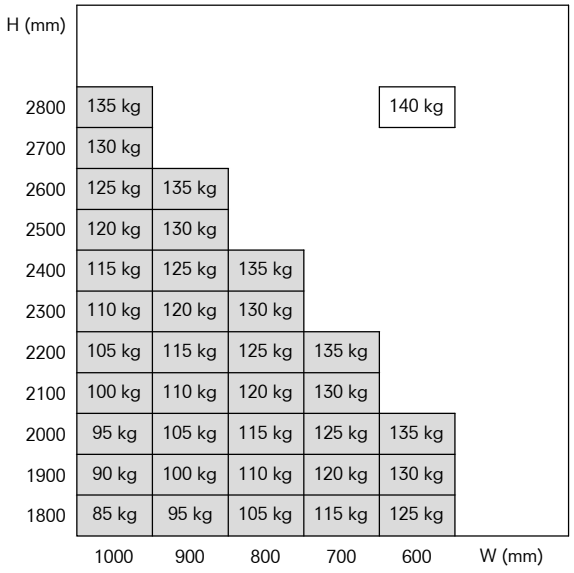
A) Trou M5 en perfil et fixation avec vis M5x16 ISO7380 après le réglage haut et bas.
B) Plates supplémentaires pour le réglage.

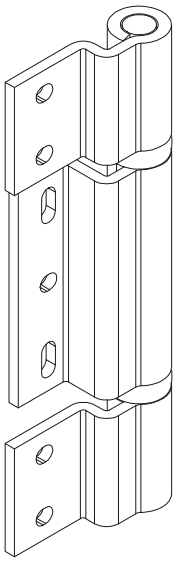
Load capacity tables
Screw-on hinges

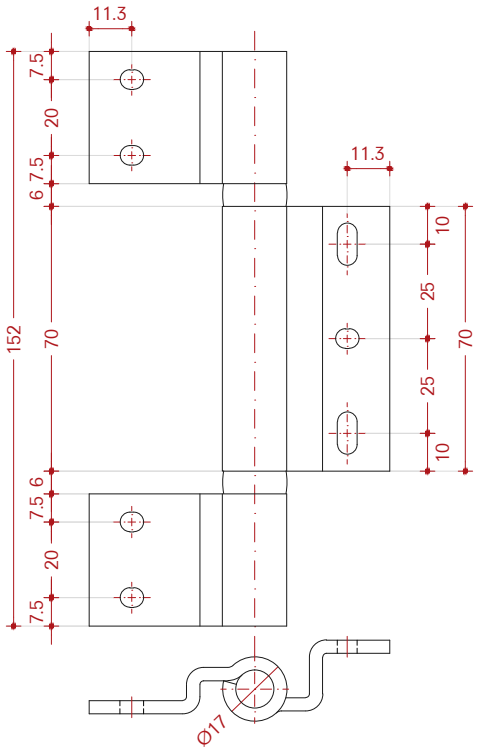
Gewichtstabellen
Anschraubband

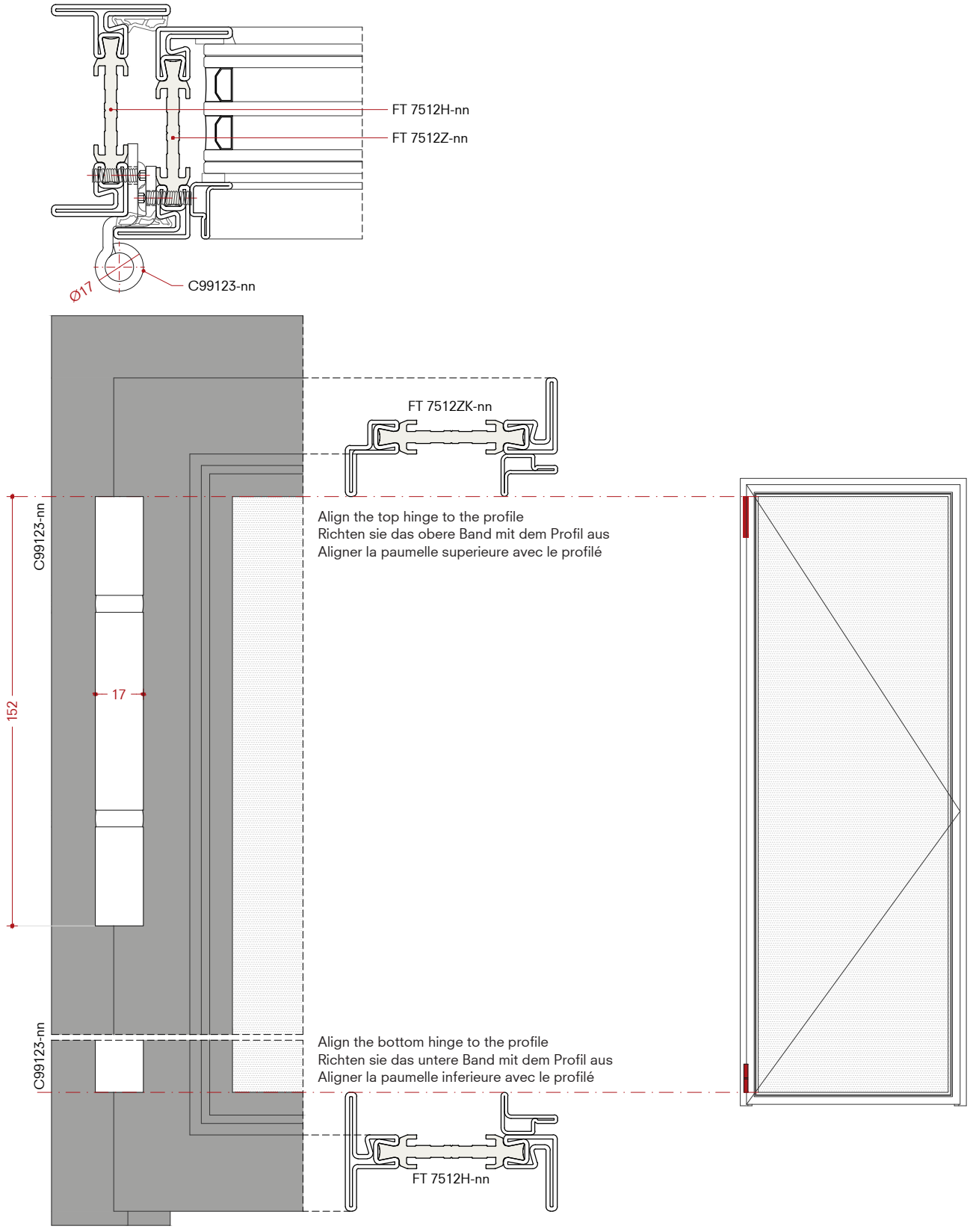
Capacité maximale
Paumelles à visser

	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99123-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	152 mm	140 kg








FT 7512H-nn
FT 7512Z-nn
Ø17
C99123-nn
FT 7512ZK-nn
C99123-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
152
17
C99123-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99123-nn
Overlapped profiles

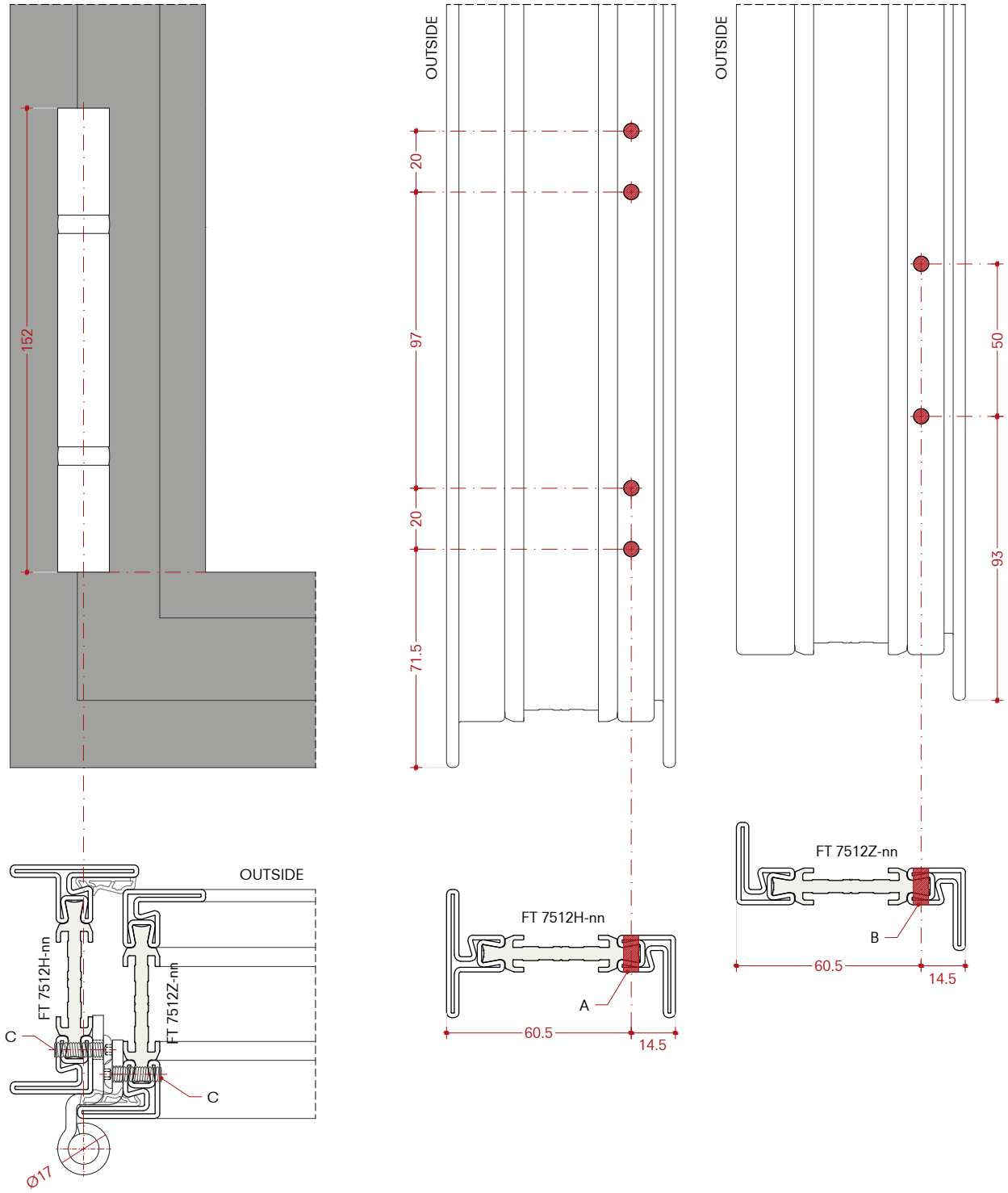
Maximum leaf weight 140 kg

Einbau
Anschraubband C99123-nn
Überlappende profile

Maximales Flügelgewicht 140 kg

Schéma de montage
Paumelle à visser C99123-nn
Profilés superposés

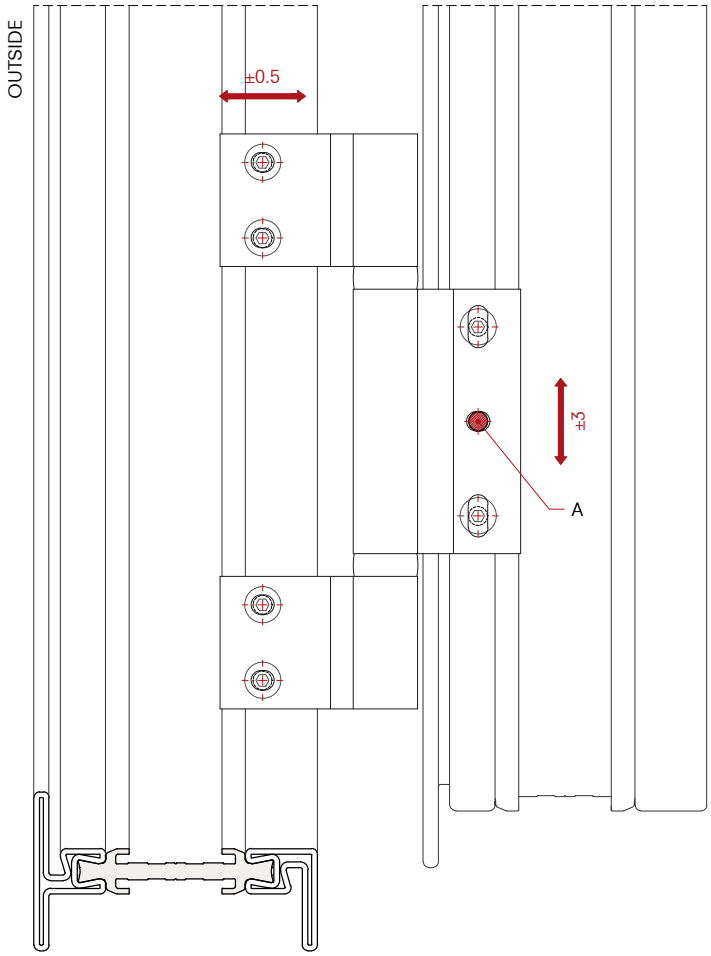
Poids maximum du ouvrant 140 kg

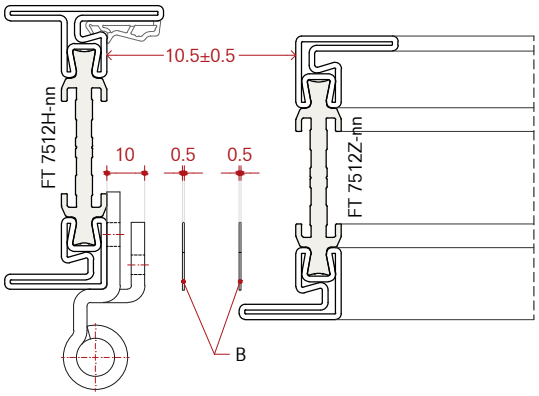


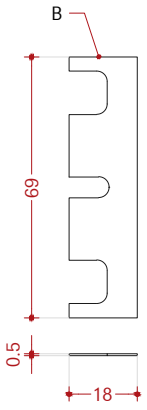
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO7380 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO7380

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO7380







A) M5 hole on profile and fastening with screw M5x16 ISO7380 after up and down adjustment.
B) Additional shims for adjustment.

A) Bohrung M5 am Profil und Befestigung mit Schrauben M5x16 ISO7380 nach der Einstellung nach oben und unten.
B) Zusätzliche Unterlegscheiben zum justieren.

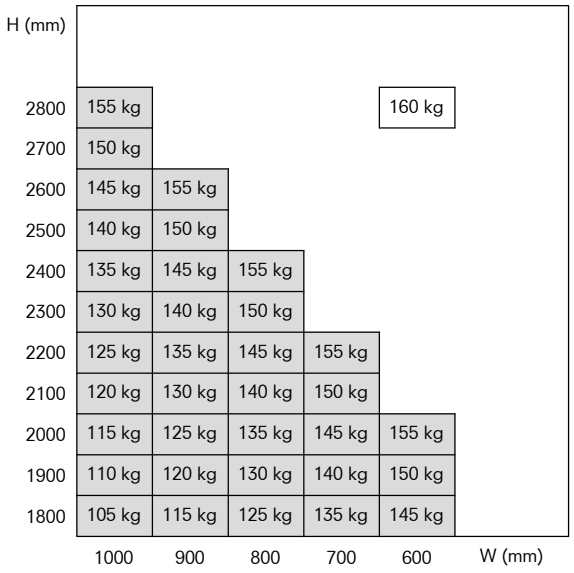
A) Trou M5 en perfil et fixation avec vis M5x16 ISO7380 après le réglage haut et bas.
B) Plates supplémentaires pour le réglage.

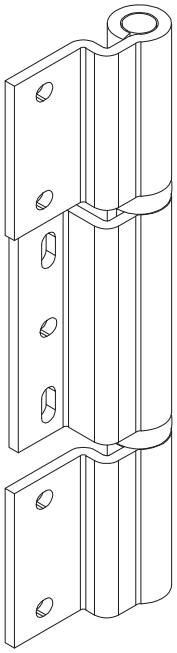
Load capacity tables
Screw-on hinges

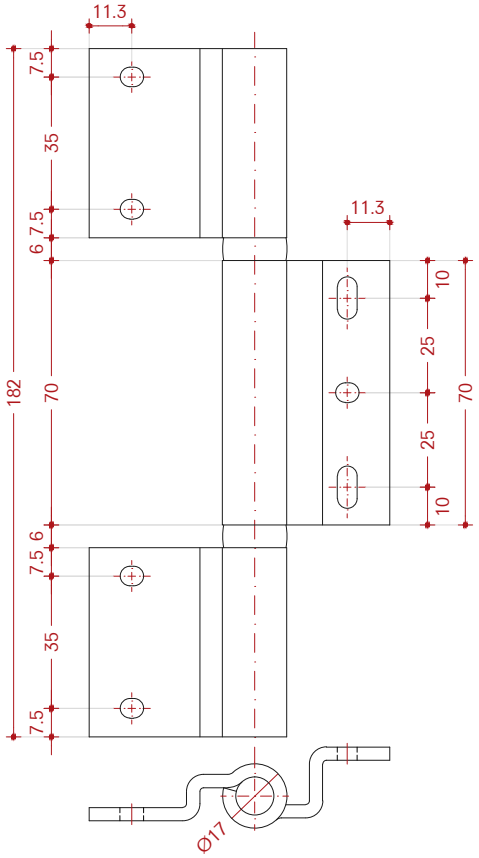
Gewichtstabellen
Anschraubband

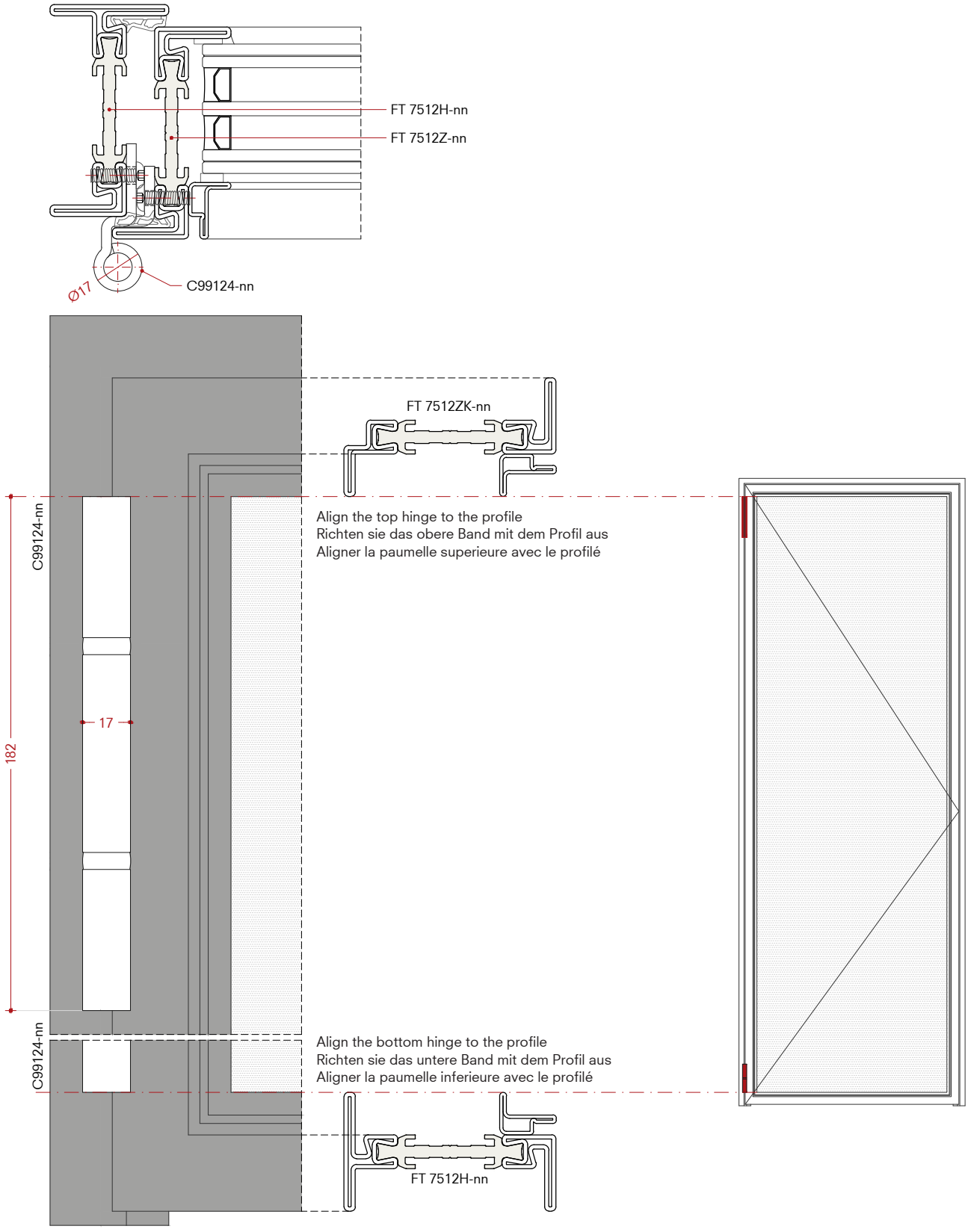
Capacité maximale
Paumelles à visser

	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99124-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	182 mm	160 kg








FT 7512H-nn
FT 7512Z-nn
Ø17
C99124-nn
FT 7512ZK-nn
C99124-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
17
182
C99124-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99124-nn
Overlapped profiles

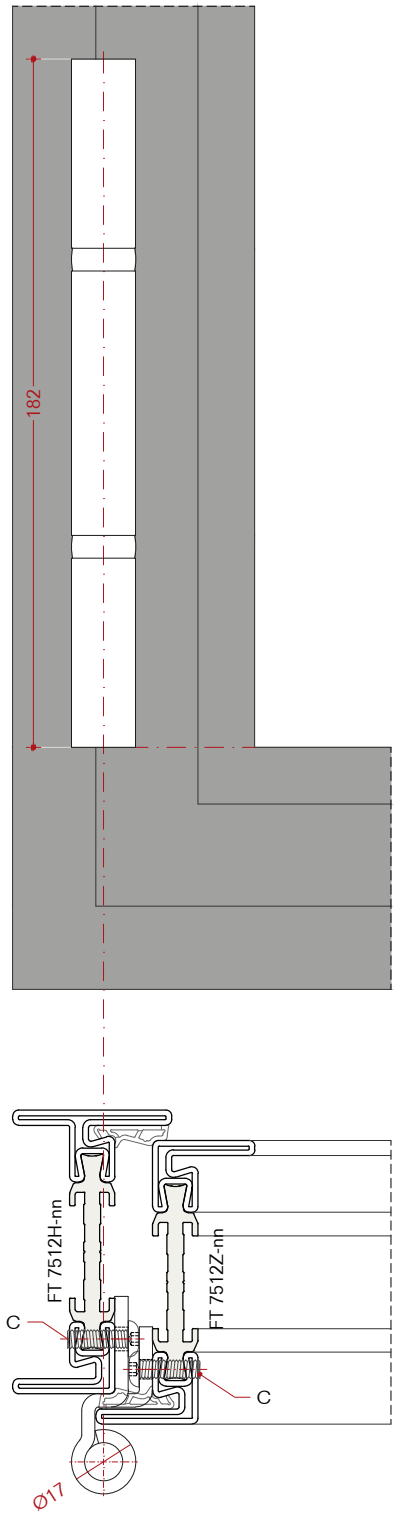
Maximum leaf weight 160 kg

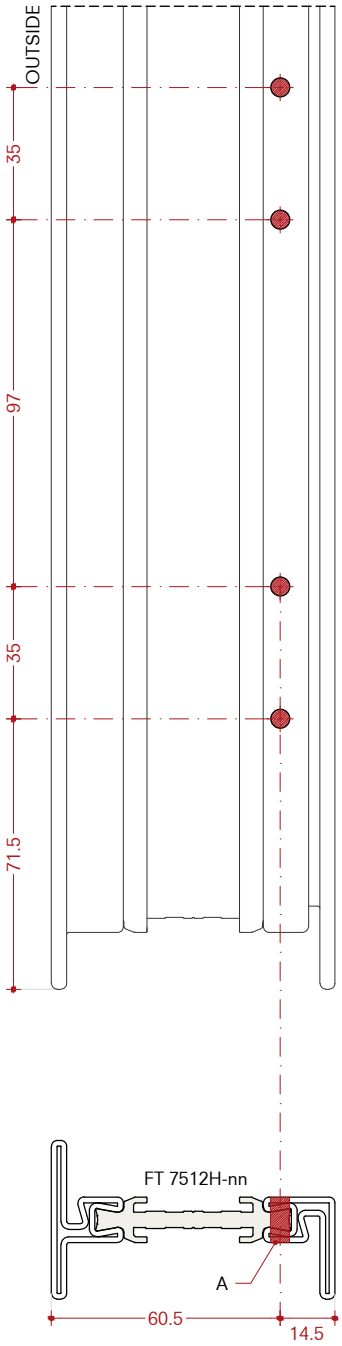
Einbau
Anschraubband C99124-nn
Überlappende profile

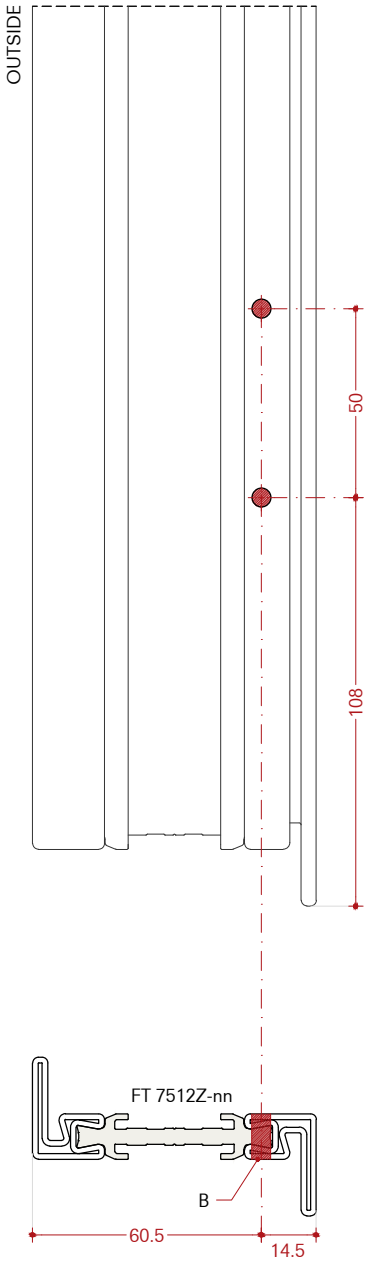
Maximales Flügelgewicht 160 kg

Schéma de montage
Paumelle à visser C99124-nn
Profilés superposés

Poids maximum du ouvrant 160 kg



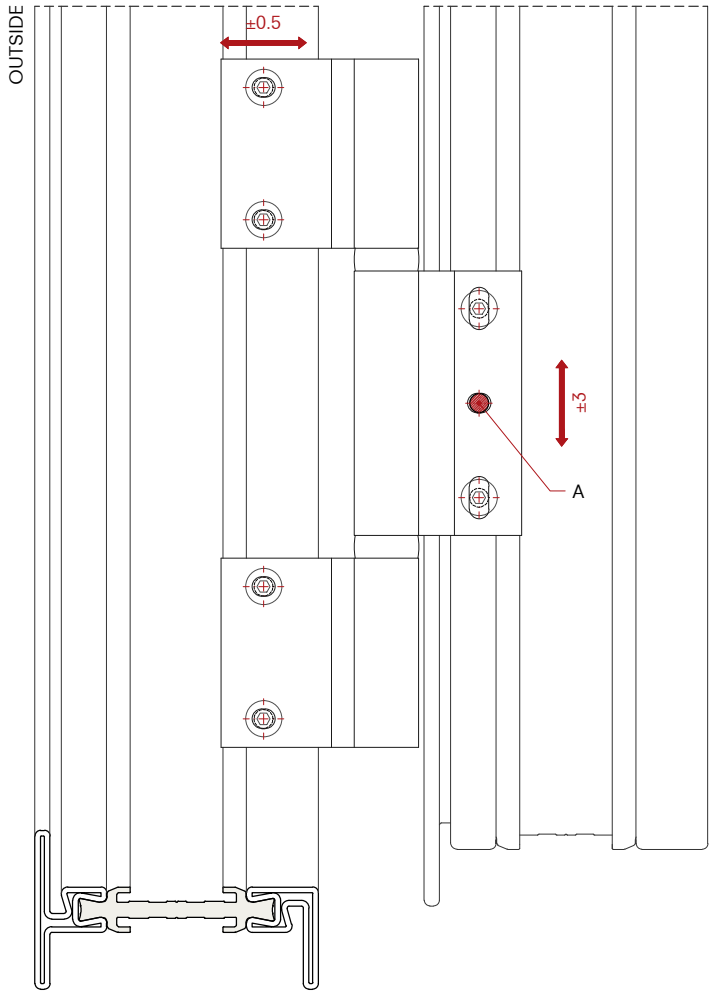


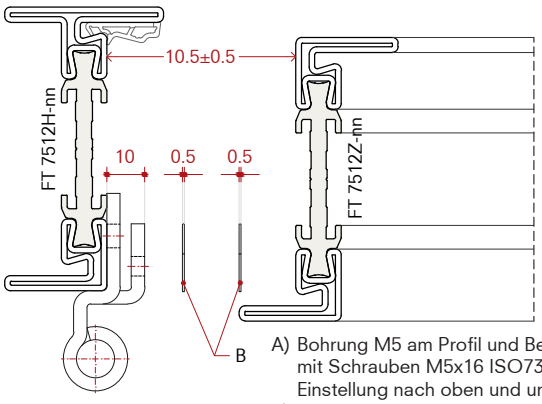


A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO7380 screws

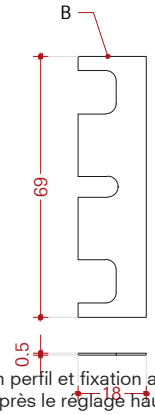
A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO7380

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO7380





A) Bohrung M5 am Profil und Befestigung mit Schrauben M5x16 ISO7380 nach der Einstellung nach oben und unten.
B) Zusätzliche Unterlegscheiben zum justieren.



A) Trou M5 en perfil et fixation avec vis M5x16 ISO7380 après le réglage haut et bas.
B) Plates supplémentaires pour le réglage.

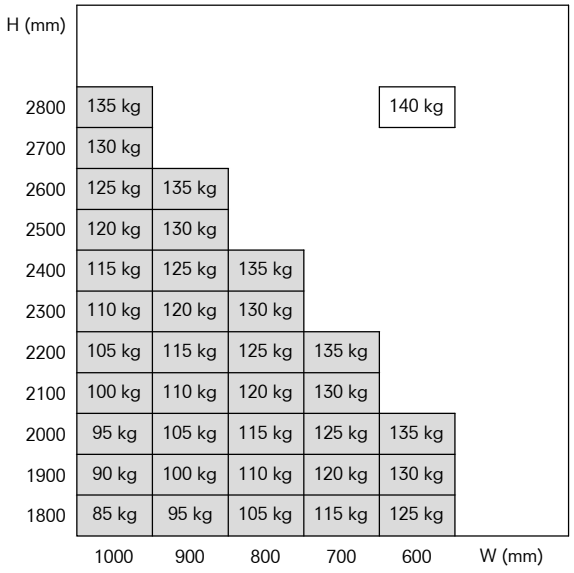
A) M5 hole on profile and fastening with screw M5x16 ISO7380 after up and down adjustment.
B) Additional shims for adjustment.

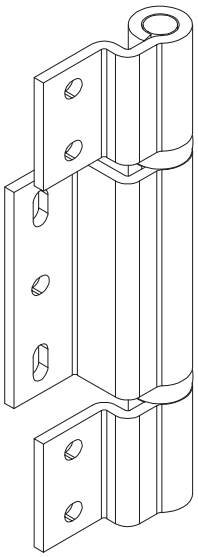
Load capacity tables
Screw-on hinges

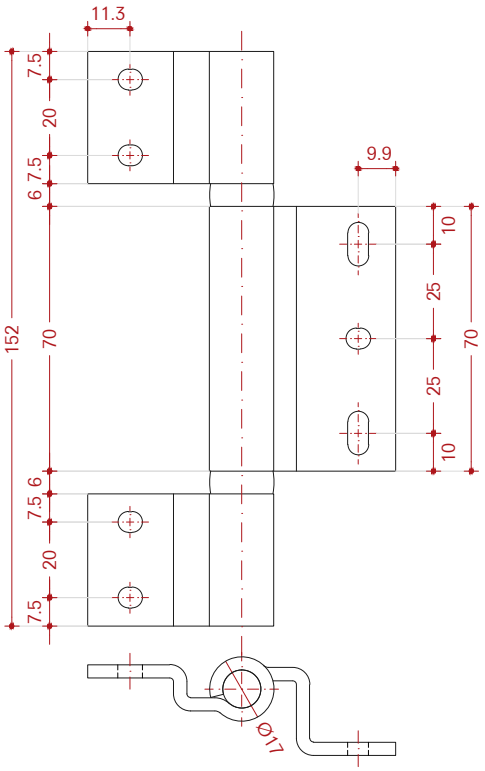
Gewichtstabellen
Anschraubband

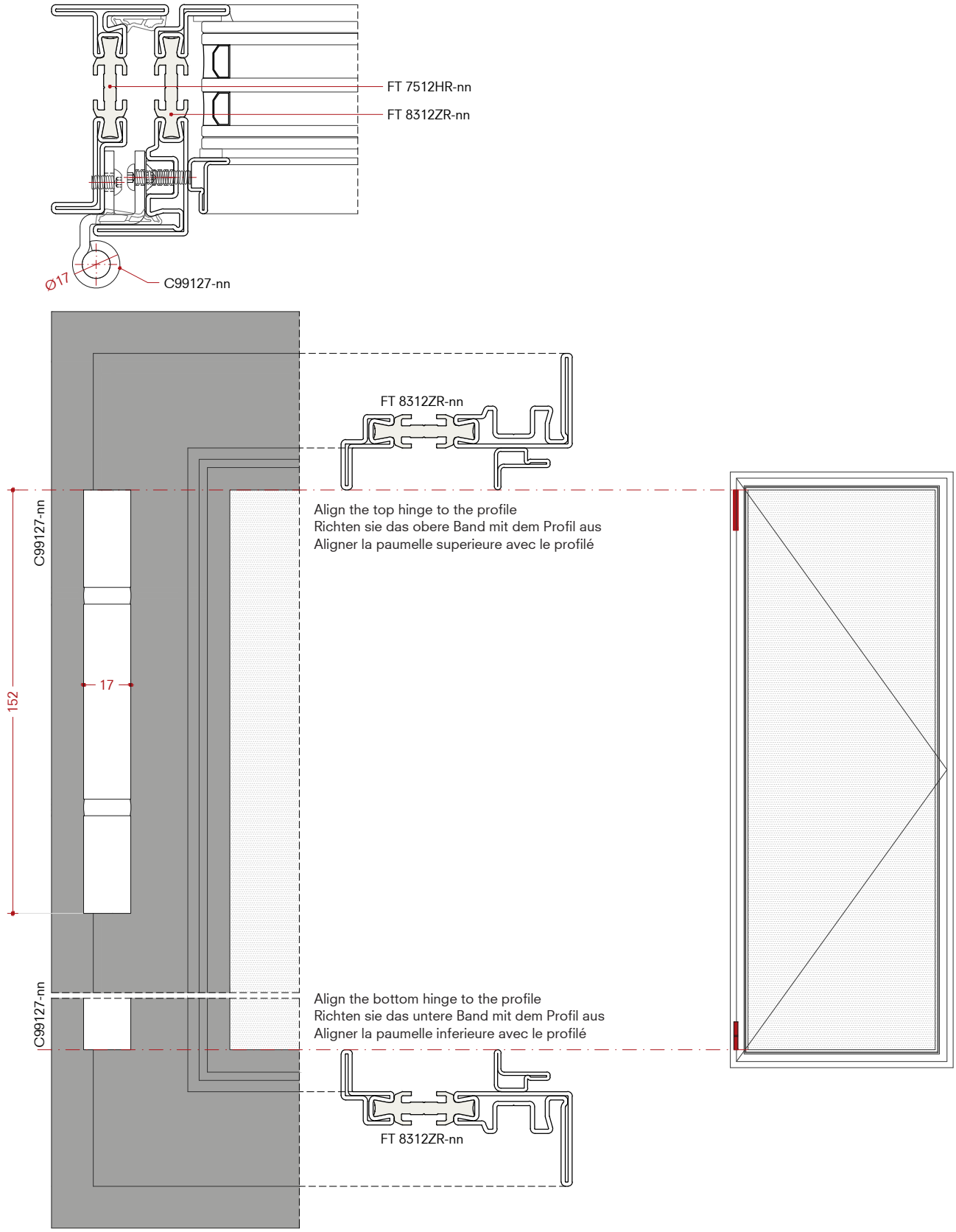
Capacité maximale
Paumelles à visser

	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99127-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	152 mm	140 kg








FT 7512HR-nn
FT 8312ZR-nn
Ø17
C99127-nn
FT 8312ZR-nn
C99127-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
152
17
C99127-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 8312ZR-nn

Installation
Screw-on hinge C99127-nn
Tilt&Turn window

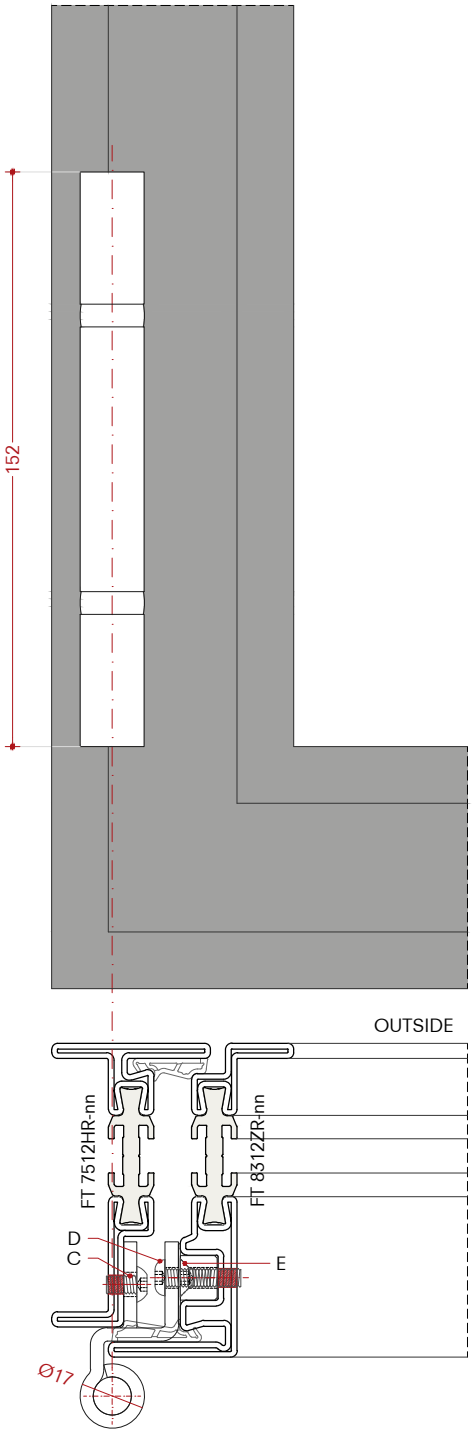
Maximum leaf weight 140 kg

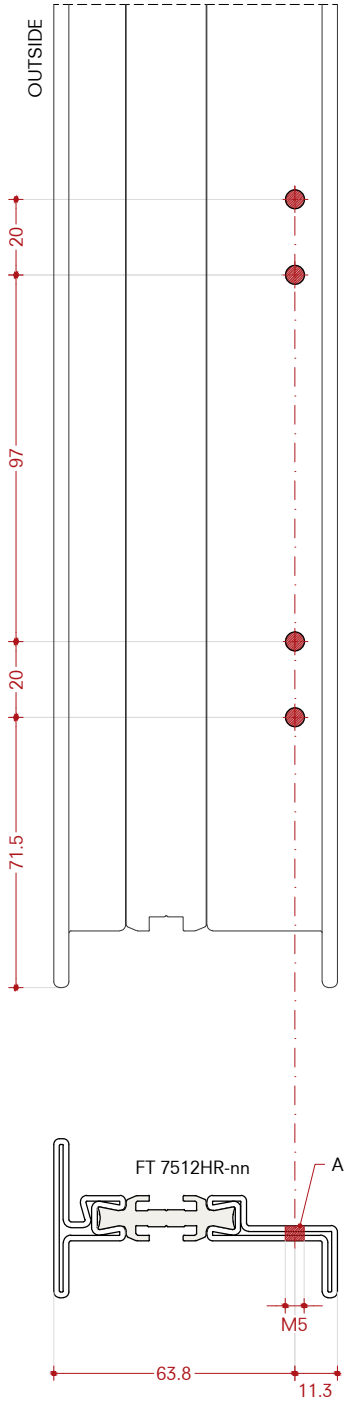
Einbau
Anschraubband C99127-nn
Dreh-Kippfenster

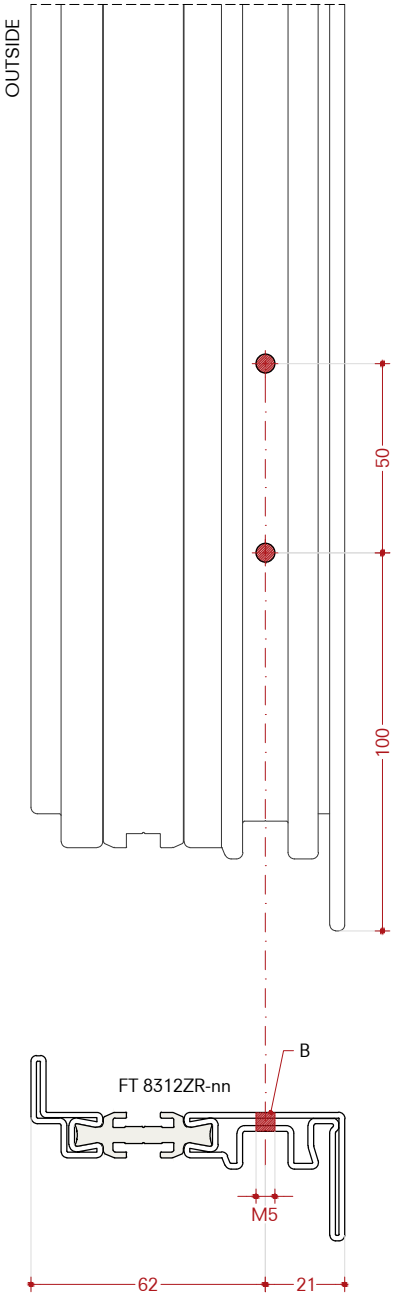
Maximales Flügelgewicht 140 kg

Schéma de montage
Paumelle à visser C99127-nn
Fênetre oscillo-battant

Poids maximum du ouvrant 140 kg



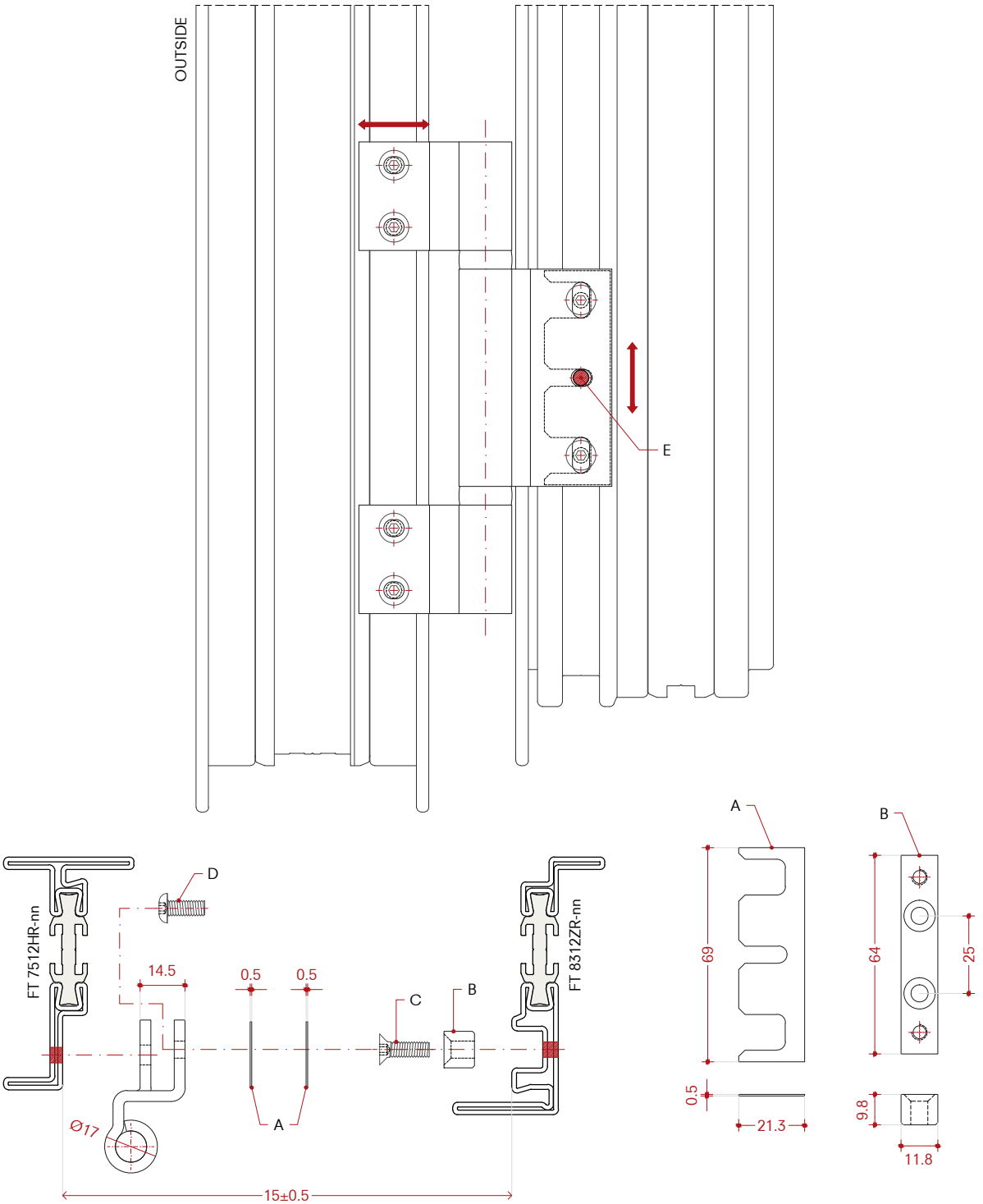




A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x8 ISO7380 screws
D) Fastening hinge with M5x12 ISO7380 screws
E) Fastening with M5x16 ISO10642 screws and cut the screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x8 ISO7380
D) Befestigungsschrauben M5x12 ISO7380
E) Befestigungsschrauben M5x16 ISO10642 und Schrauben kürzen

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x8 ISO7380
D) Fixation avec vis M5x12 ISO7380
E) Fixation avec vis M5x16 ISO10642 et couper la vis



A) Additional shims for adjustment 15±0.5
B) Additional shim
C) Fastening of (B) with M5x16 ISO10642 screws and cut the screws
D) Fastening hinge with M5x12 ISO7380 screws
E) M5 hole and fastening with screw M5x12 ISO7380 after up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 15±0.5
B) Zusätzliche Unterlegscheibe
C) Befestigungsschrauben (B) M5x16 ISO10642 und Schrauben kürzen
D) Befestigungsschrauben M5x12 ISO7380
E) Bohrung M5 und Befestigung mit Schrauben M5x12 ISO7380 nach der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 15±0.5
B) Plate supplémentaire
C) Fixation de (B) avec vis M5x16 ISO10642 et couper la vis
D) Fixation avec vis M5x12 ISO7380
E) Trou M5 et fixation avec vis M5x12 ISO7380 après le réglage haut et bas.

Load capacity tables
Screw-on hinges

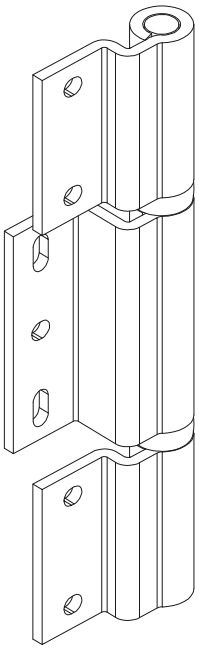
Gewichtstabellen
Anschraubband

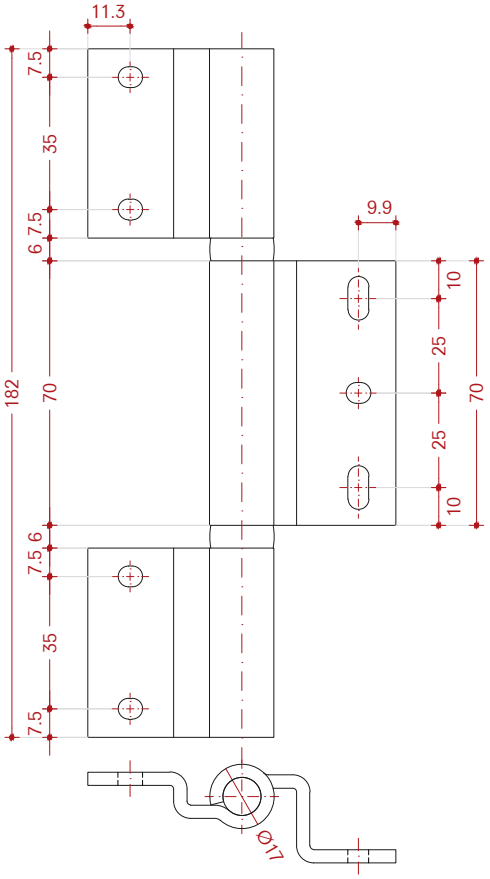
Capacité maximale
Paumelles à visser

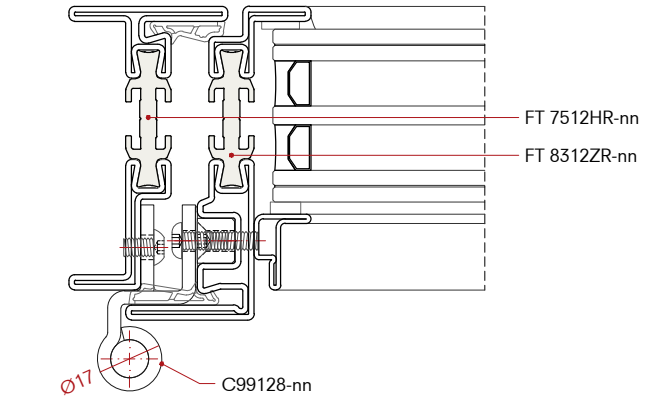
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99128-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable -12 Bright steel -12 Stahl blank -12 Acier décapé	Ø = 17 mm	182 mm	160 kg

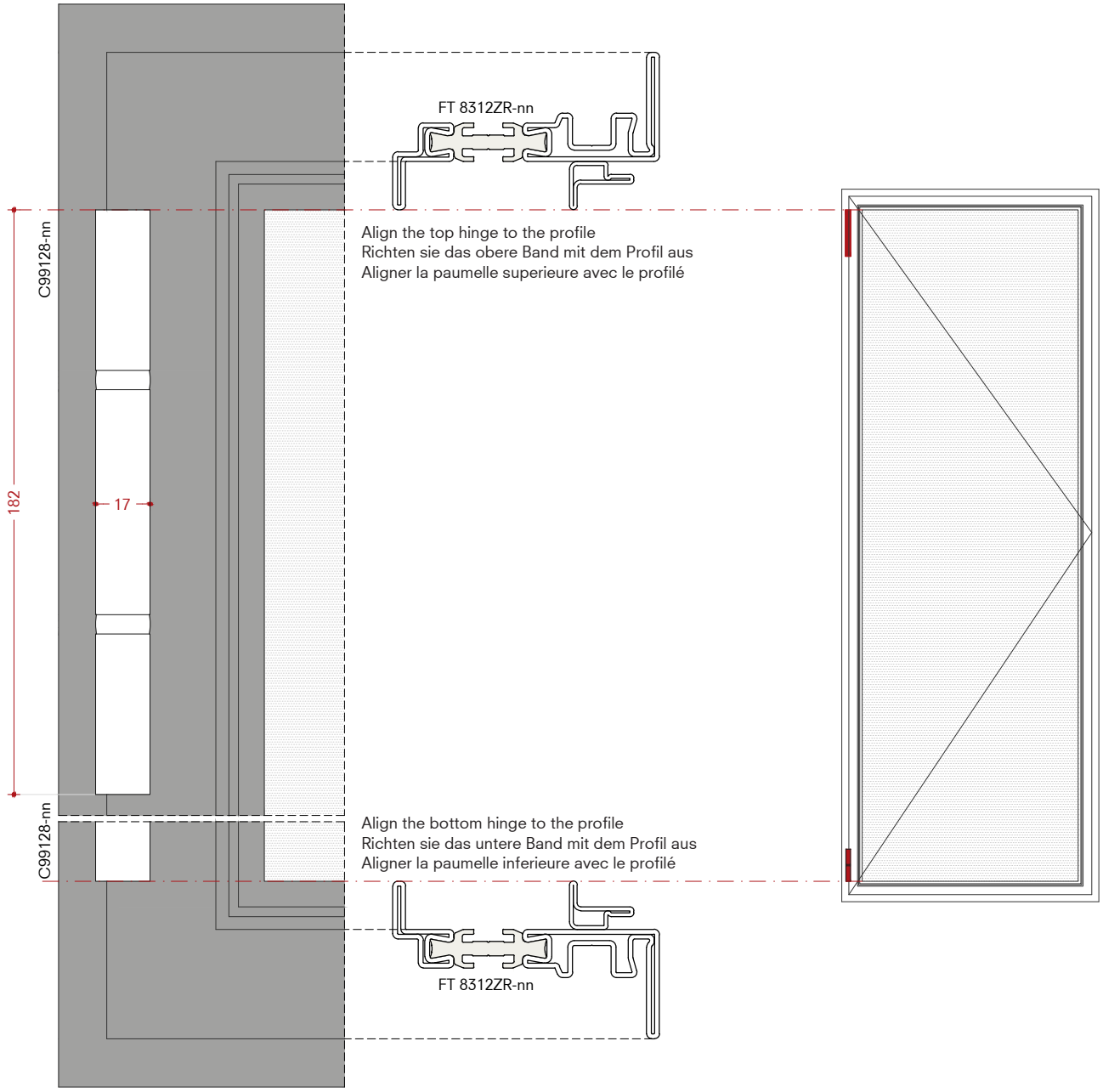
H (mm)	1000	900	800	700	600
2800	155 kg				160 kg
2700	150 kg				
2600	145 kg	155 kg			
2500	140 kg	150 kg			
2400	135 kg	145 kg	155 kg		
2300	130 kg	140 kg	150 kg		
2200	125 kg	135 kg	145 kg	155 kg	
2100	120 kg	130 kg	140 kg	150 kg	
2000	115 kg	125 kg	135 kg	145 kg	155 kg
1900	110 kg	120 kg	130 kg	140 kg	150 kg
1800	105 kg	115 kg	125 kg	135 kg	145 kg

W (mm)






FT 7512HR-nn
FT 8312ZR-nn
Ø17
C99128-nn


FT 8312ZR-nn
C99128-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
182
17
C99128-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 8312ZR-nn

Installation
Screw-on hinge C99128-nn
Tilt&Turn window

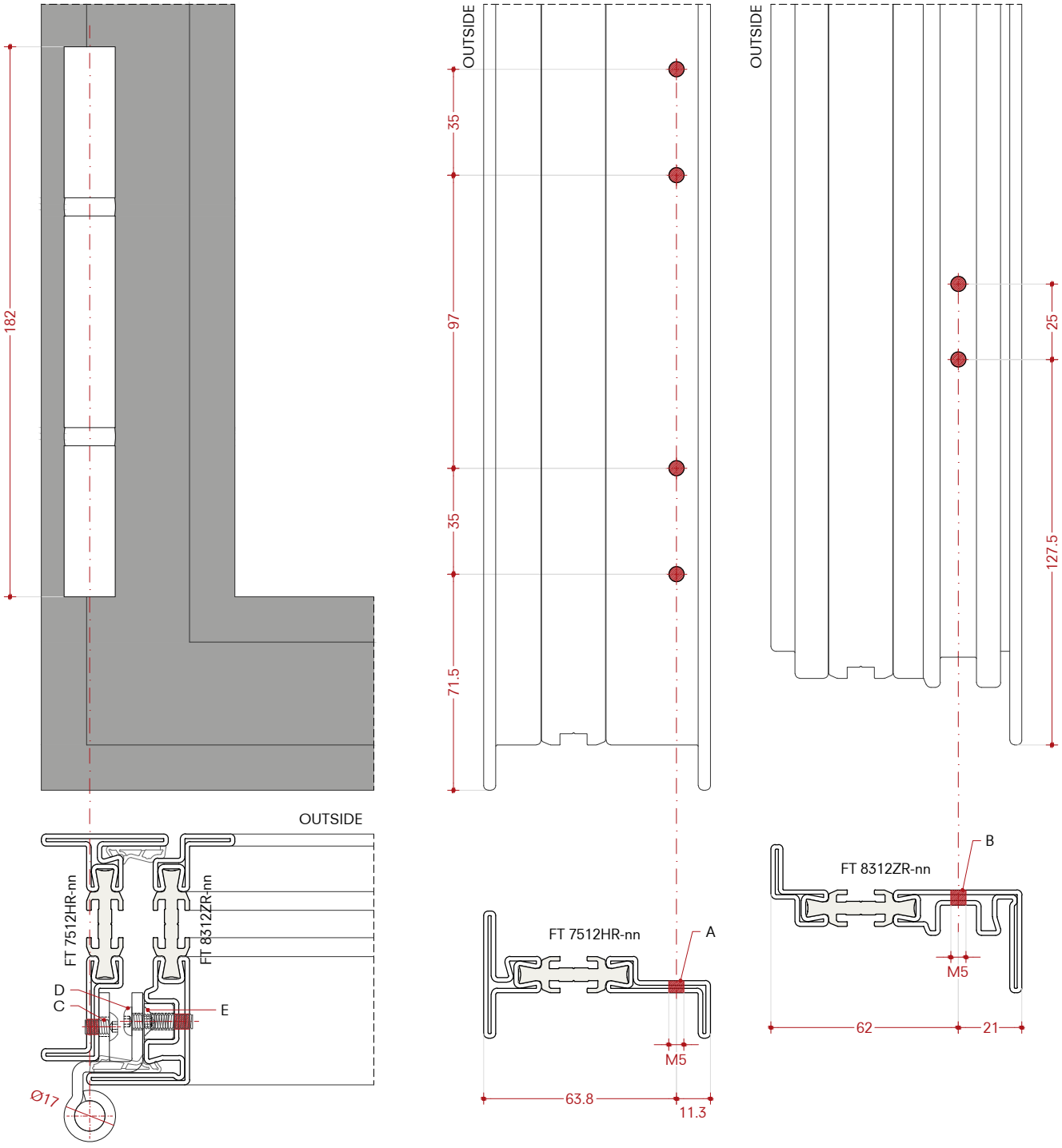
Maximum leaf weight 160 kg

Einbau
Anschraubband C99128-nn
Dreh-Kippfenster

Maximales Flügelgewicht 160 kg

Schéma de montage
Paumelle à visser C99128-nn
Fênetre oscillo-battant

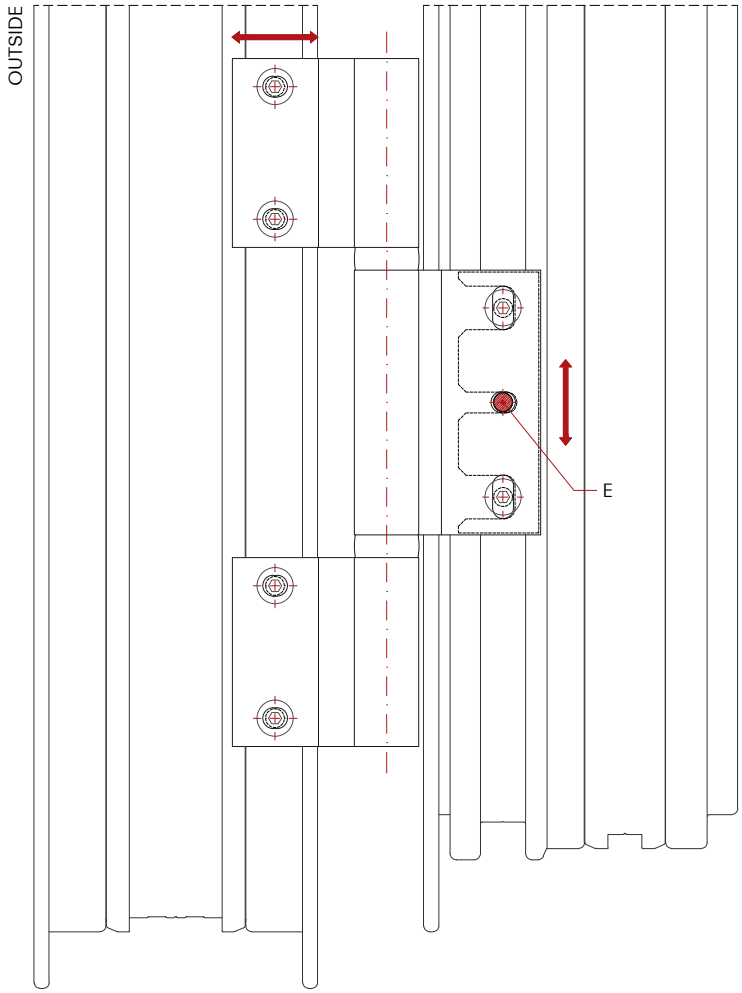
Poids maximum du ouvrant 160 kg

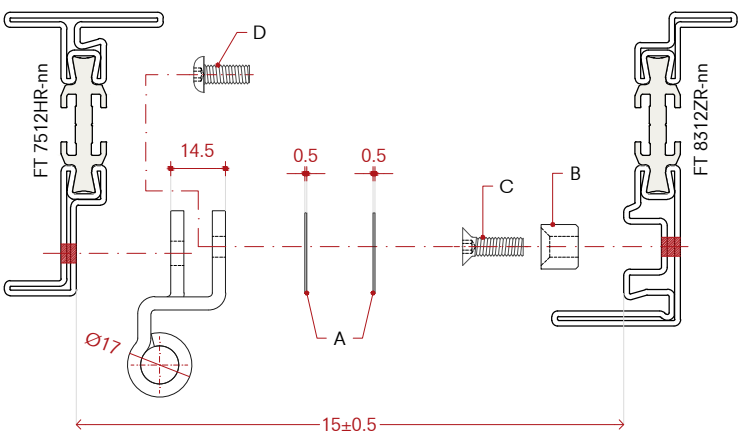


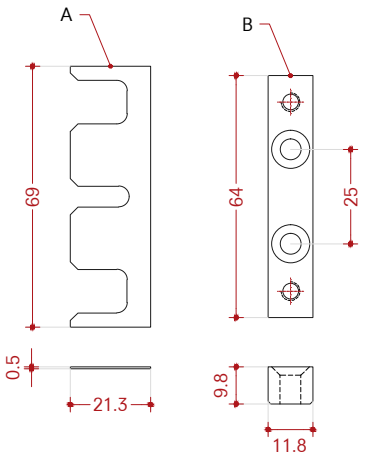
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x8 ISO7380 screws
D) Fastening hinge with M5x12 ISO7380 screws
E) Fastening with M5x16 ISO10642 screws and cut the screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x8 ISO7380
D) Befestigungsschrauben M5x12 ISO7380
E) Befestigungsschrauben M5x16 ISO10642 und Schrauben kürzen

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x8 ISO7380
D) Fixation avec vis M5x12 ISO7380
E) Fixation avec vis M5x16 ISO10642 et couper la vis







A) Additional shims for adjustment 15±0.5
B) Additional shim
C) Fastening of (B) with M5x16 ISO10642 screws and cut the screws
D) Fastening hinge with M5x12 ISO7380 screws
E) M5 hole and fastening with screw M5x12 ISO7380 after up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 15±0.5
B) Zusätzliche Unterlegscheibe
C) Befestigungsschrauben (B) M5x16 ISO10642 und Schrauben kürzen
D) Befestigungsschrauben M5x12 ISO7380
E) Bohrung M5 und Befestigung mit Schrauben M5x12 ISO7380 nach der Einstellung nach oben und unten.

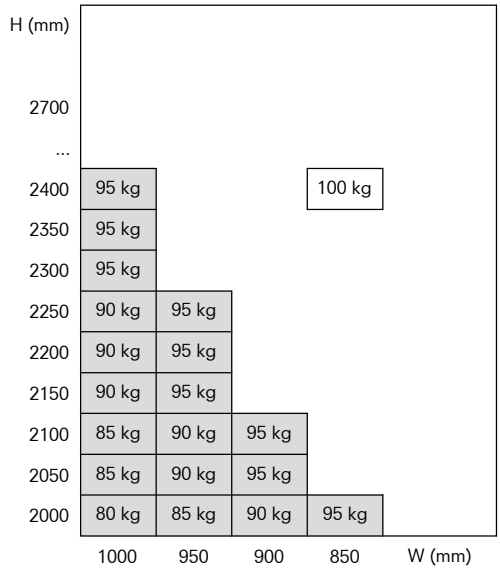
A) Plates supplémentaires pour le réglage 15±0.5
B) Plate supplémentaire
C) Fixation de (B) avec vis M5x16 ISO10642 et couper la vis
D) Fixation avec vis M5x12 ISO7380
E) Trou M5 et fixation avec vis M5x12 ISO7380 après le réglage haut et bas.

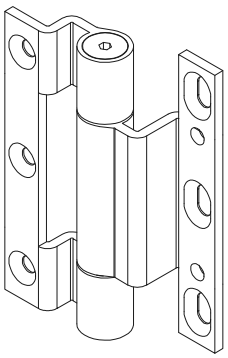
Load capacity tables
Screw-on hinges

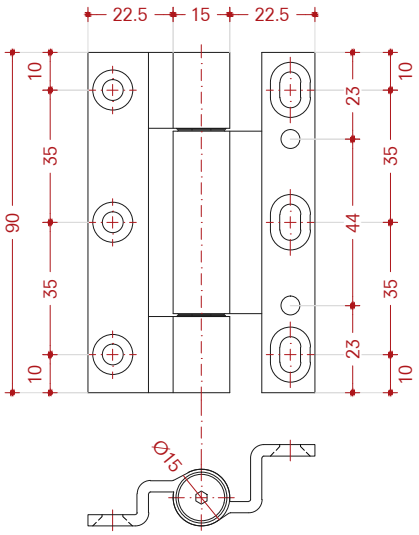
Gewichtstabellen
Anschraubband

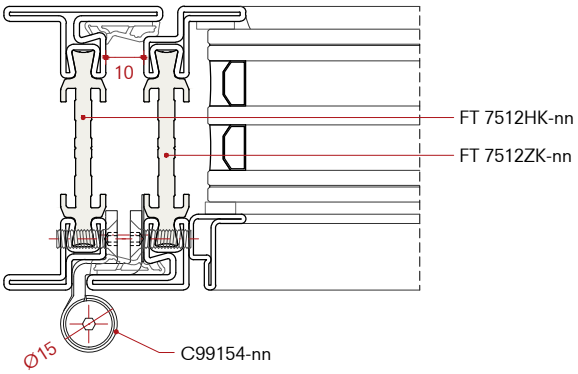
Capacité maximale
Paumelles à visser

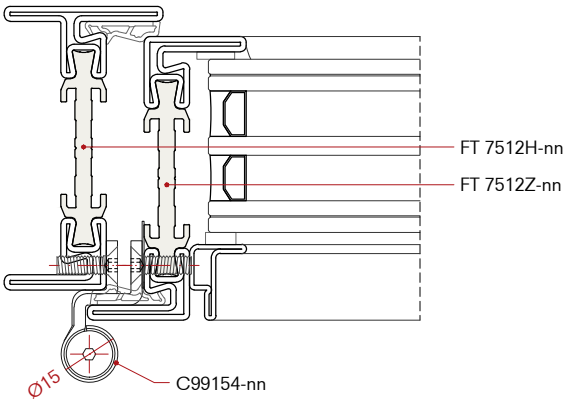
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99154-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable	Ø = 15 mm	90 mm	100 kg

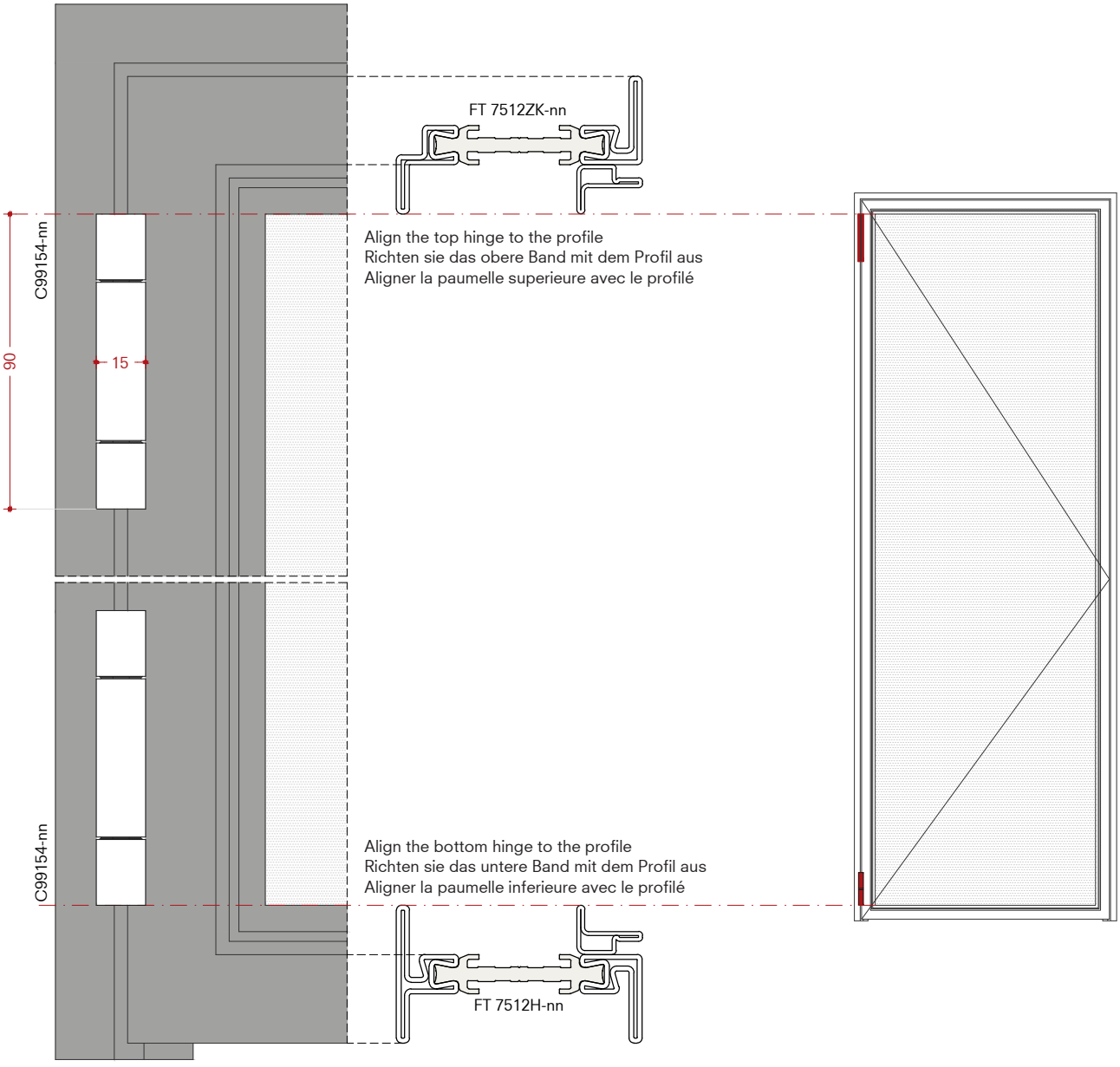







10
FT 7512HK-nn
FT 7512ZK-nn
Ø15
C99154-nn


FT 7512H-nn
FT 7512Z-nn
Ø15
C99154-nn


FT 7512ZK-nn
C99154-nn
90
15
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
C99154-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99154-nn
Flush profiles

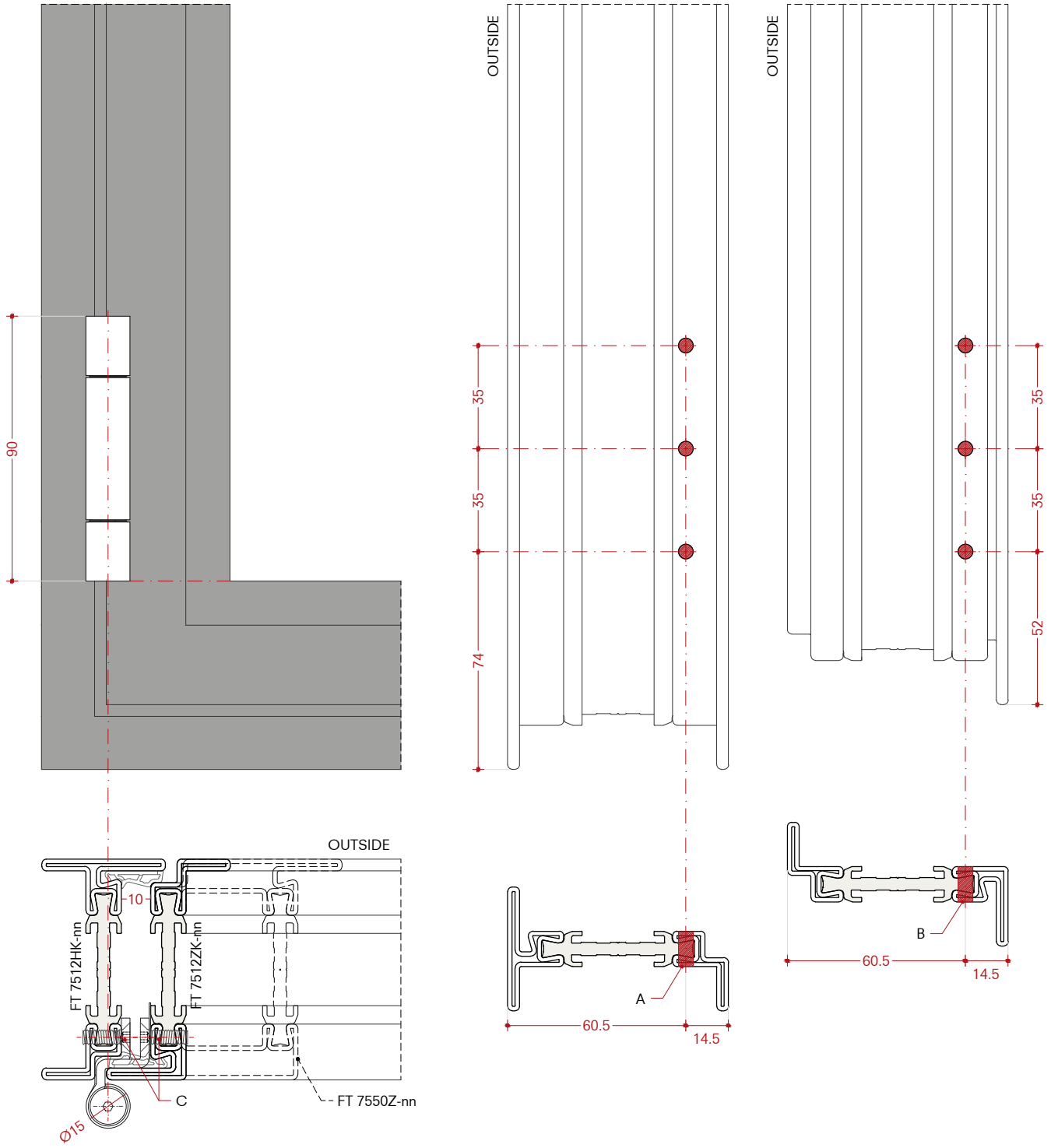
Maximum leaf weight 100 kg

Einbau
Anschraubband C99154-nn
Flächenbündige profile

Maximales Flügelgewicht 100 kg

Schéma de montage
Paumelle à visser C99154-nn
Profilés coplanaires

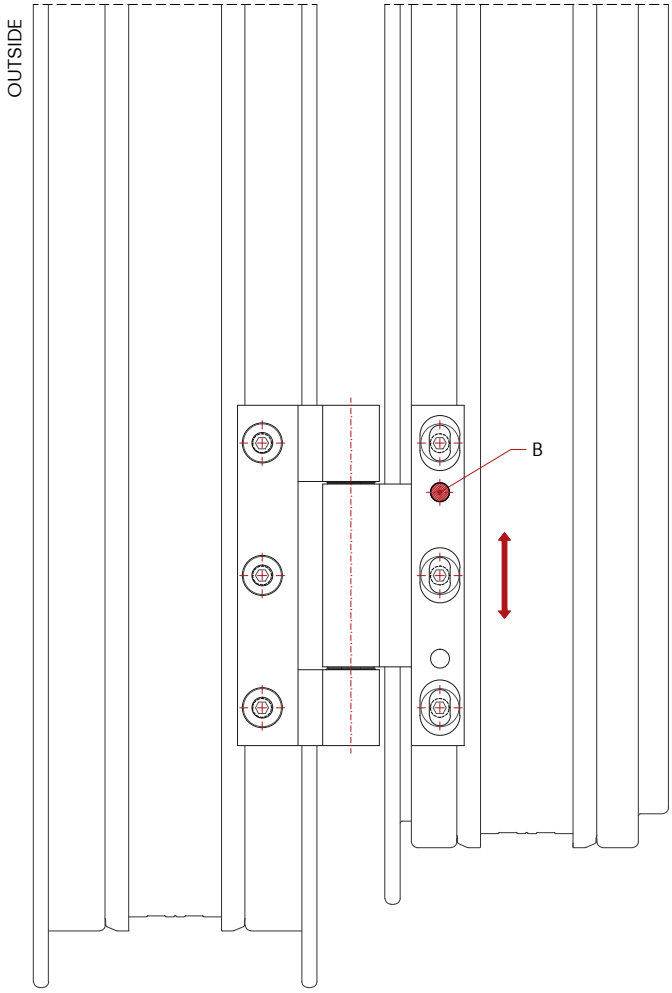
Poids maximum du ouvrant 100 kg

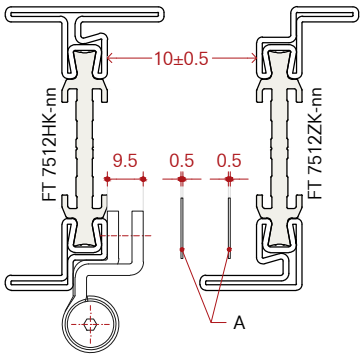


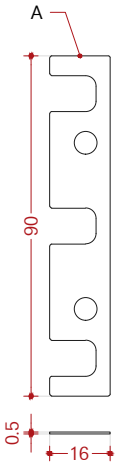
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Ø5 mm hole and pin to stop up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 10±0.5
B) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

Installation
Screw-on hinge C99154-nn
Overlapped profiles

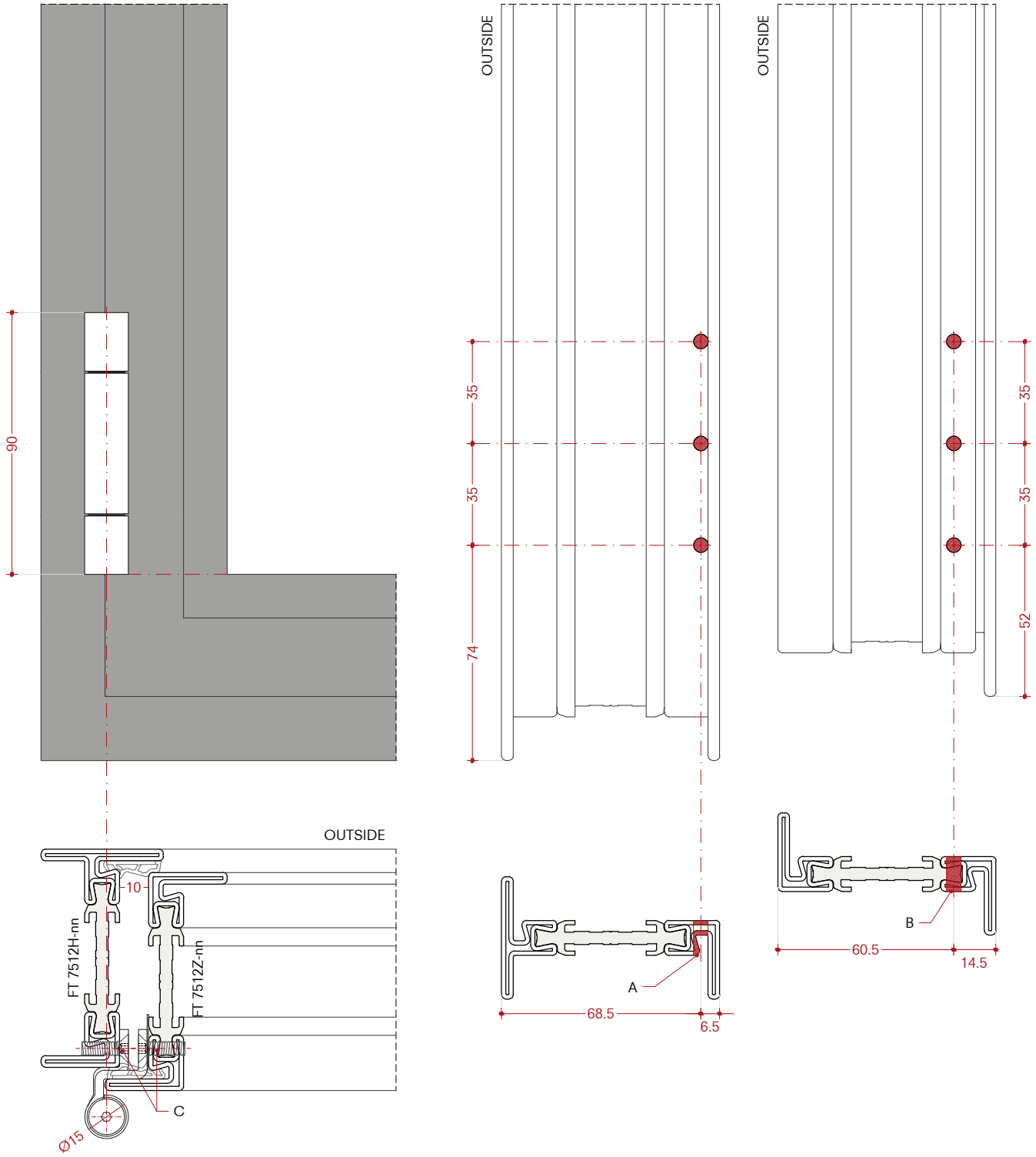
Maximum leaf weight 100 kg

Einbau
Anschraubband C99154-nn
Überlappende profile

Maximales Flügelgewicht 100 kg

Schéma de montage
Paumelle à visser C99154-nn
Profilés superposés

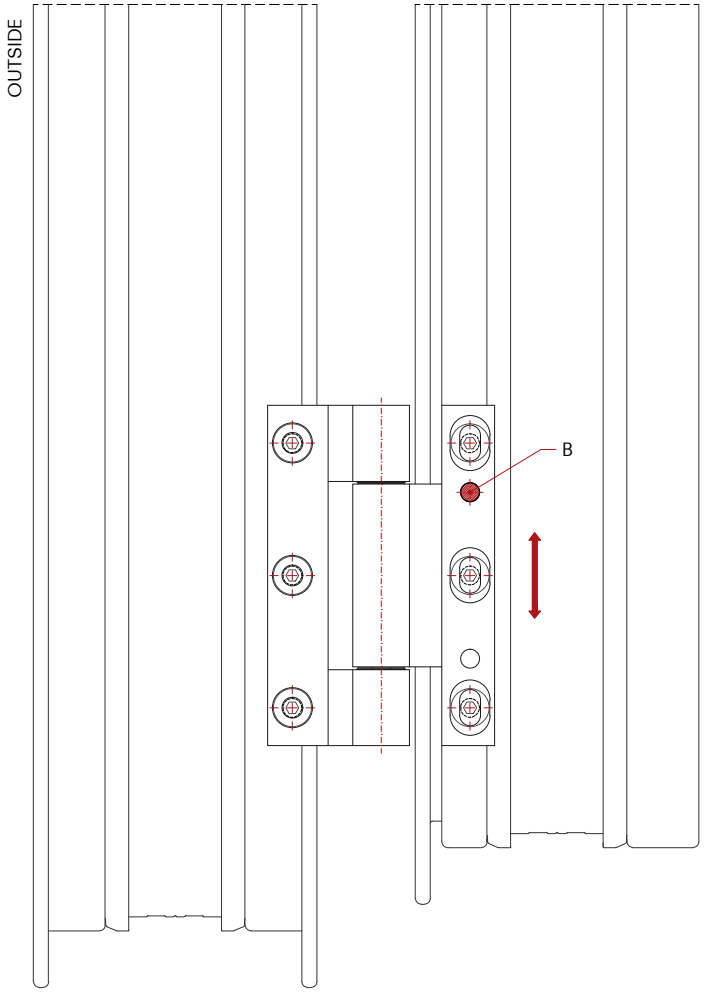
Poids maximum du ouvrant 100 kg

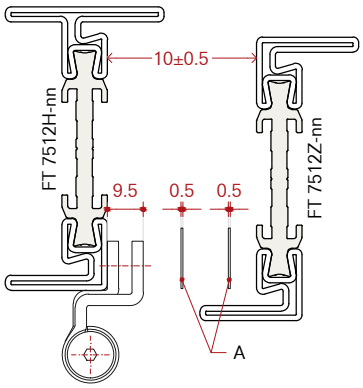


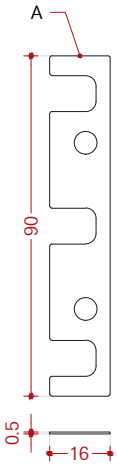
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Ø5 mm hole and pin to stop up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 10±0.5
B) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

Installation
Screw-on hinge C99154-nn
D75 TB door profiles

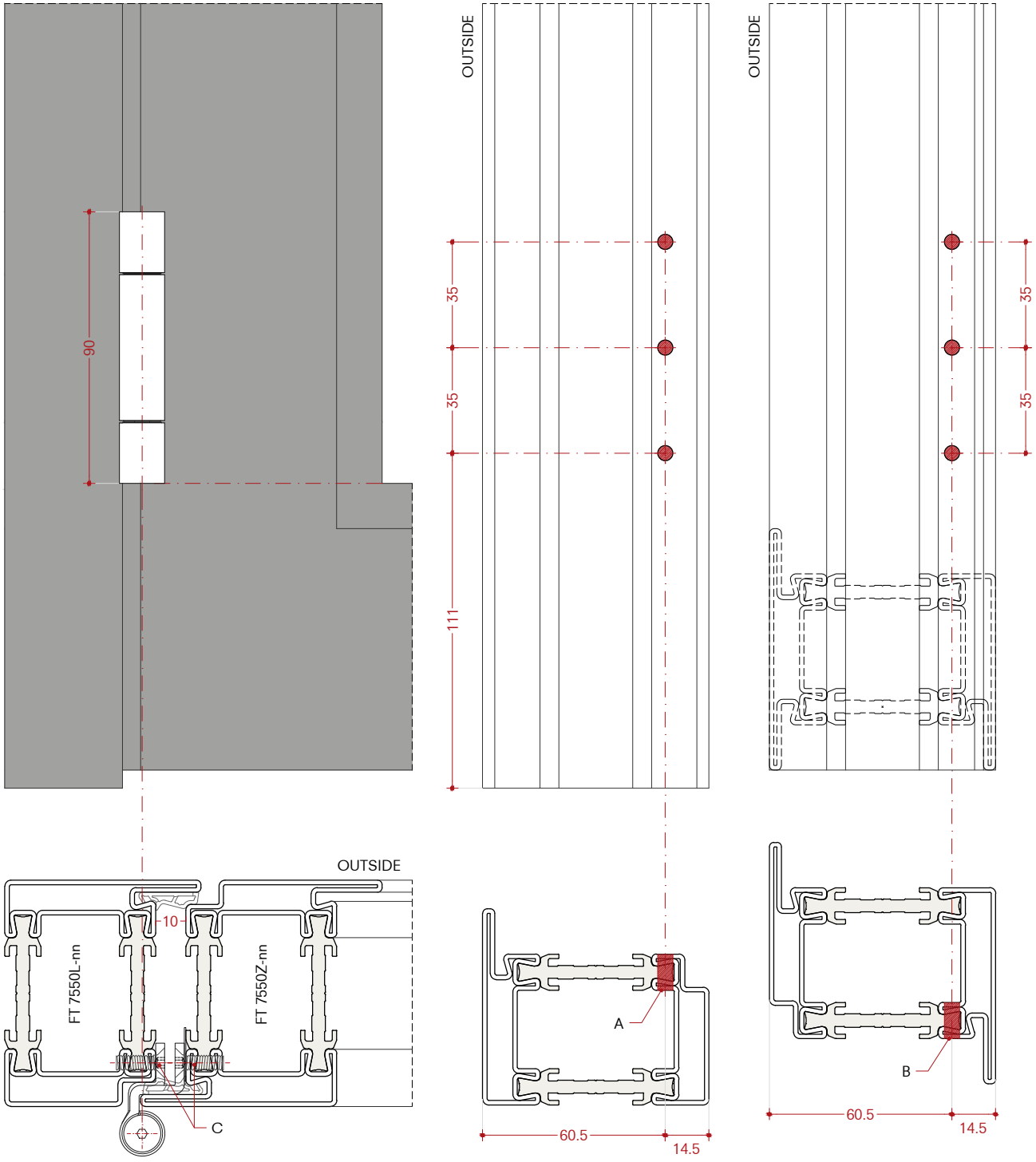
Maximum leaf weight 100 kg

Einbau
Anschraubband C99154-nn
D75 TB Tür profile

Maximales Flügelgewicht 100 kg

Schéma de montage
Paumelle à visser C99154-nn
D75 TB profilés porte

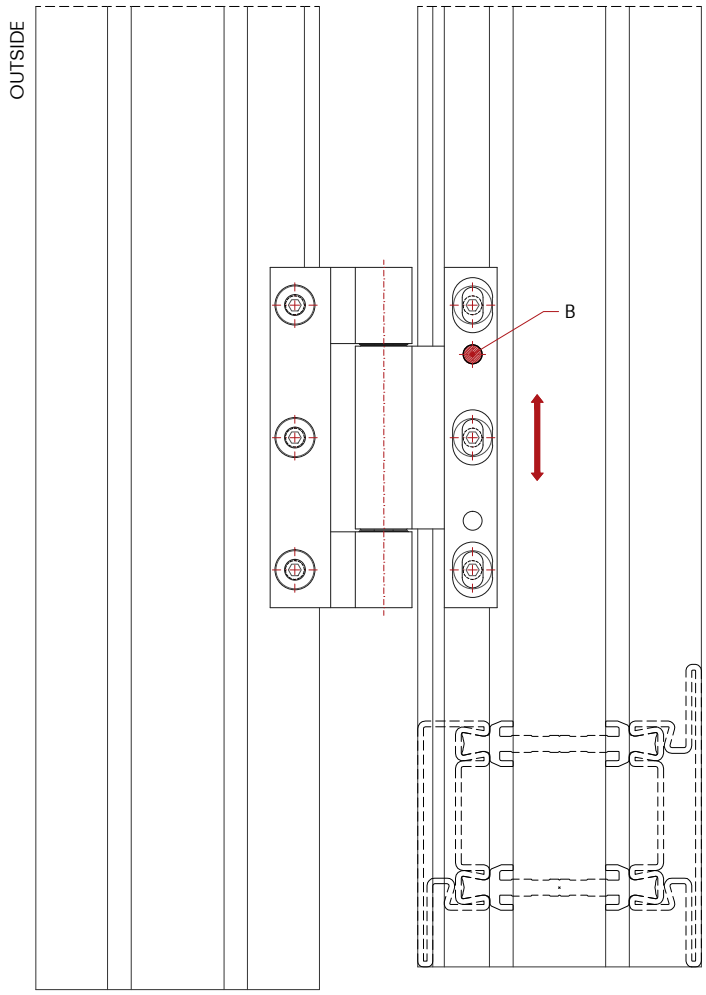
Poids maximum du ouvrant 100 kg

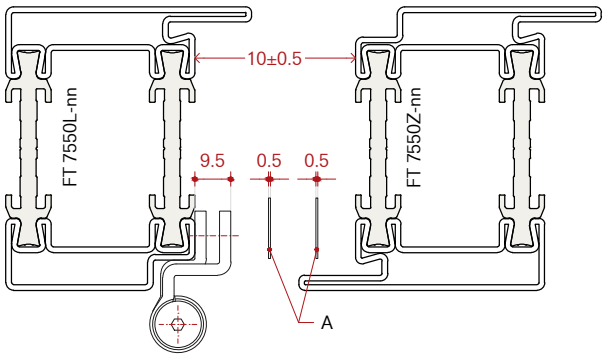


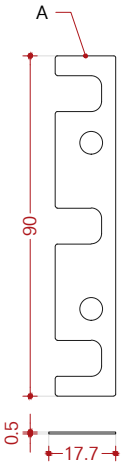
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Ø5 mm hole and pin to stop up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

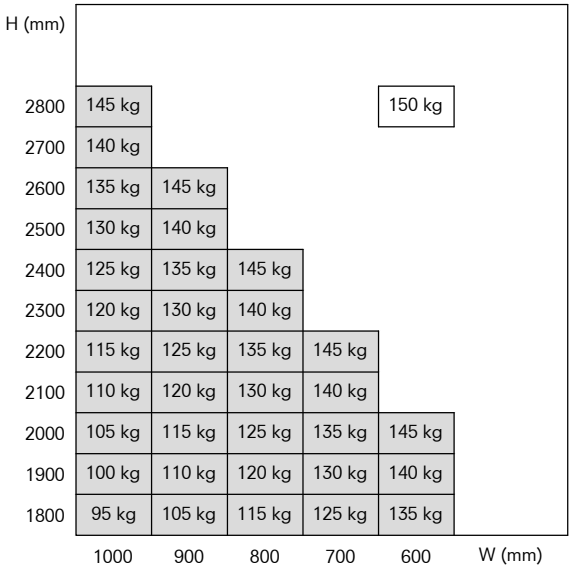
A) Plates supplémentaires pour le réglage 10±0.5
B) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

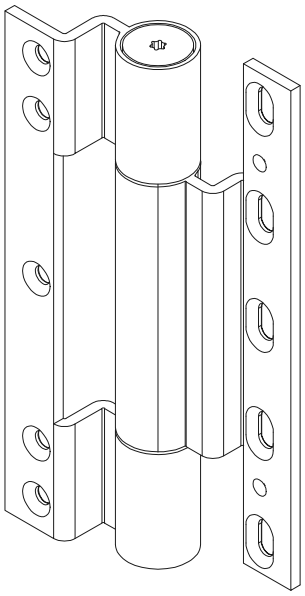
Load capacity tables
Screw-on hinges

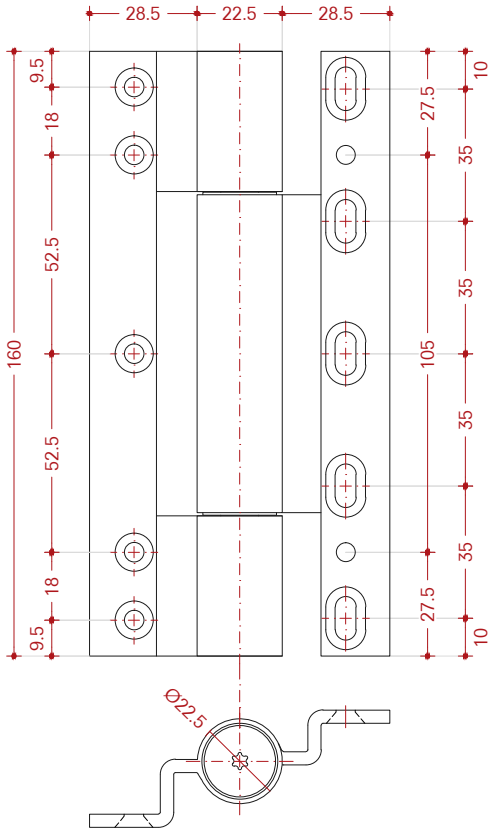
Gewichtstabellen
Anschraubband

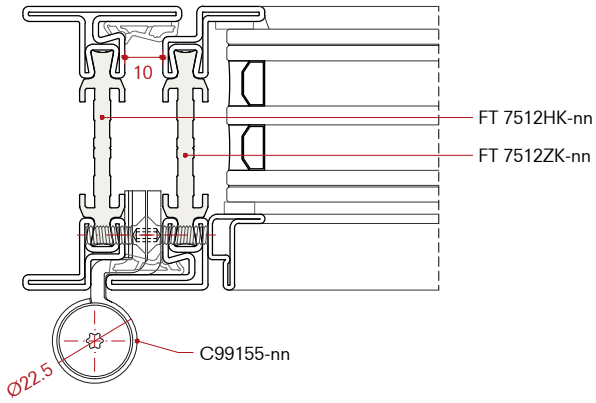
Capacité maximale
Paumelles à visser

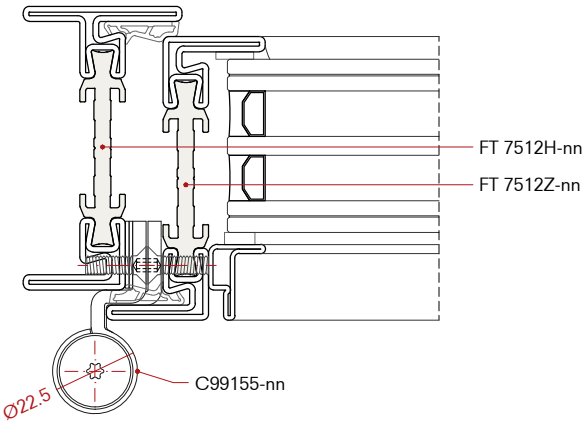
	Material Werkstoff Matériel	Diameter Durchmesser Diamètre	Length Länge Longueur	Capacity (pair) Tragkraft (Paar) Capacité (paire)
C99155-nn	-02 Galvanized steel -02 Stahl bandverzinkt -02 Acier galvanisé -04 Stainless steel -04 Edelstahl -04 Acier inoxydable	Ø = 22.5 mm	160 mm	150 kg

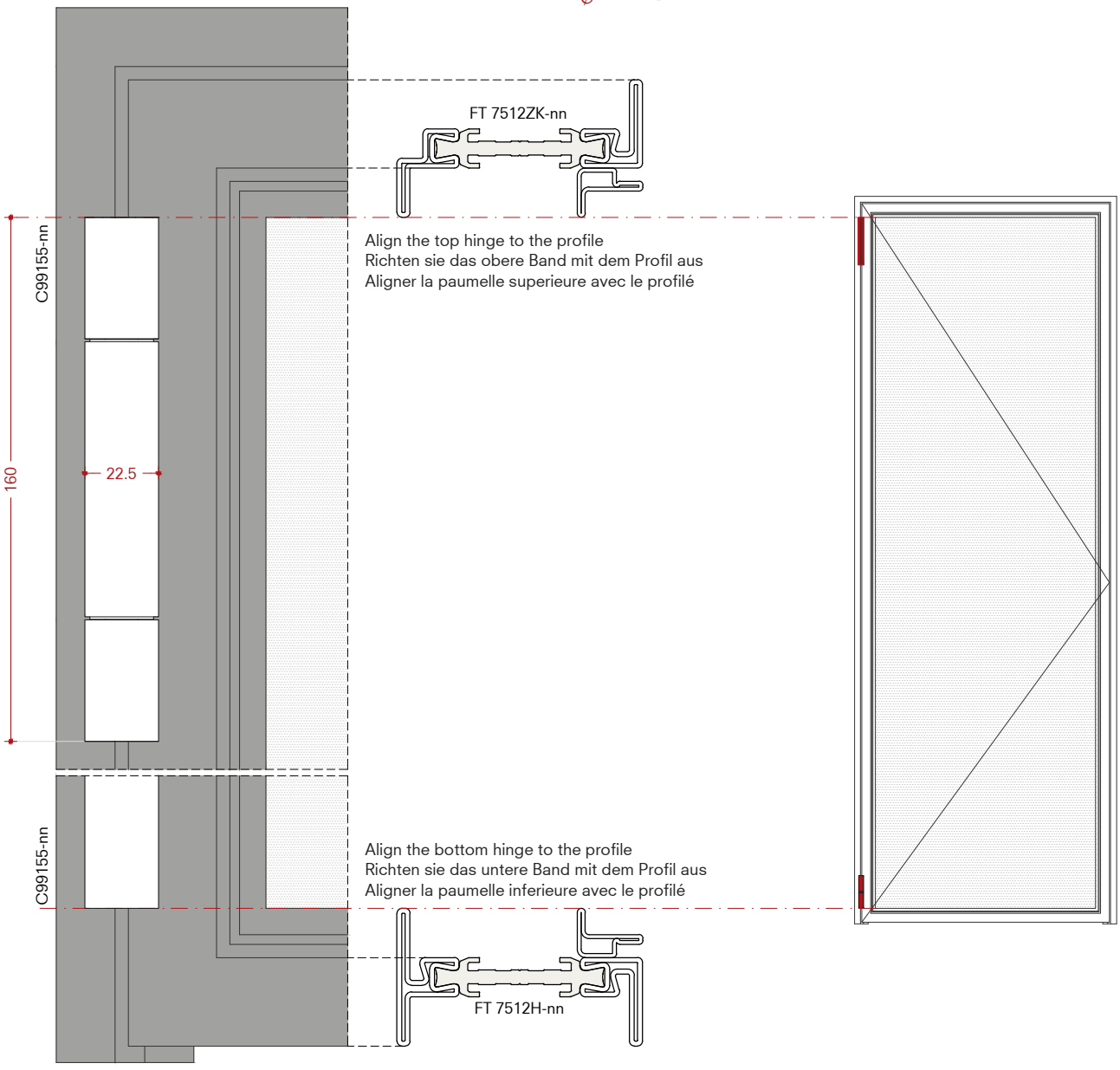







10
FT 7512HK-nn
FT 7512ZK-nn
C99155-nn
Ø22.5


FT 7512H-nn
FT 7512Z-nn
C99155-nn
Ø22.5


FT 7512ZK-nn
C99155-nn
Align the top hinge to the profile
Richten sie das obere Band mit dem Profil aus
Aligner la paumelle superieure avec le profilé
160
22.5
C99155-nn
Align the bottom hinge to the profile
Richten sie das untere Band mit dem Profil aus
Aligner la paumelle inferieure avec le profilé
FT 7512H-nn

Installation
Screw-on hinge C99155-nn
Flush profiles

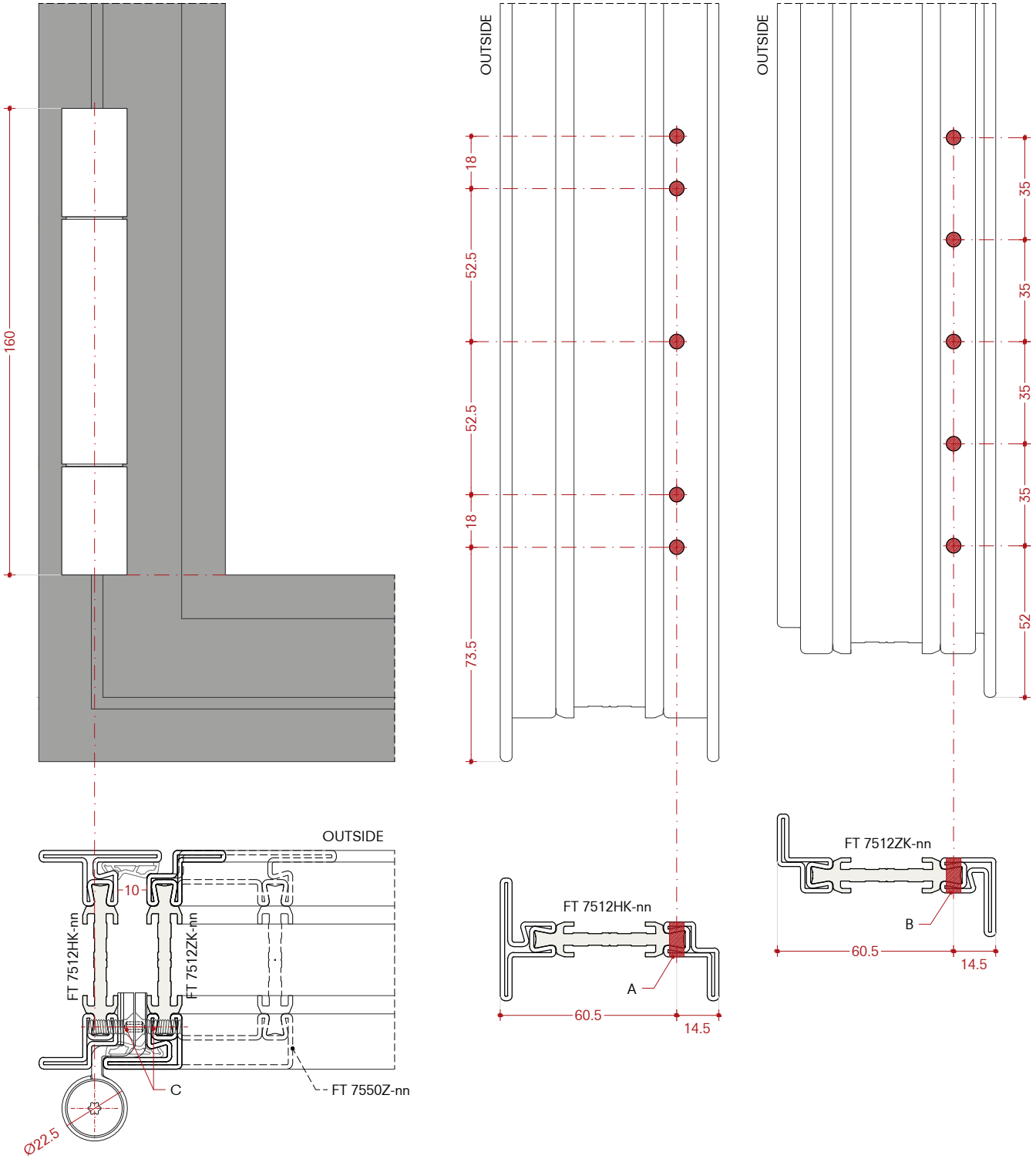
Maximum leaf weight 150 kg

Einbau
Anschraubband C99155-nn
Flächenbündige profile

Maximales Flügelgewicht 150 kg

Schéma de montage
Paumelle à visser C99155-nn
Profilés coplanaires

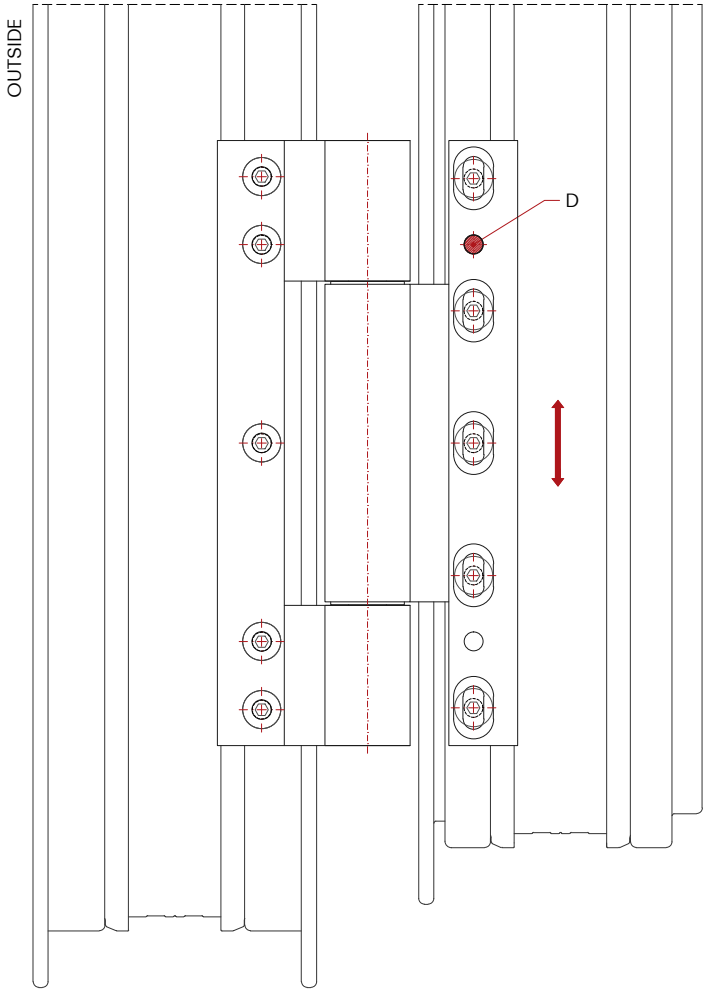
Poids maximum du ouvrant 150 kg

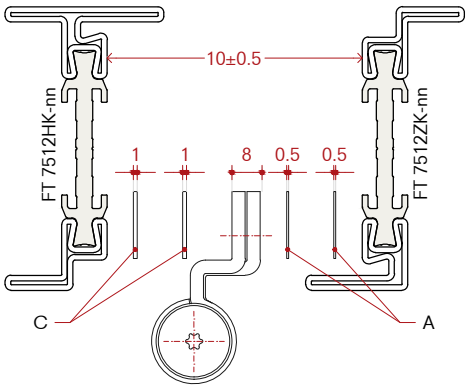


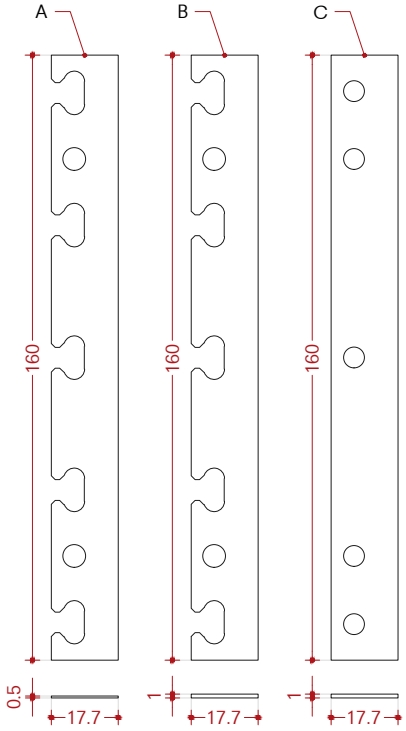
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Additional shims for adjustment
C) Additional shims for adjustment
D) Ø5 mm hole and pin to stop up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Zusätzliche Unterlegscheiben zum justieren
C) Zusätzliche Unterlegscheiben zum justieren
D) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 10±0.5
B) Plates supplémentaires pour le réglage
C) Plates supplémentaires pour le réglage
D) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

Installation
Screw-on hinge C99155-nn
Overlapped profiles

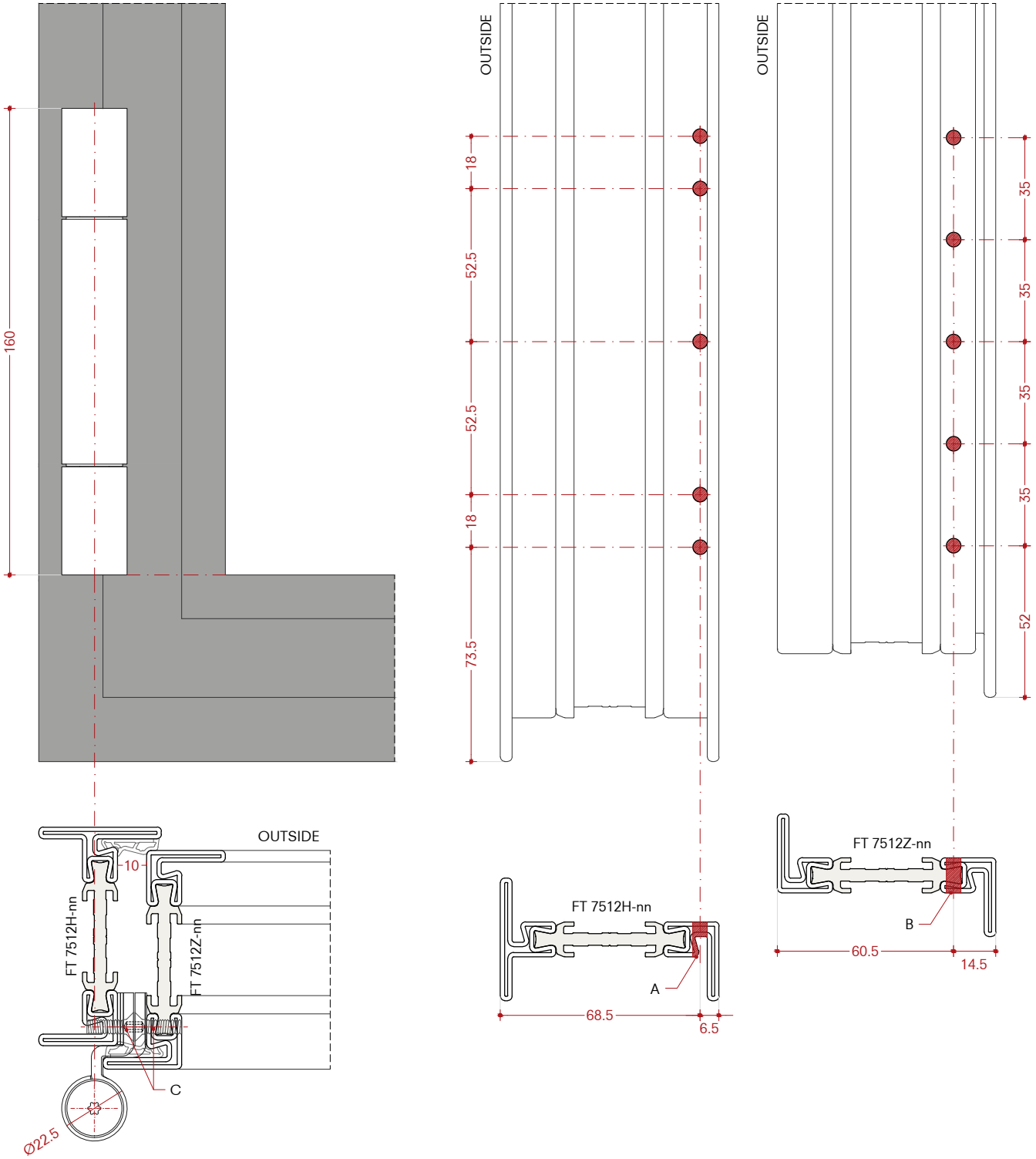
Maximum leaf weight 150 kg

Einbau
Anschraubband C99155-nn
Überlappende profile

Maximales Flügelgewicht 150 kg

Schéma de montage
Paumelle à visser C99155-nn
Profilés superposés

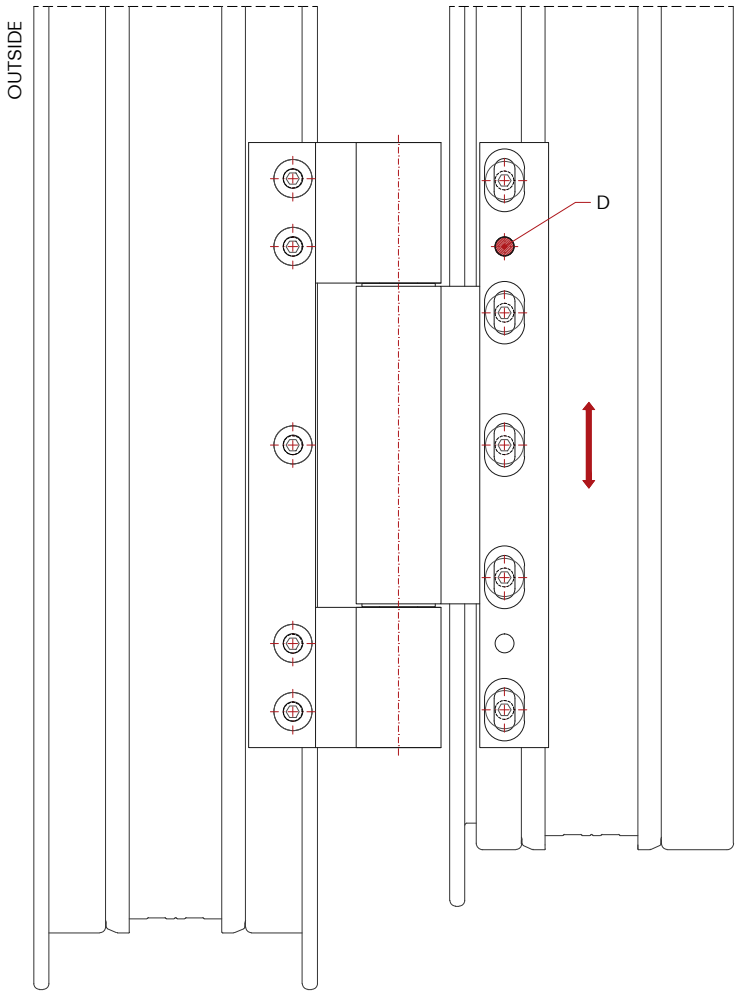
Poids maximum du ouvrant 150 kg

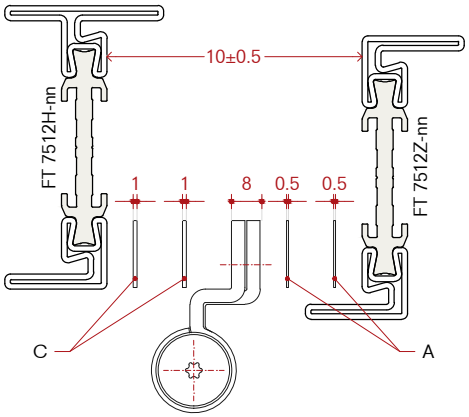


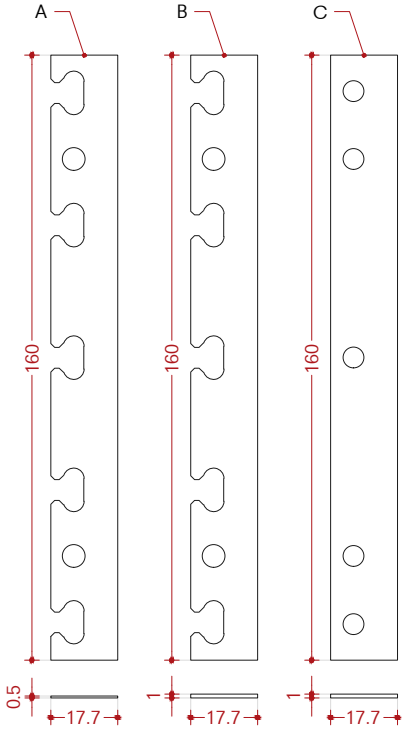
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Additional shims for adjustment
C) Additional shims for adjustment
D) Ø5 mm hole and pin to stop up and down adjustment.

A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Zusätzliche Unterlegscheiben zum justieren
C) Zusätzliche Unterlegscheiben zum justieren
D) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 10±0.5
B) Plates supplémentaires pour le réglage
C) Plates supplémentaires pour le réglage
D) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

Installation
Screw-on hinge C99155-nn
D75 TB door profiles

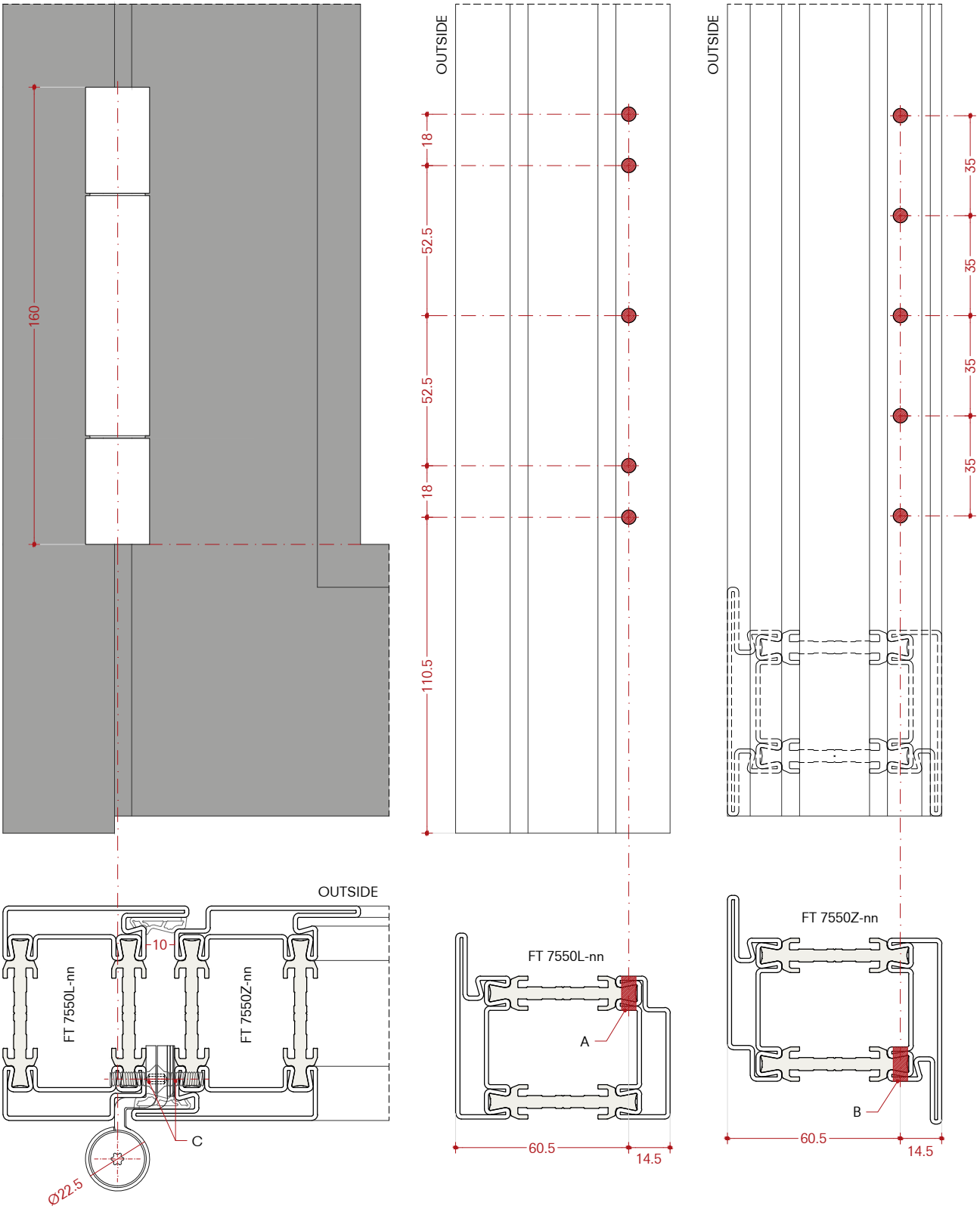
Maximum leaf weight 150 kg

Einbau
Anschraubband C99155-nn
D75 TB Tür profile

Maximales Flügelgewicht 150 kg

Schéma de montage
Paumelle à visser C99155-nn
D75 TB profilés porte

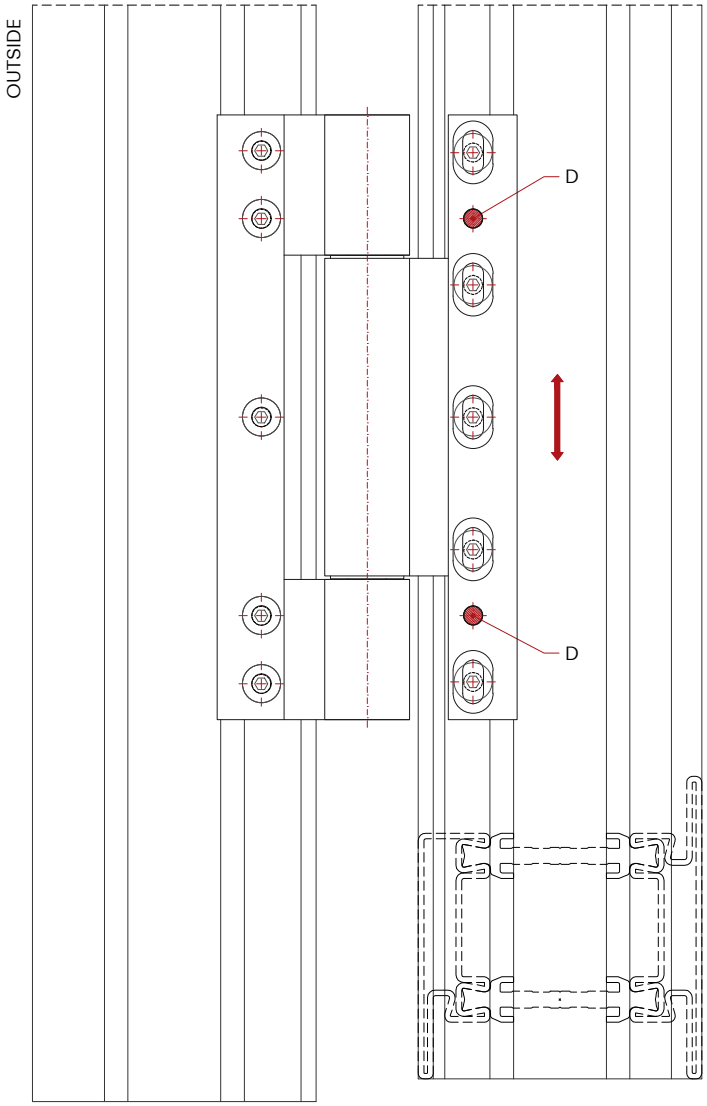
Poids maximum du ouvrant 150 kg

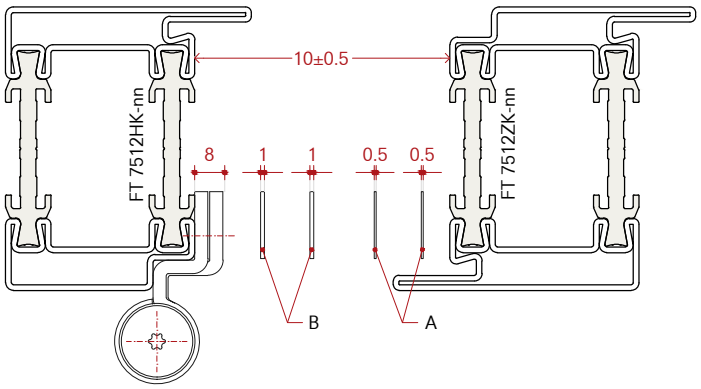


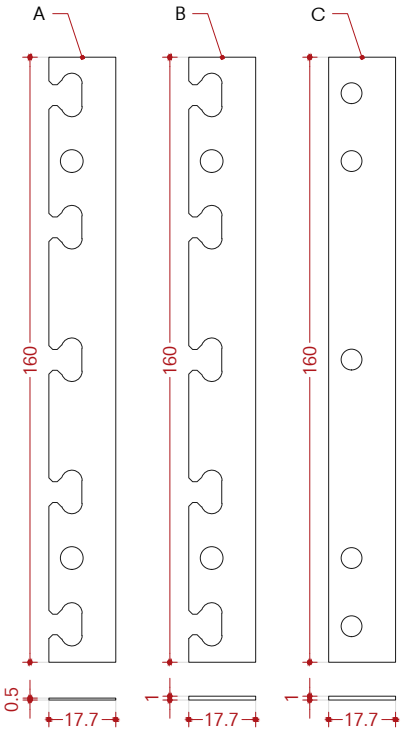
A) M5 holes on frame profile
B) M5 holes on leaf profile
C) Fastening hinge with M5x16 ISO10642 screws

A) Bohrungen M5 an Rahmen
B) Bohrungen M5 an Flügel
C) Befestigungsschrauben M5x16 ISO10642

A) Trous M5 sur profilé dormant
B) Trous M5 sur profilé ouvrant
C) Fixation avec vis M5x16 ISO10642







A) Additional shims for adjustment 10±0.5
B) Additional shims for adjustment
C) Additional shims for adjustment
D) Ø5 mm hole and pin to stop up and down adjustment.

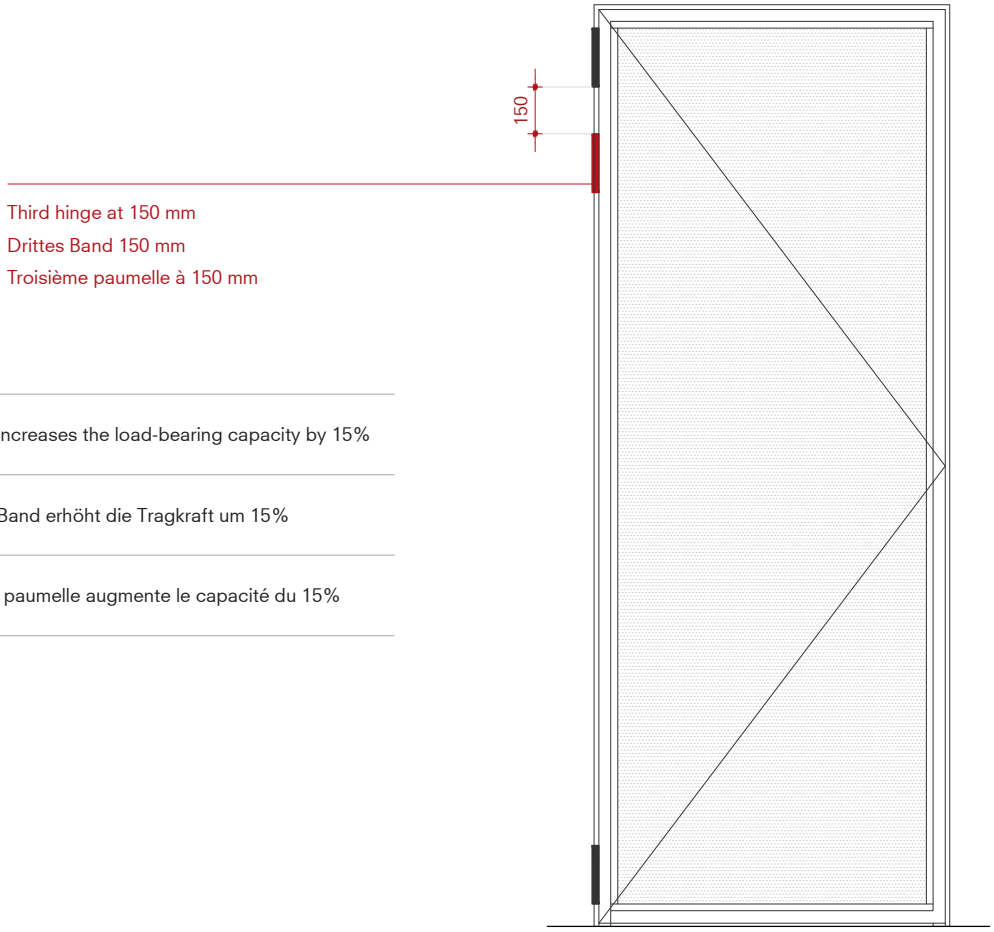
A) Zusätzliche Unterlegscheiben zum justieren 10±0.5
B) Zusätzliche Unterlegscheiben zum justieren
C) Zusätzliche Unterlegscheiben zum justieren
D) Ø5 mm Loch und Stift zum Stoppen der Einstellung nach oben und unten.

A) Plates supplémentaires pour le réglage 10±0.5
B) Plates supplémentaires pour le réglage
C) Plates supplémentaires pour le réglage
D) Trou Ø5 mm et goupille pour arrêter le réglage vertical.

Rules for third hinge

Regeln für drittes Türband

Règles pour la troisième paumelle



Third hinge at 150 mm
Drittes Band 150 mm
Troisième paumelle à 150 mm

The third hinge increases the load-bearing capacity by 15%

Ein 3. Band erhöht die Tragkraft um 15%

La troisième paumelle augmente le capacité du 15%

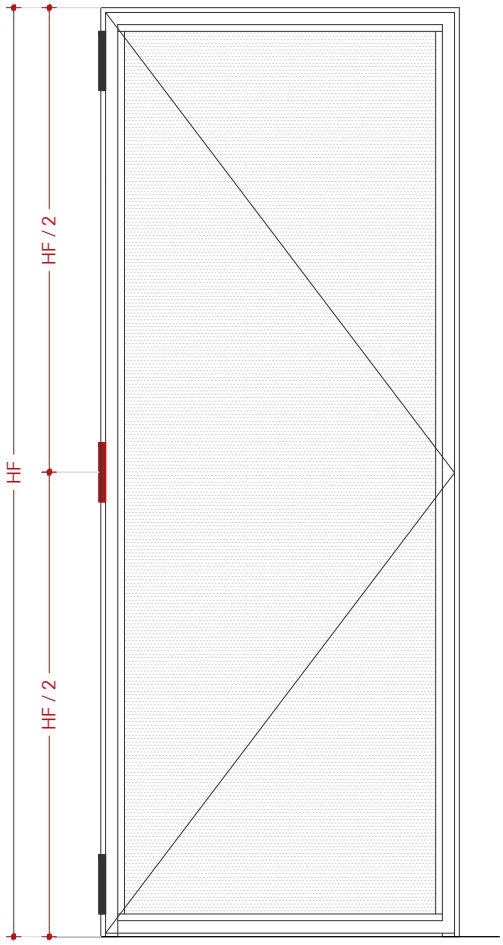
Use the third hinge if:
3. Band verwenden wenn:
Conditions d'utilisation:

A	Doors equipped with overhead door closer Türen mit Obertürschließer Portes équipées avec ferme porte en partie haute
B	Doors with panic bar (EN1125) Türen mit Panikstange (EN1125) Portes avec barre anti-panique (EN1125)
C	Doors for intensive uses (schools, hospitals, ...) Stark frequentierte Türen (Schulen, Krankenhäuser, ...) Portes pour usages intensifs (écoles, hôpitaux, ...)

Rules for middle hinge

Regeln für mittleres Türband

Règles pour la paumelle centrale



Middle hinge needed if:
Mittleres Band erforderlich wenn:
Paumelle centrale nécessaire si:

Doors height is more than 2250 mm
Die Türhöhe beträgt mehr als 2250 mm
La porte hauteur est supérieure à 2250 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

Hinweis für alle Anschweißbänder:

Bitte sicherstellen, dass die Möglichkeit besteht den Türflügel nach der Montage aushängen zu können. Dies sollte schon bei Planung Berücksichtigung finden.

HF = Höhe Rahmen

Remarque pour toutes les paumelles:

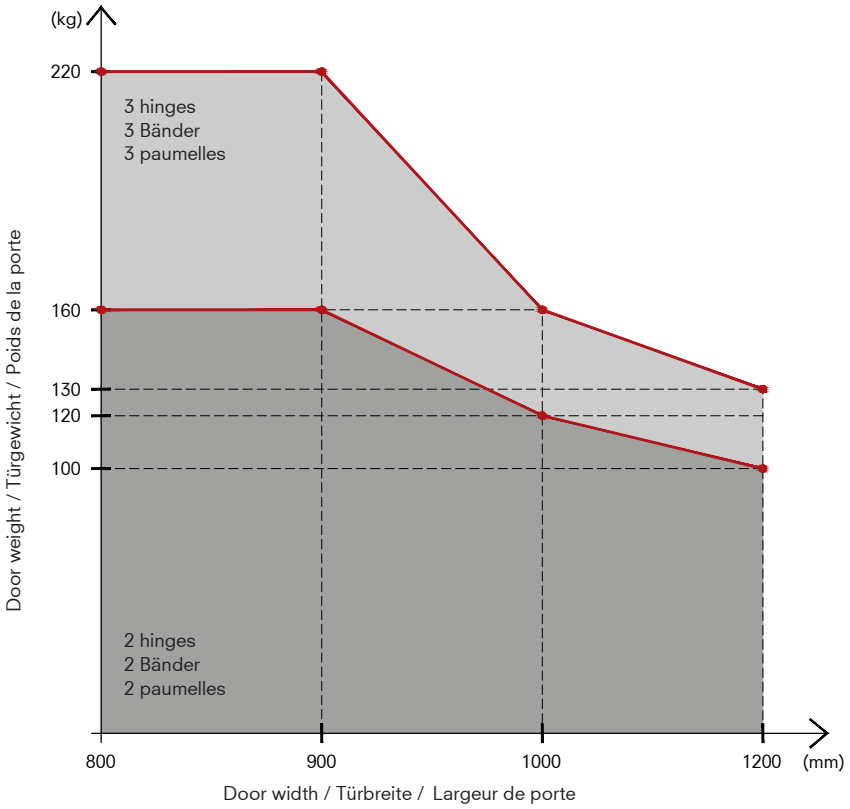
Veuillez vous assurer qu'il est possible de déverrouiller la porte feuille après l'installation. Cela doit être pris en compte pendant la planification.

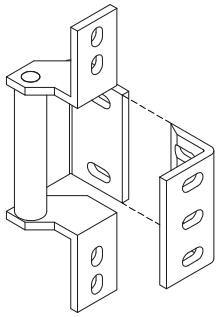
HF = Hauteur dormant

Installation
Screw-on hidden hinge C99403-46
Flush profiles

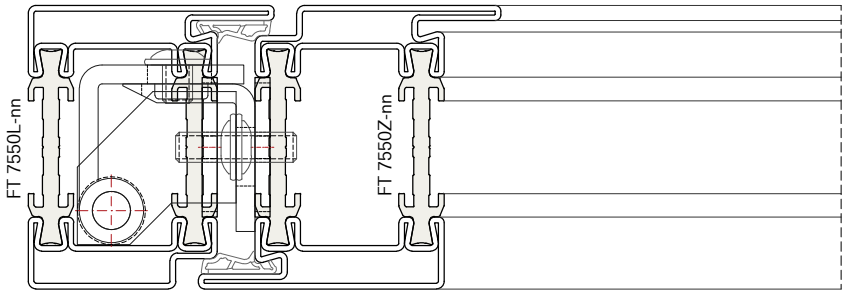
Einbau
Verdecktes Anschraubband C99403-46
Flächenbündige profile

Schéma de montage
Paumelle à visser cachée C99403-46
Profilés coplanaires

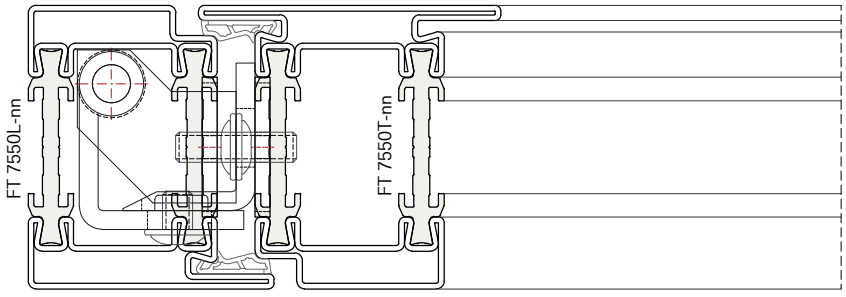


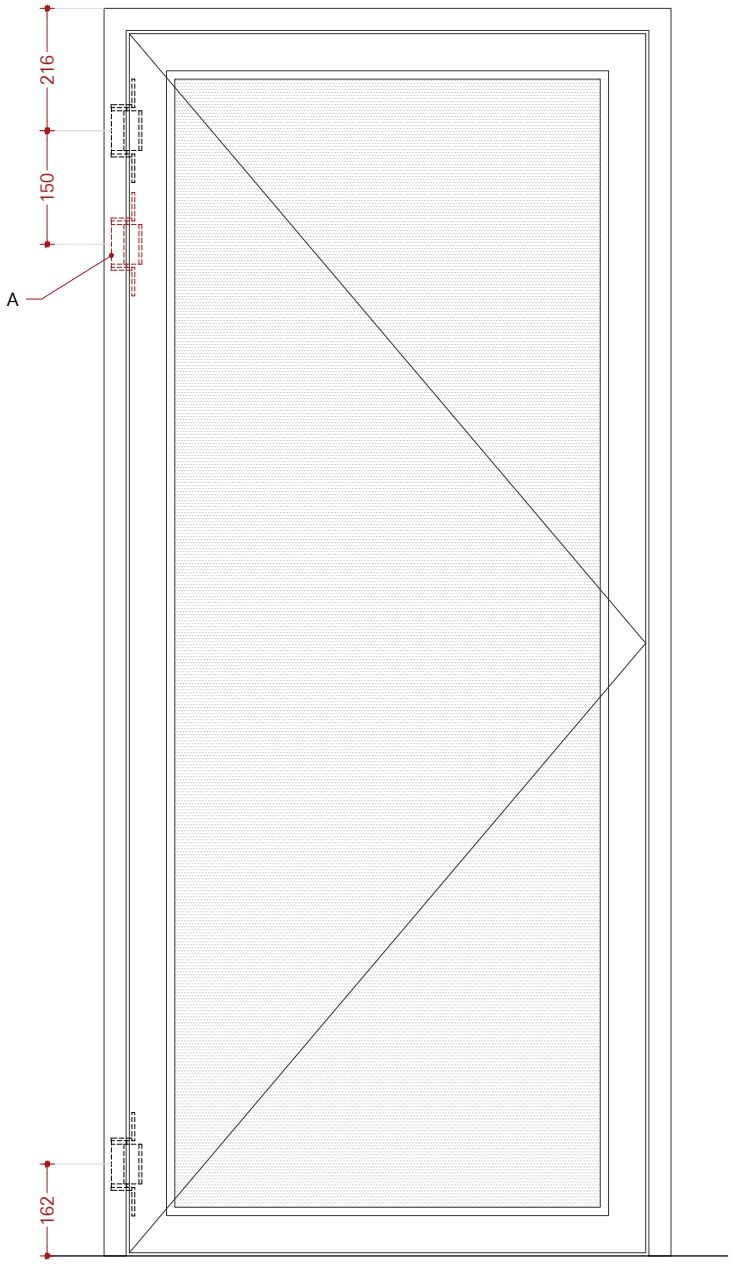


Open in
Nach Innen öffnend
Ouverture intérieure



Open out
Nach außen öffnend
Ouverture extérieure





A) Additional hinge. For the alignment foresee fixing system (not provided by OTTOSTUMM | Mogs).

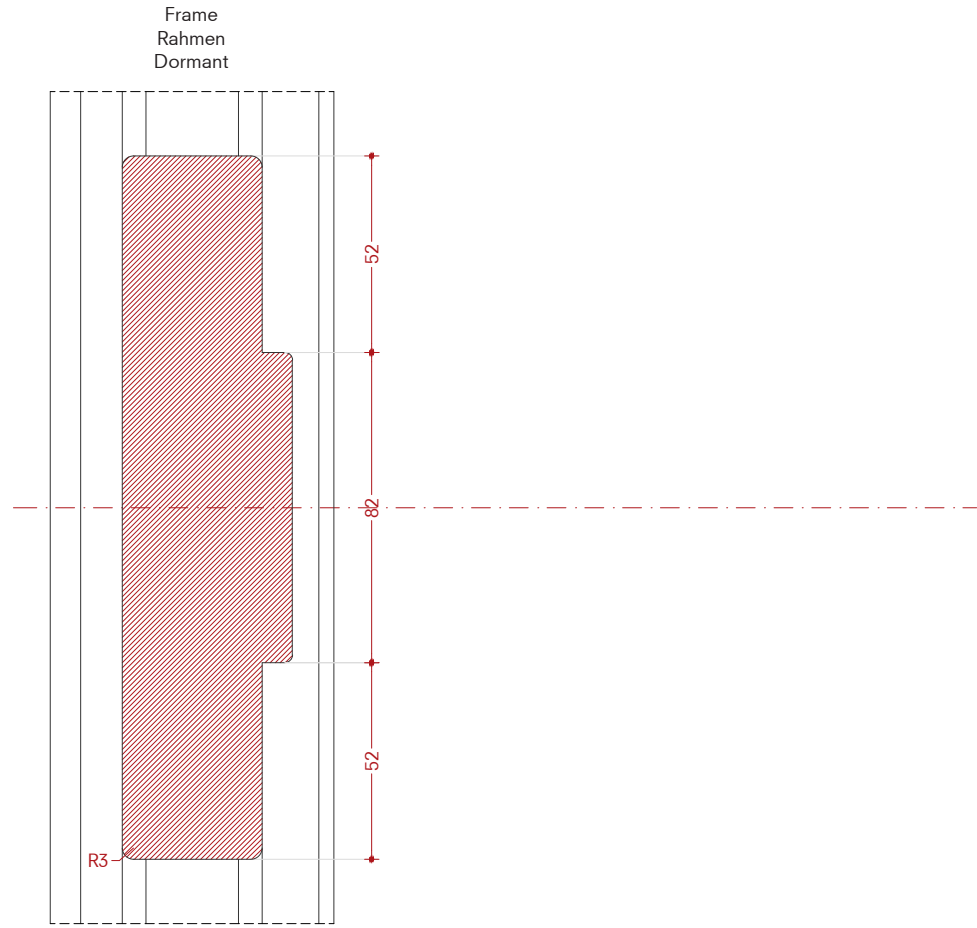
A) Zusätzliches Band. Für die Ausrichtung sehen Sie das Befestigungssystem vor (Eigenfertigung von OTTOSTUMM | Mogs).

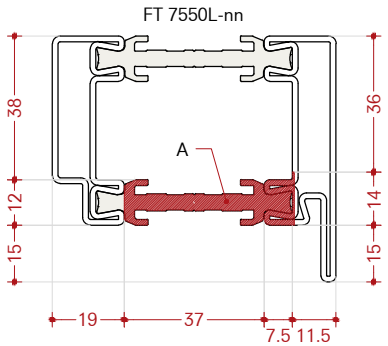
A) Paumelle supplémentaire. Pour l'alignement prévoir système de fixation (non inclus par OTTOSTUMM | Mogs).

Installation
Screw-on hidden hinge C99403-46
Flush profiles

Einbau
Verdecktes Anschraubband C99403-46
Flächenbündige profile

Schéma de montage
Paumelle à visser cachée C99403-46
Profilés coplanaires

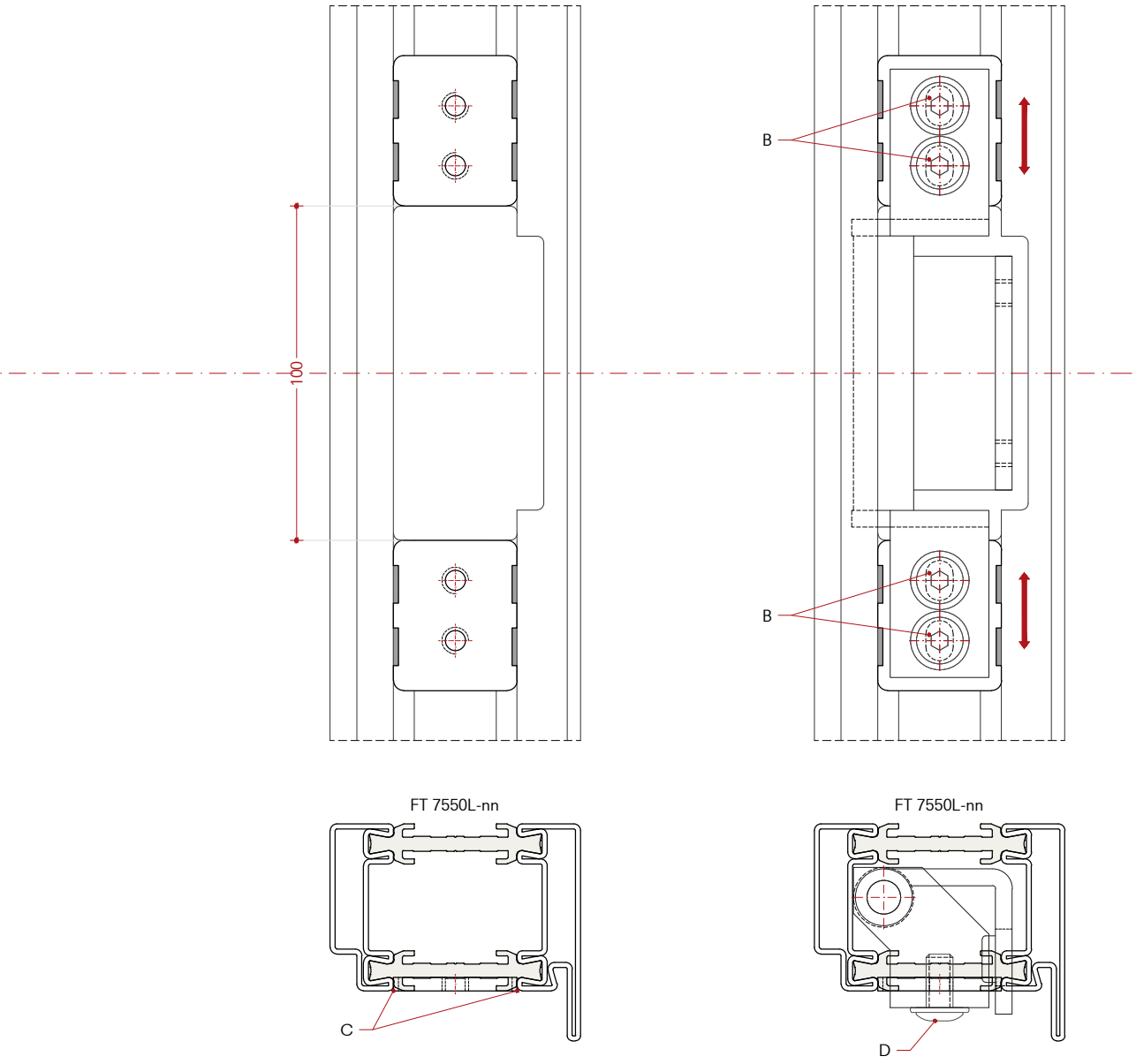




A) Cut out

A) Fräsung

A) Fraisage



B) Slotted holes for up and down adjustment
C) Welding
D) Fix the hinge to the frame using his M8 screws

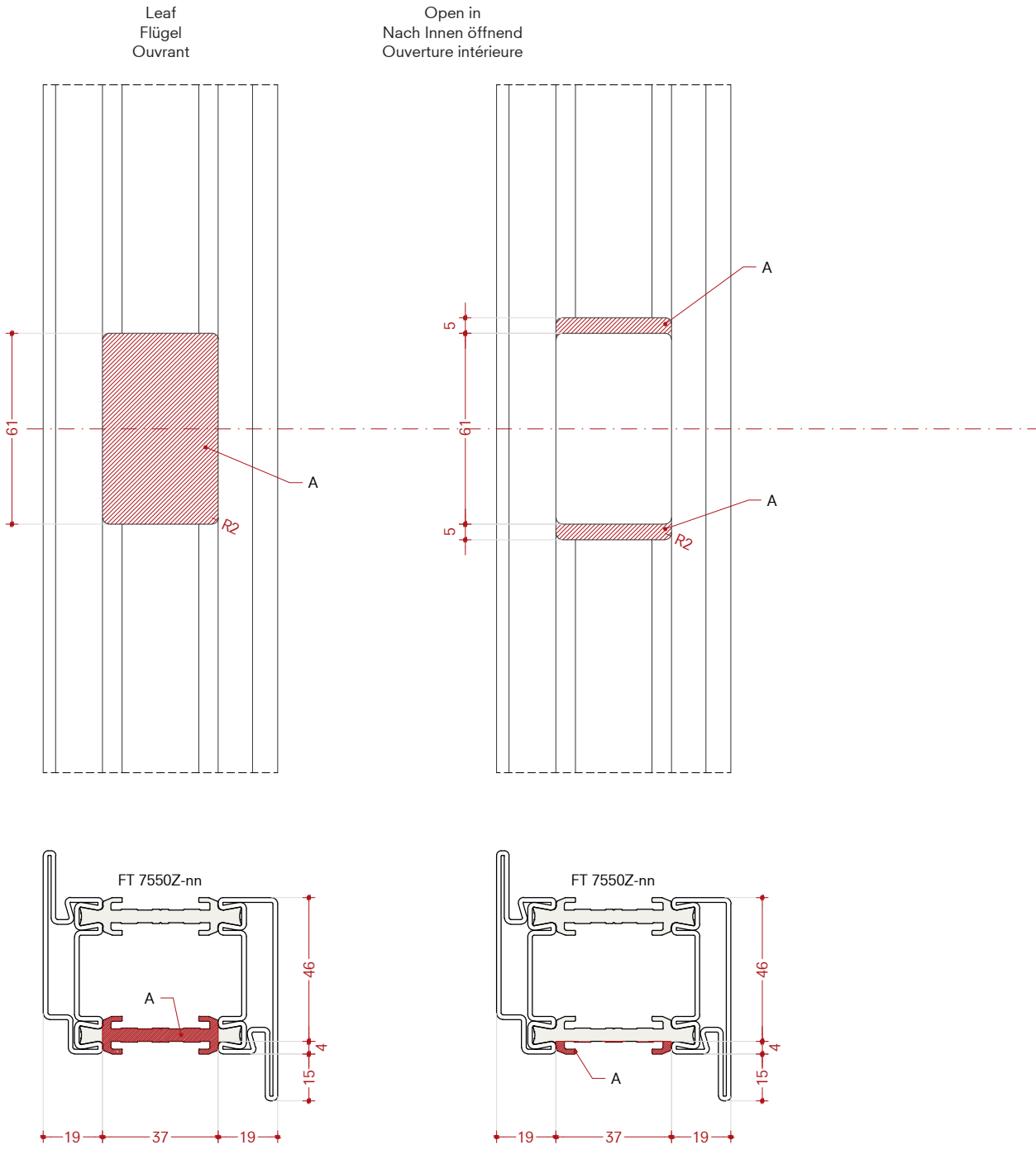
B) Langlöcher zur vertikalen Einstellung
C) Schweissen
D) Befestigen Sie das Band am Rahmen Verwenden Sie die M8 Schrauben aus dem Kit

B) Trous fendus pour le réglage vertical
C) Souder
D) Fixer la paumelle au cadre avec les vis M8 du kit

Installation
Screw-on hidden hinge C99403-46
Flush profiles

Einbau
Verdecktes Anschraubband
C99403-46
Flächenbündige profile

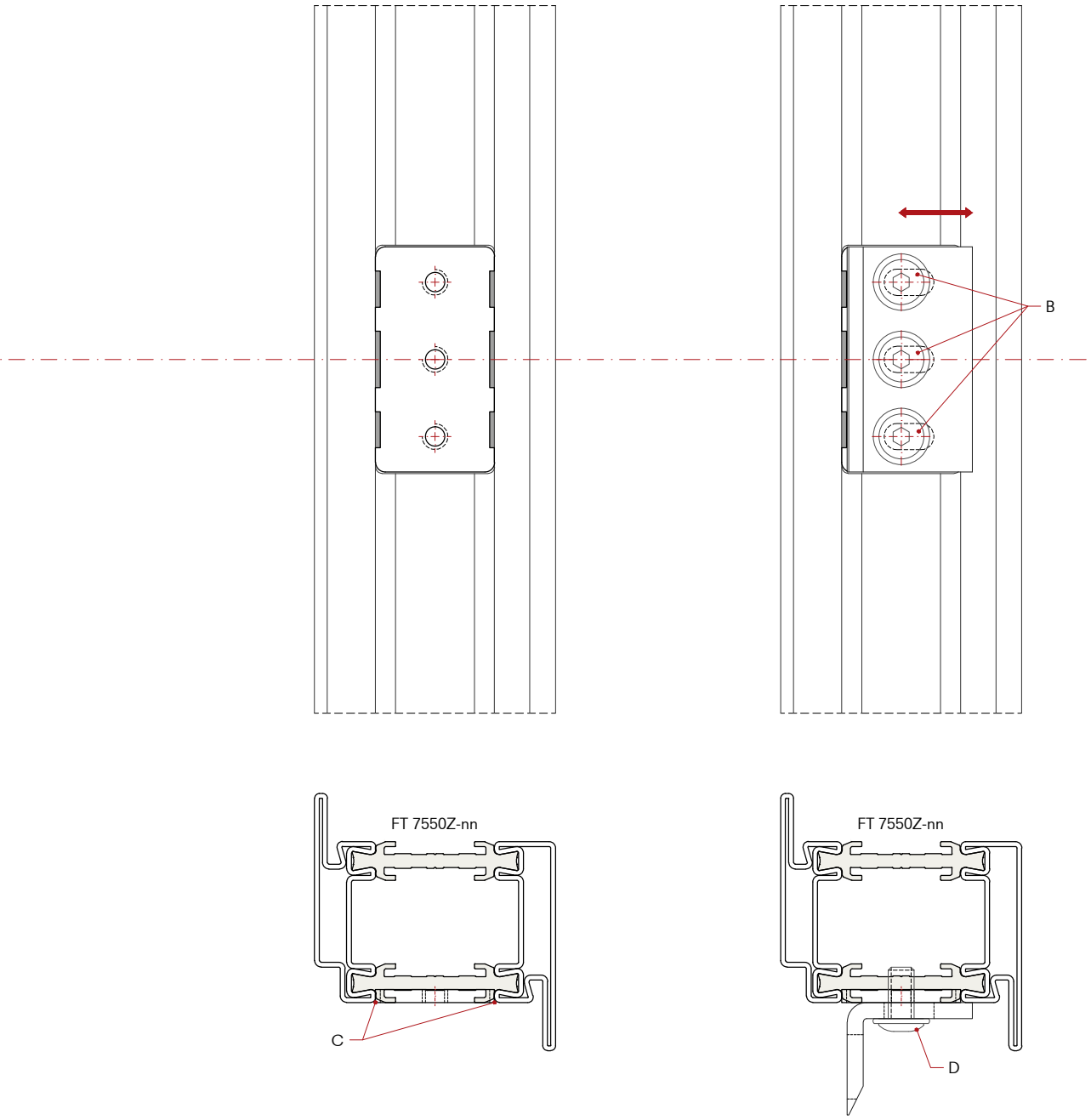
Schéma de montage
Paumelle à visser cachée C99403-46
Profilés coplanaires



A) Cut out

A) Fräsung

A) Fraisage



B) Slotted holes for up and down adjustment
C) Welding
D) Fix the hinge to the frame using his M8 screws

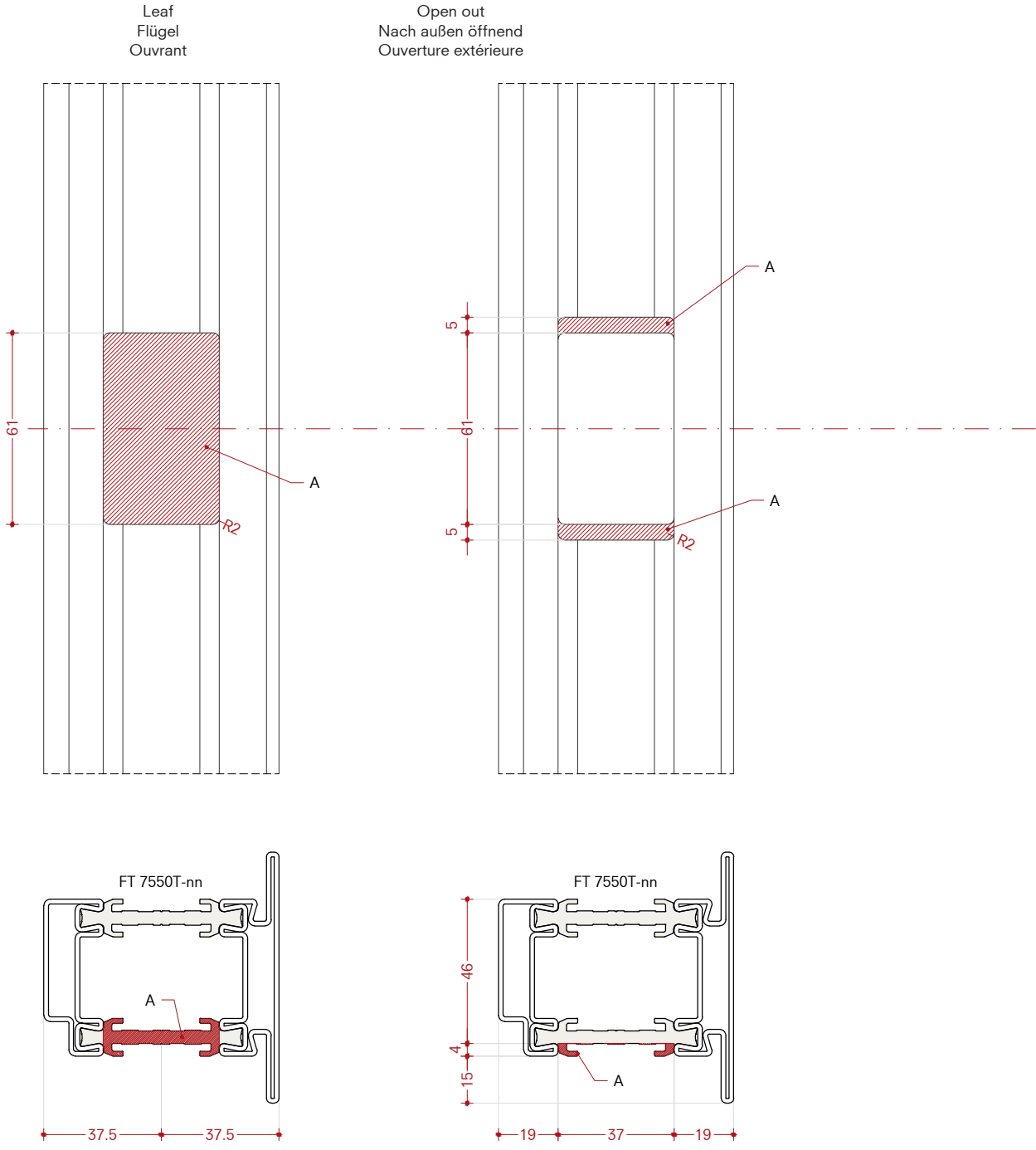
B) Langlöcher zur vertikalen Einstellung
C) Schweissen
D) Befestigen Sie das Band am Rahmen Verwenden Sie die M8 Schrauben aus dem Kit

B) Trous fendus pour le réglage vertical
C) Souder
D) Fixer la paumelle au cadre avec les vis M8 du kit

Installation
Screw-on hidden hinge C99403-46
Flush profiles

Einbau
Verdecktes Anschraubband C99403-46
Flächenbündige profile

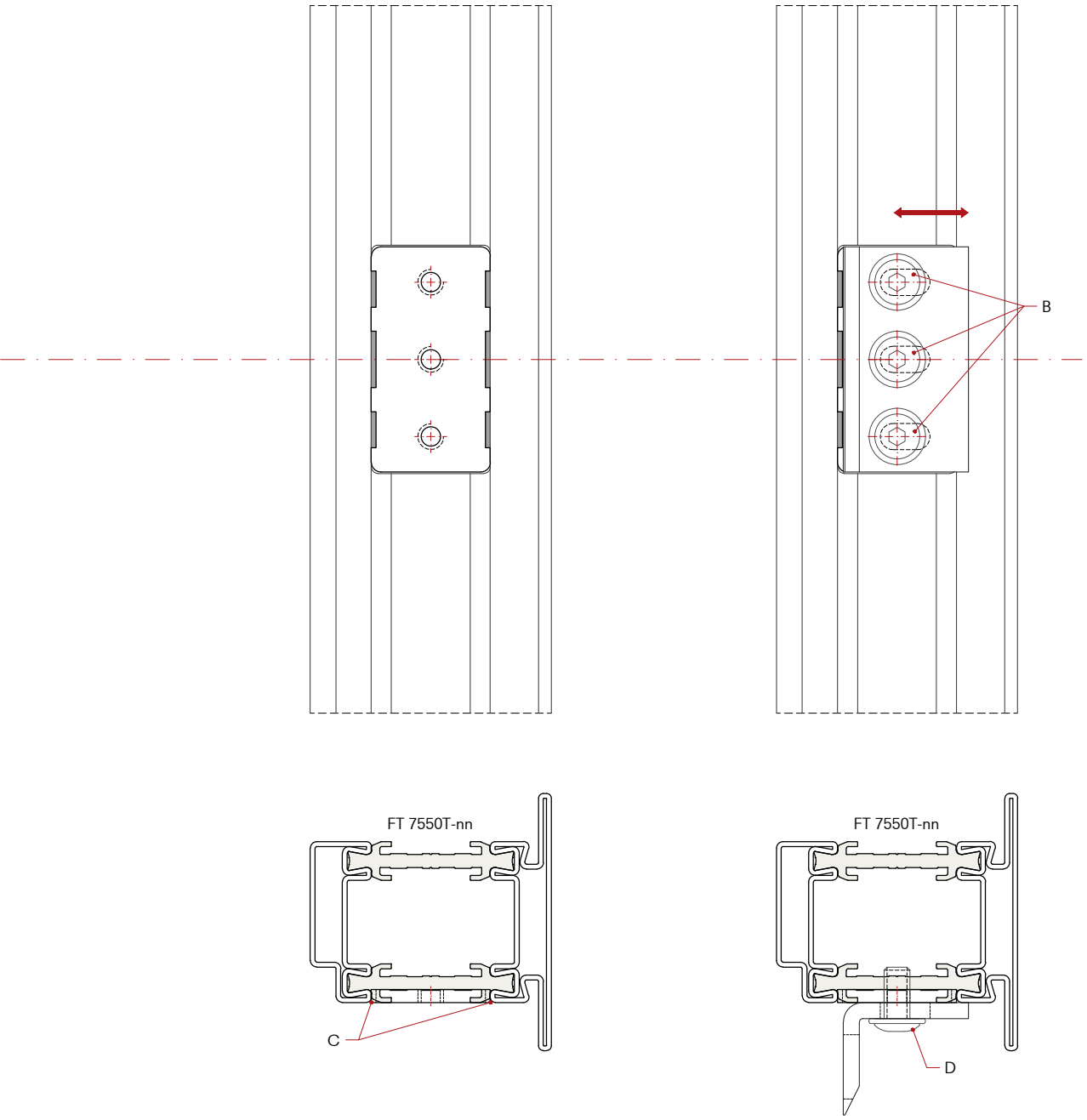
Schéma de montage
Paumelle à visser cachée C99403-46
Profilés coplanaires



A) Cut out

A) Fräsung

A) Fraisage



B) Slotted holes for up and down adjustment
C) Welding
D) Fix the hinge to the frame using his M8 screws

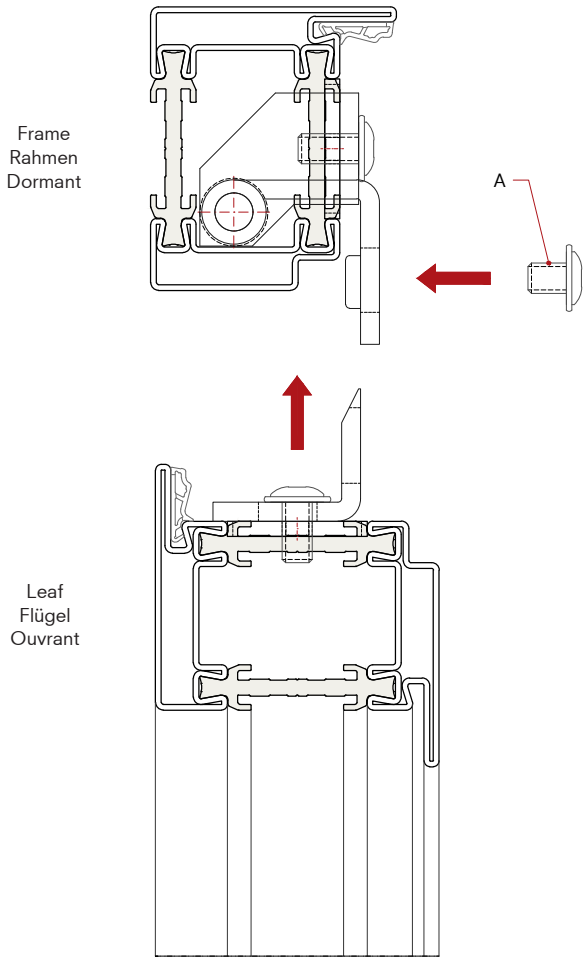
B) Langlöcher zur vertikalen Einstellung
C) Schweissen
D) Befestigen Sie das Band am Rahmen Verwenden Sie die M8 Schrauben aus dem Kit

B) Trous fendus pour le réglage vertical
C) Souder
D) Fixer la paumelle au cadre avec les vis M8 du kit

Installation
Screw-on hidden hinge C99403-46
Flush profiles

Einbau
Verdecktes Anschraubband C99403-46
Flächenbündige profile

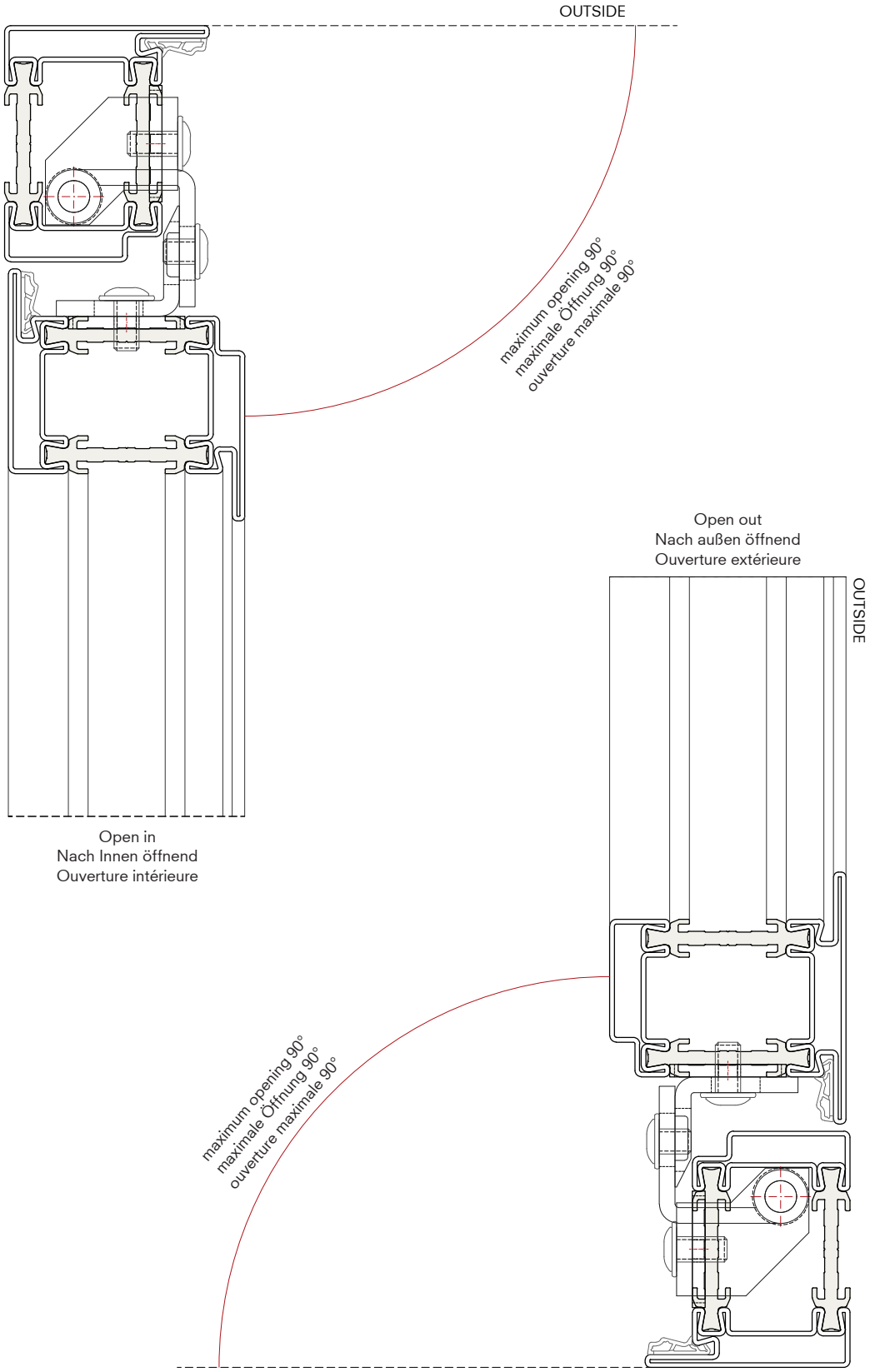
Schéma de montage
Paumelle à visser cachée C99403-46
Profilés coplanaires



A) Fix the hinge to the frame using his M8 screws

A) Befestigen Sie das Band am Rahmen Verwenden Sie die M8 Schrauben aus dem Kit

A) Fixer la paumelle au cadre avec les vis M8 du kit



Note:

To avoid causing damages, we recommend using a door stop at 90° opening.

Hinweis:

Um Beschädigungen zu vermeiden empfehlen wir eine Türstopper bei 90° Öffnung zu verwenden.

Remarque:

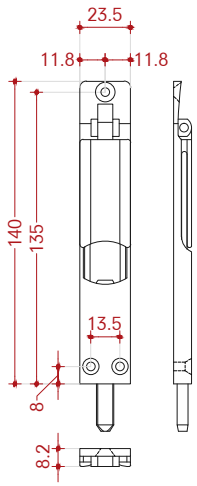
Pour éviter de causer des dommages, nous recommandons d'utiliser une butée de porte à ouverture à 90°.

Flush bolt with lever
For doors

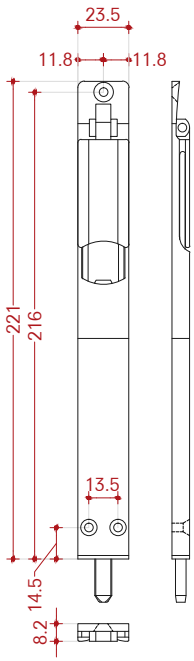
Kantriegel mit Hebel
Für Türen

Verrou à levier
Pour portes

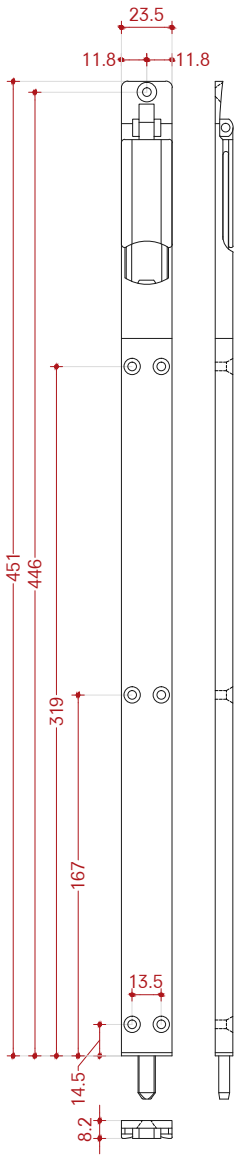
E99021-35



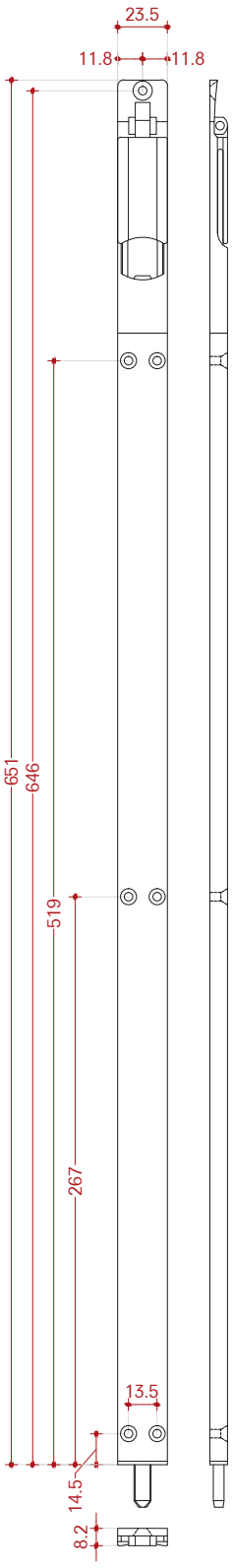
E99022-35



E99023-35



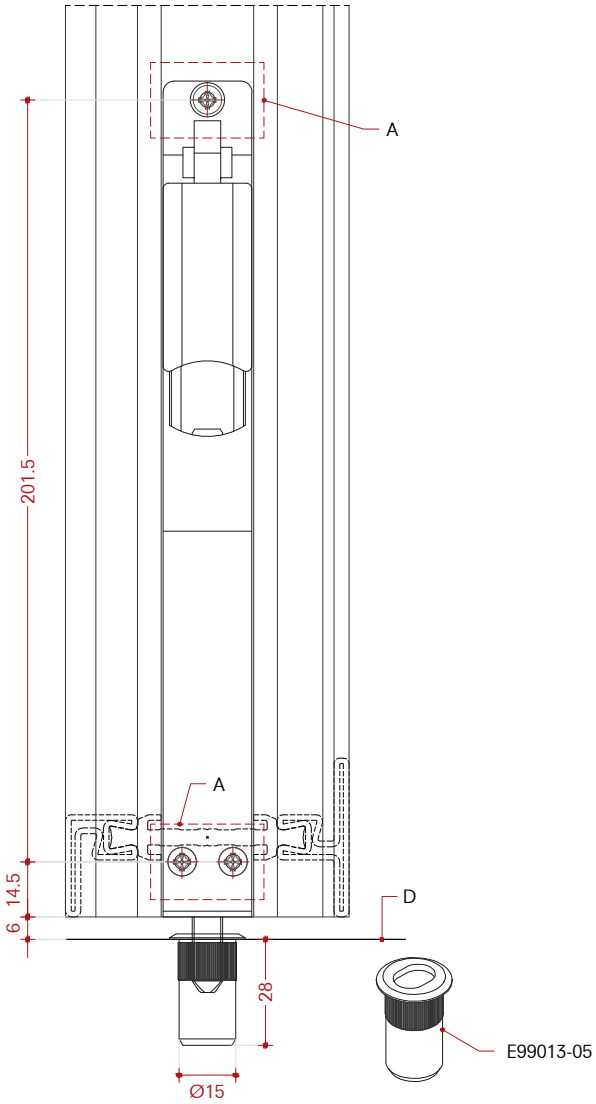
E99024-35

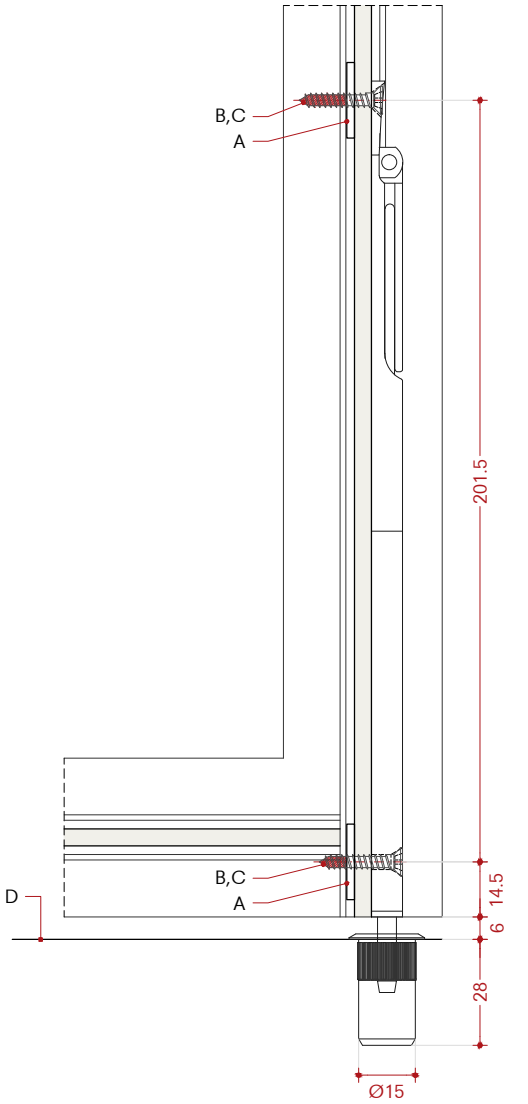


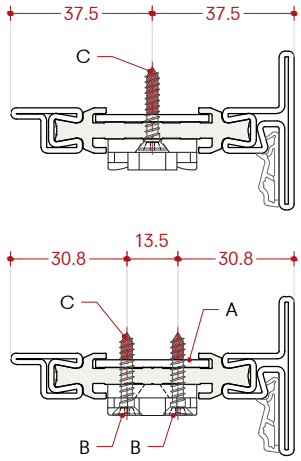
Installation
Flush bolt with lever E99022-35
For doors with single latch lock

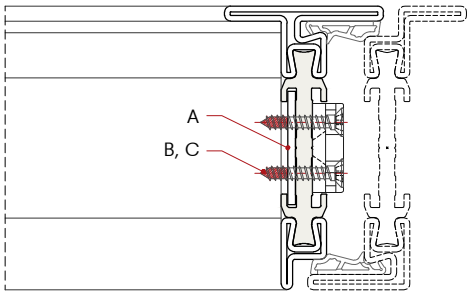
Einbau
Kantriegel mit Hebel E99022-35
Für Türen mit Einfallenschloss

Schéma de montage
Verrou à levier E99022-35
Avec serrure à verrou unique





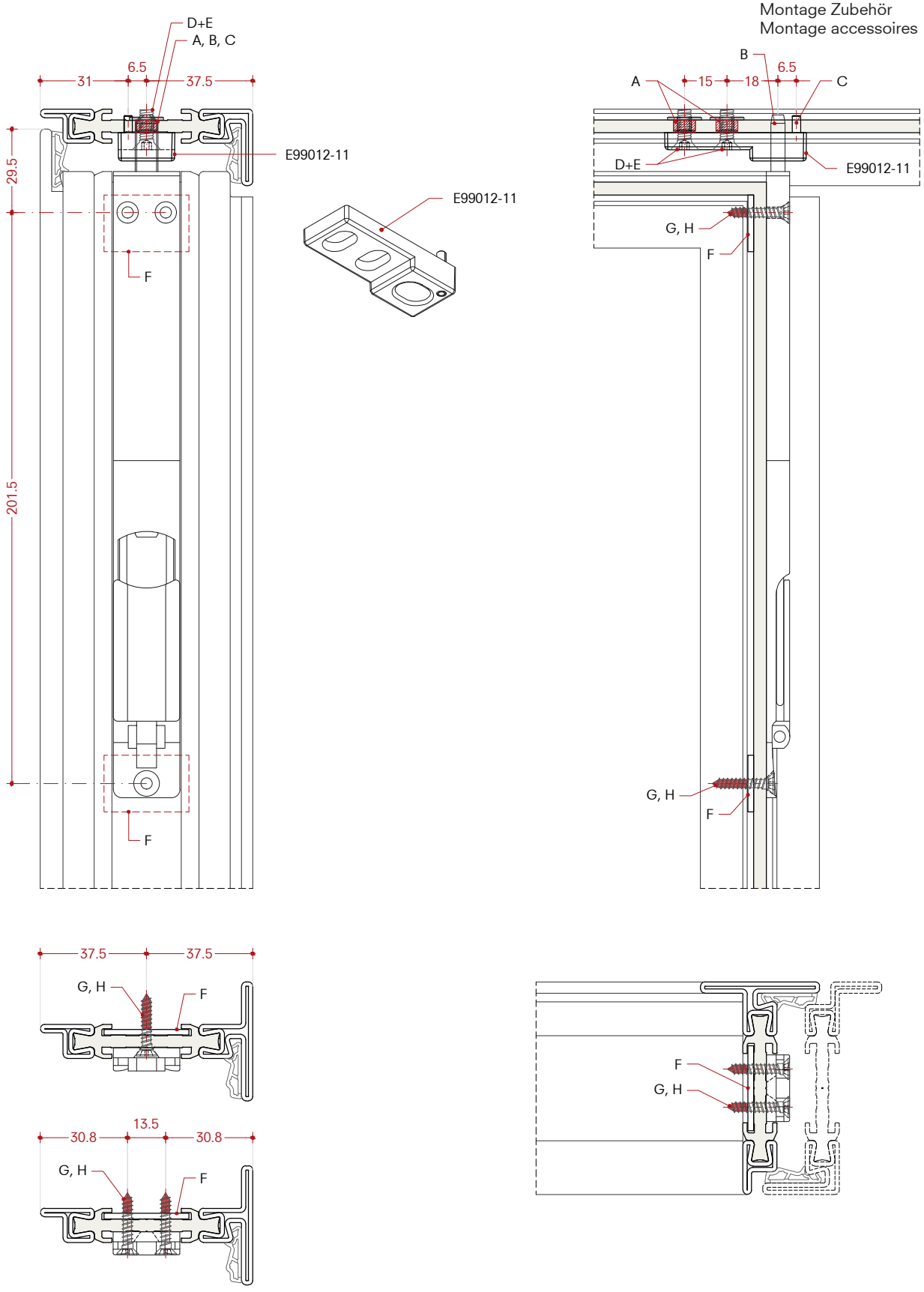




A) Plate 30x20x2 mm fixed by glue on profile (not provided)
B) Fastening with Ø3.9x22 mm ISO7050 screws
C) Cut the screws
D) Finished floor

A) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung)
B) Befestigungsschrauben Ø3.9x22 mm ISO7050
C) Schrauben kürzen
D) Fertigfussboden

A) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé
B) Fixation avec vis Ø3.9x22 mm ISO7050
C) Couper la vis
D) Sol fini



A) Ø7.5 mm holes on profile
B) Ø12 mm hole on profile
C) Ø3 mm hole on profile
D) D99702-08 M5 brass bushing
E) Fastening with M5x14 ISO10642 screws
F) Plate 30x20x2 mm fixed by glue on profile (not provided)
G) Fastening with Ø3.9x22 mm ISO7050 screws
H) Cut the screws

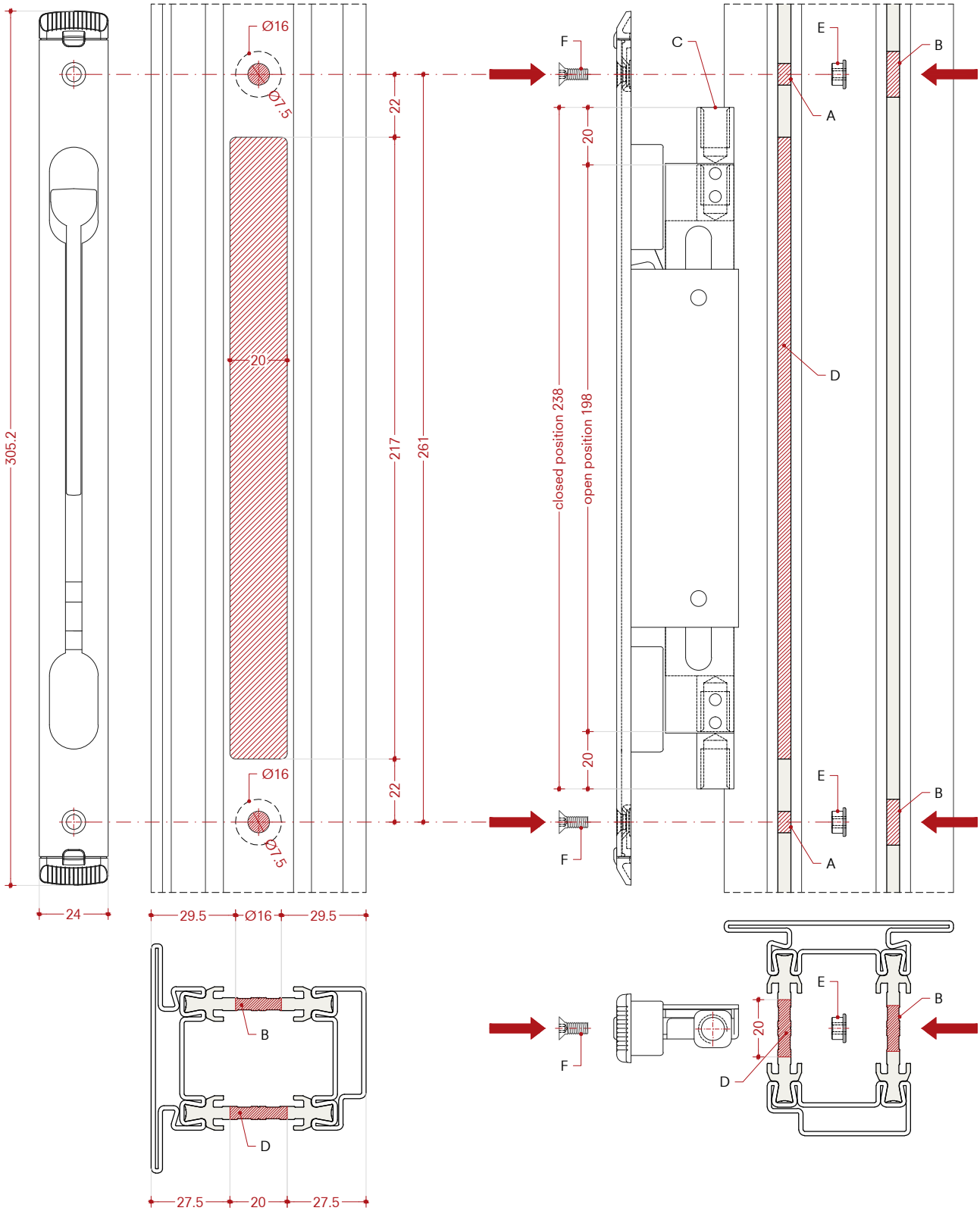
A) Ø7.5 mm Bohrungen
B) Ø12 mm Bohrung
C) Ø3 mm Bohrung
D) D99702-08 Messingbuchse M5
E) Befestigungsschrauben M5x14 ISO10642
F) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung)
G) Befestigungsschrauben Ø3.9x22 mm ISO7050
H) Schrauben kürzen

A) Trous Ø7.5 mm sur profilé
B) Trou Ø12 mm sur profilé
C) Trou Ø3 mm sur profilé
D) D99702-08 Boîte en laiton M5
E) Fixation avec vis M5x14 ISO10642
F) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé
G) Fixation avec vis Ø3.9x22 mm ISO7050
H) Couper la vis

Installation
Deadbolt E99035-02
with FT 7550T-nn + FT 7550Z-nn -
Open in door

Einbau
Kantriegel E99035-02
mit FT 7550T-nn + FT 7550Z-nn
Tür nach innen öffnend

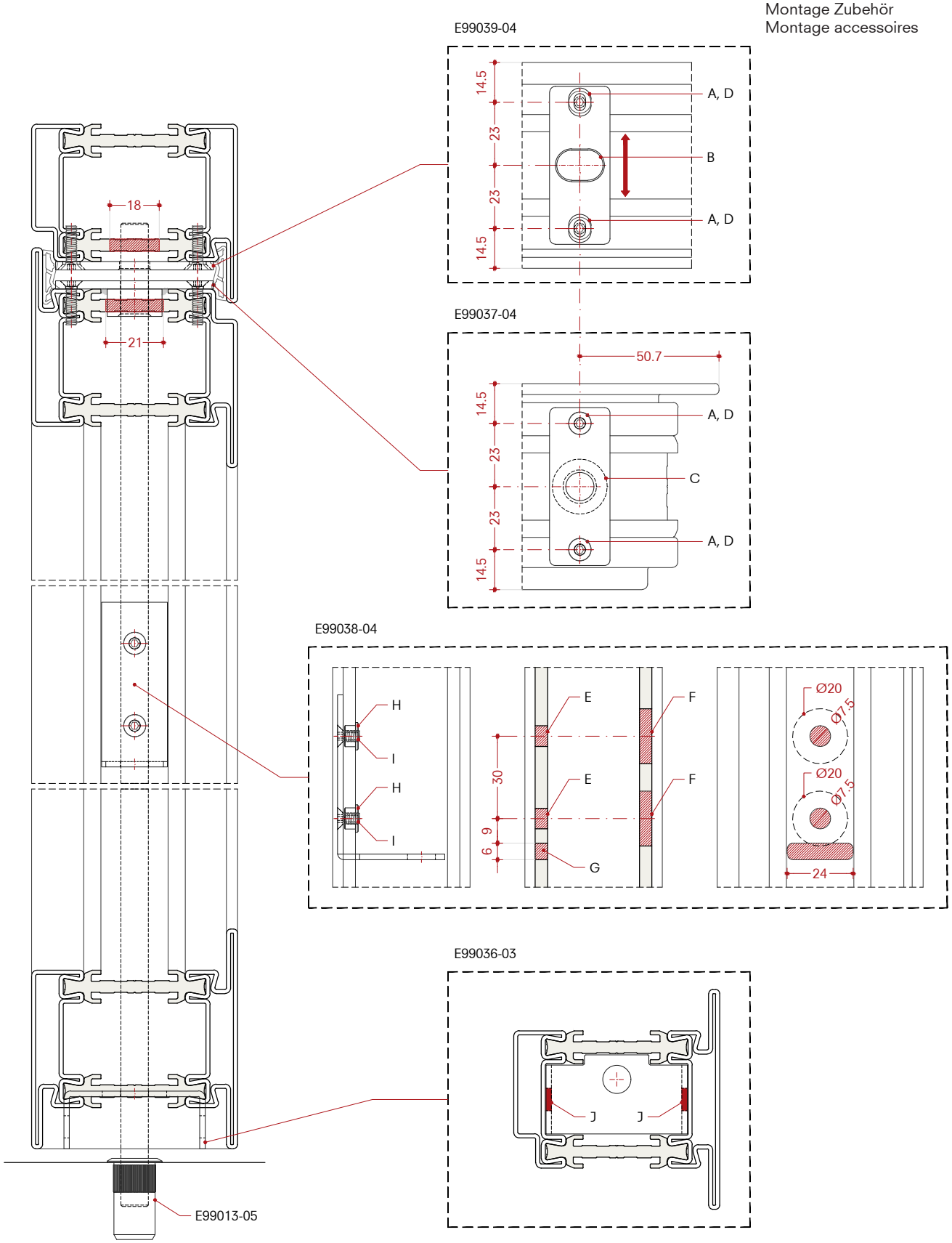
Schéma de montage
Verrou à bascule E99035-02
avec FT 7550T-nn + FT 7550Z-nn
Porte ouverture intérieure



A) Ø7.5 mm holes on profile
B) Ø16 mm hole on profile
C) M10 holes
D) Cut out 20x217 mm
E) D99704-08 M4 brass bushing
F) Fastening with M4x10 ISO10642 screws

A) Ø7.5 mm Bohrungen
B) Ø16 mm Bohrung
C) M10 Bohrungen
D) Fräsung 20x217 mm
E) D99704-08 Messingbuchse M4
F) Befestigungsschrauben M4x10 ISO10642

A) Trous Ø7.5 mm sur profilé
B) Trou Ø16 mm sur profilé
C) Trous M10
D) Fraisage 20x217 mm
E) D99704-08 Boîte en laiton M4
F) Fixation avec vis M4x10 ISO10642



A) M4 holes on profile
B) Ø18 mm hole on profile
C) Ø21 mm hole on profile
D) Fastening with M4x16 ISO10642 screws
E) Ø7.5 mm holes on profile
F) Ø20 mm holes on profile
G) Cut out 24x6 mm
H) D99704-08 M4 brass bushing
I) Fastening with M4x8 ISO10642 screws
J) Welding

A) M4 Bohrungen
B) Ø18 mm Bohrung
C) Ø21 mm Bohrung
D) Befestigungsschrauben M4x16 ISO10642
E) Ø7.5 mm Bohrungen
F) Ø20 mm Bohrungen
G) Fräsung 24x6 mm
H) D99704-08 Messingbuchse M4
I) Befestigungsschrauben M4x8 ISO10642
J) Schweissen

A) Trous M4 sur profilé
B) Trou Ø18 mm sur profilé
C) Trou Ø21 mm sur profilé
D) Fixation avec vis M4x16 ISO10642
E) Trous Ø7.5 mm sur profilé
F) Trous Ø20 mm sur profilé
G) Fraisage 24x6 mm
H) D99704-08 Boîte en laiton M4
I) Fixation avec vis M4x8 ISO10642
J) Souder

Installation
Automatic door seal
Single and double leaf door
Open in and open out

Note:
In case the E99035-02 shoot bolt is used for double-leaf door, the automatic door seal must be moved outwards.

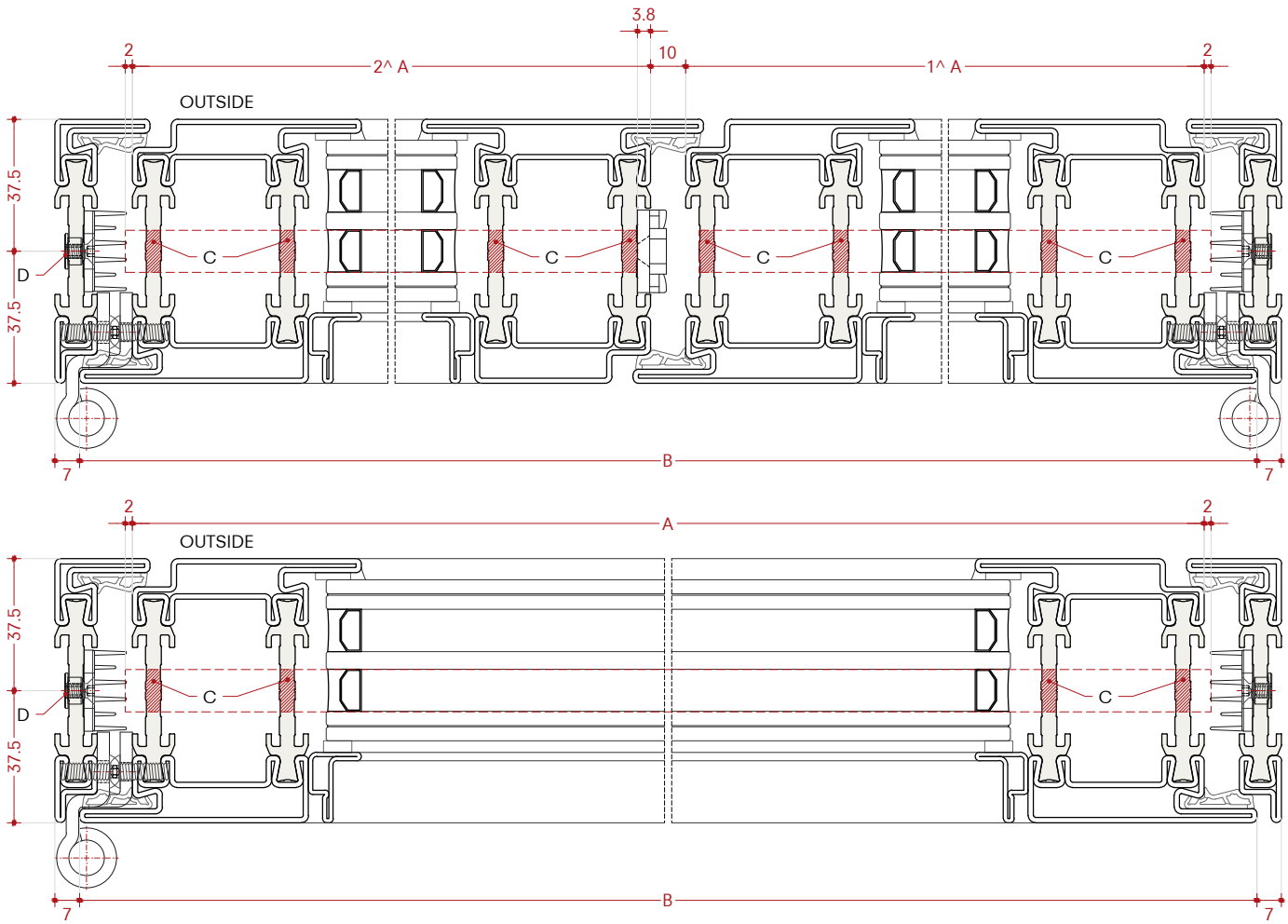
Einbau
Automatische Bodendichtung
Einflüglige und Zweiflügliges Tür
Nach innen und außen öffnend

Hinweis:
Wird der Kantriegel E99035-02 für zweiflüglige Türen verwendet, muss die automatische Bodendichtung nach außen bewegt werden.

Schéma de montage
Joint de seuil automatique
Porte à un et deux vantaux
Ouvrant vers l'intérieur et extérieur

Remarque:
Si le pêne de verrou à bascule E99035-02 est utilisé pour une porte à deux battants, le joint de seuil automatique doit être déplacé vers l'extérieur.

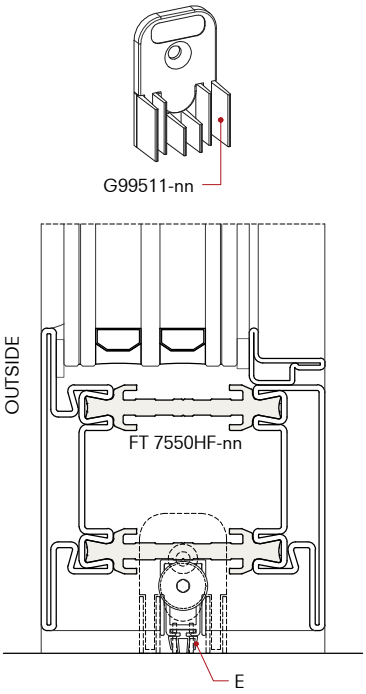
Open in
Nach innen öffnend
Ouverture intérieure

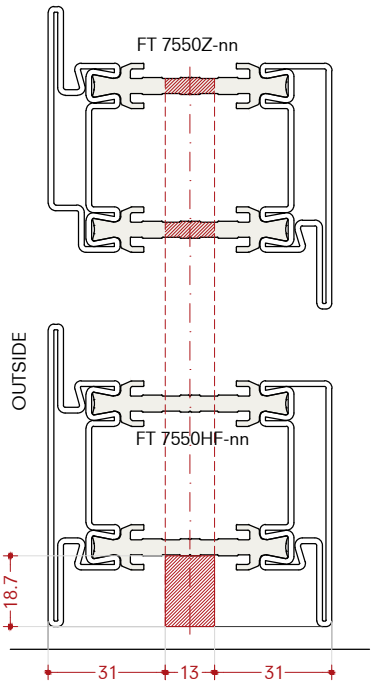


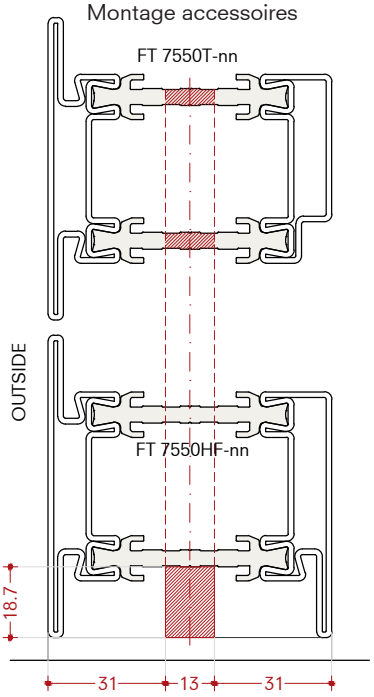
A) Length Leaf
B) Door leaf
C) Cutout
D) Fastening of G99511-nn with M4x8 ISO10642 screws + D99704-08 M4 brass bushing

A) Länge Flügel
B) Türflügel
C) Ausnehmung
D) Befestigung von G99511-nn mit M4x8 ISO10642 Schrauben + D99704-08 Messingbuchse M4

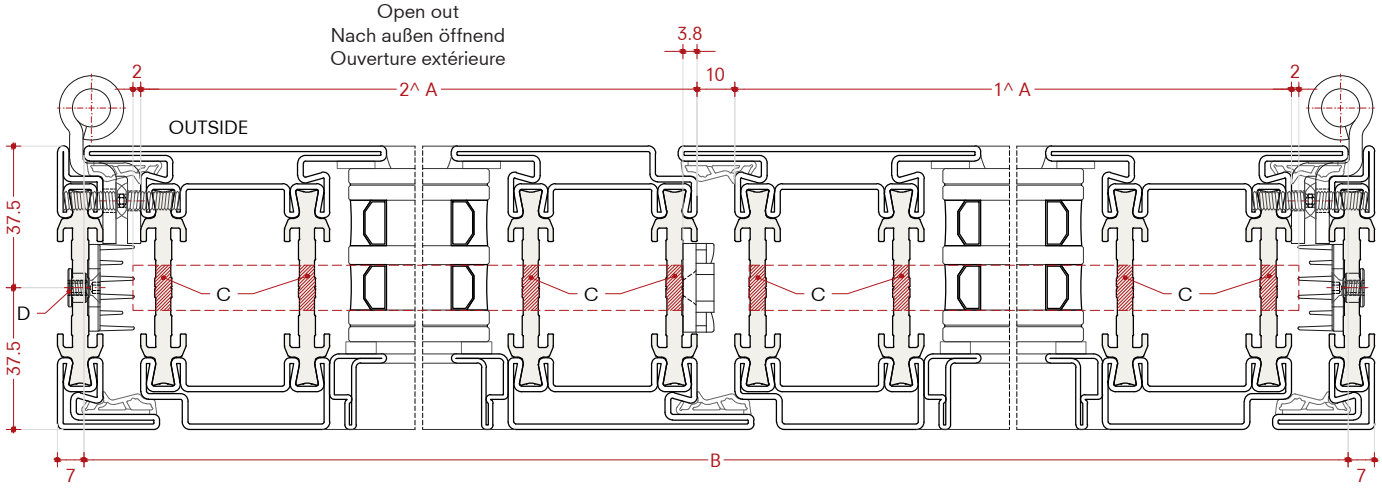
A) Largeur ouvrant
B) Porte
C) Pièce à enlever
D) Fixation du G99511-nn avec vis M4x8 ISO10642 + D99704-08 Boîte en laiton M4

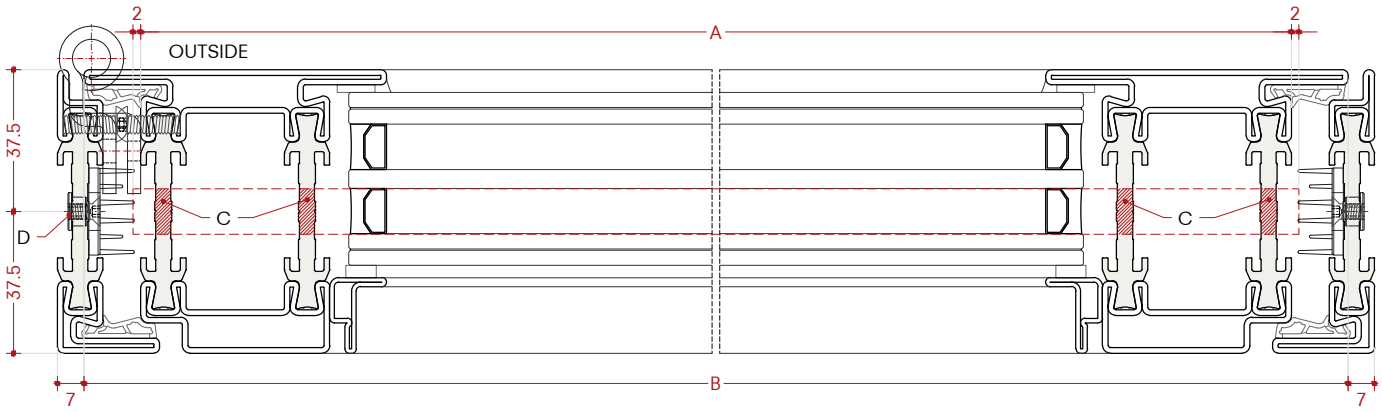






Open out
Nach außen öffnend
Ouverture extérieure





A) Length Leaf
B) Door leaf
C) Cutout
D) Fastening of G99511-nn with M4x8 ISO10642 screws + D99704-08 M4 brass bushing
E) G995XX-62 bottom profile fastening with Ø3.5x9.5 mm ISO7049 screws. Automatic drop seal G995XX-62 length of 330 mm to 1230 mm

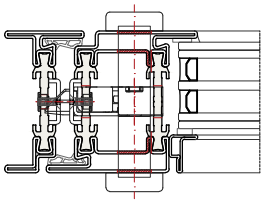
A) Länge Flügel
B) Türflügel
C) Ausnehmung
D) Befestigung von G99511-nn mit M4x8 ISO10642 Schrauben + D99704-08 Messingbuchse M4
E) G995XX-62 Befestigung am Sockelprofil mit Ø3.5x9.5 mm ISO7049. Automatische bodendichtung G995XX-62 länge von 330 mm bis 1230 mm

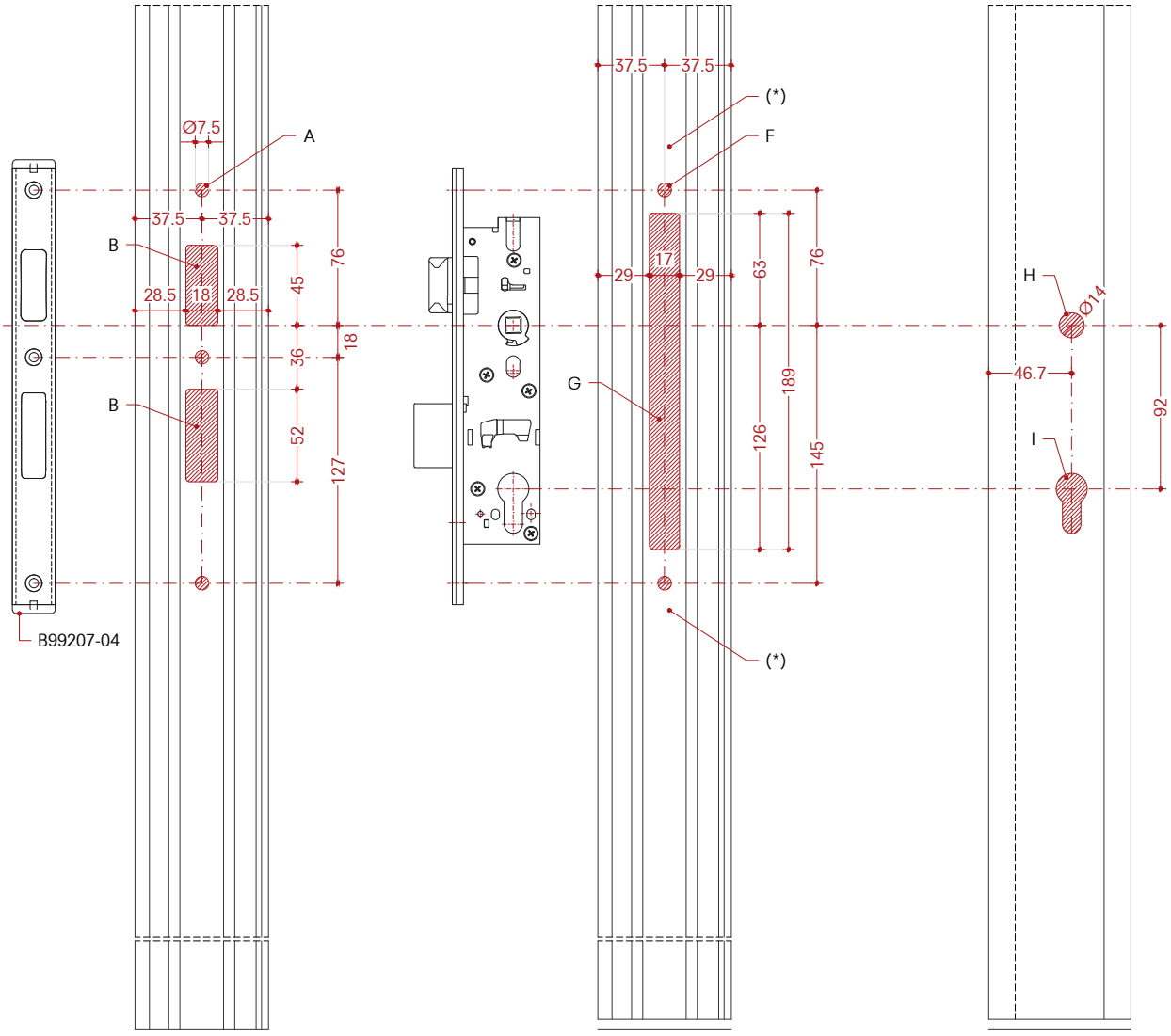
A) Largeur ouvrant
B) Porte
C) Pièce à enlever
D) Fixation du G99511-nn avec vis M4x8 ISO10642 + D99704-08 Boîte en laiton M4
E) G995XX-62 fixation au profil de socle avec Ø3.5x9.5 mm ISO7049. Joint de seuil automatique G995XX-62 longueur de 330 mm à 1230 mm

Installation
Lock B99015-02
with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99015-02
mit Schlosskasten
FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

Schéma de montage
Serrure B99015-02
avec boîte de verrouillage
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure





1 2 3

Scale 1:4
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Lever handle bore Ø14 mm
I) Profile cylinder milling

(*) Pay attention to glazing bead clips position.

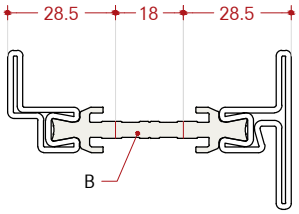
Maßstab 1:4
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Drückerbohrung Ø14 mm
I) Fräsung Profilzylinder

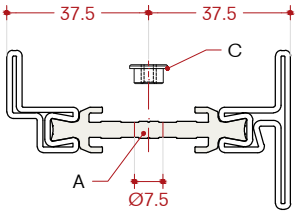
(*) Achten Sie auf die Position der Glashalteleisten-Klips.

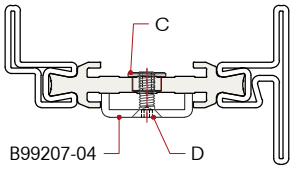
Échelle1:4
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Alésage de la béquille Ø14 mm
I) Fraisage de cylindres profilés

(*) Vérifier la position des clips pour parcloses.

1







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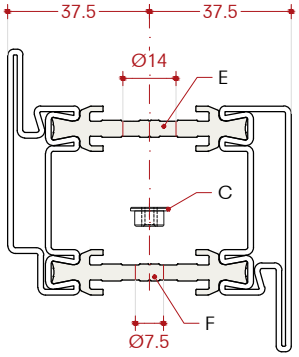

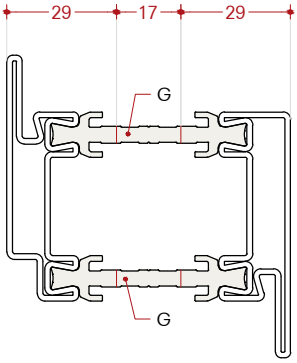

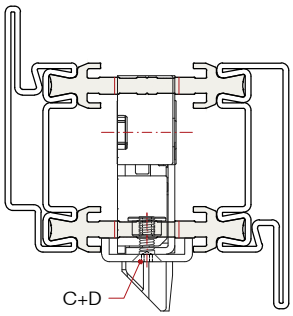

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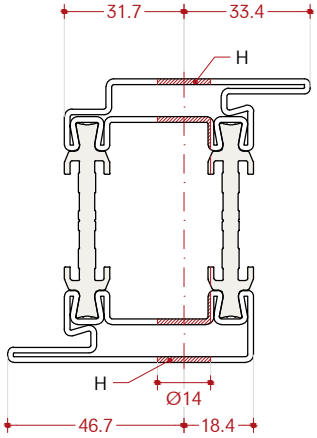
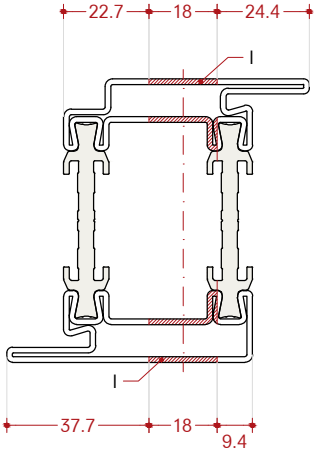
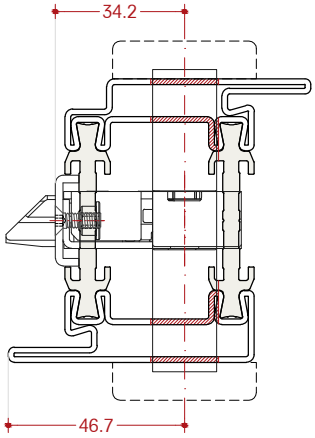
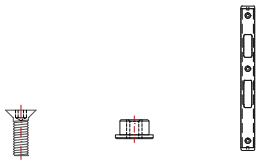








M4x12
ISO 10642
n° 5 pcs

D99704-08
n° 5 pcs

B99207-04
n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Lever handle bore Ø14 mm
I) Profile cylinder milling

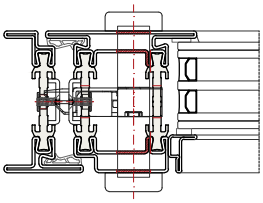
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Drückerbohrung Ø14 mm
I) Fräsung Profilzylinder

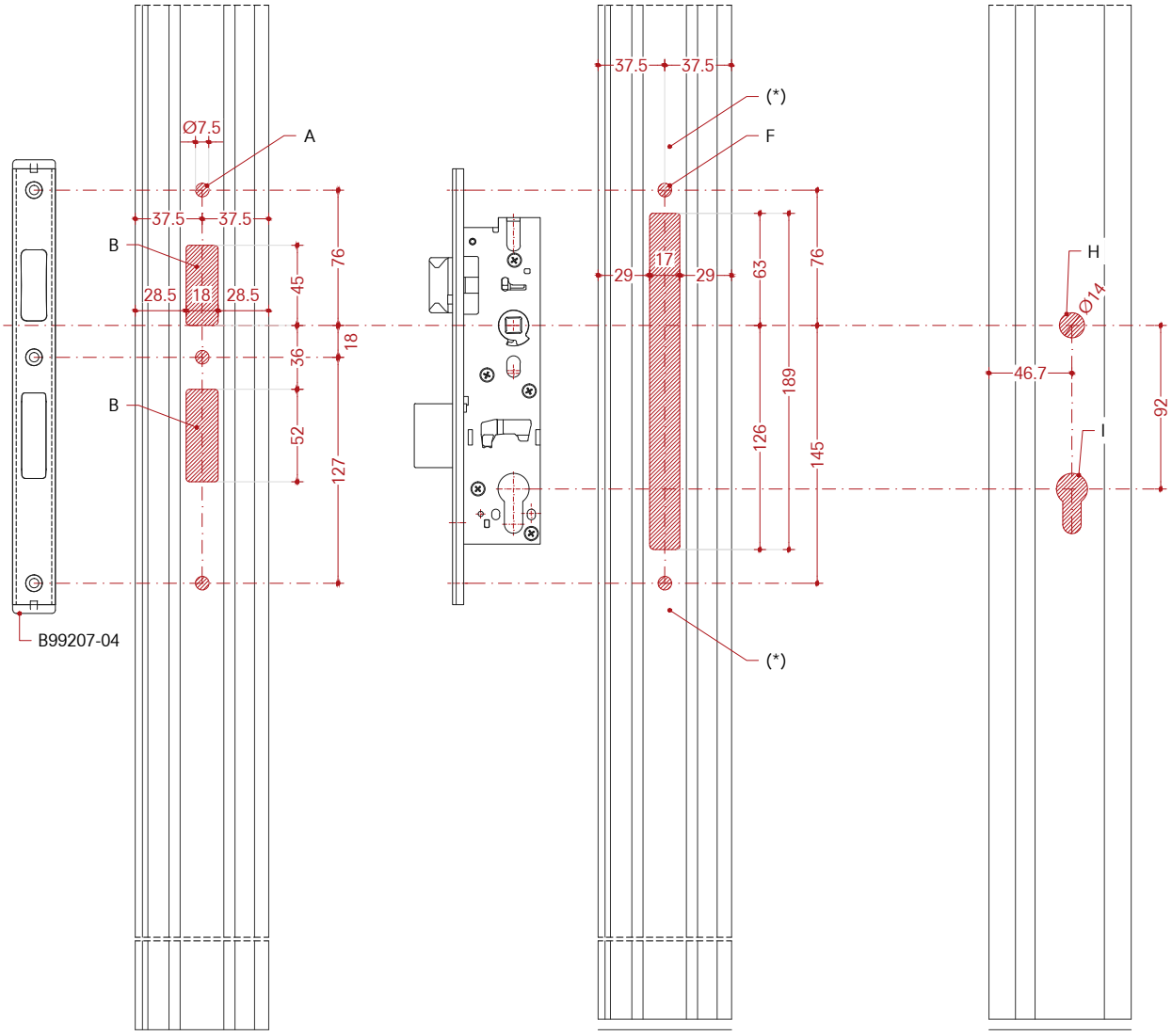
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Alésage de la béquille Ø14 mm
I) Fraisage de cylindres profilés

Installation
Lock B99015-02
with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99015-02
mit Schlosskasten
FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

Schéma de montage
Serrure B99015-02
avec boîte de verrouillage
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure





1 2 3

Scale 1:4
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Lever handle bore Ø14 mm
I) Profile cylinder milling

(*) Pay attention to glazing bead clips position.

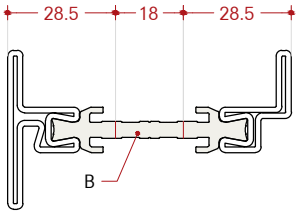
Maßstab 1:4
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Drückerbohrung Ø14 mm
I) Fräsung Profilzylinder

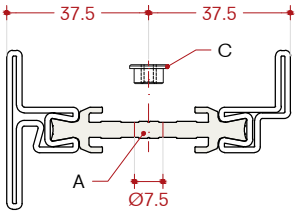
(*) Achten Sie auf die Position der Glashalteleisten-Klips.

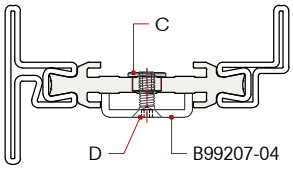
Échelle1:4
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Alésage de la béquille Ø14 mm
I) Fraisage de cylindres profilés

(*) Vérifier la position des clips pour parcloses.

1







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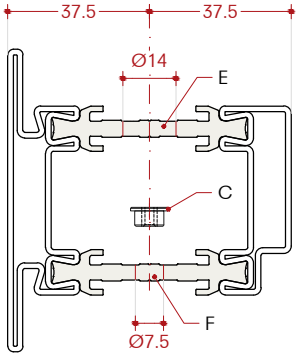

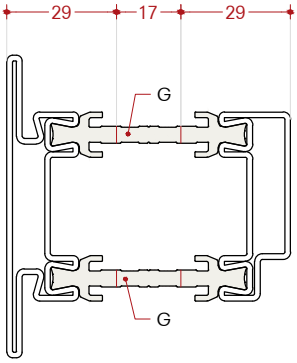

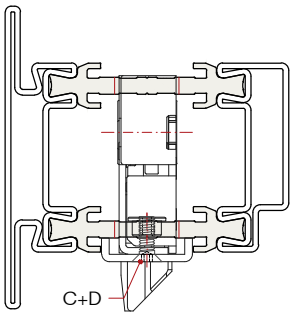

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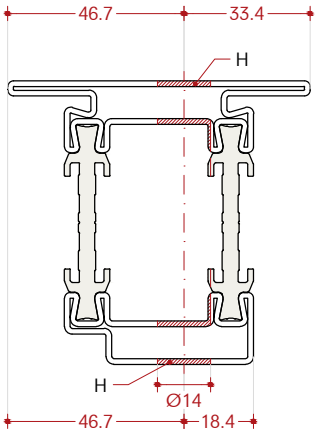
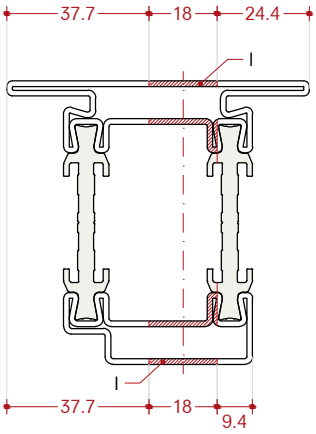
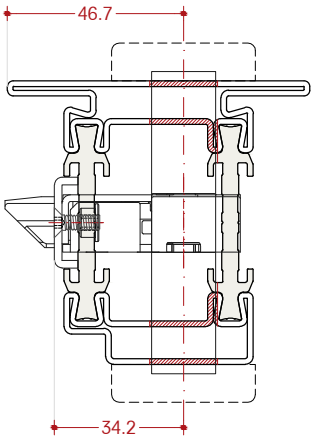
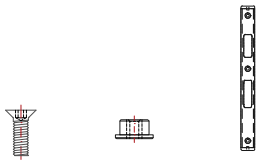








M4x12
ISO 10642
n° 5 pcs

D99704-08
n° 5 pcs

B99207-04
n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Lever handle bore Ø14 mm
I) Profile cylinder milling

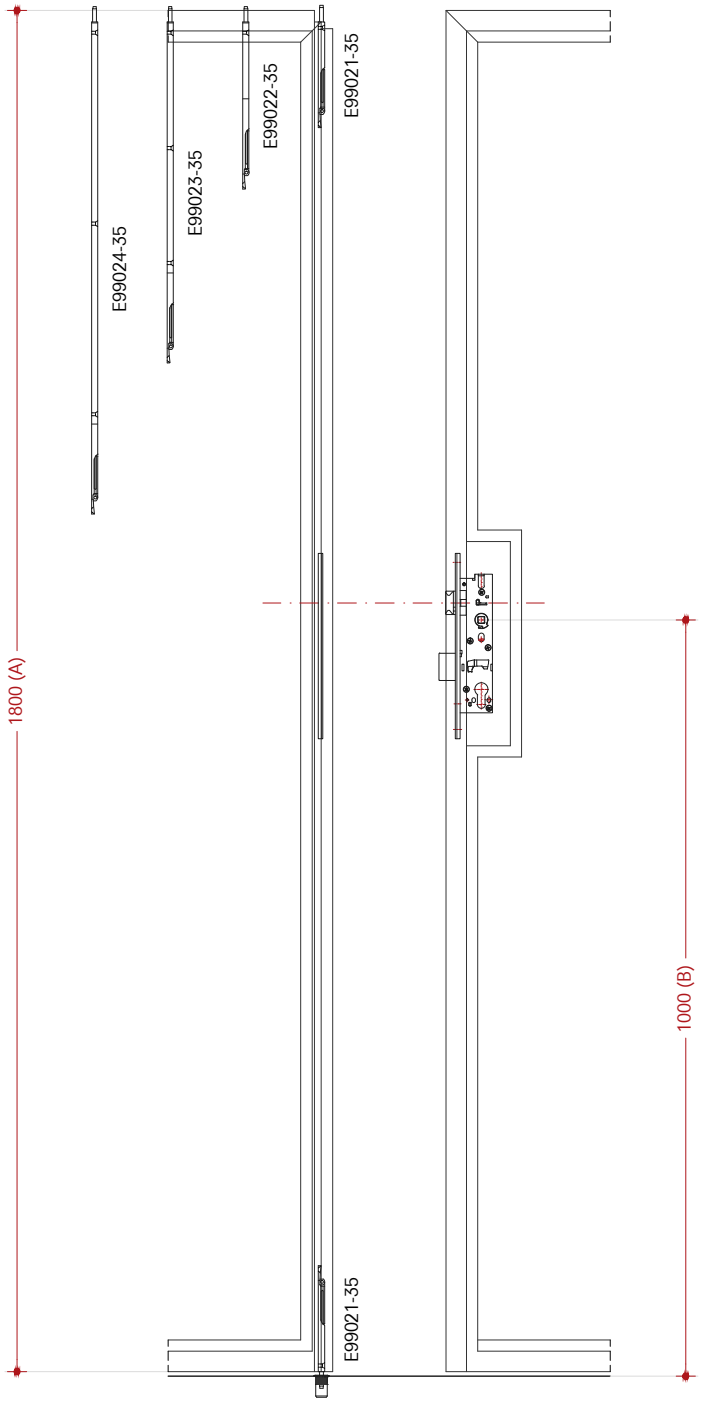
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Drückerbohrung Ø14 mm
I) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Alésage de la béquille Ø14 mm
I) Fraisage de cylindres profilés

Installation
Flush bolt E9902X-35
Lock B99015-02
Double leaf door open in with locking box

Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99015-02
Zweiflüglige Anschlagtür nach innen öffnend mit Schlosstasche

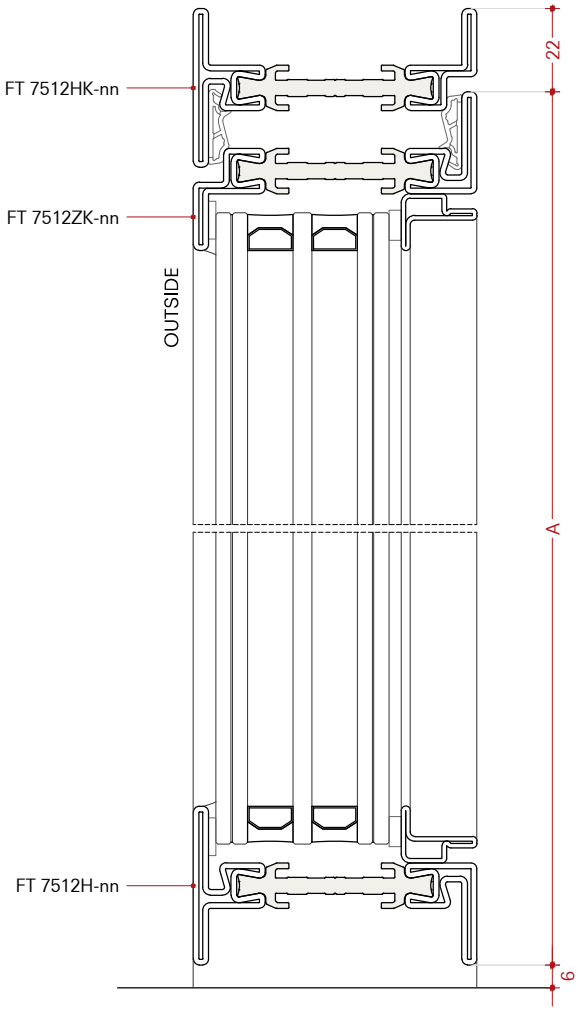
Schéma de montage
Verrou E9902X-35
Serrure B99015-02
Porte à deux vantaux ouvrant vers l'intérieur avec boîte pour la serrure

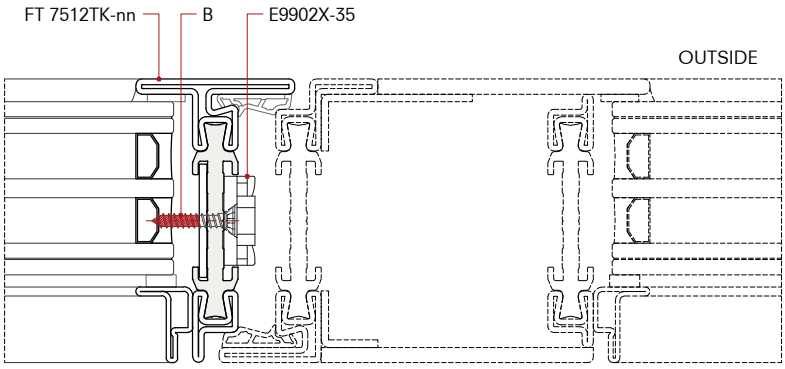


Scale 1:10
A) Minimum height leaf
B) Height handle

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée





A) Height leaf
B) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

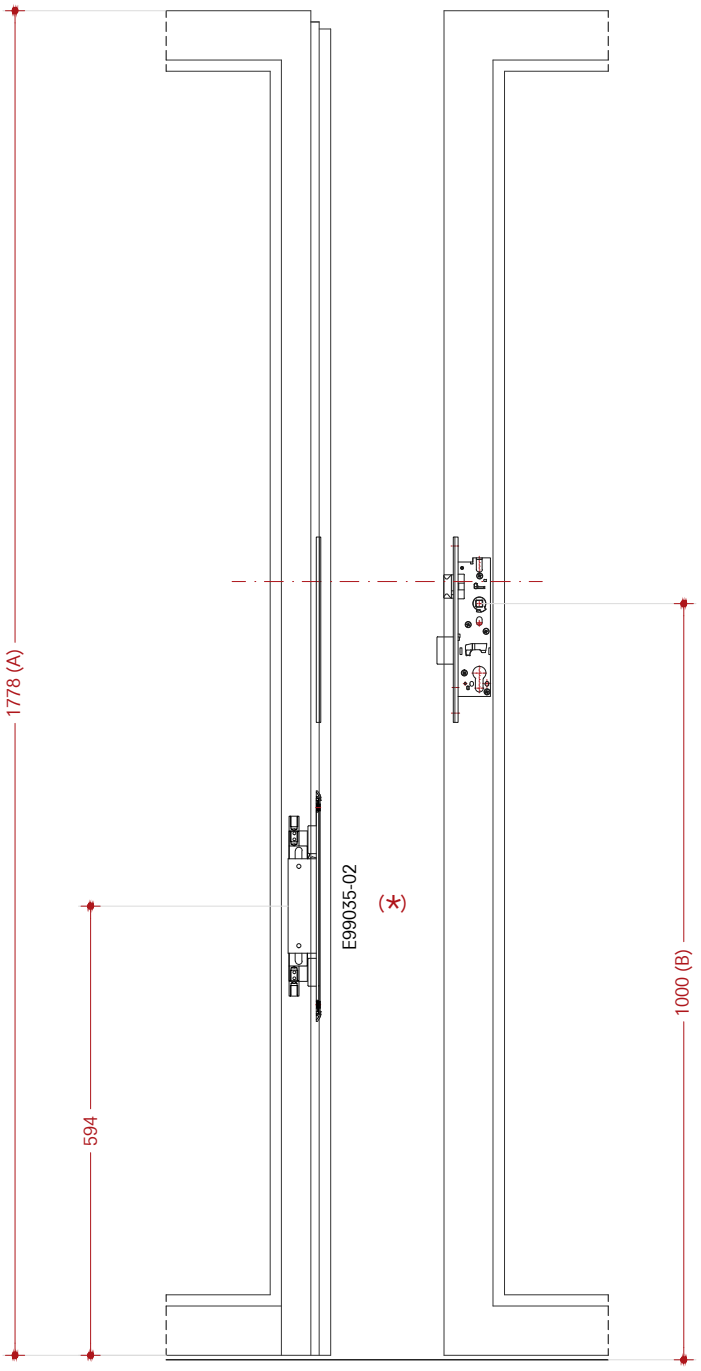
A) Höhe Flügel
B) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

A) Hauteur du vantail
B) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

Installation
Flush bolt E99035-02
Lock B99015-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99015-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99015-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure



Scale 1:10
A) Minimum height leaf
B) Height handle

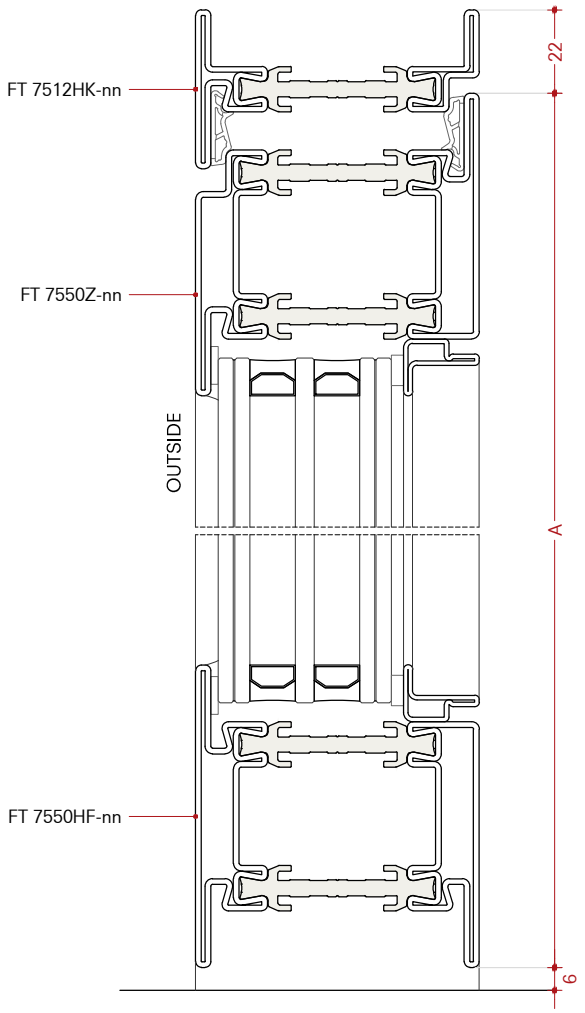
(*) Evaluate the position of the flush bolt E99035-02, installation allowed above or below the lock.

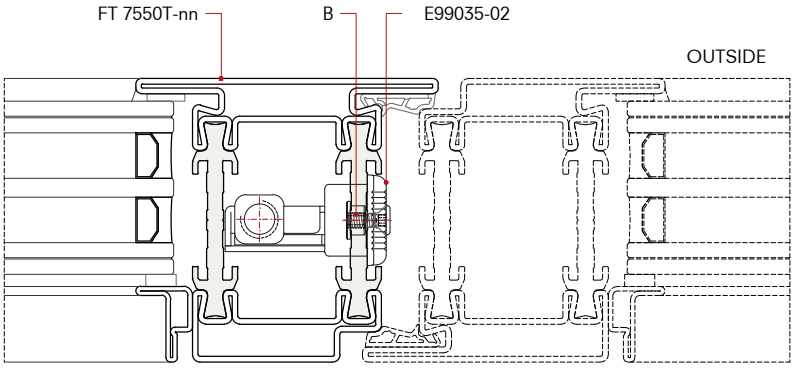
Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig

(*) Lage des Kantriegel E99035-02 bewerten, Einbau über oder unter dem Schloss zulässig.

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée

(*) Évaluez la position du verrou E99035-02, installation autorisée au-dessus ou au-dessous de la serrure.





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

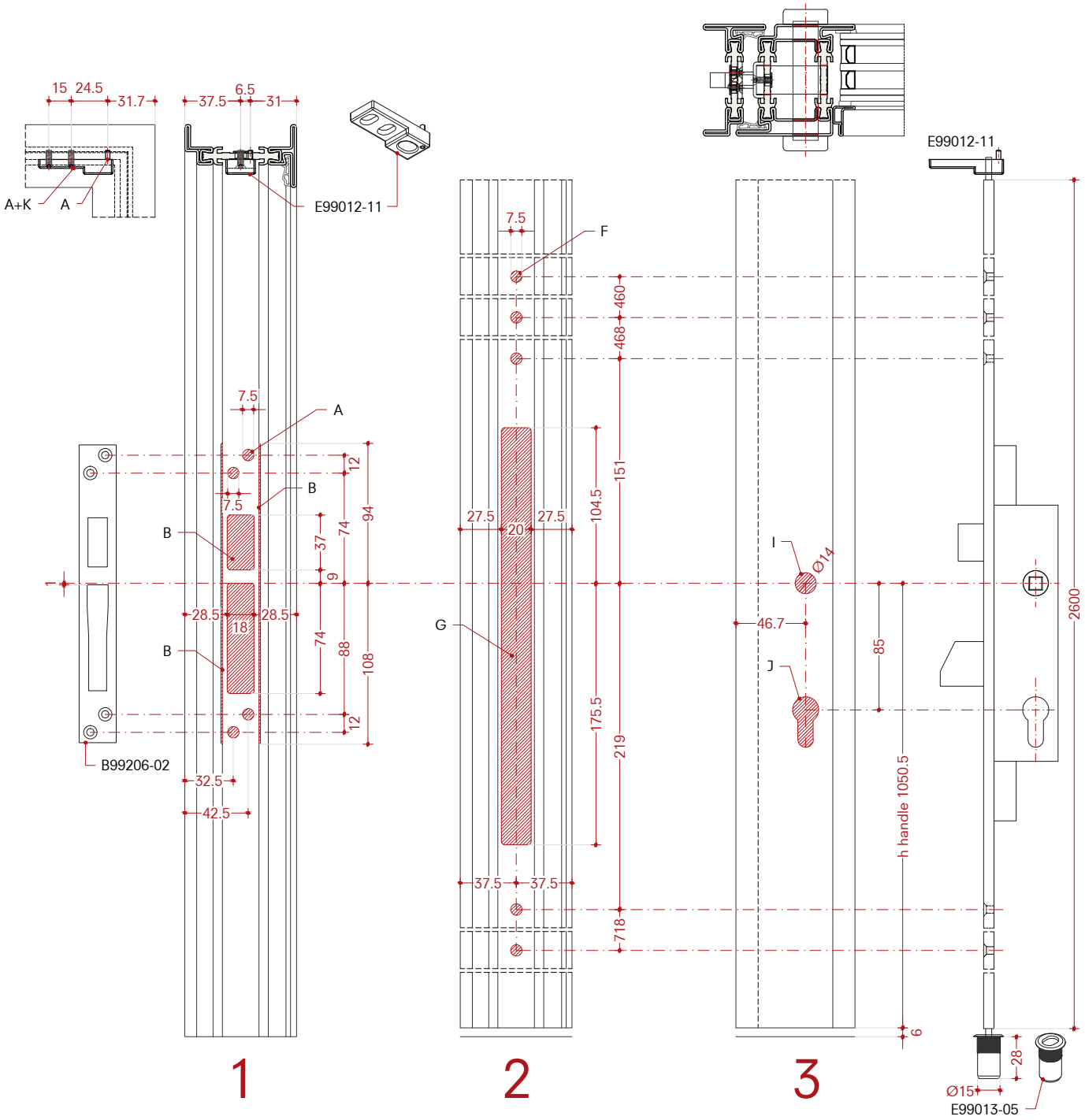
A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Lock B99111-02
with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99111-02
mit Schlosskasten
FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

Schéma de montage
Serrure B99111-02
avec boîte de verrouillage
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure

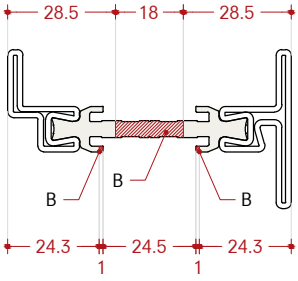


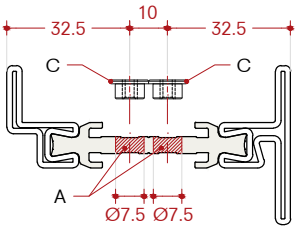
Scale 1:4
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x8 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Fastening with M4x12 ISO10642 screws
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

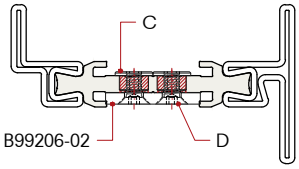
Maßstab 1:4
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x8 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Befestigungsschrauben M4x12 ISO10642
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:4
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x8 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fixation avec vis M4x12 ISO10642
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

1







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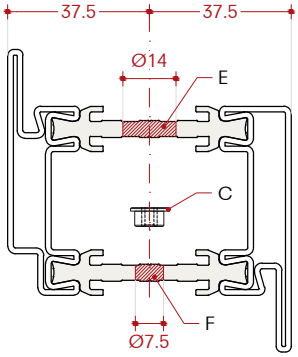

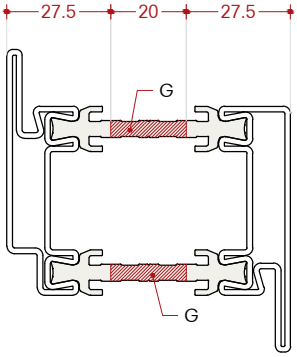

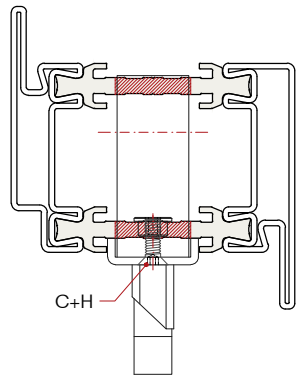

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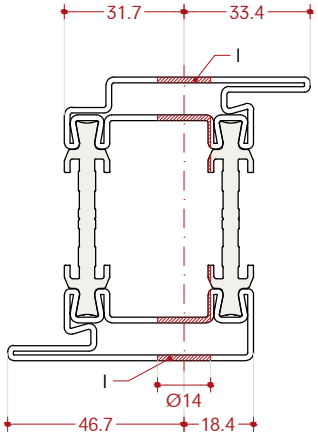
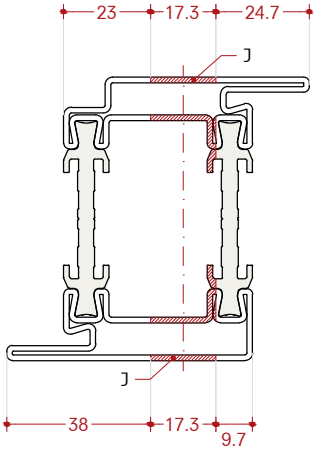
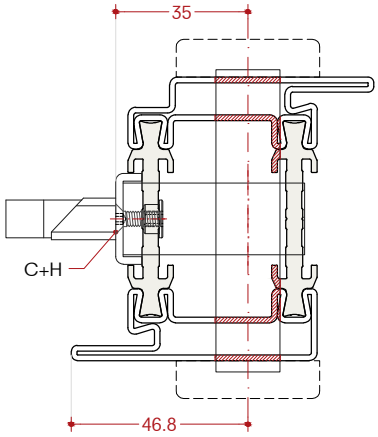
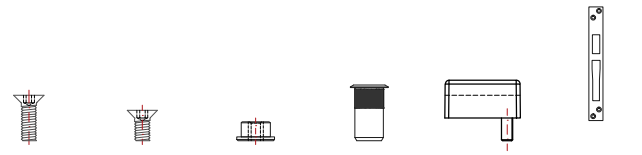








M4x12 ISO 10642 n° 7 pcs
M4x8 ISO 10642 n° 4 pcs
D99704-08 n° 11 pcs
E99013-05 n° 1 pc
E99012-11 n° 1 pc
B99206-02 n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x8 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Fastening with M4x12 ISO10642 screws
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

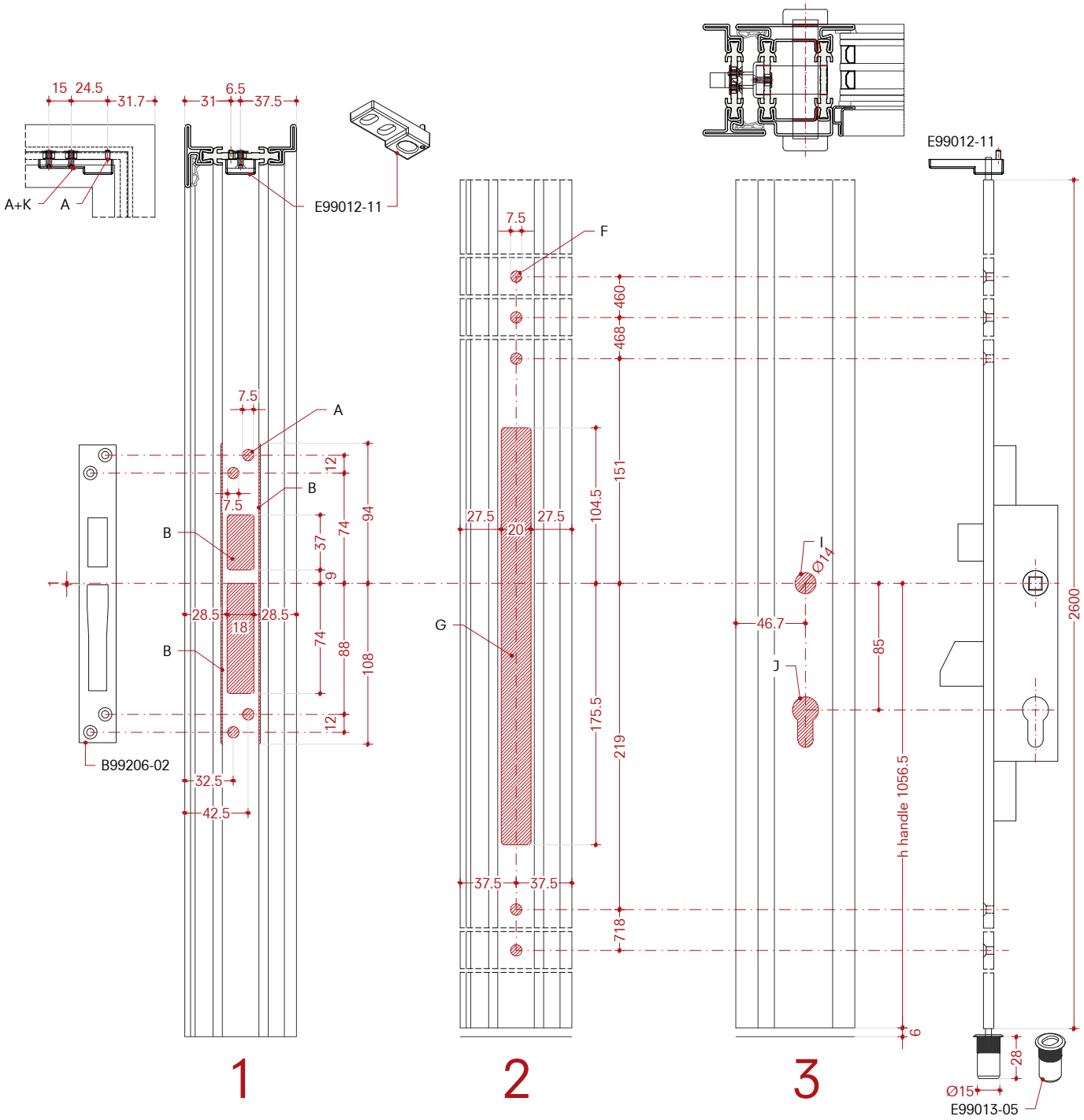
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x8 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Befestigungsschrauben M4x12 ISO10642
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x8 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fixation avec vis M4x12 ISO10642
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Lock B99111-02
with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99111-02
mit Schlosskasten
FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

Schéma de montage
Serrure B99111-02
avec boîte de verrouillage
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure

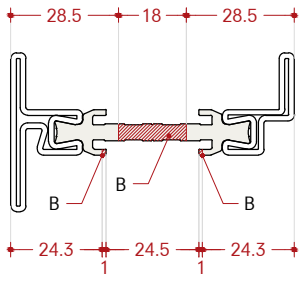


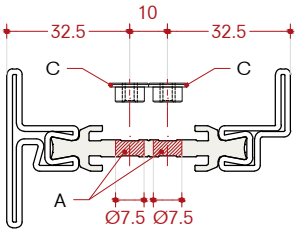
Scale 1:4
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x8 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Fastening with M4x12 ISO10642 screws
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

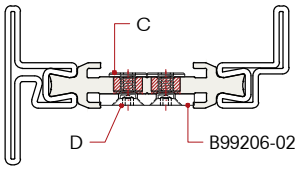
Maßstab 1:4
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x8 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Befestigungsschrauben M4x12 ISO10642
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:4
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x8 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fixation avec vis M4x12 ISO10642
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

1







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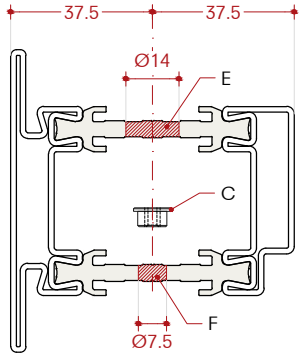

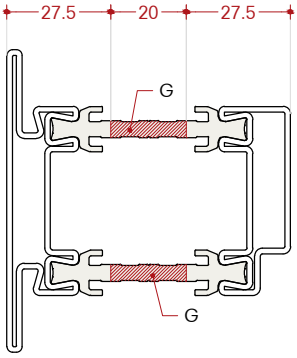

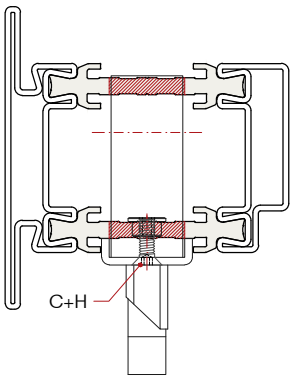

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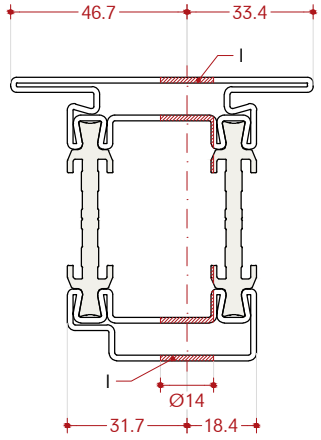
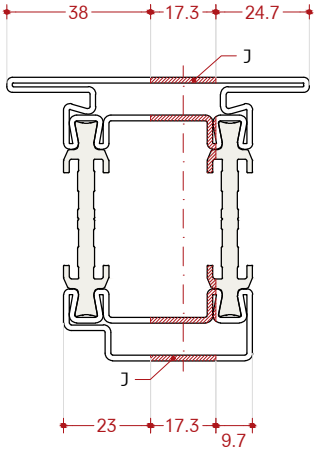
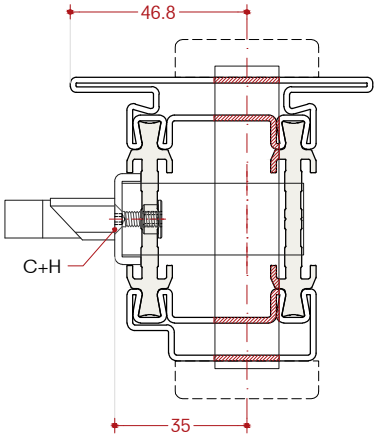
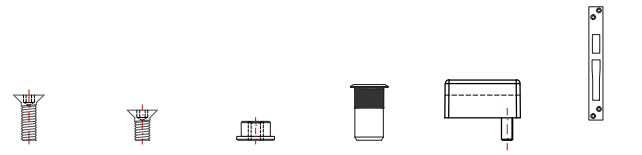








M4x12 ISO 10642 n° 7 pcs	M4x8 ISO 10642 n° 4 pcs	D99704-08 n° 11 pcs	E99013-05 n° 1 pc	E99012-11 n° 1 pc	B99206-02 n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x8 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Fastening with M4x12 ISO10642 screws
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

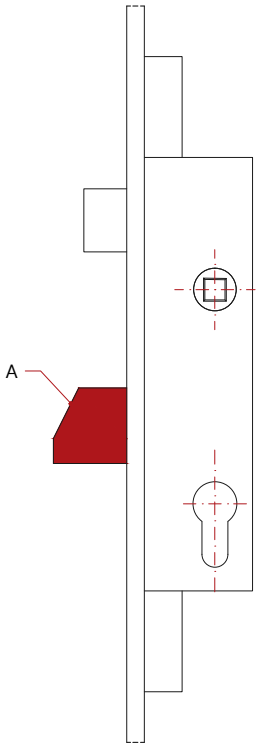
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x8 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Befestigungsschrauben M4x12 ISO10642
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x8 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fixation avec vis M4x12 ISO10642
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

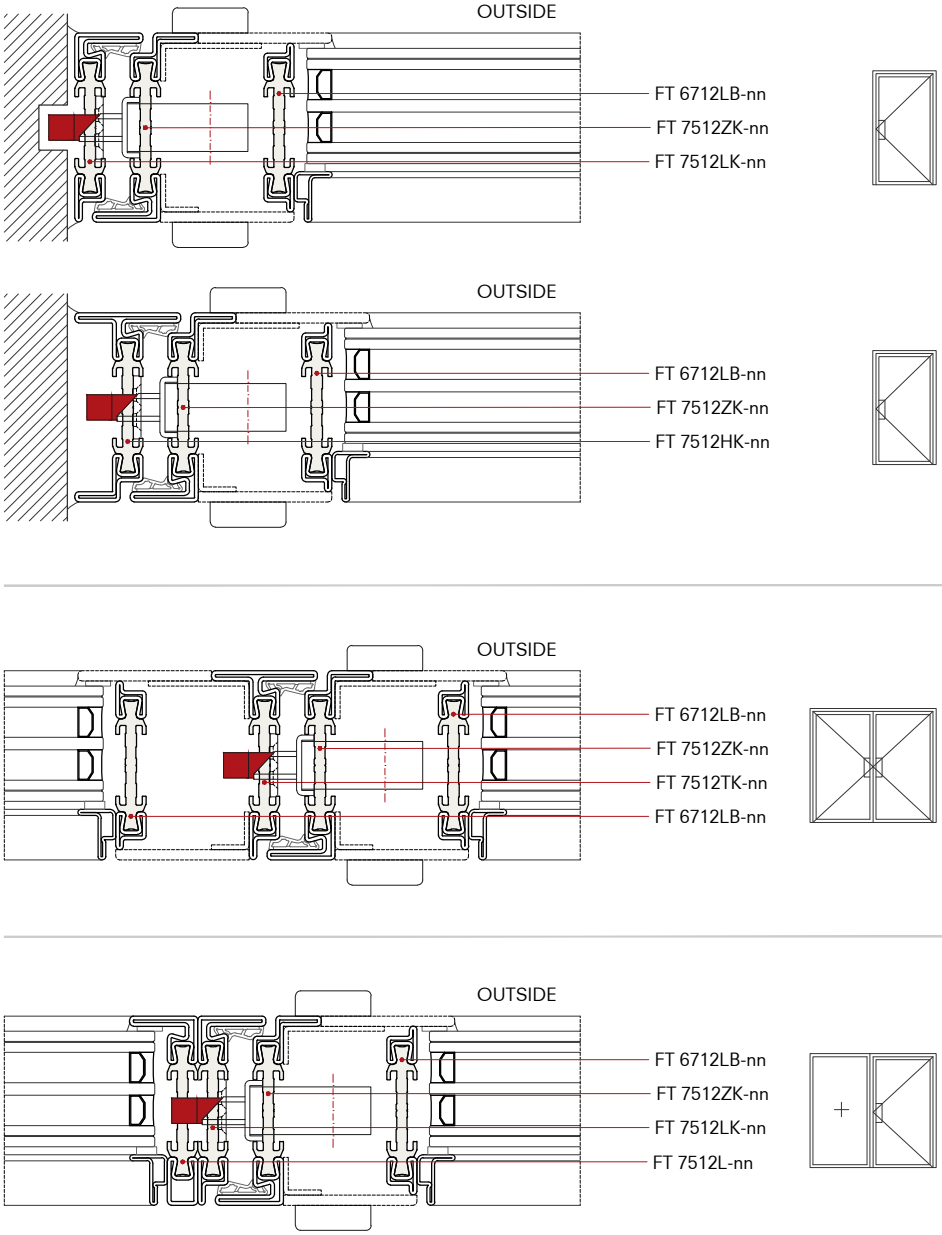
Installation
Lock B99111-02
Deadbolt
Open in door

Einbau
Fallen-Riegel-Schloss B99111-02
Schlossfalle
Tür nach innen öffnend

Schéma de montage
Serrure B99111-02
Loquet de verrouillage
Porte ouverture intérieure



B99111-02



Scale 1:3
A) Deadbolt

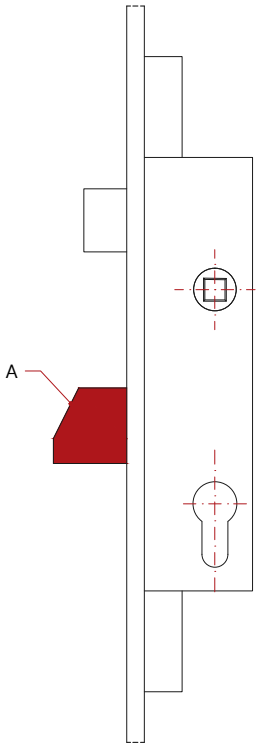
Maßstab 1:3
A) Schlossfalle

Échelle1:3
A) Loquet de verrouillage

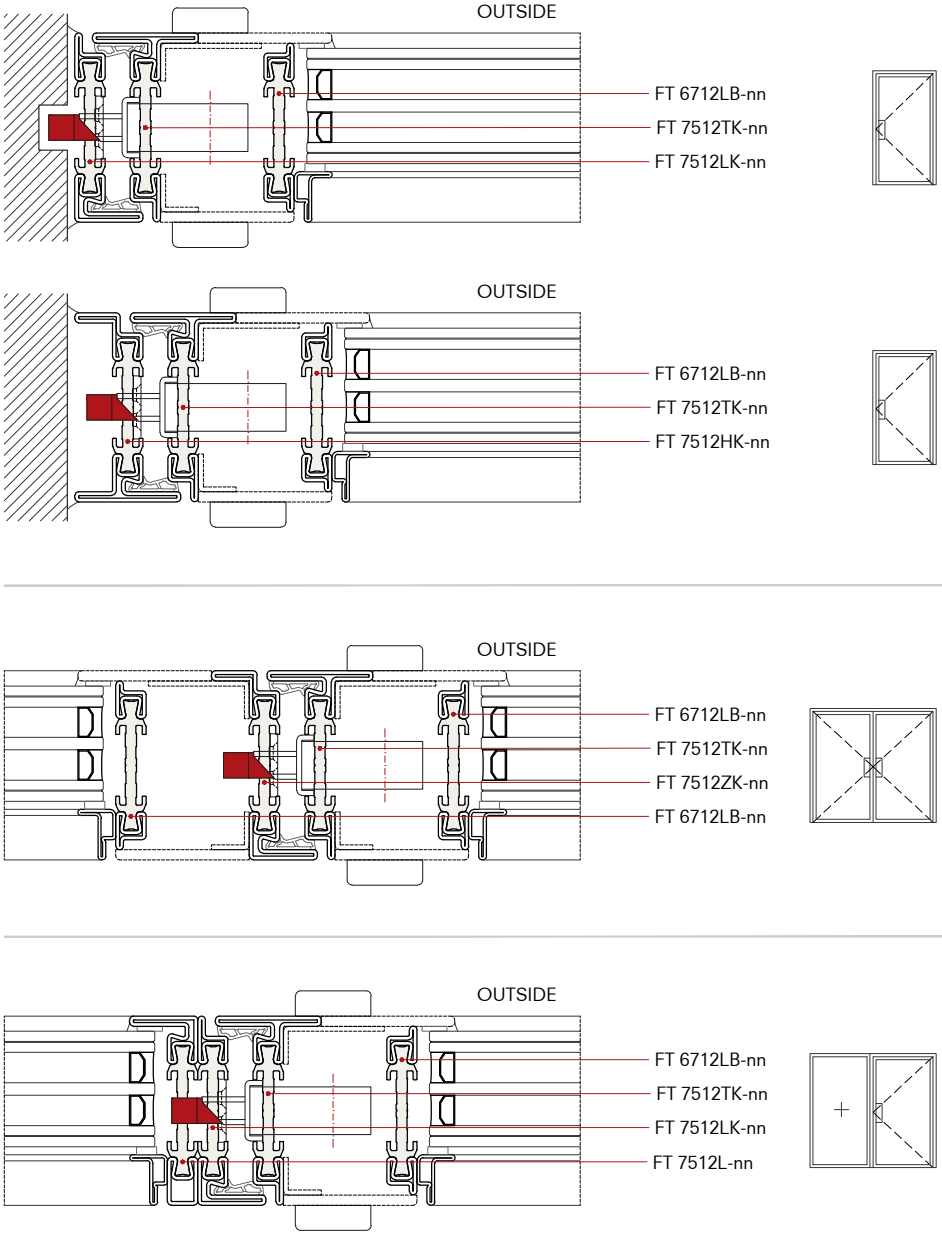
Installation
Lock B99111-02
Deadbolt
Open out door

Einbau
Fallen-Riegel-Schloss B99111-02
Schlossfalle
Tür nach außen öffnend

Schéma de montage
Serrure B99111-02
Loquet de verrouillage
Porte ouverture extérieure



B99111-02



Scale 1:3
A) Deadbolt

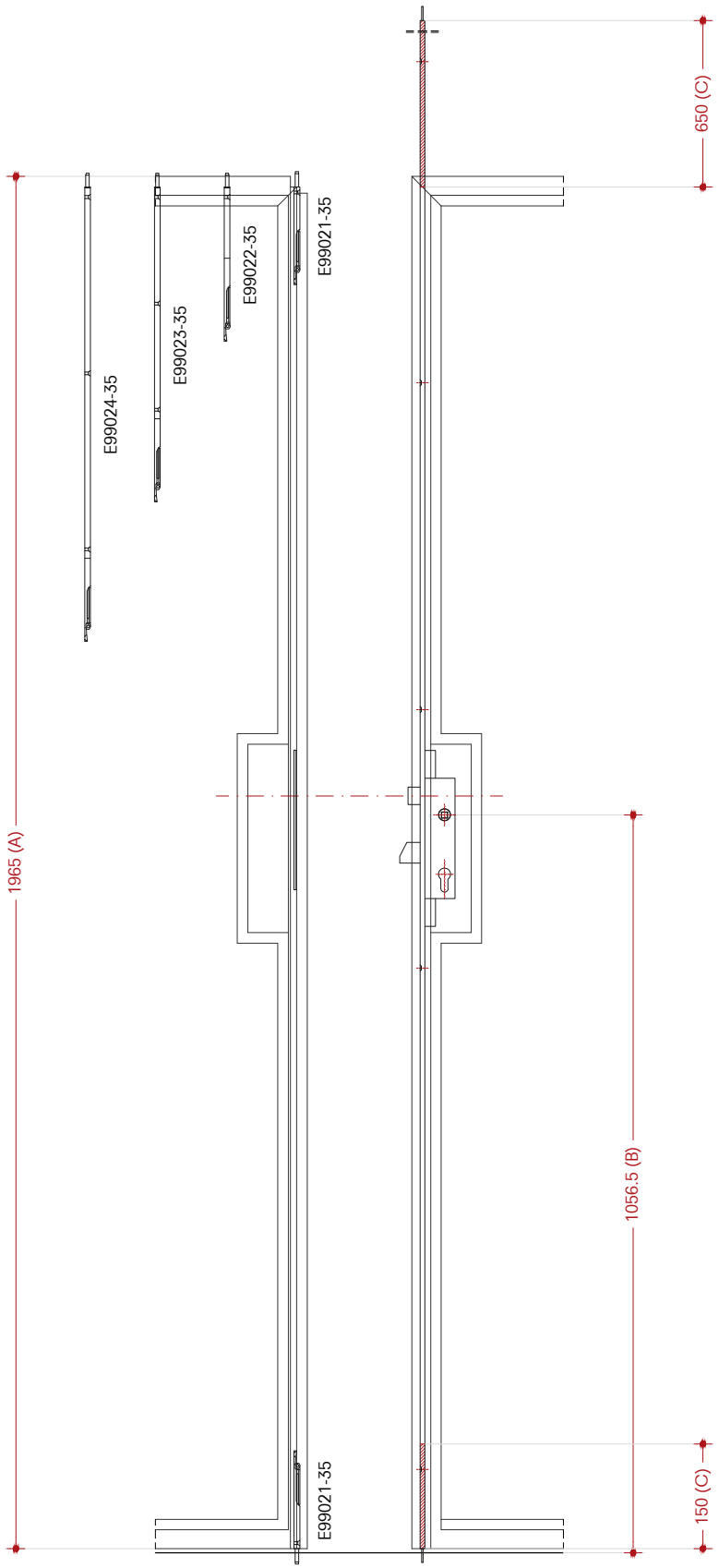
Maßstab 1:3
A) Schlossfalle

Échelle1:3
A) Loquet de verrouillage

Installation
Flush bolt E9902X-35
Lock B99111-02
Double leaf door open in with locking box

Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99111-02
Zweiflüglige Anschlagtür nach innen öffnend mit Schlosstasche

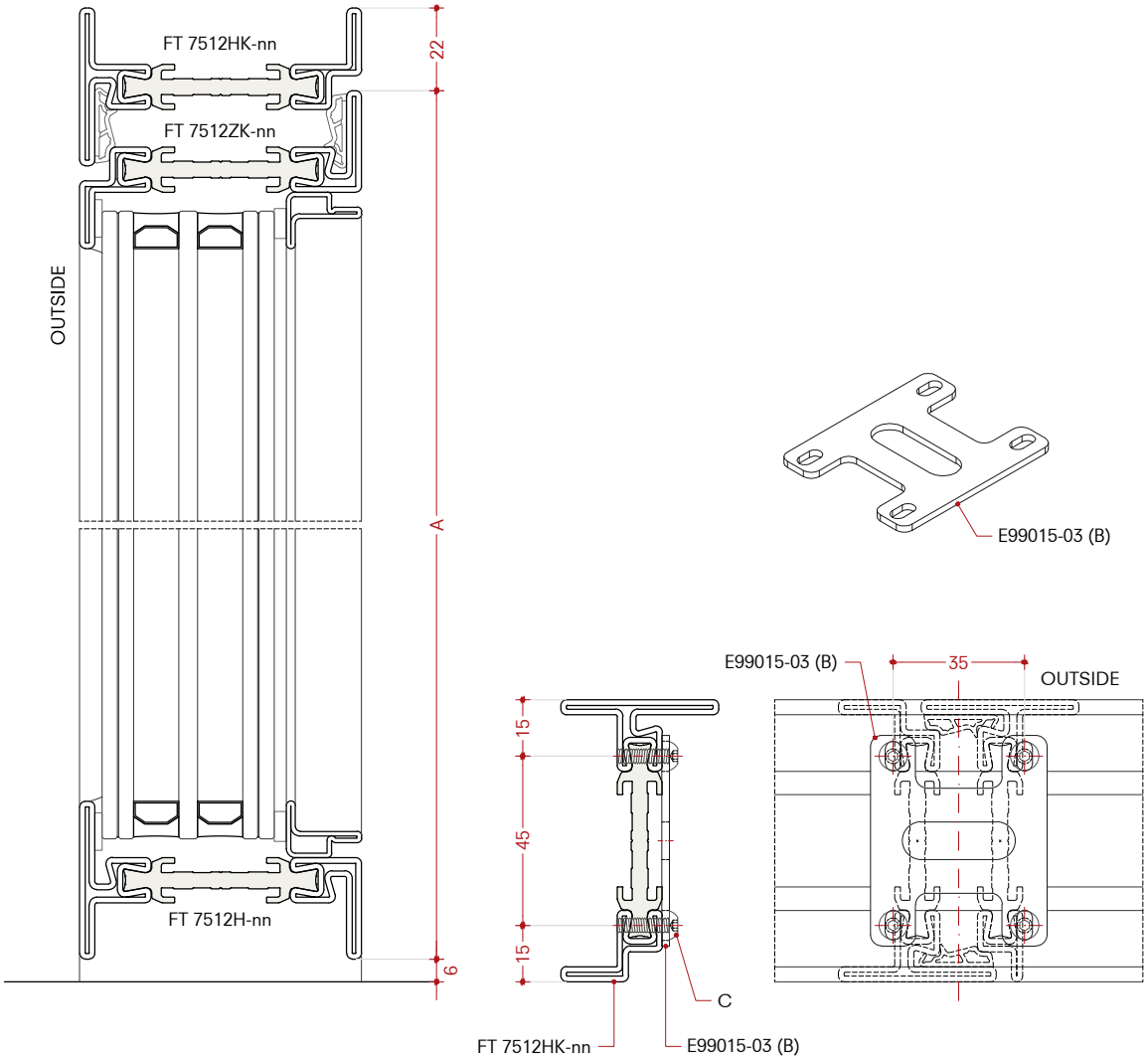
Schéma de montage
Verrou E9902X-35
Serrure B99111-02
Porte à deux vantaux ouvrant vers l'intérieur avec boîte pour la serrure

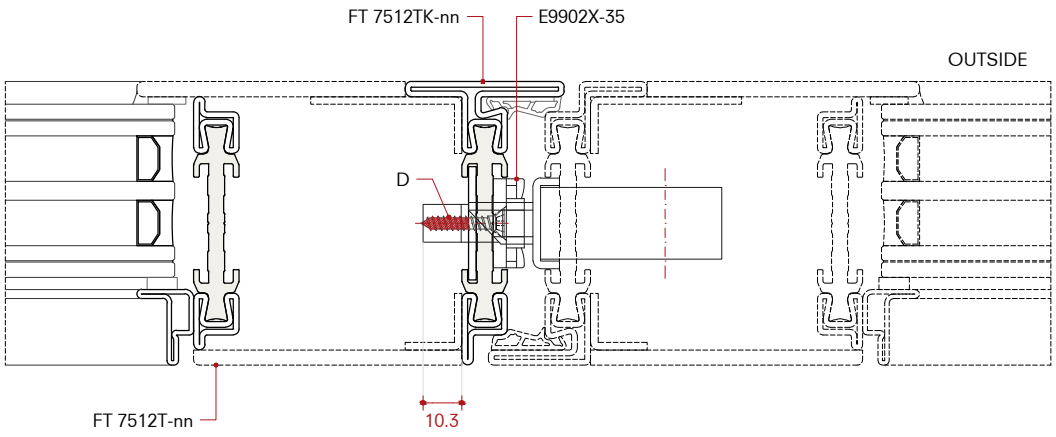


Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping





A) Height leaf
B) E99015-03 only for double leaf door with B99111-02 + E9902X-35 (installation on top and bottom)
C) Fastening with M4x14 ISO7380 screws
D) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

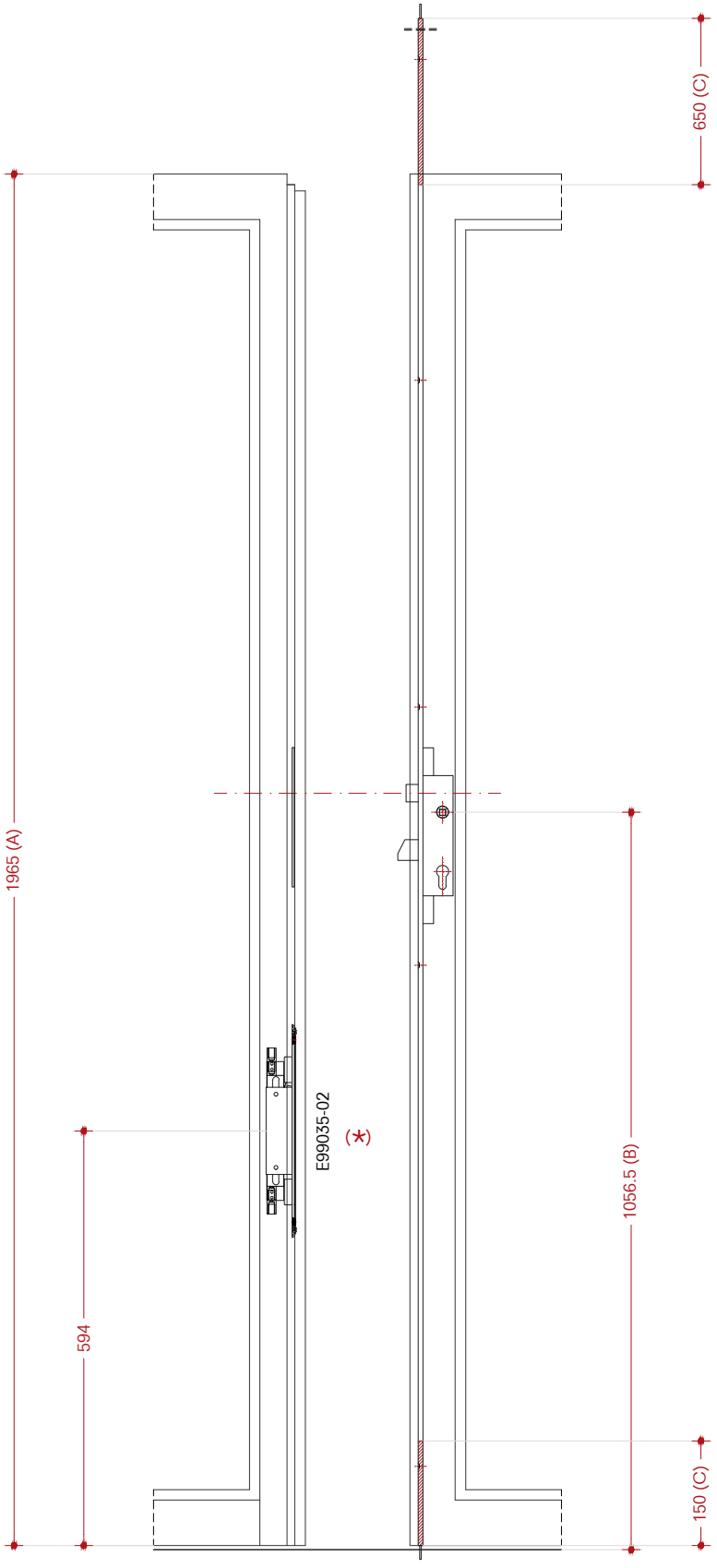
A) Höhe Flügel
B) E99015-03 nur für Zweiflüglige Anschlagtür mit B99111-02 + E9902X-35 (Montage oben und unten)
C) Befestigungsschrauben M4x14 ISO7380
D) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

A) Hauteur du vantail
B) E99015-03 seulement pour porte à double battant avec B99111-02 + E9902X-35 (installation en haut et en bas)
C) Fixation avec vis M4x14 ISO7380
D) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

Installation
Flush bolt E99035-02
Lock B99111-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99111-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99111-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure



Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

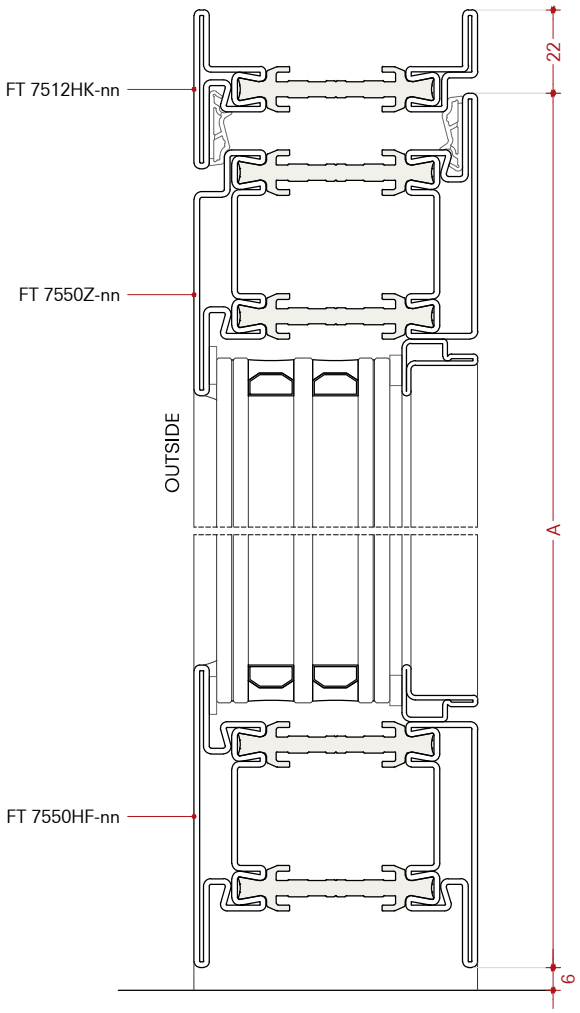
(*) Evaluate the position of the flush bolt E99035-02, installation allowed above or below the lock.

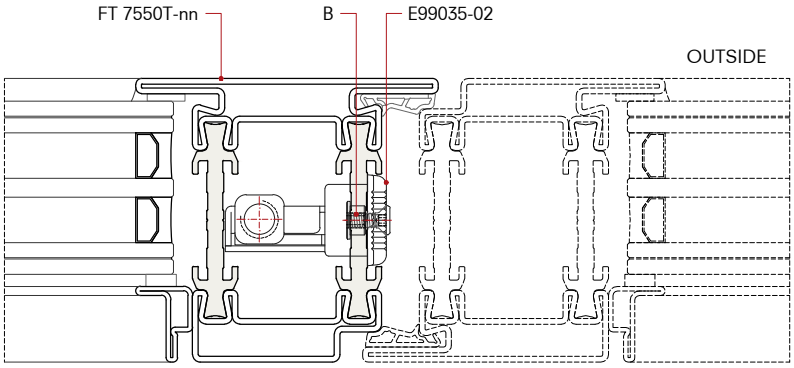
Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

(*) Lage des Kantriegel E99035-02 bewerten, Einbau über oder unter dem Schloss zulässig.

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal

(*) Évaluez la position du verrou E99035-02, installation autorisée au-dessus ou au-dessous de la serrure.





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

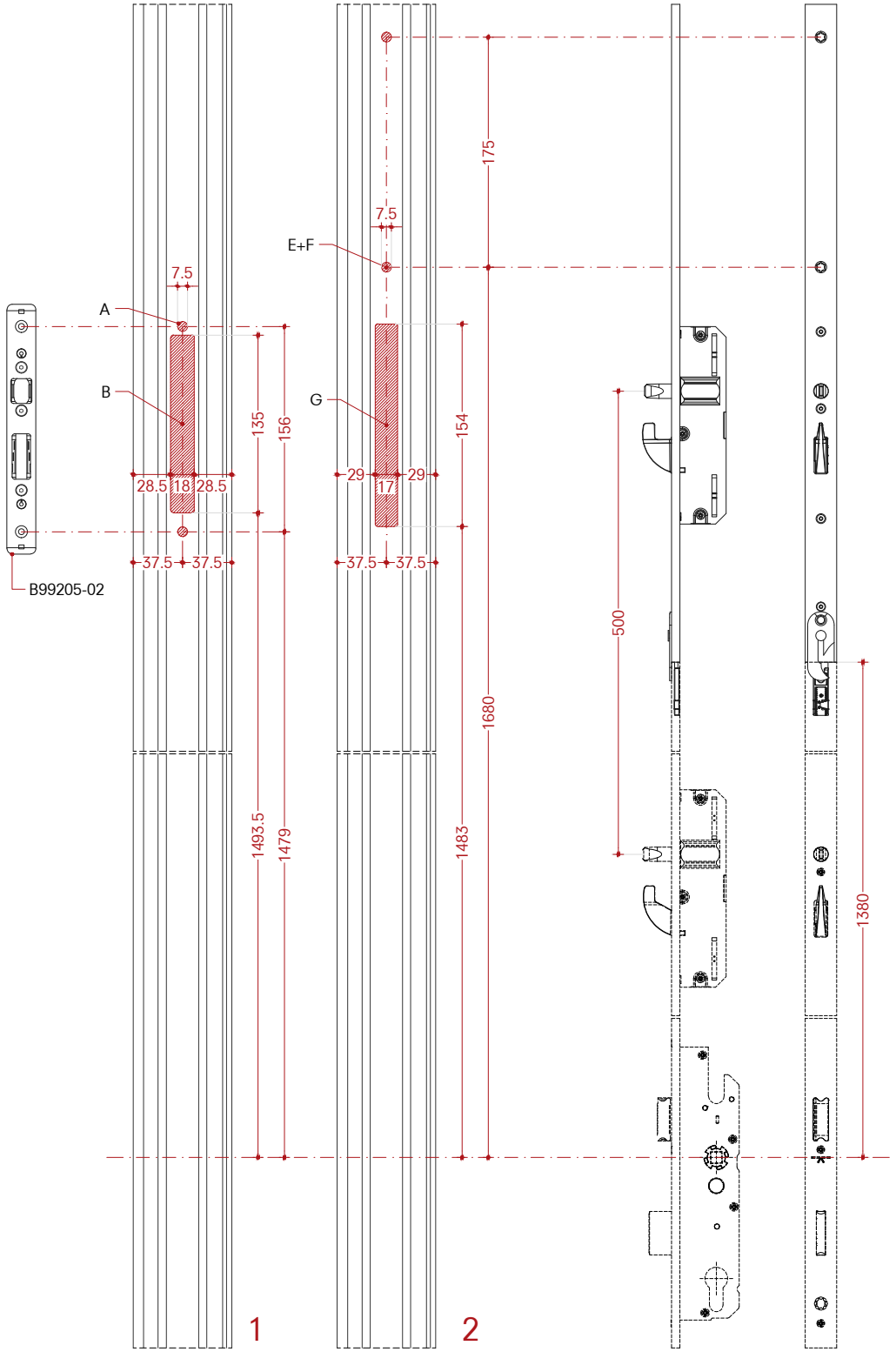
A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Lock B99169-02 with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99169-02 mit
Schlosskasten FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

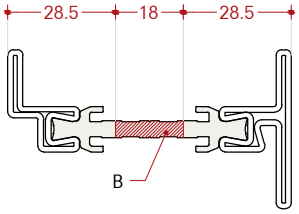
Schéma de montage
Serrure B99169-02 avec
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure

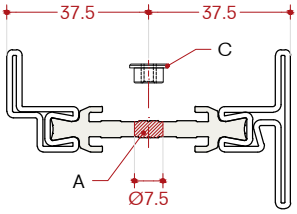


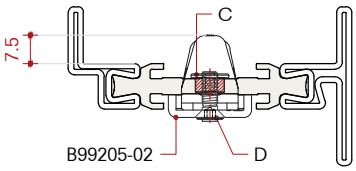
Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte







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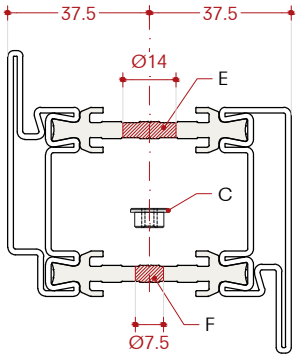
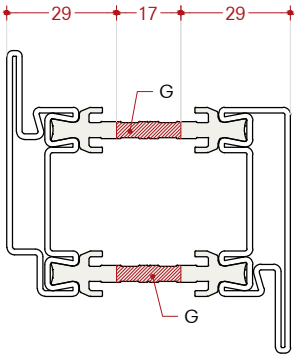
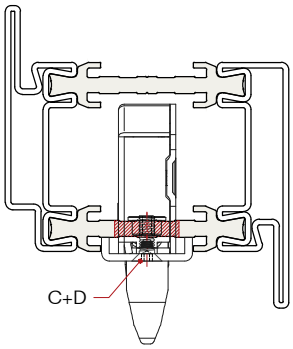






2

M4x12
ISO 10642
n° 2 pcs

D99704-08
n° 2 pcs

D99205-02
n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf

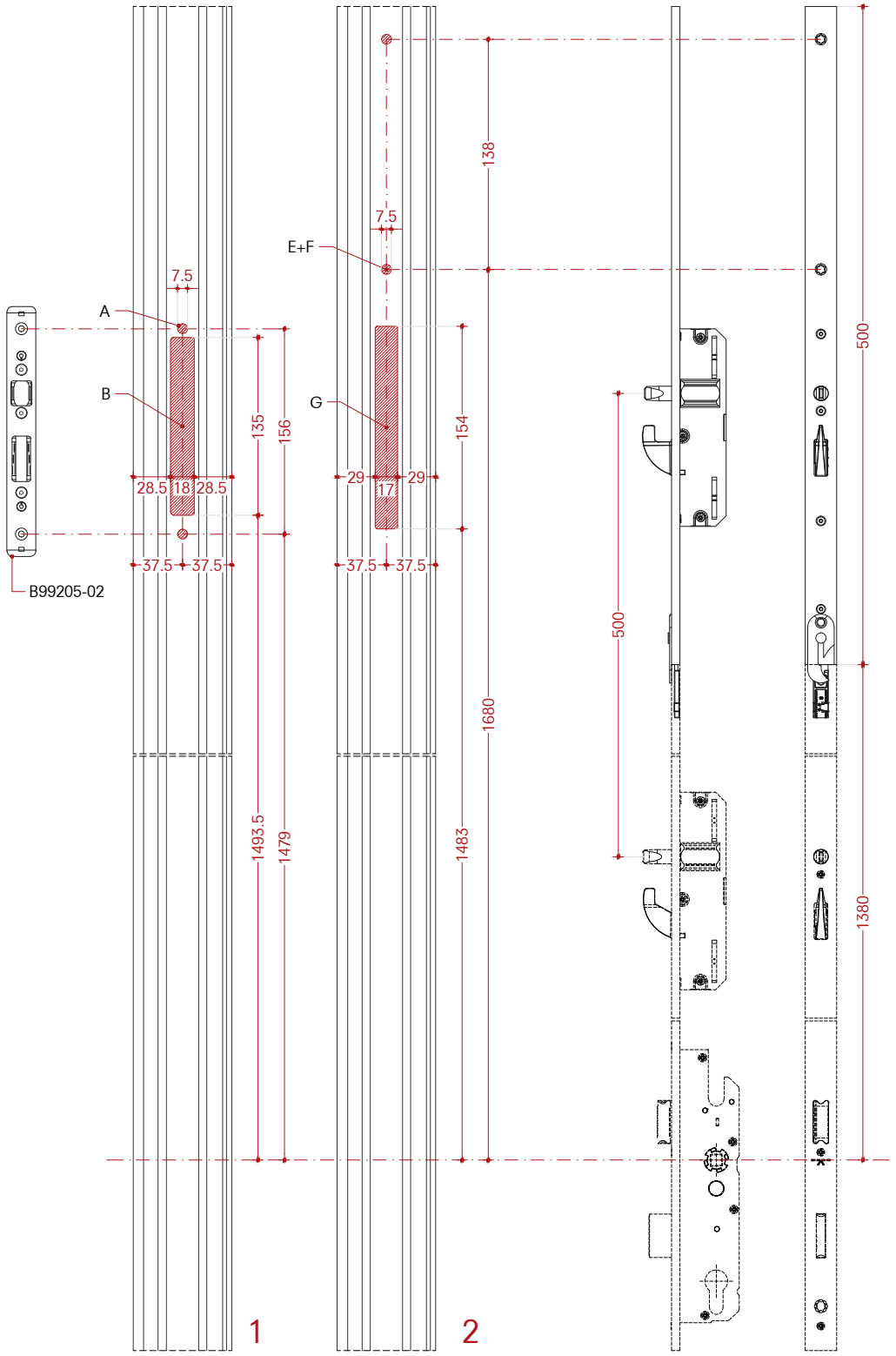
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte

Installation
Lock B99169-02 with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99169-02 mit
Schlosskasten FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

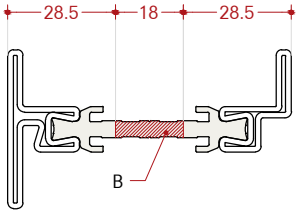
Schéma de montage
Serrure B99169-02 avec
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure

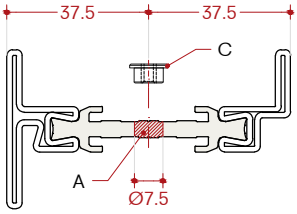


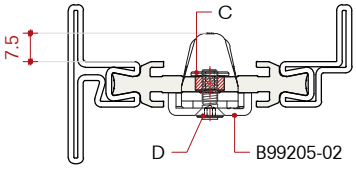
Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte







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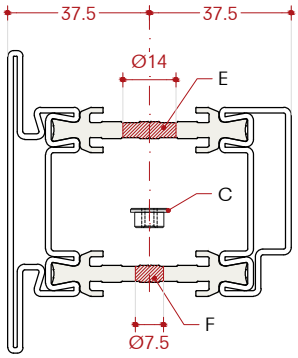
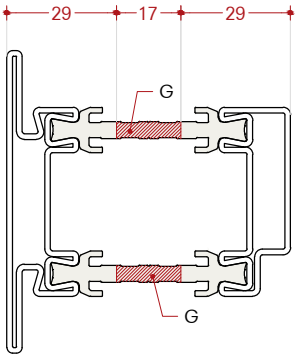
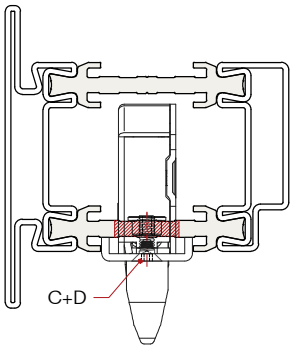






2

M4x12
ISO 10642
n° 2 pcs

D99704-08
n° 2 pcs

D99205-02
n° 1 pc

A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf

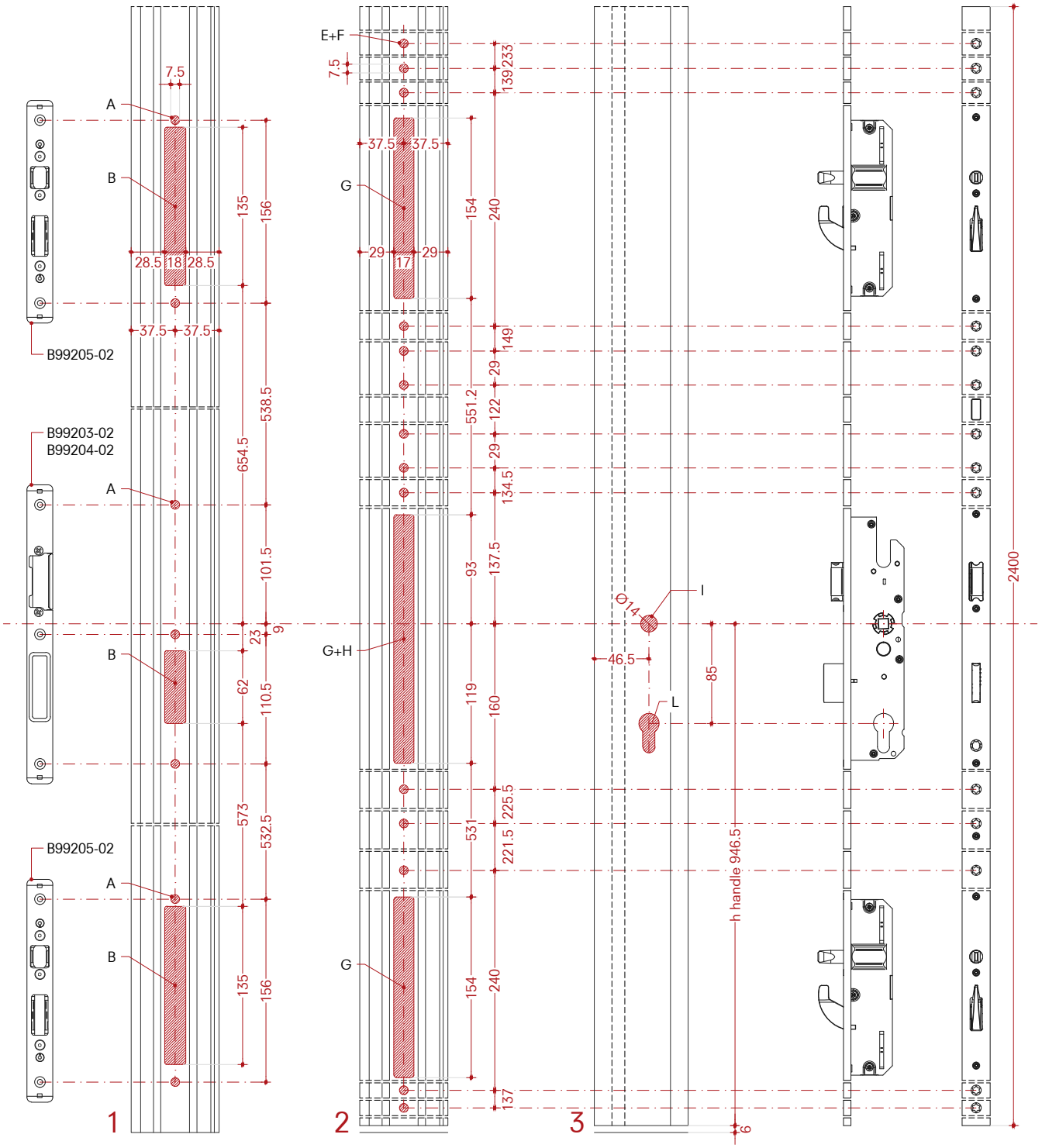
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte

Installation
Lock B99170-02 with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99170-02 mit
Schlosskasten FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

Schéma de montage
Serrure B99170-02 avec
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure

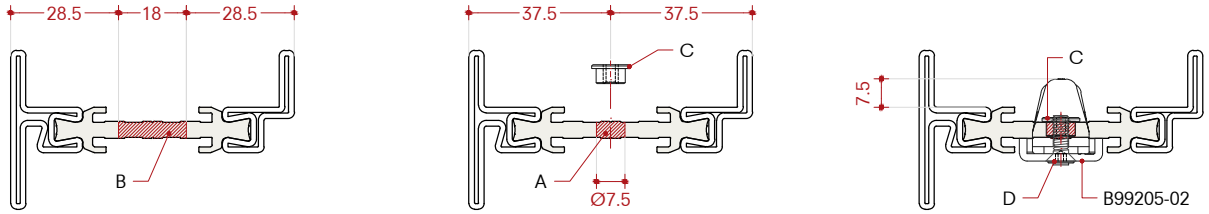


Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

1



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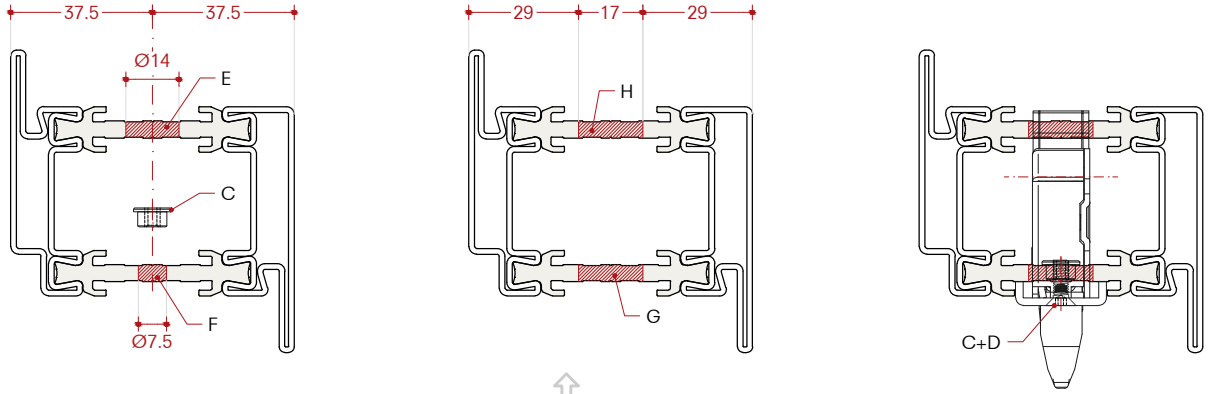

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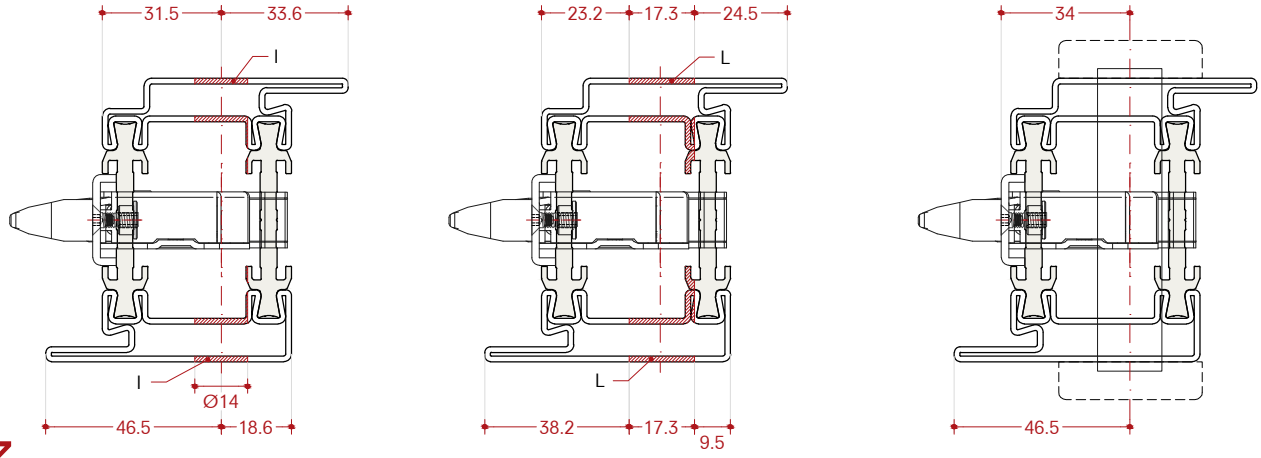
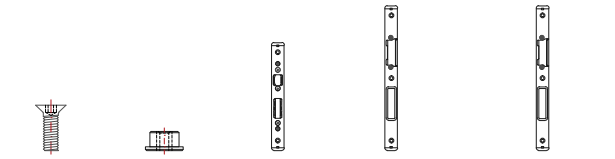
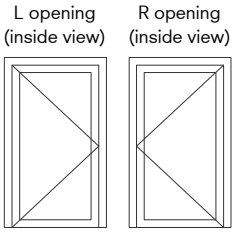






A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

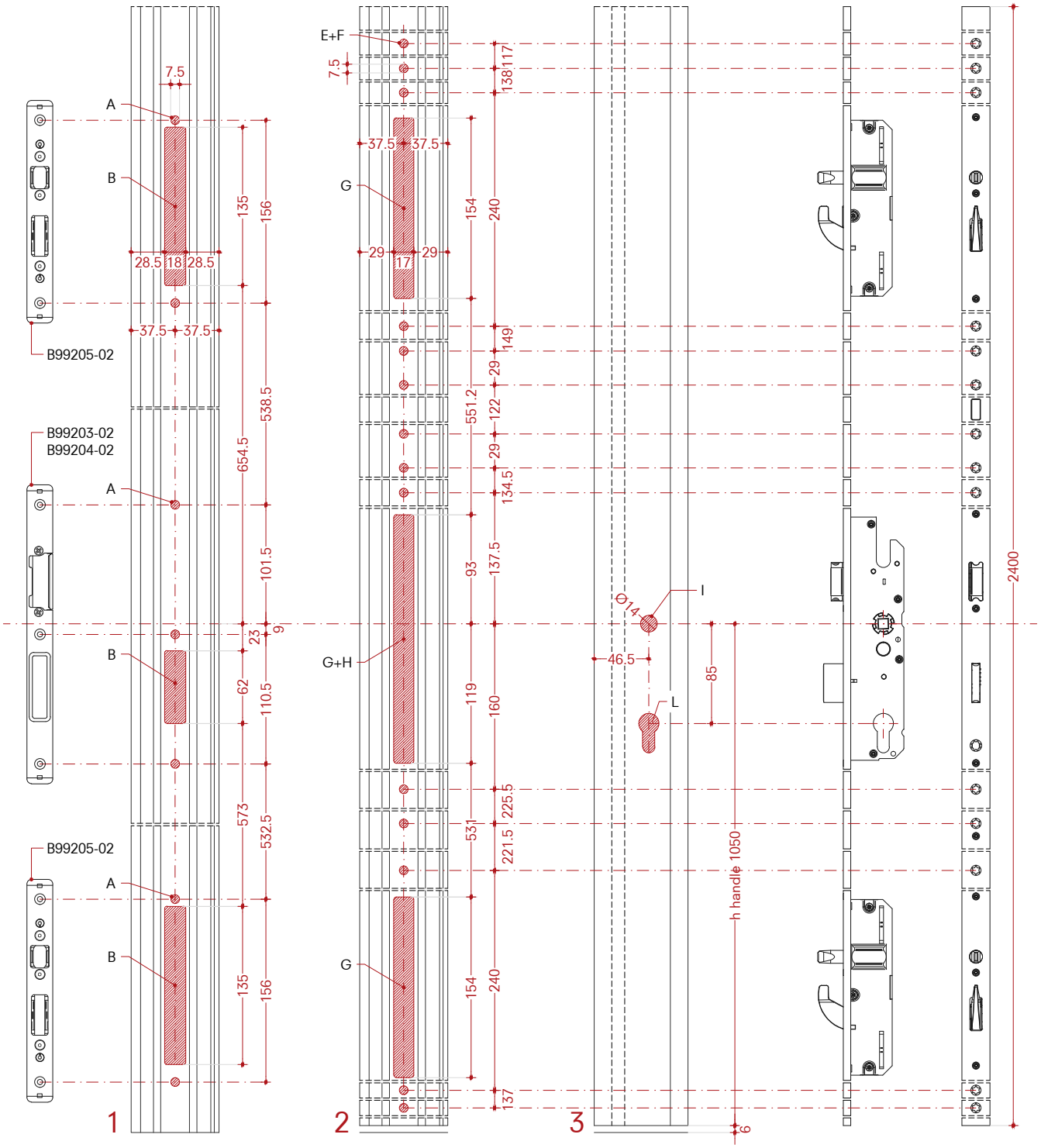
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Lock B99170-02 with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99170-02 mit
Schlosskasten FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

Schéma de montage
Serrure B99170-02 avec
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure

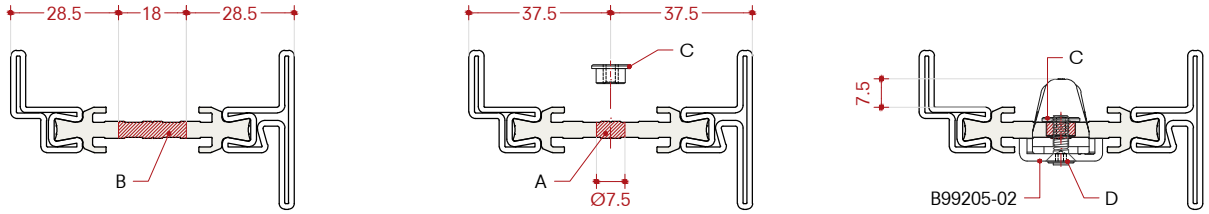


Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

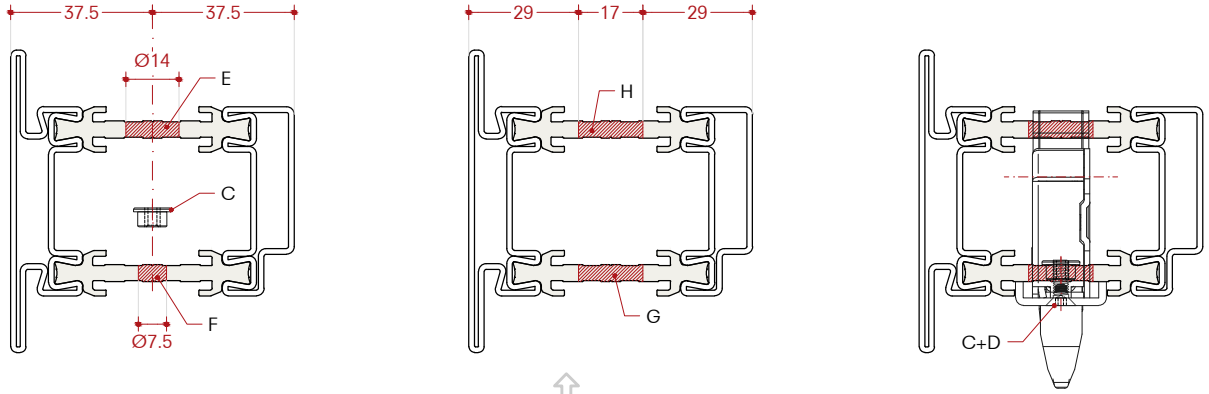
Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

1



2



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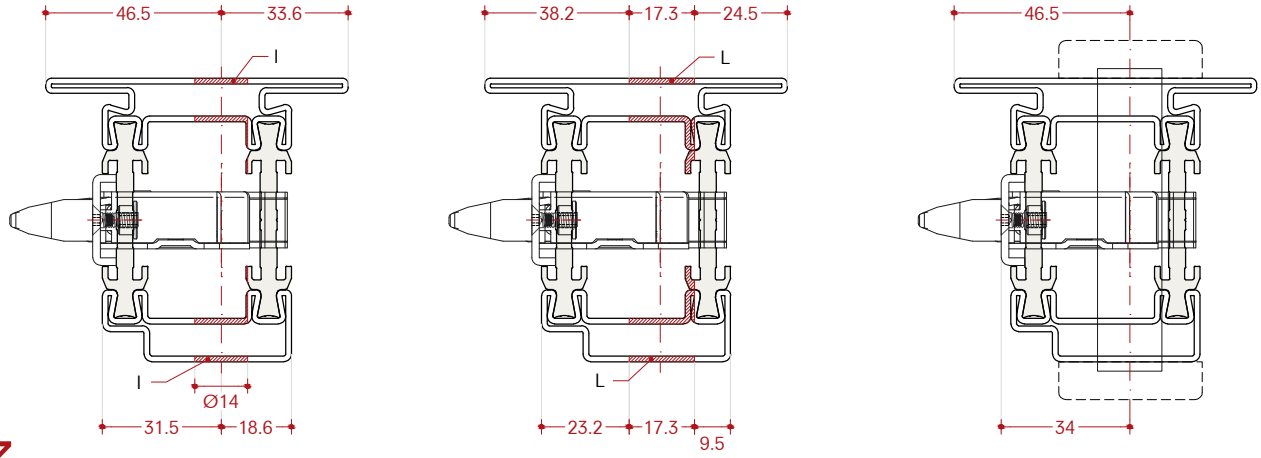
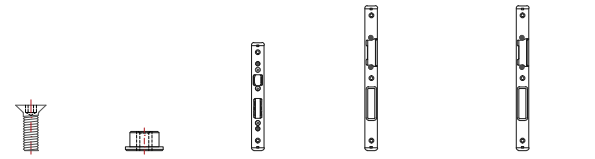
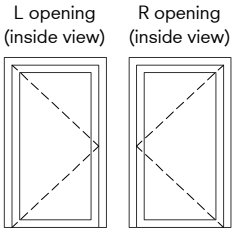






A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Flush bolt E99035-02
Lock B99170-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99170-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99170-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

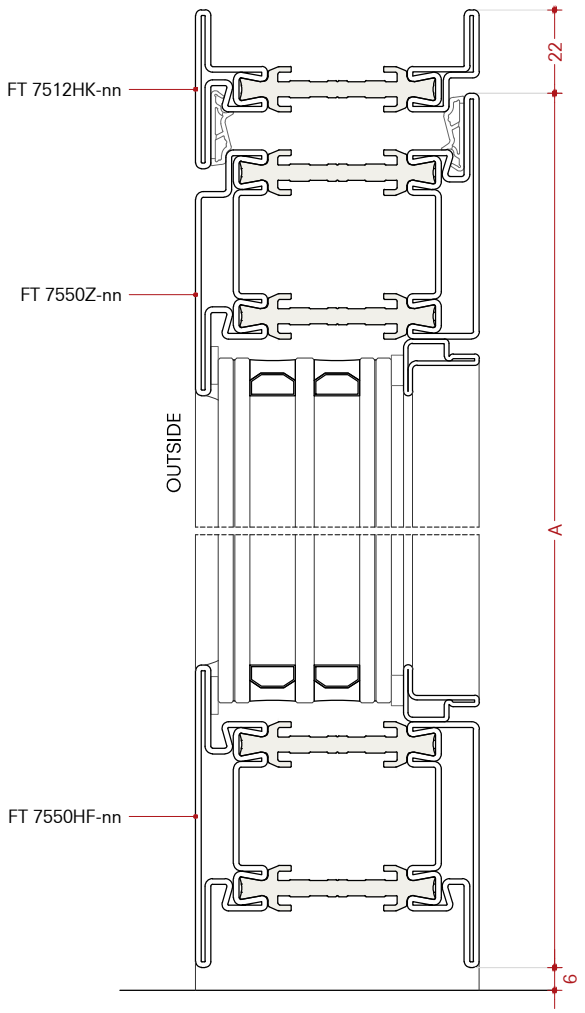
(*) Evaluate the position of the flush bolt E99035-02, installation allowed above or below the lock.

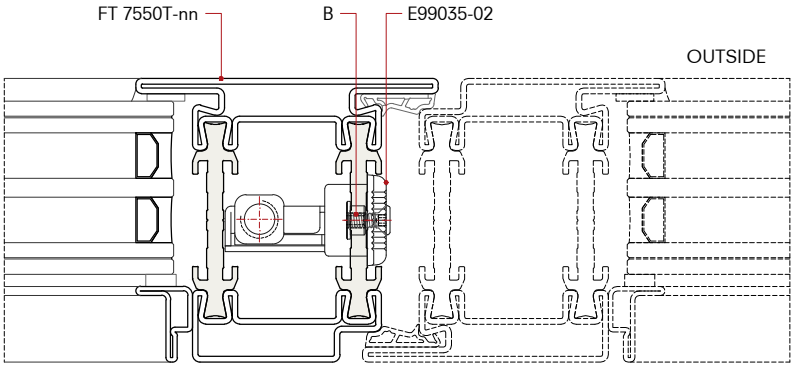
Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

(*) Lage des Kantriegel E99035-02 bewerten, Einbau über oder unter dem Schloss zulässig.

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal

(*) Évaluez la position du verrou E99035-02, installation autorisée au-dessus ou au-dessous de la serrure.





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Flush bolt E9902X-35
Lock B99170-02
Double leaf door open in with widening on complete height on lock side

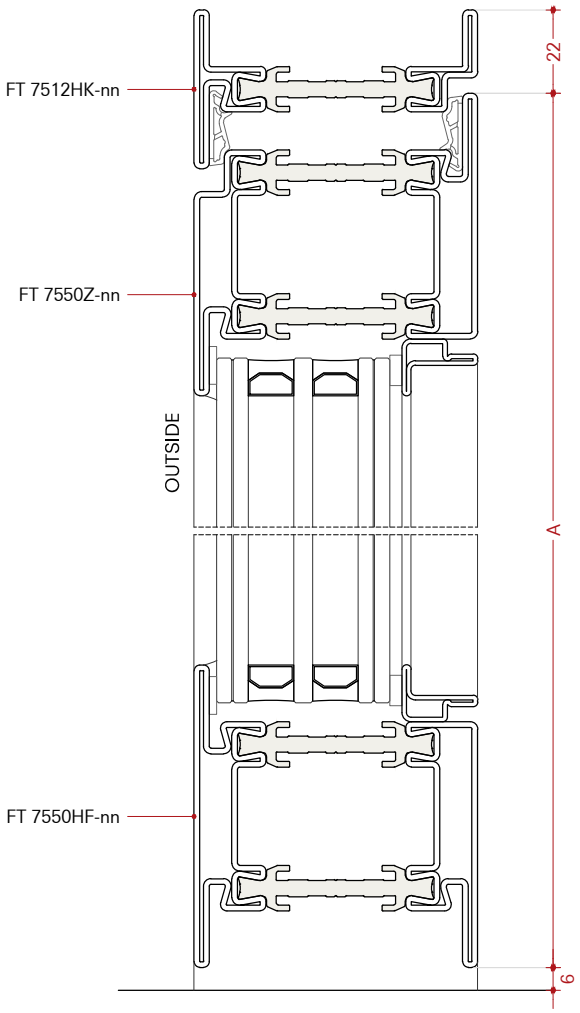
Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99170-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

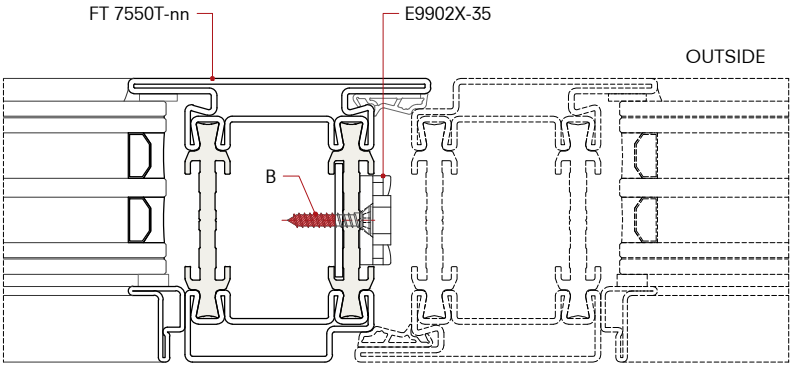
Schéma de montage
Verrou E9902X-35
Serrure B99170-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal





A) Height leaf
B) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

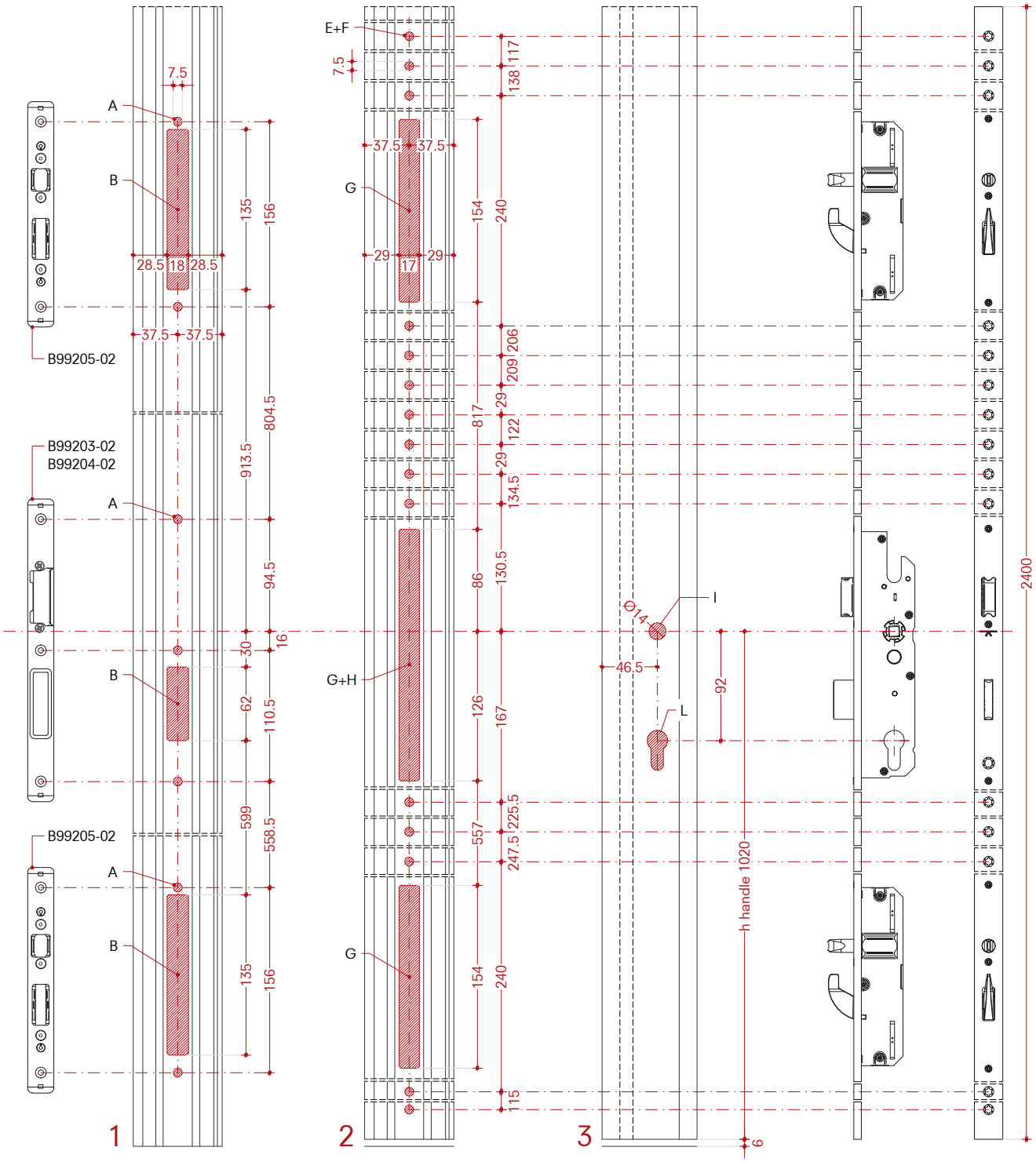
A) Höhe Flügel
B) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

A) Hauteur du vantail
B) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

Installation
Lock B99171-02 with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99171-02 mit
Schlosskasten FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

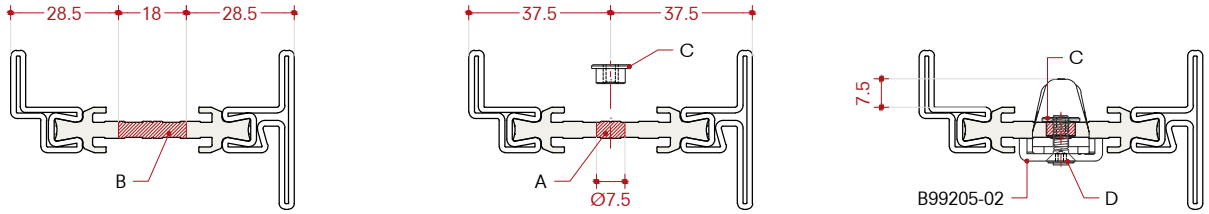
Schéma de montage
Serrure B99171-02 avec
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure



Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés



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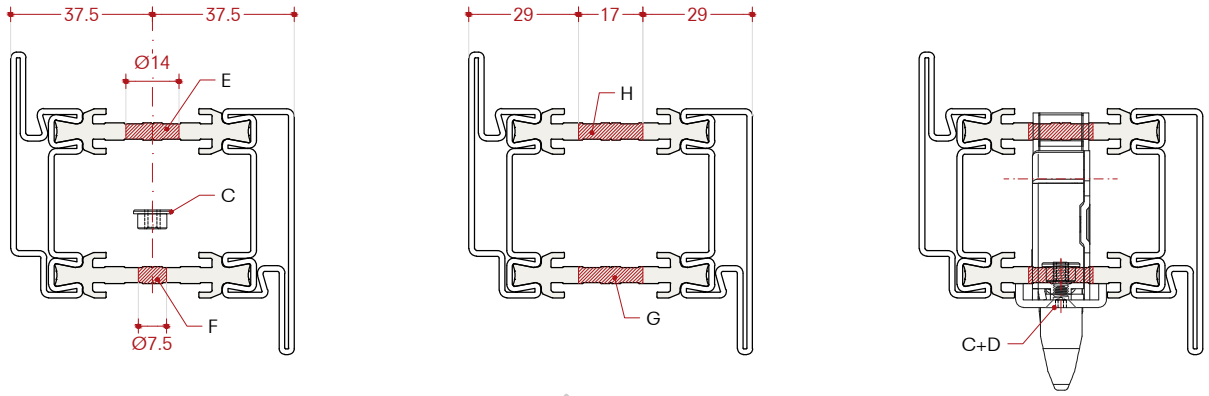

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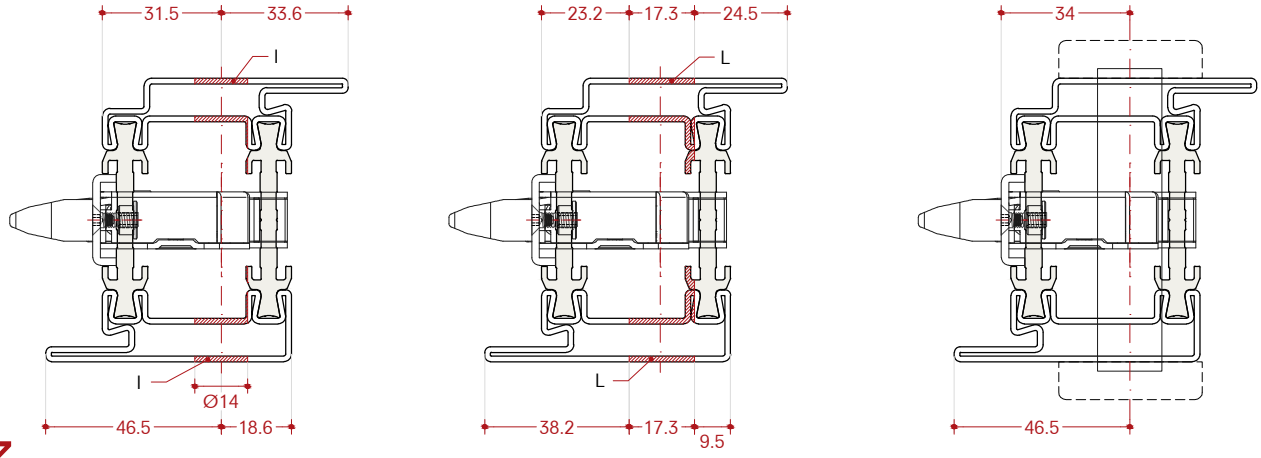

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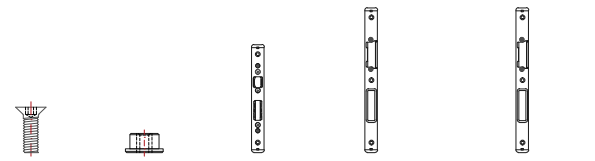
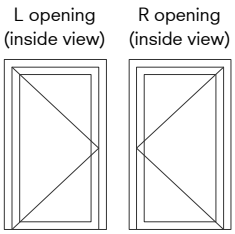




A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

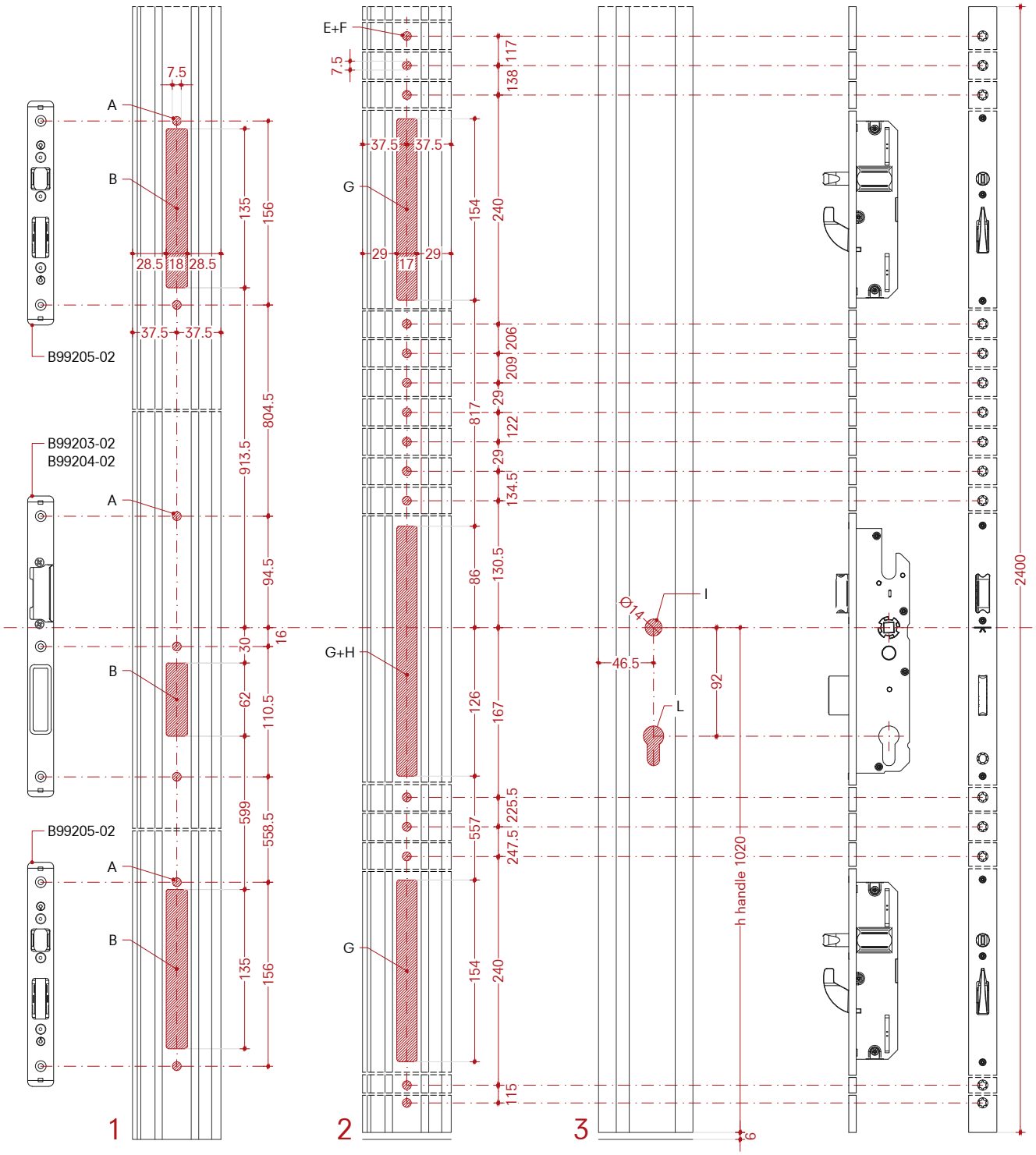
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Lock B99171-02 with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99171-02 mit
Schlosskasten FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

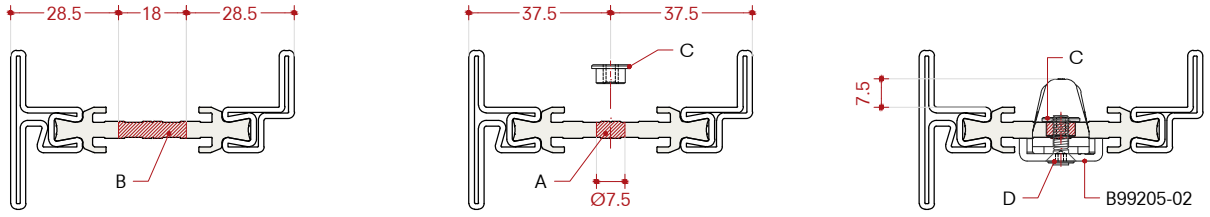
Schéma de montage
Serrure B99171-02 avec
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure



Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés



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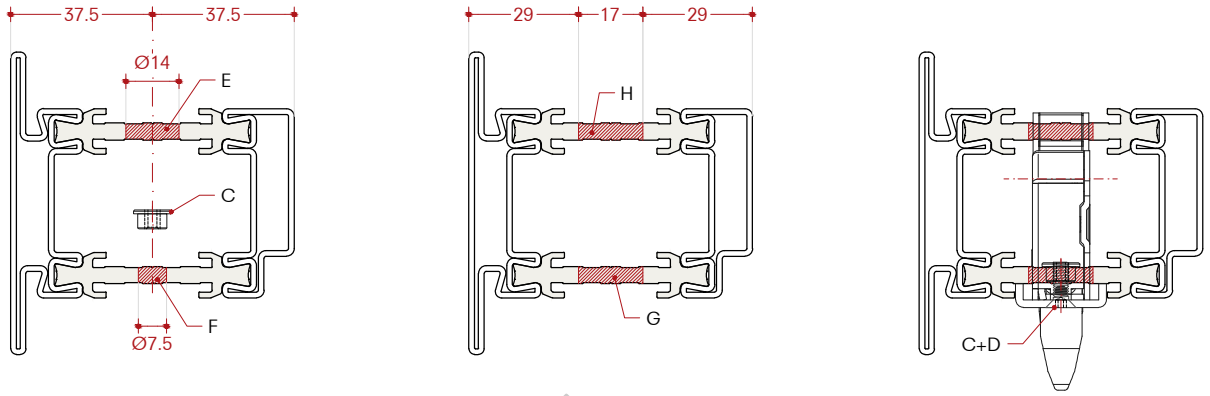

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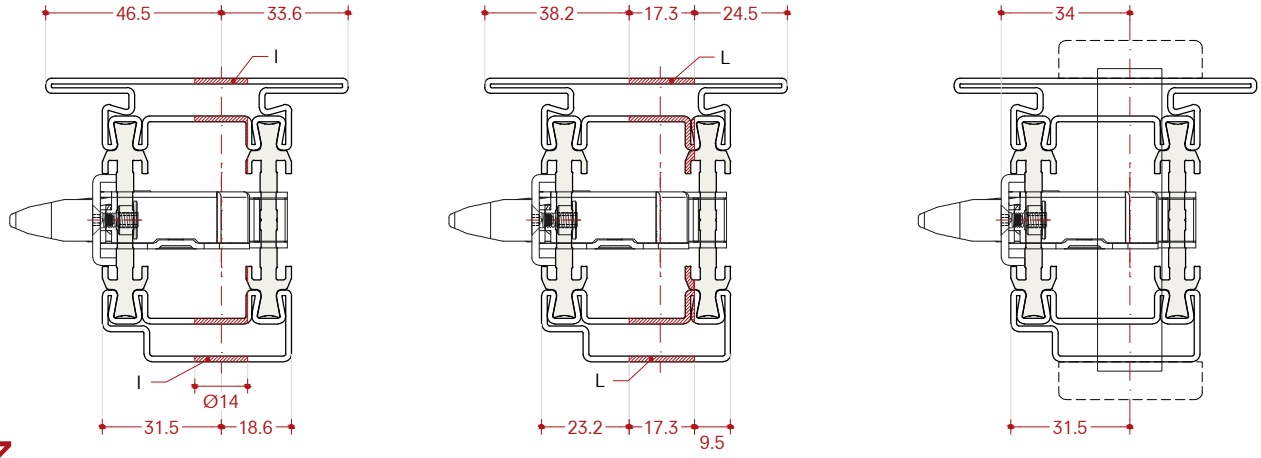

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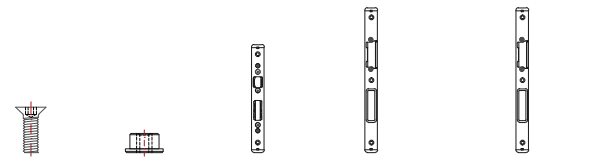
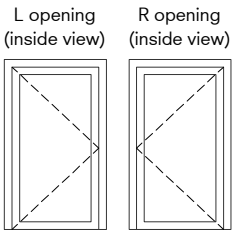




A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

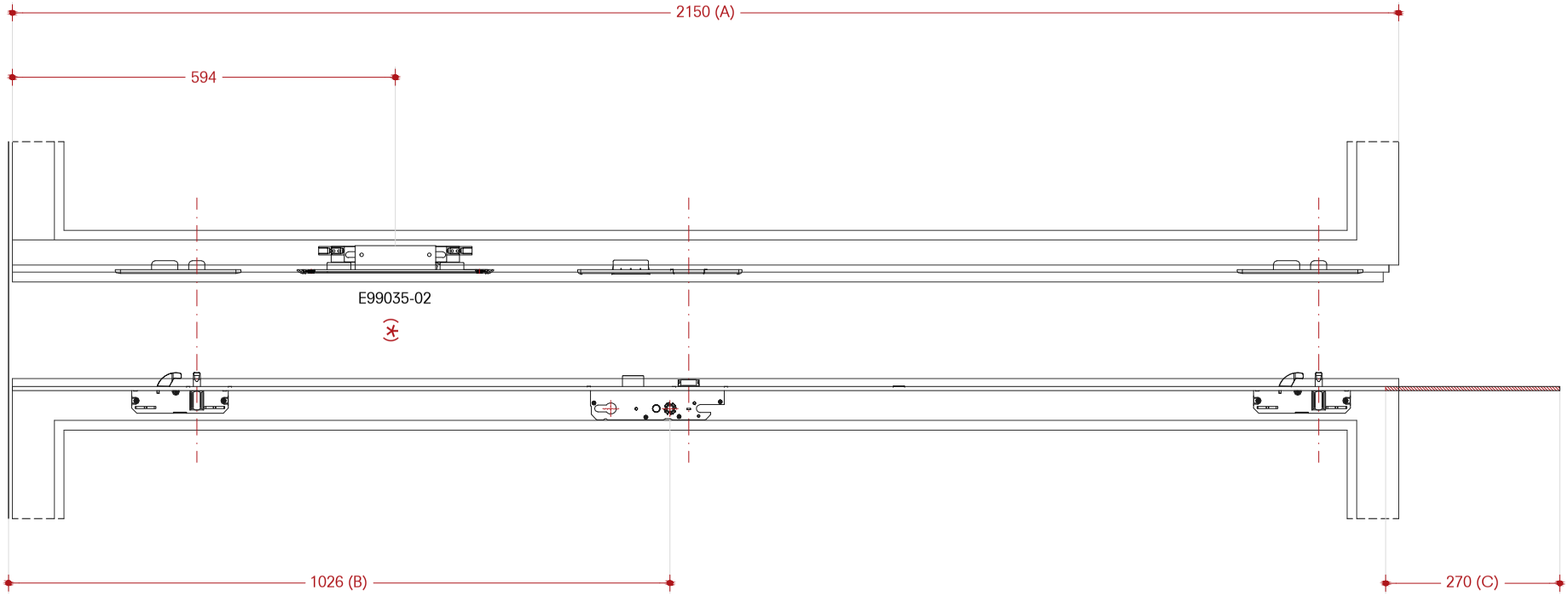
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Flush bolt E99035-02
Lock B99171-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99171-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99171-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure



Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

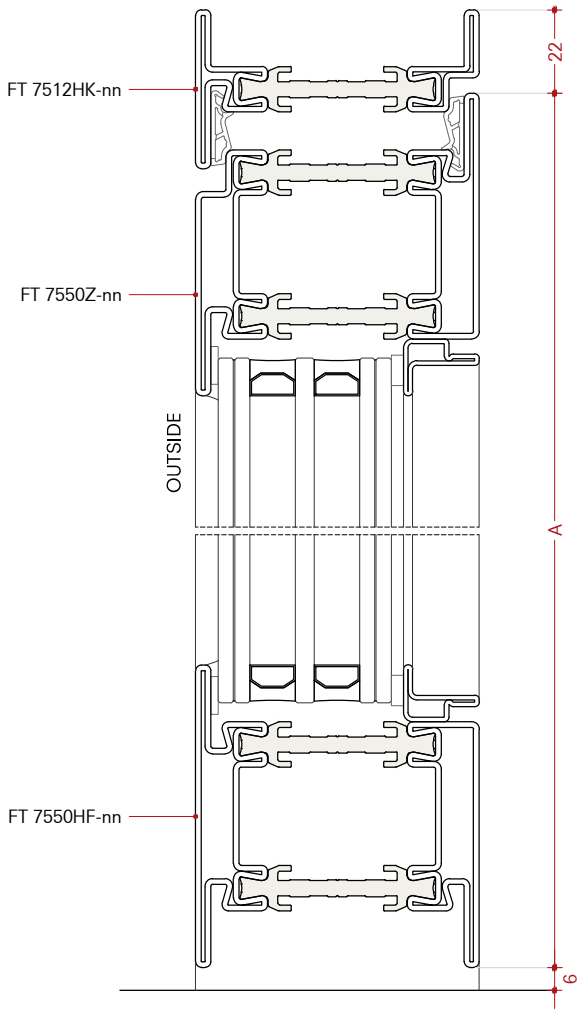
(*) Evaluate the position of the flush bolt E99035-02, installation allowed above or below the lock.

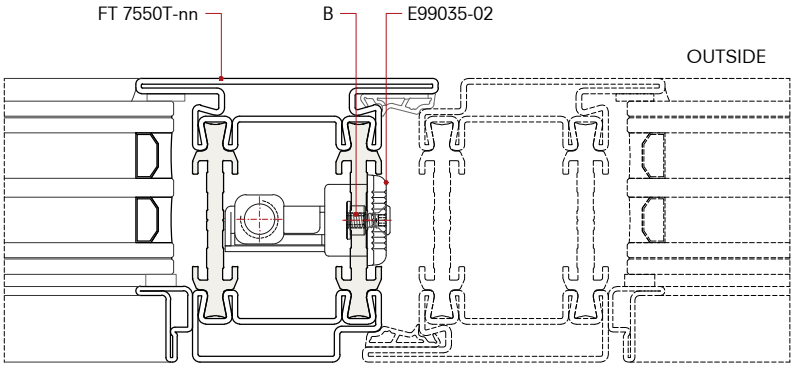
Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

(*) Lage des Kantriegel E99035-02 bewerten, Einbau über oder unter dem Schloss zulässig.

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal

(*) Évaluez la position du verrou E99035-02, installation autorisée au-dessus ou au-dessous de la serrure.





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

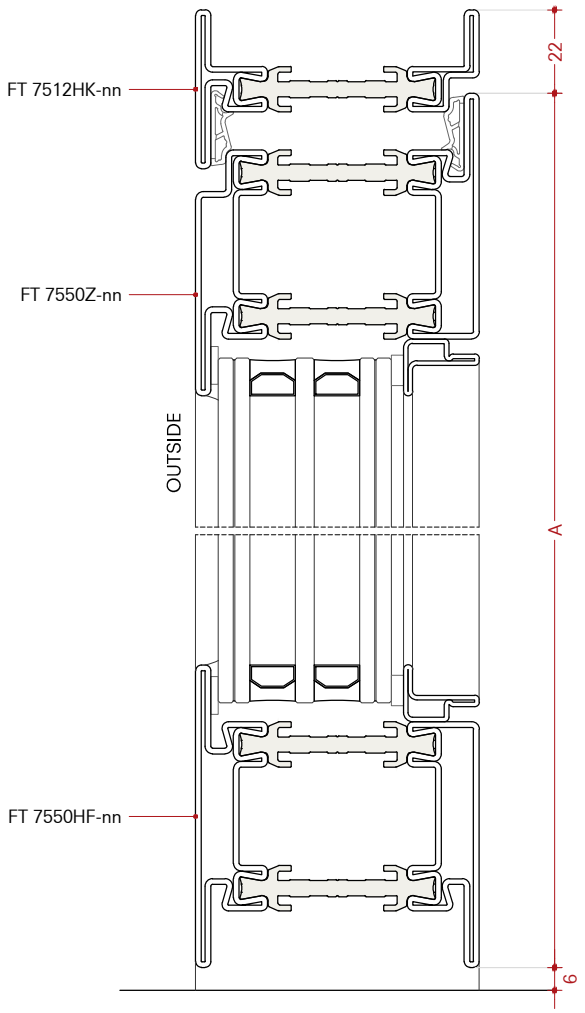
A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

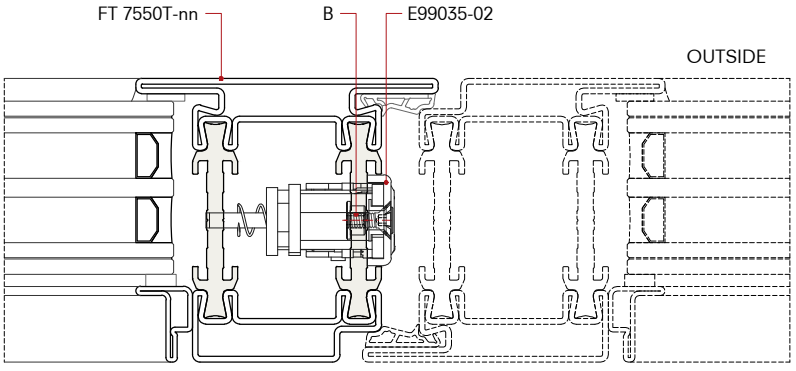
A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Flush bolt E99035-02
Lock B99171-02
Lock extension B99169-02
French casement drive gear B99162-02/B99163-02
Extension B99164-02
Shoot bolt B99165-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99171-02
Verlängerung B99169-02
Stulpflügelgetriebe B99162-02/B99163-02
Verlängerung B99164-02
Kantriege B99165-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99171-02
Extension de verrouillage B99169-02
Crémone de semi-fixe B99162-02/B99163-02
Extension B99164-02
Verrou à entailler B99165-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Flush bolt E99035-02
Lock B99171-02
Lock extension B99169-02
French casement drive gear B99162-02/B99163-02
Extension B99164-02
Shoot bolt B99165-02
Double leaf door open in with widening on complete height on lock side

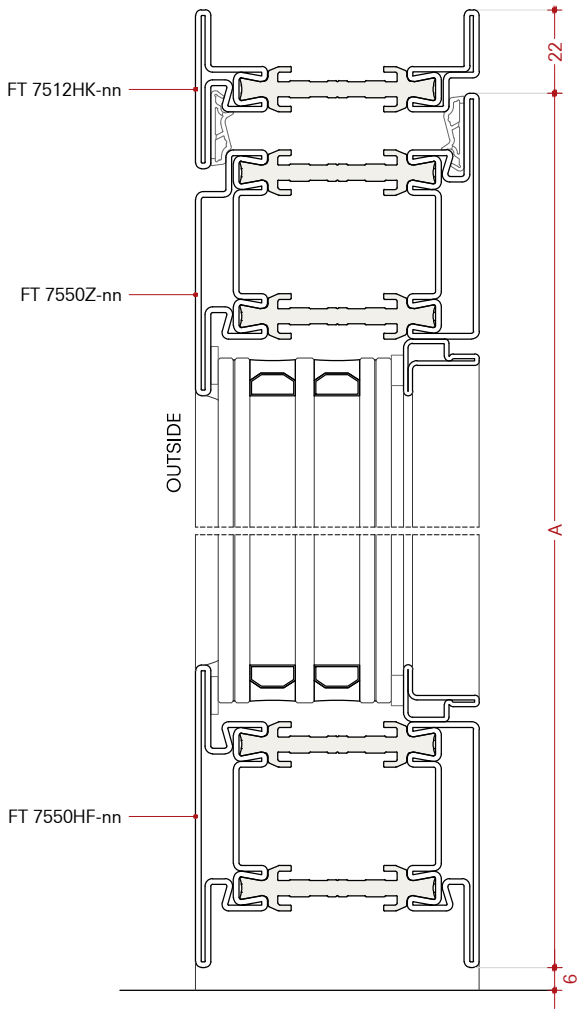
Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99171-02
Verlängerung B99169-02
Stulpflügelgetriebe B99162-02/B99163-02
Verlängerung B99164-02
Kantriege B99165-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

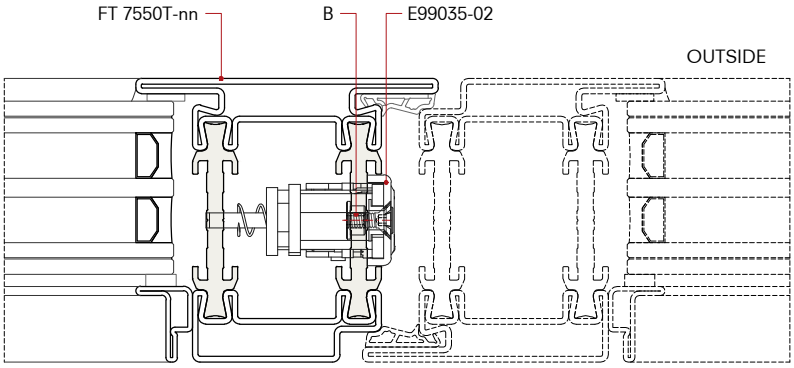
Schéma de montage
Verrou E99035-02
Serrure B99171-02
Extension de verrouillage B99169-02
Crémone de semi-fixe B99162-02/B99163-02
Extension B99164-02
Verrou à entailler B99165-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping
D) Maximum height

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt
D) Maximalehöhe

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal
D) Hauteur maximum





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Flush bolt E9902X-35
Lock B99171-02
Double leaf door open in with widening on complete height on lock side

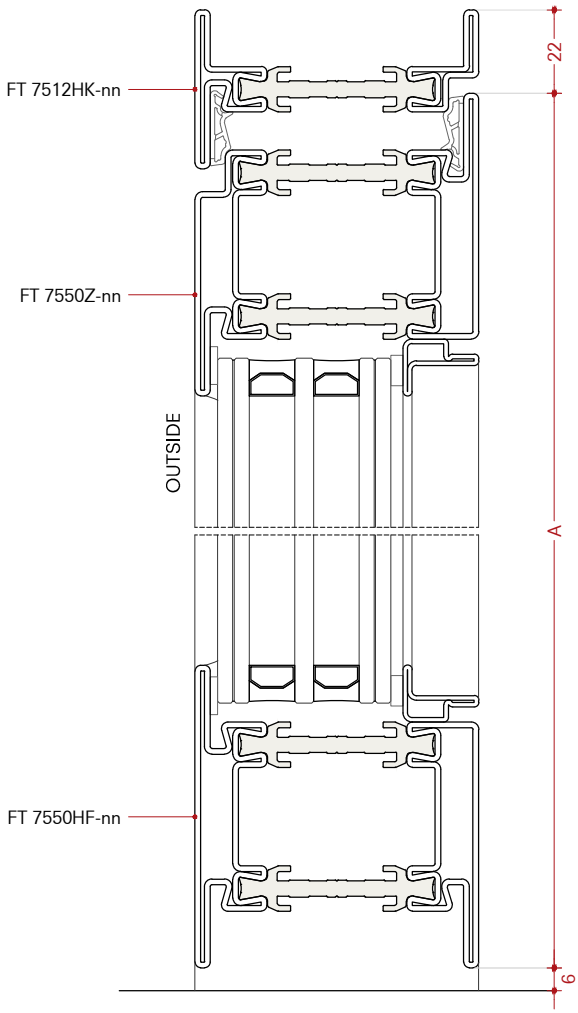
Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99171-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

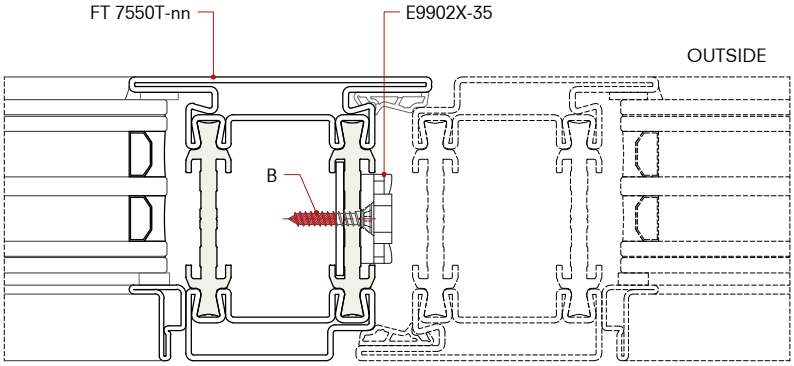
Schéma de montage
Verrou E9902X-35
Serrure B99171-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

Scale 1:10
A) Minimum height leaf
B) Height handle

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée





A) Height leaf
B) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

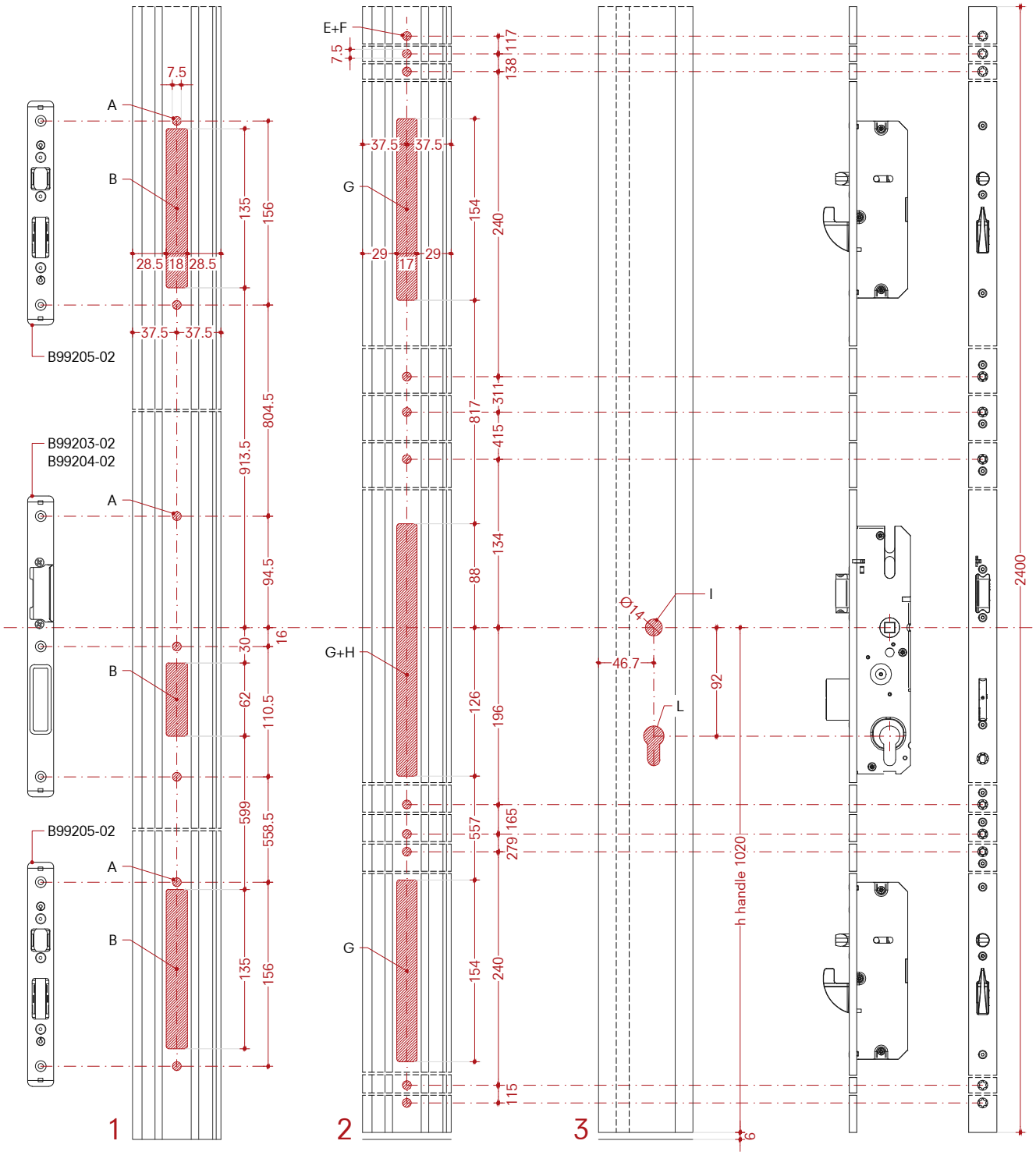
A) Höhe Flügel
B) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

A) Hauteur du vantail
B) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

Installation
Lock B99173-02 with locking box
FT 7512HK-nn + FT 7550Z-nn
Open in door

Einbau
Fallen-Riegel-Schloss B99173-02 mit
Schlosskasten FT 7512HK-nn + FT 7550Z-nn
Tür nach innen öffnend

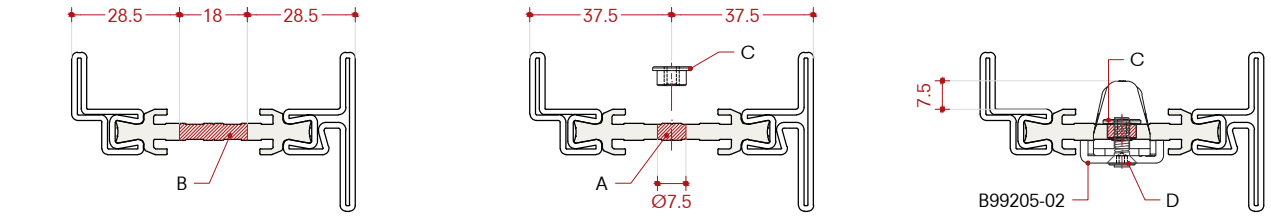
Schéma de montage
Serrure B99173-02 avec
FT 7512HK-nn + FT 7550Z-nn
Porte ouverture intérieure



Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés



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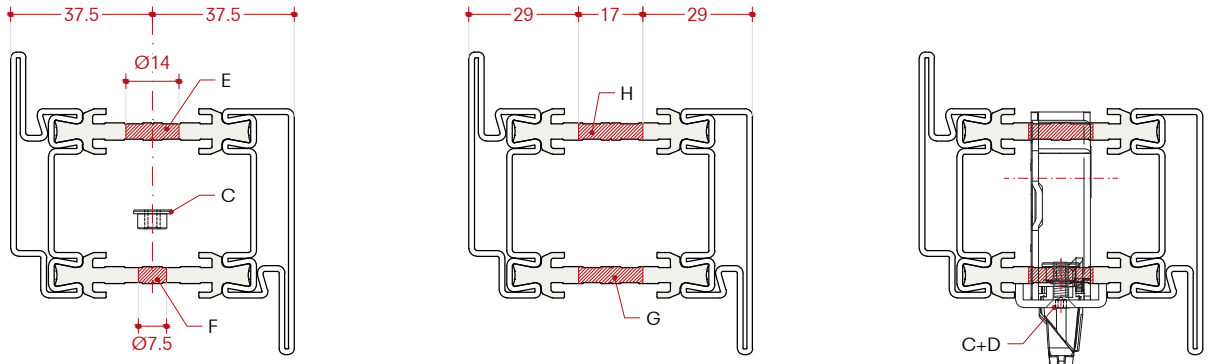

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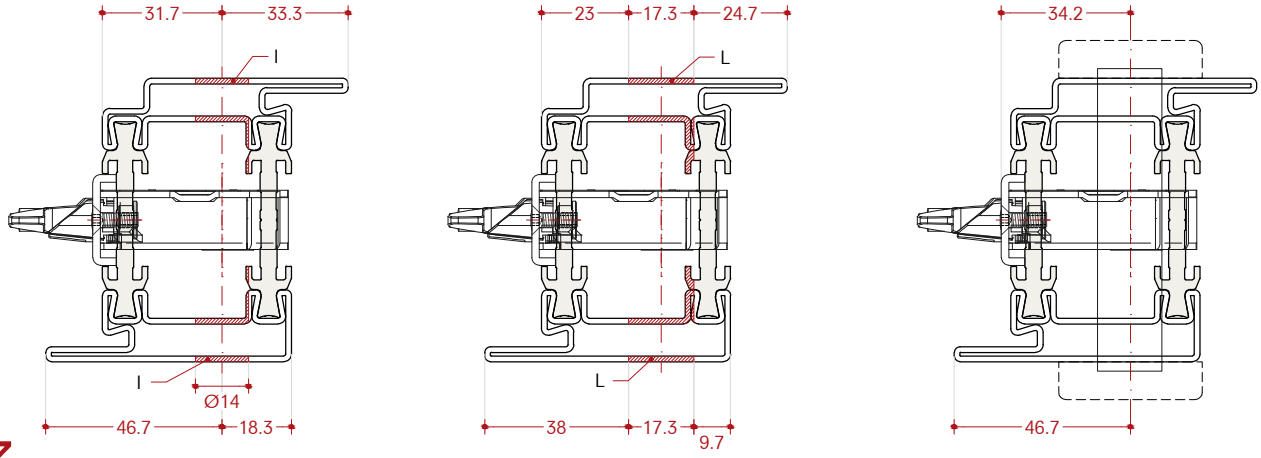

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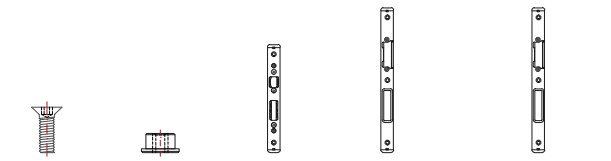
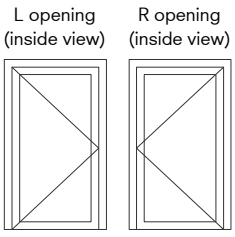




A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

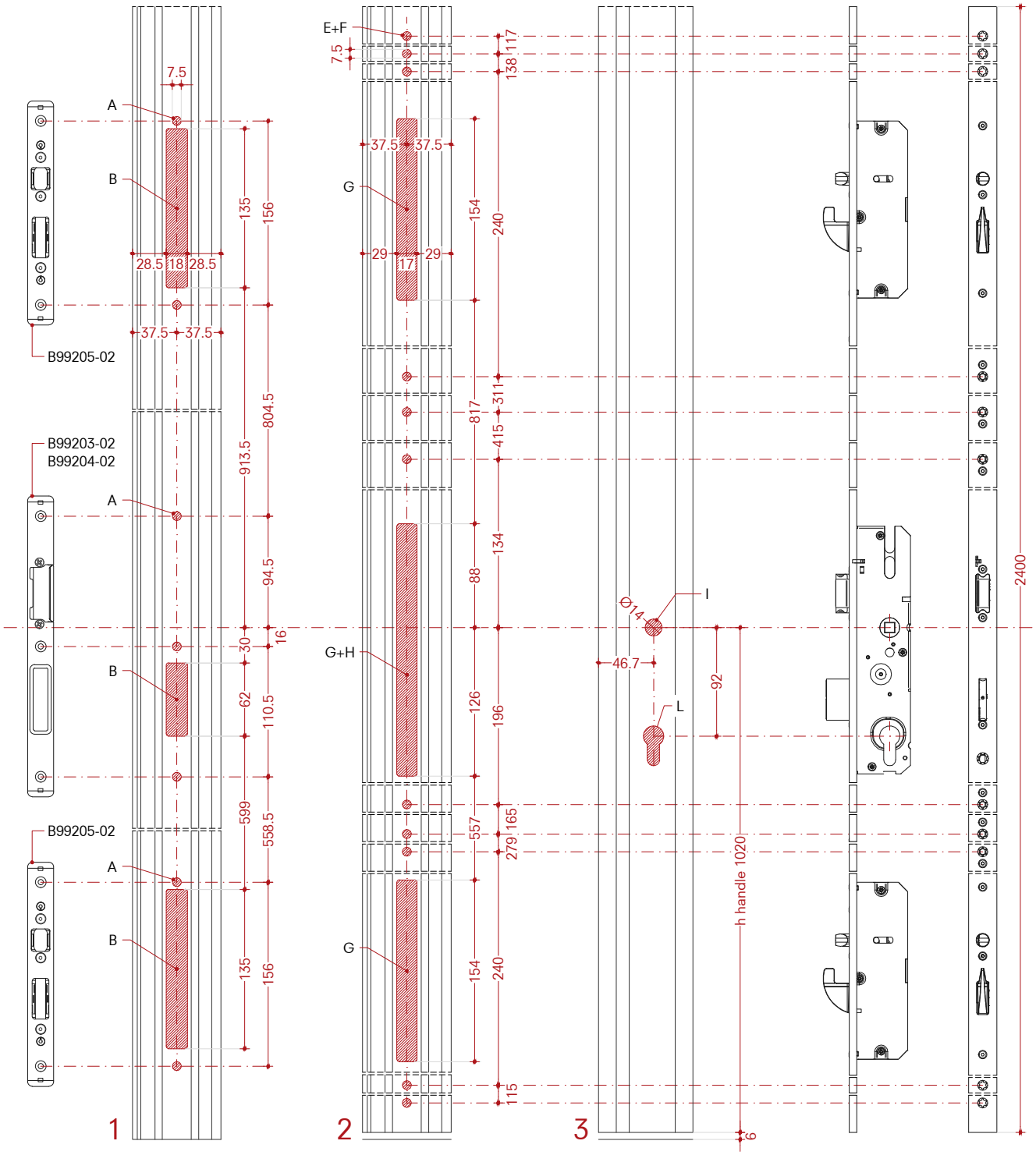
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Lock B99173-02 with locking box
FT 7512HK-nn + FT 7550T-nn
Open out door

Einbau
Fallen-Riegel-Schloss B99173-02 mit
Schlosskasten FT 7512HK-nn + FT 7550T-nn
Tür nach außen öffnend

Schéma de montage
Serrure B99173-02 avec
FT 7512HK-nn + FT 7550T-nn
Porte ouverture extérieure

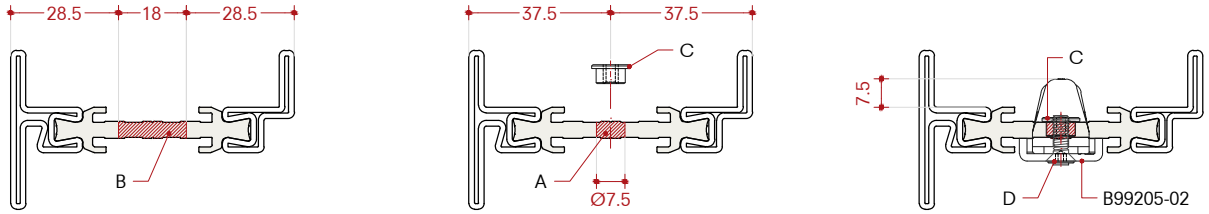


Scale 1:5
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

Maßstab 1:5
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

Échelle1:5
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

1



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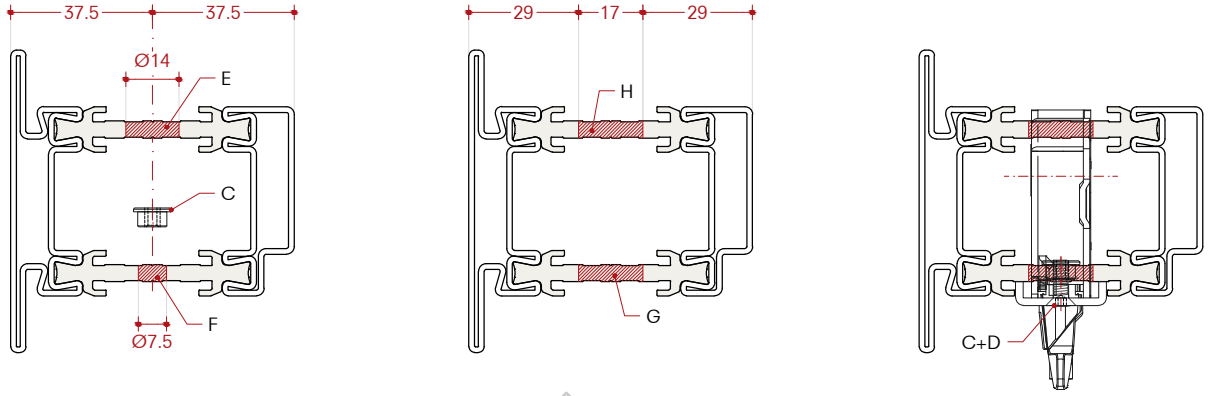

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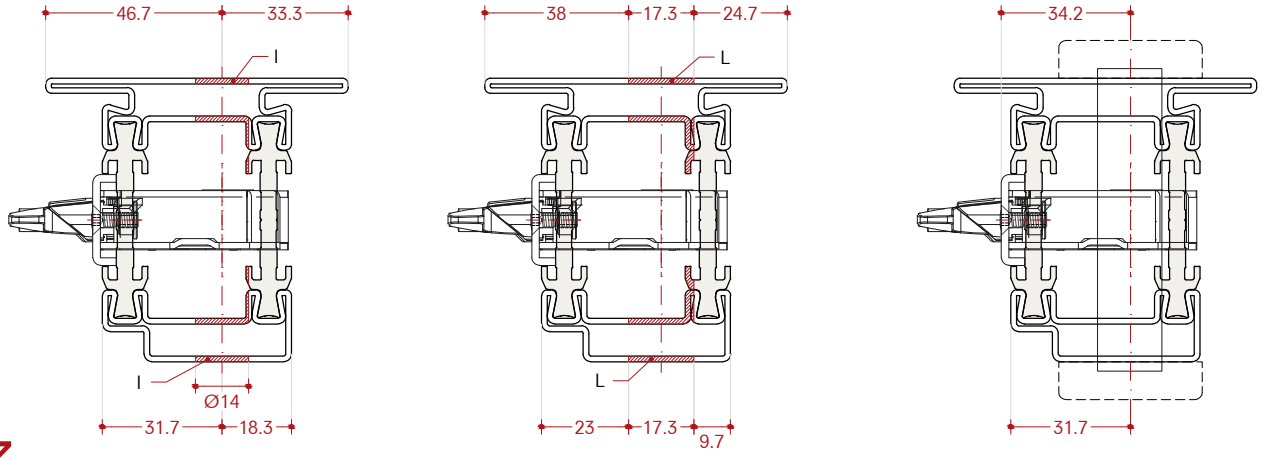
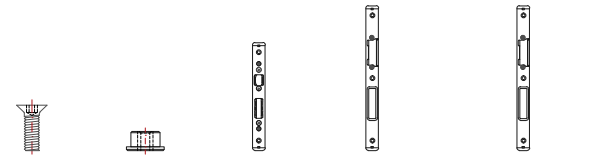
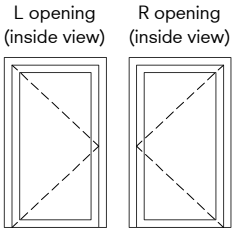






A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Cut-out in the door leaf
H) Cut-out in the door leaf
I) Lever handle bore Ø14 mm
J) Profile cylinder milling

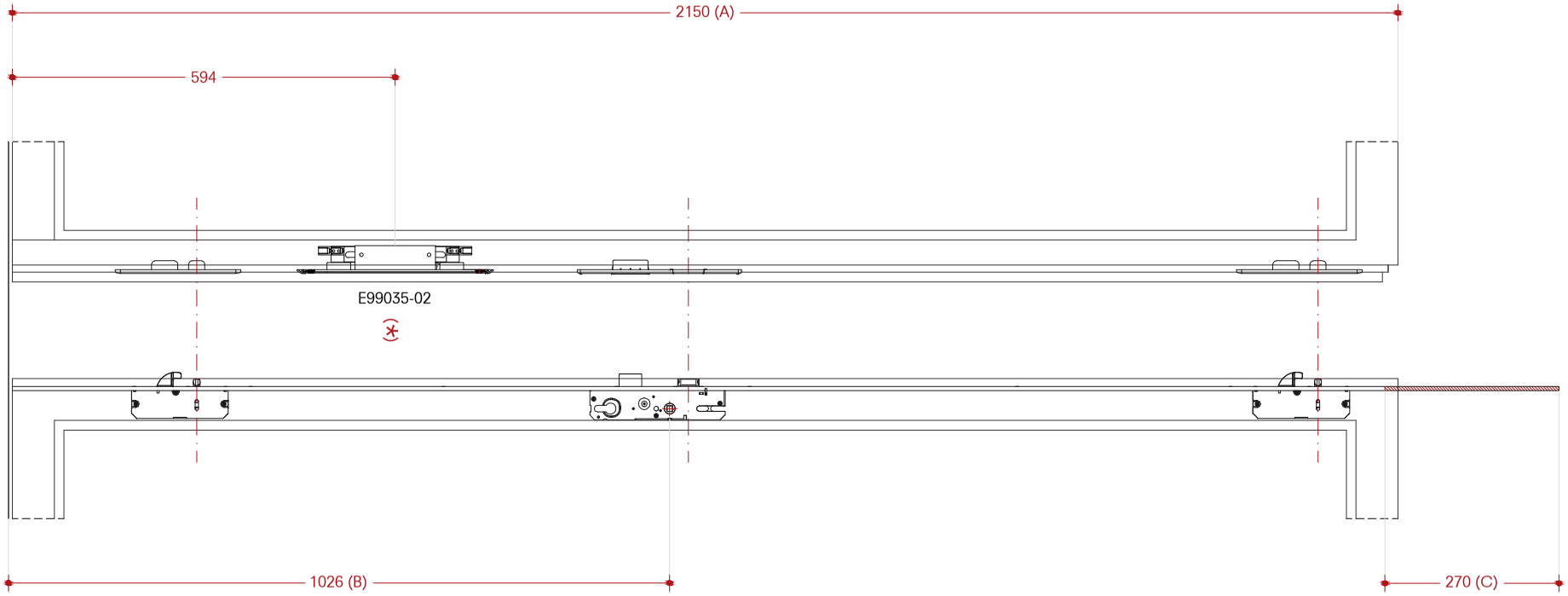
A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel
H) Ausfräsung im Türflügel
I) Drückerbohrung Ø14 mm
J) Fräsung Profilzylinder

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte
H) Fraisage dans le vantail de porte
I) Alésage de la béquille Ø14 mm
J) Fraisage de cylindres profilés

Installation
Flush bolt E99035-02
Lock B99173-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E99035-02
Fallen-Riegel-Schloss B99173-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

Schéma de montage
Verrou E99035-02
Serrure B99173-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure



Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

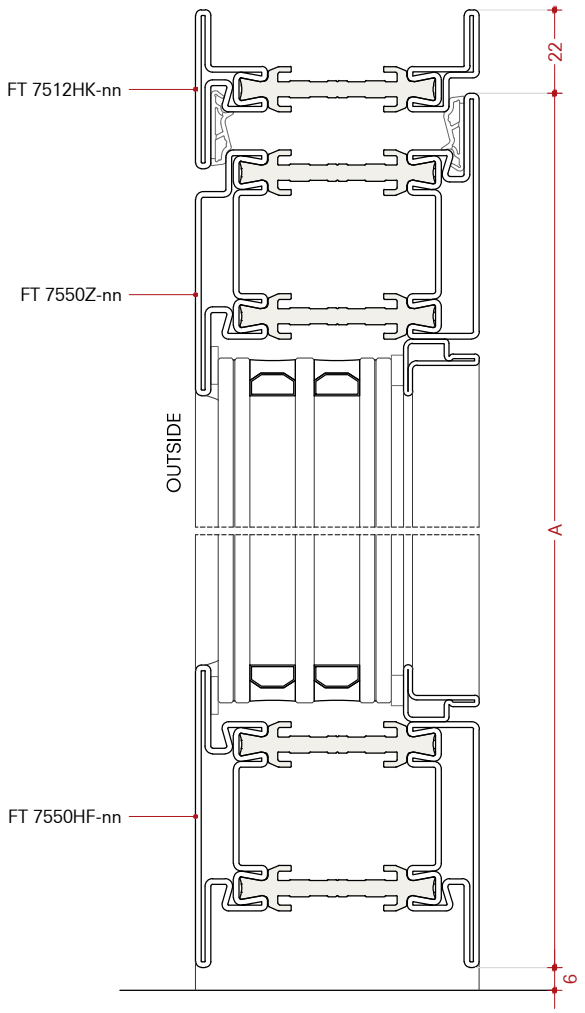
(*) Evaluate the position of the flush bolt E99035-02, installation allowed above or below the lock.

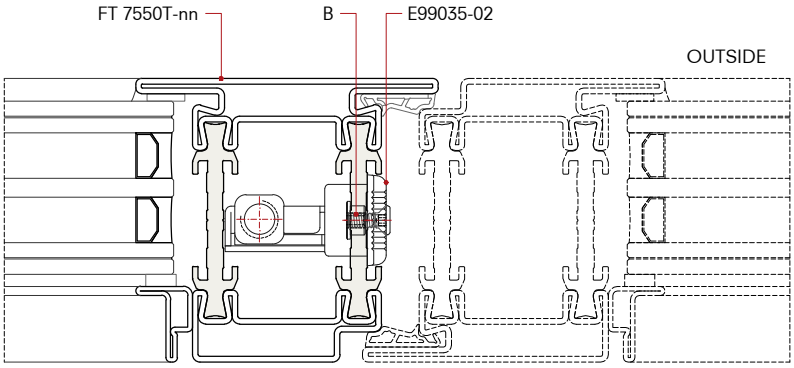
Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

(*) Lage des Kantriegel E99035-02 bewerten, Einbau über oder unter dem Schloss zulässig.

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal

(*) Évaluez la position du verrou E99035-02, installation autorisée au-dessus ou au-dessous de la serrure.





A) Height leaf
B) Fastening with M4x10 ISO10642 screws and D99704-08 M4 brass bushing

A) Höhe Flügel
B) Befestigungsschrauben M4x10 ISO10642 und D99704-08 Messingbuchse M4

A) Hauteur du vantail
B) Fixation avec vis M4x10 ISO10642 et boîte M4 en laiton D99704-08

Installation
Flush bolt E9902X-35
Lock B99173-02
Double leaf door open in with widening on complete height on lock side

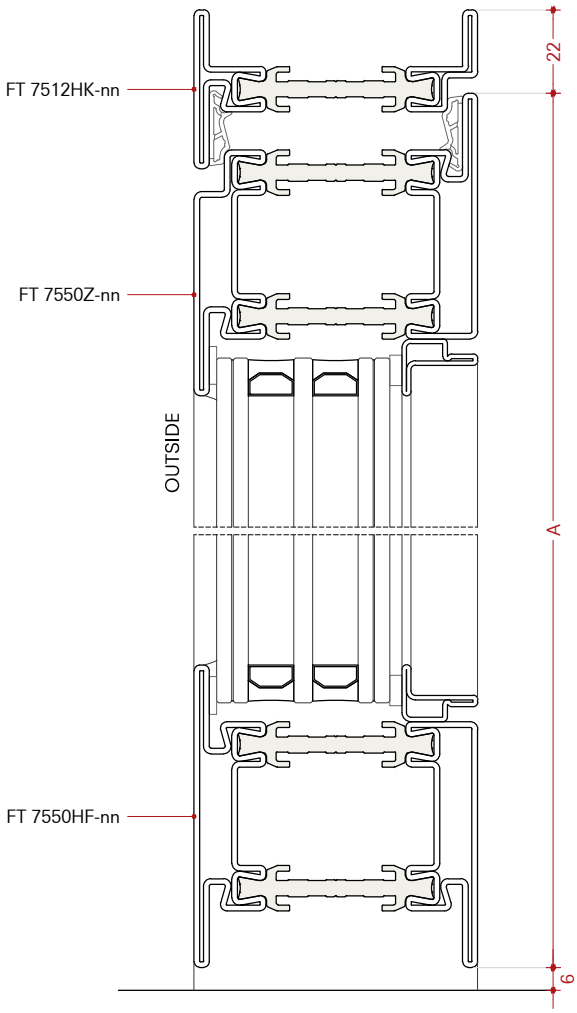
Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99173-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

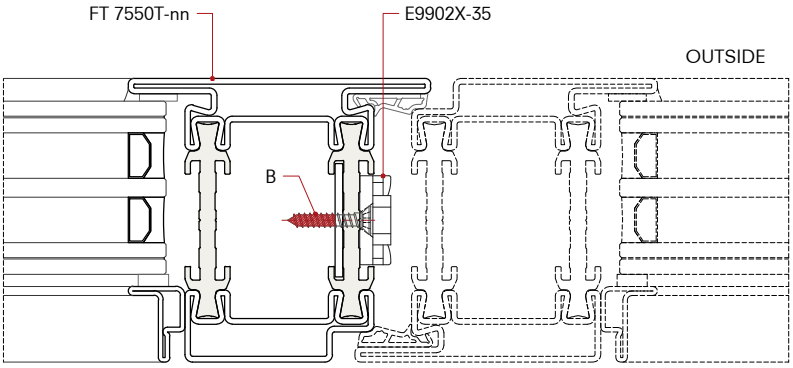
Schéma de montage
Verrou E9902X-35
Serrure B99173-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal





A) Height leaf
B) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

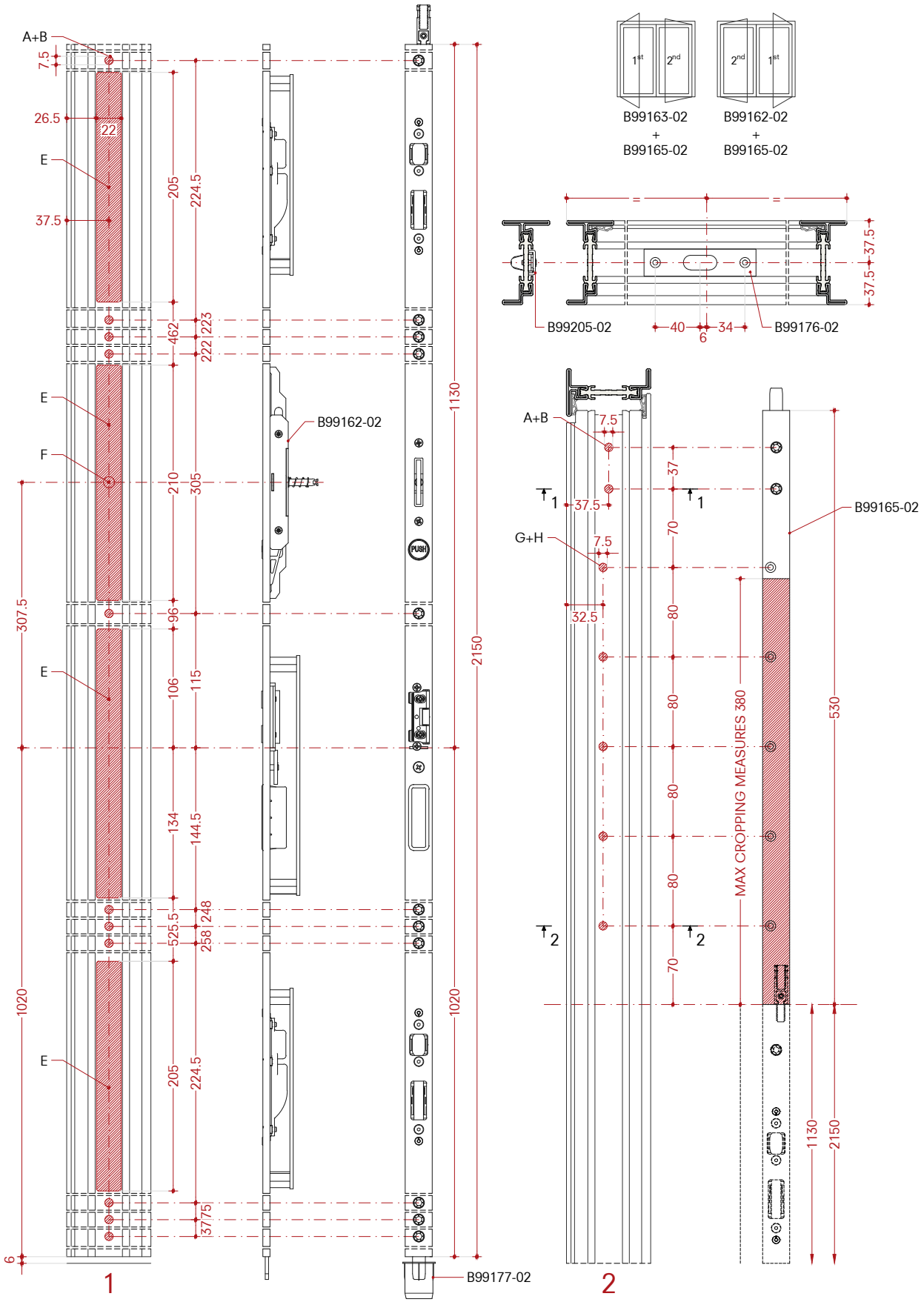
A) Höhe Flügel
B) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

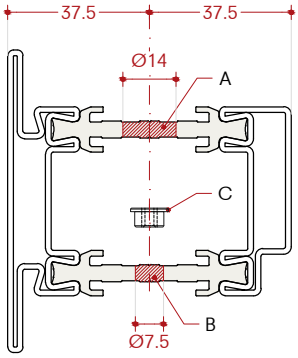
A) Hauteur du vantail
B) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

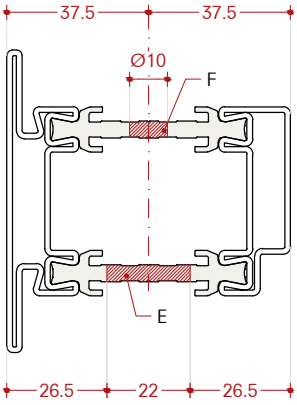
Installation
2nd leaf shoot bolt B99165-02
Open in door

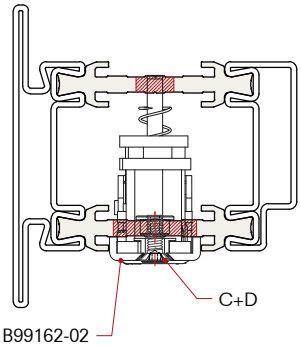
Einbau
Standflügel Kantriegel B99165-02
Tür nach innen öffnend

Schéma de montage
Verrou à bascule 2e ouvrant B99165-02
Porte ouverture intérieure



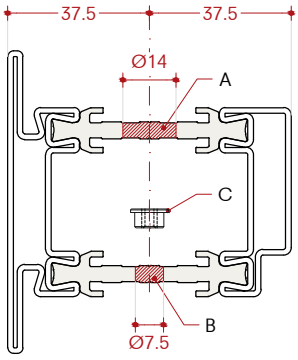




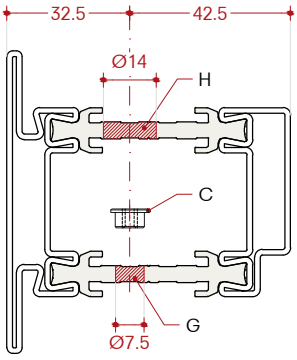


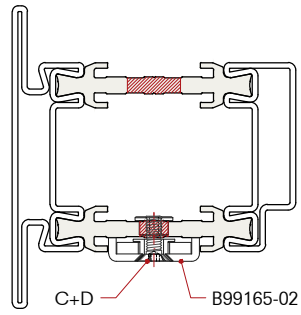
1

1-1

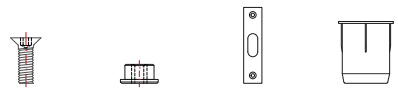


2-2





2



M4x12 ISO 10642 n° 20 pcs
D99704-08 n° 20 pcs
B99176-02 n° 1 pc
B99177-02 n° 1 pc

A) Holes Ø14 mm in the door leaf
B) Holes Ø7.5 mm in the door leaf
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Milling in the door leaf
F) Holes Ø10 mm in the door leaf
G) Holes Ø7.5 mm in the door leaf
H) Holes Ø14 mm in the door leaf

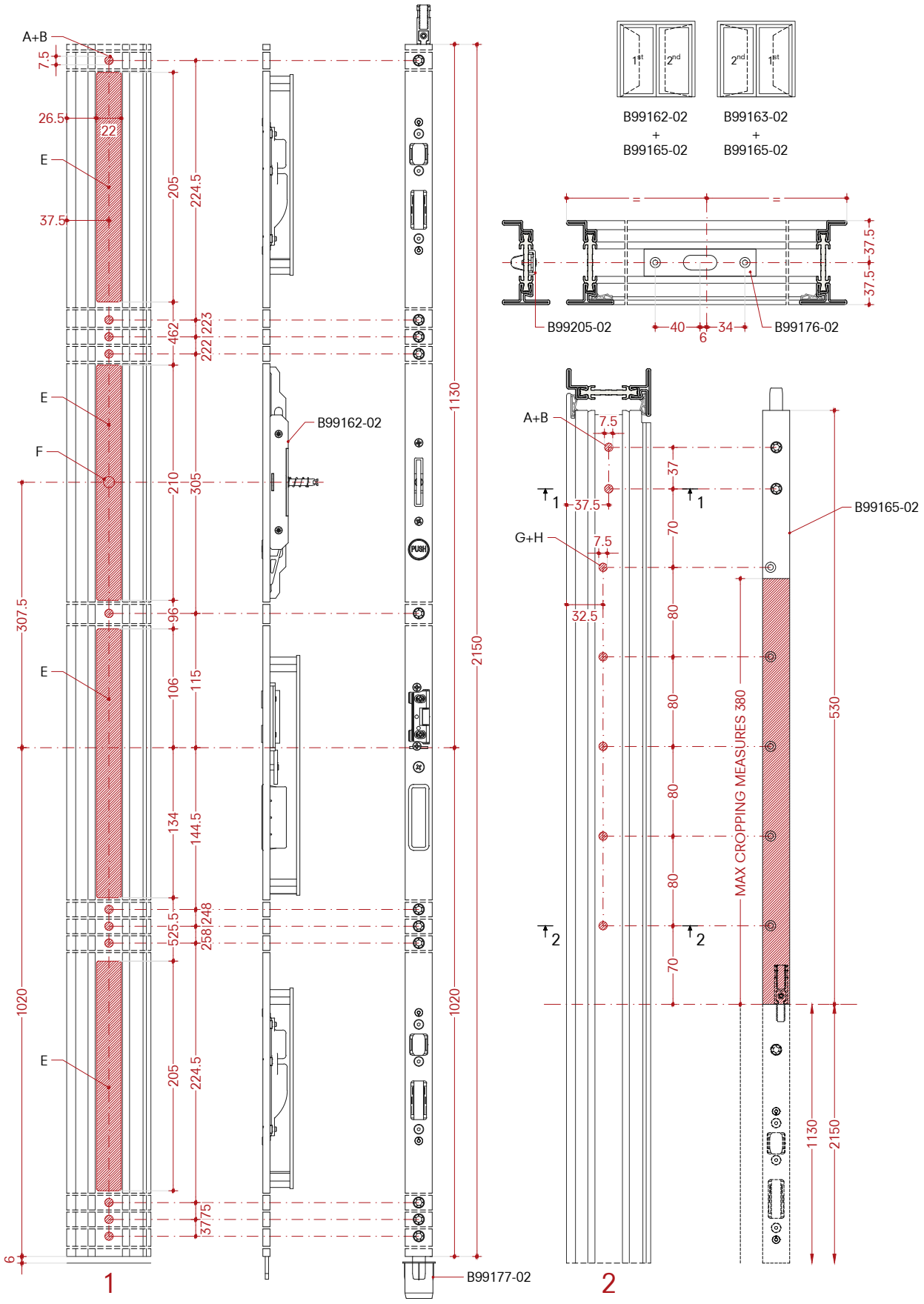
A) Bohrungen Ø14 mm im Türflügel
B) Bohrungen Ø7.5 mm im Türflügel
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Ausfräsung im Türflügel
F) Bohrungen Ø10 mm im Türflügel
G) Bohrungen Ø7.5 mm im Türflügel
H) Bohrungen Ø14 mm im Türflügel

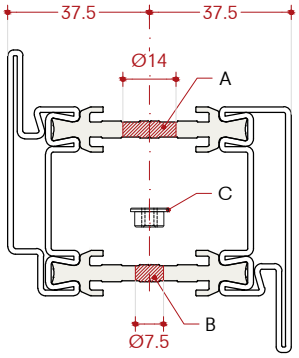
A) Trous Ø14 mm dans le vantail de porte
B) Trous Ø7.5 mm dans le vantail de porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Fraisage dans le vantail de porte
F) Trous Ø10 mm dans le vantail de porte
G) Trous Ø7.5 mm dans le vantail de porte
H) Trous Ø14 mm dans le vantail de porte

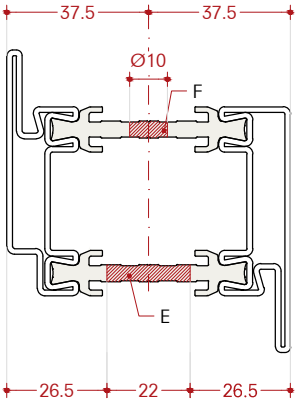
Installation
2nd leaf shoot bolt B99165-02
Open out door

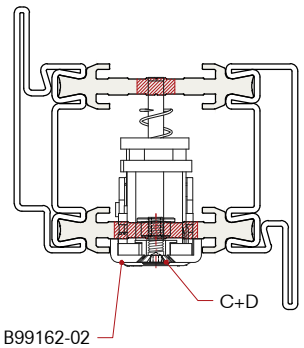
Einbau
Standflügel Kantriegel B99165-02
Tür nach außen öffnend

Schéma de montage
Verrou à bascule 2e ouvrant B99165-02
Porte ouverture extérieure









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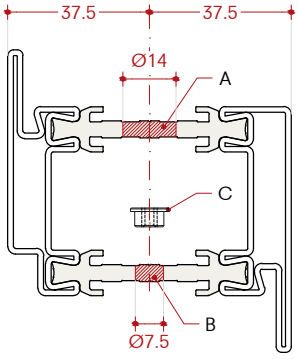

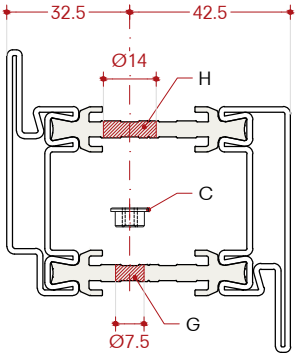

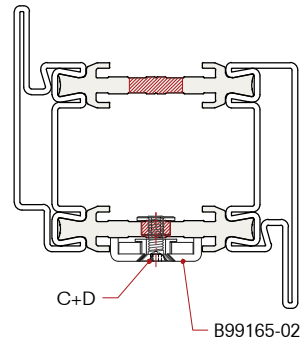

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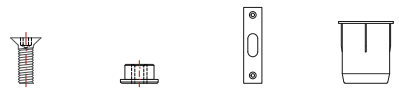


M4x12 ISO 10642 n° 20 pcs | D99704-08 n° 20 pcs | B99176-02 n° 1 pc | B99177-02 n° 1 pc

A) Holes Ø14 mm in the door leaf
B) Holes Ø7.5 mm in the door leaf
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Milling in the door leaf
F) Holes Ø10 mm in the door leaf
G) Holes Ø7.5 mm in the door leaf
H) Holes Ø14 mm in the door leaf

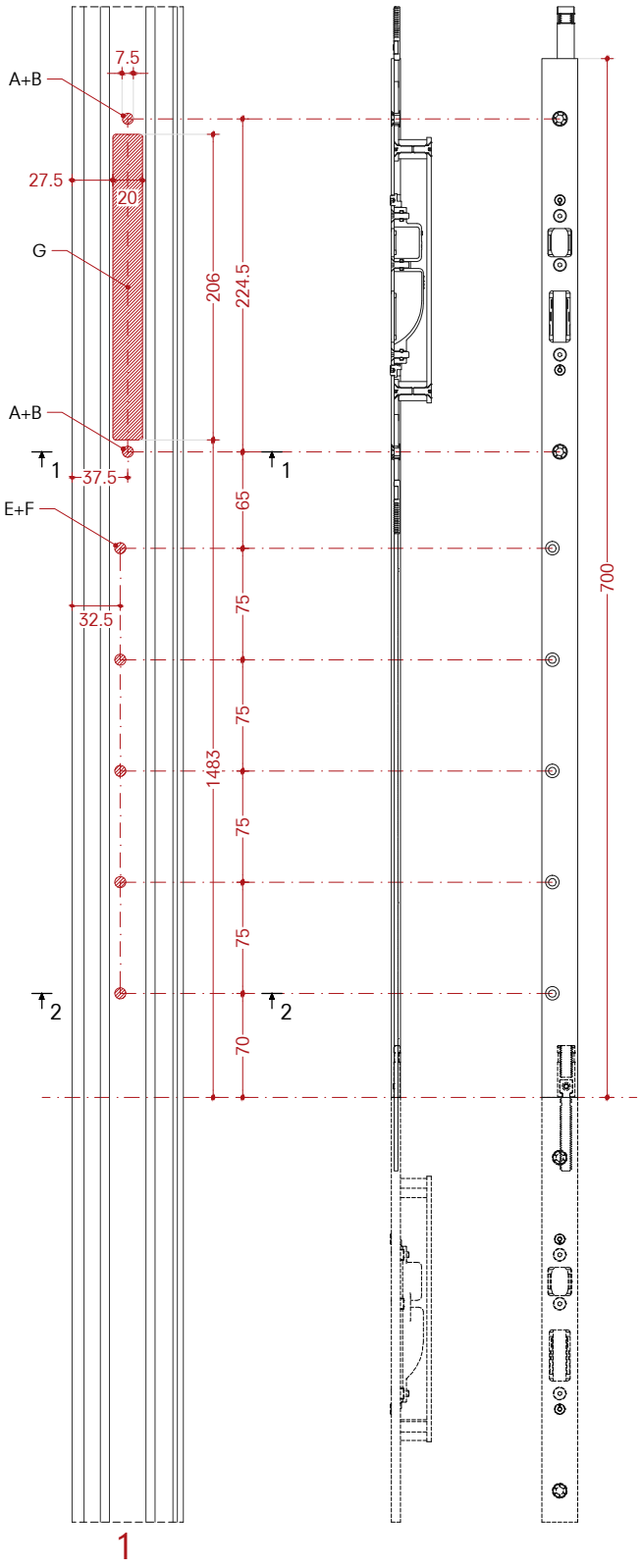
A) Bohrungen Ø14 mm im Türflügel
B) Bohrungen Ø7.5 mm im Türflügel
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Ausfräsung im Türflügel
F) Bohrungen Ø10 mm im Türflügel
G) Bohrungen Ø7.5 mm im Türflügel
H) Bohrungen Ø14 mm im Türflügel

A) Trous Ø14 mm dans le vantail de porte
B) Trous Ø7.5 mm dans le vantail de porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Fraisage dans le vantail de porte
F) Trous Ø10 mm dans le vantail de porte
G) Trous Ø7.5 mm dans le vantail de porte
H) Trous Ø14 mm dans le vantail de porte

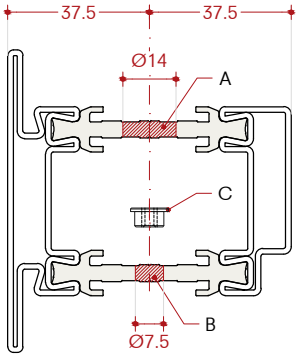
Installation
2nd leaf extension B99164-02
Open in door

Einbau
Standflügel Verlängerung B99164-02
Tür nach innen öffnend

Schéma de montage
Extension 2e ouvrant B99164-02
Porte ouverture intérieure



1-1



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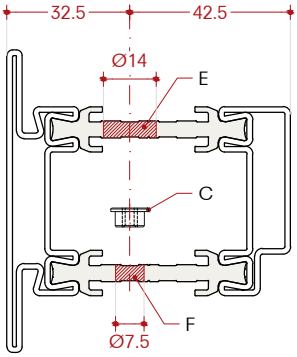
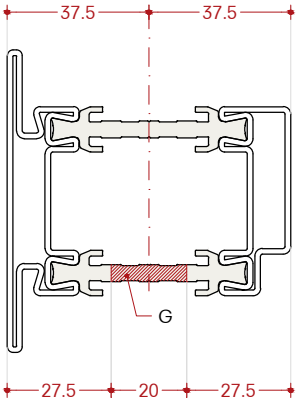
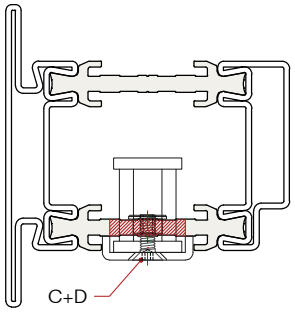






1

M4x12
ISO 10642
n° 7 pcs

D99704-08
n° 7 pcs

A) Holes Ø14 mm in the door leaf
B) Holes Ø7.5 mm in the door leaf
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Milling in the door leaf

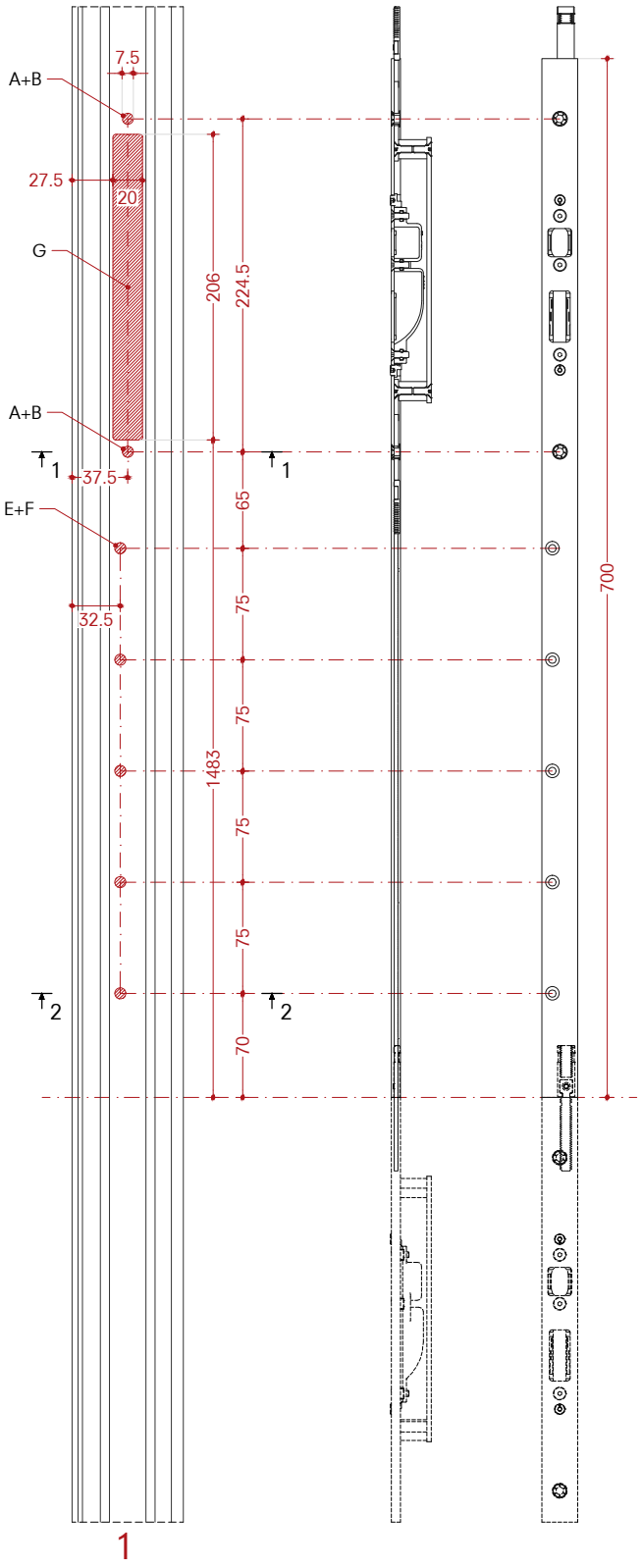
A) Bohrungen Ø14 mm im Türflügel
B) Bohrungen Ø7.5 mm im Türflügel
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

A) Trous Ø14 mm dans le vantail de porte
B) Trous Ø7.5 mm dans le vantail de porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte

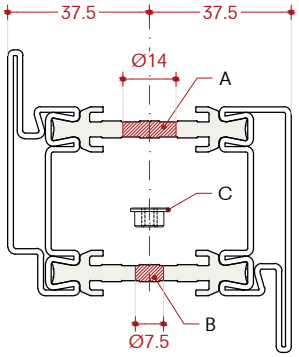
Installation
2nd leaf extension B99164-02
Open out door

Einbau
Standflügel Verlängerung B99164-02
Tür nach außen öffnend

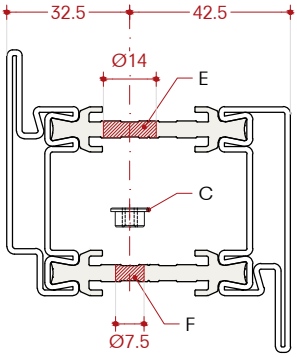
Schéma de montage
Extension 2e ouvrant B99164-02
Porte ouverture extérieure

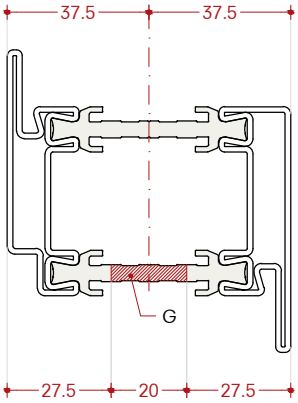


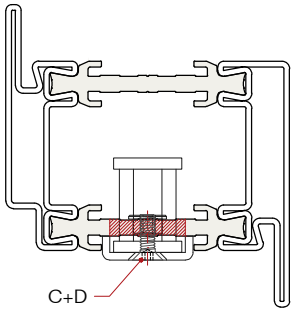
1-1



2-2







1

M4x12
ISO 10642
n° 7 pcs

D99704-08
n° 7 pcs

A) Holes Ø14 mm in the door leaf
B) Holes Ø7.5 mm in the door leaf
C) D99704-08 M4 brass bushing
D) Fastening with M4x12 ISO10642 screws
E) Holes Ø14 mm in the door leaf
F) Holes Ø7.5 mm in the door leaf
G) Milling in the door leaf

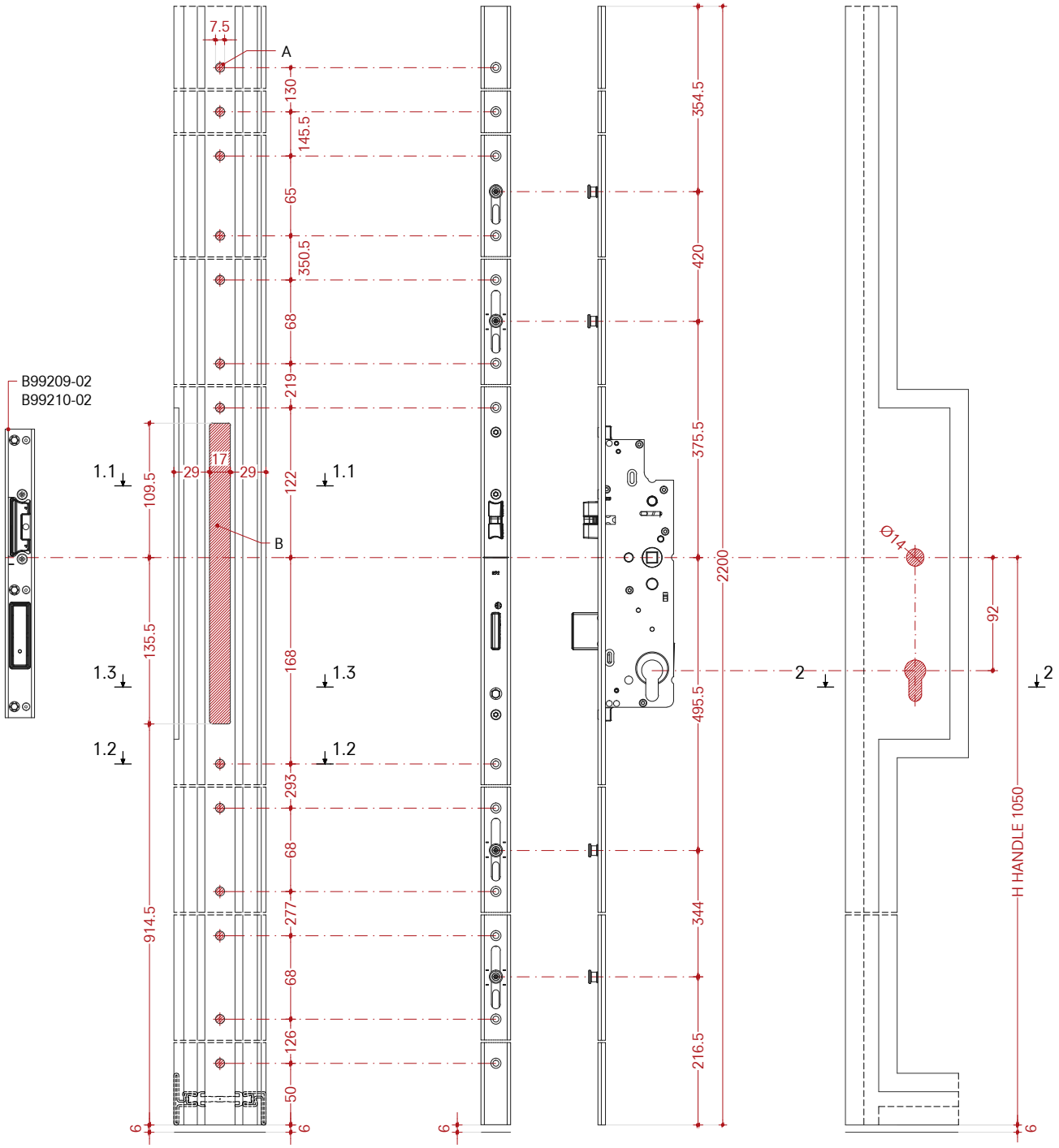
A) Bohrungen Ø14 mm im Türflügel
B) Bohrungen Ø7.5 mm im Türflügel
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x12 ISO10642
E) Bohrungen Ø14 mm im Türflügel
F) Bohrungen Ø7.5 mm im Türflügel
G) Ausfräsung im Türflügel

A) Trous Ø14 mm dans le vantail de porte
B) Trous Ø7.5 mm dans le vantail de porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x12 ISO10642
E) Trous Ø14 mm dans le vantail de porte
F) Trous Ø7.5 mm dans le vantail de porte
G) Fraisage dans le vantail de porte

Installation
Lock B99174-02
with locking box FT 7512ZK-nn
Open in door

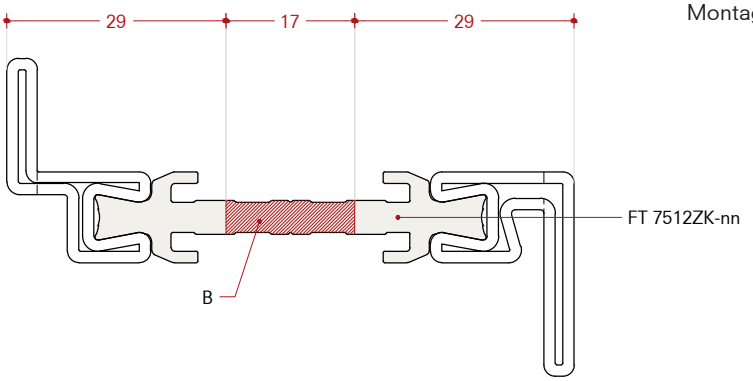
Einbau
Fallen-Riegel-Schloss B99174-02
mit Schlosskasten FT 7512ZK-nn
Tür nach innen öffnend

Schéma de montage
Serrure B99174-02
avec boîte de verrouillage FT 7512ZK-nn
Porte ouverture intérieure



Scale 1:5 Maßstab 1:5 Échelle1:5

1.1



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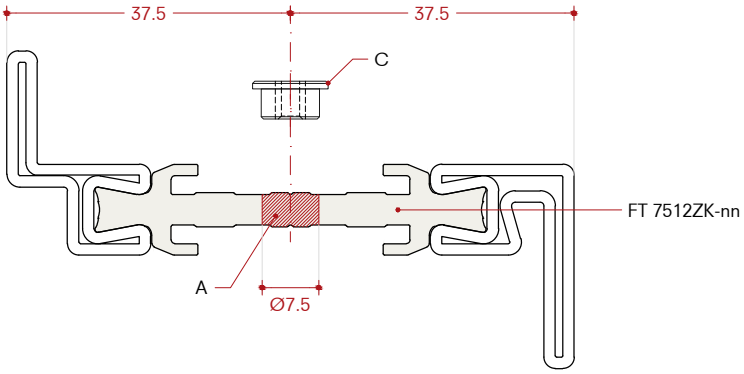

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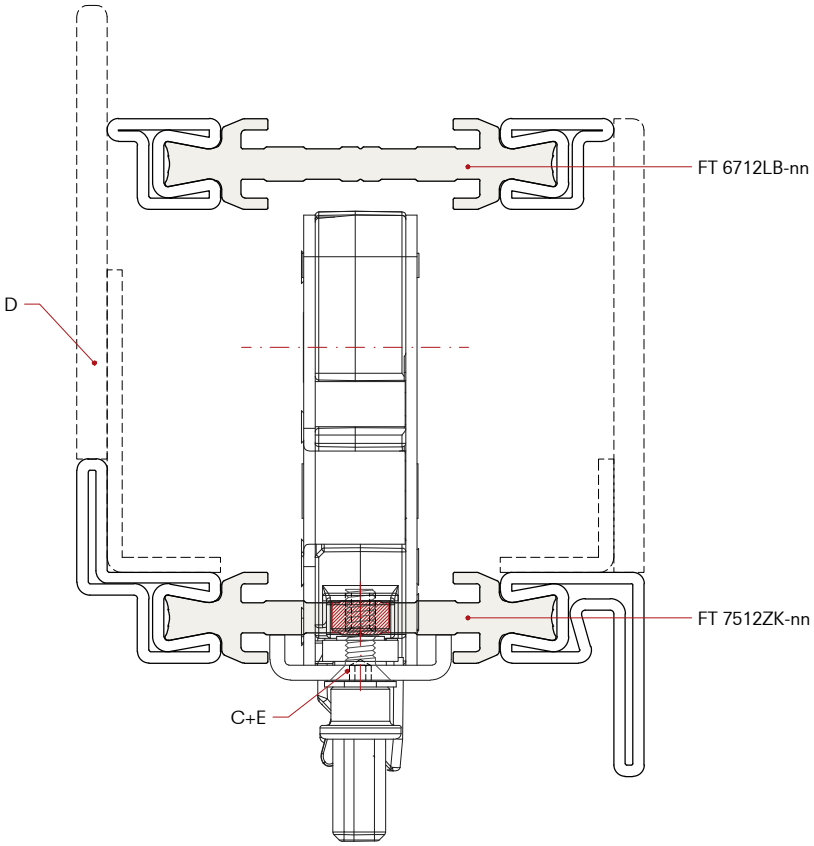
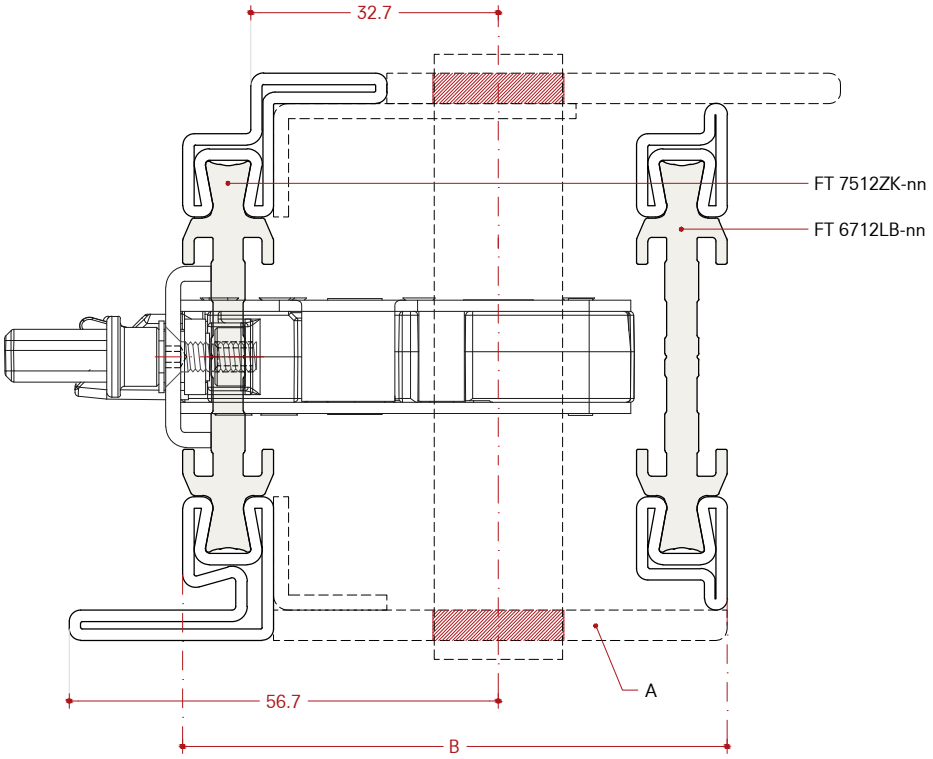


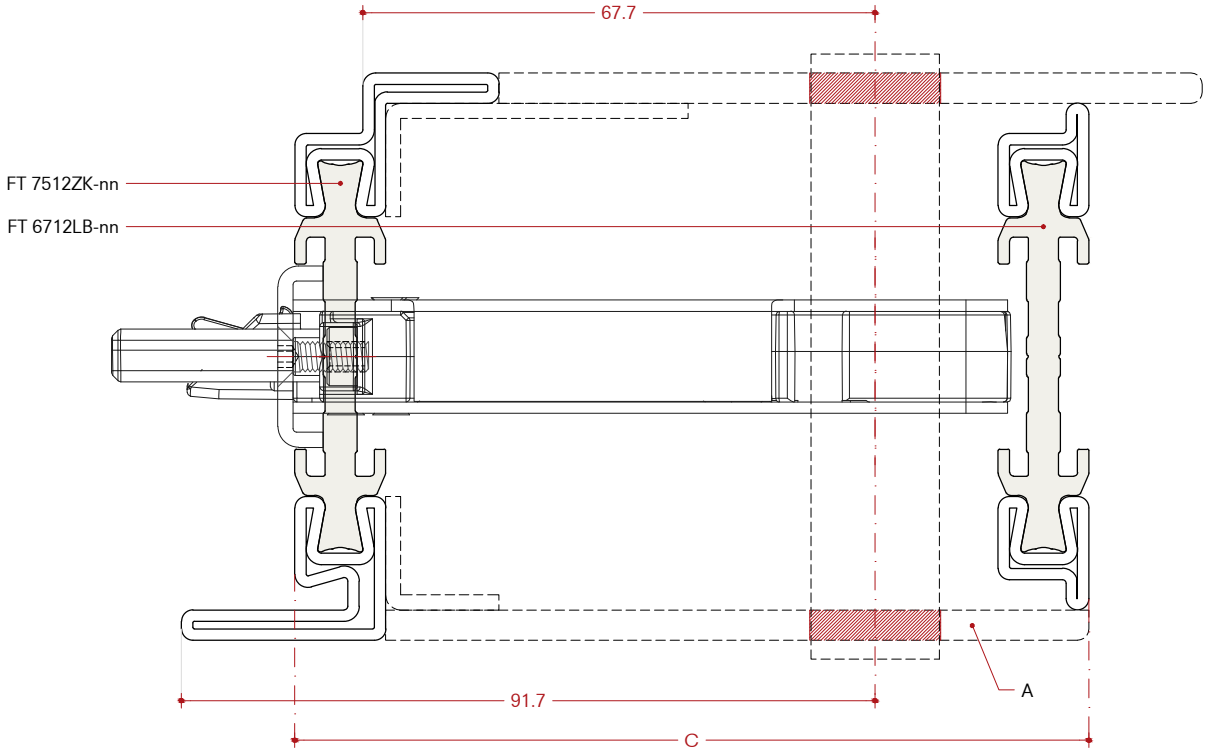
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Locking box
E) Fastening with M4x12 ISO10642 screws

A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Schlosskasten
E) Befestigungsschrauben M4x12 ISO10642

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Boîte pour serrure
E) Fixation avec vis M4x12 ISO10642

2

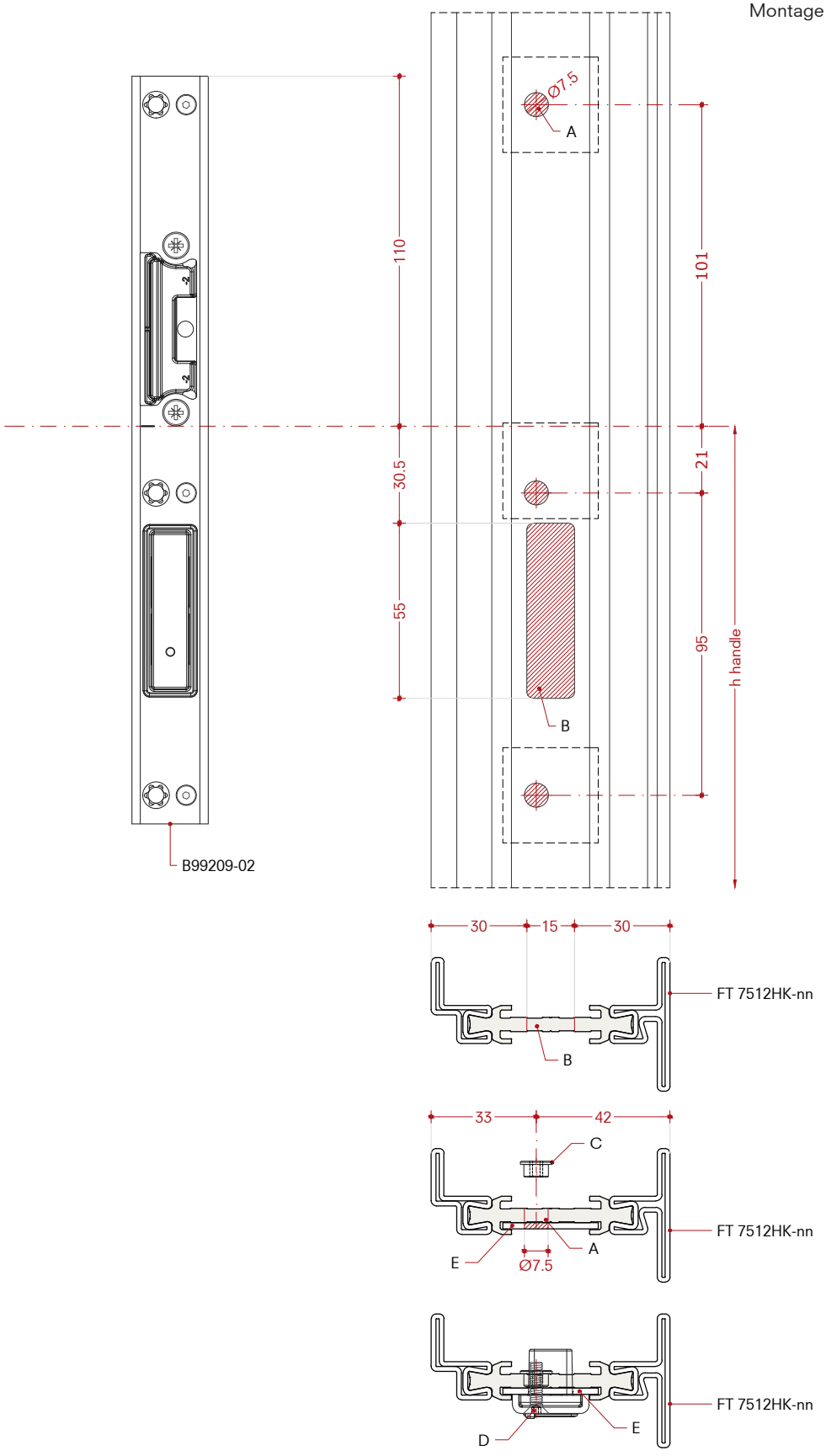




A) Locking box
B) Minimum size recommended 70 mm
C) Minimum size recommended 105 mm

A) Schlosskasten
B) Mindestgrösse empfohlen 70 mm
C) Mindestgrösse empfohlen 105 mm

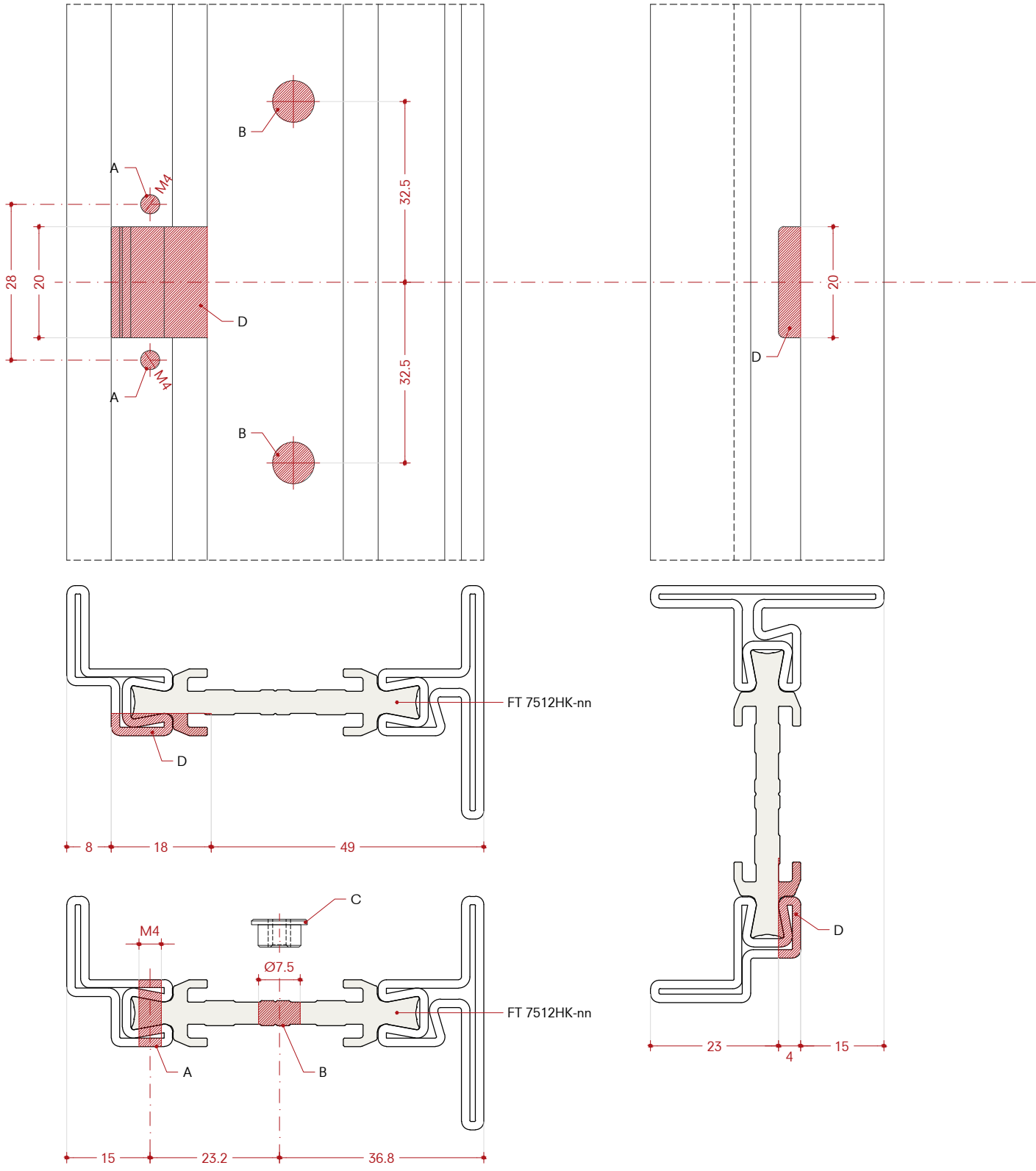
A) Boîte pour serrure
B) Taille minimale recommandée 70 mm
C) Taille minimale recommandée 105 mm



A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x16 ISO10642 screws and cut the screw
E) Plate 30x20x2 mm fixed by glue on profile (not provided) only for double leaves door

A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x16 ISO10642 und Schraube kürzen
E) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung) nur für zweiflüglige Tür

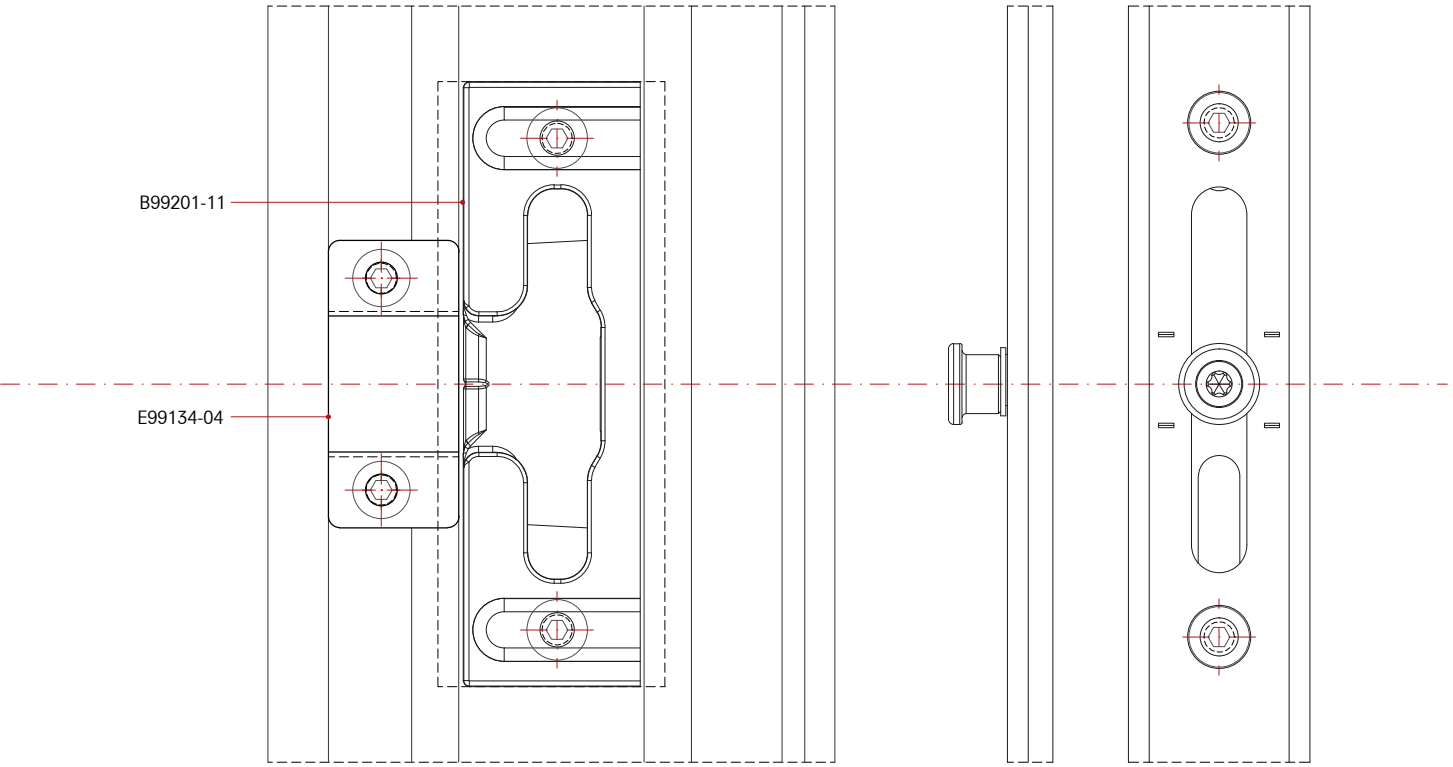
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x16 ISO10642 et couper la vis
E) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé, seulement pour porte à deux vantaux

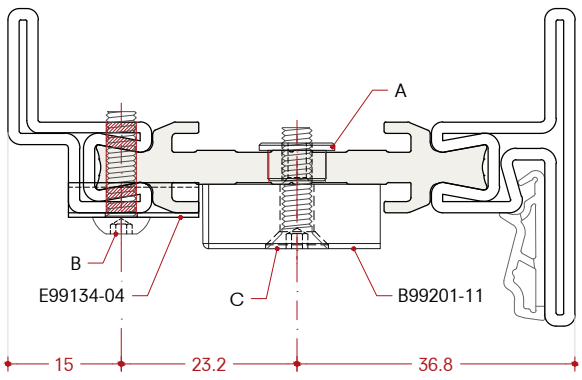


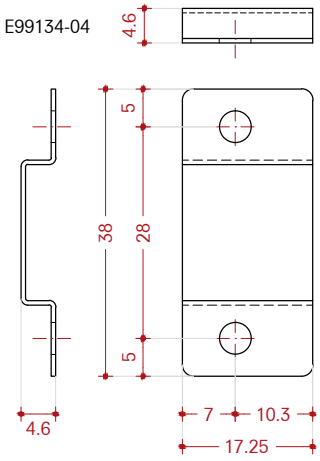
A) Holes M4 in door frame
B) Holes Ø7.5 mm in door frame
C) D99704-08 M4 brass bushing
D) Cut-out in door frame

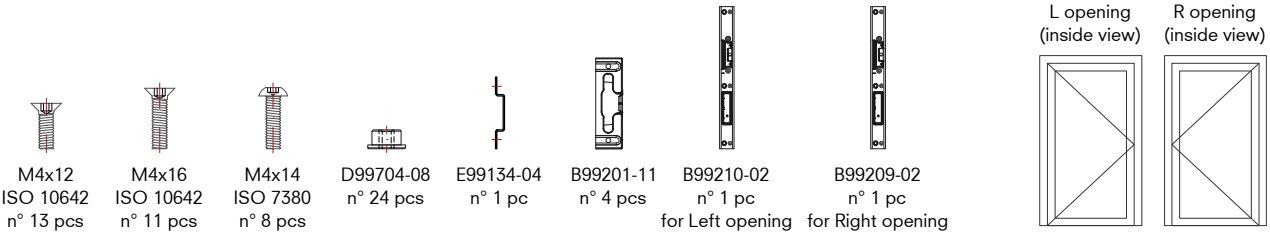
A) Bohrungen M4 im Türrahmen
B) Bohrungen Ø7.5 mm im Türrahmen
C) D99704-08 Messingbuchse M4
D) Ausfräsung im Türrahmen

A) Trous M4 dans le cadre de la porte
B) Trous Ø7.5 mm dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fraisage dans le cadre de la porte









A) D99704-08 M4 brass bushing
B) Fastening with M4x14 ISO7380 screws
C) Fastening with M4x16 ISO10642 screws

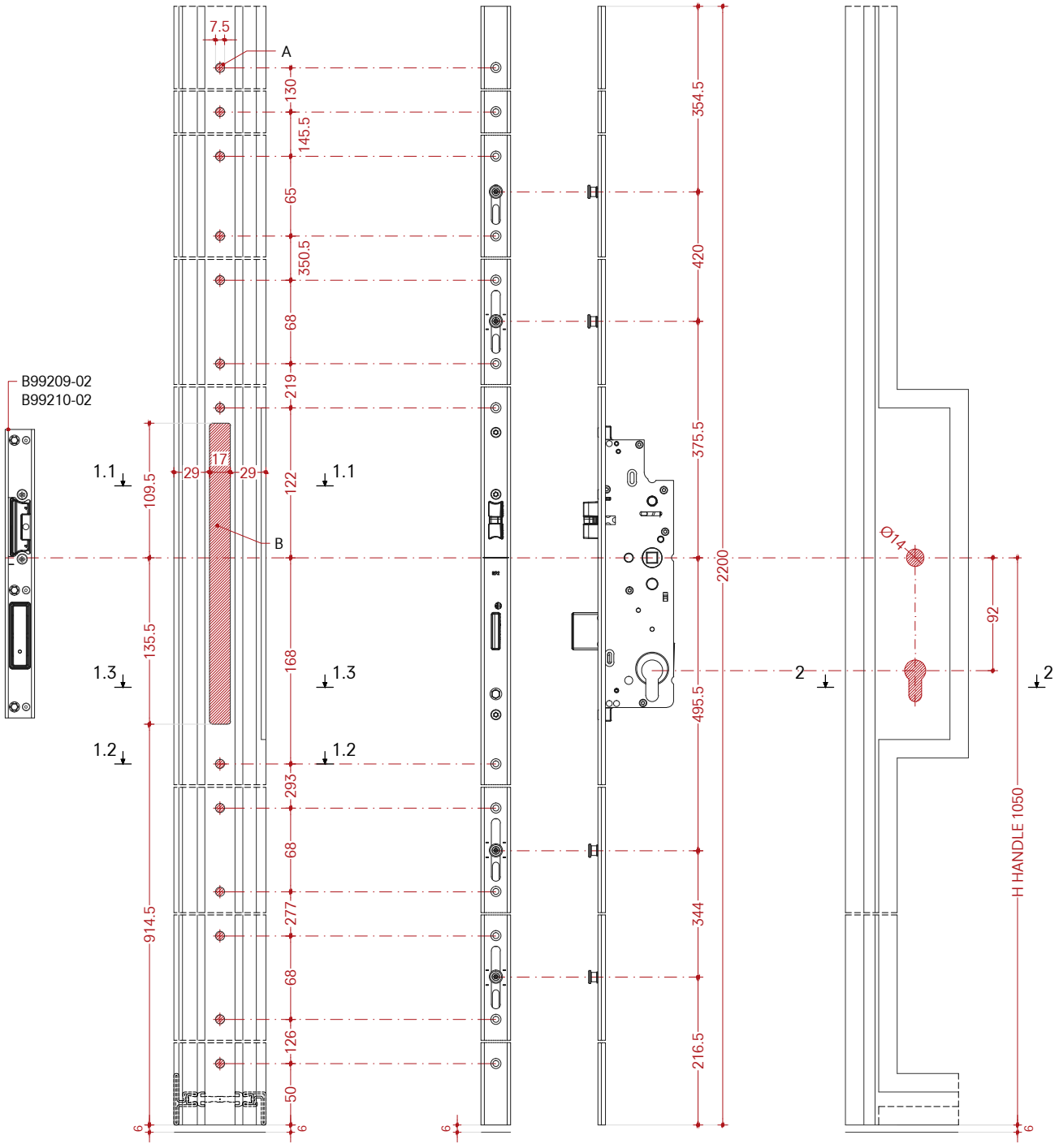
A) D99704-08 Messingbuchse M4
B) Befestigungsschrauben M4x14 ISO7380
C) Befestigungsschrauben M4x16 ISO10642

A) D99704-08 Boîte en laiton M4
B) Fixation avec vis M4x14 ISO7380
C) Fixation avec vis M4x16 ISO10642

Installation
Lock B99174-02
with locking box FT 7512TK-nn
Open out door

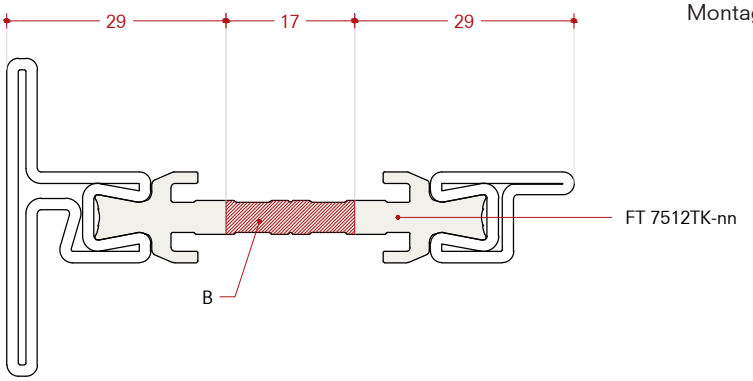
Einbau
Fallen-Riegel-Schloss B99174-02
mit Schlosskasten FT 7512TK-nn
Tür nach außen öffnend

Schéma de montage
Serrure B99174-02
avec boîte de verrouillage FT 7512TK-nn
Porte ouverture extérieure

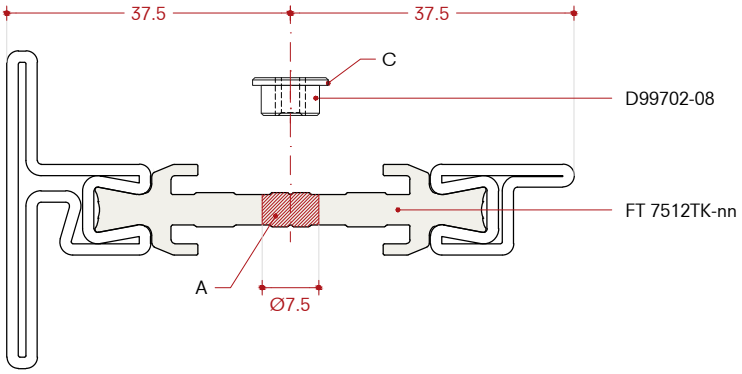


Scale 1:5 Maßstab 1:5 Échelle1:5

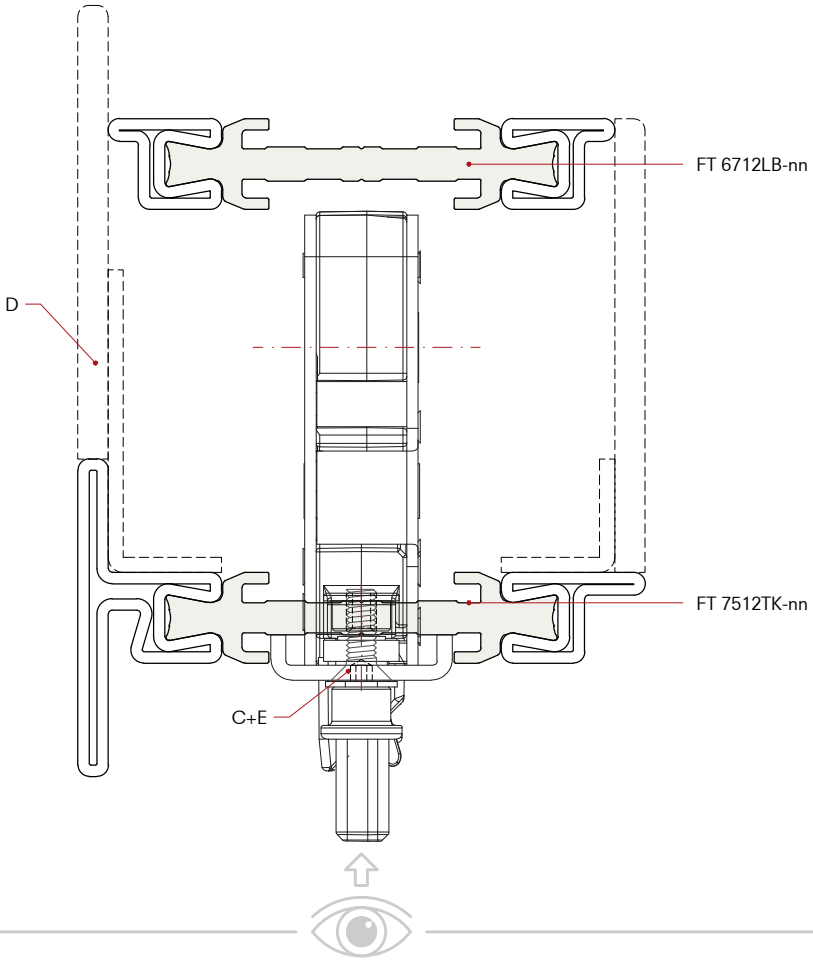
1.1



1.2



1.3

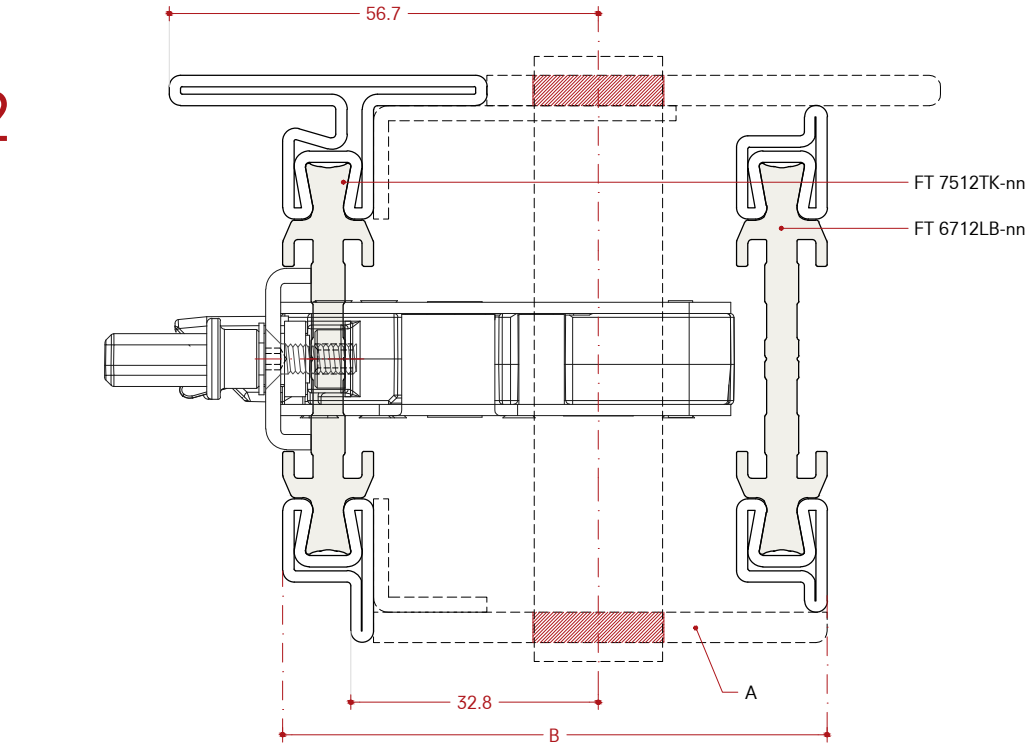


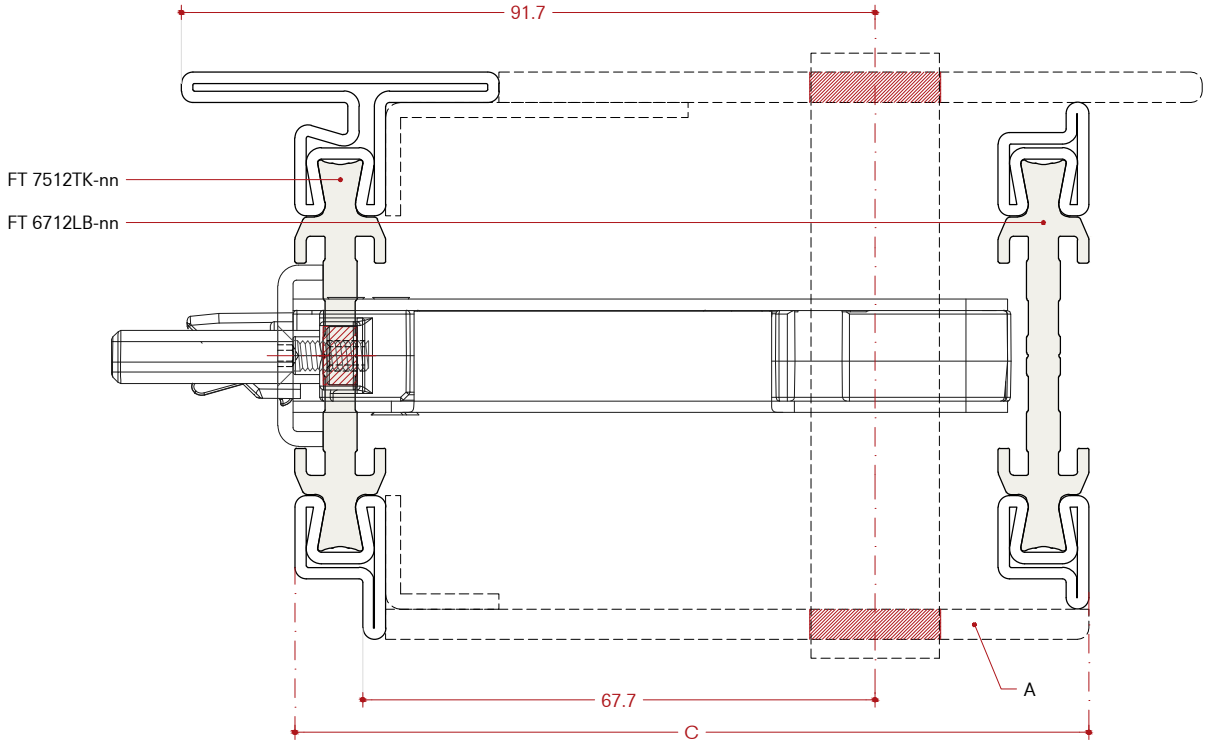
A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Locking box
E) Fastening with M4x12 ISO10642 screws

A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Schlosskasten
E) Befestigungsschrauben M4x12 ISO10642

A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Boîte pour serrure
E) Fixation avec vis M4x12 ISO10642

2

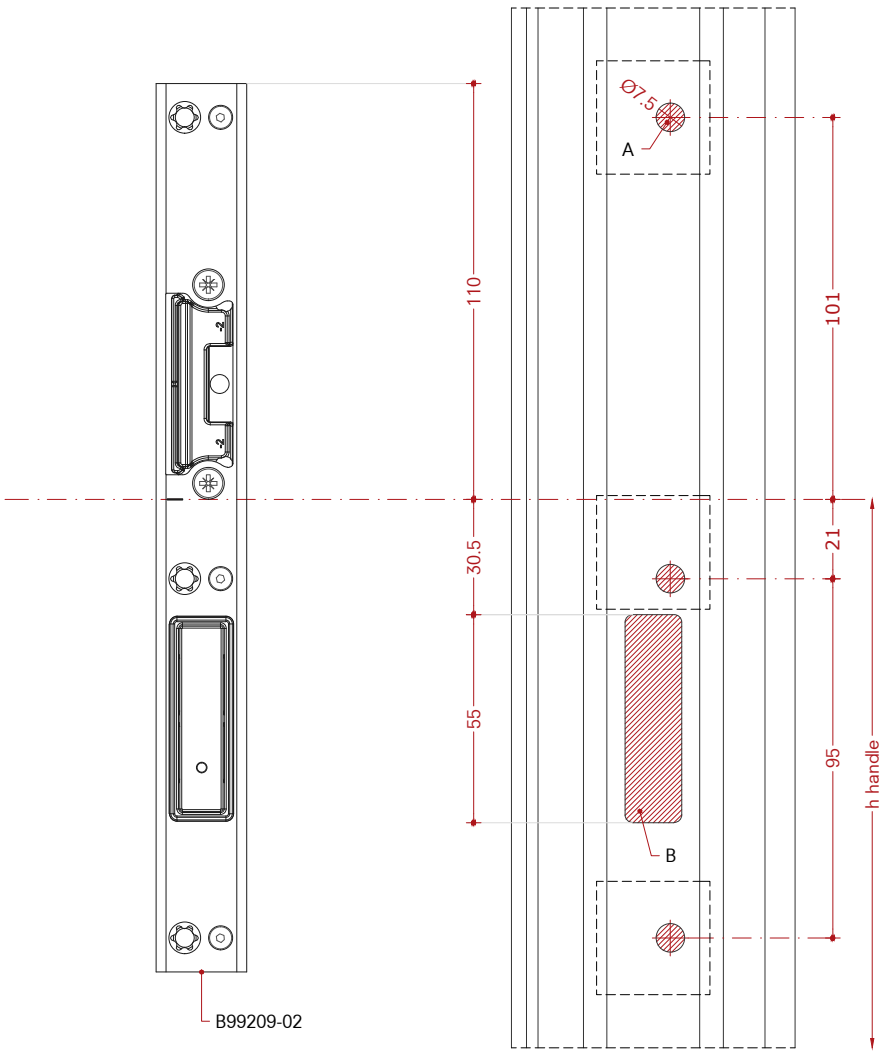


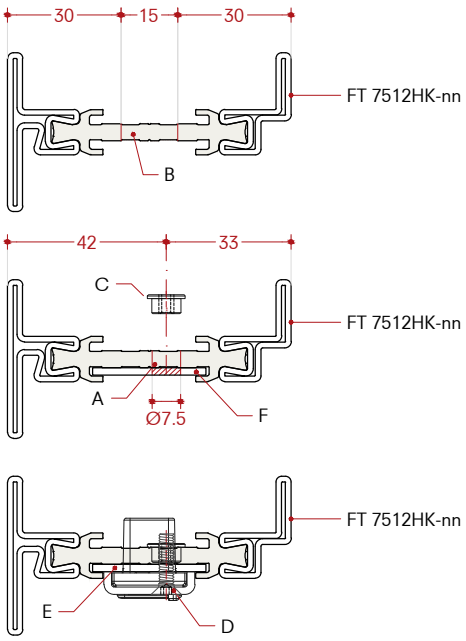


A) Locking box
B) Minimum size recommended 70 mm
C) Minimum size recommended 105 mm

A) Schlosskasten
B) Mindestgrösse empfohlen 70 mm
C) Mindestgrösse empfohlen 105 mm

A) Boîte pour serrure
B) Taille minimale recommandée 70 mm
C) Taille minimale recommandée 105 mm

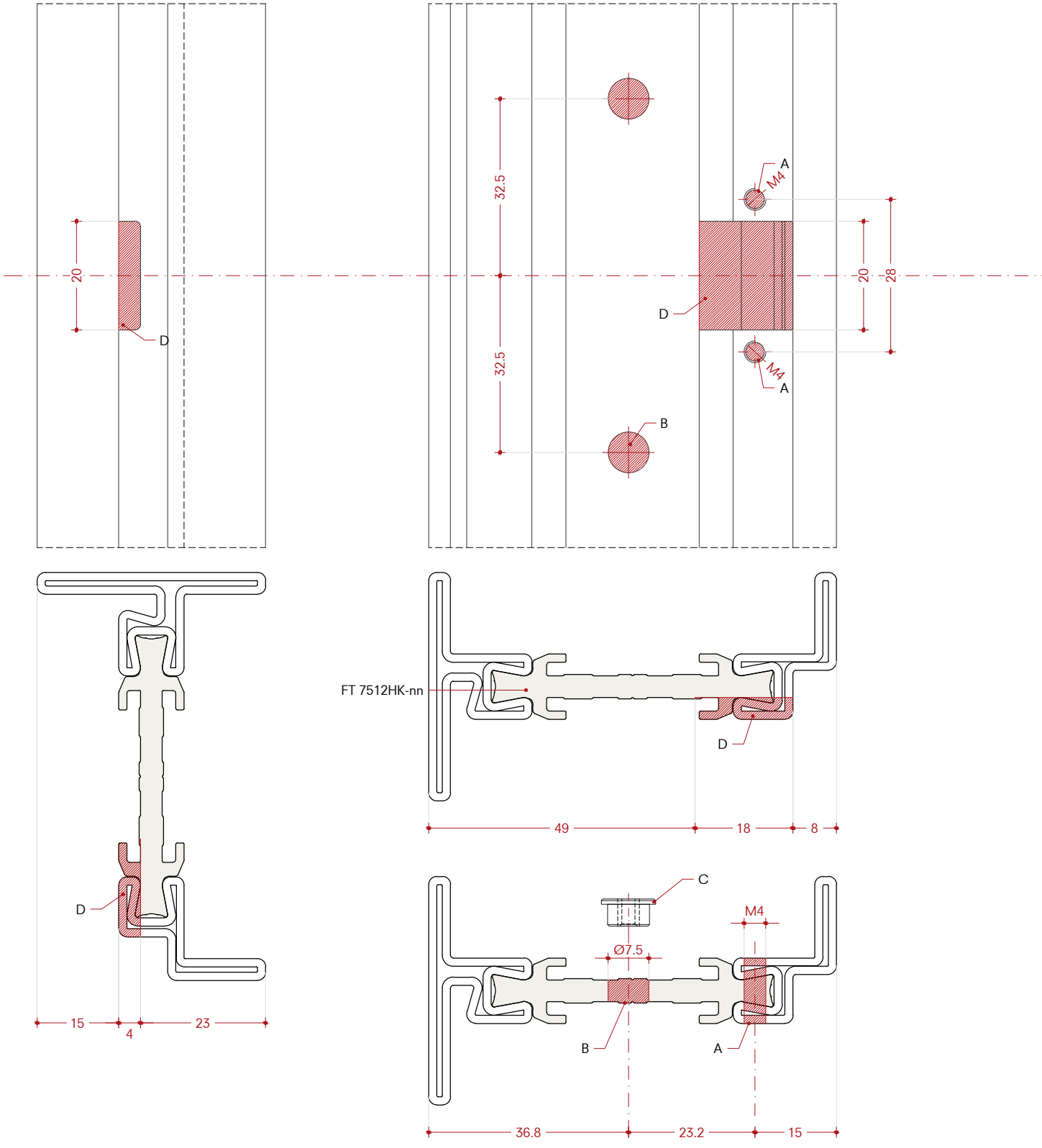




A) Holes Ø7.5 mm in door frame
B) Cut-out in door frame
C) D99704-08 M4 brass bushing
D) Fastening with M4x16 ISO10642 screws and cut the screw
E) Plate 30x20x2 mm fixed by glue on profile (not provided) only for double leaves door

A) Bohrungen Ø7.5 mm im Türrahmen
B) Ausfräsung im Türrahmen
C) D99704-08 Messingbuchse M4
D) Befestigungsschrauben M4x16 ISO10642 und Schraube kürzen
E) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung) nur für zweiflüglige Tür

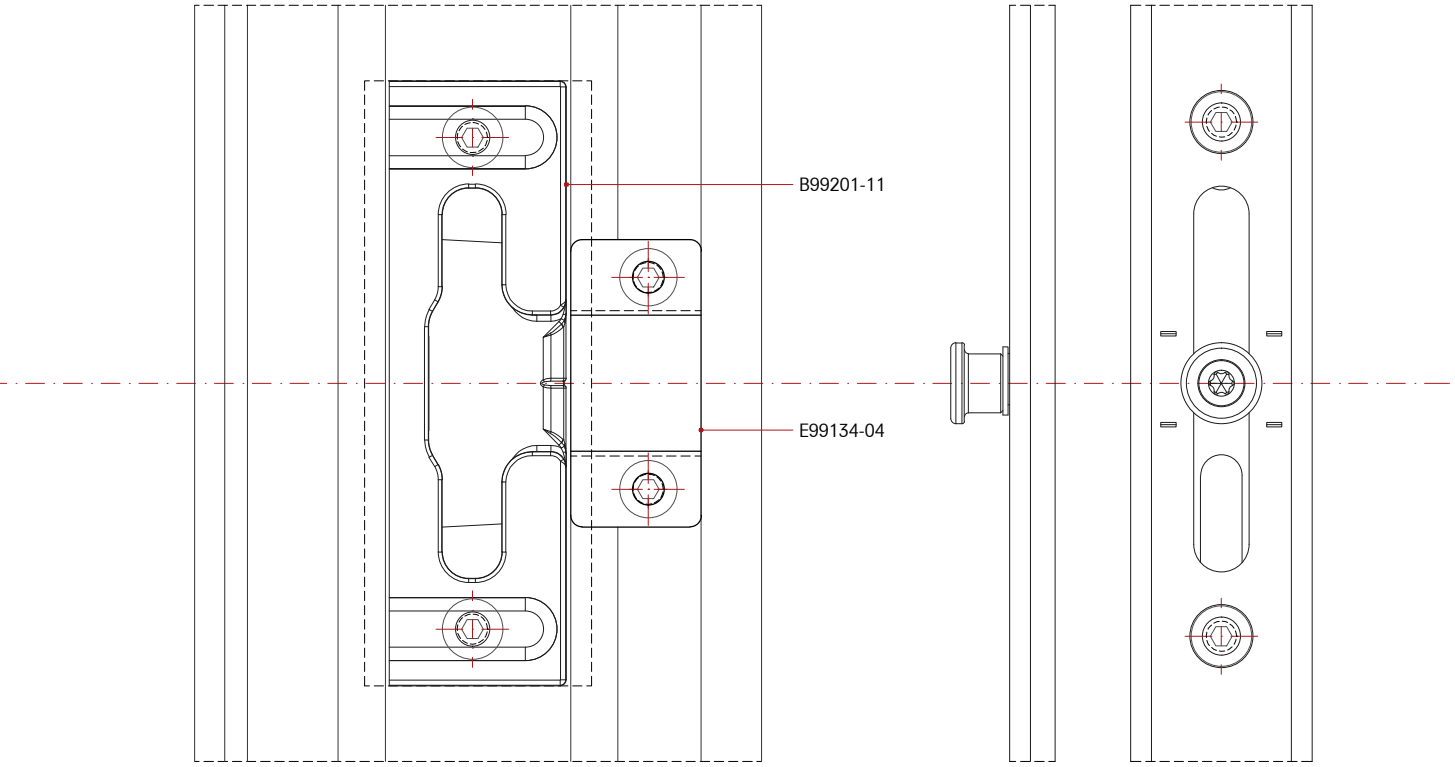
A) Trous Ø7.5 mm dans le cadre de la porte
B) Fraisage dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fixation avec vis M4x16 ISO10642 et couper la vis
E) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé, seulement pour porte à deux vantaux

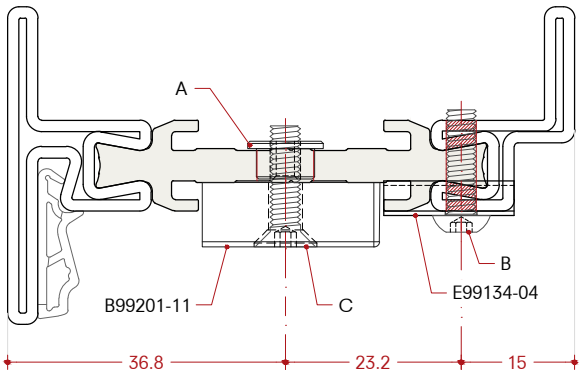


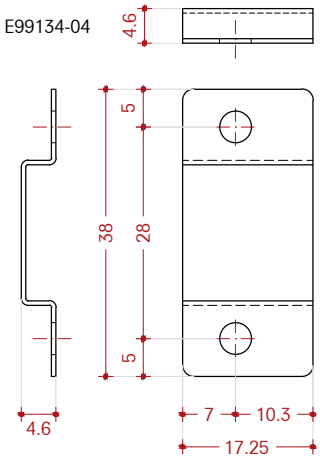
A) Holes M4 in door frame
B) Holes Ø7.5 mm in door frame
C) D99704-08 M4 brass bushing
D) Cut-out in door frame

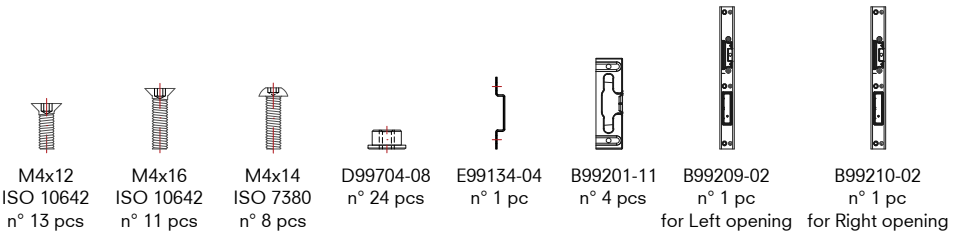
A) Bohrungen M4 im Türrahmen
B) Bohrungen Ø7.5 mm im Türrahmen
C) D99704-08 Messingbuchse M4
D) Ausfräsung im Türrahmen

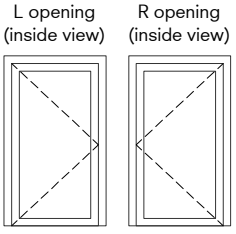
A) Trous M4 dans le cadre de la porte
B) Trous Ø7.5 mm dans le cadre de la porte
C) D99704-08 Boîte en laiton M4
D) Fraisage dans le cadre de la porte











A) D99704-08 M4 brass bushing
B) Fastening with M4x14 ISO7380 screws
C) Fastening with M4x16 ISO10642 screws

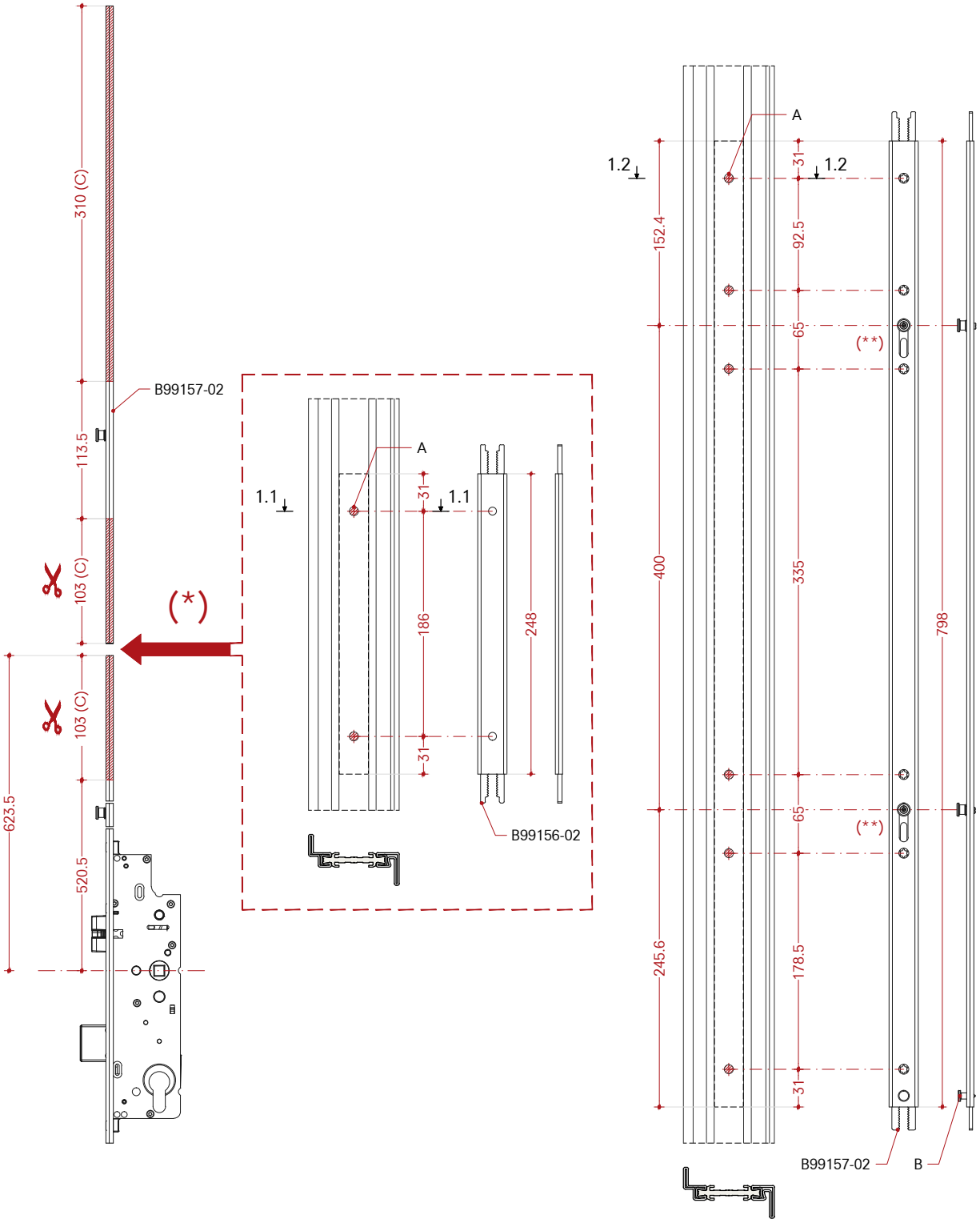
A) D99704-08 Messingbuchse M4
B) Befestigungsschrauben M4x14 ISO7380
C) Befestigungsschrauben M4x16 ISO10642

A) D99704-08 Boîte en laiton M4
B) Fixation avec vis M4x14 ISO7380
C) Fixation avec vis M4x16 ISO10642

Installation
2nd leaf extension B99174-02
Open in door

Einbau
Standflügel Verlängerung B99174-02
Tür nach innen öffnend

Schéma de montage
Extension 2e ouvrant B99174-02
Porte ouverture intérieure



Scale 1:5
A) Holes Ø7.5 mm
B) Remove this pin after installation
C) Maximum cropping

(*) Extension position

(**) Extension in open position with studs at the top

Maßstab 1:5
A) Bohrungen Ø7.5 mm
B) Entfernen Sie den Stift nach der Installation
C) Maximaler Zuschnitt

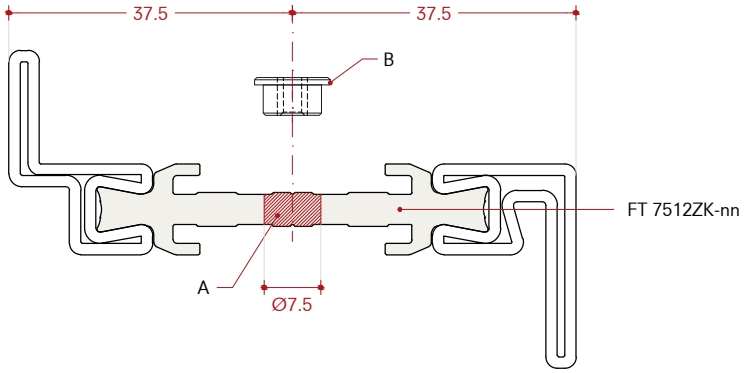
(*) Verlängerungsposition

(**) Verlängerung in Offenstellung mit Pilzzapfenverriegelungen oben

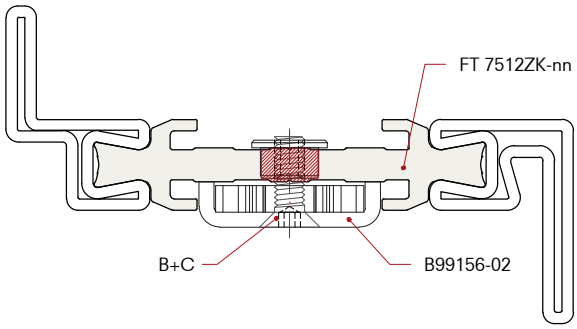
Échelle1:5
A) Trous Ø7.5 mm
B) Retirer la goupille après l'installation
C) Recadrage maximal

(*) Poste d'extension

(**) Extension en position ouverte avec galettes poussoirs en haut



1.1



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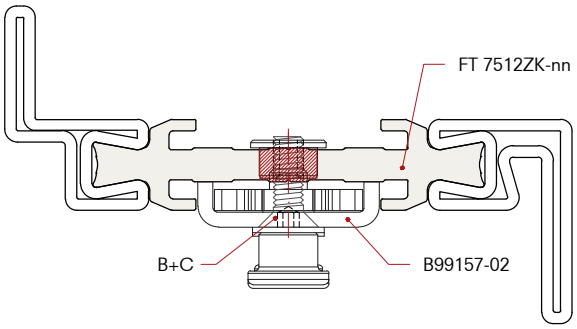
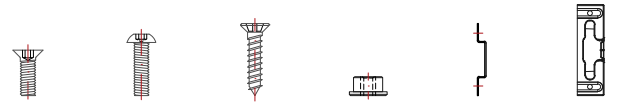


B99156-02

M4x12 ISO 10642 n° 2 pcs
D99704-08 n° 2 pcs

B99157-02



M4x12 ISO 10642 n° 6 pcs
M4x14 ISO 7380 n° 4 pcs
3.9x19 ISO 7050 n° 4 pcs
D99704-08 n° 6 pcs
E99134-04 n° 0.5 pcs
B99201-11 n° 2 pcs

A) Holes Ø7.5 mm
B) D99704-08 M4 brass bushing
C) Fastening with M4x12 ISO10642 screws

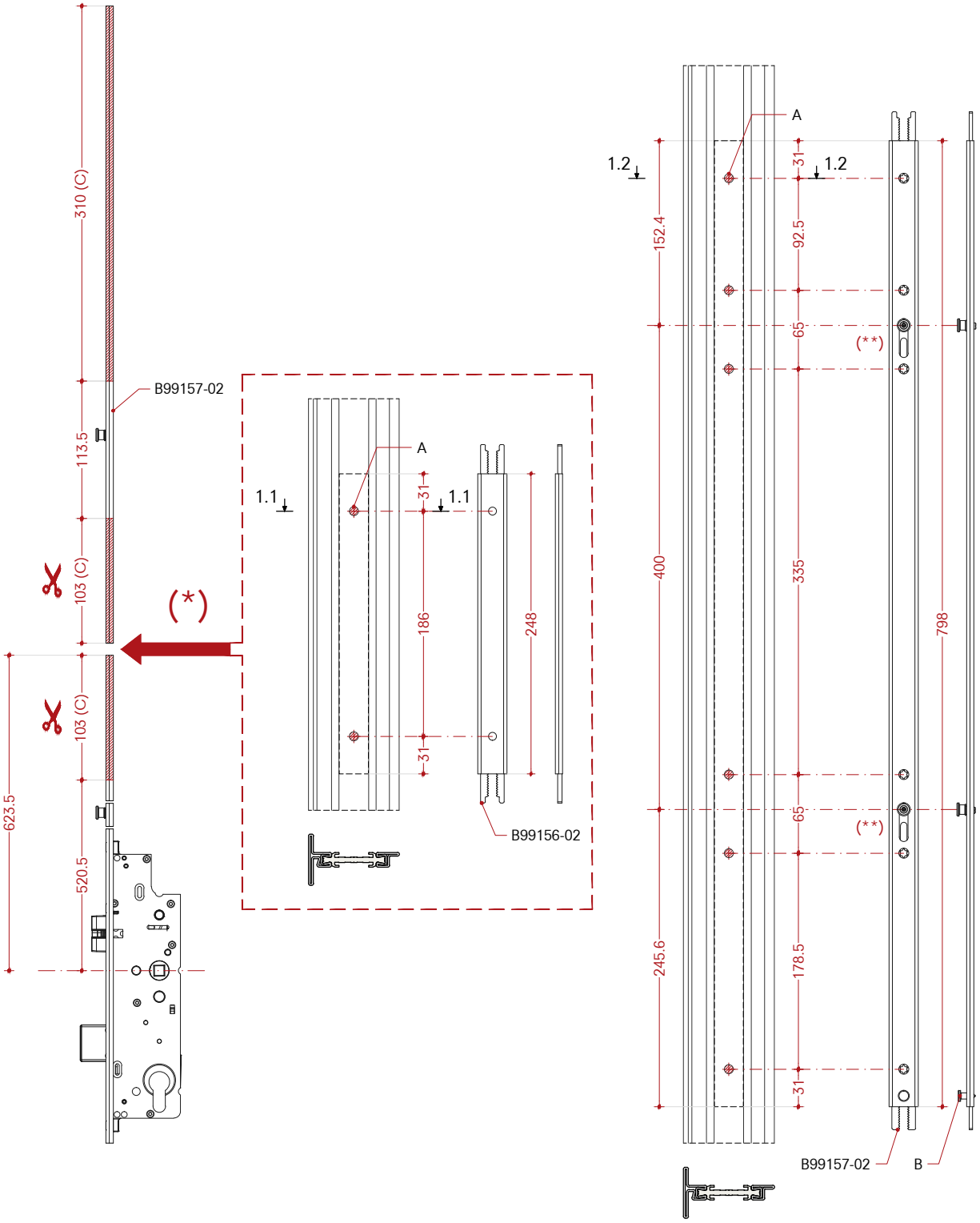
A) Bohrungen Ø7.5 mm
B) D99704-08 Messingbuchse M4
C) Befestigungsschrauben M4x12 ISO10642

A) Trous Ø7.5 mm
B) D99704-08 Boîte en laiton M4
C) Fixation avec vis M4x12 ISO10642

Installation
2nd leaf extension B99174-02
Open out door

Einbau
Standflügel Verlängerung B99174-02
Tür nach außen öffnend

Schéma de montage
Extension 2e ouvrant B99174-02
Porte ouverture extérieure



Scale 1:5
A) Holes Ø7.5 mm
B) Remove this pin after installation
C) Maximum cropping

(*) Extension position

(**) Extension in open position with studs at the top

Maßstab 1:5
A) Bohrungen Ø7.5 mm
B) Entfernen Sie den Stift nach der Installation
C) Maximaler Zuschnitt

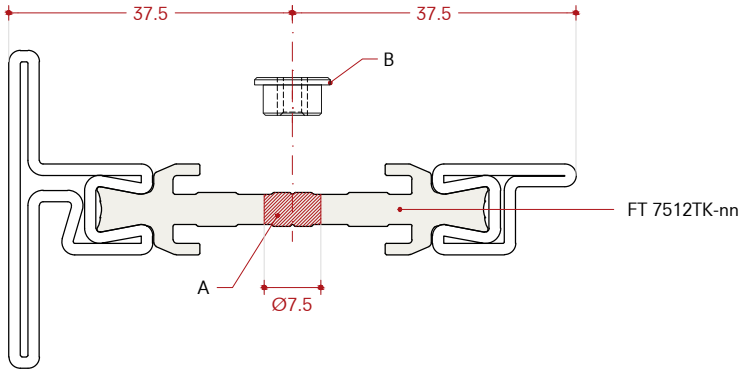
(*) Verlängerungsposition

(**) Verlängerung in Offenstellung mit Pilzzapfenverriegelungen oben

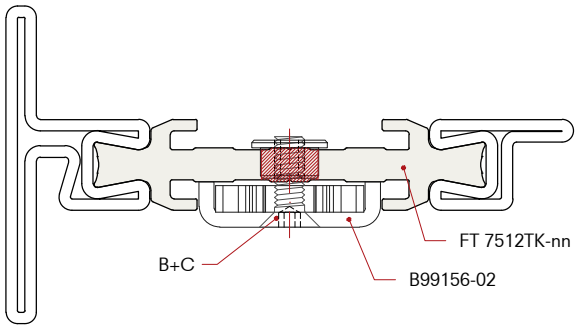
Échelle1:5
A) Trous Ø7.5 mm
B) Retirer la goupille après l'installation
C) Recadrage maximal

(*) Poste d'extension

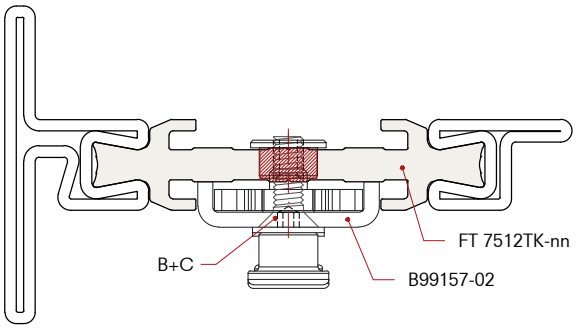
(**) Extension en position ouverte avec galettes poussoirs en haut



1.1



1.2



B99156-02

M4x12 ISO 10642 n° 2 pcs
D99704-08 n° 2 pcs

B99157-02

M4x12 ISO 10642 n° 6 pcs
M4x14 ISO 7380 n° 4 pcs
3.9x19 ISO 7050 n° 4 pcs
D99704-08 n° 6 pcs
E99134-04 n° 0.5 pcs
B99201-11 n° 2 pcs

A) Holes Ø7.5 mm
B) D99704-08 M4 brass bushing
C) Fastening with M4x12 ISO10642 screws

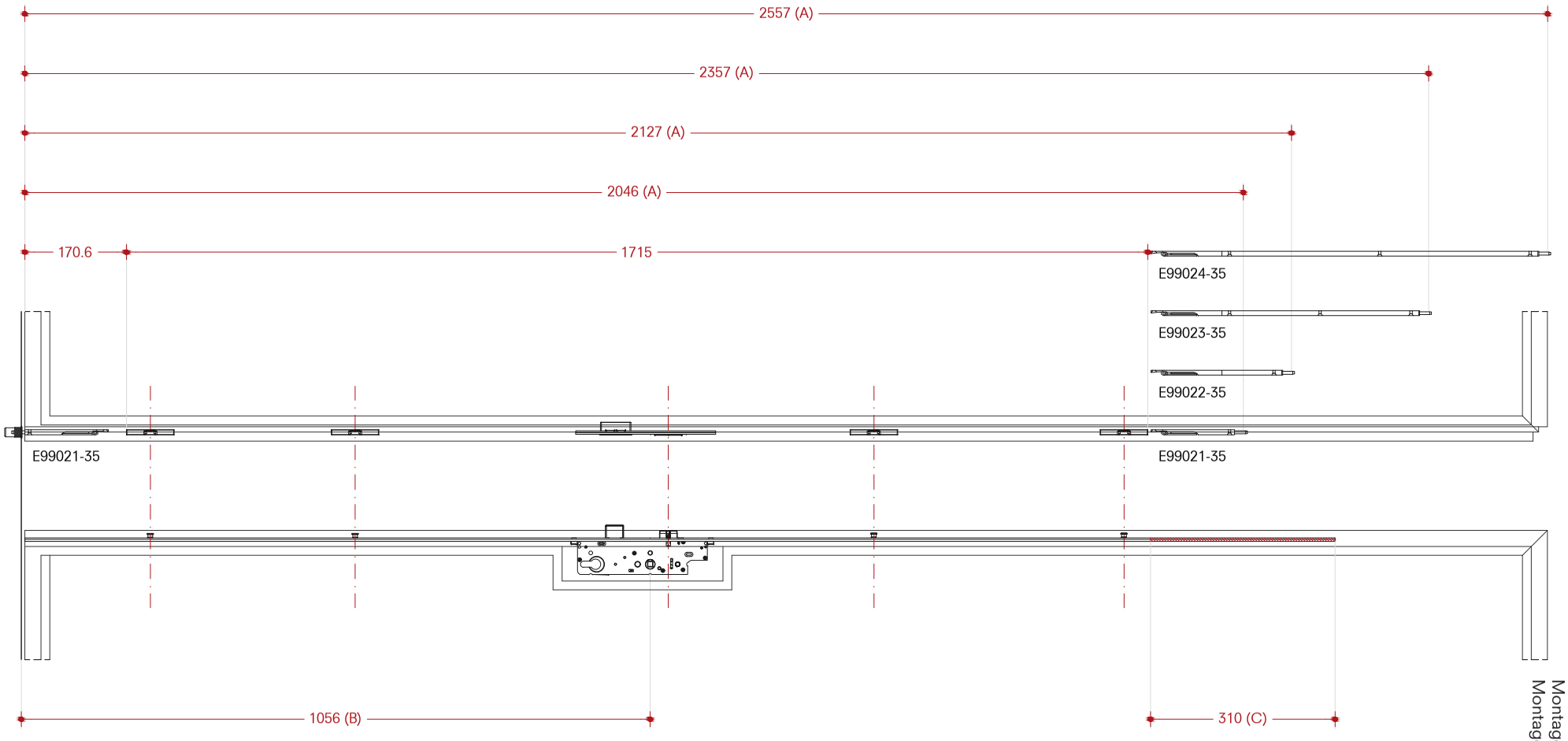
A) Bohrungen Ø7.5 mm
B) D99704-08 Messingbuchse M4
C) Befestigungsschrauben M4x12 ISO10642

A) Trous Ø7.5 mm
B) D99704-08 Boîte en laiton M4
C) Fixation avec vis M4x12 ISO10642

Installation
Flush bolt E9902X-35
Lock B99174-02
Double leaf door open in with widening on complete height on lock side

Einbau
Kantriegel E9902X-35
Fallen-Riegel-Schloss B99174-02
Zweiflüglige Anschlagtür nach innen öffnend mit durchgehender Verbreiterung Schlossseite

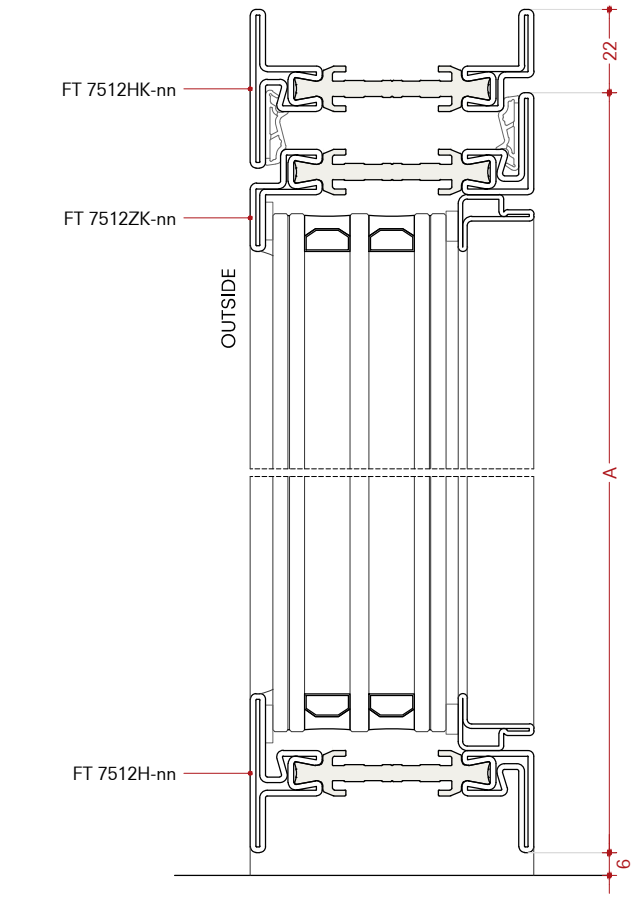
Schéma de montage
Verrou E9902X-35
Serrure B99174-02
Porte à deux vantaux ouvrant vers l'intérieur avec élargissement sur toute la hauteur côté serrure

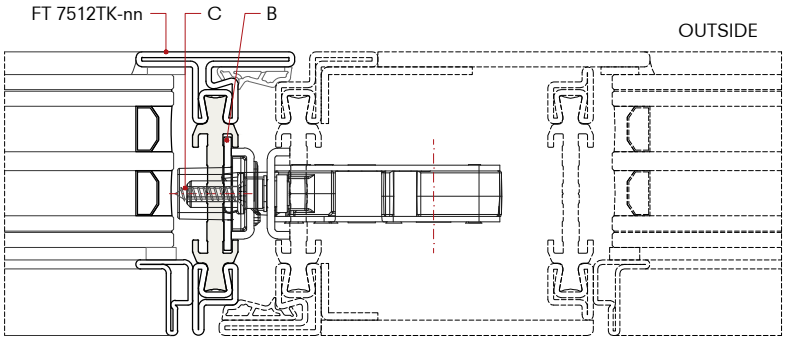


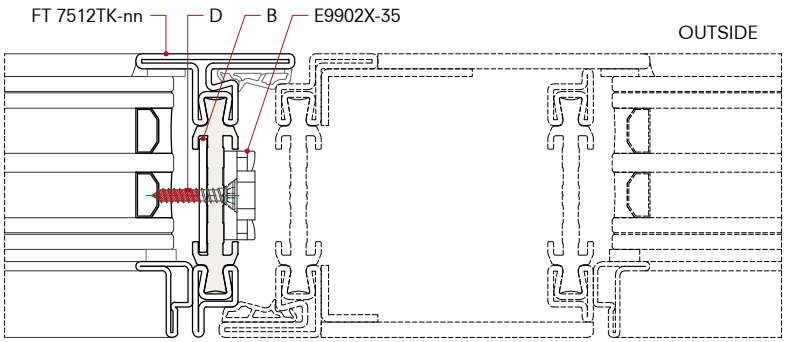
Scale 1:10
A) Minimum height leaf
B) Height handle
C) Maximum cropping

Maßstab 1:10
A) Mindesthöhe Flügel
B) Griffsitz Mittig
C) Maximaler Zuschnitt

Échelle1:10
A) Hauteur minimale du vantail
B) Hauteur de la poignée
C) Recadrage maximal







A) Height leaf
B) Additional 2 mm shim on central striker for 2nd leaf
C) Fastening with Ø3.9x19 mm ISO7050 screws and cut the screws
D) Fastening with Ø3.9x22 mm ISO7050 screws and cut the screws

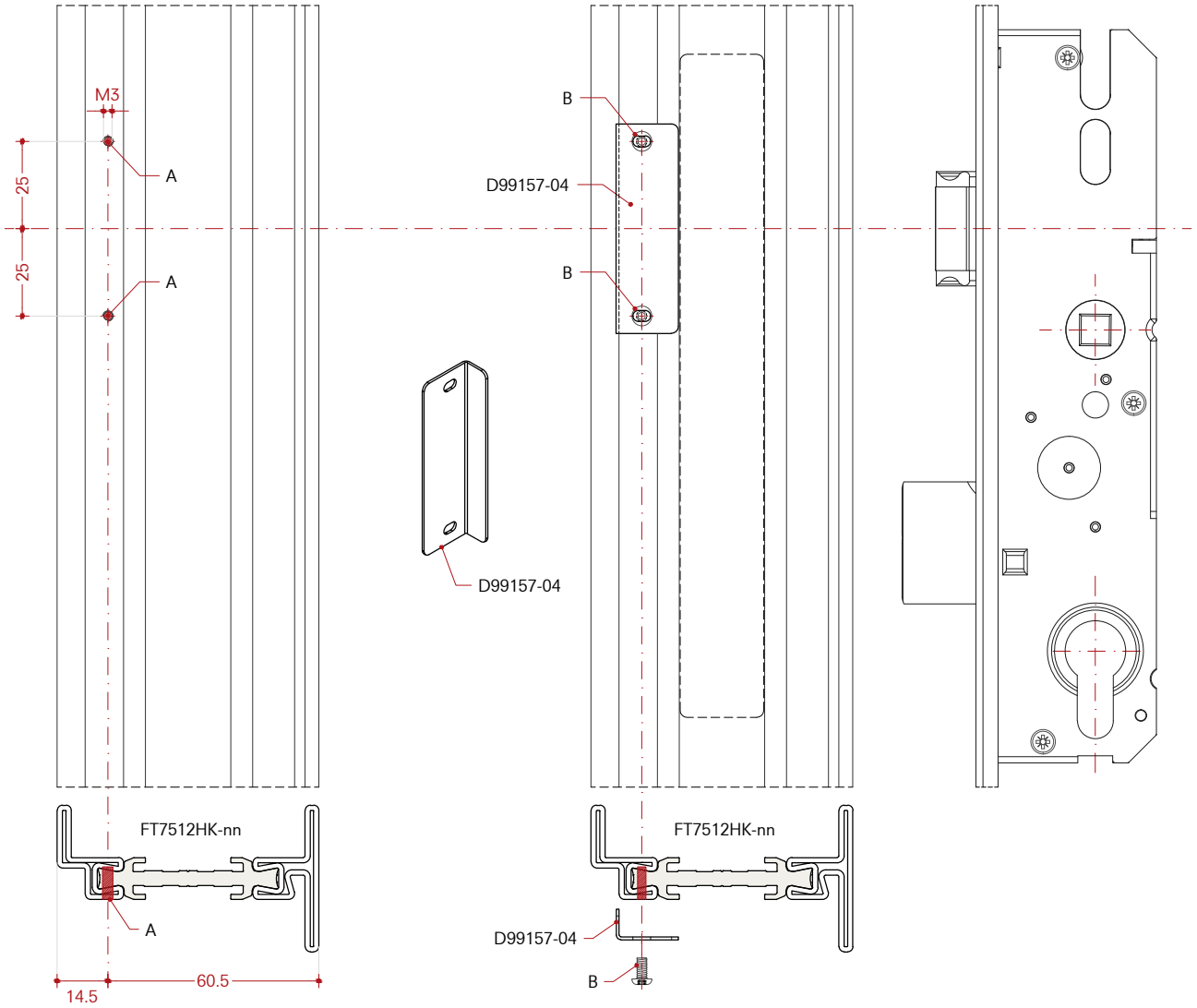
A) Höhe Flügel
B) 2 mm Unterlagen am Mittelschließer für Standflügel
C) Befestigungsschrauben Ø3.9x19 mm ISO7050 und Schraube kürzen
D) Befestigungsschrauben Ø3.9x22 mm ISO7050 und Schraube kürzen

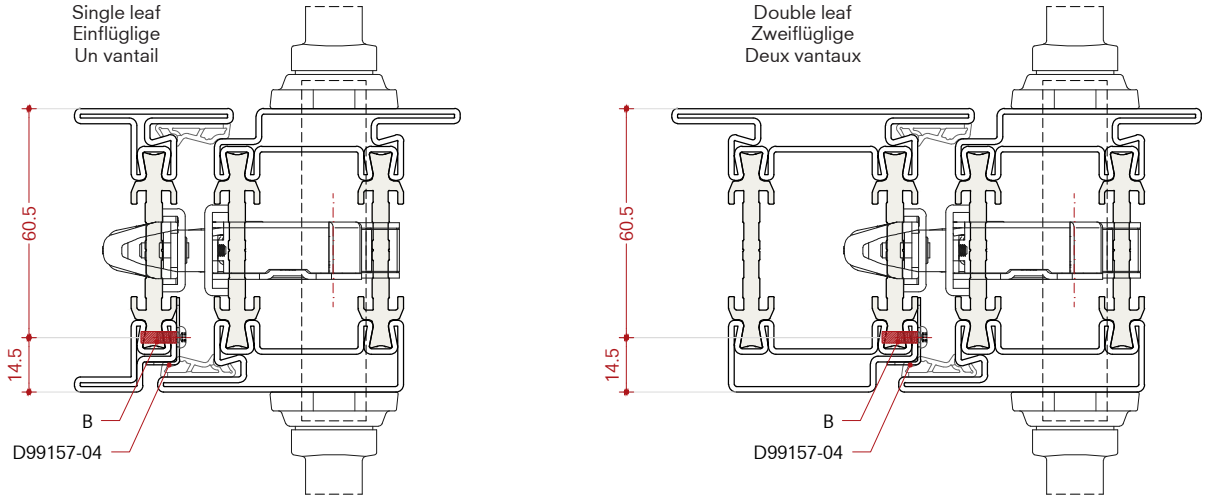
A) Hauteur du vantail
B) Plate supplémentaire de 2 mm sur la gâche centrale pour la 2e ouvrant
C) Fixation avec vis Ø3.9x19 mm ISO7050 et couper les vis
D) Fixation avec vis Ø3.9x22 mm ISO7050 et couper les vis

Installation of rebate protection for latchbolt
Open in door

Anschlagschutz für Schlossfalle Einbau
Tür nach innen öffnend

Schéma de montage du protection joint pour pêne demi-tour
Porte ouverture intérieure





A) Holes M3 mm in door frame
B) Fastening with M3x6 ISO7380 screws
C) Fastening with M3x20 ISO7380 screws and cut the screws

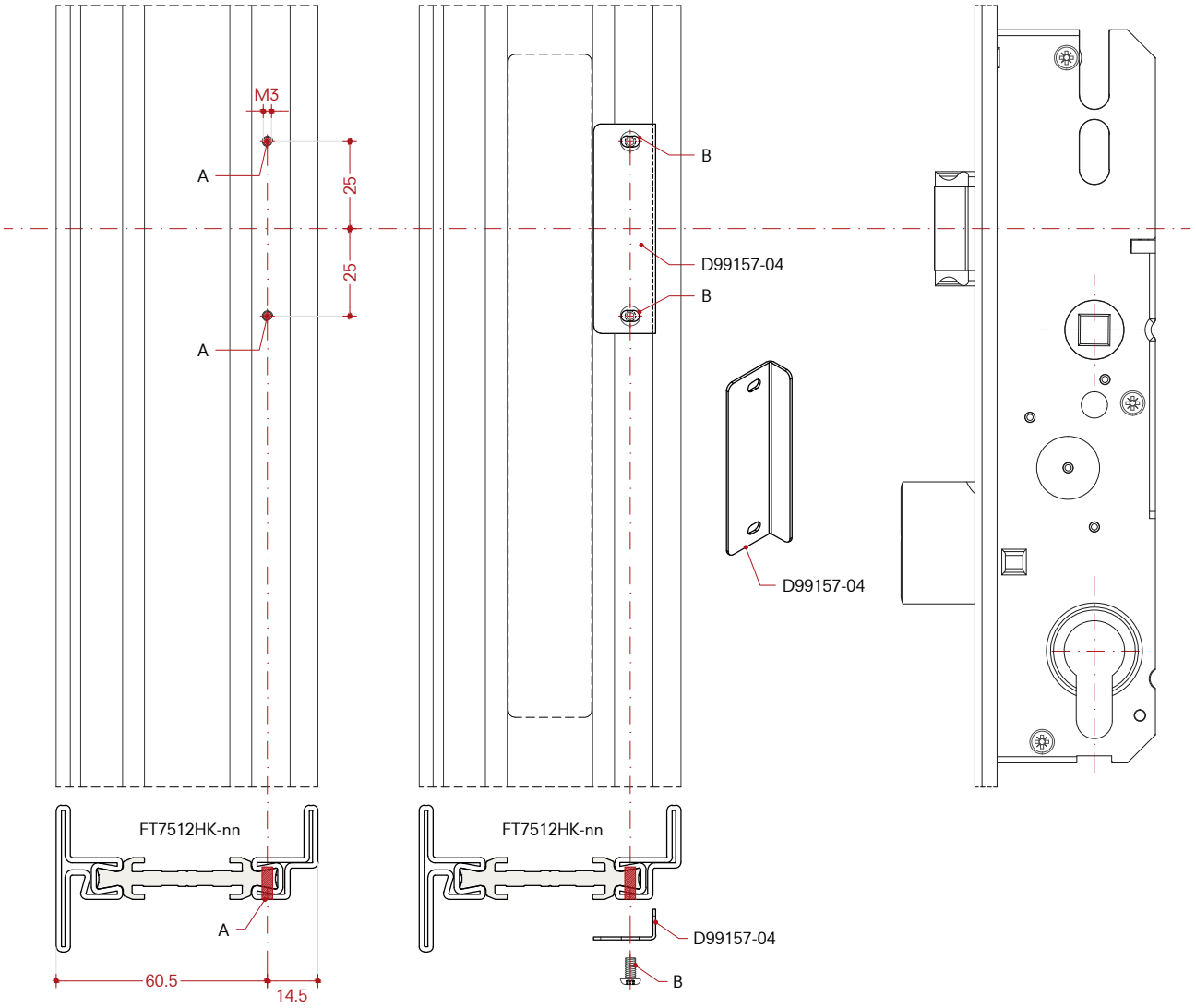
A) Bohrungen M3 mm im Türrahmen
B) Befestigungsschrauben M3x6 ISO7380
C) Befestigungsschrauben M3x20 ISO7380 und Schrauben kürzen

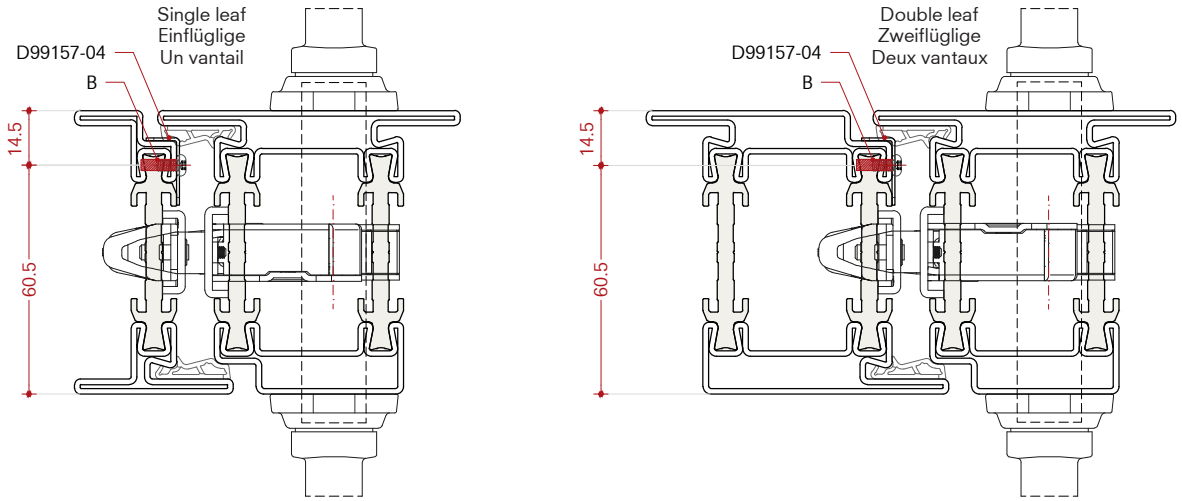
A) Trous M3 mm dans le cadre de la porte
B) Fixation avec vis M3x6 ISO7380
C) Fixation avec vis M3x20 ISO7380 et couper la vis

Installation of rebate protection for latchbolt
Open out door

Anschlagschutz für Schlossfalle Einbau
Tür nach außen öffnend

Schéma de montage du protection joint pour pêne demi-tour
Porte ouverture extérieure





A) Holes M3 mm in door frame
B) Fastening with M3x6 ISO7380 screws

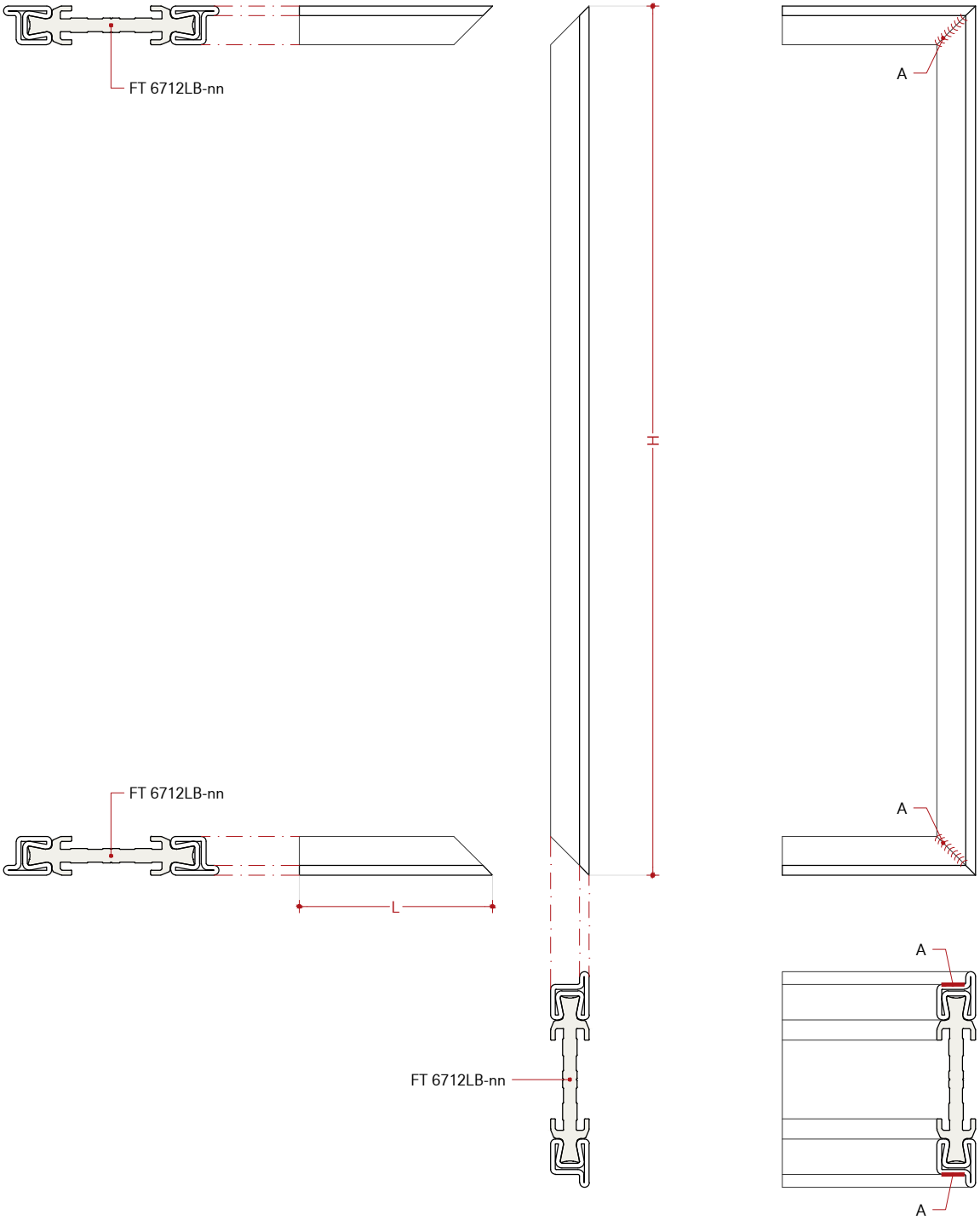
A) Bohrungen M3 mm im Türrahmen
B) Befestigungsschrauben M3x6 ISO7380

A) Trous M3 mm dans le cadre de la porte
B) Fixation avec vis M3x6 ISO7380

Processing
Locking box with FT 6712LB-nn
Open in

Bearbeitung
Schlosskasten mit FT 6712LB-nn
Nach innen öffnend

Usinages
Boîte pour serrure avec FT 6712LB-nn
Ouverture intérieure



L = Length locking box
H = Height locking box

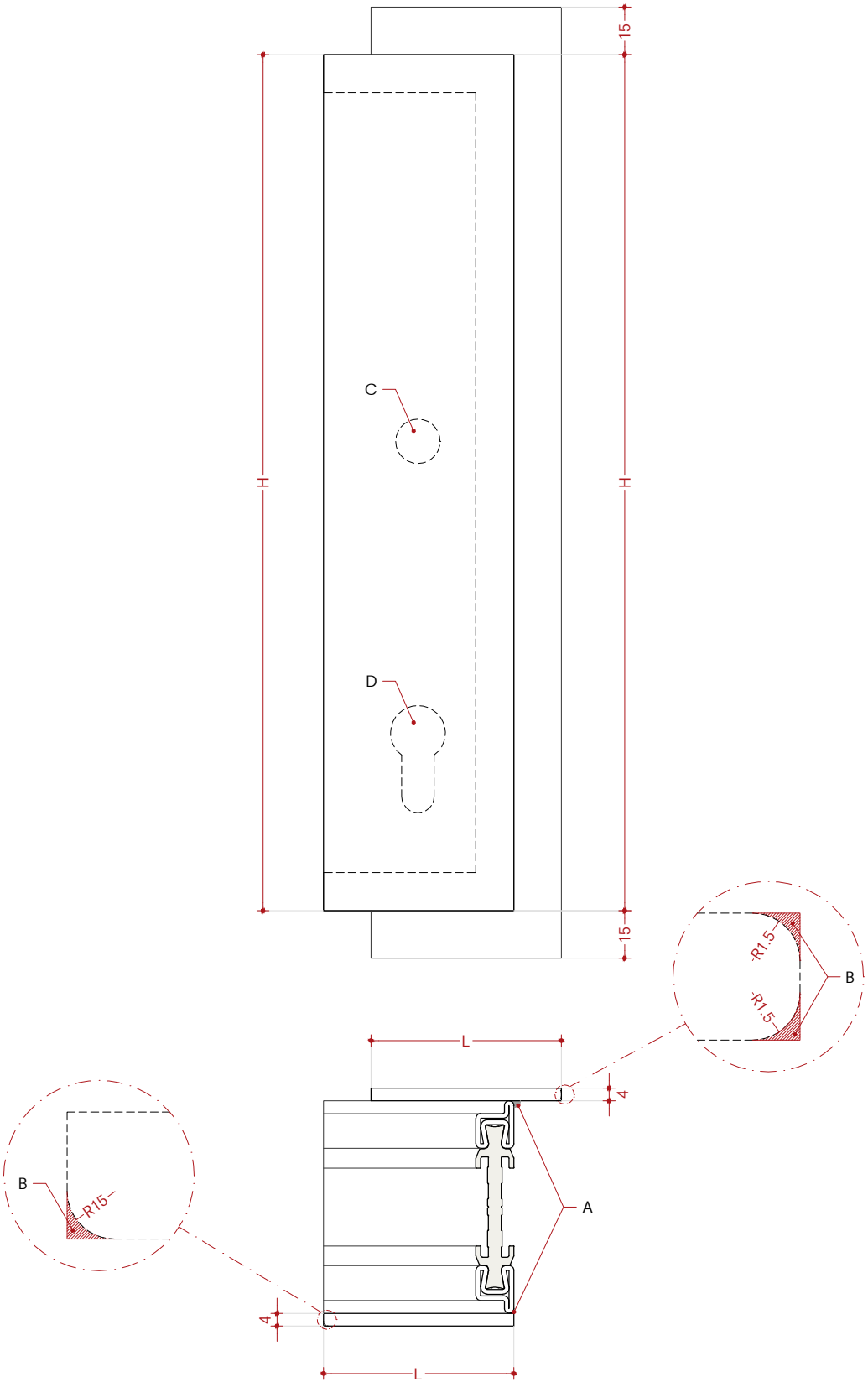
A) Welding

L = Länge Schlosskasten
H = Höhe Schlosskasten

A) Schweissen

L = Largeur boîte pour serrure
H = Hauteur boîte pour serrure

A) Souder



L = Length locking box
H = Height locking box

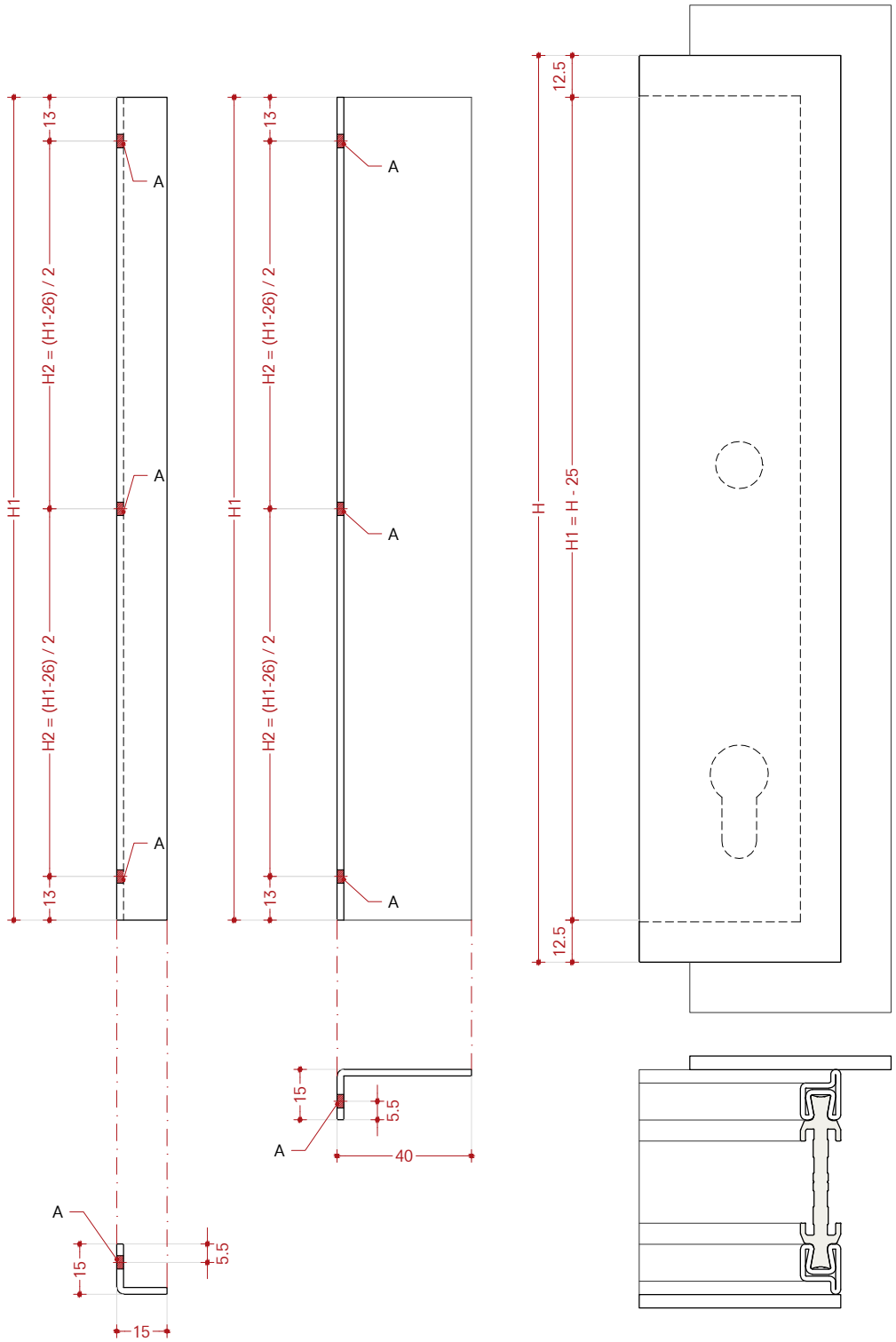
A) Welding
B) Chamfer
C) Handle holes
D) Cylinder holes

L = Länge Schlosskasten
H = Höhe Schlosskasten

A) Schweissen
B) Anfasung
C) Löcher Drücker
D) Löcher Profilzylinder

L = Largeur boîte pour serrure
H = Hauteur boîte pour serrure

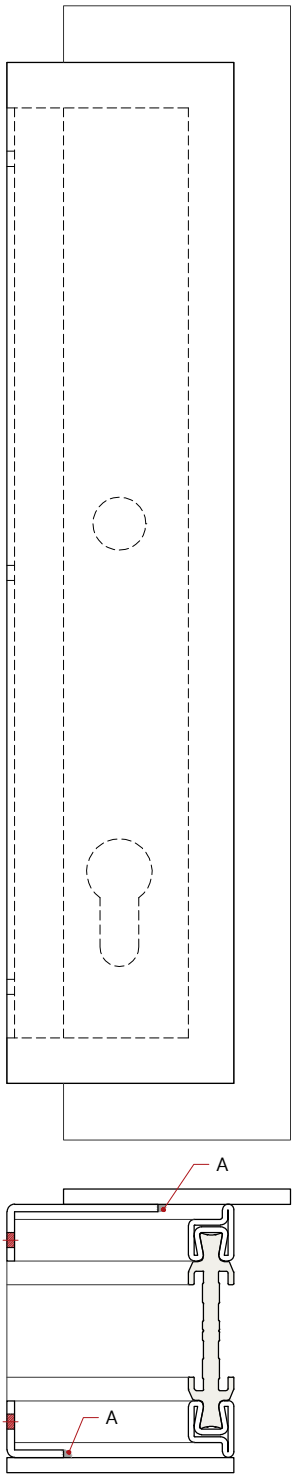
A) Souder
B) Chanfreiner
C) Trous de poignée
D) Trous de cylindre

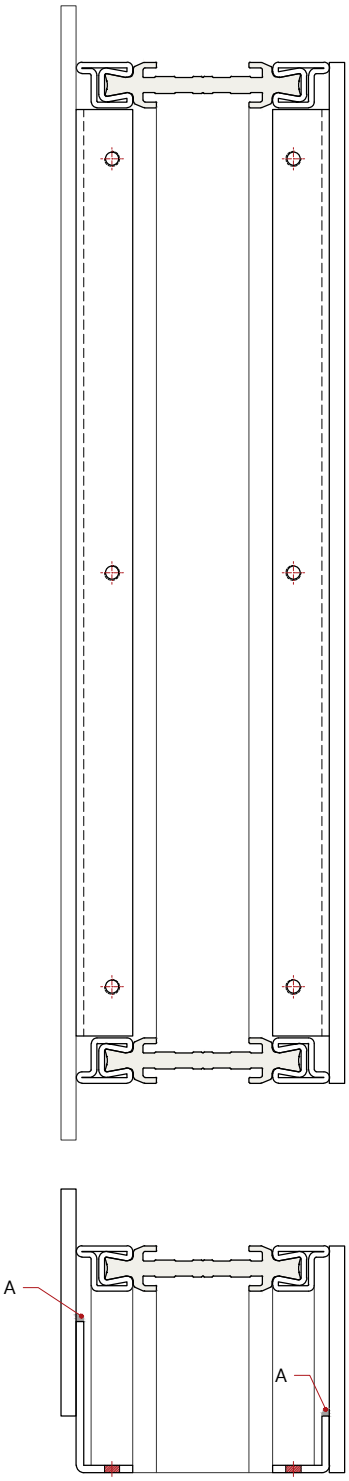


A) Holes M4

A) Bohrungen M4

A) Trous M4



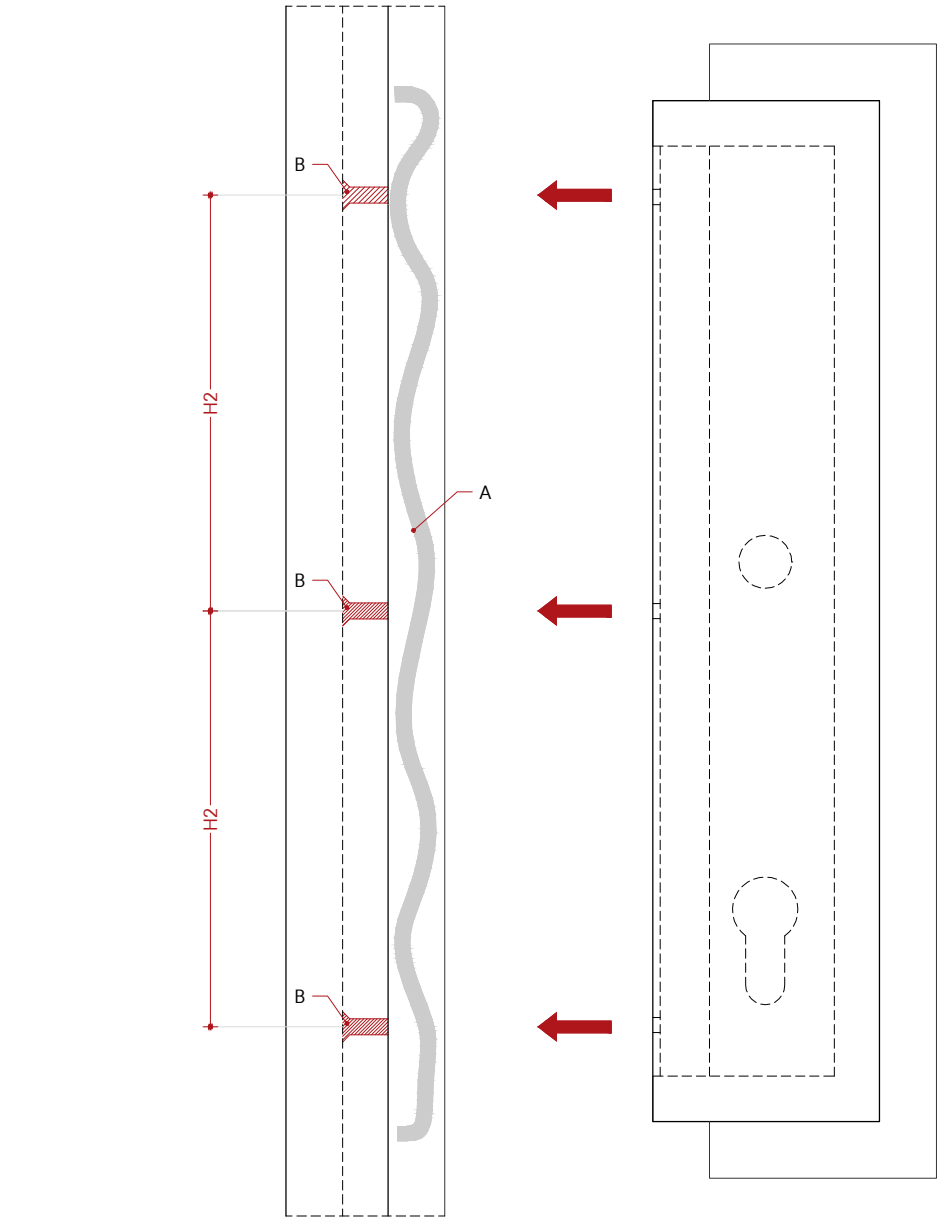


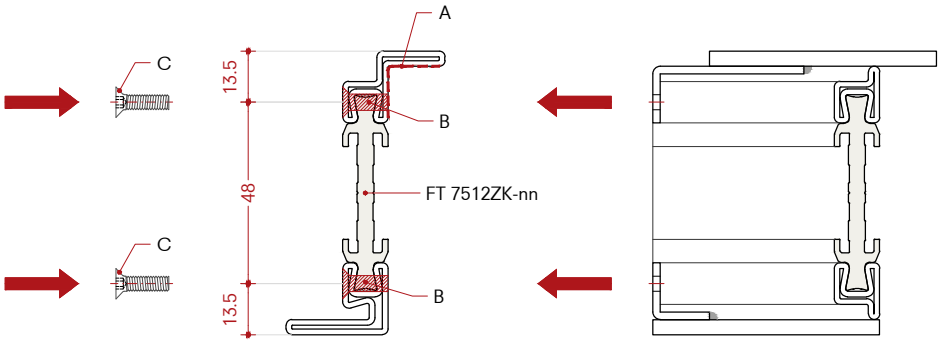
A) Welding

A) Schweissen

A) Souder

Open in
Nach Innen öffnend
Ouverture intérieure





Note:
Fixing on the leaf after coating.

A) Sealant at corners
B) Ø4.25 mm countersunked
C) Fastening with M4x14 ISO10642 screws

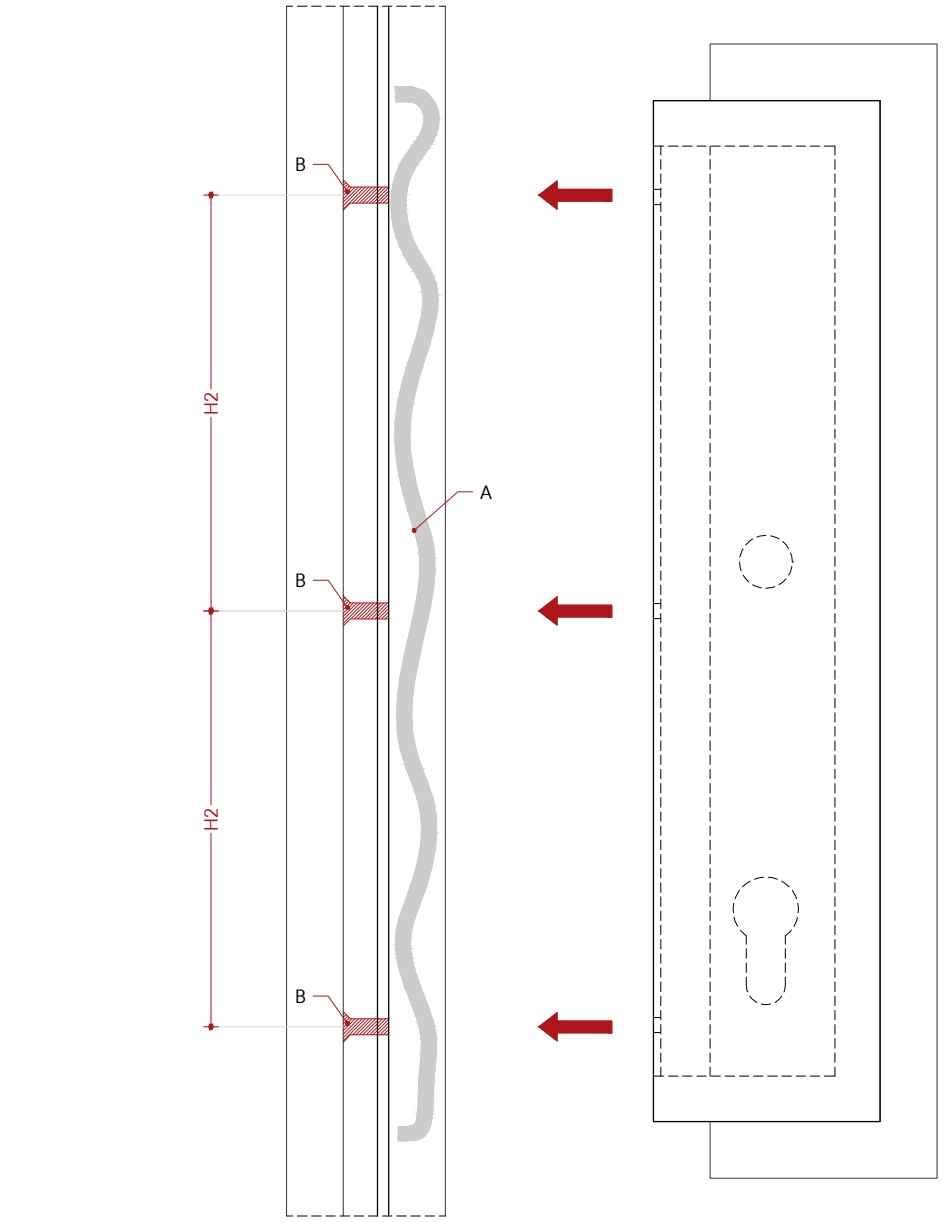
Anmerkung:
Befestigung nach dem beschichten.

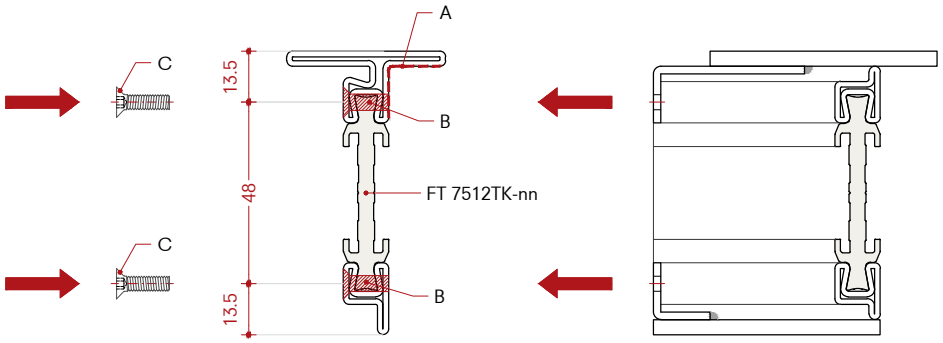
A) Dichtstoff an den ecken
B) Bohrungen angesenkt Ø4.25 mm
C) Befestigungsschrauben M4x14 ISO10642

Remarque:
Fixation sur l'ouvrant après peinture.

A) Silicon aux coins
B) Trous fraisé Ø4.25 mm
C) Fixation avec vis M4x14 ISO10642

Open out
Nach außen öffnend
Ouverture extérieure





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Fixing on the leaf after coating.

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Anmerkung:
Befestigung nach dem beschichten.

A) Dichtstoff an den ecken
B) Bohrungen angesenkt Ø4.25 mm
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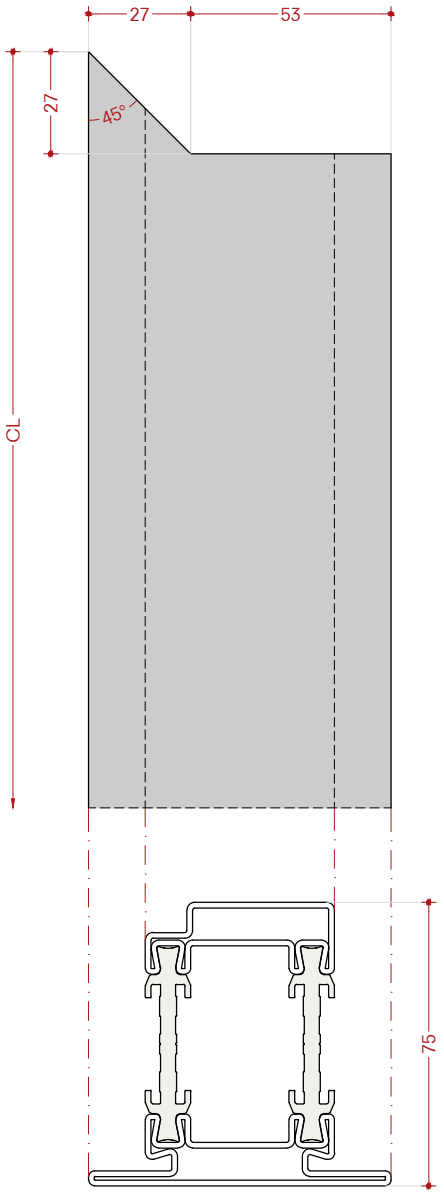
Remarque:
Fixation sur l'ouvrant après peinture.

A) Silicon aux coins
B) Trous évasé Ø4.25 mm
C) Fixation avec vis M4x14 ISO10642

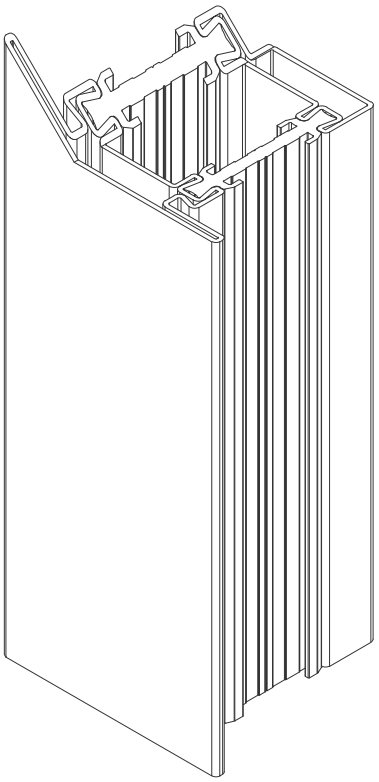
Processing
Leaf door widening on complete height on lock side
FT 7550T-nn + FT 7512ZK-nn
Open in

Bearbeitung
Anschlagtür mit durchgehender Verbreiterung Schlossseite
FT 7550T-nn + FT 7512ZK-nn
Nach innen öffnend

Usinages
Vantail de la porte
FT 7550T-nn + FT 7512ZK-nn
Ouverture intérieure



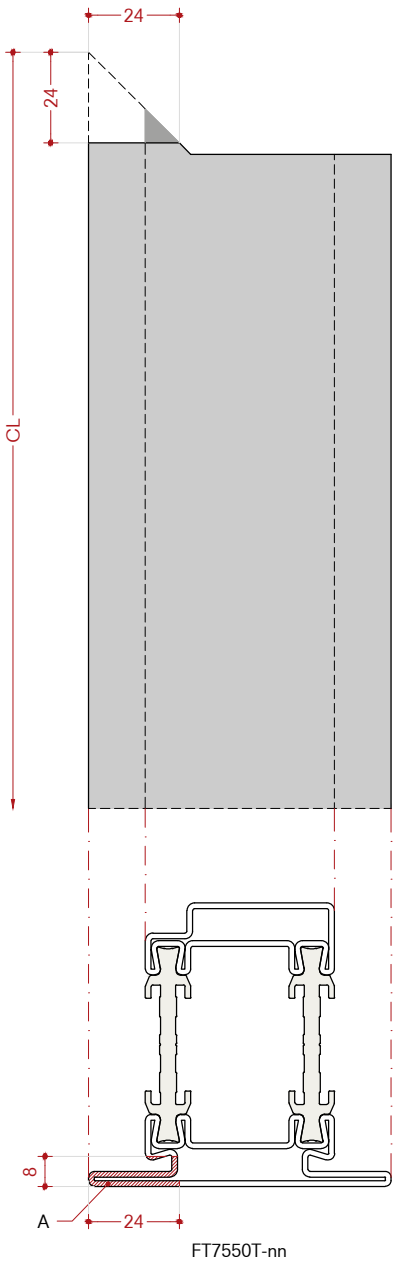
FT7550T-nn



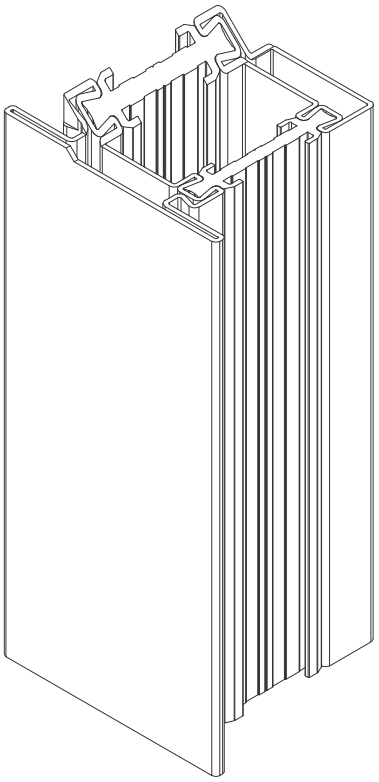
CL = Cutting Length

CL = Zuschnitt

CL = Découpe



FT7550T-nn



CL = Cutting Length

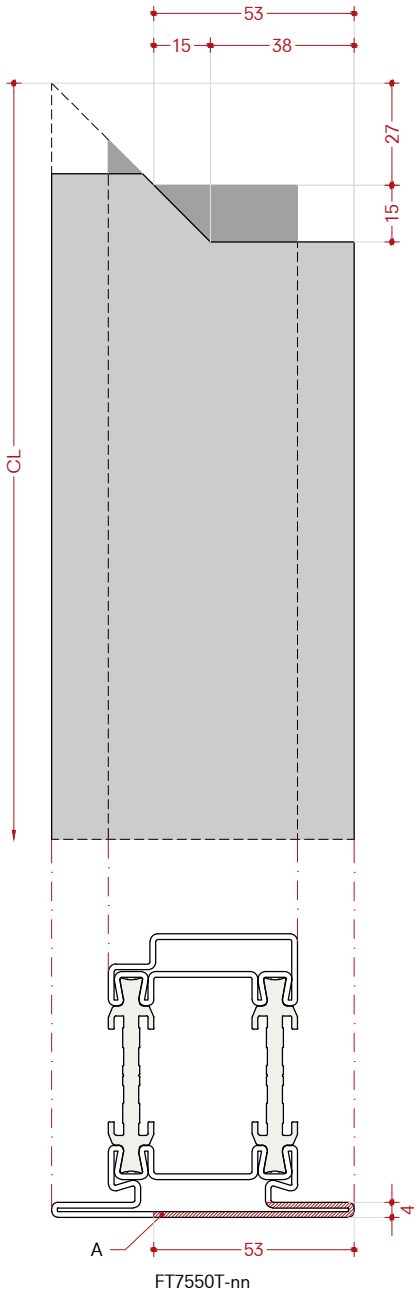
A) Cut out

CL = Zuschnitt

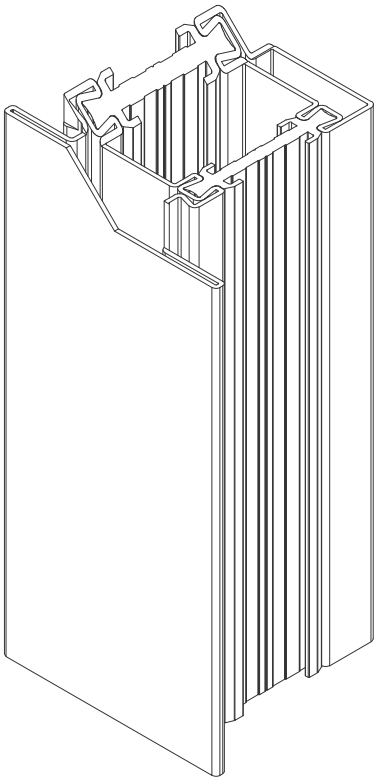
A) Fräsung

CL = Découpe

A) Fraisage



FT7550T-nn



CL = Cutting Length

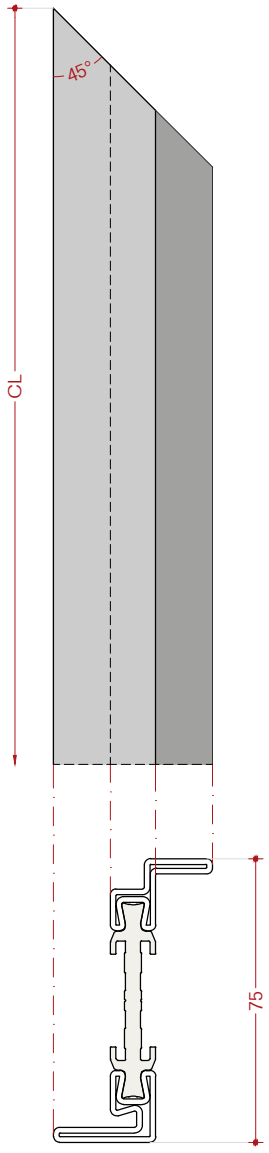
A) Cut out

CL = Zuschnitt

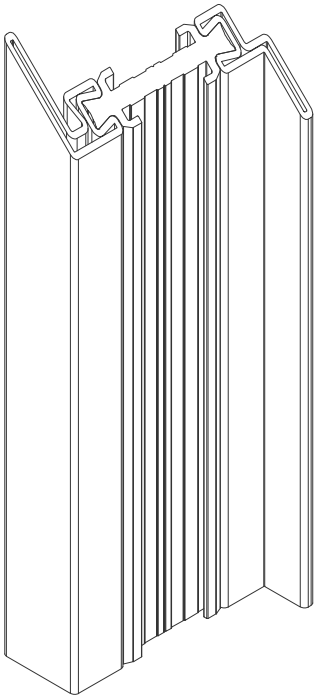
A) Fräsung

CL = Découpe

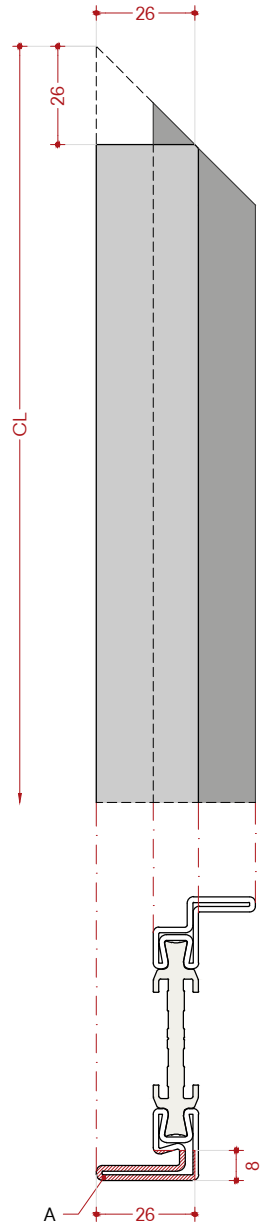
A) Fraisage



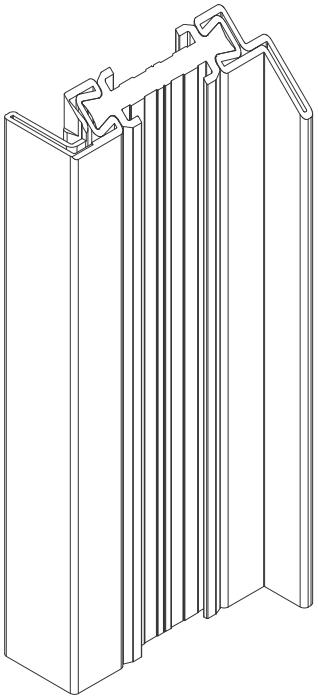
FT7512ZK-nn



CL = Cutting Length CL = Zuschnitt CL = Découpe



FT7512ZK-nn



CL = Cutting Length

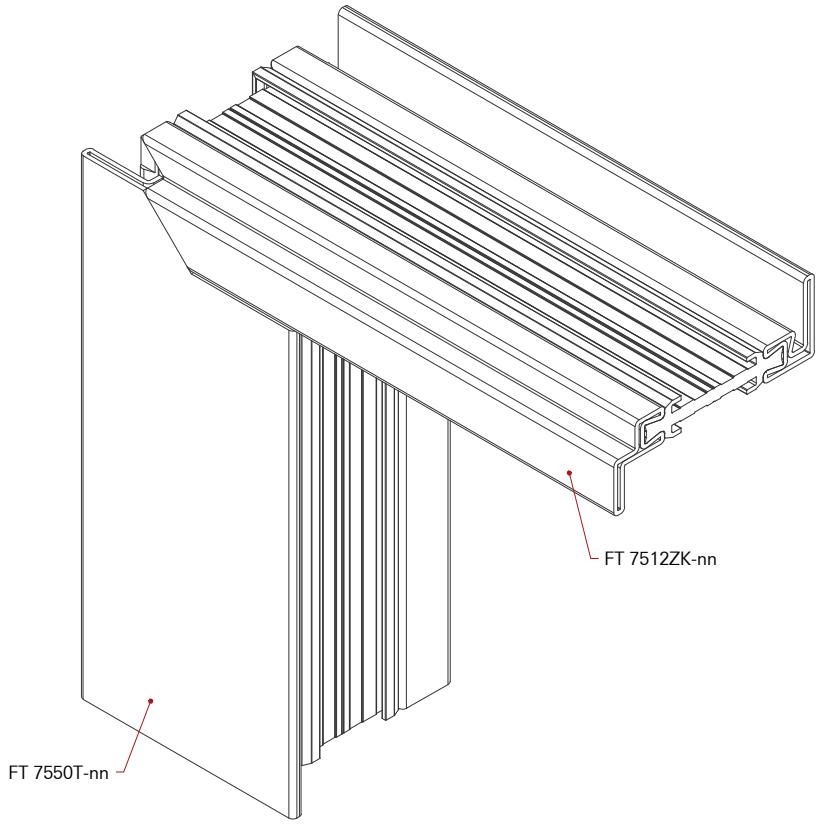
A) Cut out

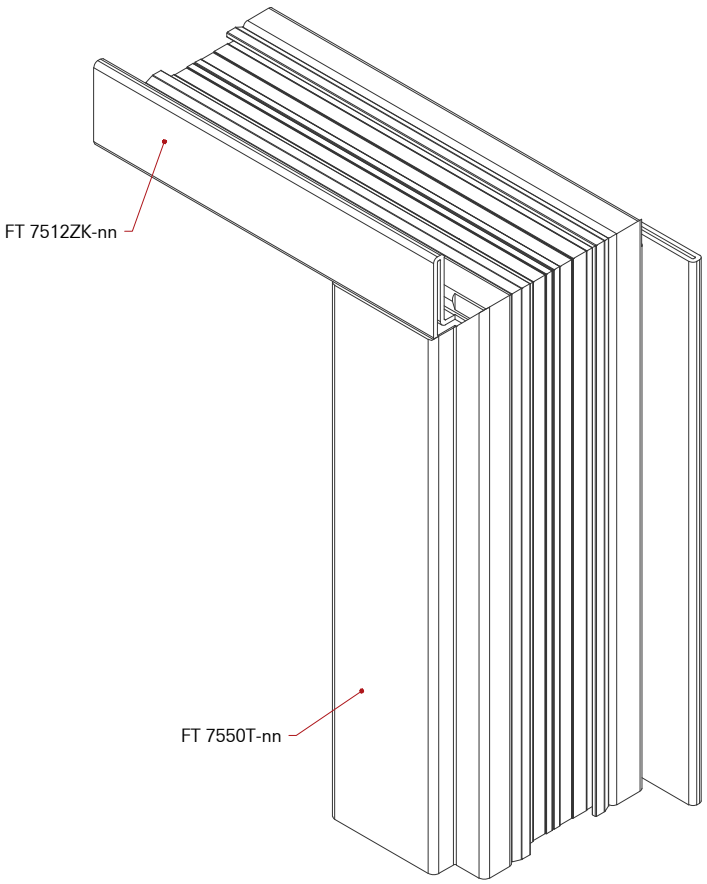
CL = Zuschnitt

A) Fräsung

CL = Découpe

A) Fraisage

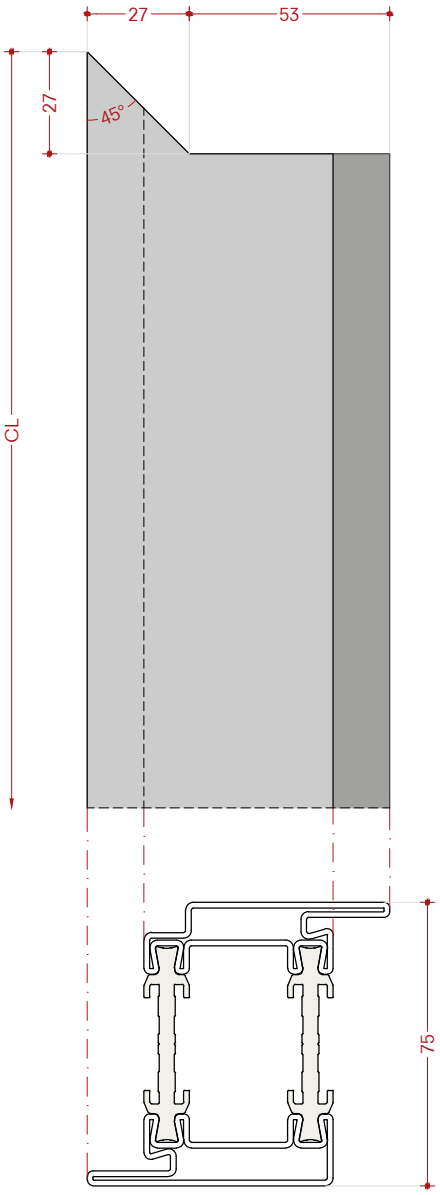

FT 7512ZK-nn
FT 7550T-nn


FT 7512ZK-nn
FT 7550T-nn

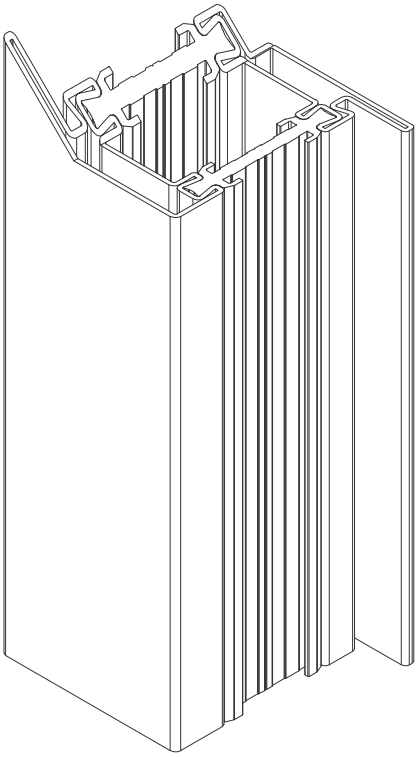
Processing
Leaf door widening on complete height on lock side
FT 7550Z-nn + FT 7512ZK-nn
Open in

Bearbeitung
Anschlagtür mit durchgehender Verbreiterung Schlossseite
FT 7550Z-nn + FT 7512ZK-nn
Nach innen öffnend

Usinages
Vantail de la porte
FT 7550Z-nn + FT 7512ZK-nn
Ouverture intérieure



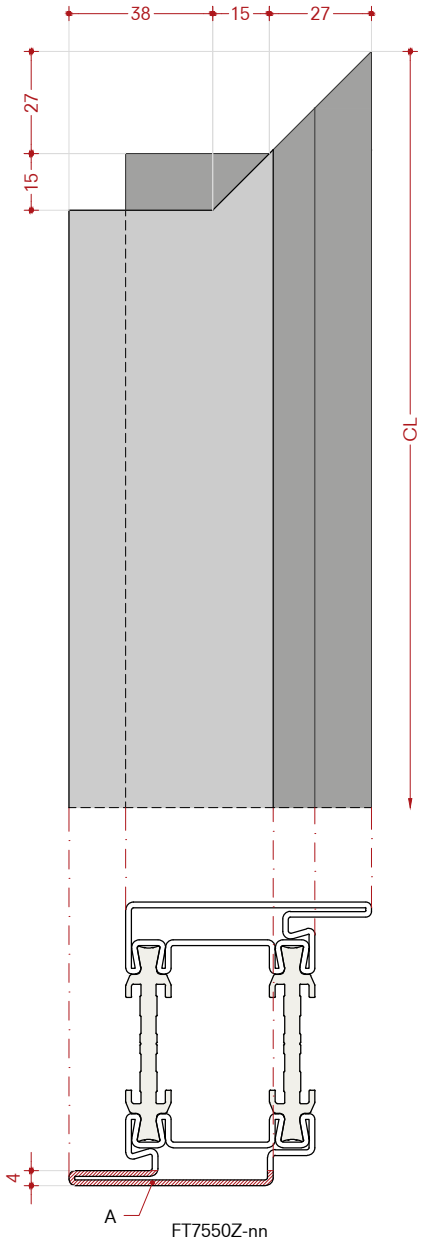
FT7550Z-nn

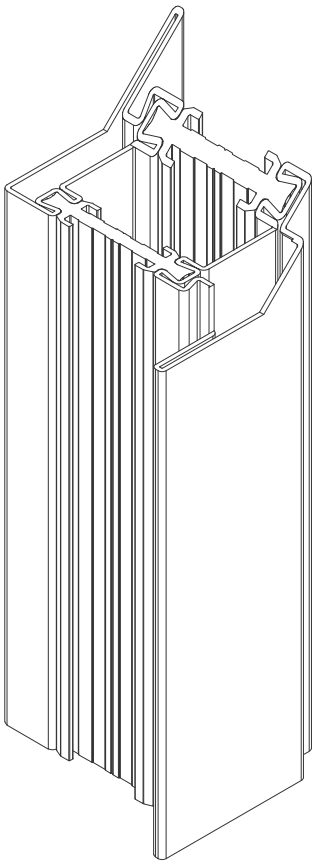


CL = Cutting Length

CL = Zuschnitt

CL = Découpe





CL = Cutting Length

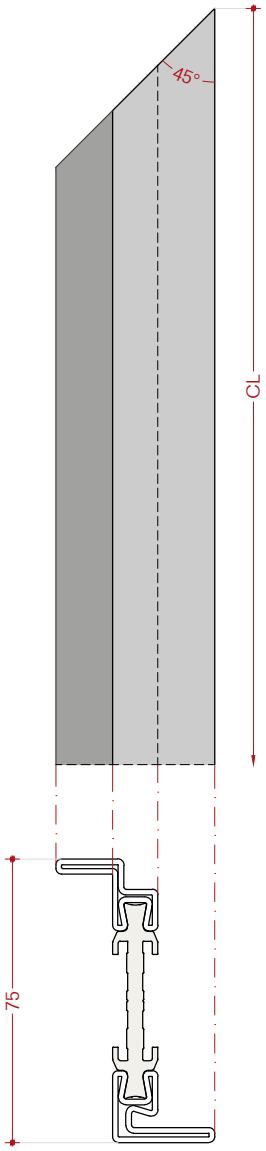
A) Cut out

CL = Zuschnitt

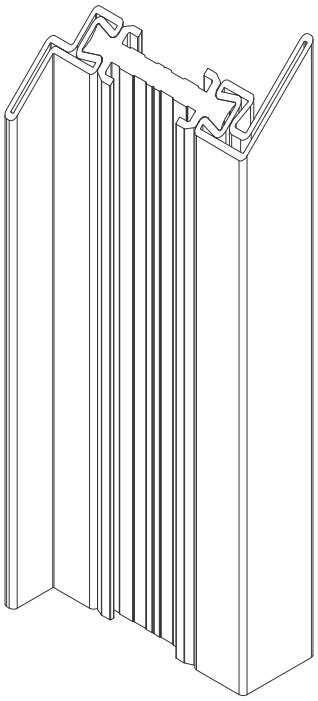
A) Fräsung

CL = Découpe

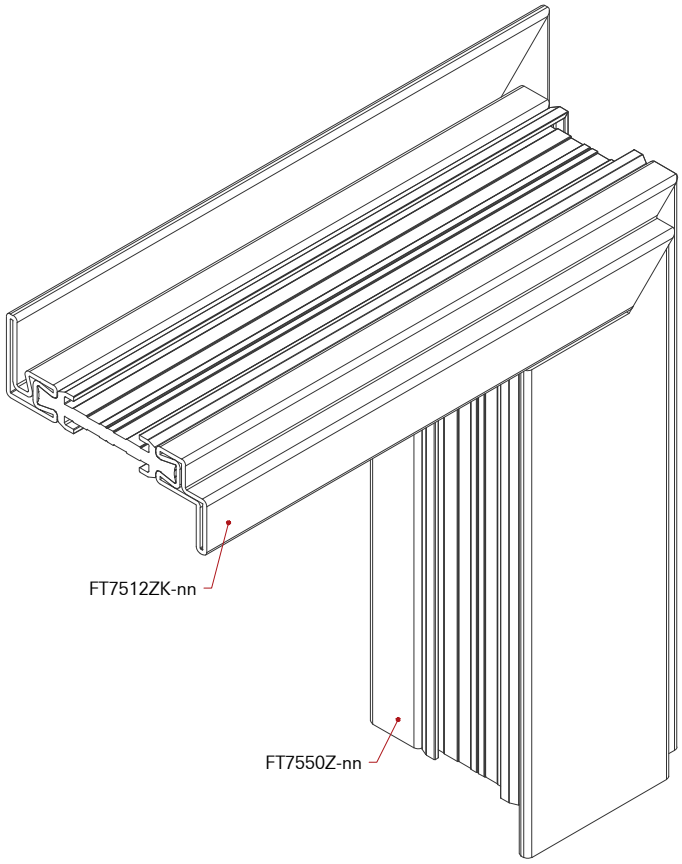
A) Fraisage

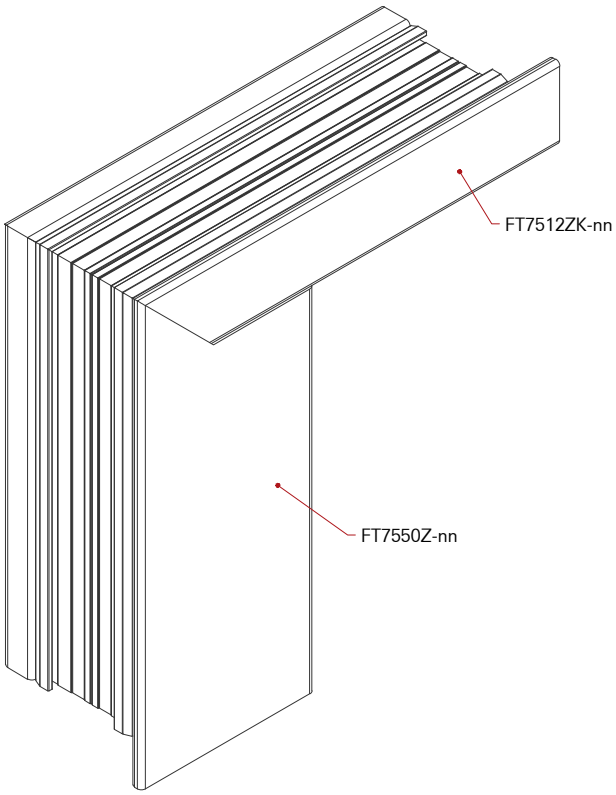


FT7512ZK-nn



CL = Cutting Length CL = Zuschnitt CL = Découpe

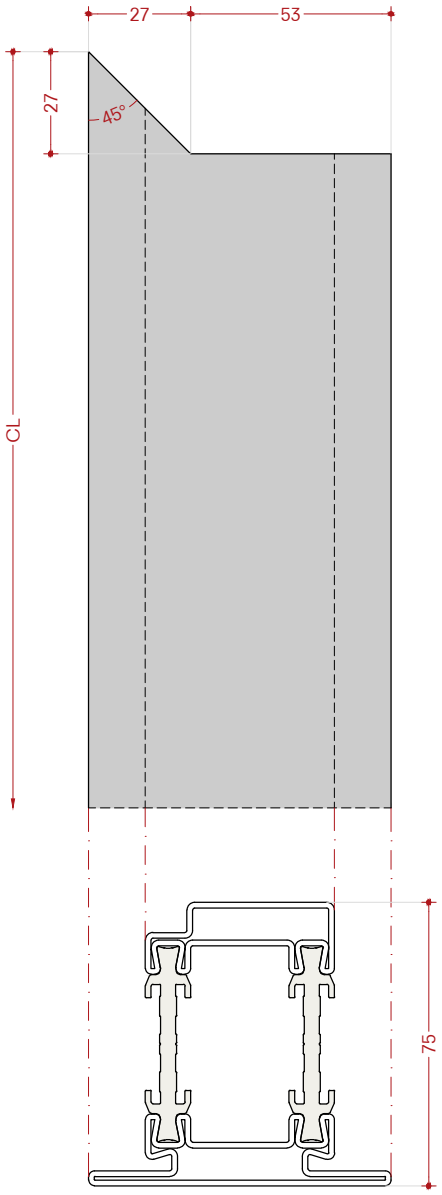

FT7512ZK-nn
FT7550Z-nn


FT7512ZK-nn
FT7550Z-nn

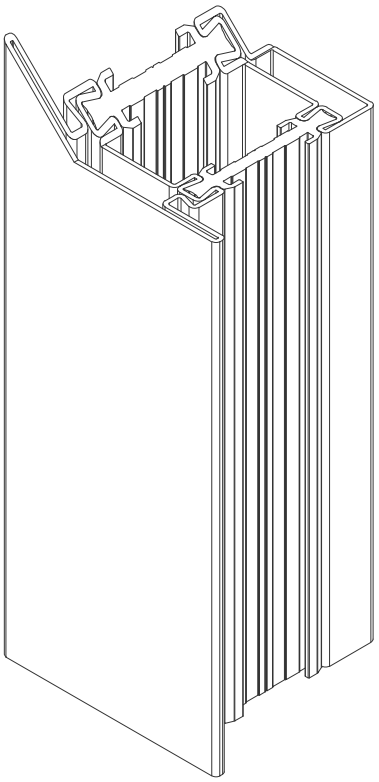
Processing
Leaf door widening on complete height on lock side
FT 7550T-nn + FT 7512TK-nn
Open out

Bearbeitung
Anschlagtür mit durchgehender Verbreiterung Schlossseite
FT 7550T-nn + FT 7512TK-nn
Nach außen öffnend

Usinages
Vantail de la porte
FT 7550T-nn + FT 7512TK-nn
Ouverture extérieure



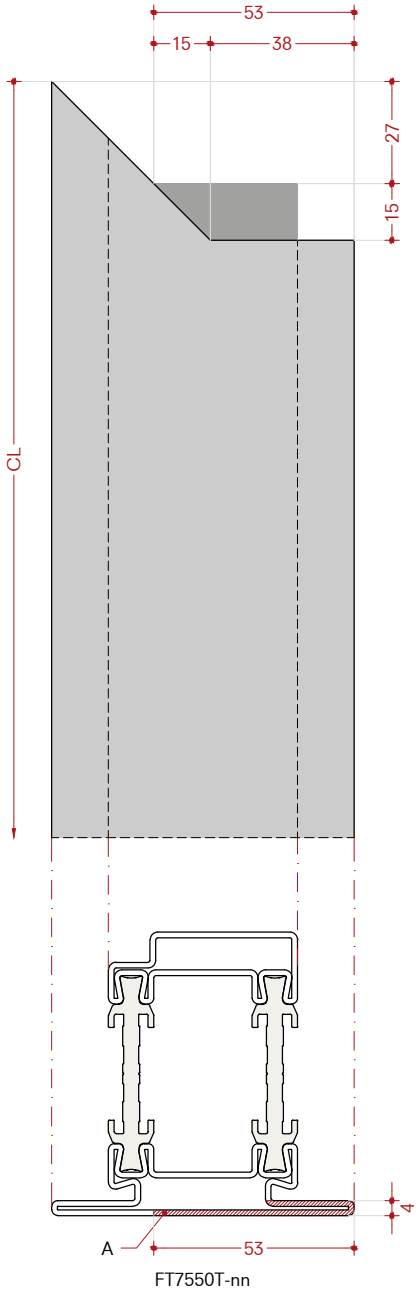
FT7550T-nn



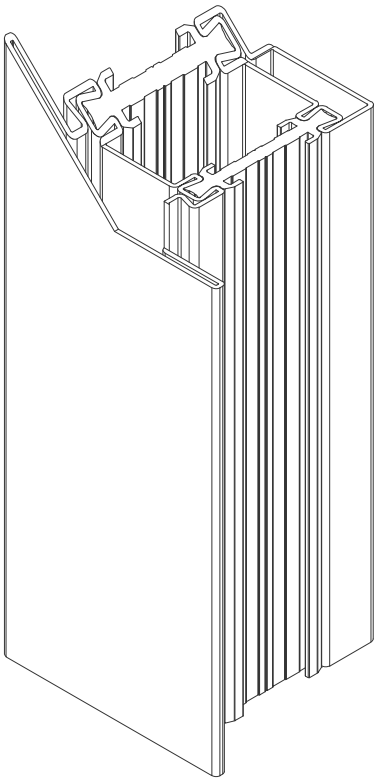
CL = Cutting Length

CL = Zuschnitt

CL = Découpe



FT7550T-nn



CL = Cutting Length

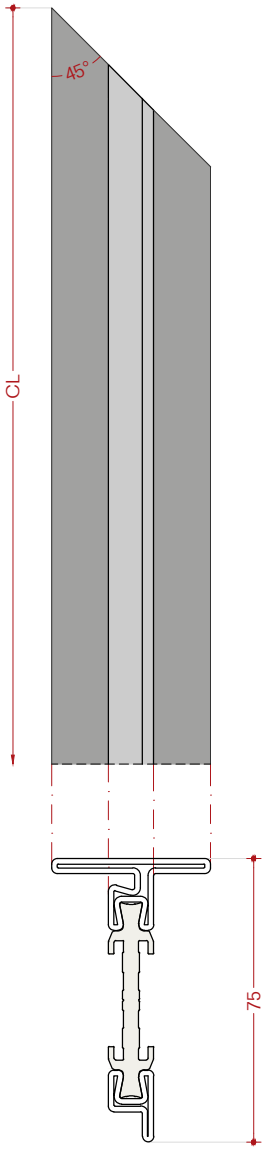
A) Cut out

CL = Zuschnitt

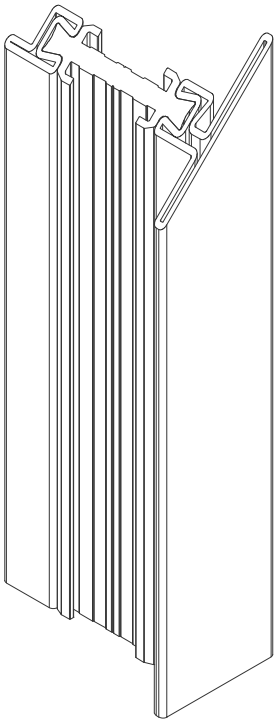
A) Fräsung

CL = Découpe

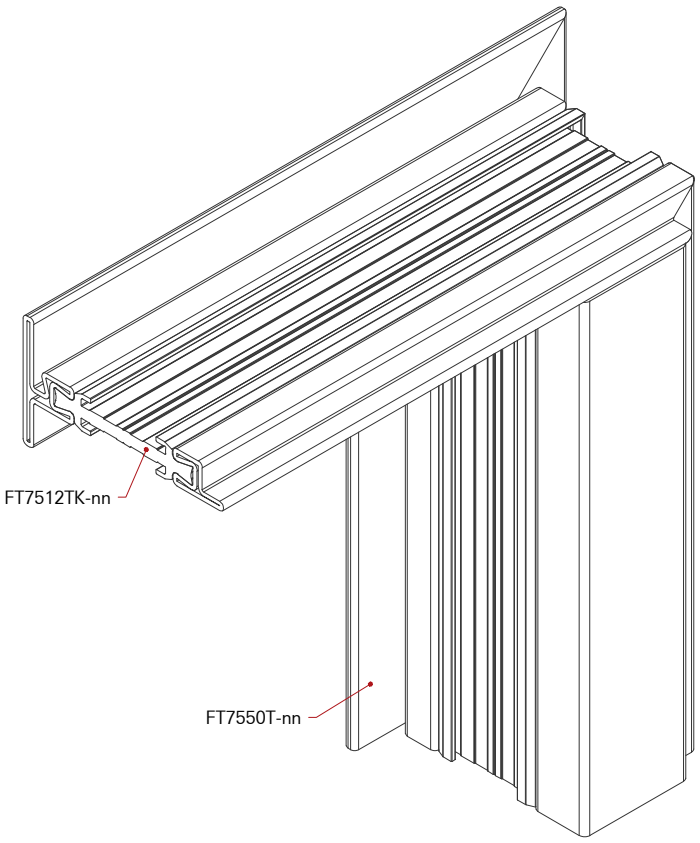
A) Fraisage

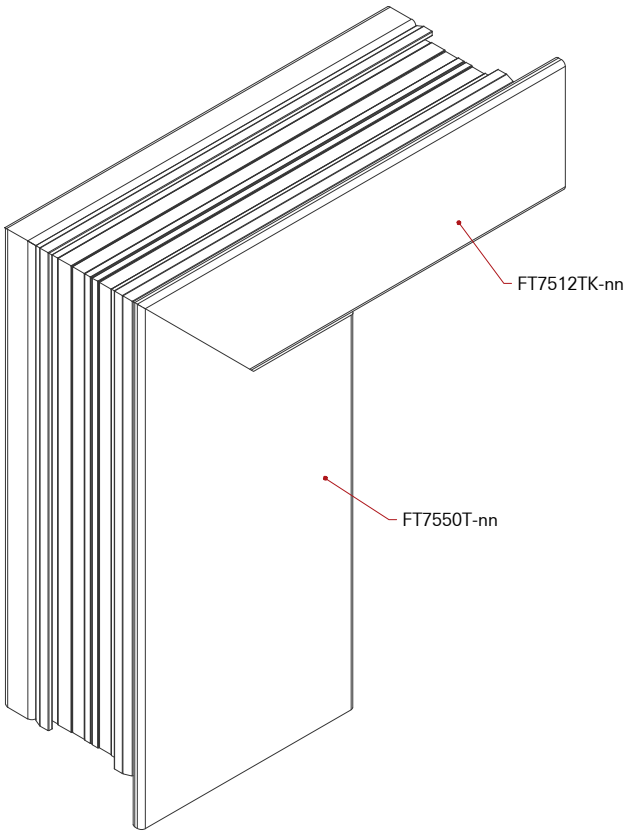


FT7512TK-nn



CL = Cutting Length CL = Zuschnitt CL = Découpe

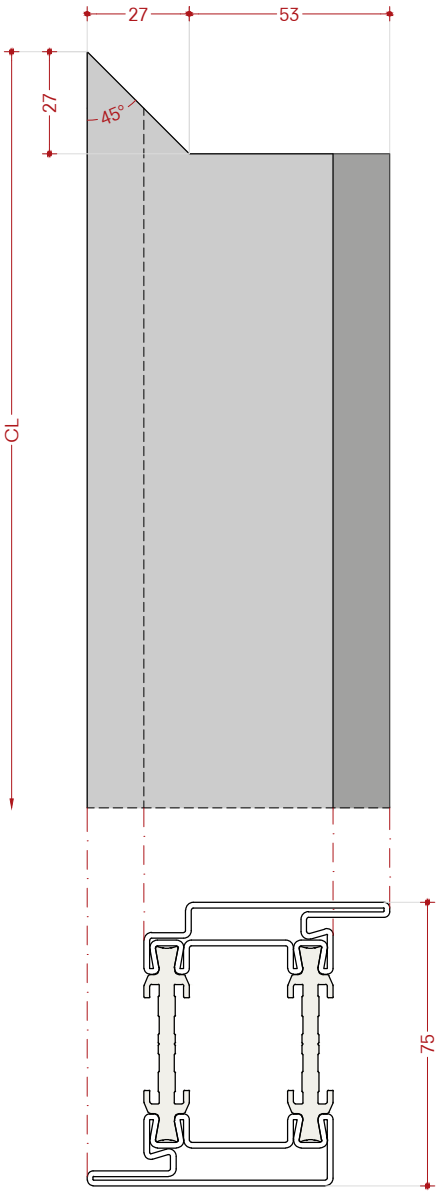

FT7512TK-nn
FT7550T-nn


FT7512TK-nn
FT7550T-nn

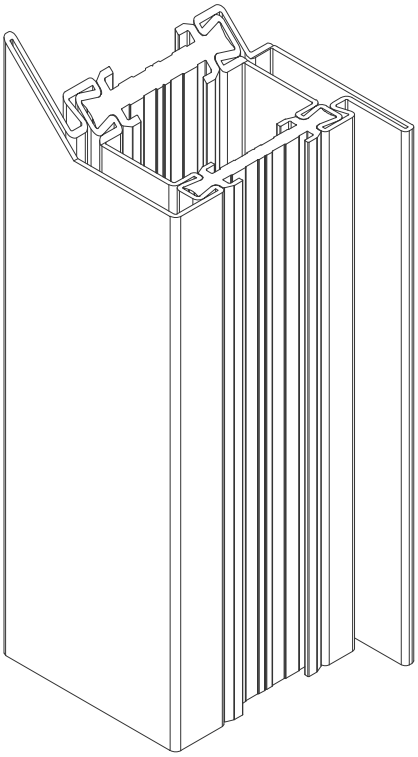
Processing
Leaf door widening on complete height on lock side
FT 7550Z-nn + FT 7512TK-nn
Open out

Bearbeitung
Anschlagtür mit durchgehender Verbreiterung Schlossseite
FT 7550Z-nn + FT 7512TK-nn
Nach außen öffnend

Usinages
Vantail de la porte
FT 7550Z-nn + FT 7512TK-nn
Ouverture extérieure



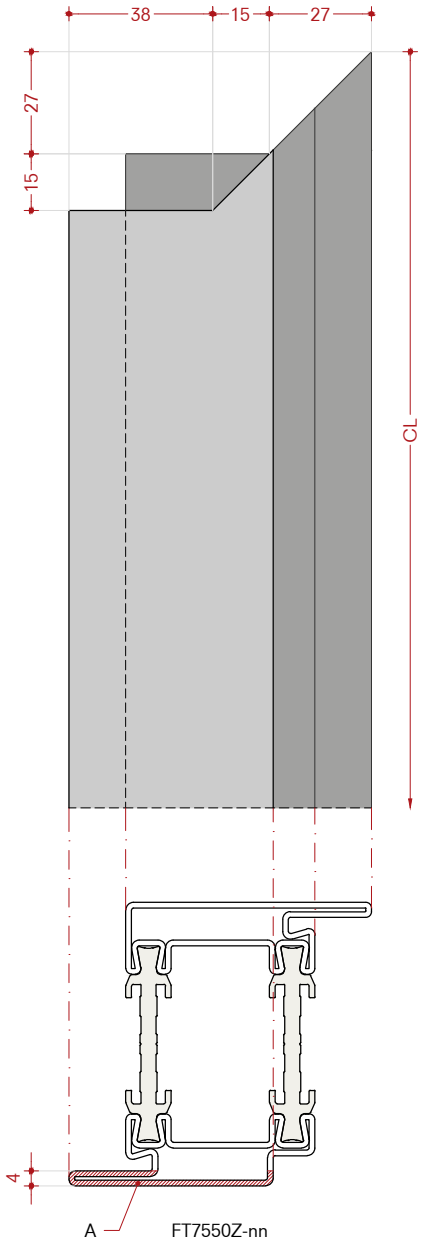
FT7550Z-nn

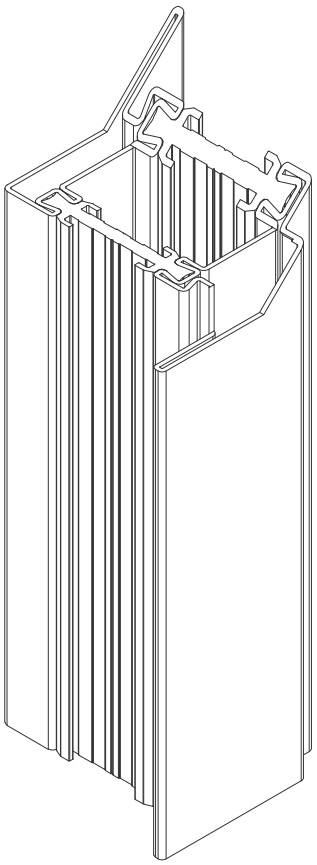


CL = Cutting Length

CL = Zuschnitt

CL = Découpe





CL = Cutting Length

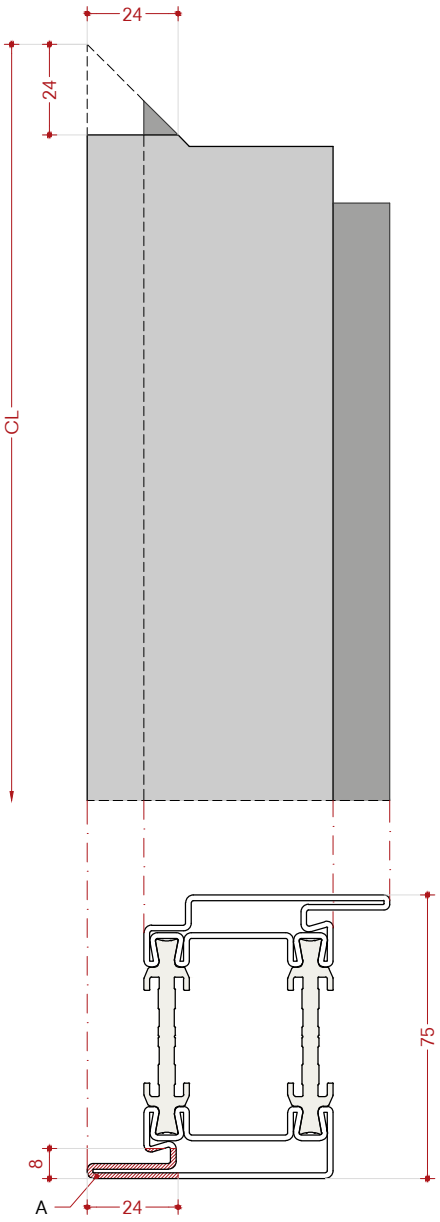
A) Cut out

CL = Zuschnitt

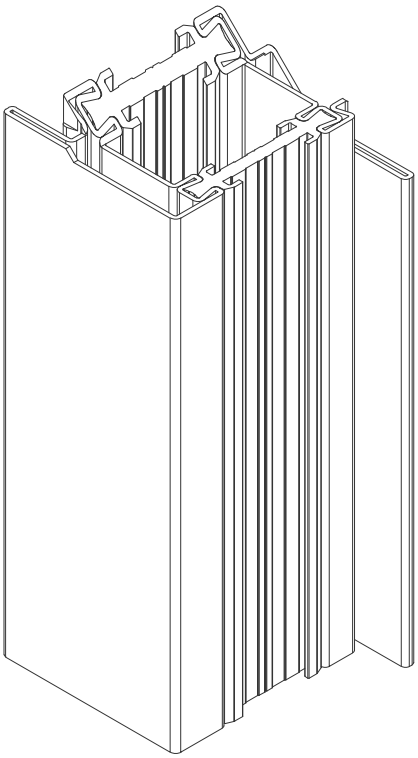
A) Fräsung

CL = Découpe

A) Fraisage



FT7550Z-nn



CL = Cutting Length

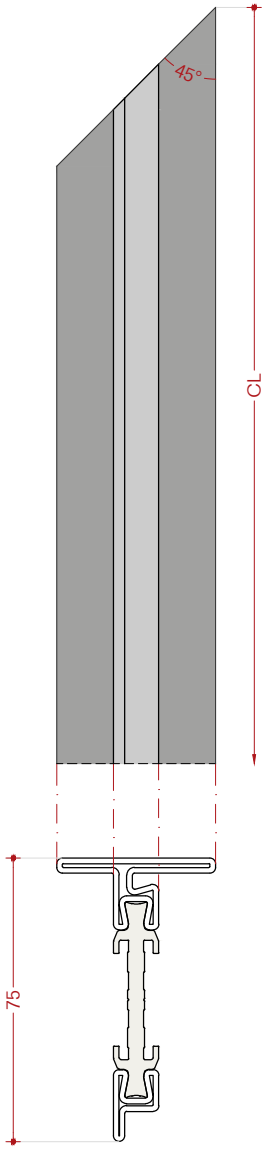
A) Cut out

CL = Zuschnitt

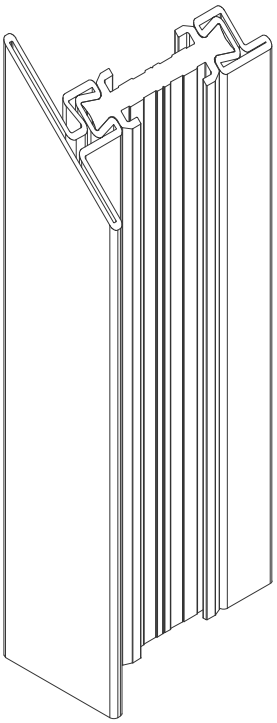
A) Fräsung

CL = Découpe

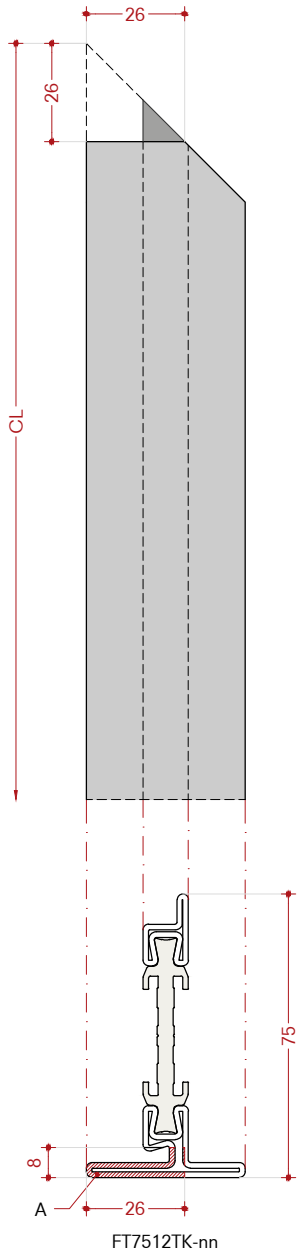
A) Fraisage



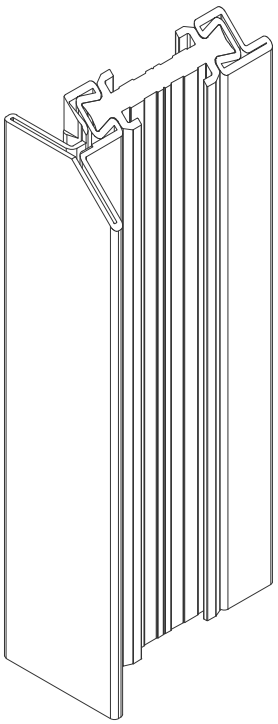
FT7512TK-nn



CL = Cutting Length CL = Zuschnitt CL = Découpe



FT7512TK-nn



CL = Cutting Length

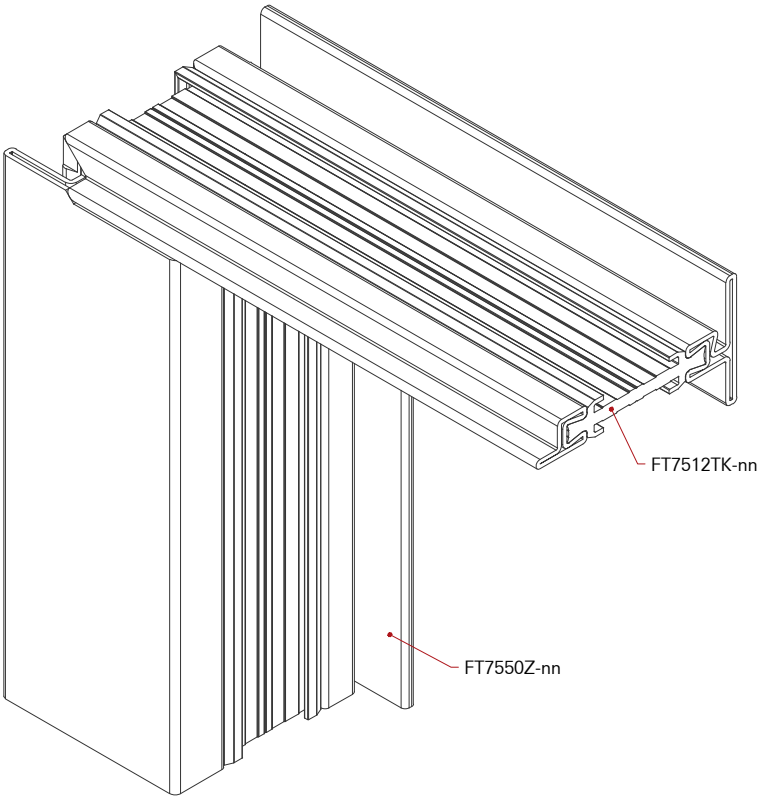
A) Cut out

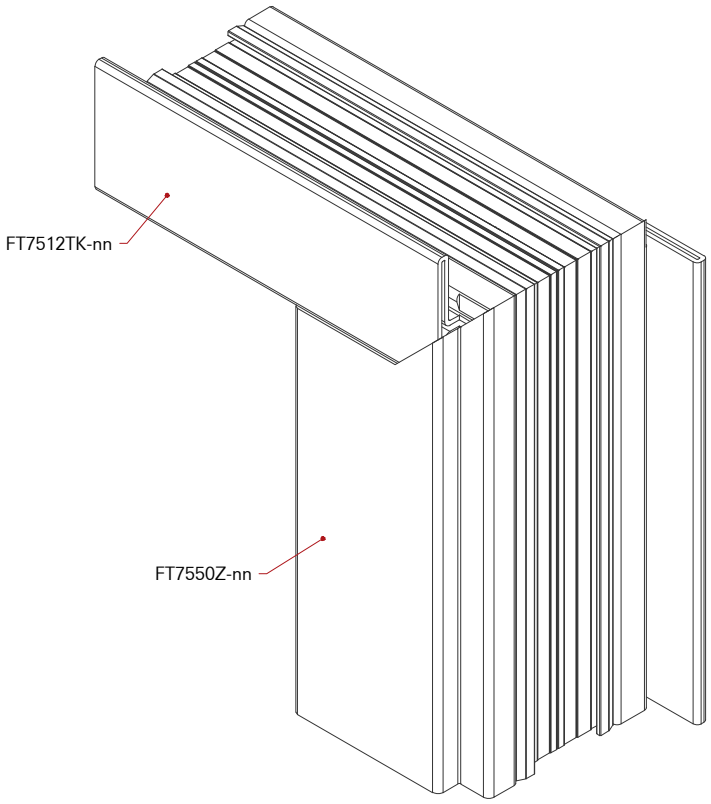
CL = Zuschnitt

A) Fräsung

CL = Découpe

A) Fraisage

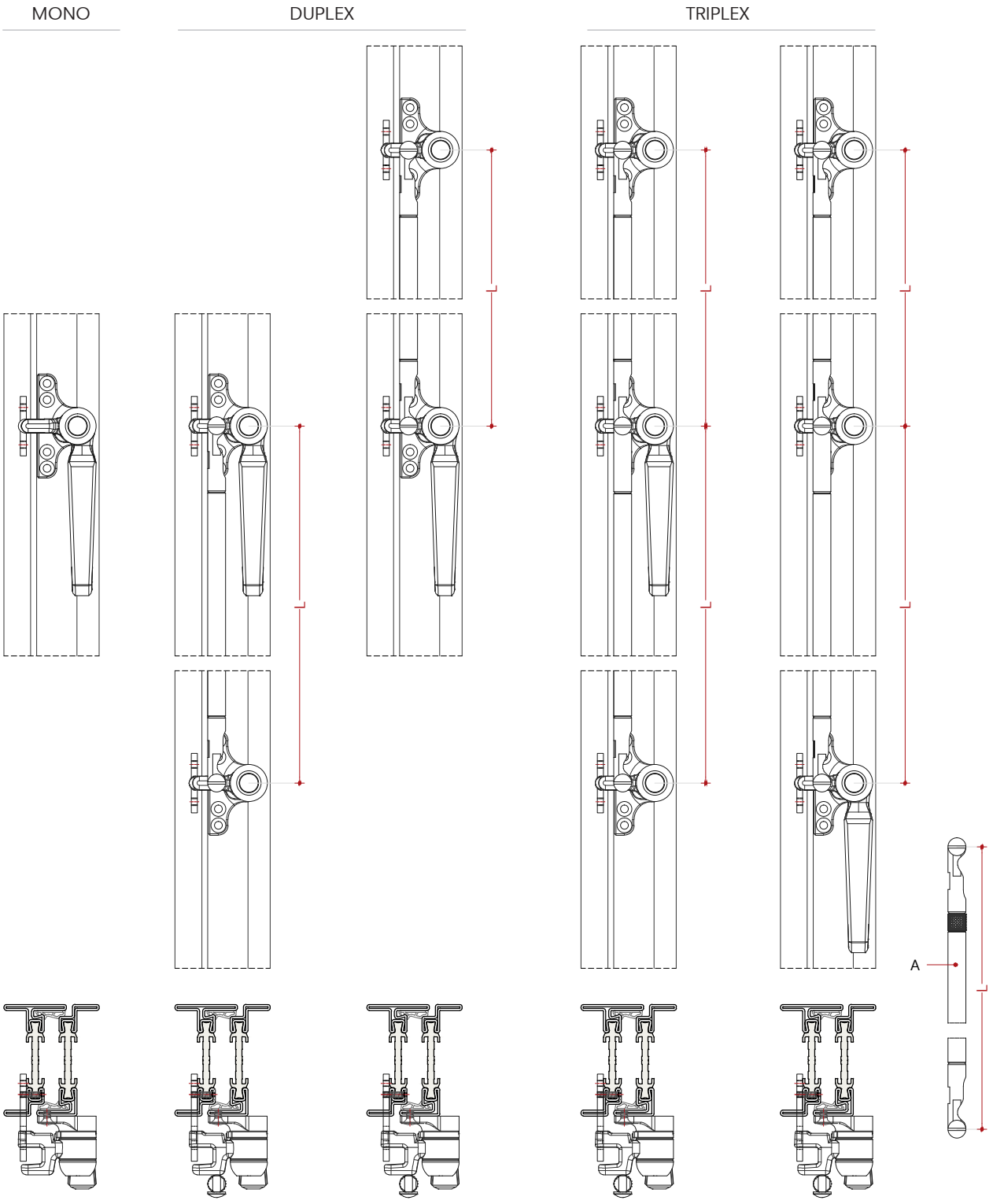

FT7512TK-nn
FT7550Z-nn


FT7512TK-nn
FT7550Z-nn

Installation
Heritage window handle
Open in, single leaf window
Flush profiles

Einbau
Heritage Fenstergriff
Einflüglige Fenster nach innen öffnend
Flächenbündige profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre un vantail, ouverture intérieure
Profilés coplanaires



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

Maßstab 1:4
A) Verbindungsstange

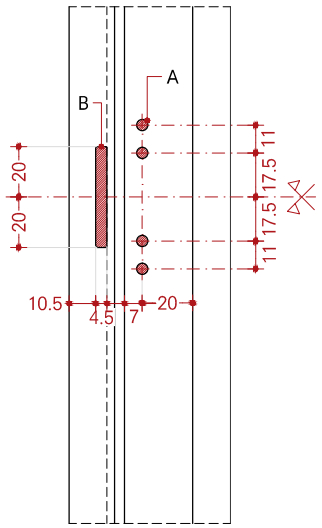
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Échelle1:4
A) Barre de liaison

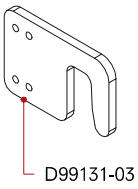
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

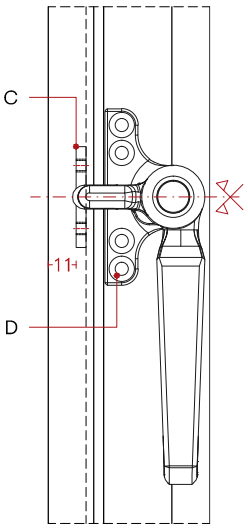
Assembly / Montage / Schéma de montage

Profiles drilling
Profilbearbeitung
Trous sur profilés

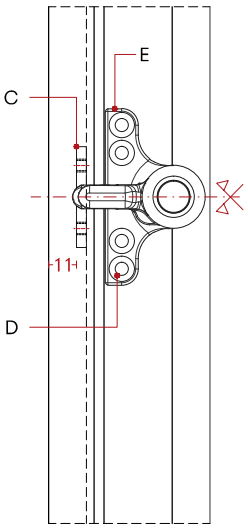


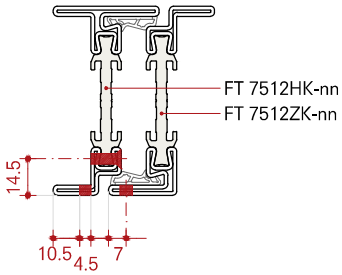
Handle and locking hook
Griff und Verriegelungshaken
Poignée et crochet de fermeture

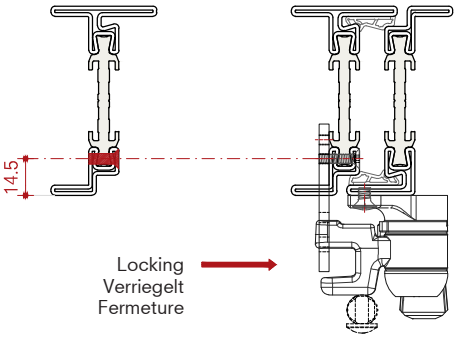


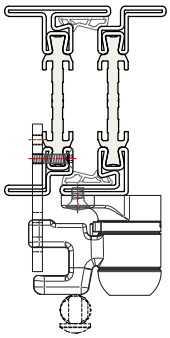


Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture









A) M5 holes on leaf profile
B) Cut out 4.5x40 mm on frame profile
C) Fastening of locking hook with M4x16 ISO10642 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) Bohrungen M5 am Flügelprofil
B) Ausfräsung 4.5x40 mm am Rahmenprofil
C) Befestigung von Verriegelungshaken am Rahmen durch Schrauben M4x16 ISO10642
D) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
E) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden

Für weitere Informationen wenden Sie sich bitte das technische Büro.

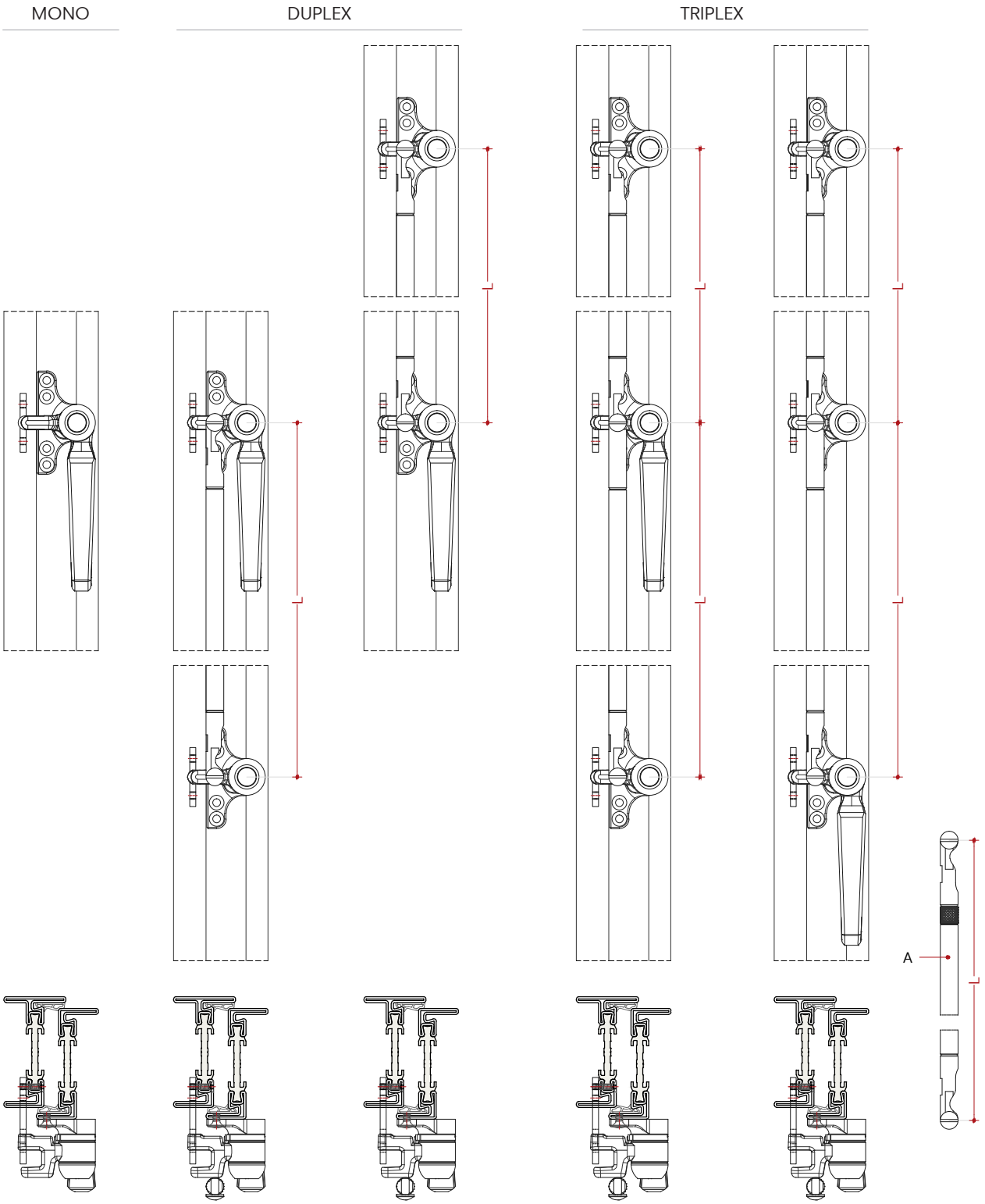
A) Trous M5 sur profilé ouvrant
B) Fraisage 4.5x40 mm sur profilé dormant
C) Fixation du crochet de fermeture sur cadre avec vis M4x16 ISO10642
D) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
E) 70122X nn barre de liaison requise pour lier la poignée et le nez

Pour toute information supplémentaire, contacter le bureau technique.

Installation
Heritage window handle
Open in, single leaf window
Overlapped profiles

Einbau
Heritage Fenstergriff
Einflüglige Fenster nach innen öffnend
Überlappende profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre un vantail, ouverture intérieure
Profilés superposés



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

Maßstab 1:4
A) Verbindungsstange

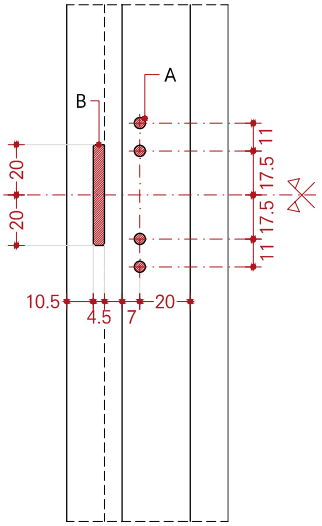
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

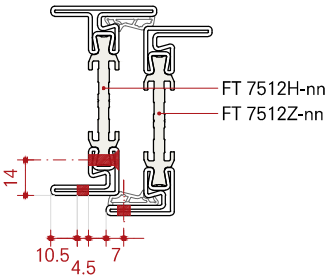
Échelle1:4
A) Barre de liaison

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

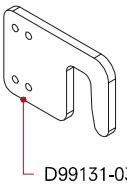
Assembly / Montage / Schéma de montage

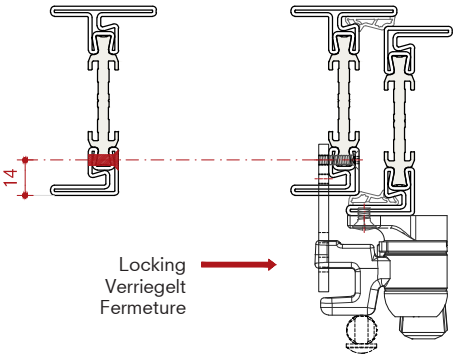
Profiles drilling
Profilbearbeitung
Trous sur profilés

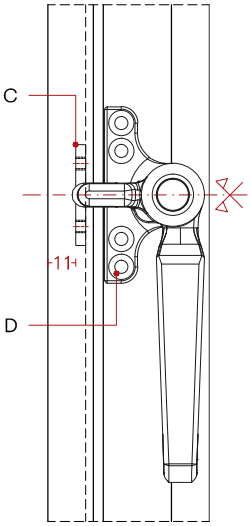




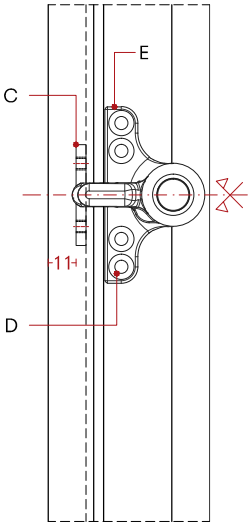
Handle and locking hook
Griff und Verriegelungshaken
Poignée et crochet de fermeture

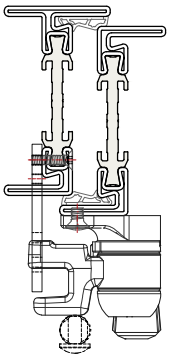






Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture





A) M5 holes on leaf profile
B) Cut out 4.5x40 mm on frame profile
C) Fastening of locking hook with M4x16 ISO10642 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) Bohrungen M5 am Flügelprofil
B) Ausfräsung 4.5x40 mm am Rahmenprofil
C) Befestigung von Verriegelungshaken am Rahmen durch Schrauben M4x16 ISO10642
D) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
E) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden

Für weitere Informationen wenden Sie sich bitte das technische Büro.

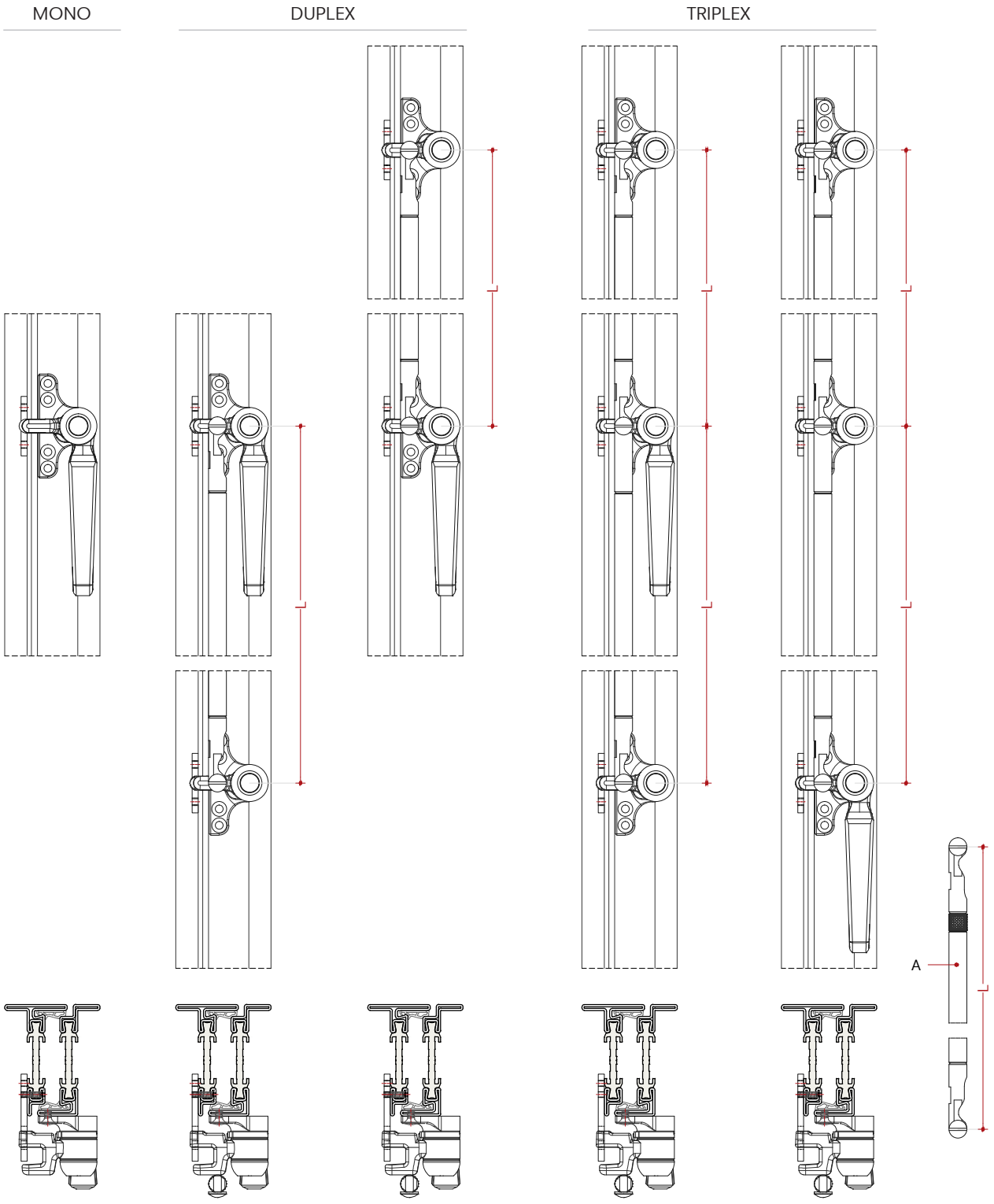
A) Trous M5 sur profilé ouvrant
B) Fraisage 4.5x40 mm sur profilé dormant
C) Fixation du crochet de fermeture sur cadre avec vis M4x16 ISO10642
D) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
E) 70122X nn barre de liaison requise pour lier la poignée et le nez

Pour toute information supplémentaire, contacter le bureau technique.

Installation
Heritage window handle
Open in, double leaf window
Flush profiles

Einbau
Heritage Fenstergriff
Zweiflügliges Fenster nach innen öffnend
Flächenbündige profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre à deux vantaux, ouverture intérieure
Profilés coplanaires



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

Maßstab 1:4
A) Verbindungsstange

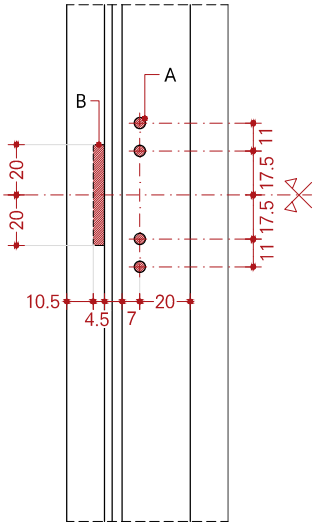
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

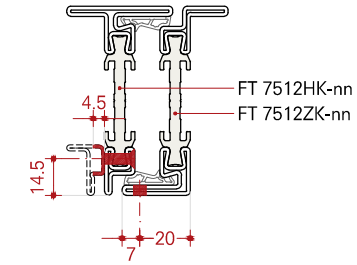
Échelle1:4
A) Barre de liaison

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

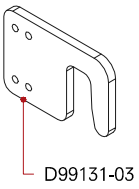
Assembly / Montage / Schéma de montage

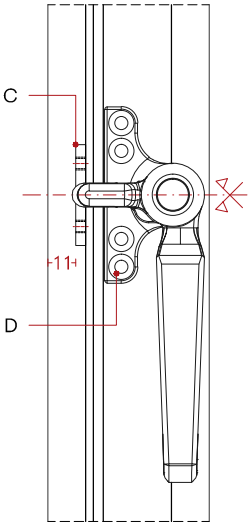
Profiles drilling
Profilbearbeitung
Trous sur profilés

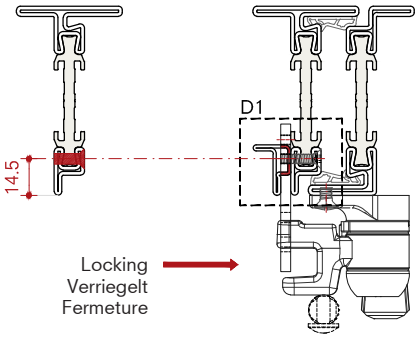




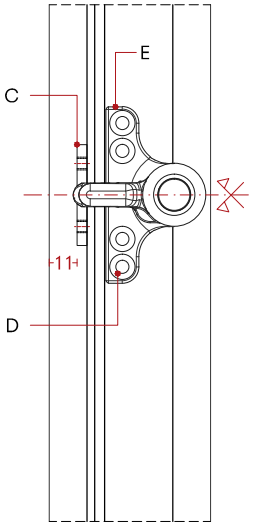
Handle and locking hook
Griff und Verriegelungshaken
Poignée et crochet de fermeture

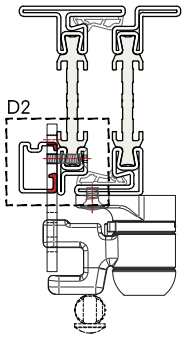


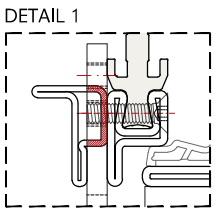


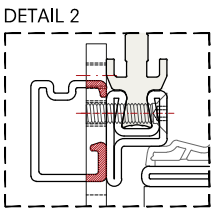


Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture









A) M5 holes on leaf profile
B) Cut out 4.5x40 mm on glazing bead
C) Fastening of locking hook with M4x16 ISO10642 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) Bohrungen M5 am Flügelprofil
B) Ausfräsung 4.5x40 mm am Glashalteleisten
C) Befestigung von Verriegelungshaken am Rahmen durch Schrauben M4x16 ISO10642
D) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
E) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden

Für weitere Informationen wenden Sie sich bitte das technische Büro.

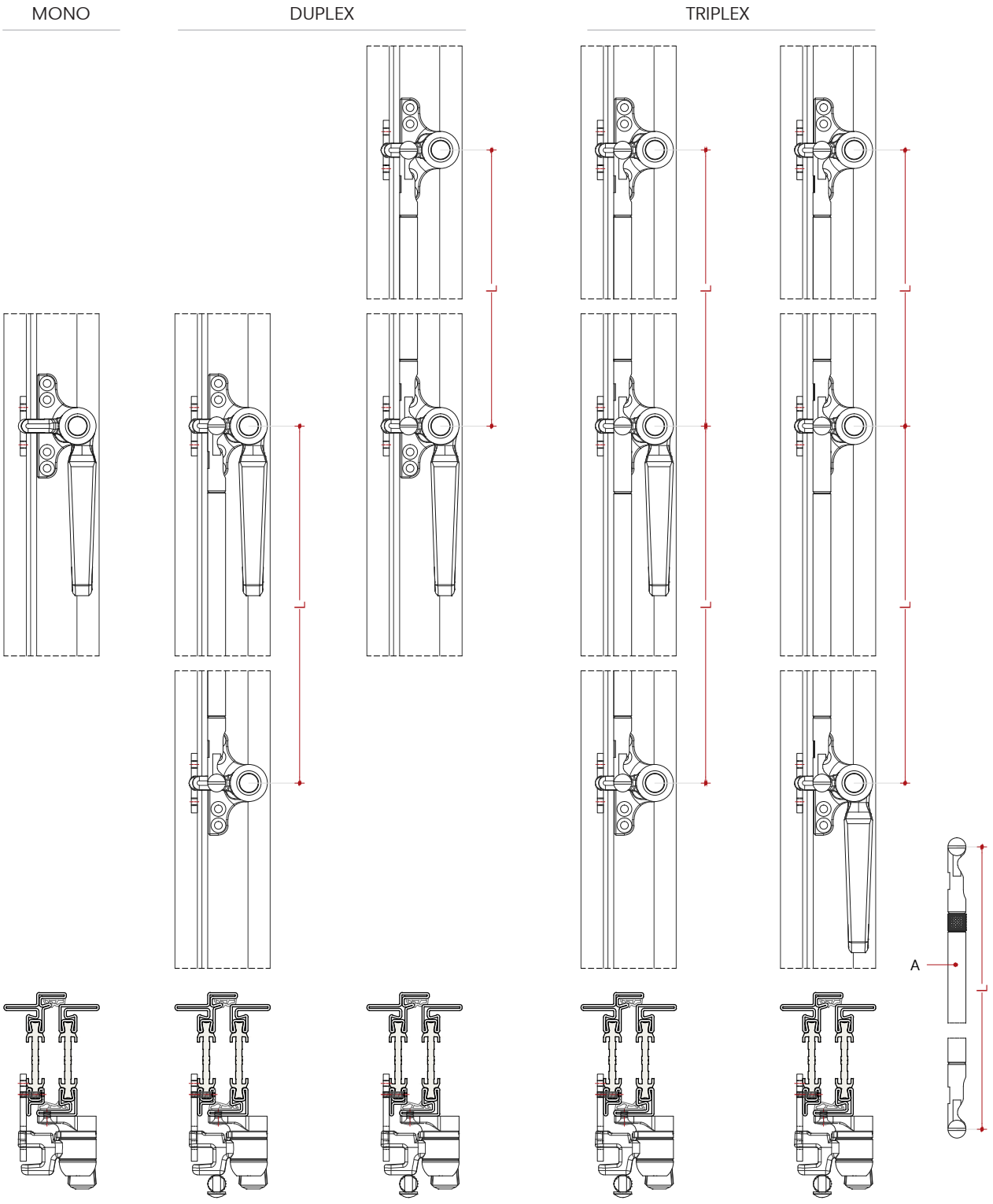
A) Trous M5 sur profilé ouvrant
B) Fraisage 4.5x40 mm sur parclose
C) Fixation du crochet de fermeture sur cadre avec vis M4x16 ISO10642
D) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
E) 70122X nn barre de liaison requise pour lier la poignée et le nez

Pour toute information supplémentaire, contacter le bureau technique.

Installation
Heritage window handle
Open in, double leaf window
Overlapped profiles

Einbau
Heritage Fenstergriff
Zweiflügliges Fenster nach innen öffnend
Überlappende profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre à deux vantaux, ouverture intérieure
Profilés superposés



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

Maßstab 1:4
A) Verbindungsstange

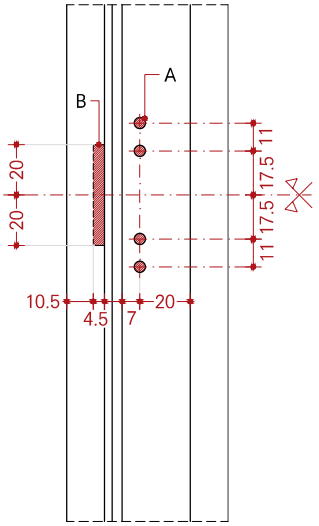
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

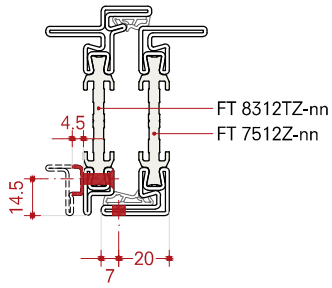
Échelle1:4
A) Barre de liaison

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

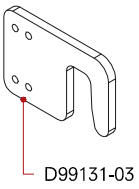
Assembly / Montage / Schéma de montage

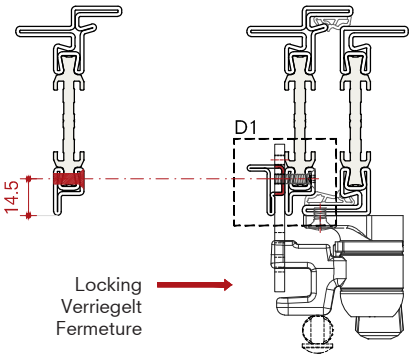
Profiles drilling
Profilbearbeitung
Trous sur profilés

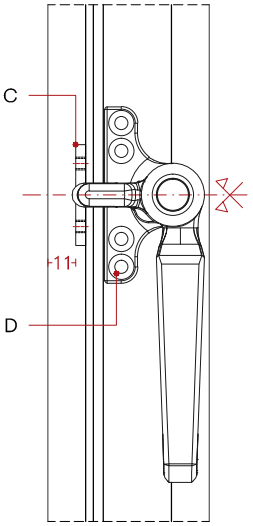




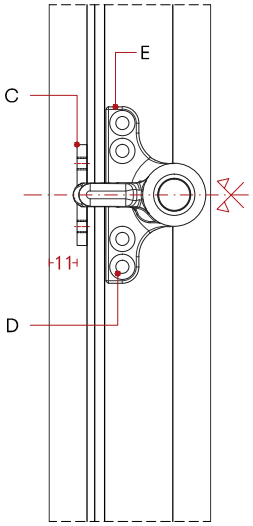
Handle and locking hook
Griff und Verriegelungshaken
Poignée et crochet de fermeture

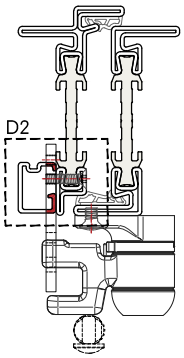


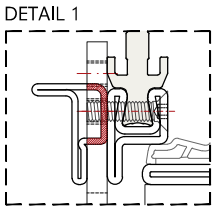


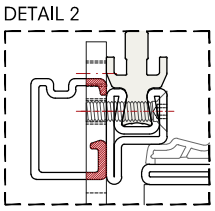


Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture









A) M5 holes on leaf profile
B) Cut out 4.5x40 mm on glazing bead
C) Fastening of locking hook with M4x16 ISO10642 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) Bohrungen M5 am Flügelprofil
B) Ausfräsung 4.5x40 mm am Glashalteleisten
C) Befestigung von Verriegelungshaken am Rahmen durch Schrauben M4x16 ISO10642
D) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
E) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden

Für weitere Informationen wenden Sie sich bitte das technische Büro.

A) Trous M5 sur profilé ouvrant
B) Fraisage 4.5x40 mm sur parclose
C) Fixation du crochet de fermeture sur cadre avec vis M4x16 ISO10642
D) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
E) 70122X nn barre de liaison requise pour lier la poignée et le nez

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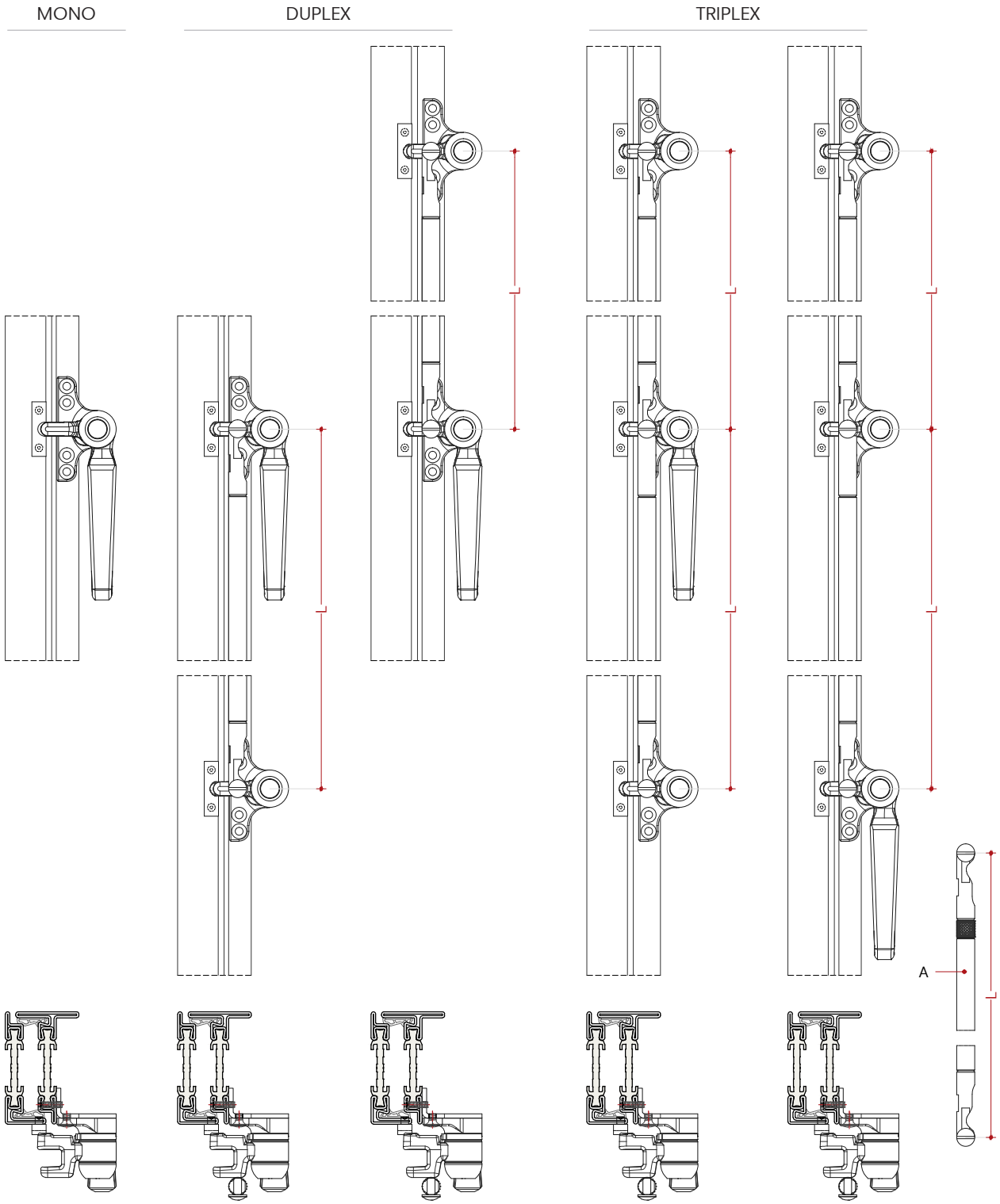
Installation
Heritage window handle
Open out, single leaf window
Flush profiles

Einbau
Heritage Fenstergriff
Einflüglige Fenster nach außen öffnend
Flächenbündige profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre un vantail, ouverture extérieure
Profilés coplanaires



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

Maßstab 1:4
A) Verbindungsstange

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Échelle1:4
A) Barre de liaison

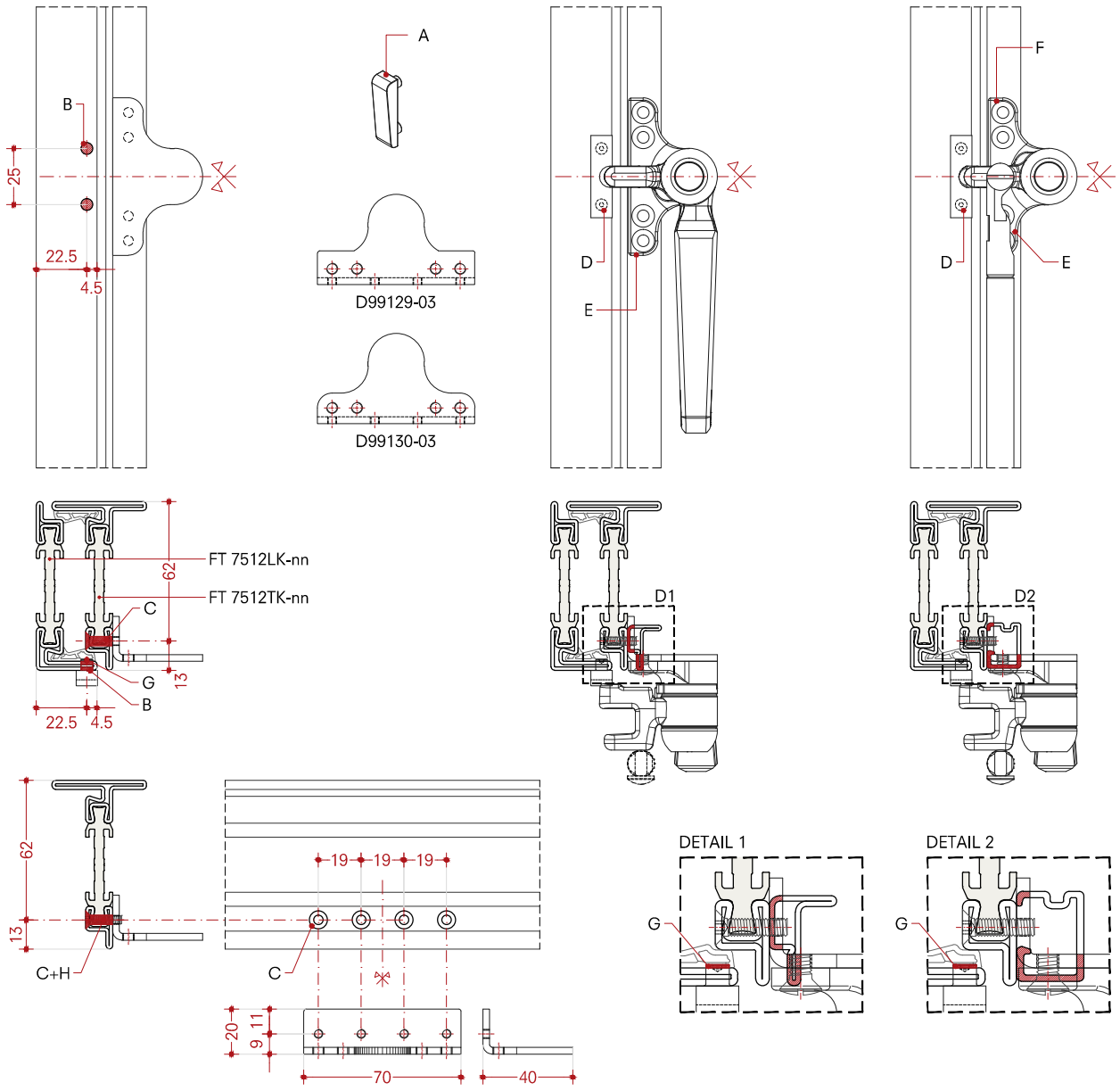
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montage / Schéma de montage

Profiles drilling
Profilbearbeitung
Trous sur profilés

Handle and locking wedge
Griff und Verriegelungshaken
Poignée et crochet de fermeture

Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture



A) Wedge 700105 NB
D99129-03 Angular for snap-on glazing beads FV 15XXR-nn
D99130-03 Angular for screw-on glazing beads FV 15XXE-nn
B) Ø5.25 mm holes on frame profile
C) Ø4.25 mm flared holes
D) Fastening of 700105 NB on frame profile
E) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
F) A 70122X nn connection rod required to connect the handle to additional locking nose
G) Remove protrusions
H) Fastening with M4x16 ISO10642 screws

Detail 1-2) Glazing beads - fastening examples: cut out glazing bead accordingly.

For any additional information please contact our technical office.

A) Verriegelungskeil 700105NB
D99129-03 für Rechteckglashalteleiste FV 15XXR-nn
D99130-03 für Winkelglashalteleiste FV 15XXE-nn
B) Bohrungen Ø5.25 mm am Rahmenprofil
C) Bohrungen aufgekelchtes Ø4.25 mm
D) Befestigung 700105 NB am Rahmenprofil
E) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
F) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden
G) Zuschnitt
H) Befestigung mit Schrauben M4x16 ISO10642

Detail 1-2) Glashalteleisten - Befestigungsbeispiele: Glashalteleiste entsprechend ausklinken.

Für weitere Informationen wenden Sie sich bitte das technische Büro.

A) Coin de verrouillage 700105NB
D99129-03 pour parcloses encastrè FV 15XXR-nn
D99130-03 pour parcloses cornière FV 15XXE-nn
B) Trous Ø5.25 mm sur profilé dormant
C) Trous évasé Ø4.25 mm
D) Fixation de 700105 NB sur profilé dormant
E) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
F) 70122X nn barre de liaison requise pour lier la poignée et le nez
G) Pièce à enlever
H) Fixation avec vis M4x16 ISO10642

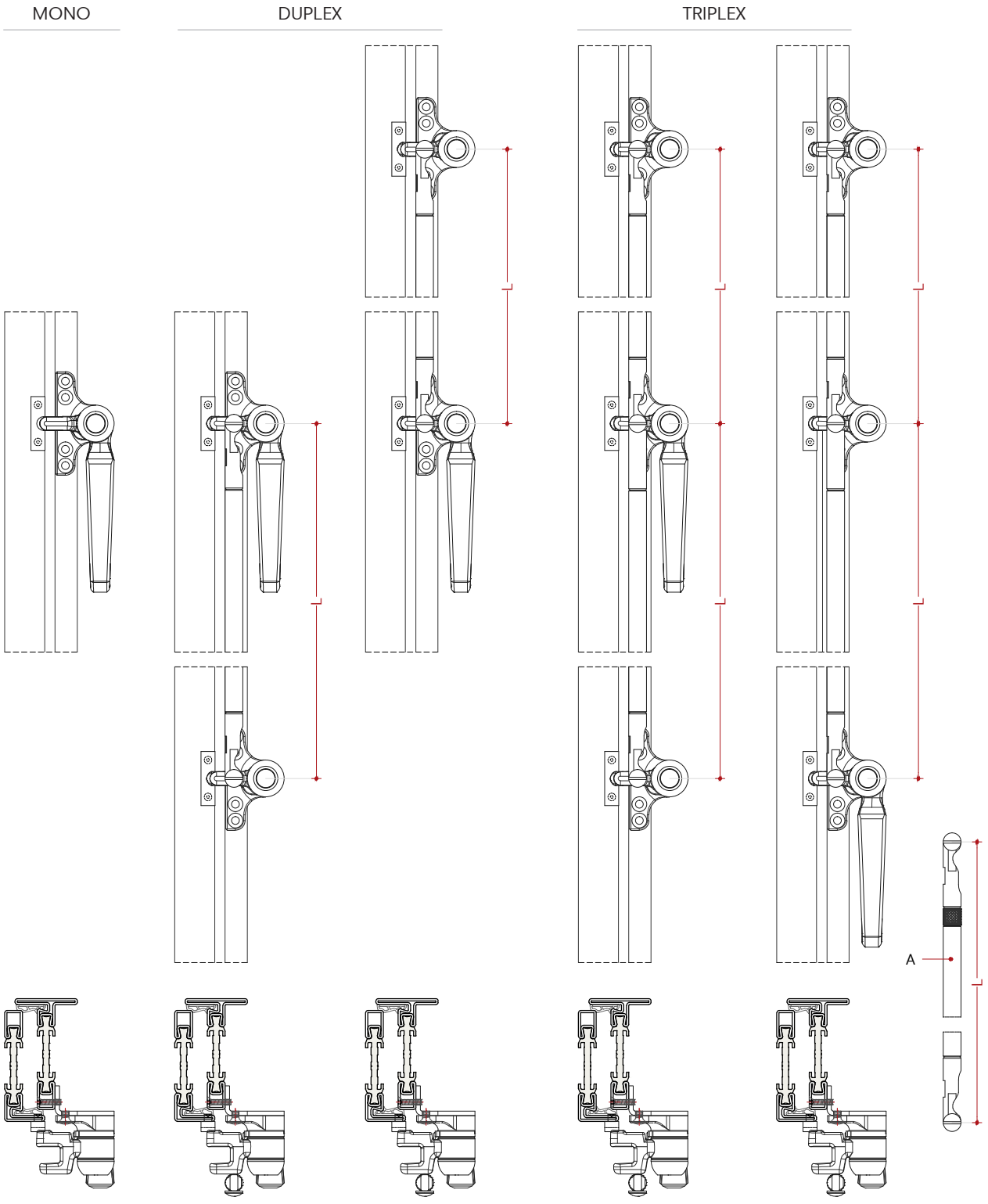
Detail 1-2) Parcloses - exemples de fixation: entailler la parclose.

Pour toute information supplémentaire, contacter le bureau technique.

Installation
Heritage window handle
Open out, single leaf window
Overlapped profiles

Einbau
Heritage Fenstergriff
Einflüglige Fenster nach außen öffnend
Überlappende profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre un vantail, ouverture extérieure
Profilés superposés



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

Maßstab 1:4
A) Verbindungsstange

Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Échelle1:4
A) Barre de liaison

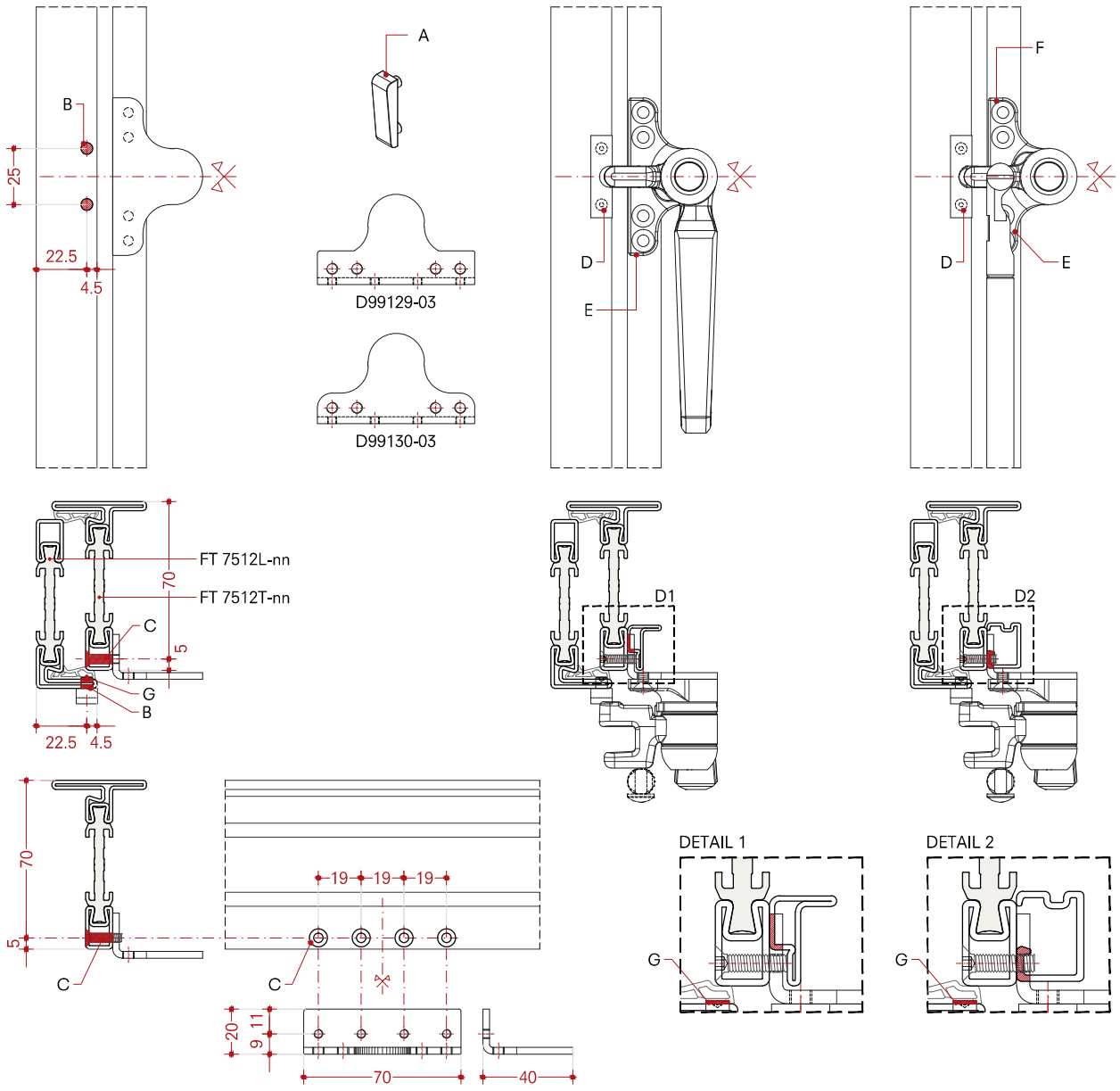
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Assembly / Montage / Schéma de montage

Profiles drilling
Profilbearbeitung
Trous sur profilés

Handle and locking wedge
Griff und Verriegelungshaken
Poignée et crochet de fermeture

Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture



A) Wedge 700105 NB
D99129-03 Angular for snap-on glazing beads FV 15XXR-nn
D99130-03 Angular for screw-on glazing beads FV 15XXE-nn
B) Ø5.25 mm holes on frame profile
C) Ø4.25 mm flared holes
D) Fastening of 700105 NB on frame profile
E) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
F) A 70122X nn connection rod required to connect the handle to additional locking nose
G) Remove protrusions
H) Fastening with M4x16 ISO10642 screws

Detail 1-2) Glazing beads - fastening examples: cut out glazing bead accordingly.

For any additional information please contact our technical office.

A) Verriegelungskeil 700105NB
D99129-03 für Rechteckglashalteleiste FV 15XXR-nn
D99130-03 für Winkelglashalteleiste FV 15XXE-nn
B) Bohrungen Ø5.25 mm am Rahmenprofil
C) Bohrungen aufgekelchtes Ø4.25 mm
D) Befestigung 700105 NB am Rahmenprofil
E) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
F) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden
G) Zuschnitt
H) Befestigung mit Schrauben M4x16 ISO10642

Detail 1-2) Glashalteleisten - Befestigungsbeispiele: Glashalteleiste entsprechend ausklinken.

Für weitere Informationen wenden Sie sich bitte das technische Büro.

A) Coin de verrouillage 700105NB
D99129-03 pour parcloses encastrè FV 15XXR-nn
D99130-03 pour parcloses cornière FV 15XXE-nn
B) Trous Ø5.25 mm sur profilé dormant
C) Trous évasé Ø4.25 mm
D) Fixation de 700105 NB sur profilé dormant
E) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
F) 70122X nn barre de liaison requise pour lier la poignée et le nez
G) Pièce à enlever
H) Fixation avec vis M4x16 ISO10642

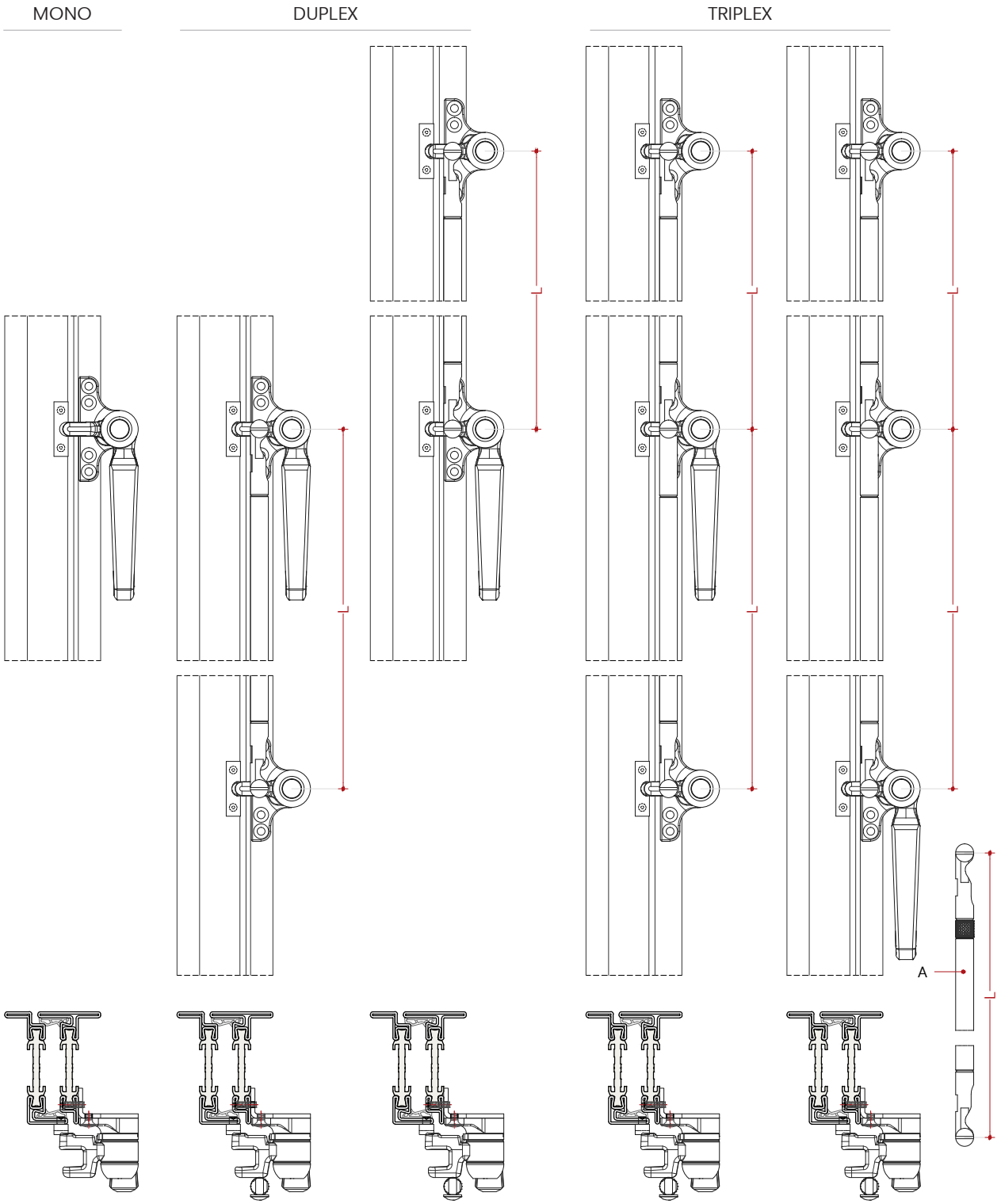
Detail 1-2) Parcloses - exemples de fixation: entailler la parclose.

Pour toute information supplémentaire, contacter le bureau technique.

Installation
Heritage window handle
Open out, double leaf window
Flush and overlapped profiles

Einbau
Heritage Fenstergriff
Zweiflügliges Fenster nach außen öffnend
Flächenbündige und Überlappende profile

Schéma de montage
Poignée Heritage pour fenêtre
Fenêtre à deux vantaux, ouverture extérieure
Profilés coplanaires et superposés



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

Maßstab 1:4
A) Verbindungsstange

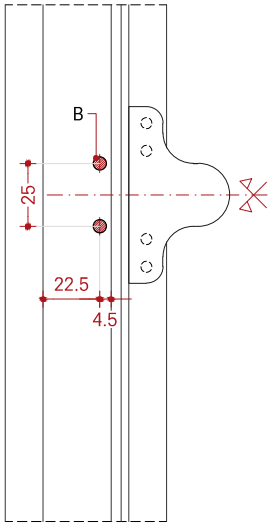
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

Échelle1:4
A) Barre de liaison

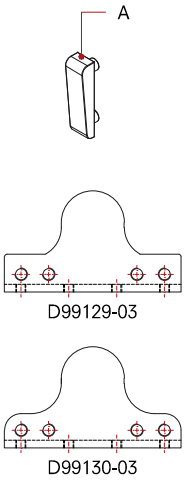
Code	L
701220 nn	600 mm
701221 nn	750 mm
701222 nn	900 mm
701223 nn	1050 mm
701224 nn	1200 mm

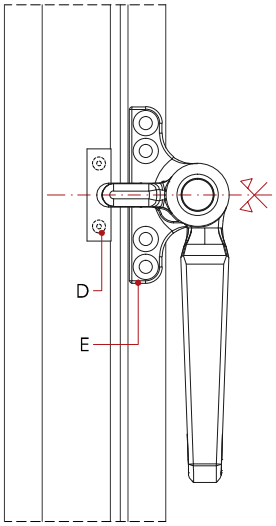
Assembly / Montage / Schéma de montage

Profiles drilling
Profilbearbeitung
Trous sur profilés

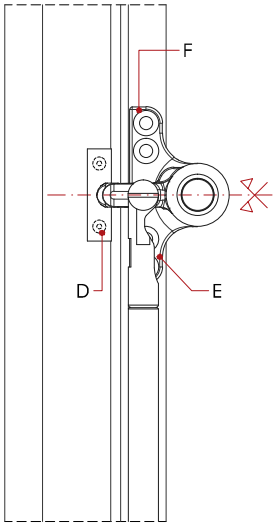


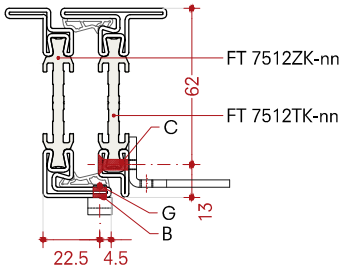
Handle and locking wedge
Griff und Verriegelungshaken
Poignée et crochet de fermeture

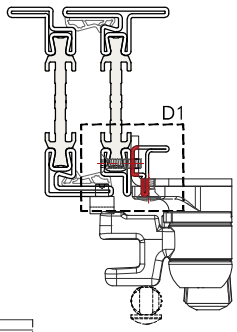


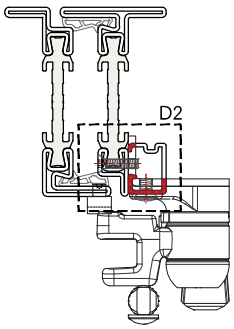


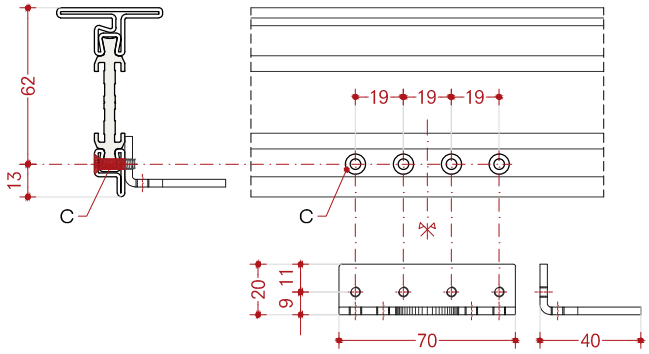
Additional locking nose and hook
Zusatzverrieglung und Verriegelungshaken
Nez et crochet de fermeture

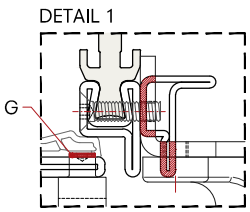


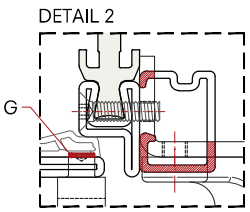












A) Wedge 700105 NB
D99129-03 Angular for snap-on glazing beads FV 15XXR-nn
D99130-03 Angular for screw-on glazing beads FV 15XXE-nn
B) Ø5.25 mm holes
C) Ø4.25 mm flared holes
D) Fastening of 700105 NB
E) Fastening of handle and of additional locking nose with M5x8 ISO2010/ISO7047 screws
F) A 70122X nn connection rod required to connect the handle to additional locking nose
G) Remove protrusions
H) Fastening with M4x16 ISO10642 screws

Detail 1-2) Glazing beads - fastening examples: cut out glazing bead accordingly.

For any additional information please contact our technical office.

A) Verriegelungskeil 700105NB
D99129-03 für Rechteckglashalteleiste FV 15XXR-nn
D99130-03 für Winkelglashalteleiste FV 15XXE-nn
B) Bohrungen Ø5.25 mm
C) Bohrungen aufgekelchtes Ø4.25 mm
D) Befestigung 700105 NB
E) Befestigung der Griffe und Zusatzverriegelungen mit Flügelrahmen durch Schrauben M5x8 ISO2010/ISO7047
F) Verbindungsstange 70122X nn erforderlich um den Griff mit der Zusatzverriegelung zu verbinden
G) Zuschnitt
H) Befestigung mit Schrauben M4x16 ISO10642

Detail 1-2) Glashalteleisten - Befestigungsbeispiele: Glashalteleiste entsprechend ausklinken.

Für weitere Informationen wenden Sie sich bitte das technische Büro.

A) Coin de verrouillage 700105NB
D99129-03 pour parcloses encastrè FV 15XXR-nn
D99130-03 pour parcloses cornière FV 15XXE-nn
B) Trous Ø5.25 mm
C) Trous évasé Ø4.25 mm
D) Fixation de 700105 NB
E) Fixation des poignées et du nez sur cadre avec vis M5x8 ISO2010/ISO7047
F) 70122X nn barre de liaison requise pour lier la poignée et le nez
G) Pièce à enlever
H) Fixation avec vis M4x16 ISO10642

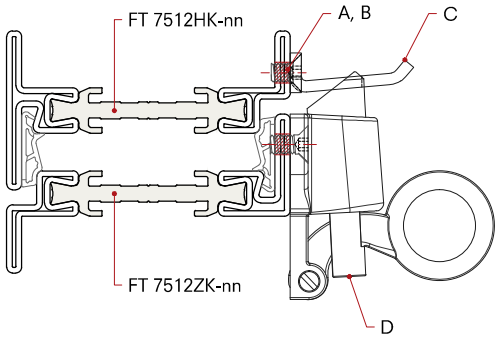
Detail 1-2) Parcloses - exemples de fixation: entailler la parclose.

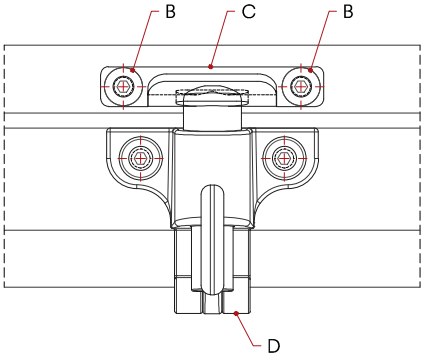
Pour toute information supplémentaire, contacter le bureau technique.

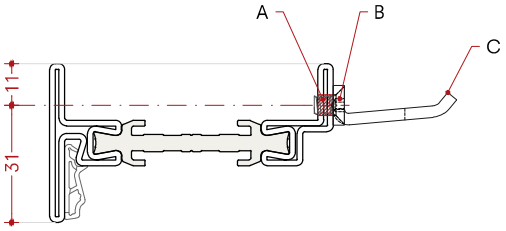
Installation
Spring catch 703000 nn
and spring catch plate 703002 nn
Bottom hung window
Flush profiles

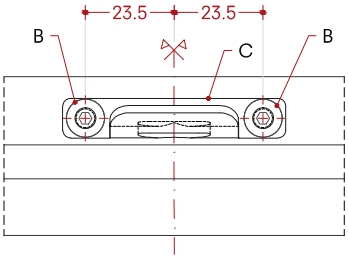
Einbau
Schnäpper 703000 nn
und Schnäpperplatte 703002 nn
Kipp-Fenster
Flächenbündige profile

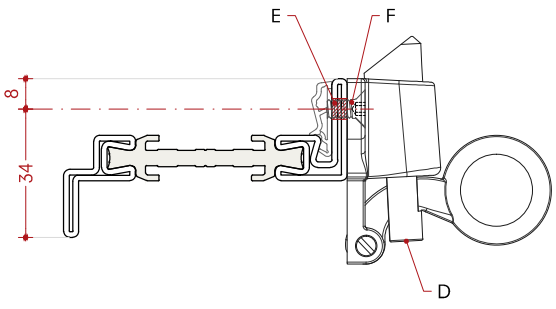
Schéma de montage
Loqueteau 703000 nn
et languette703002 nn
Fênetre à soufflet
Profilés coplanaires

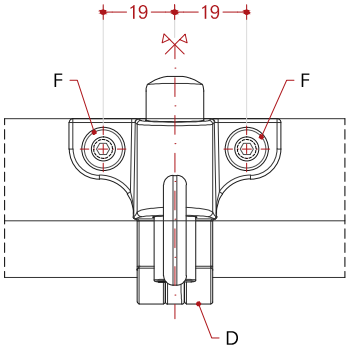












Single spring catch

Schnäpperlasche

Loqueteau simple

A) M5 holes
B) Fastening with M5x8 ISO10642 screws
C) 703002 nn spring catch plate
D) 703000 nn spring catch
E) M5 holes
F) Fastening with M5x10 ISO1064 screws

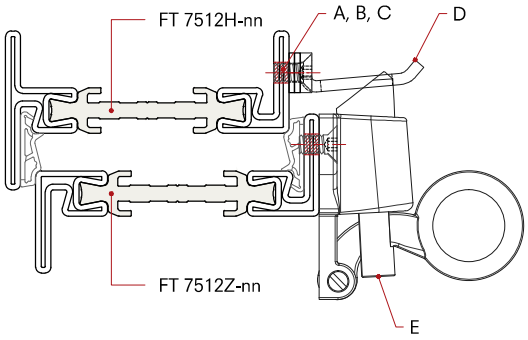
A) Bohrungen M5
B) Befestigung Schrauben M5x8 ISO10642
C) Schnäpperlasche 703002 nn
D) Schnäpper 703000 nn
E) Bohrungen M5
F) Befestigung Schrauben M5x10 ISO10642

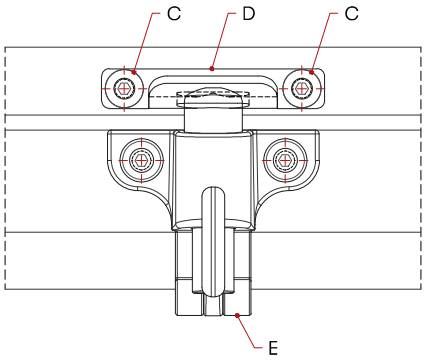
A) M5 trous
B) Fixation avec vis M5x8 ISO10642
C) 703002 nn languette pour loqueteau
D) 703000 nn loqueteau
E) M5 trous
F) Fixation avec vis M5x10 ISO10642

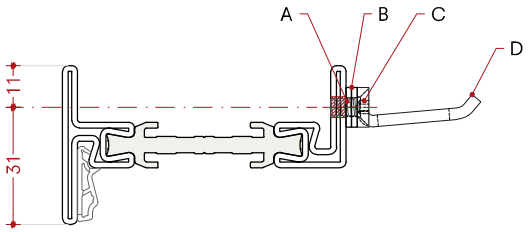
Installation
Spring catch 703000 nn
and spring catch plate 703001 nn
Bottom hung window
Overlapped profiles

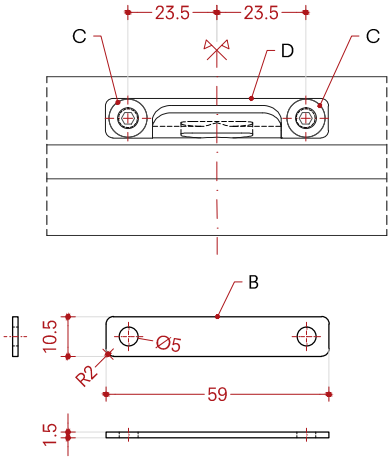
Einbau
Schnäpper 703000 nn
und Schnäpperplatte 703001 nn
Kipp-Fenster
Überlappende profile

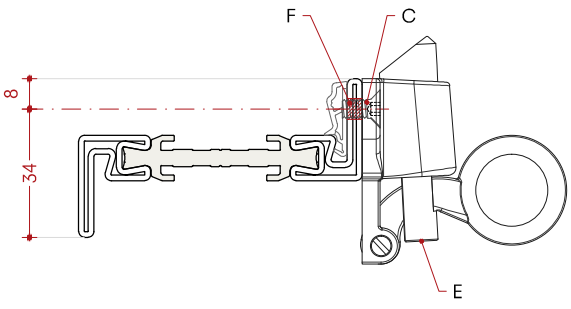
Schéma de montage
Loqueteau 703000 nn
et languette703001 nn
Fênetre à soufflet
Profilés superposés

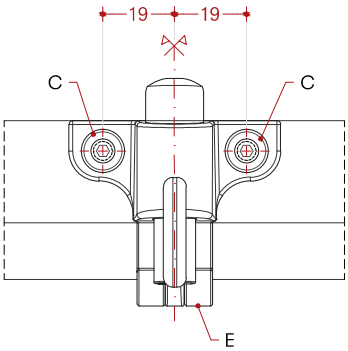












Single spring catch

Schnäpperlasche

Loqueteau simple

A) M5 holes
B) n°02 E99137-03 stainless steel shim
59x10.5x1.5 mm
C) Fastening with M5x10 ISO10642 screws
D) 703001 nn spring catch plate
E) 703000 nn spring catch
F) M5 holes

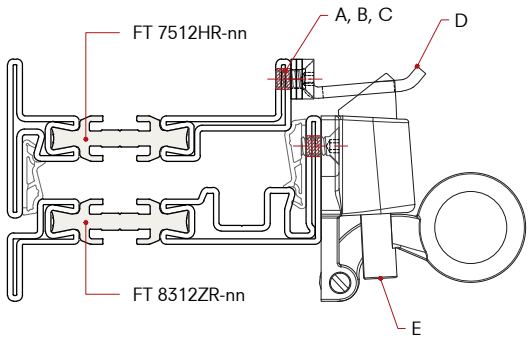
A) Bohrungen M5
B) 2x E99137-03 Dicke in Edelstahl
59x10.5x1.5 mm
C) Befestigung Schrauben M5x10 ISO10642
D) Schnäpperlasche 703001 nn
E) Schnäpper 703000 nn
F) Bohrungen M5

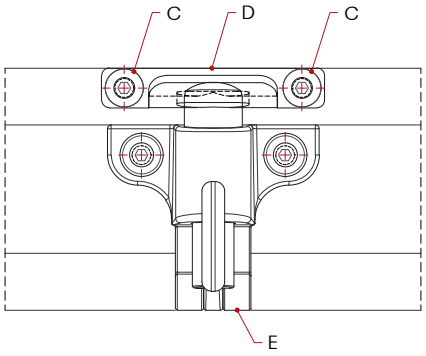
A) M5 trous
B) n°02 E99137-03 plat en acier inoxydable
59x10.5x1.5 mm
C) Fixation avec vis M5x10 ISO10642
D) 703001 nn languette pour loqueteau
E) 703000 nn loqueteau
F) M5 trous

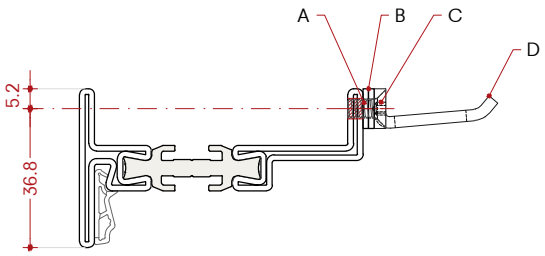
Installation
Spring catch 703000 nn
and spring catch plate 703001 nn
Bottom hung window
Tilt&Turn profiles

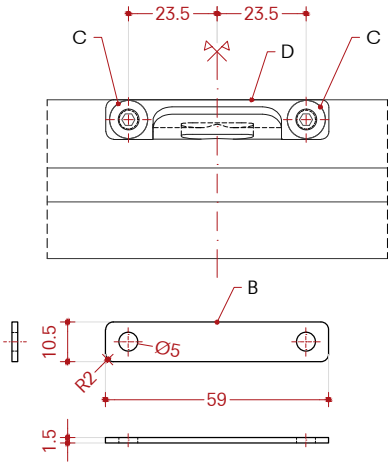
Einbau
Schnäpper 703000 nn
und Schnäpperplatte 703001 nn
Kipp-Fenster
Überlappende profile

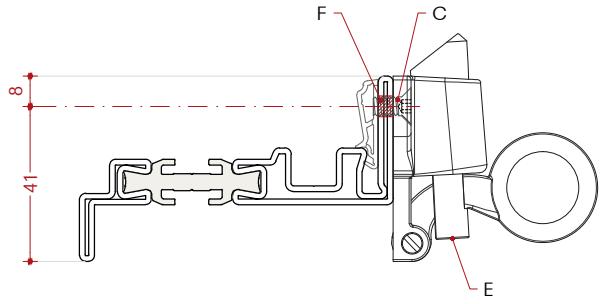
Schéma de montage
Loqueteau 703000 nn
et languette703001 nn
Fênetre à soufflet
Profilés superposés

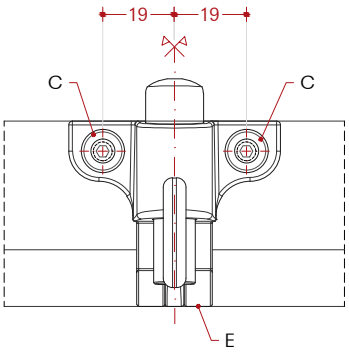












Single spring catch

Verriegelungslasche

Loqueteau simple

A) M5 holes
B) n°02 E99137-03 stainless steel shim 59x10.5x1.5 mm
C) Fastening with M5x10 ISO10642 screws
D) 703001 nn spring catch plate
E) 703000 nn spring catch
F) M5 holes

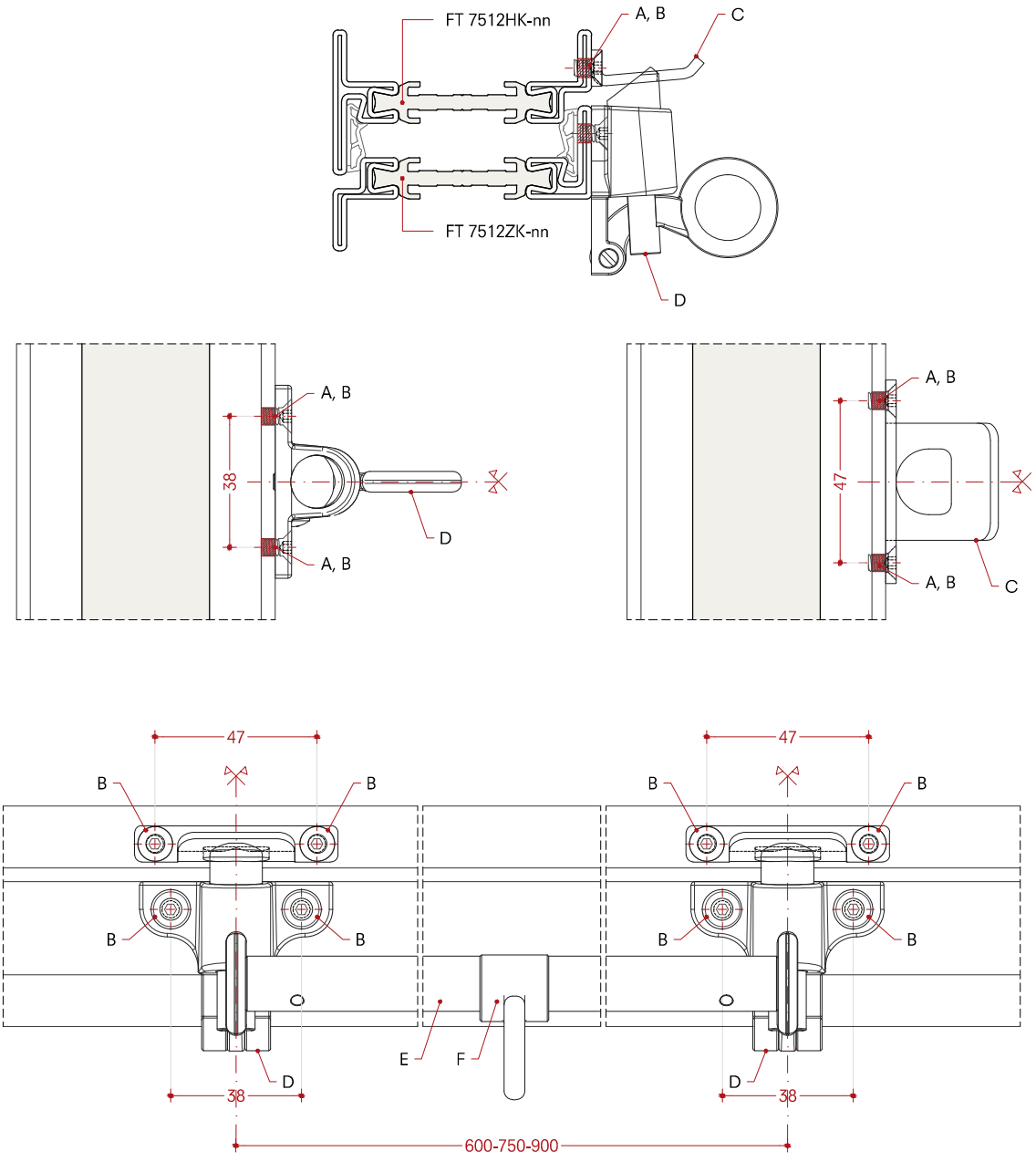
A) Bohrungen M5
B) 2x E99137-03 Dicke in Edelstahl 59x10.5x1.5 mm
C) Befestigung Schrauben M5x10 ISO10642
D) Schnäpperlasche 703001 nn
E) Schnäpper 703000 nn
F) Bohrungen M5

A) M5 trous
B) n°02 E99137-03 plat en acier inoxydable 59x10.5x1.5 mm
C) Fixation avec vis M5x10 ISO10642
D) 703001 nn languette pour loqueteau
E) 703000 nn loqueteau
F) M5 trous

Installation
Spring catch 703000 nn
and spring catch plate 703002 nn
Double spring catch
Flush profiles

Einbau
Schnäpper 703000 nn
und Schnäpperplatte 703002 nn
Doppelter Gelenkarm
Flächenbündige profile

Schéma de montage
Loqueteau 703000 nn
et languette703002 nn
Loqueteau double
Profilés coplanaires



Double spring catch

A) M5 holes
B) Fastening with M5x8 ISO10642 screws
C) 703002 nn spring catch plate
D) 703000 nn spring catch
E) 700520 nn connecting tube ring
F) Connecting tube
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

Doppelschnäpper

A) Bohrungen M5
B) Befestigung Schrauben M5x8 ISO10642
C) Schnäpperlasche 703002 nn
D) Schnäpper 703000 nn
E) 700520 nn Ring
F) Verbindungsrohr
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

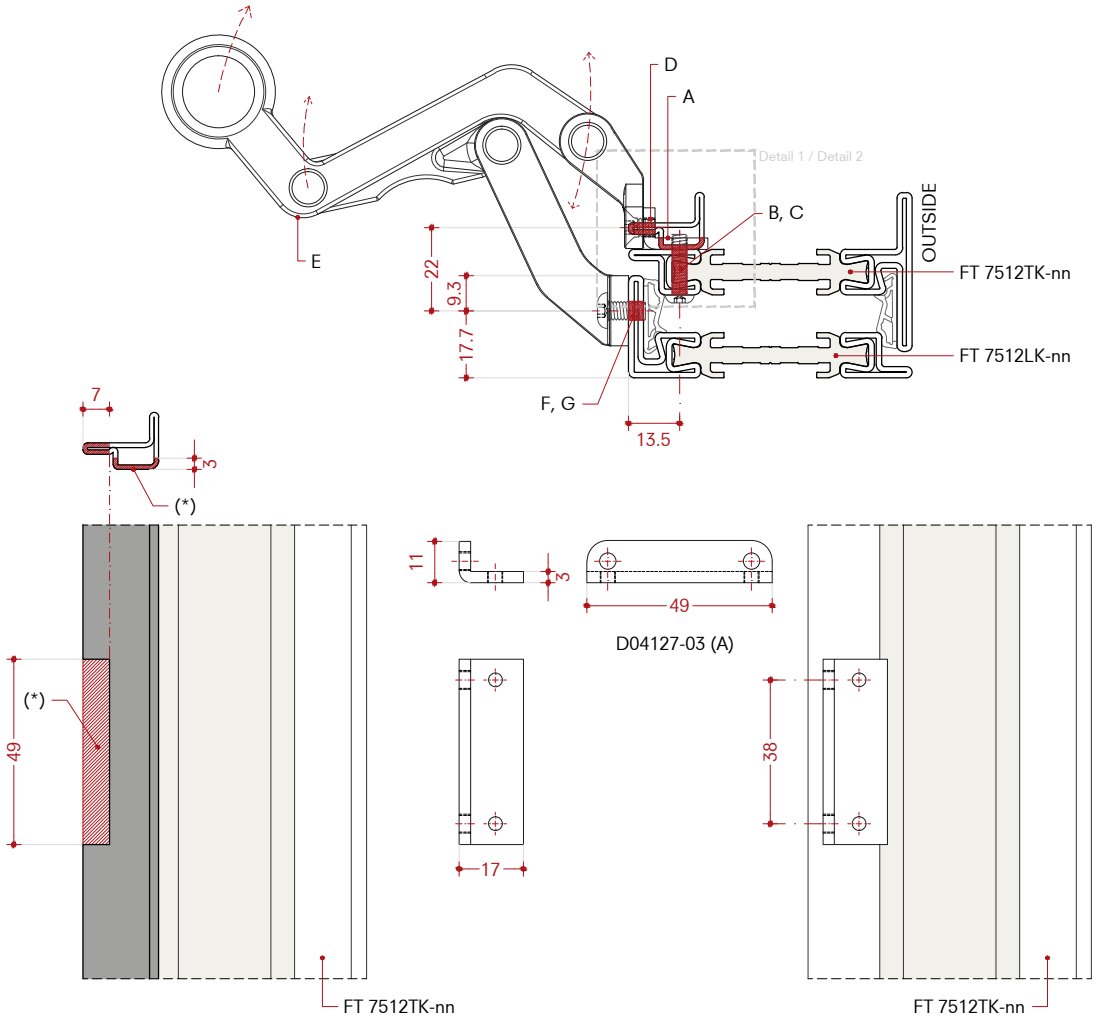
Loqueteau double

A) M5 trous
B) Fixation avec vis M5x8 ISO10642
C) 703002 nn languette pour loqueteau
D) 703000 nn loqueteau
E) 700520 nn anneau pour tube de jonction
F) Tube de jonction
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

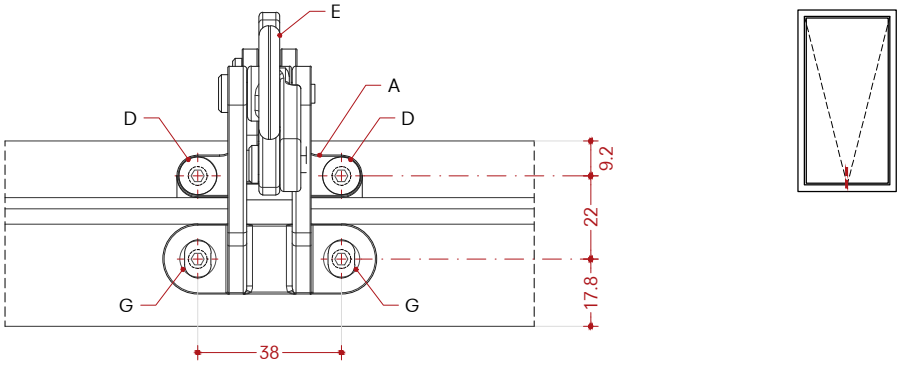
Installation
Folding opener
700500 nn and 700501 nn
Flush profiles

Einbau
Gelenkarm
700500 nn und 700501 nn
Flächenbündige profile

Schéma de montage
Bras articule
700500 nn 700501 nn
Profilés coplanaires



Single folding opener | Gelenkarm | bras articule pliante simple



A) D04127-03 bracket folding opener
B) n°02 Ø4.25 mm holes on FT 7512TK-nn
C) Fastening with M4x16 ISO7380 screws
D) Fastening with M5x8 ISO10642 screws
E) 700500 nn folding opener
F) n°02 Ø5 mm holes on FT 7512LK-nn
G) Fastening with M5x10 ISO7380 screws

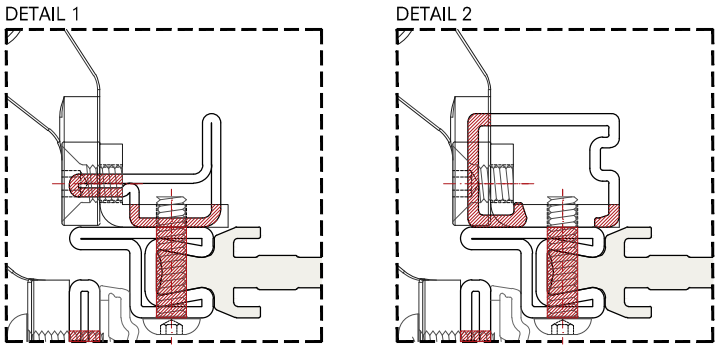
(*) Cut out on glazing bead

A) D04127-03 Gelenkarm Halterung
B) 2x Bohrungen Ø4.25 mm am FT 7512TK-nn
C) Befestigung mit Schrauben M4x16 ISO7380
D) Befestigung mit Schrauben M5x8 ISO10642
E) 700500 nn gelenkarm
F) 2x Bohrungen Ø5 mm am FT 7512LK-nn
G) Befestigung mit Schrauben M5x10 ISO7380

(*) Glashalteleisten kürzen

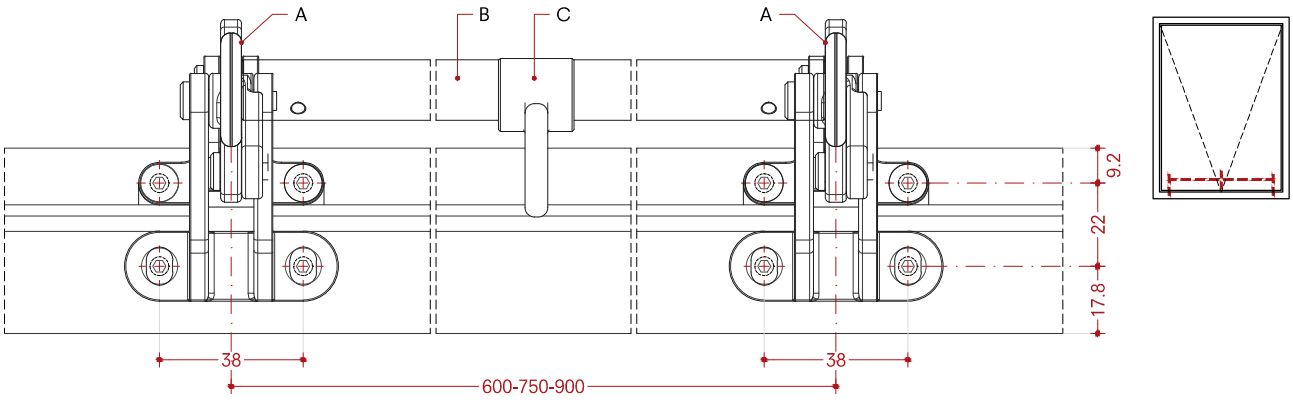
A) D04127-03 fixation, bras articulé
B) n°02 Trous Ø4.25 mm sur FT 7512TK-nn
C) Fixation avec vis M4x16 ISO7380
D) Fixation avec vis M5x8 ISO10642
E) 700500 nn bras articule pliante simple
F) n°02 Trous Ø5 mm sur FT 7512LK-nn
G) Fixation avec vis M5x10 ISO7380

(*) Pièce à enlever sur parclose



Glazing beads - fastening examples - glazing bead cut out
Glashalteleisten - Befestigungsbeispiele - Glashalteleisten Anpassen
Parcloses - exemples de fixation - ajustez le parclose

Double folding opener



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

Doppelgelenkarm

A) 700501 nn Doppelgelenkarm
B) 700520 nn Ring
C) Verbindungsrohr
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

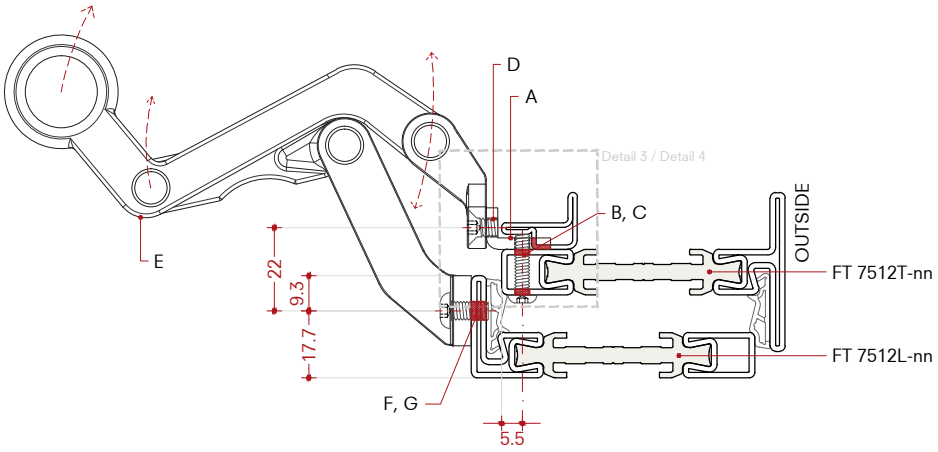
Bras articule pliante double

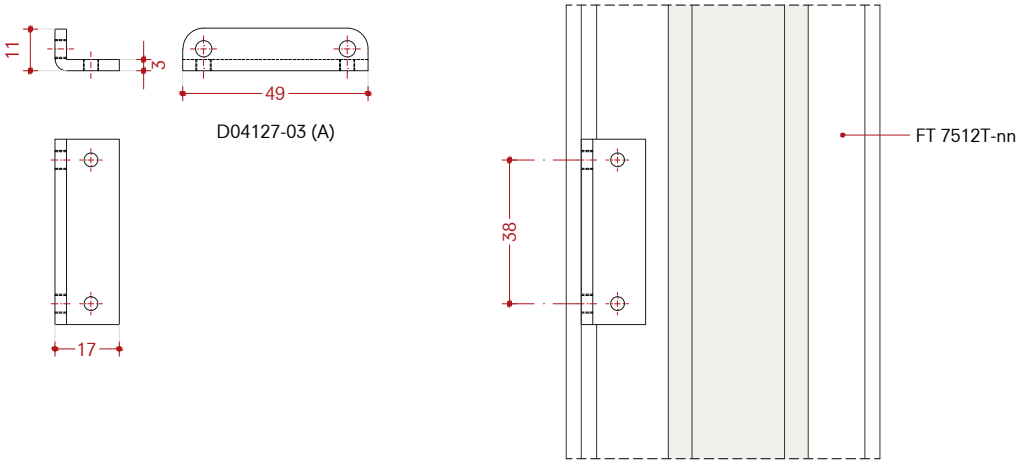
A) 700501 nn bras articule pliante double
B) 700520 nn anneau pour tube de jonction
C) Tube de jonction
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

Installation
Folding opener
700500 nn and 700501 nn
Overlapped profiles

Einbau
Gelenkarm
700500 nn und 700501 nn
Überlappende profile

Schéma de montage
Bras articule
700500 nn 700501 nn
Profilés superposés

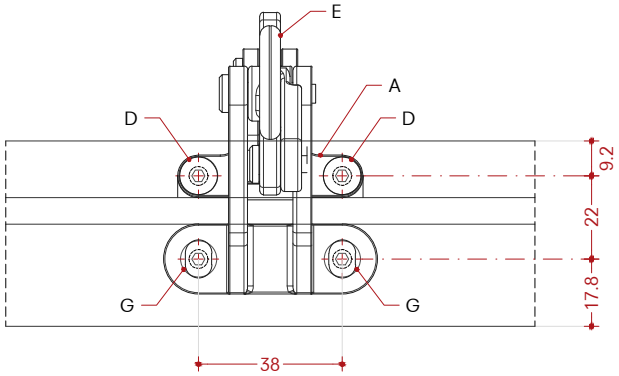


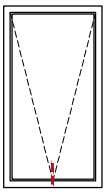


Single folding opener

Gelenkarm

bras articule pliante simple





A) D04127-03 bracket folding opener
B) n°02 Ø4.25 mm holes on FT 7512T-nn
C) Fastening with M4x16 ISO7380 screws
D) Fastening with M5x8 ISO10642 screws
E) 700500 nn folding opener
F) n°02 Ø5 mm holes on FT 7512L-nn
G) Fastening with M5x10 ISO7380 screws

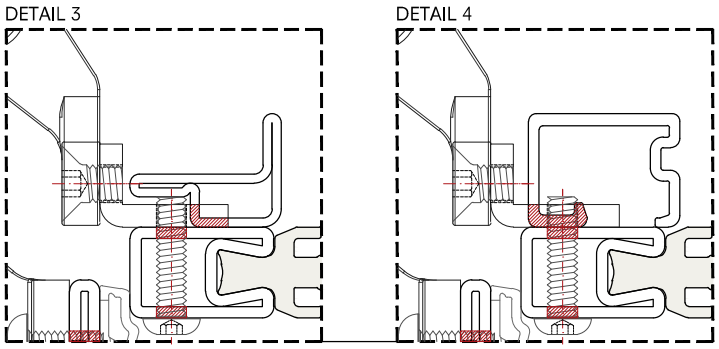
(*) Cut out on glazing bead

A) D04127-03 Gelenkarm Halterung
B) 2x Bohrungen Ø4.25 mm am FT 7512T-nn
C) Befestigung mit Schrauben M4x16 ISO7380
D) Befestigung mit Schrauben M5x8 ISO10642
E) 700500 nn gelenkarm
F) 2x Bohrungen Ø5 mm am FT 7512L-nn
G) Befestigung mit Schrauben M5x10 ISO7380

(*) Glashalteleisten kürzen

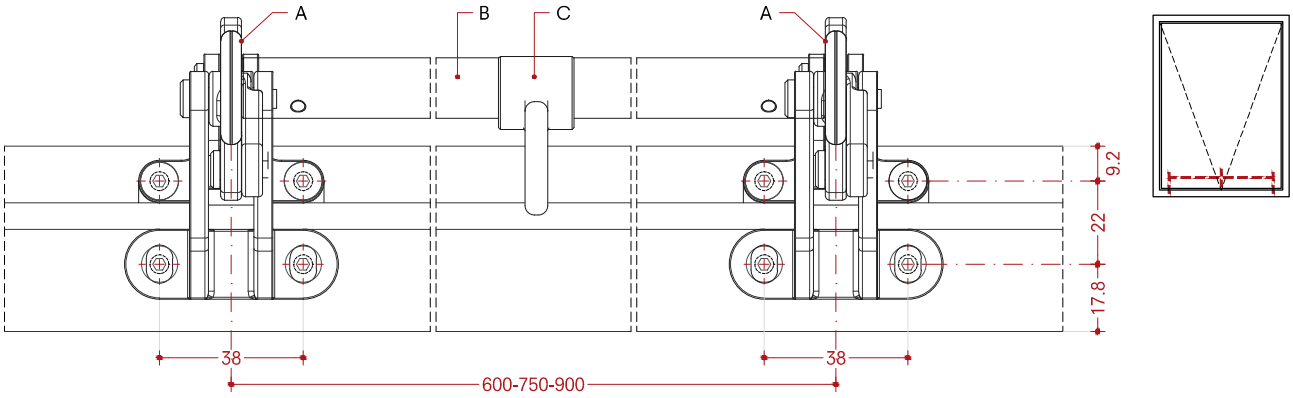
A) D04127-03 fixation, bras articulé
B) n°02 Trous Ø4.25 mm sur FT 7512T-nn
C) Fixation avec vis M4x16 ISO7380
D) Fixation avec vis M5x8 ISO10642
E) 700500 nn bras articule pliante simple
F) n°02 Trous Ø5 mm sur FT 7512L-nn
G) Fixation avec vis M5x10 ISO7380

(*) Pièce à enlever sur parclose



Glazing beads - fastening examples - glazing bead cut out
Glashalteleisten - Befestigungsbeispiele - Glashalteleisten Anpassen
Parcloses - exemples de fixation - ajustez le parclose

Double folding opener



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

Doppelgelenkarm

A) 700501 nn Doppelgelenkarm
B) 700520 nn Ring
C) Verbindungsrohr
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

Bras articule pliante double

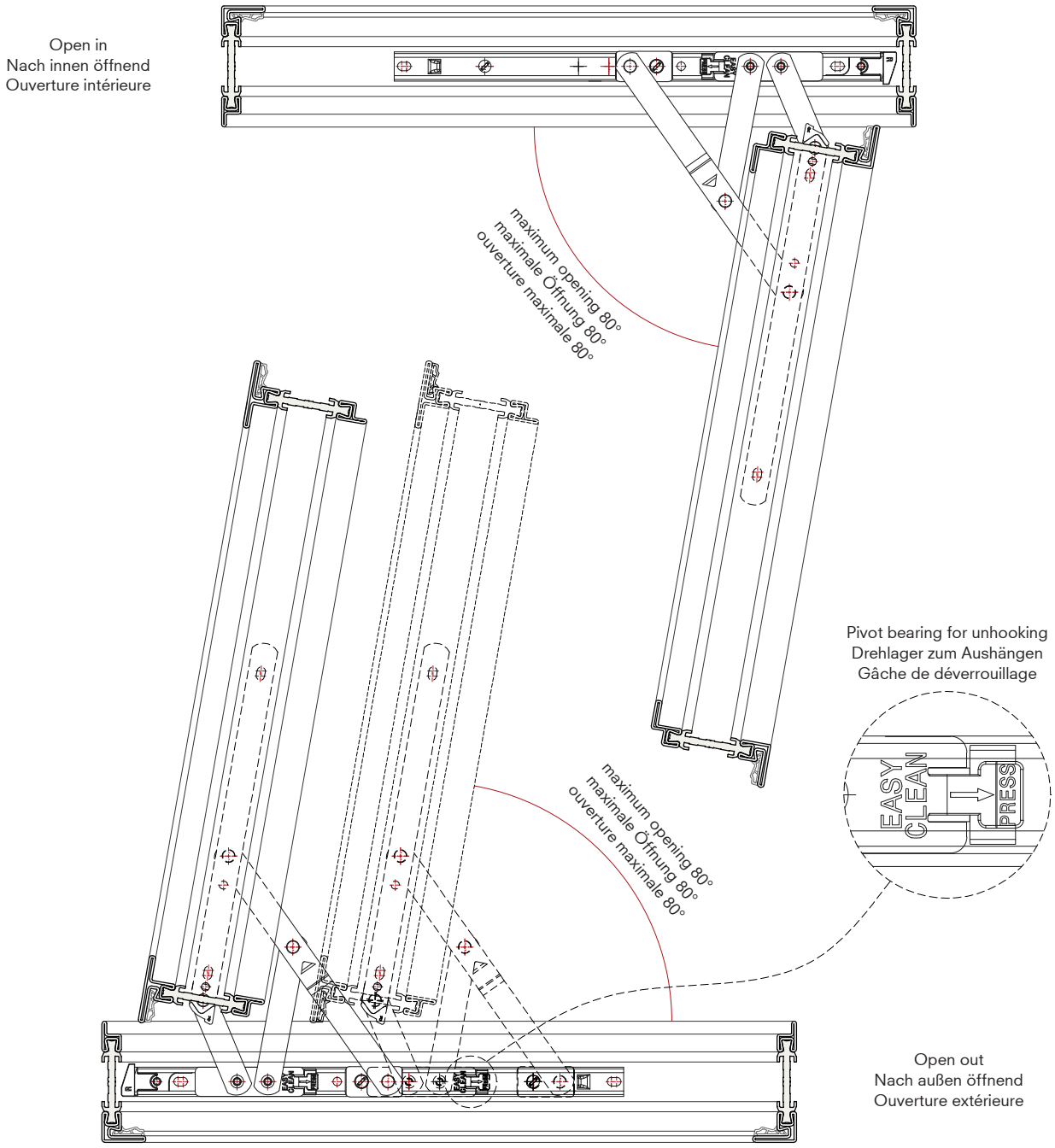
A) 700501 nn bras articule pliante double
B) 700520 nn anneau pour tube de jonction
C) Tube de jonction
700510 nn L = 600
700511 nn L = 750
700512 nn L = 900

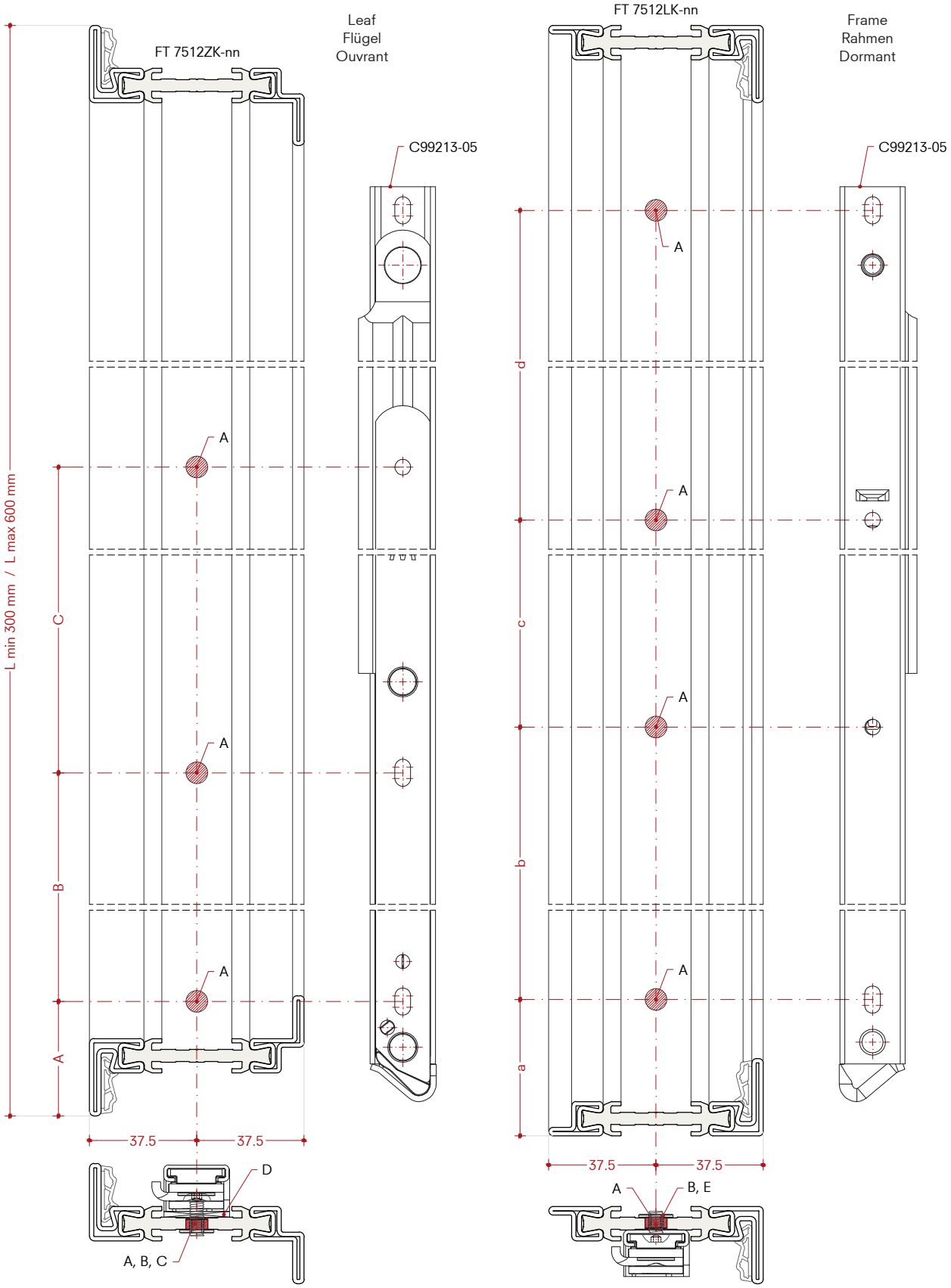
Installation
Friction stay C9921X-05
Flush profiles

Einbau
Drehschere C9921X-05
Flächenbündige profile

Schéma de montage
Compas pour fenêtre battante C9921X-05
Profilés coplanaires

	A	B	C	a	b	c	d	Capacity (pair) Tragkraft (Paar) Capacité (paire) [Kg]	Height window Fensterhöhe Hauteur fenêtre [mm]	Opening angle Öffnungswinkel Angle d'ouverture
C99210-05	37.5	55.3	133	48.6	96.9	171.5	-	22	300÷600	80°
C99211-05	37.5	108.8	213.7	48.6	96.9	273.1	-	24	400÷700	90°
C99212-05	40	34	131.1	47.7	177.8	40.4	-	38	300÷660	85°
C99213-05	38	118.4	122.8	49.7	133.7	88.3	148.6	55	450÷840	60°





A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x12 ISO7380 screws
D) Spacer 2 mm (not provided)
E) Fastening with M5x8 ISO7380 screws

A) Bohrungen Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x12 ISO7380
D) Abstand 2 mm (Eigenfertigung)
E) Befestigung mit Schrauben M5x8 ISO7380

A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x12 ISO7380
D) Entretoise 2 mm (non inclus)
E) Fixation avec vis M5x8 ISO7380

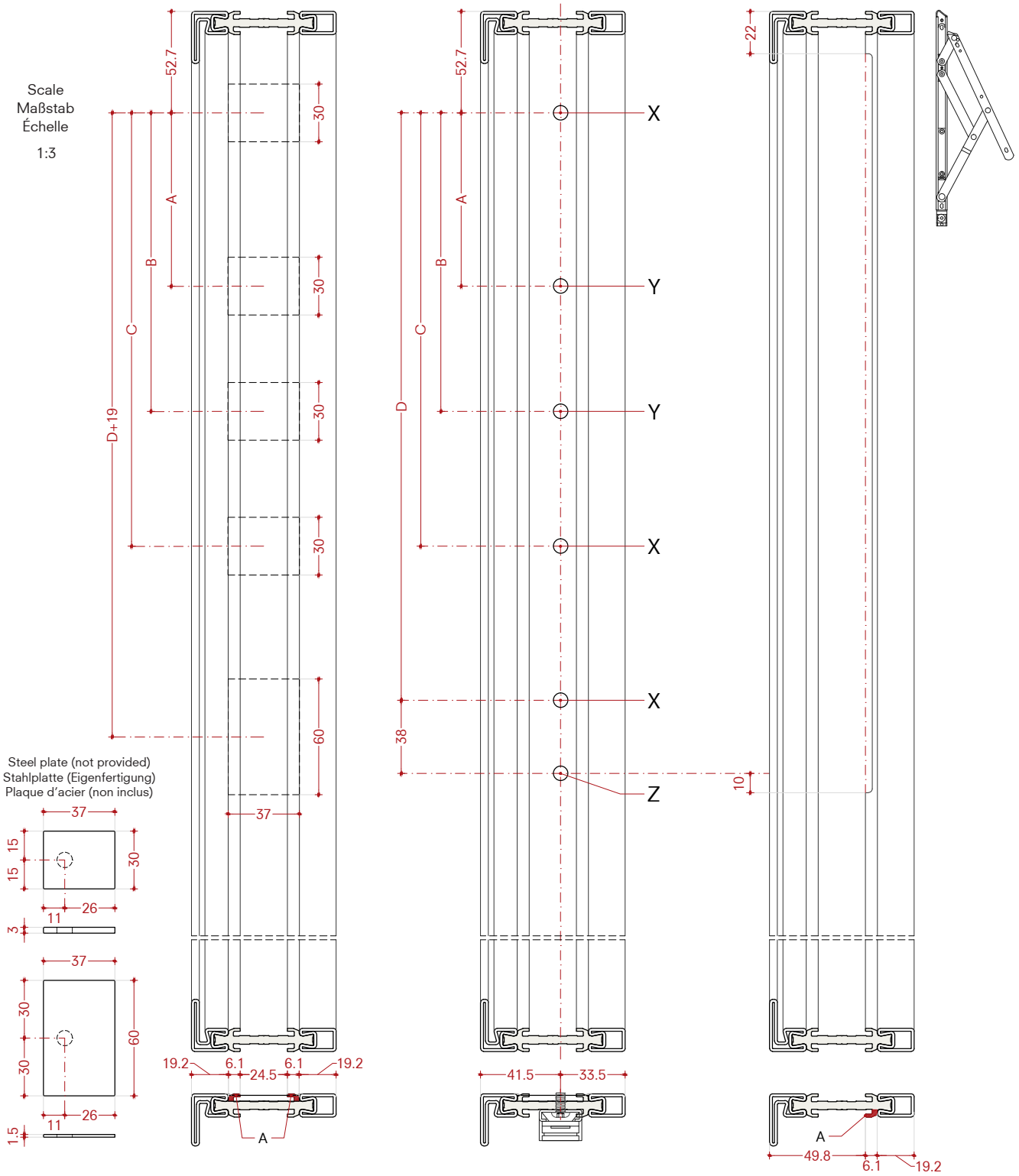
Installation
Friction stay for top hung
Open out window
Overlapped profiles

Einbau
Senk-Klapp-Schere
Fenster nach außen öffnend
Überlappende profile

Schéma de montage
Compas pour ouverture à l'italienne
Fênetre ouvrant vers l'extérieur
Profilés superposés

	Capacity (pair) Tragkraft (Paar) [Kg]	Capacité (paire)	Height window Fensterhöhe [mm]	Hauteur fenêtre	Opening angle Öffnungswinkel	Angle d'ouverture
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°	

Scale
Maßstab
Échelle
1:3



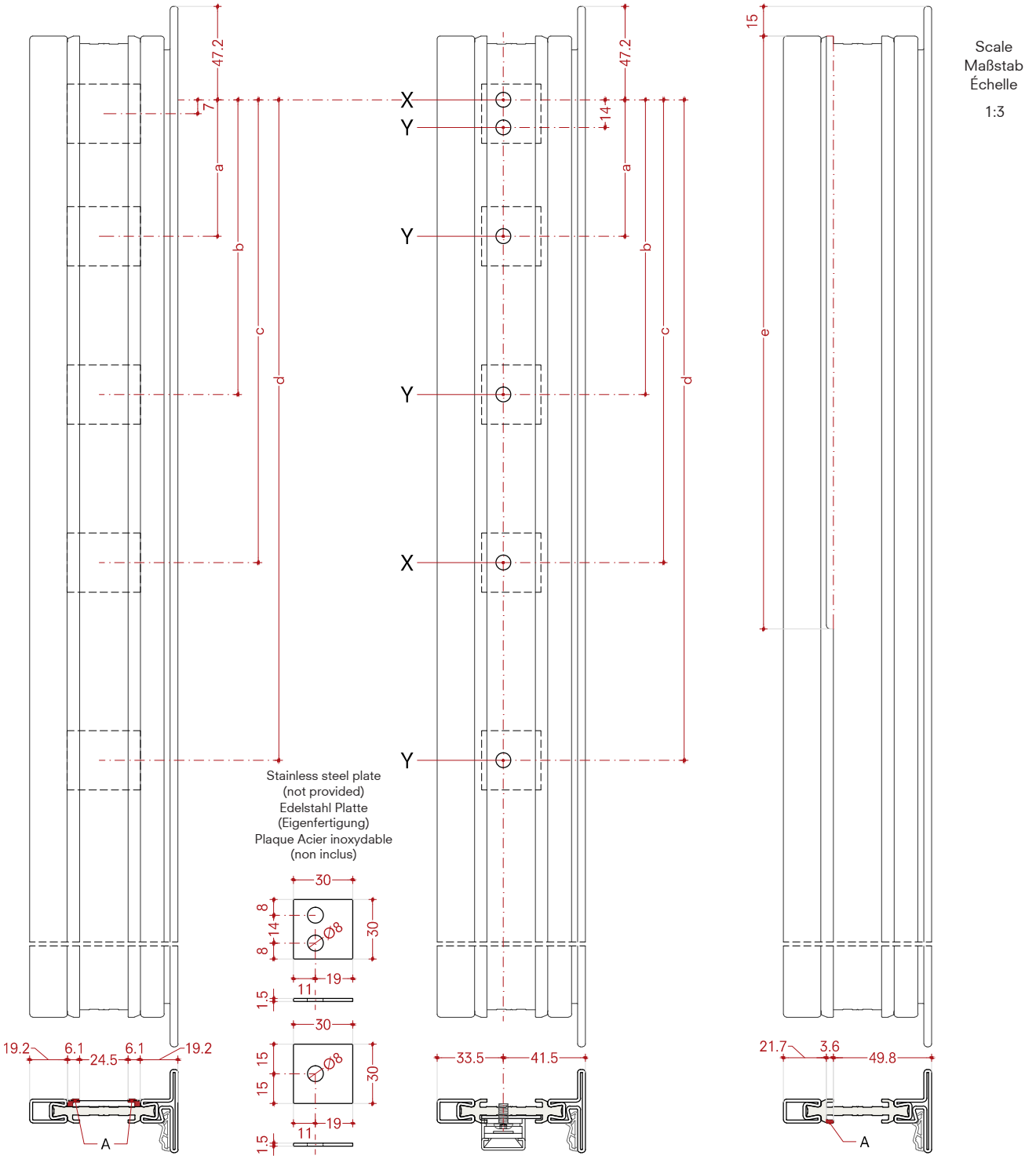
A) Cut out
A) Fräsung
A) Fraisage

Table with distances between holes Tabelle mit Bohrabständen Table avec distances de perçage									
	A (y)	B (y)	C (x)	D (x)	a (y)	b (y)	c (x)	d (y)	e
C99201-05	177.8	-	-	218.2	40.8	-	165.1	-	220
C99202-05	212.7	-	-	269.0	65.0	-	190.1	-	245
C99203-05	215.7	304.0	-	370.6	118.4	-	541.2	-	395
C99204-05	133.7	222.0	-	370.6	-	-	118.4	241.2	395
C99205-05	251.3	418.3	-	523.0	65.0	203.2	317.4	-	375
C99206-05	295.4	-	-	526.5	80.0	-	235.75	350.0	405
C99207-05	161.4	292.4	584.5	638.5	65.0	189.0	314.4	383.9	440

X M5 hole on profile
M5x10 mm ISO7380 screw
Bohrung M5 am Profil
M5x10 mm ISO7380 Schraube
Trou M5 sur profilé
M5x10 mm ISO7380 vis

Y M5x12 mm ISO7380
(Screws must be cut)
M5x12 mm ISO7380
(Schrauben müssen gekürzt werden)
M5x12 mm ISO7380
(Couper la partie de la vis dépasse)

Z Hole Ø7 mm
Bohrung Ø7 mm
Trou Ø7 mm



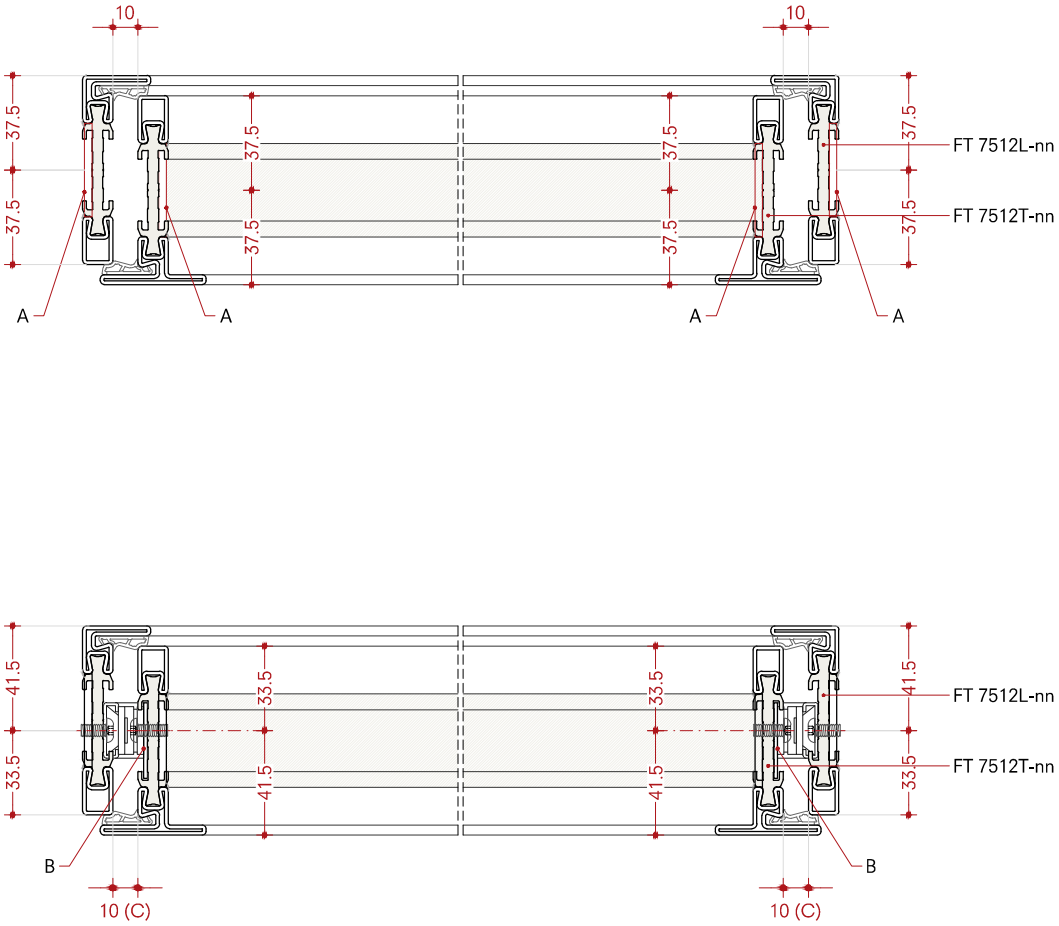
Scale
Maßstab
Échelle
1:3

A) Cut out
A) Fräsung
A) Fraisage

Installation
Example for friction stay C99203-05
up to 65 kg
Window height 800-1090 mm
Opening angle of 55°

Einbaubeispiel
Senk-Klapp-Schere C99203-05
bis 65 Kg
Fensterhöhe 800-1090 mm
Öffnungswinkel 55°

Schéma de montage
Compas ouverture à l'italienne
C99203-05 65 kg
H Fenêtre 800-1090 mm
Angle d'ouverture 55°



X M5 hole on profile
M5x10 mm ISO7380 screw
Bohrung M5 am Profil
M5x10 mm ISO7380 Schraube
Trou M5 sur profilé
M5x10 mm ISO7380 vis

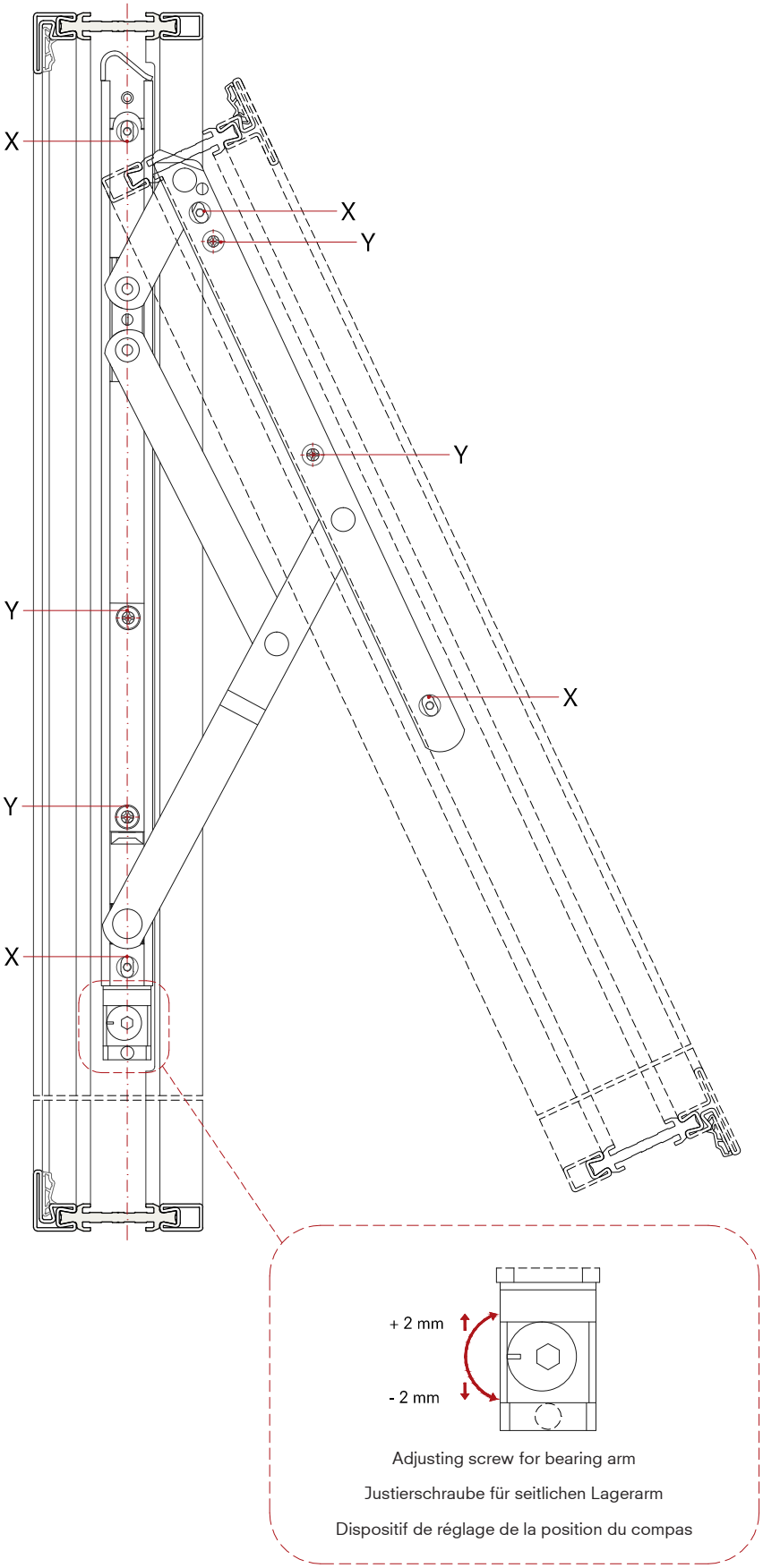
Y M5x12 mm ISO7380
M5x12 mm ISO7380
M5x12 mm ISO7380

Z Hole Ø7 mm
Bohrung Ø7 mm
Trou Ø7 mm

Scale 1:3
A) 37x30x3 mm plate welded on profile (not provided)
B) 30x30x1.5 mm plate welded on profile (not provided)
C) Friction stay - 10 mm

Maßstab 1:3
A) Platte 37x30x3 mm geschweisst am Profil (Eigenfertigung)
B) Platte 30x30x1.5 mm geschweisst am Profil (Eigenfertigung)
C) Senk-Klapp-Schere - 10 mm

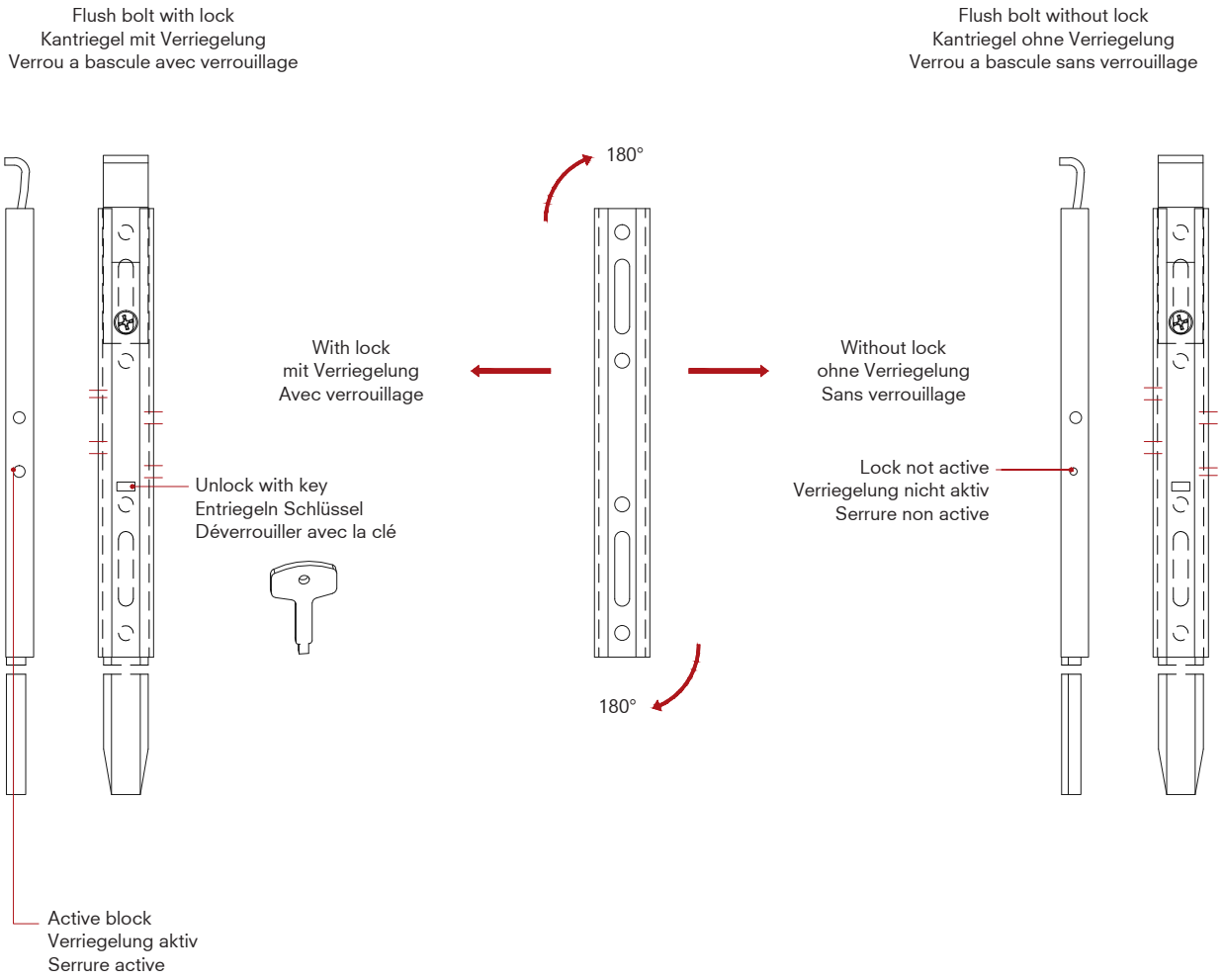
Échelle 1:3
A) Plat 37x30x3 mm (non inclus) soudé sur le profilé
B) Plat 30x30x1.5 mm (non inclus) soudé sur le profilé
C) Compas douverture - 10 mm

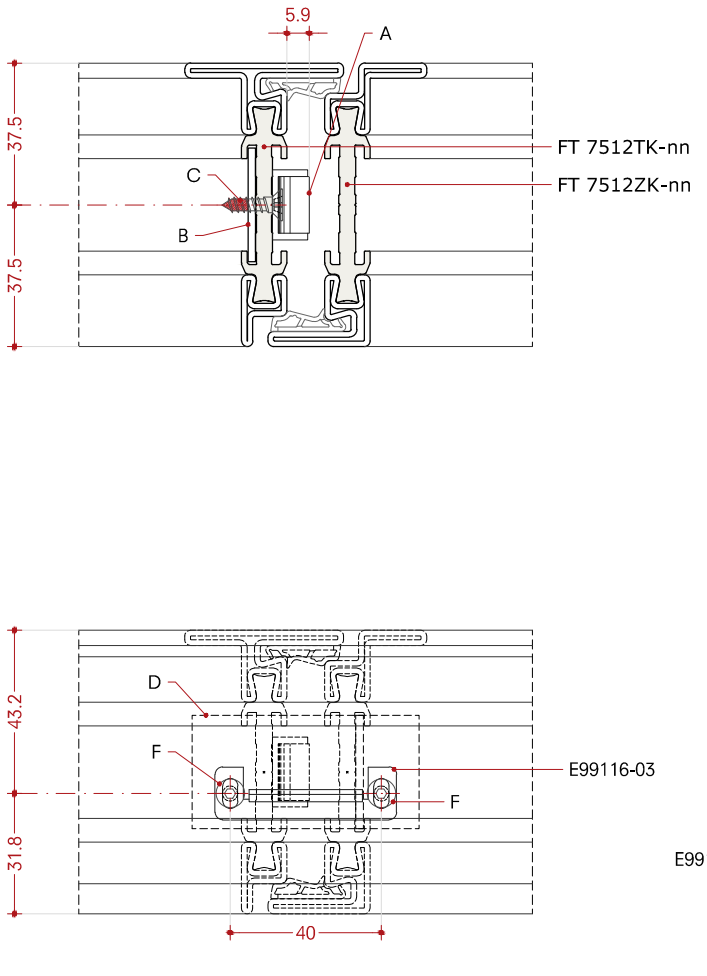

X
X
Y
Y
Y
X
Y
X
+ 2 mm
- 2 mm
Adjusting screw for bearing arm
Justierschraube für seitlichen Lagerarm
Dispositif de réglage de la position du compas

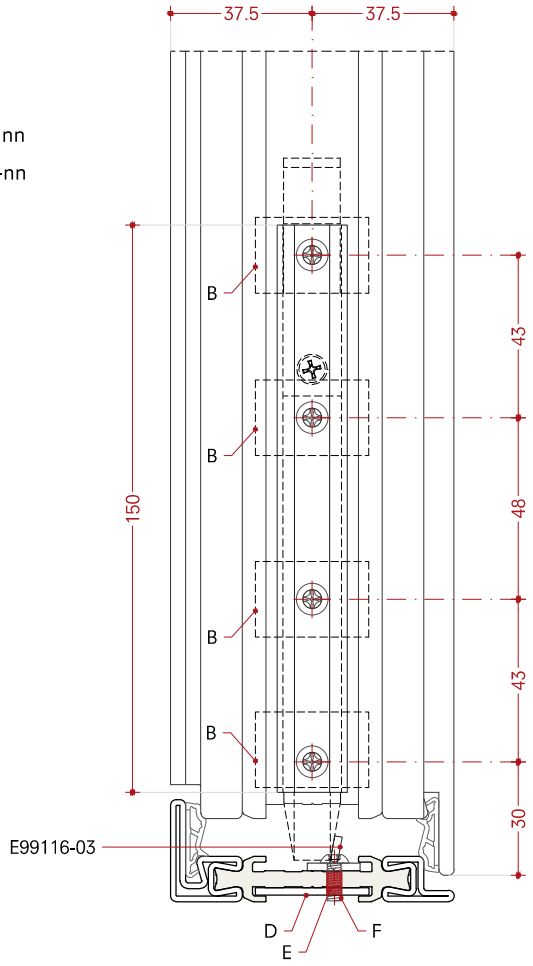
Installation
Flush bolt E99001-nn
(with or without lock)
L = 150 mm

Einbau
Kantriegel E99001-nn
(mit oder ohne Verriegelung)
L = 150 mm

Schéma de montage
Verrou a bascule E99001-nn
(avec ou sans verrouillage)
L = 150 mm







A) Flush bolt
B) Plate 30x20x2 mm fixed by glue on profile (not provided)
C) Fastening with Ø4.2x16 mm ISO7050 screws and cut the screws
D) Plate 60x30x2 mm fixed by glue on profile (not provided)
E) M4 mm holes
F) Fastening with M4x10 ISO7380 screws

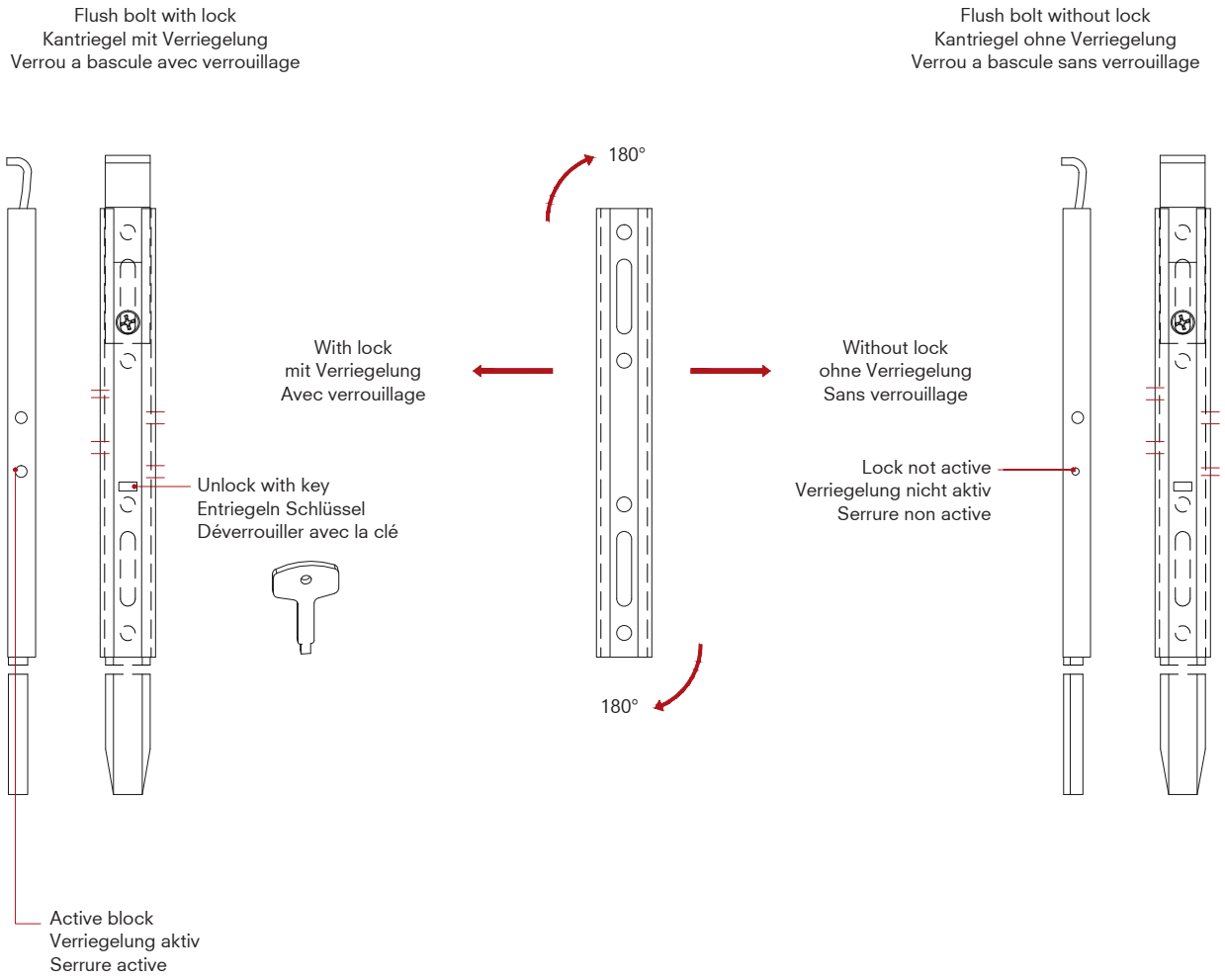
A) Kantriegel
B) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung)
C) Befestigung mit Schrauben Ø4.2x16 mm ISO7050 und Schraube kürzen
D) Platte 60x30x2 mm mit Klebstoff fixieren (Eigenfertigung)
E) Bohrungen M4
F) Befestigung mit Schrauben M4x10 ISO7380

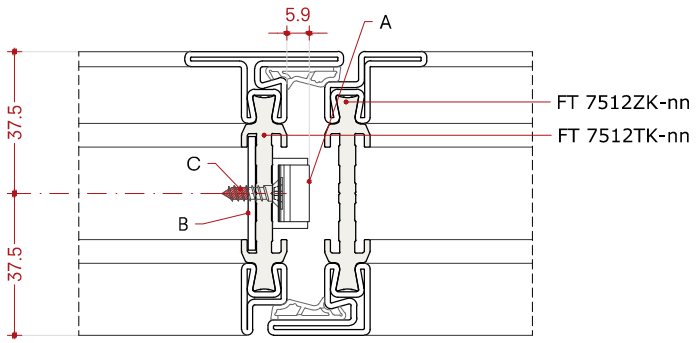
A) Verrou a bascule
B) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé
C) Fixation avec vis Ø4.2x16 mm ISO7050 et couper la vis
D) Plaque 60x30x2 mm (non inclus) fixé avec colle sur le profilé
E) Trous M4
F) Fixation avec vis M4x10 ISO7380

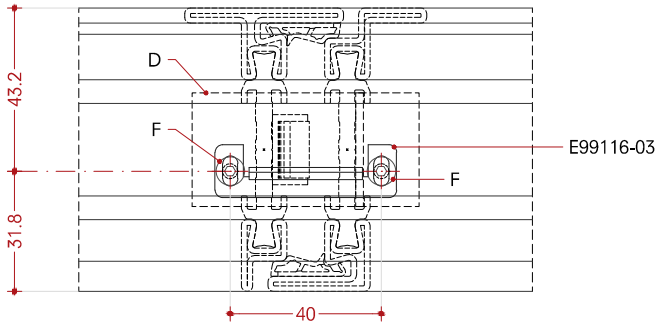
Installation
Flush bolt E99002-nn
(with or without lock)
L = 300 mm

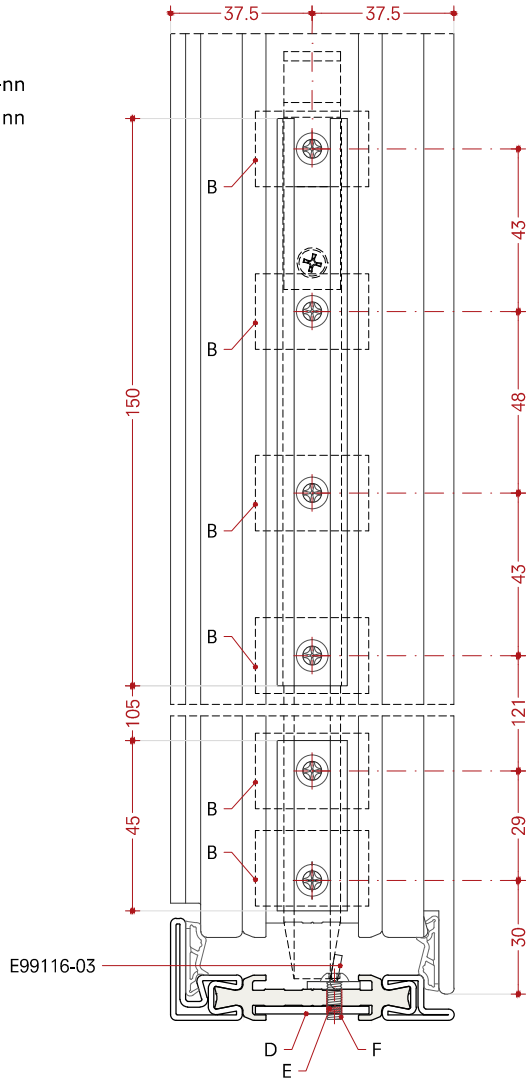
Einbau
Kantriegel E99002-nn
(mit oder ohne Verriegelung)
L = 300 mm

Schéma de montage
Verrou a bascule E99002-nn
(avec ou sans verrouillage)
L = 300 mm









A) Flush bolt
B) Plate 30x20x2 mm fixed by glue on profile (not provided)
C) Fastening with Ø4.2x16 mm ISO7050 screws and cut the screws
D) Plate 60x30x2 mm fixed by glue on profile (not provided)
E) M4 mm holes
F) Fastening with M4x10 ISO7380 screws

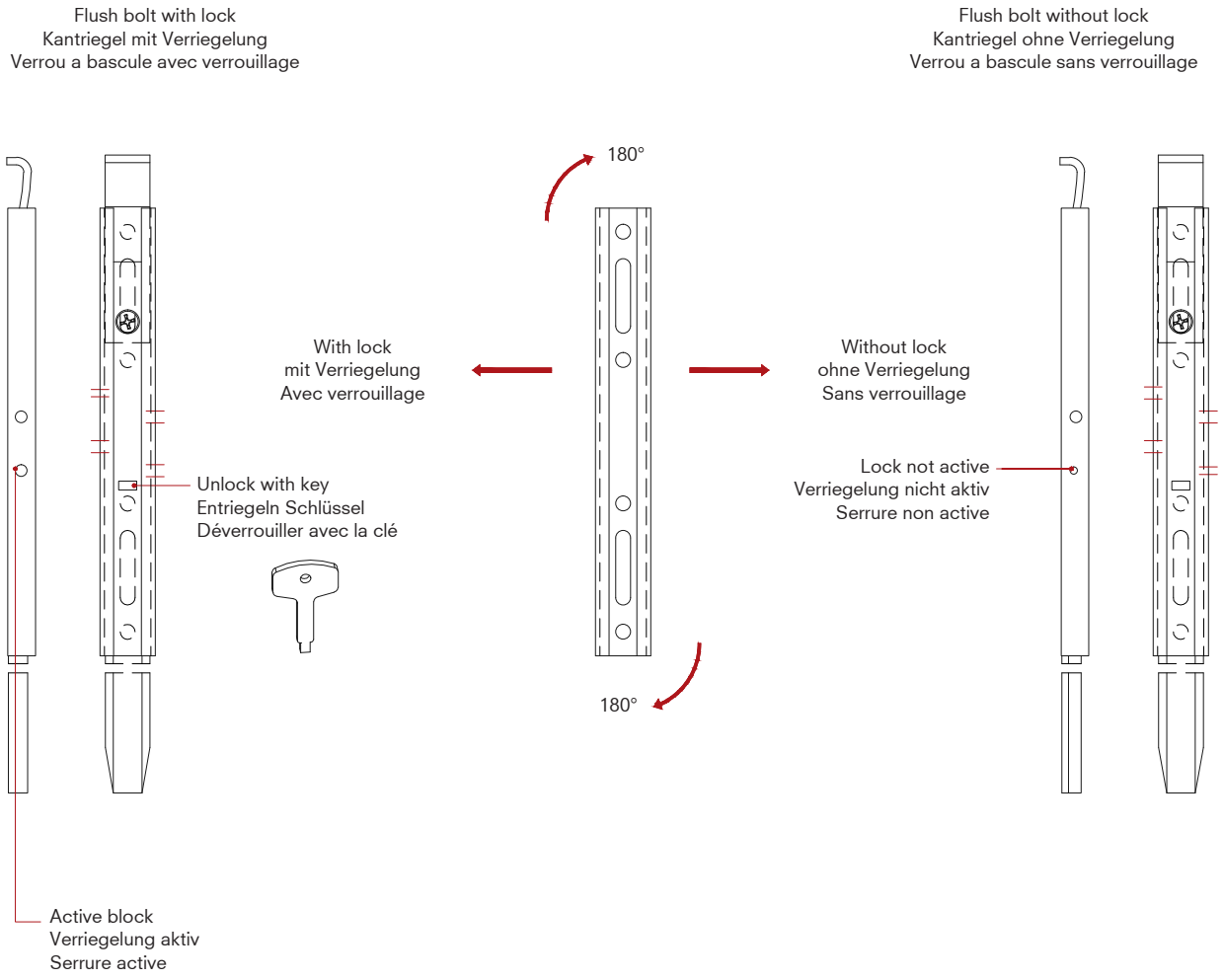
A) Kantriegel
B) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung)
C) Befestigung mit Schrauben Ø4.2x16 mm ISO7050 und Schraube kürzen
D) Platte 60x30x2 mm mit Klebstoff fixieren (Eigenfertigung)
E) Bohrungen M4
F) Befestigung mit Schrauben M4x10 ISO7380

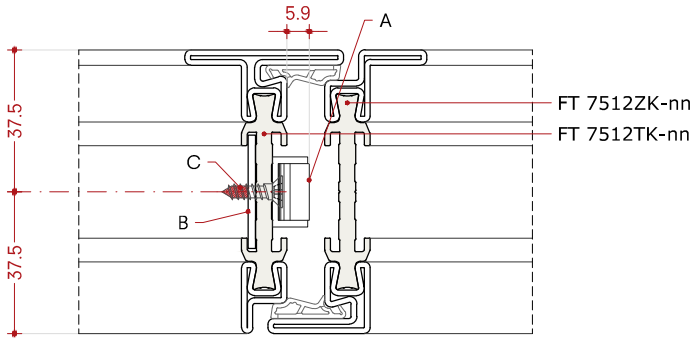
A) Verrou a bascule
B) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé
C) Fixation avec vis Ø4.2x16 mm ISO7050 et couper la vis
D) Plaque 60x30x2 mm (non inclus) fixé avec colle sur le profilé
E) Trous M4
F) Fixation avec vis M4x10 ISO7380

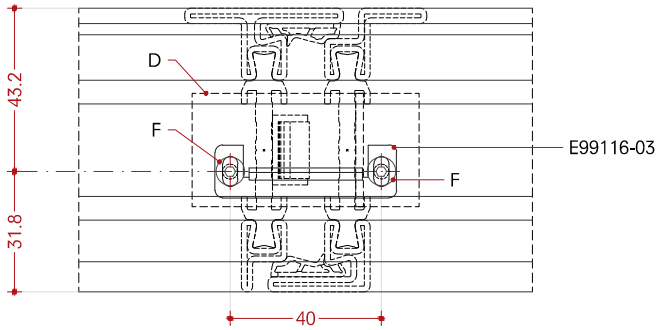
Installation
Flush bolt E99003-nn
(with or without lock)
L = 450 mm

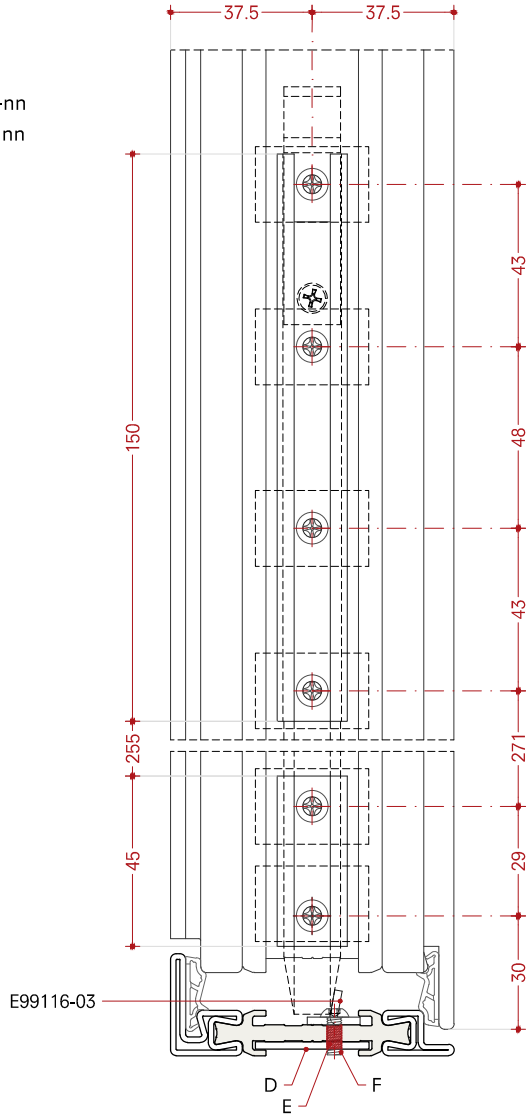
Einbau
Kantriegel E99003-nn
(mit oder ohne Verriegelung)
L = 450 mm

Schéma de montage
Verrou a bascule E99003-nn
(avec ou sans verrouillage)
L = 450 mm









A) Flush bolt
B) Plate 30x20x2 mm fixed by glue on profile (not provided)
C) Fastening with Ø4.2x16 mm ISO7050 screws and cut the screws
D) Plate 60x30x2 mm fixed by glue on profile (not provided)
E) M4 mm holes
F) Fastening with M4x10 ISO7380 screws

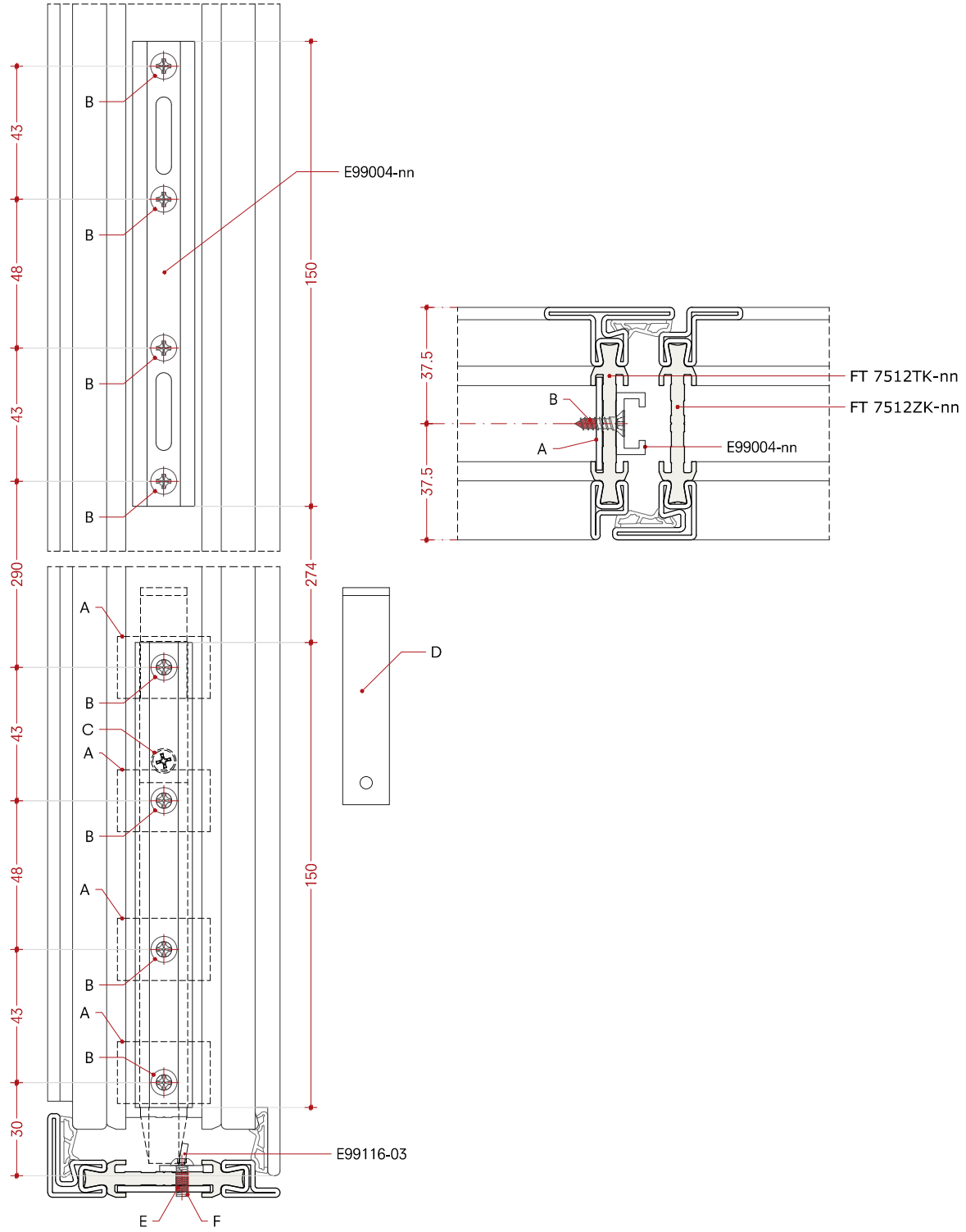
A) Kantriegel
B) Platte 30x20x2 mm mit Klebstoff fixieren (Eigenfertigung)
C) Befestigung mit Schrauben Ø4.2x16 mm ISO7050 und Schraube kürzen
D) Platte 60x30x2 mm mit Klebstoff fixieren (Eigenfertigung)
E) Bohrungen M4
F) Befestigung mit Schrauben M4x10 ISO7380

A) Verrou a bascule
B) Plaque 30x20x2 mm (non inclus) fixé avec colle sur le profilé
C) Fixation avec vis Ø4.2x16 mm ISO7050 et couper la vis
D) Plaque 60x30x2 mm (non inclus) fixé avec colle sur le profilé
E) Trous M4
F) Fixation avec vis M4x10 ISO7380

Installation
Extension E99004-nn for flush bolt E99001-nn, E99002-nn, E99003-nn

Verlängerung
Erweiterung E99004-nn für Kantriegel E99001-nn, E99002-nn, E99003-nn

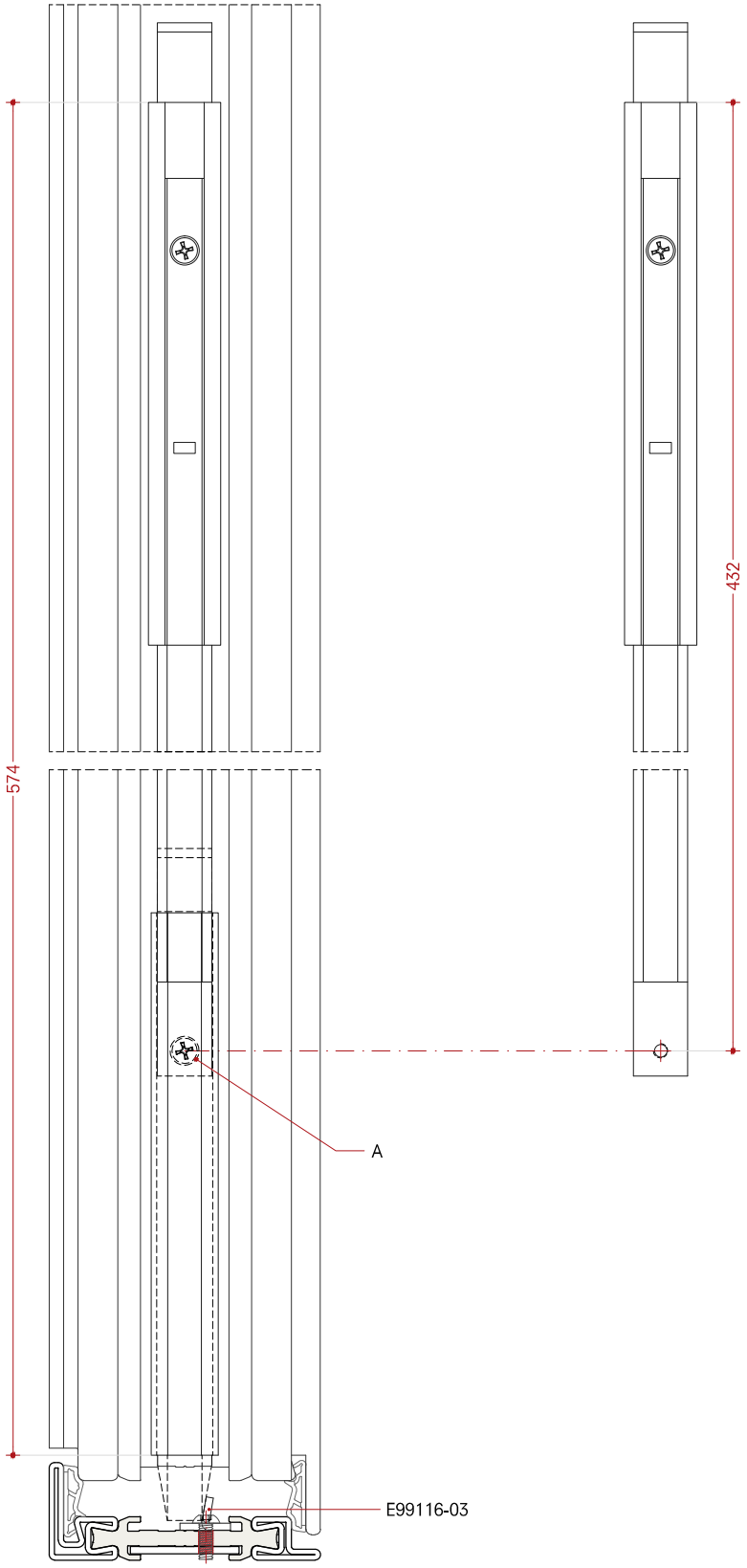
Schéma de montage
Extension E99004-nn pour verrou à bascule E99001-nn, E99002-nn, E99003-nn



A) 25x2 mm L=145 mm plate welded on profile (not provided)
B) Fastening with Ø4.2x16 ISO7050 screws and cut the screws
C) Remove this screw
D) Remove the lever part
E) M4 mm holes
F) Fastening with M4x10 ISO7380 screws

A) Platte 25x2 mm L=145 mm geschweisst am Profil (Eigenfertigung)
B) Befestigung mit Schrauben Ø4.2x16 ISO7050 und Schraube kürzen
C) Entfernen Sie diese Schraube
D) Entfernen Sie den Hebelteil
E) Bohrungen M4
F) Befestigung mit Schrauben M4x10 ISO7380

A) Plat 25x2 mm L=145 mm (non inclus) soudé sur le profilé
B) Fixation avec vis Ø4.2x16 ISO7050 et couper la vis
C) Retirer cette vis
D) Retirer la partie levier
E) Trous M4
F) Fixation avec vis M4x10 ISO7380



A) Fix the extension part with the screw

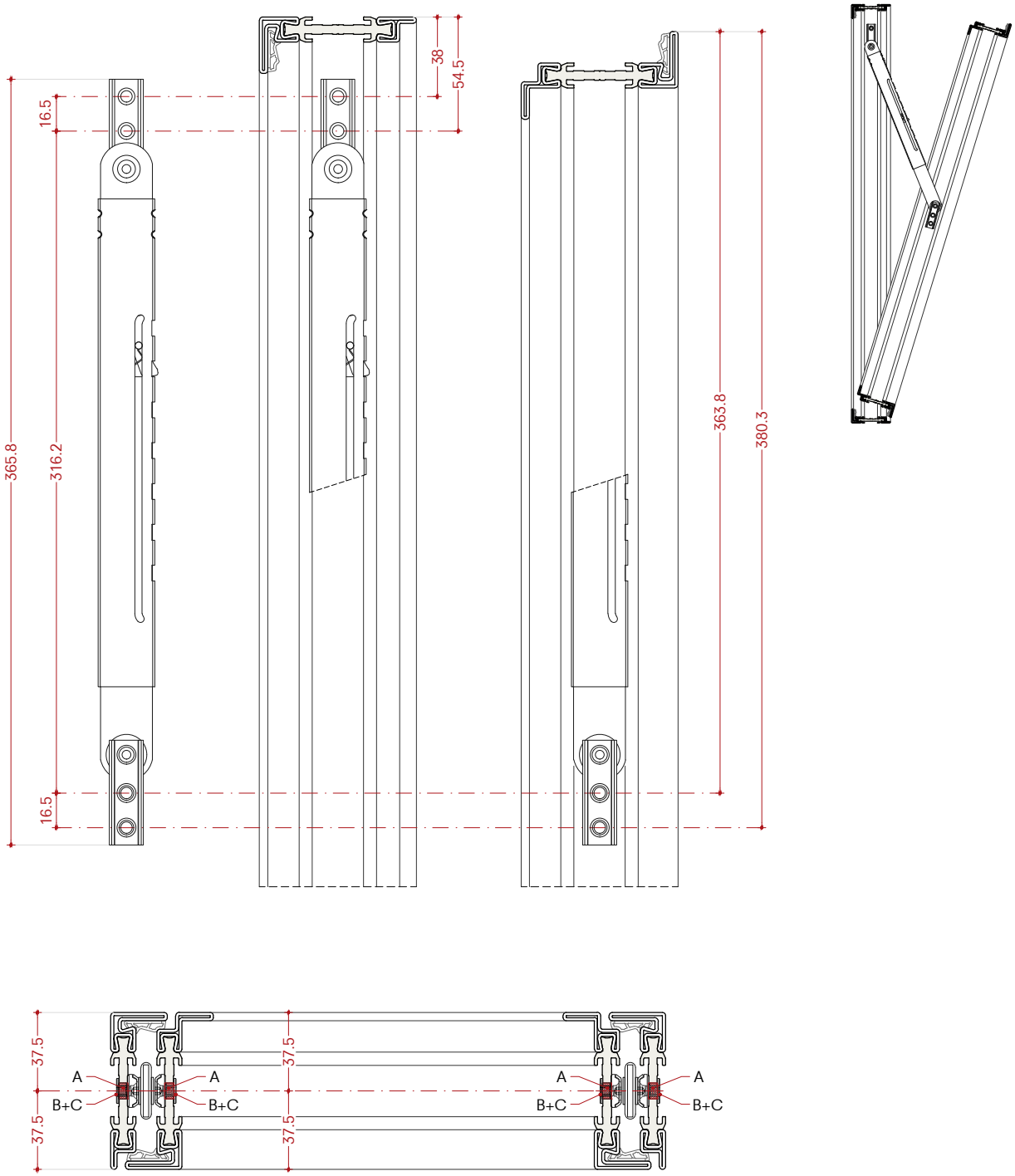
A) Befestigen Sie die Verlängerung mit der Schraube

A) Fixer la partie d'extension avec la vis

Installation
Opening restrictor E99205-05
Bottom hung open in window
Flush profiles

Einbau
Öffnungsbegrenzer E99205-05
Klappfenster nach innen öffnend
Flächenbündige profile

Schéma de montage
Compas de limitation E99205-05
Ouverture intérieure
Profilés coplanaires



Scale 1:3
A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x10 ISO10642 screws

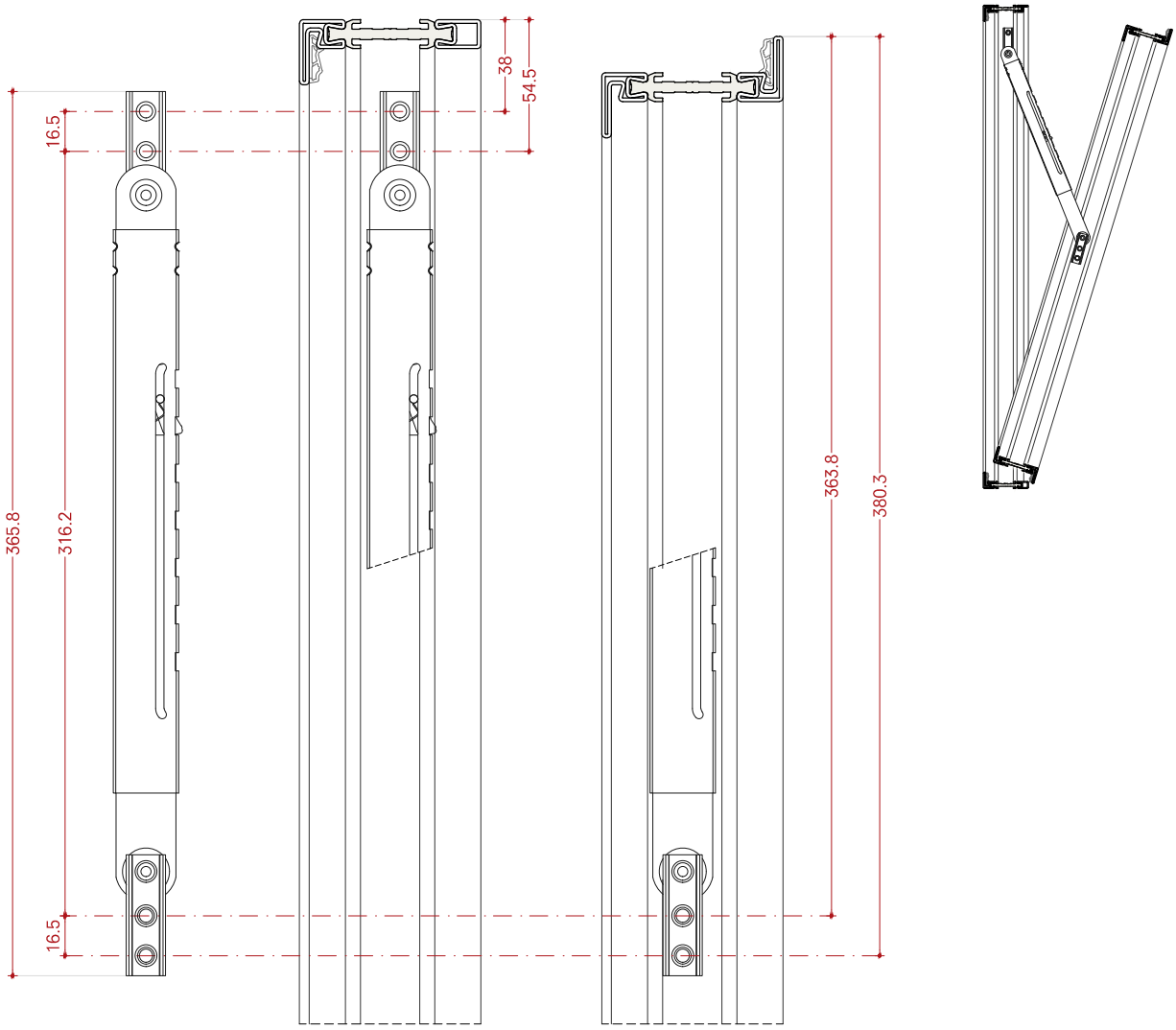
Maßstab 1:3
A) Bohrungen Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x10 ISO10642

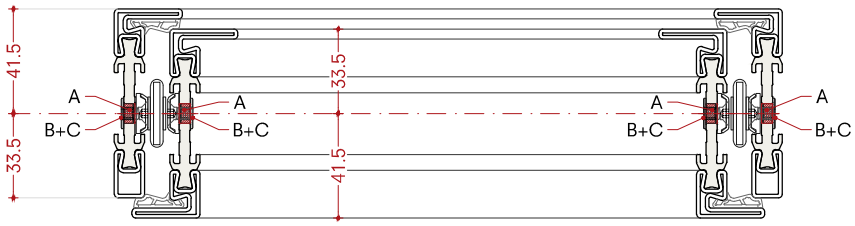
Échelle 1:3
A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x10 ISO10642

Installation
Opening restrictor E99205-05
Bottom hung open in window
Overlapped profiles

Einbau
Öffnungsbegrenzer E99205-05
Klappfenster nach innen öffnend
Überlappende profile

Schéma de montage
Compas de limitation E99205-05
Ouverture intérieure
Profilés superposés





Scale 1:3
A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x10 ISO10642 screws

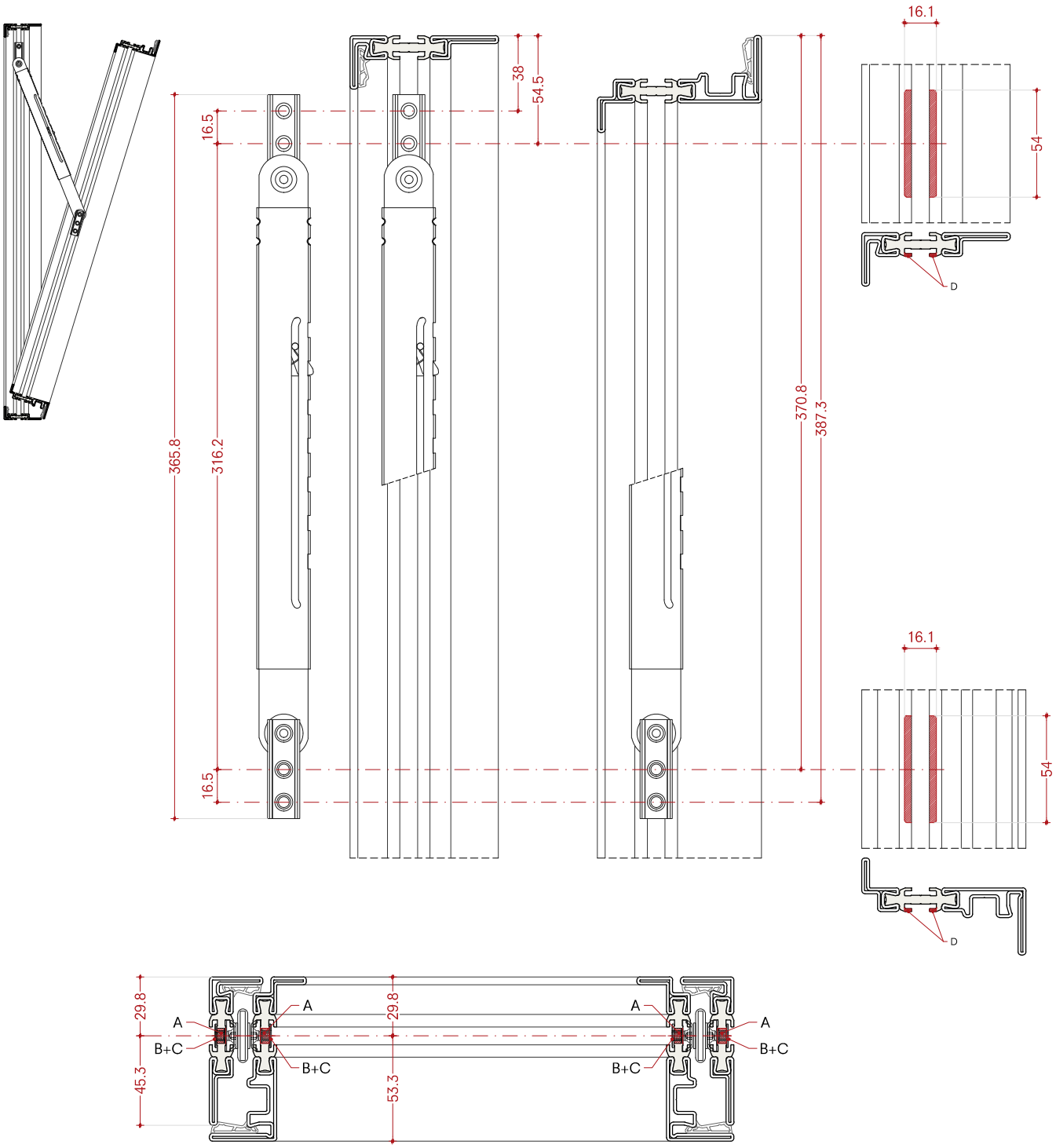
Maßstab 1:3
A) Bohrungen Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x10 ISO10642

Échelle 1:3
A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x10 ISO10642

Installation
Opening restrictor E99205-05
Bottom hung open in window
Tilt&Turn profiles

Einbau
Öffnungsbegrenzer E99205-05
Kipp-Fenster nach innen öffnend

Schéma de montage
Compas de limitation E99205-05
Fênetre à soufflet ouverture intérieure



A) Scale 1:3
B) Ø7.5 mm holes
C) D99702-08 M5 brass bushing
D) Fastening with M5x10 ISO10642 screws
E) Cut off profile

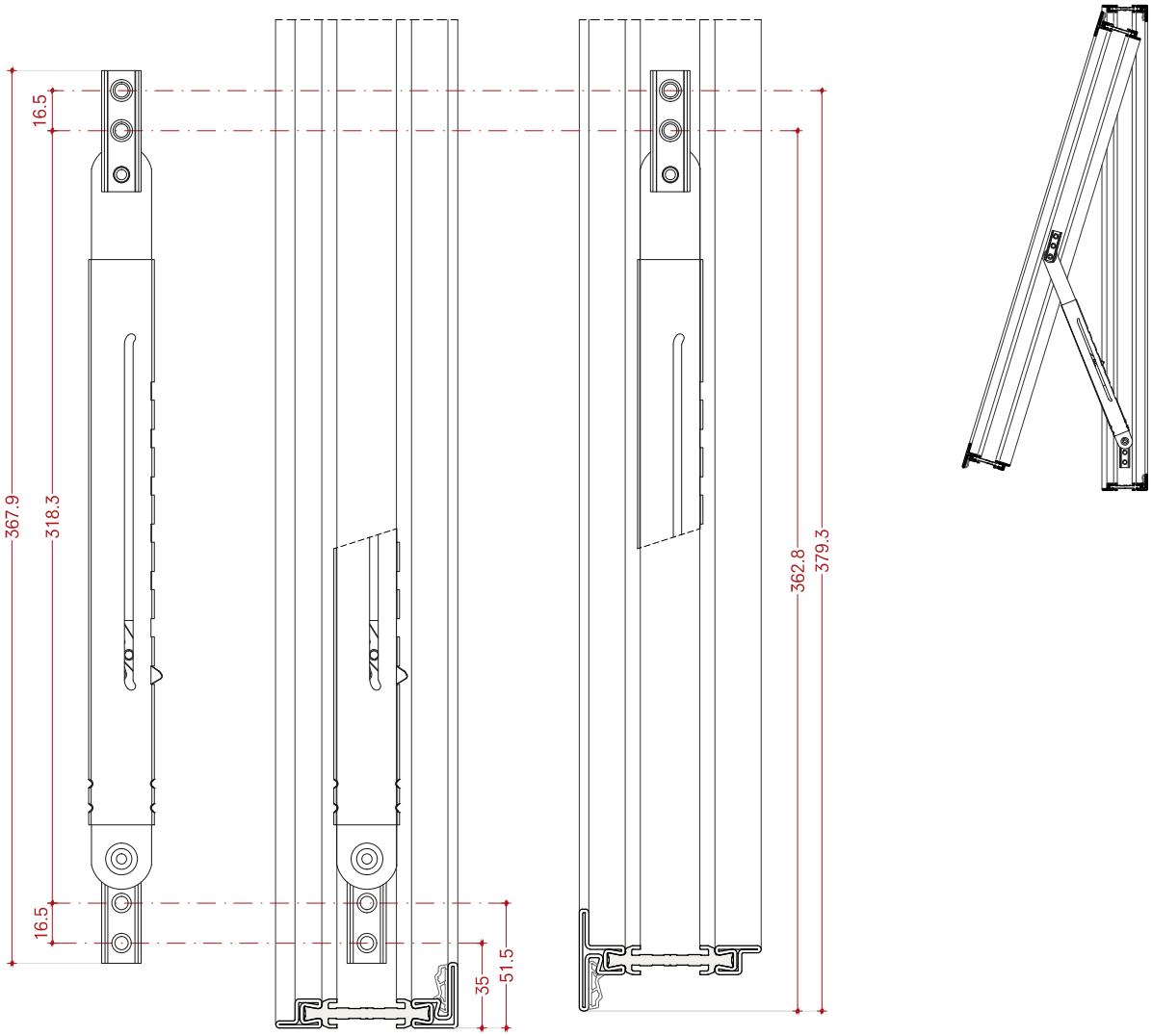
A) Maßstab 1:3
B) Bohrungen Ø7.5 mm
C) D99702-08 Messingbuchse M5
D) Befestigung mit Schrauben M5x10 ISO10642
E) Profil Ausklinken

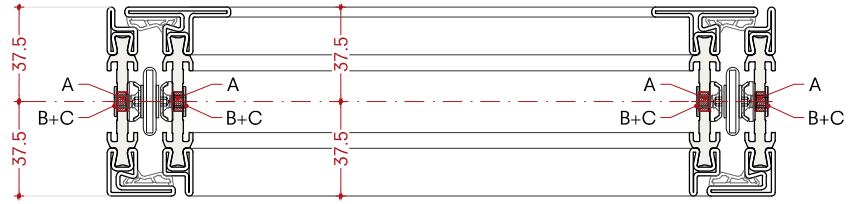
A) Échelle 1:3
B) Trous Ø7.5 mm
C) D99702-08 Boîte en laiton M5
D) Fixation avec vis M5x10 ISO10642
E) Pièce à enlever

Installation
Opening restrictor E99203-05
Top hung open out window
Flush profiles

Einbau
Öffnungsbegrenzer E99203-05
Senkklapp-Fenster nach außen öffnend - Flächenbündige profile

Schéma de montage
Compas de limitation E99203-05
Fênetre à l'italienne ouverture extérieure - Profilés coplanaires





Scale 1:3
A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x10 ISO10642 screws

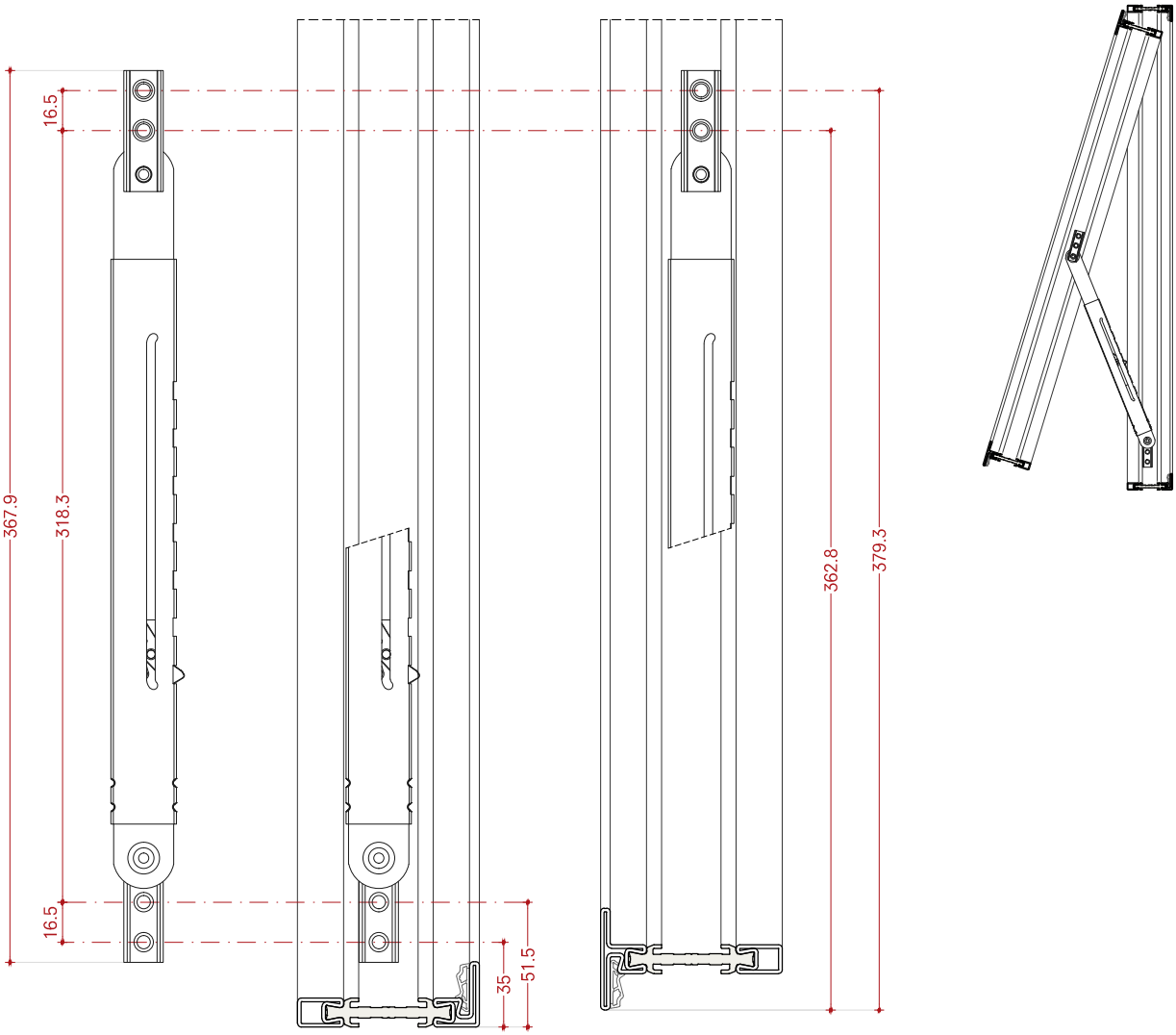
Maßstab 1:3
A) Bohrungen Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x10 ISO10642

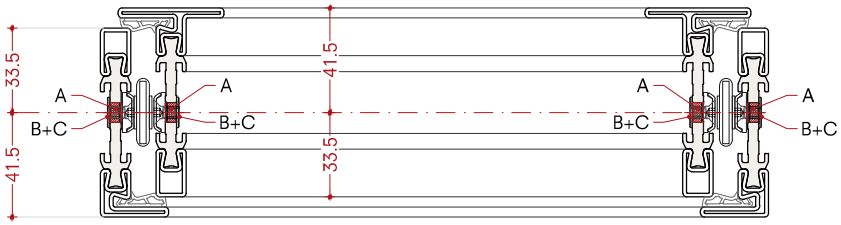
Échelle 1:3
A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x10 ISO10642

Installation
Opening restrictor E99203-05
Top hung open out window
Overlapped profiles

Einbau
Öffnungsbegrenzer E99203-05
Senkklapp-Fenster nach außen öffnend - Überlappende profile

Schéma de montage
Compas de limitation E99203-05
Fênetre à l'italienne ouverture extérieure - Profilés superposés





Scale 1:3
A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x10 ISO10642 screws

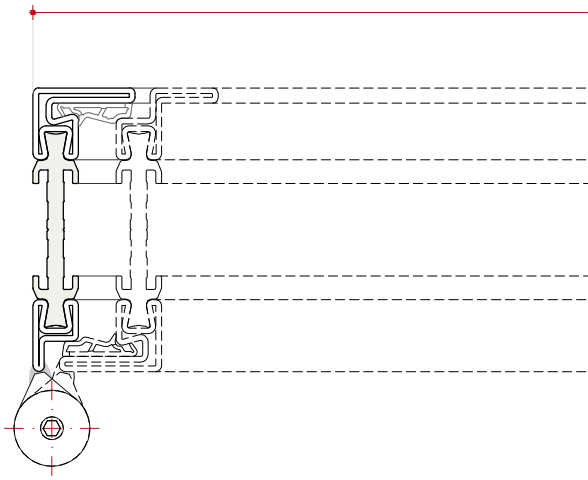
Maßstab 1:3
A) Bohrungen Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x10 ISO10642

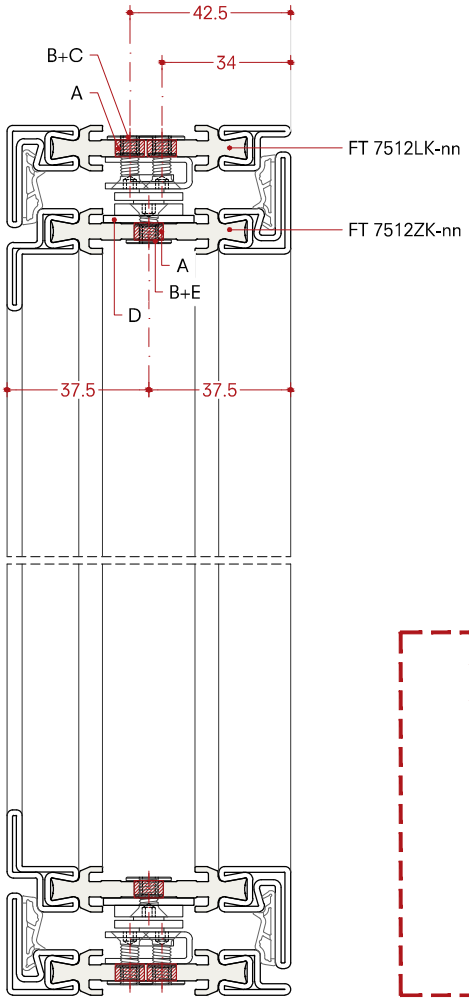
Échelle 1:3
A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x10 ISO10642

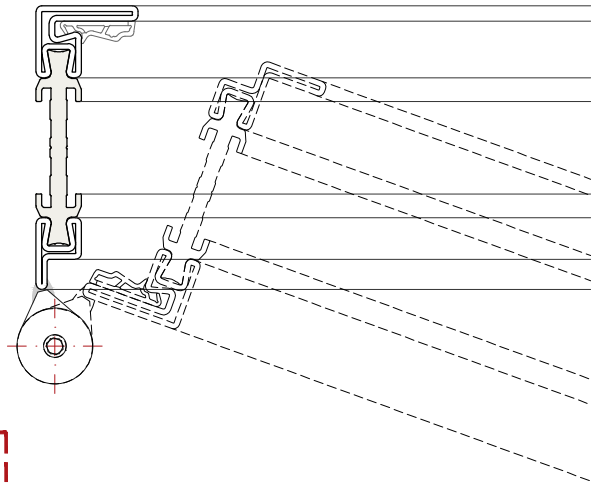
Installation
Opening restrictor E99201-02
Open in window
Flush profiles

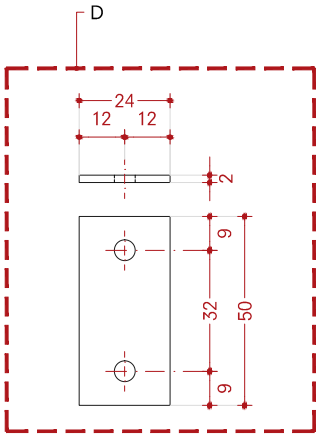
Einbau
Öffnungsbegrenzer E99201-02
Nach innen öffnend
Flächenbündige profile

Schéma de montage
Compas delimitatation E99201-02
Ouverture intérieure
Profilés coplanaires





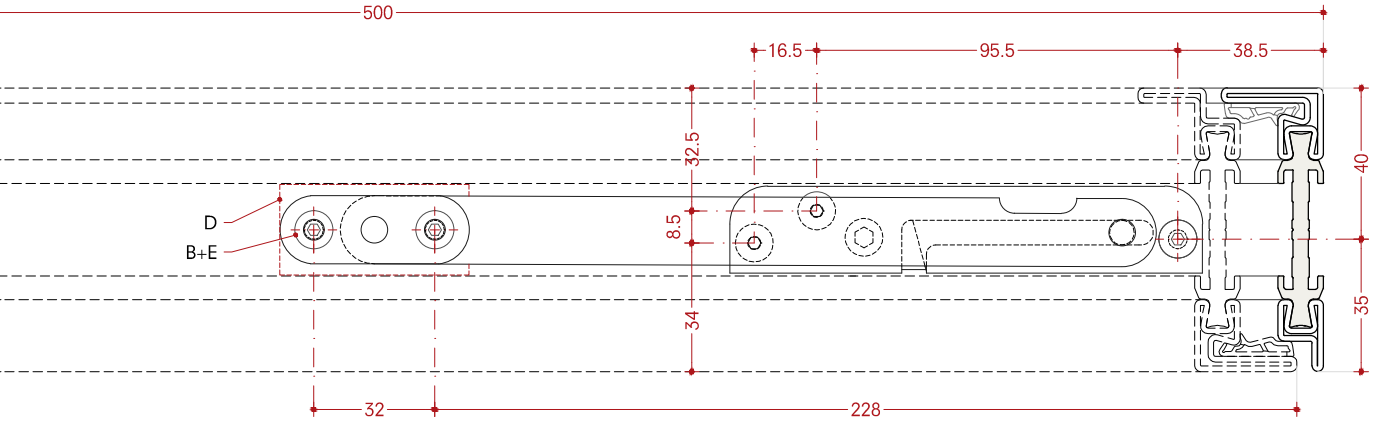




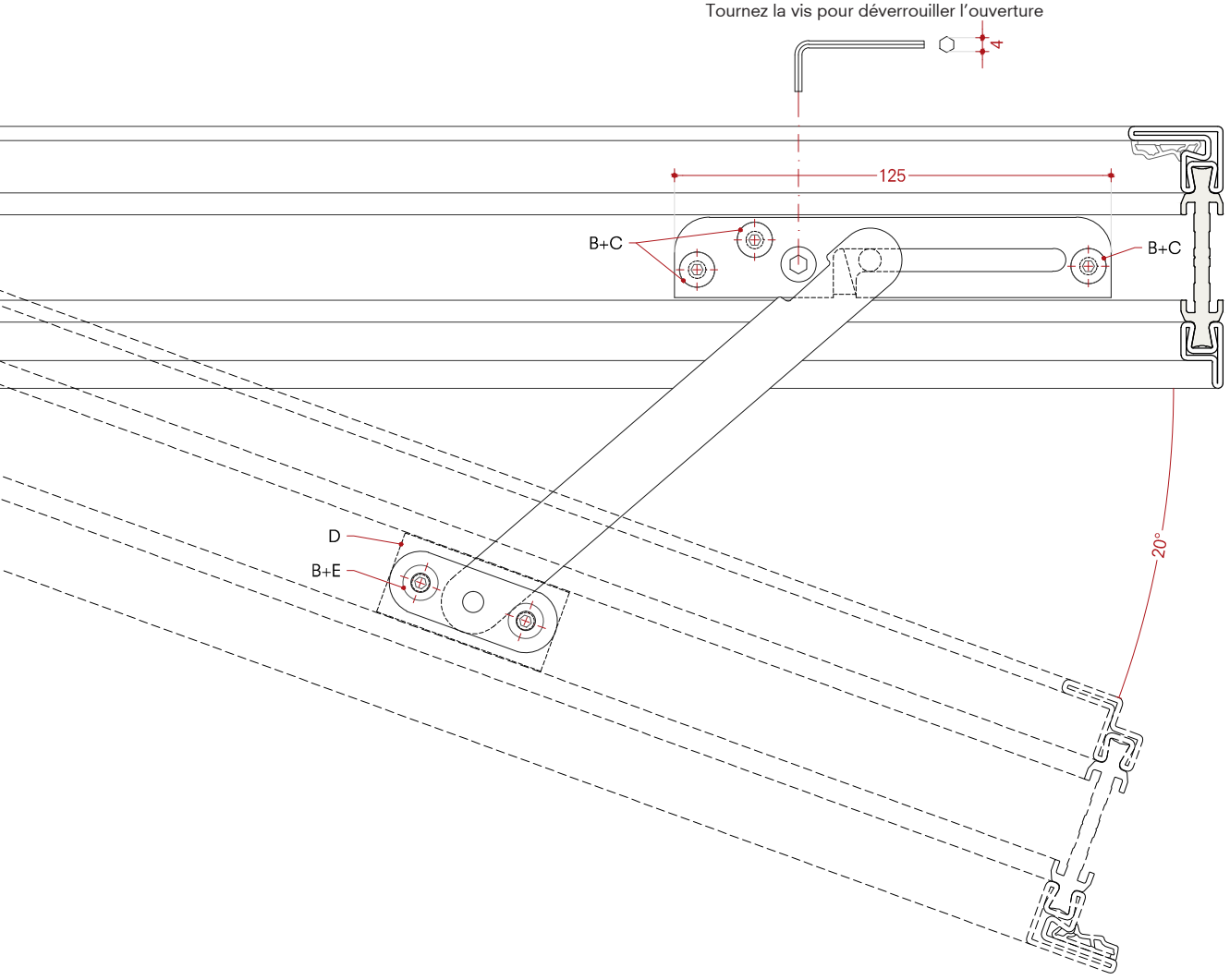
A) Ø7.5 mm holes
B) D99702-08 M5 brass bushing
C) Fastening with M5x14 ISO10642 screws
D) 50x24x2 mm plate (not provided)
E) Fastening with M5x10 ISO10642 screws

A) Fori Ø7.5 mm
B) D99702-08 Messingbuchse M5
C) Befestigung mit Schrauben M5x14 ISO10642
D) Platte 50x24x2 mm (Eigenfertigung)
E) Befestigung mit Schrauben M5x10 ISO10642

A) Trous Ø7.5 mm
B) D99702-08 Boîte en laiton M5
C) Fixation avec vis M5x14 ISO10642
D) Plat 50x24x2 mm (non inclus)
E) Fixation avec vis M5x10 ISO10642



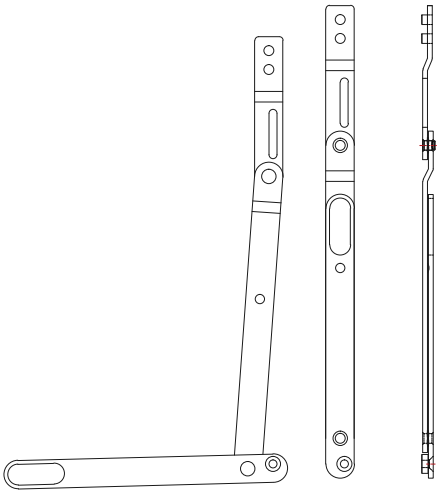
Turn the screw to unlock the leaf
Drehen Sie die Schraube um das Flügel zu entriegeln
Tournez la vis pour déverrouiller l'ouverture



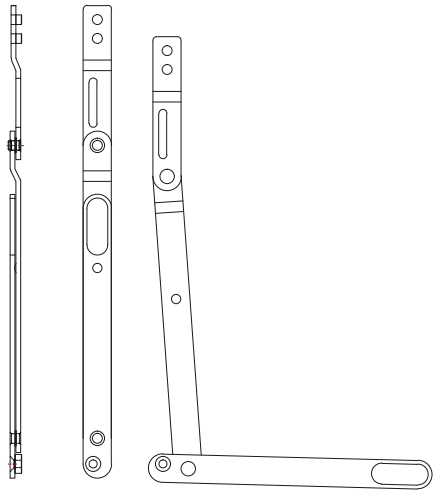
Installation
Upper and lower long shoot bolt
E99040-04 - E99041-04

Einbau
Oberer und unterer langer Kantriegel
E99040-04 - E99041-04

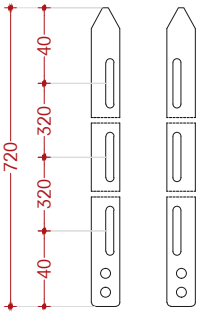
Schéma de montage
Verrou a bascule long supérieur et inférieur E99040-04 - E99041-04



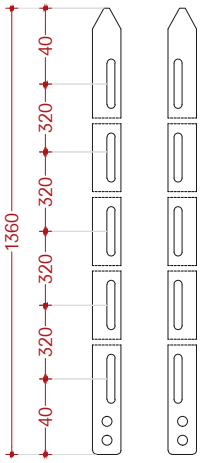
E99040-04



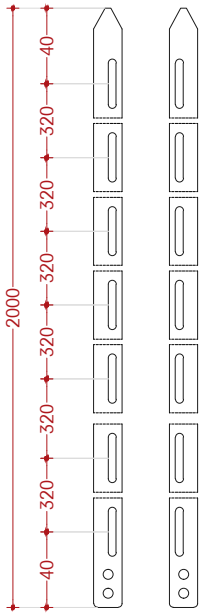
E99041-04



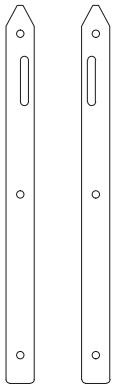
E99042-04
L=720 mm



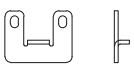
E99043-04
L=1360 mm



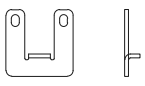
E99044-04
L=2000 mm



E99045-04

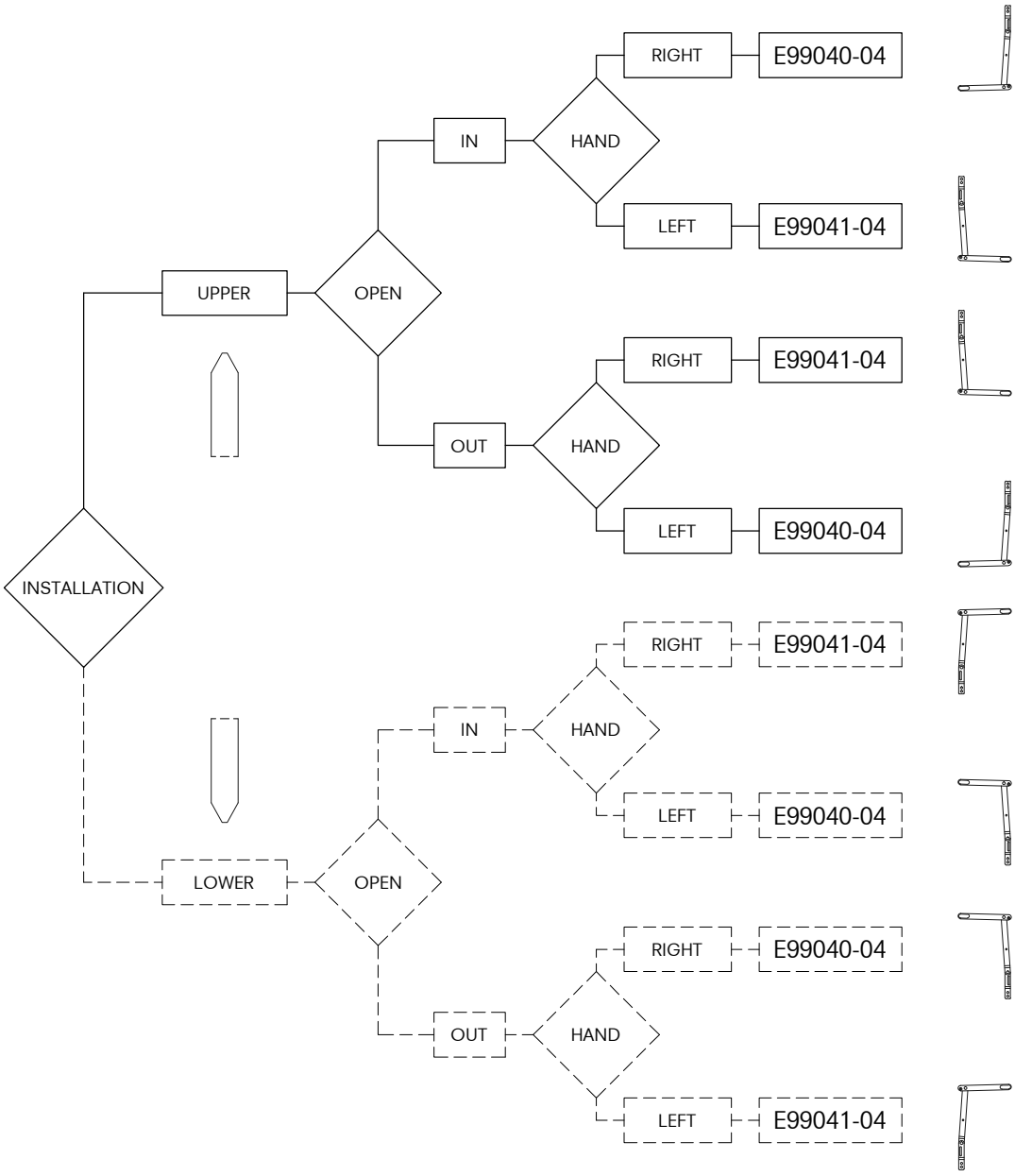


E99052-04

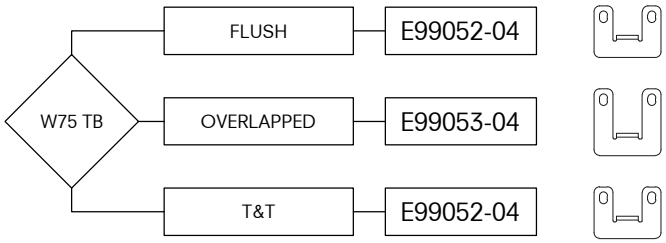


E99053-04

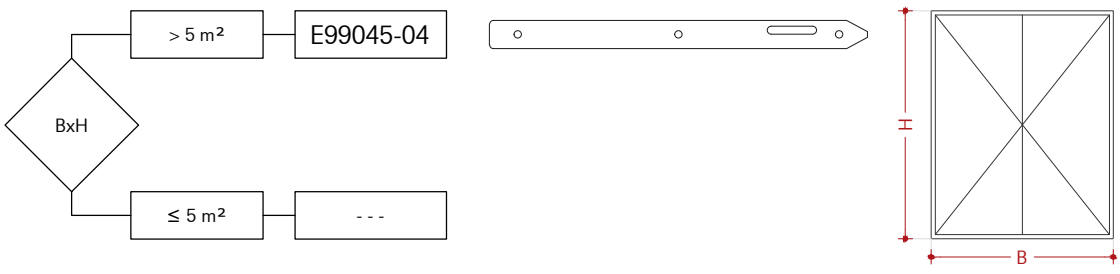
Lever
Hebel
Levier



Strike plate
Schließblech
Gâche pour tige



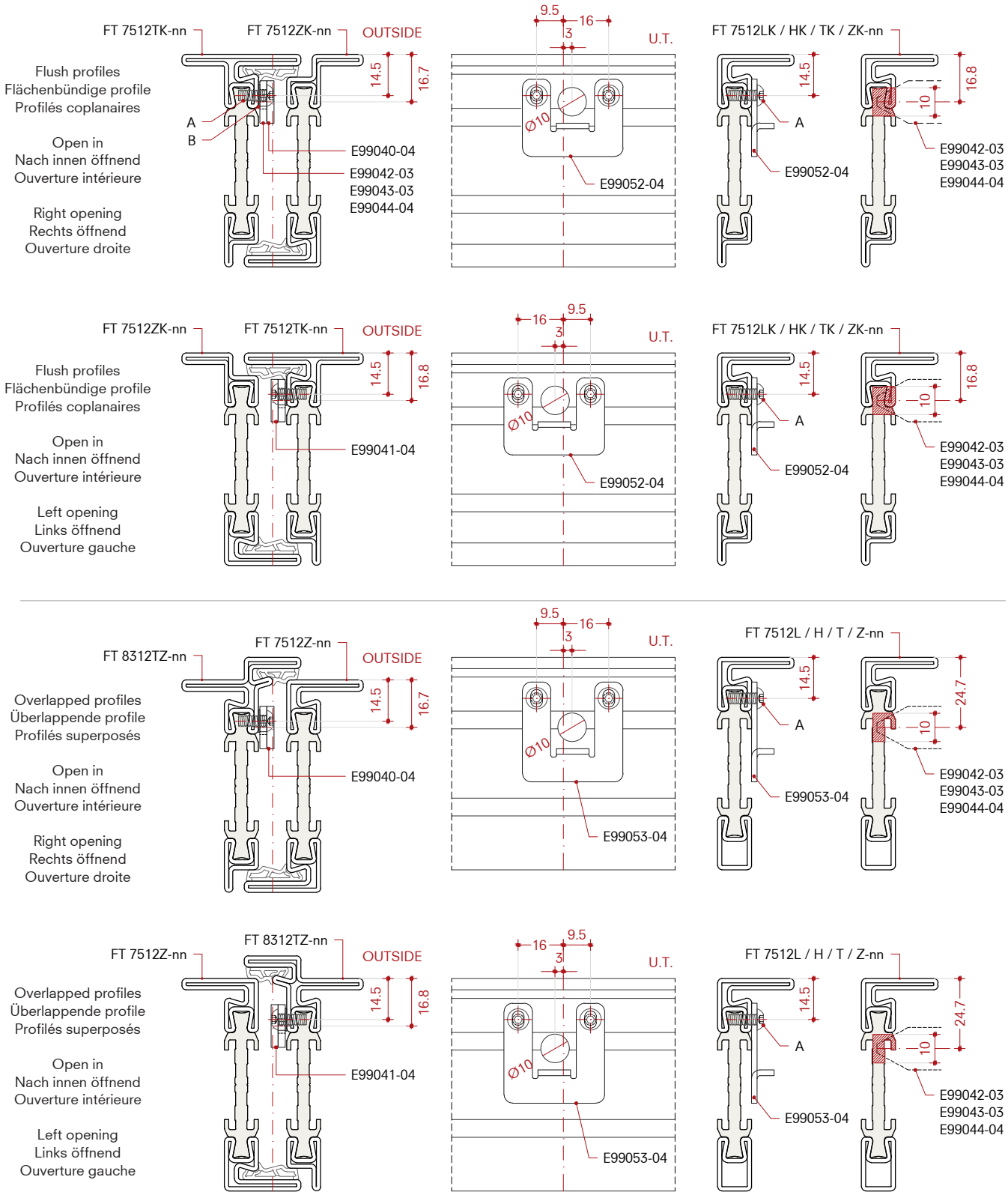
Reinforcement
Verstärkung
Renforcement



Installation
Upper long shoot bolt
E99040-04 - E99041-04

Einbau
Oberer langer Kantriegel
E99040-04 - E99041-04

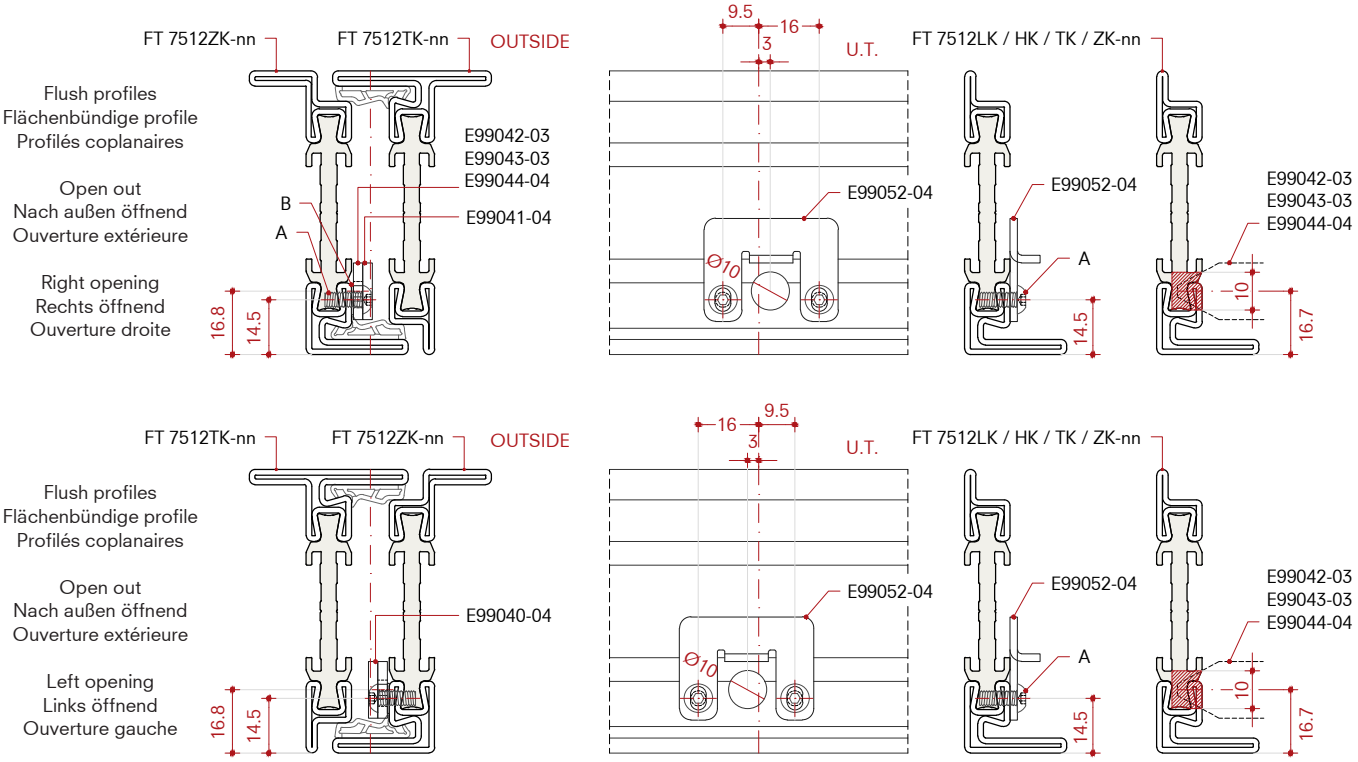
Schéma de montage
Verrou a bascule long supérieur
E99040-04 - E99041-04

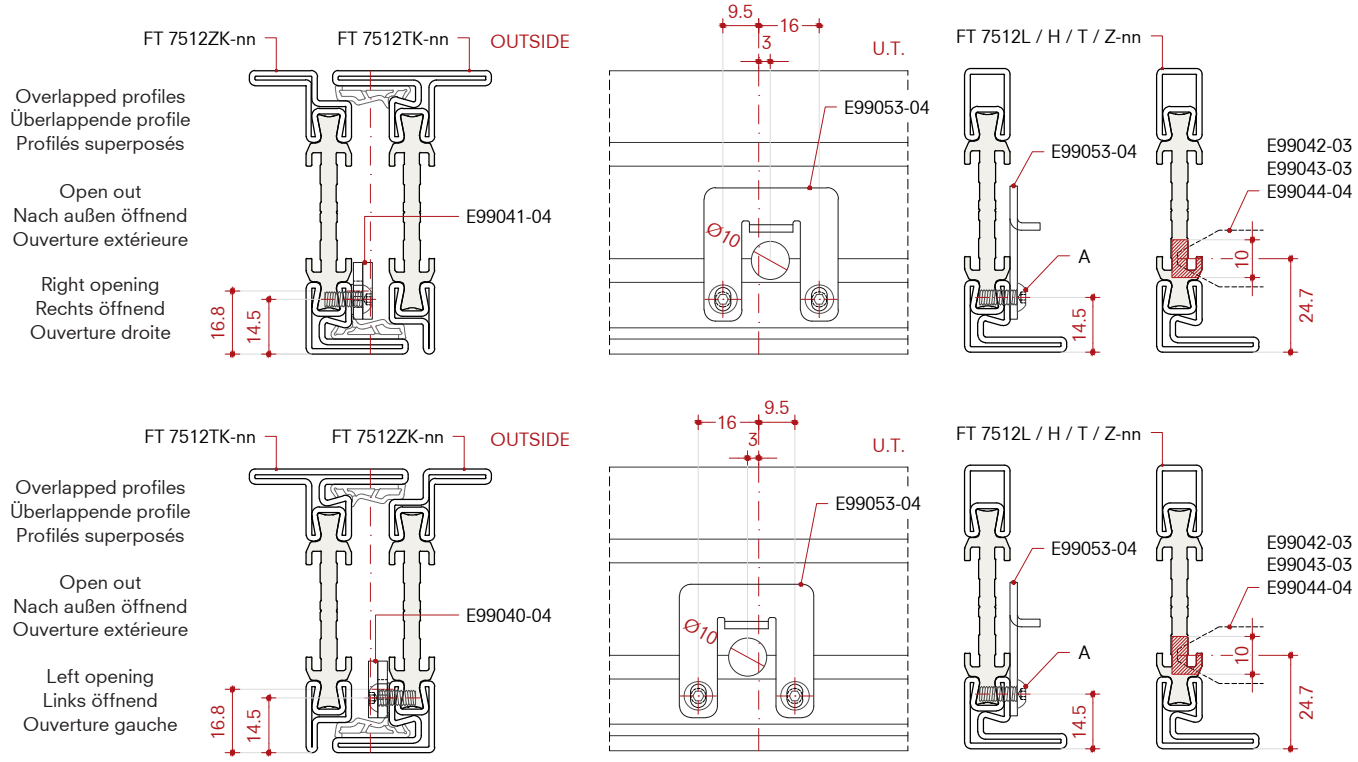


U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)

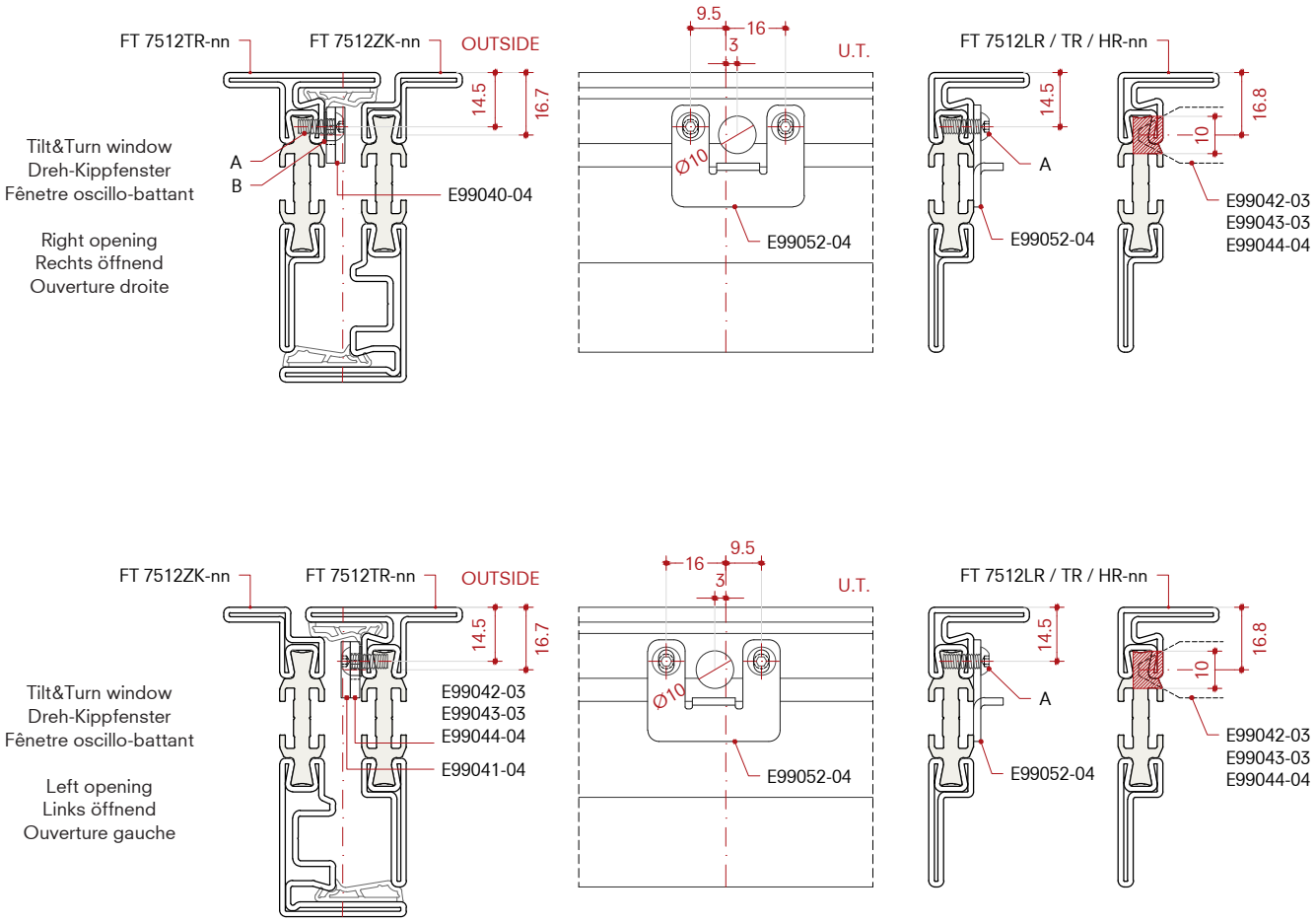




U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

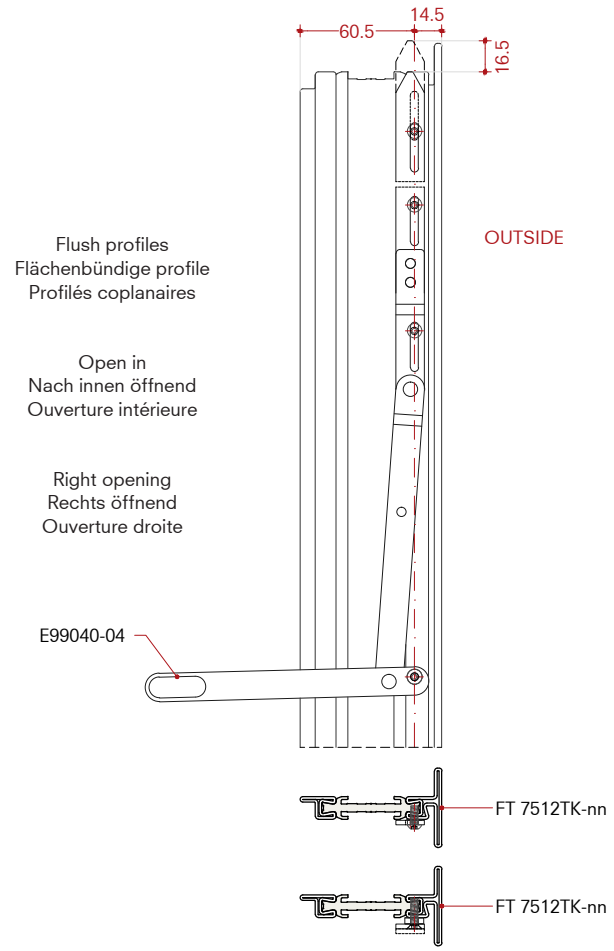
U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)

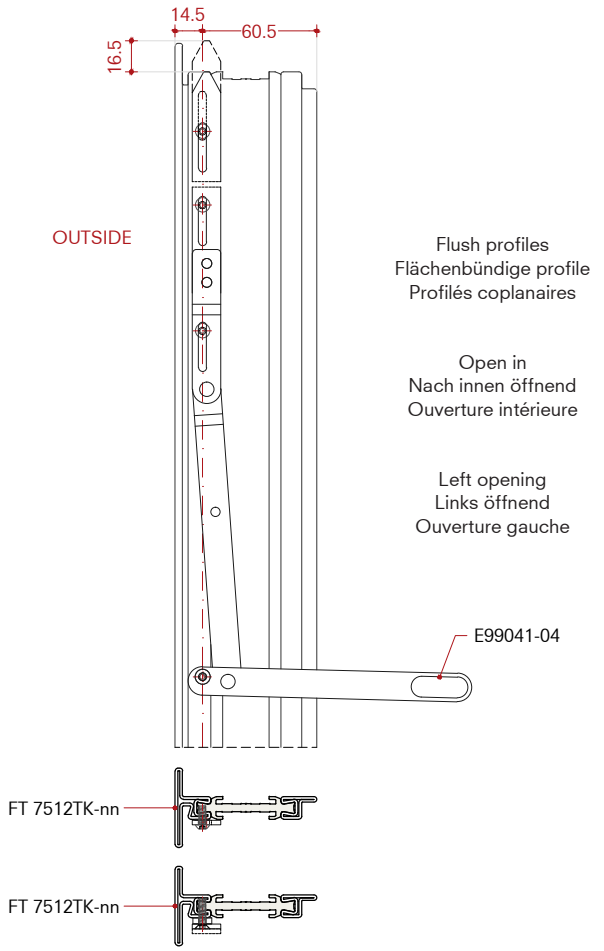


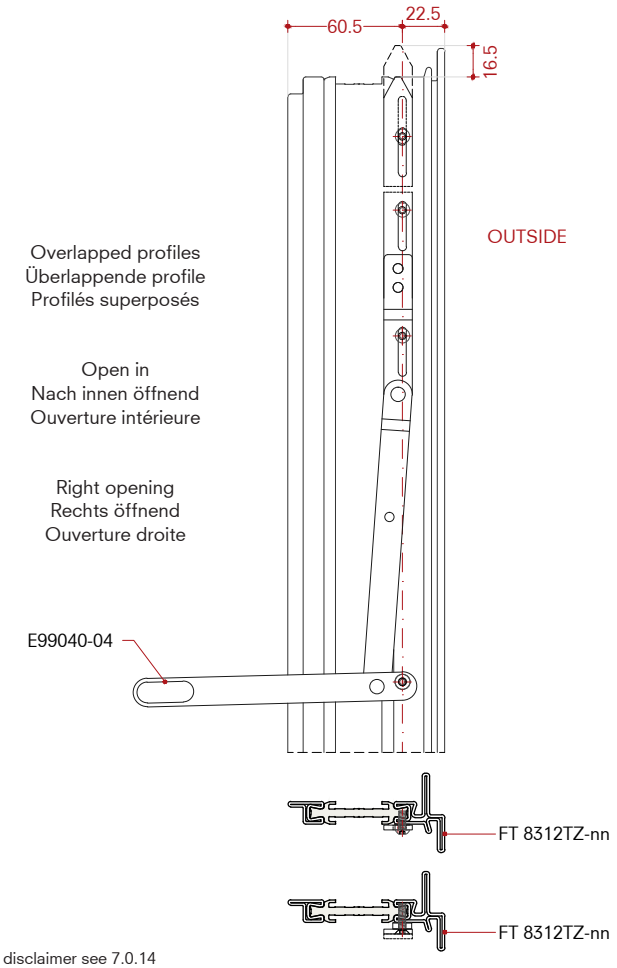
U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

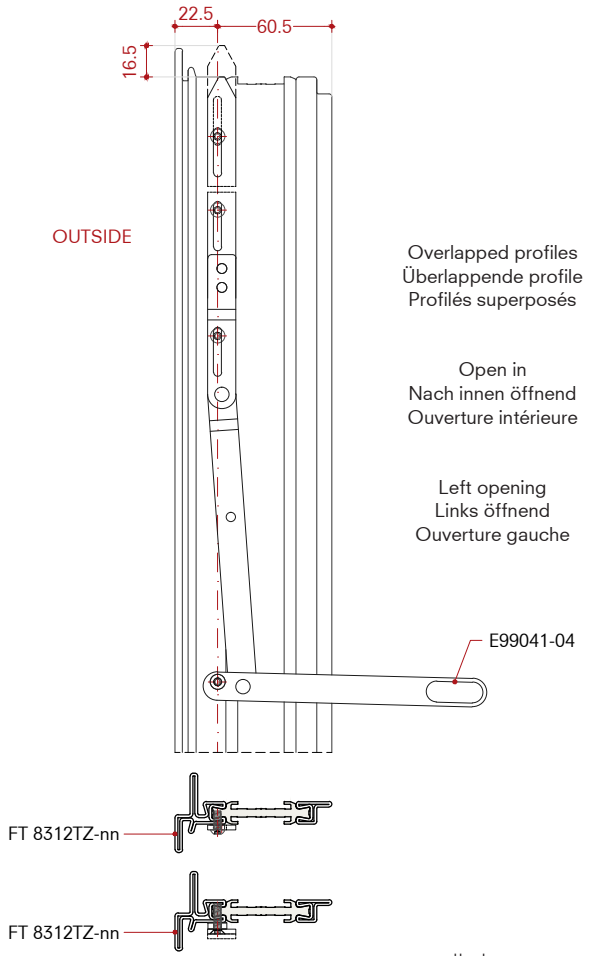
U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

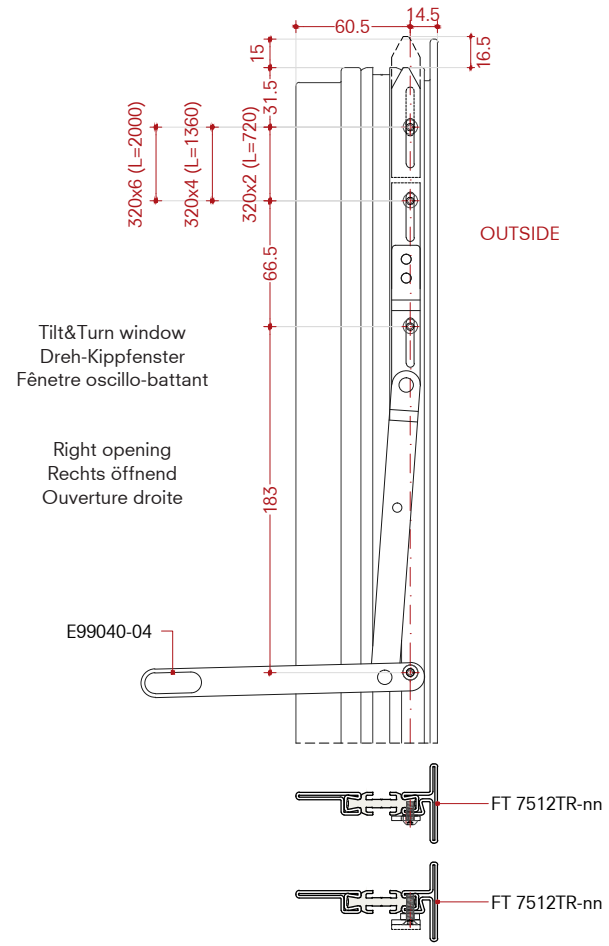
U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)

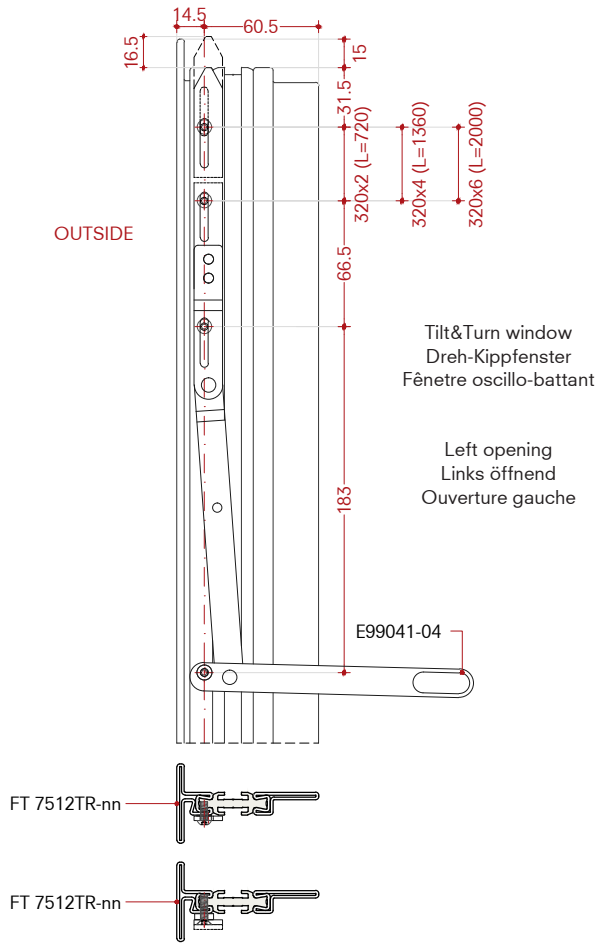

14.5
60.5
16.5
OUTSIDE
Flush profiles
Flächenbündige profile
Profilés coplanaires
Open in
Nach innen öffnend
Ouverture intérieure
Right opening
Rechts öffnend
Ouverture droite
E99040-04
FT 7512TK-nn
FT 7512TK-nn

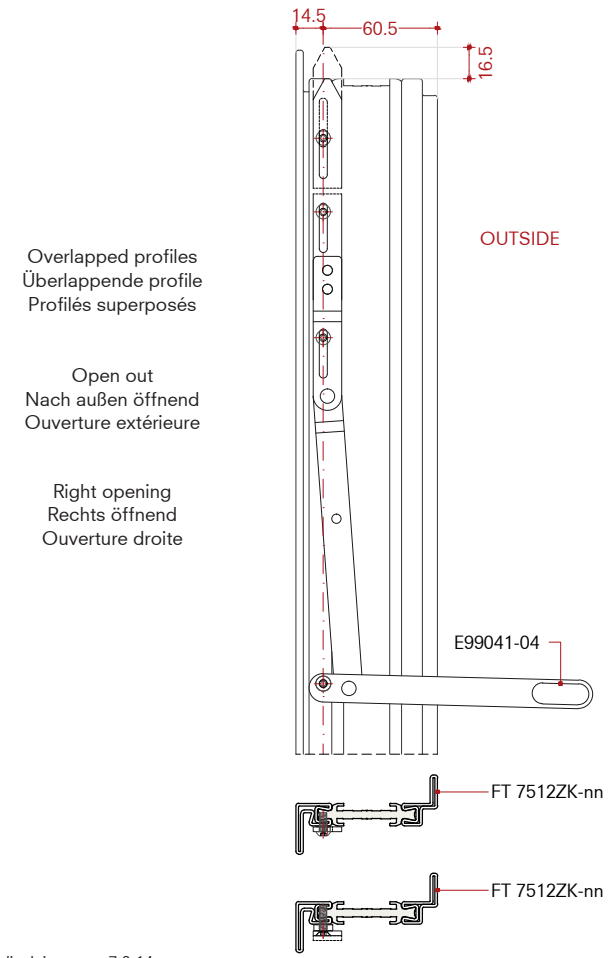

14.5
60.5
16.5
OUTSIDE
Flush profiles
Flächenbündige profile
Profilés coplanaires
Open in
Nach innen öffnend
Ouverture intérieure
Left opening
Links öffnend
Ouverture gauche
E99041-04
FT 7512TK-nn
FT 7512TK-nn

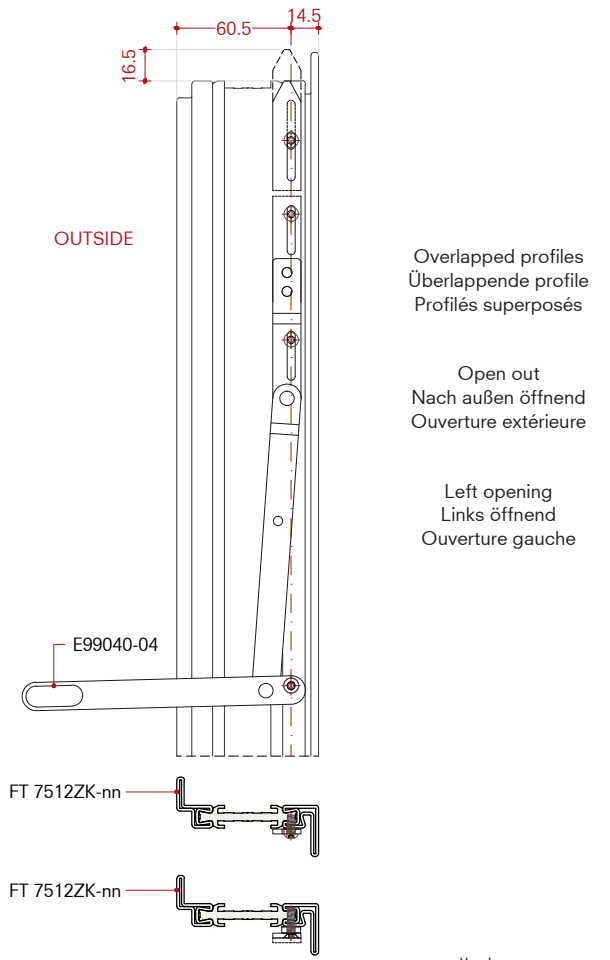

22.5
60.5
16.5
OUTSIDE
Overlapped profiles
Überlappende profile
Profilés superposés
Open in
Nach innen öffnend
Ouverture intérieure
Right opening
Rechts öffnend
Ouverture droite
E99040-04
FT 8312TZ-nn
FT 8312TZ-nn

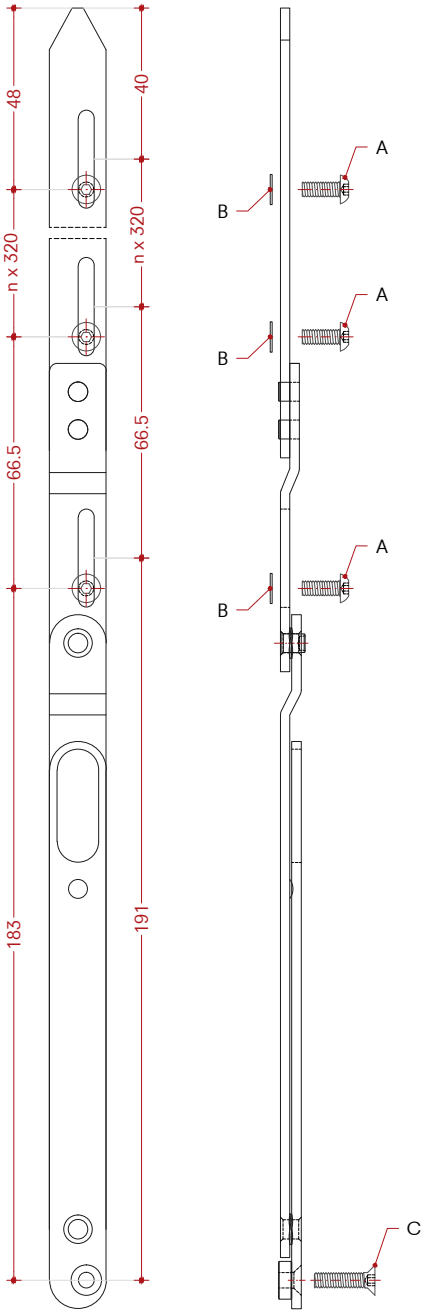

22.5
60.5
16.5
OUTSIDE
Overlapped profiles
Überlappende profile
Profilés superposés
Open in
Nach innen öffnend
Ouverture intérieure
Left opening
Links öffnend
Ouverture gauche
E99041-04
FT 8312TZ-nn
FT 8312TZ-nn


14.5
60.5
16.5
15
31.5
320x6 (L=2000)
320x4 (L=1360)
320x2 (L=720)
66.5
183
OUTSIDE
Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant
Right opening
Rechts öffnend
Ouverture droite
E99040-04
FT 7512TR-nn
FT 7512TR-nn


14.5
60.5
16.5
15
31.5
320x2 (L=720)
320x4 (L=1360)
320x6 (L=2000)
66.5
183
OUTSIDE
Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant
Left opening
Links öffnend
Ouverture gauche
E99041-04
FT 7512TR-nn
FT 7512TR-nn

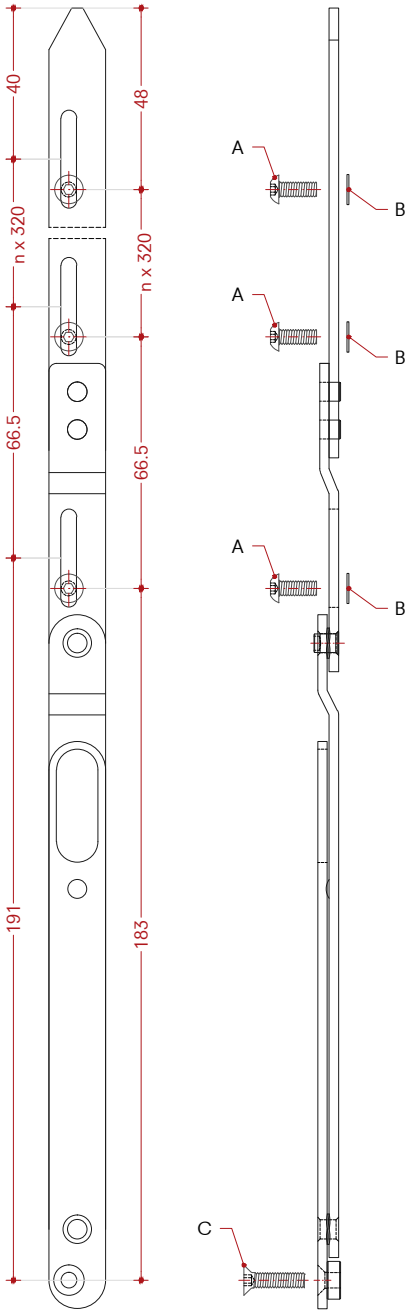

14.5
60.5
16.5
OUTSIDE
Overlapped profiles
Überlappende profile
Profilés superposés
Open out
Nach außen öffnend
Ouverture extérieure
Right opening
Rechts öffnend
Ouverture droite
E99041-04
FT 7512ZK-nn
FT 7512ZK-nn


14.5
60.5
16.5
OUTSIDE
Overlapped profiles
Überlappende profile
Profilés superposés
Open out
Nach außen öffnend
Ouverture extérieure
Left opening
Links öffnend
Ouverture gauche
E99040-04
FT 7512ZK-nn
FT 7512ZK-nn



E99040-04

	Cod.	L (mm)	
n° 2	**E99042-04**	720	(Right-Open in / Left-Open out)
n° 4	**E99043-04**	1360	(Right-Open in / Left-Open out)
n° 6	**E99044-04**	2000	(Right-Open in / Left-Open out)



E99041-04

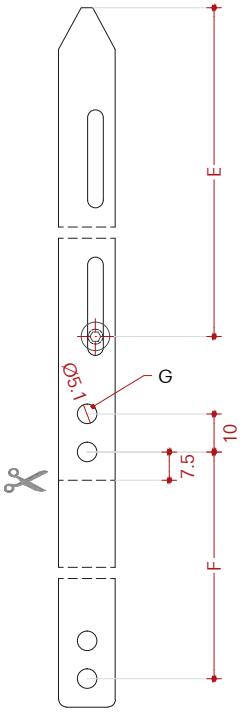
	Cod.	L (mm)	
n° 2	**E99042-04**	720	(Left-Open in / Right-Open out)
n° 4	**E99043-04**	1360	(Left-Open in / Right-Open out)
n° 6	**E99044-04**	2000	(Left-Open in / Right-Open out)

A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)
C) Fastening with M4x16 ISO10642 screws

A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)
C) Befestigung mit Schrauben M4x16 ISO10642

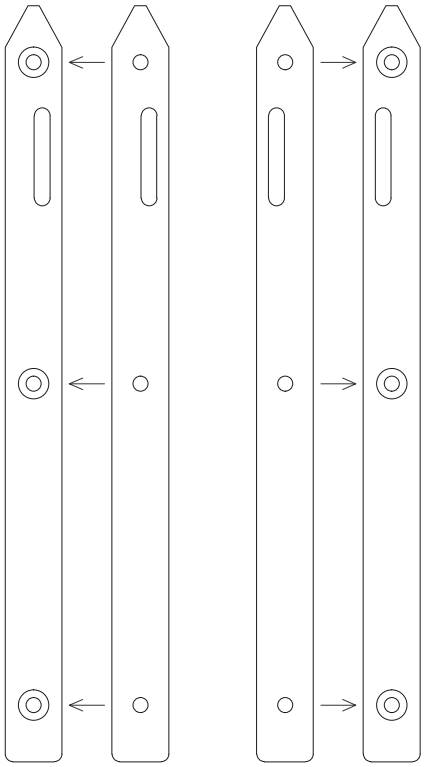
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)
C) Fixation avec vis M4x16 ISO10642

Cropping rod
Stangenschneiden
Coupe de tige

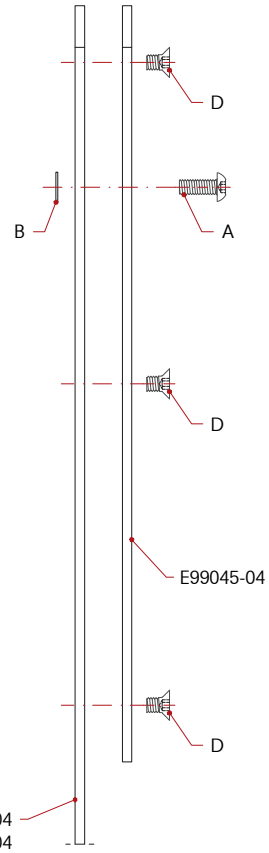


E99042-04
E99043-04
E99044-04

Reinforcement rod
Verstärkung
Tige de renforcement

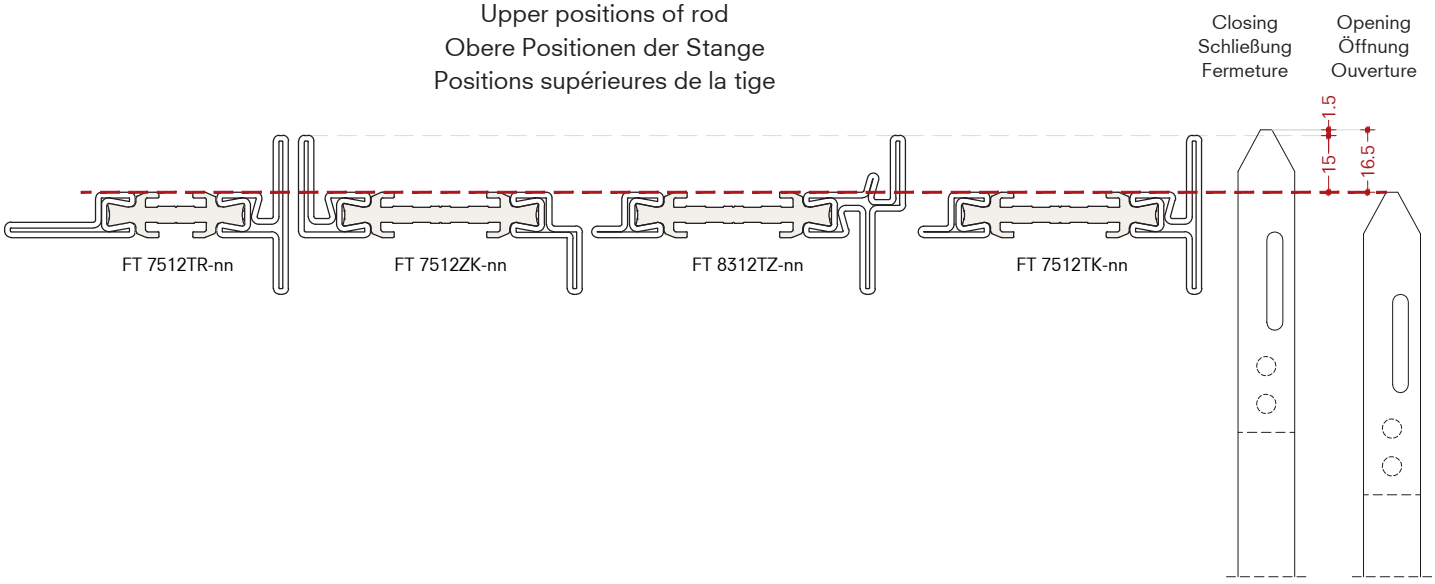


E99045-04



E99042-04
E99043-04
E99044-04

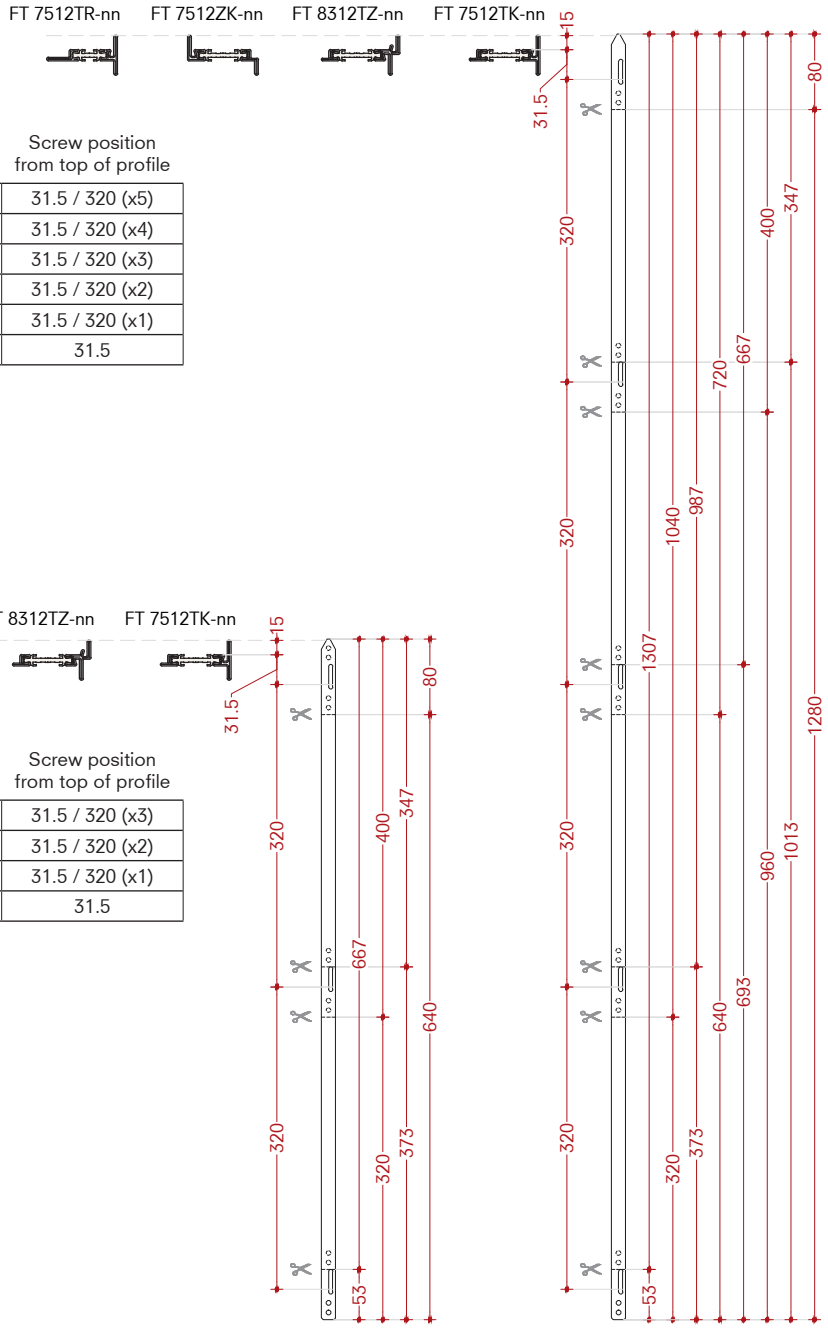
Upper positions of rod
Obere Positionen der Stange
Positions supérieures de la tige



A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)
D) Fastening with M4x6 ISO10642 screws and cut the screws (not provided)
E) No variation beyond first slot above cropping
F) Cropping (reference to allowable cropping fields)
G) Redrill new Ø5.1 mm holes

A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)
D) Befestigung mit Schrauben M4x6 ISO10642 und Schrauben kürzen (Eigenfertigung)
E) Keine Variation über den ersten Slot hinaus über dem Zuschneiden
F) Zuschneiden (Verweis auf zulässige Zuschneidefelder)
G) Neue Ø5.1 mm Löcher neu bohren

A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)
D) Fixation avec vis M4x6 ISO10642 et couper la vis (non inclus)
E) Aucun changement au-delà de la première fente au-dessus de la découpe
F) Culture (référence aux champs de culture autorisés)
G) Repercer de nouveaux trous Ø5.1 mm



Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99044-04	2000	53 - 320	31.5 / 320 (x5)
		373 - 640	31.5 / 320 (x4)
		693 - 960	31.5 / 320 (x3)
		1013 - 1280	31.5 / 320 (x2)
		1333 - 1600	31.5 / 320 (x1)
		1653 - 1920	31.5

Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99043-04	1360	53 - 320	31.5 / 320 (x3)
		373 - 640	31.5 / 320 (x2)
		693 - 960	31.5 / 320 (x1)
		1013 - 1280	31.5

NOTE:
Only right installation is represent.

Fastening screw position is referred to the body of profile.

Hinweis:
Darstellung DIN Rechts.

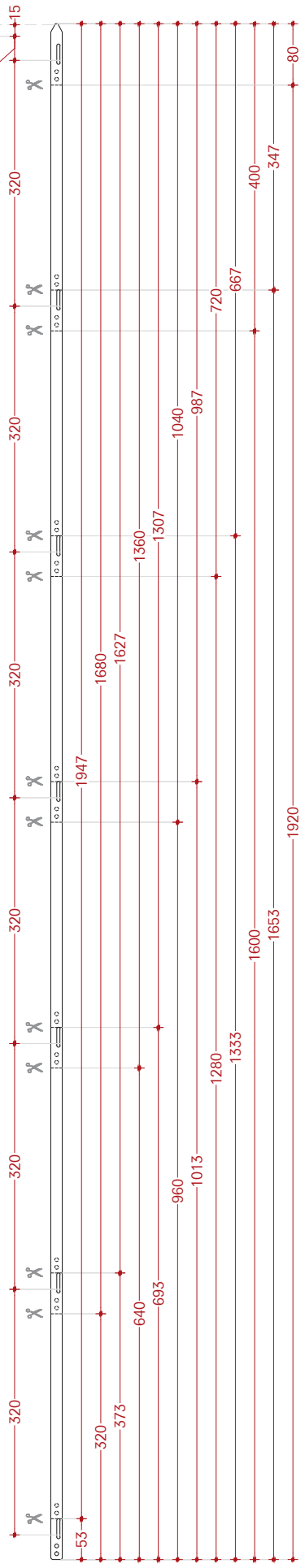
Die Position der Befestigungsschraube bezieht sich auf den Profilkörper.

Remarque:
Seule la droite installation est représentée.

La position de la vis de fixation se rapporte au corps du profilé.

FT 7512TR-nn FT 7512ZK-nn FT 8312TZ-nn FT 7512TK-nn

Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99042-04	720	53 - 320	31.5 / 320 (x1)
		373 - 640	31.5



Remarque:
Seule la droite installation est représentée.

La position de la vis de fixation se rapporte au corps du profilé.

Hinweis:
Darstellung DIN Rechts.

Die Position der Befestigungsschraube bezieht sich auf den Profilkörper.

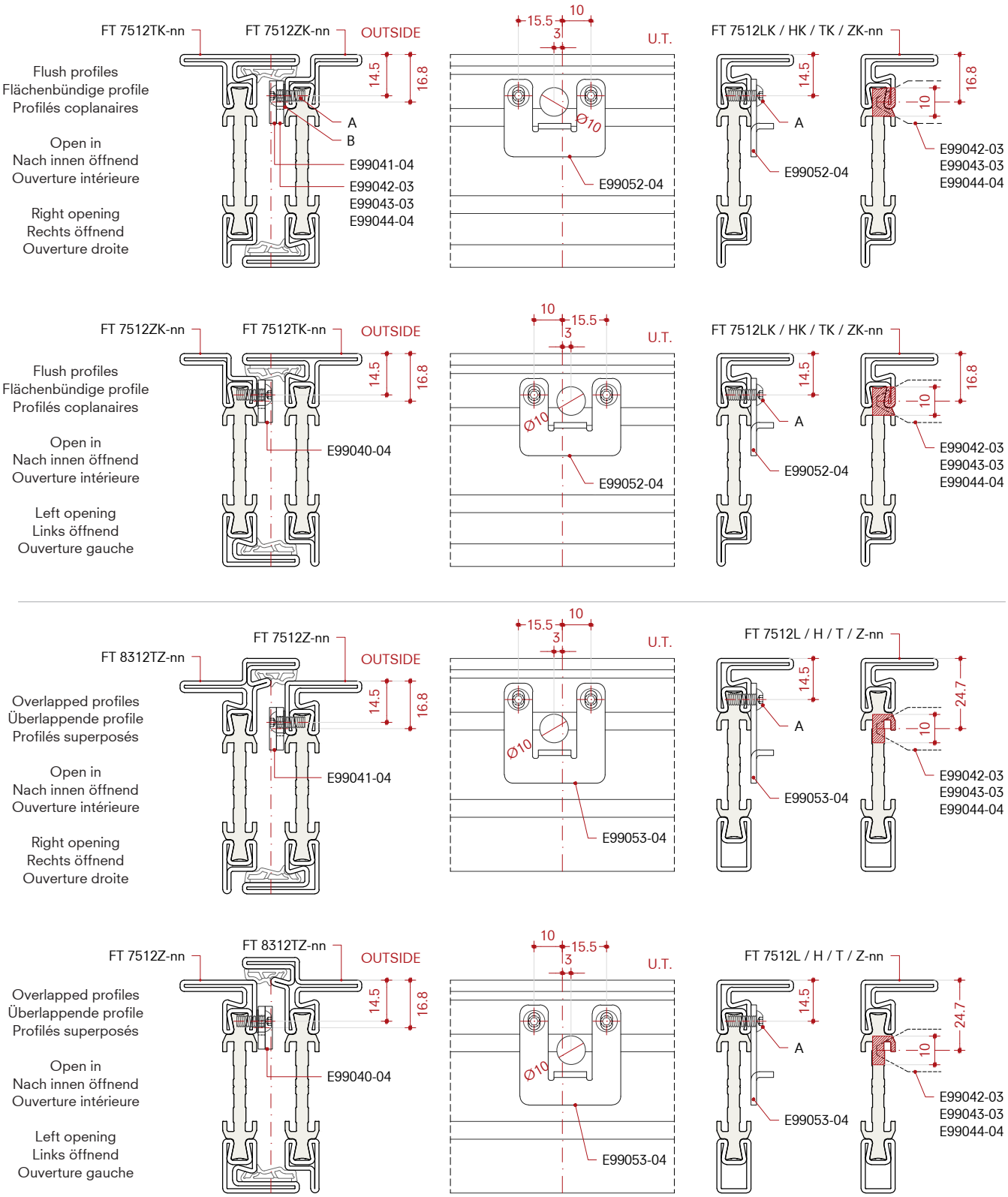
NOTE:
Only right installation is represent.

Fastening screw position is referred to the body of profile.

Installation
Lower long shoot bolt
E99040-04 - E99041-04

Einbau
Unterer langer Kantriegel
E99040-04 - E99041-04

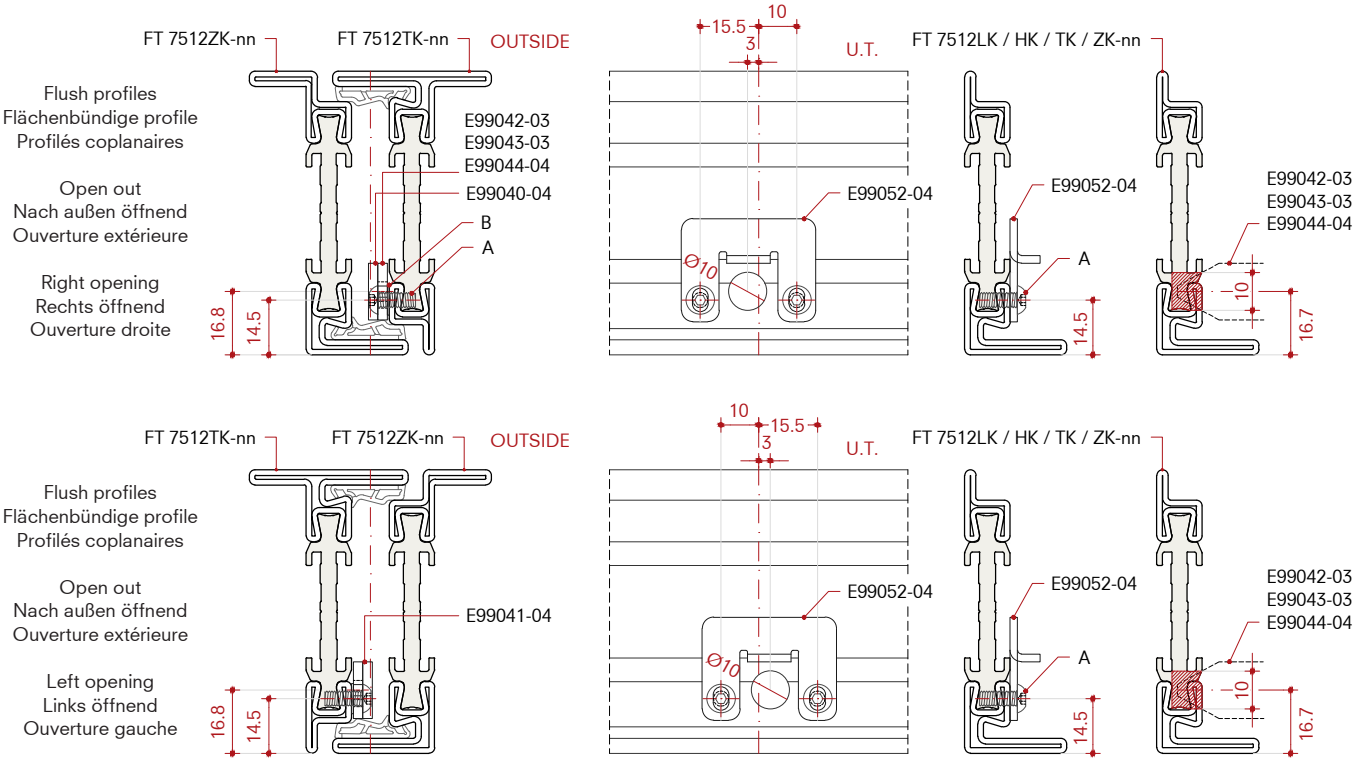
Schéma de montage
Verrou a bascule long inférieur
E99040-04 - E99041-04

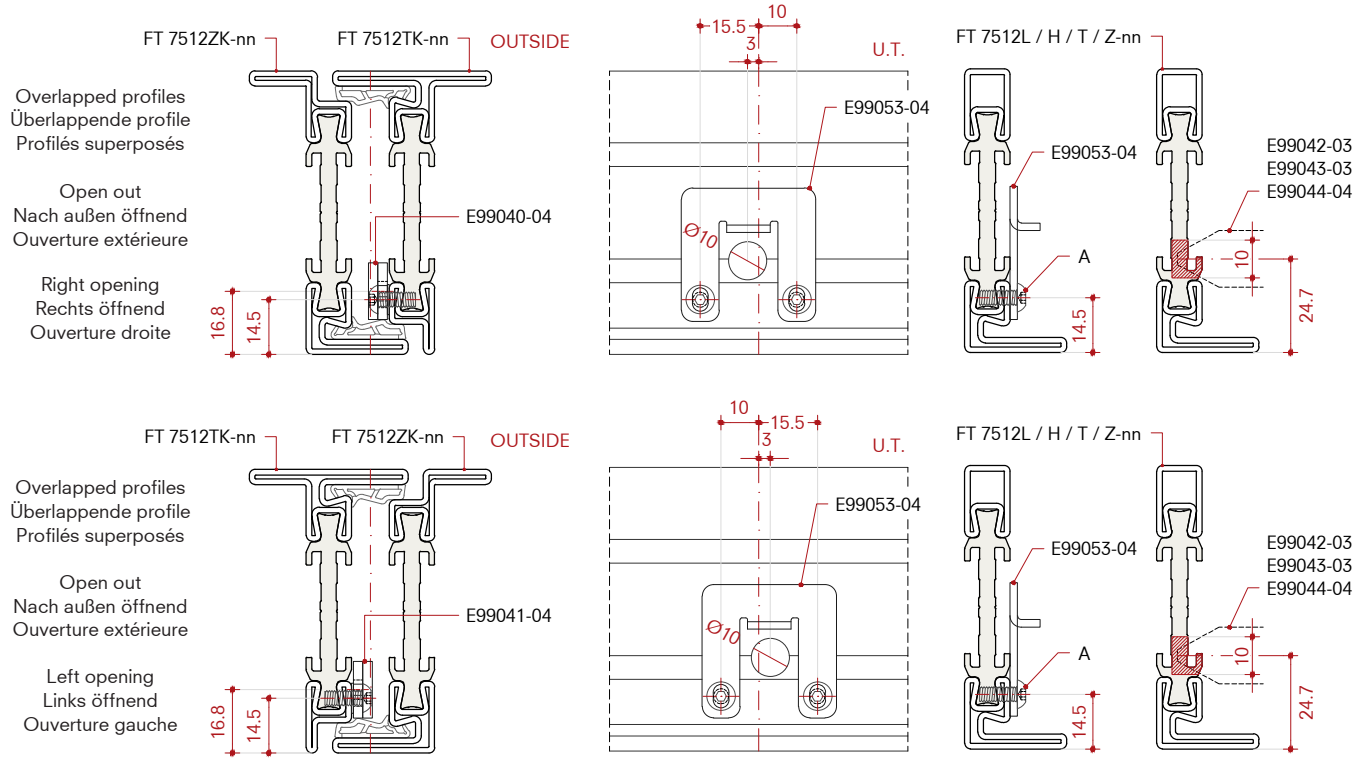


U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)





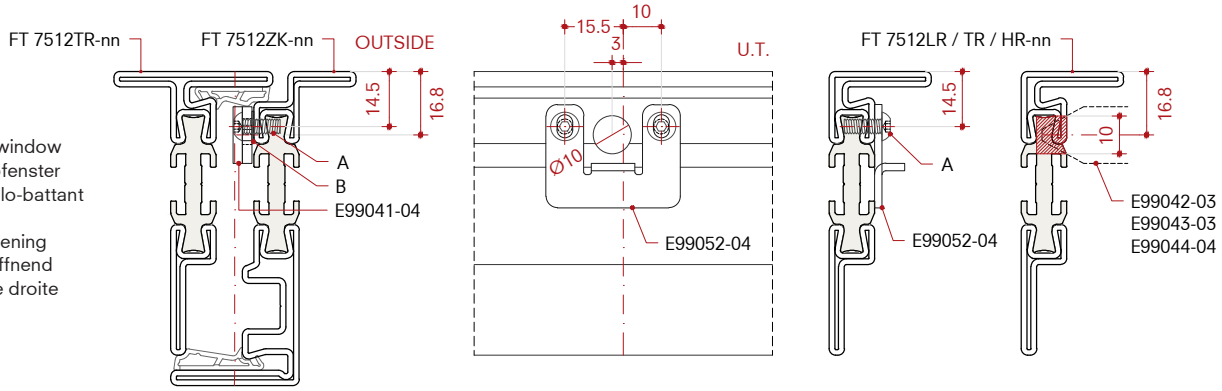
U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)

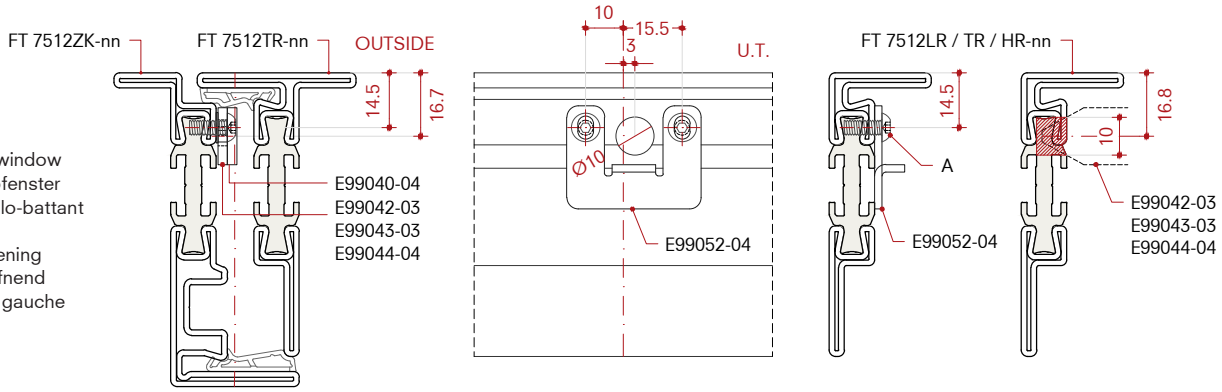
Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant

Right opening
Rechts öffnend
Ouverture droite



Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant

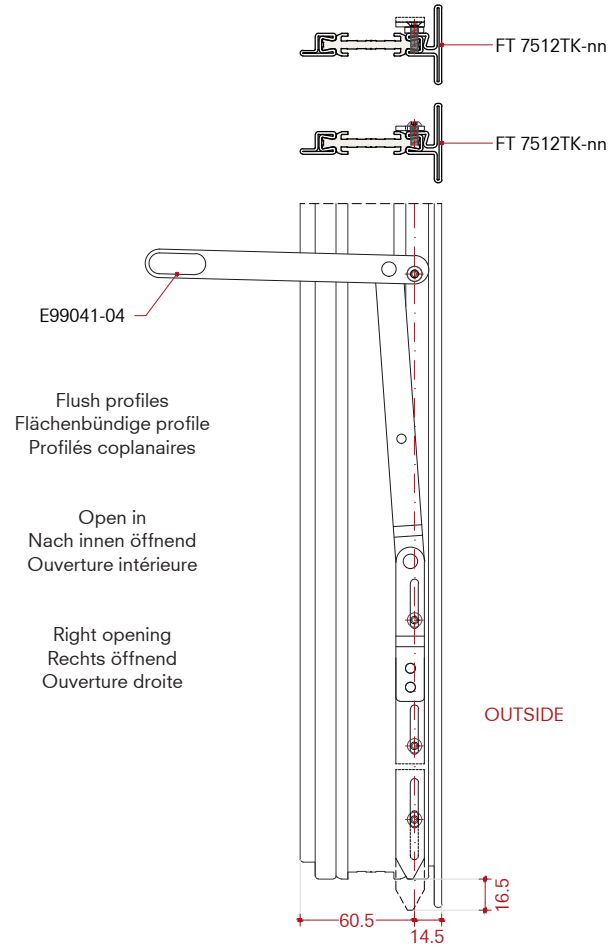
Left opening
Links öffnend
Ouverture gauche

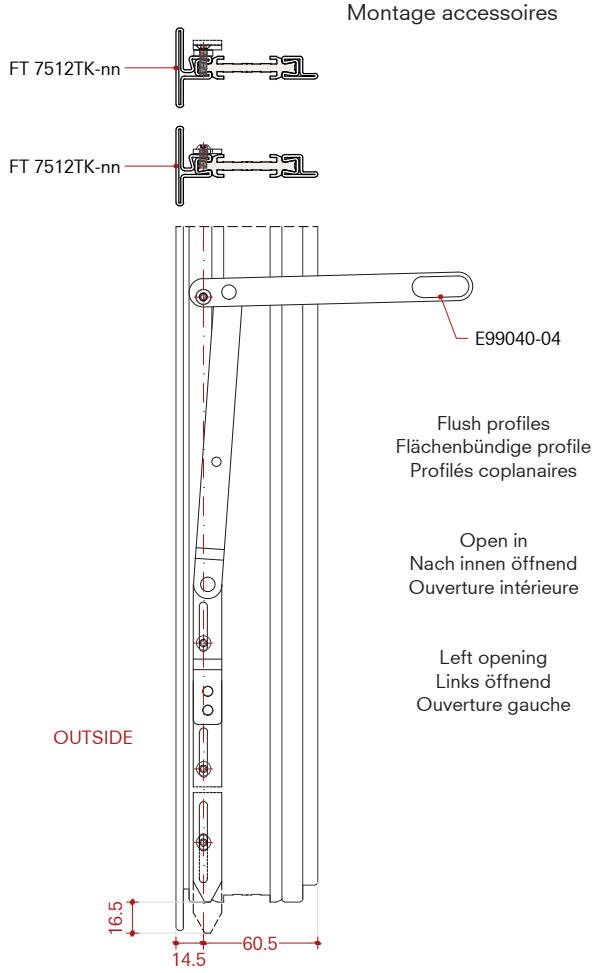


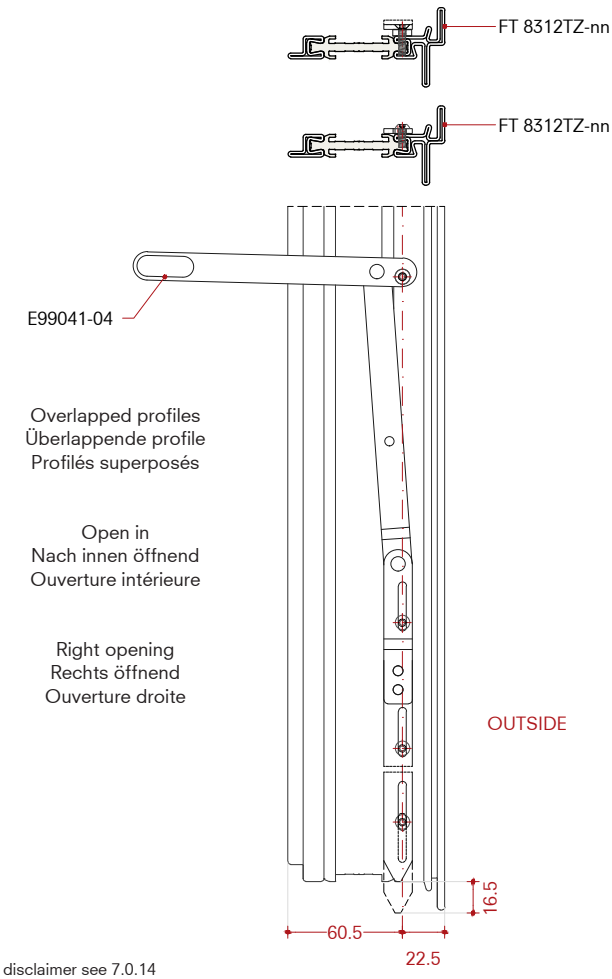
U.T. = Upper Transom
A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)

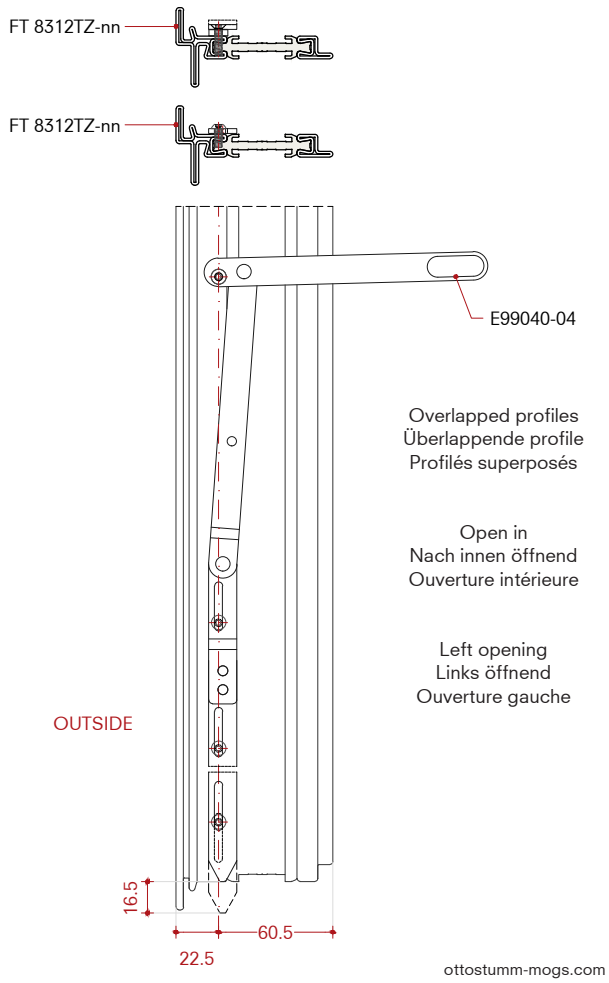
U.T. = Oberer Querbalken
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)

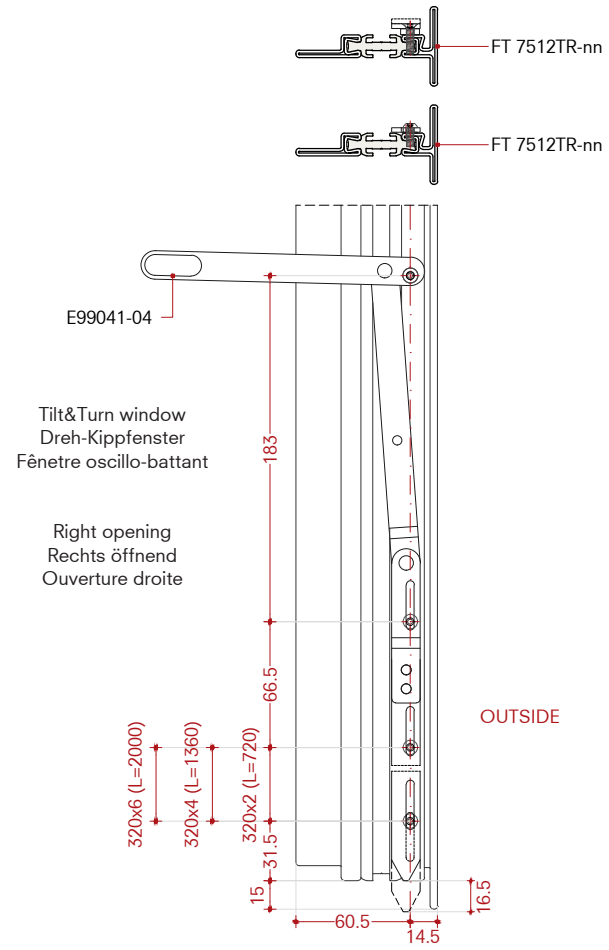
U.T. = Traverse supérieure
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)

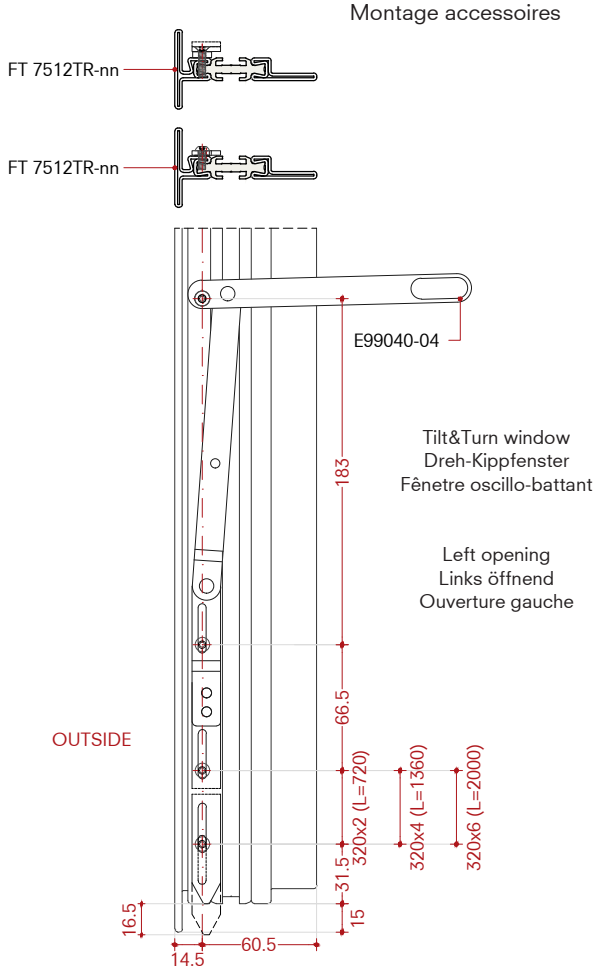

FT 7512TK-nn
FT 7512TK-nn
E99041-04
Flush profiles
Flächenbündige profile
Profilés coplanaires
Open in
Nach innen öffnend
Ouverture intérieure
Right opening
Rechts öffnend
Ouverture droite
OUTSIDE
16.5
60.5
14.5

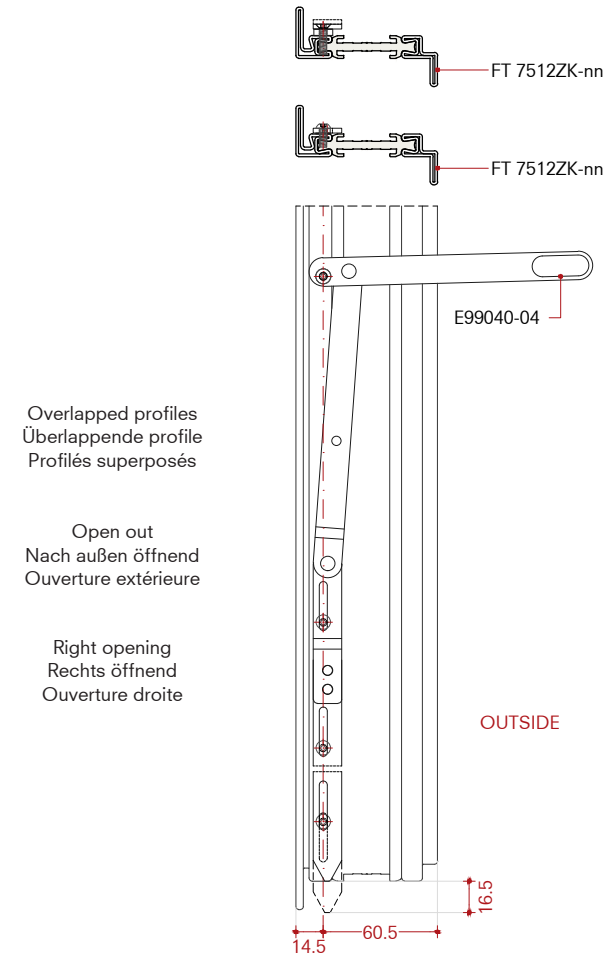

FT 7512TK-nn
FT 7512TK-nn
E99040-04
Flush profiles
Flächenbündige profile
Profilés coplanaires
Open in
Nach innen öffnend
Ouverture intérieure
Left opening
Links öffnend
Ouverture gauche
OUTSIDE
16.5
60.5
14.5

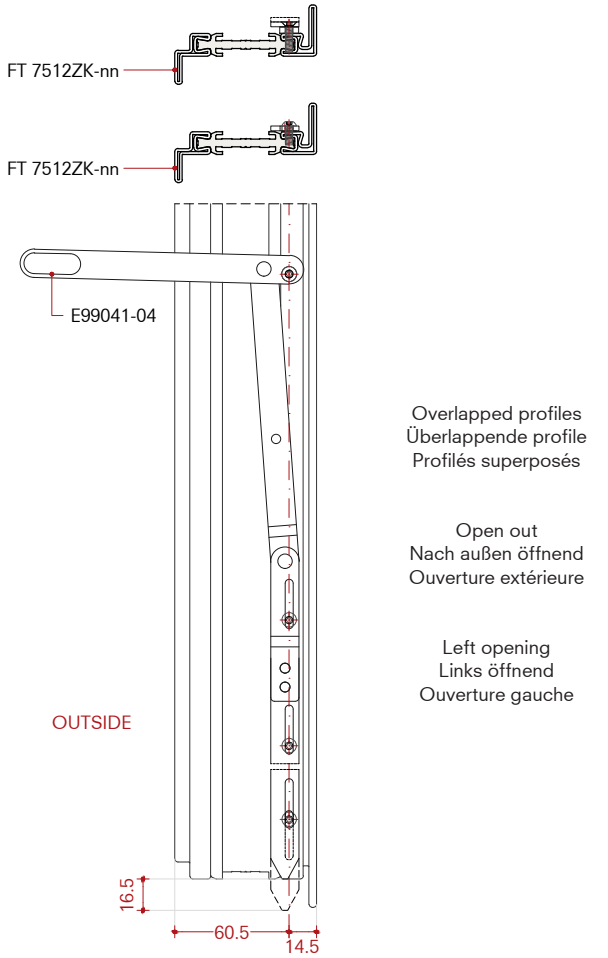

FT 8312TZ-nn
FT 8312TZ-nn
E99041-04
Overlapped profiles
Überlappende profile
Profilés superposés
Open in
Nach innen öffnend
Ouverture intérieure
Right opening
Rechts öffnend
Ouverture droite
OUTSIDE
16.5
60.5
22.5

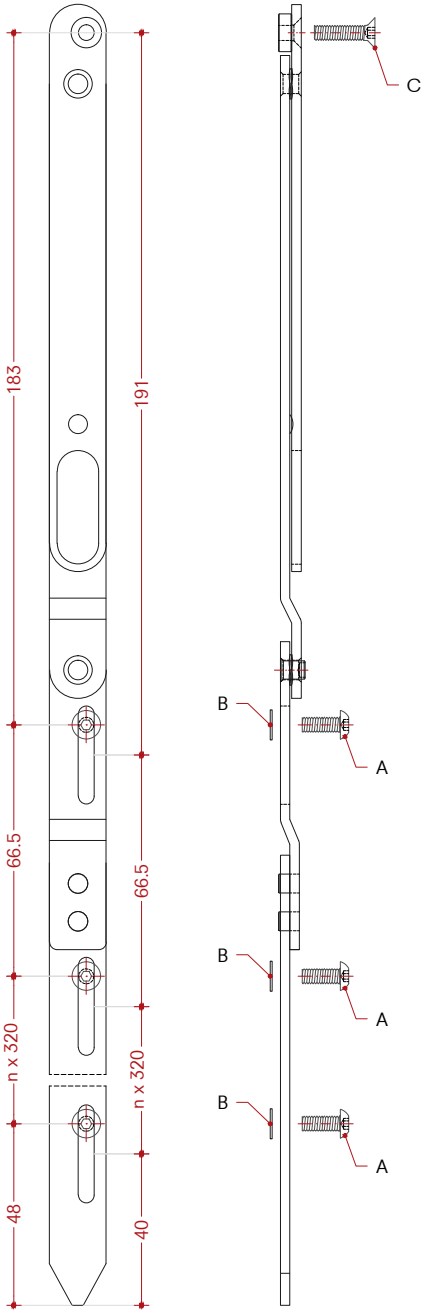

FT 8312TZ-nn
FT 8312TZ-nn
E99040-04
Overlapped profiles
Überlappende profile
Profilés superposés
Open in
Nach innen öffnend
Ouverture intérieure
Left opening
Links öffnend
Ouverture gauche
OUTSIDE
16.5
60.5
22.5


FT 7512TR-nn
FT 7512TR-nn
E99041-04
Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant
Right opening
Rechts öffnend
Ouverture droite
183
66.5
320x6 (L=2000)
320x4 (L=1360)
320x2 (L=720)
31.5
15
16.5
60.5
14.5
OUTSIDE


FT 7512TR-nn
FT 7512TR-nn
E99040-04
Tilt&Turn window
Dreh-Kippfenster
Fênetre oscillo-battant
Left opening
Links öffnend
Ouverture gauche
183
66.5
320x2 (L=720)
320x4 (L=1360)
320x6 (L=2000)
31.5
15
16.5
60.5
14.5
OUTSIDE

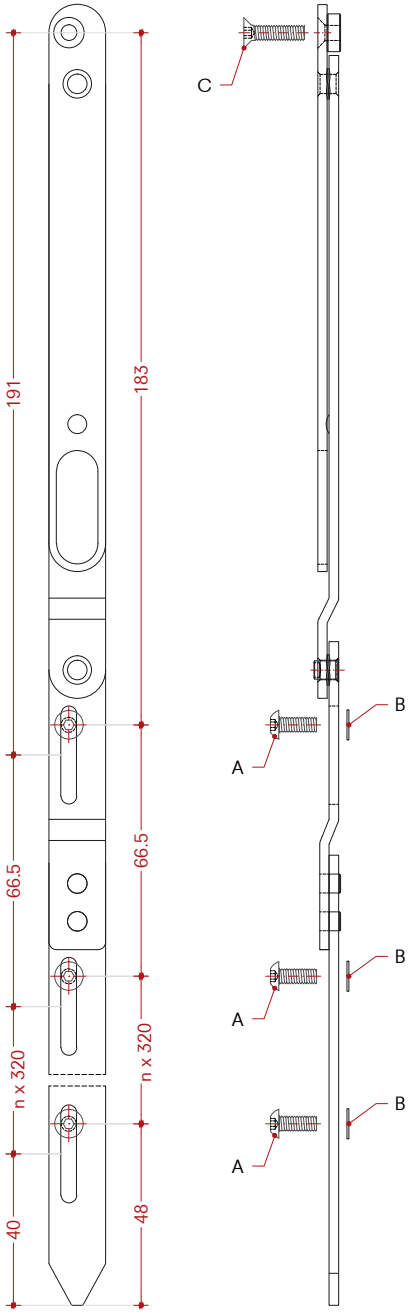

FT 7512ZK-nn
FT 7512ZK-nn
E99040-04
Overlapped profiles
Überlappende profile
Profilés superposés
Open out
Nach außen öffnend
Ouverture extérieure
Right opening
Rechts öffnend
Ouverture droite
16.5
60.5
14.5
OUTSIDE


FT 7512ZK-nn
FT 7512ZK-nn
E99041-04
Overlapped profiles
Überlappende profile
Profilés superposés
Open out
Nach außen öffnend
Ouverture extérieure
Left opening
Links öffnend
Ouverture gauche
16.5
60.5
14.5
OUTSIDE



E99040-04

	Cod.	L (mm)	
n° 2	**E99042-04**	720	(Right-Open in / Left-Open out)
n° 4	**E99043-04**	1360	(Right-Open in / Left-Open out)
n° 6	**E99044-04**	2000	(Right-Open in / Left-Open out)



E99041-04

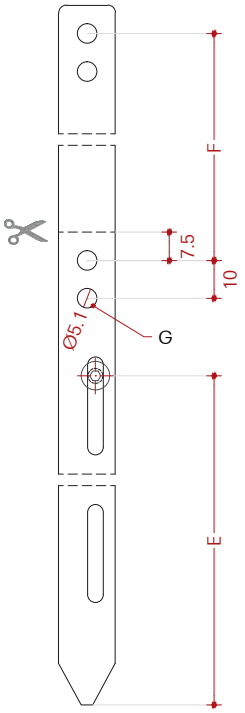
	Cod.	L (mm)	
n° 2	**E99042-04**	720	(Left-Open in / Right-Open out)
n° 4	**E99043-04**	1360	(Left-Open in / Right-Open out)
n° 6	**E99044-04**	2000	(Left-Open in / Right-Open out)

A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)
C) Fastening with M4x16 ISO10642 screws

A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)
C) Befestigung mit Schrauben M4x16 ISO10642

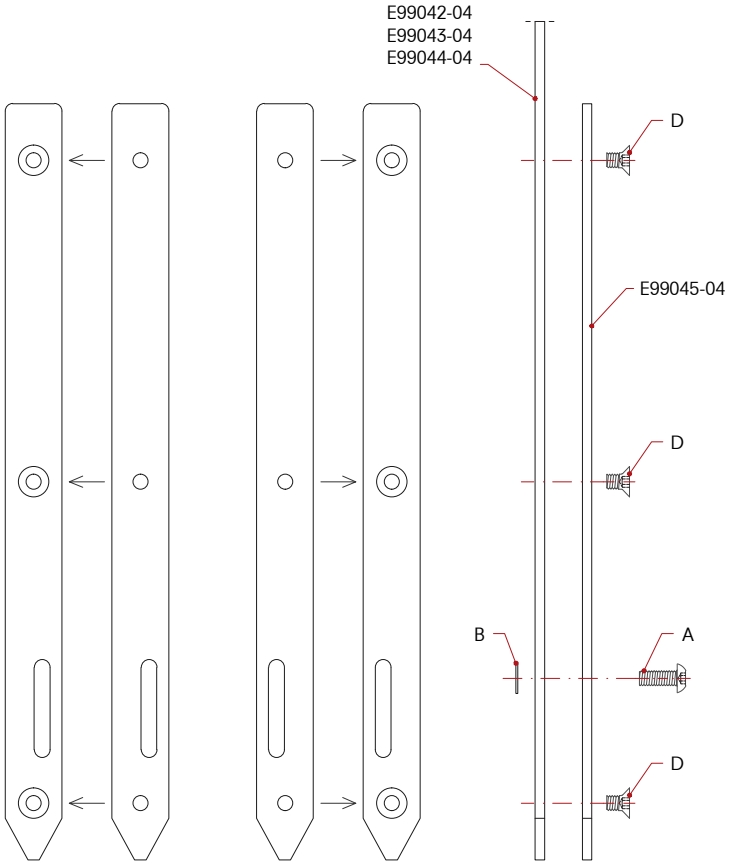
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)
C) Fixation avec vis M4x16 ISO10642

Cropping rod
Stangenschneiden
Coupe de tige

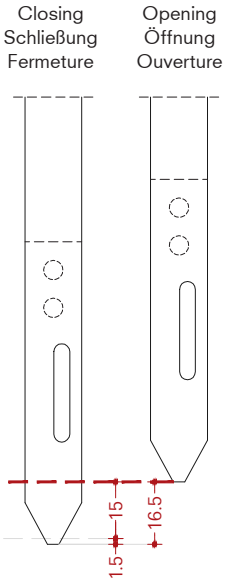


E99042-04
E99043-04
E99044-04

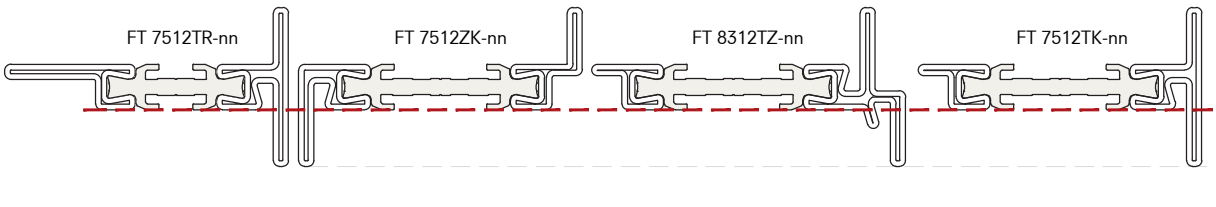
Reinforcement rod
Verstärkung
Tige de renforcement



E99045-04



Lower positions of rod
Unterer Positionen der Stange
Positions inférieures de la tige

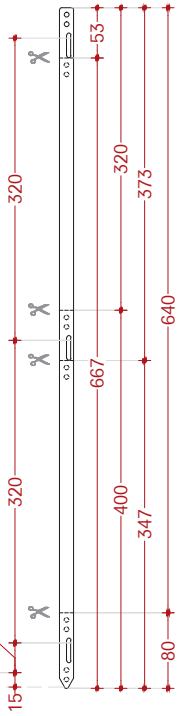


A) Fastening with M4x10 ISO7380 screws
B) M4 A2 DIN433 washer (not provided)
D) Fastening with M4x6 ISO10642 screws and cut the screws (not provided)
E) No variation beyond first slot above cropping
F) Cropping (reference to allowable cropping fields)
G) Redrill new Ø5.1 mm holes

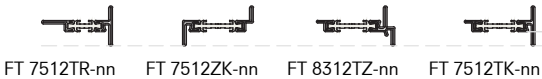
A) Befestigung mit Schrauben M4x10 ISO7380
B) Scheibe M4 A2 DIN433 (Eigenfertigung)
D) Befestigung mit Schrauben M4x6 ISO10642 und Schrauben kürzen (Eigenfertigung)
E) Keine Variation über den ersten Slot hinaus über dem Zuschneiden
F) Zuschneiden (Verweis auf zulässige Zuschneidefelder)
G) Neue Ø5.1 mm Löcher neu bohren

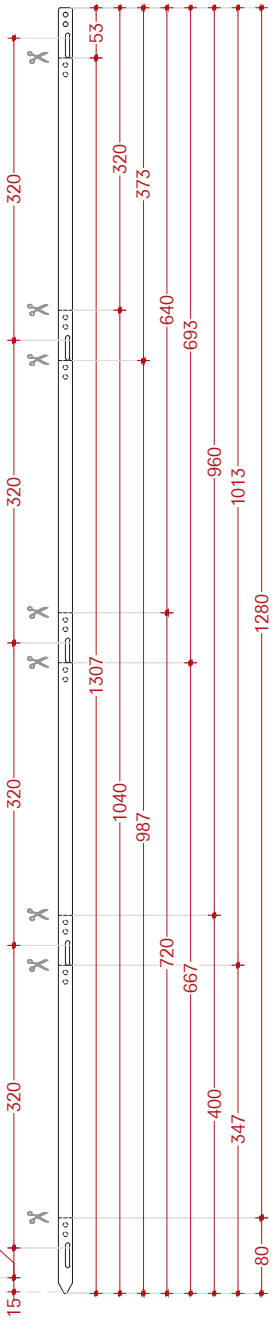
A) Fixation avec vis M4x10 ISO7380
B) Rondelle M4 A2 DIN433 (non inclus)
D) Fixation avec vis M4x6 ISO10642 et couper la vis (non inclus)
E) Aucun changement au-delà de la première fente au-dessus de la découpe
F) Culture (référence aux champs de culture autorisés)
G) Repercer de nouveaux trous Ø5.1 mm

Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99044-04	2000	53 - 320	31.5 / 320 (x5)
		373 - 640	31.5 / 320 (x4)
		693 - 960	31.5 / 320 (x3)
		1013 - 1280	31.5 / 320 (x2)
		1333 - 1600	31.5 / 320 (x1)
		1653 - 1920	31.5



Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99043-04	1360	53 - 320	31.5 / 320 (x3)
		373 - 640	31.5 / 320 (x2)
		693 - 960	31.5 / 320 (x1)
		1013 - 1280	31.5





NOTE:
Only right installation is represent.

Fastening screw position is referred to the body of profile.

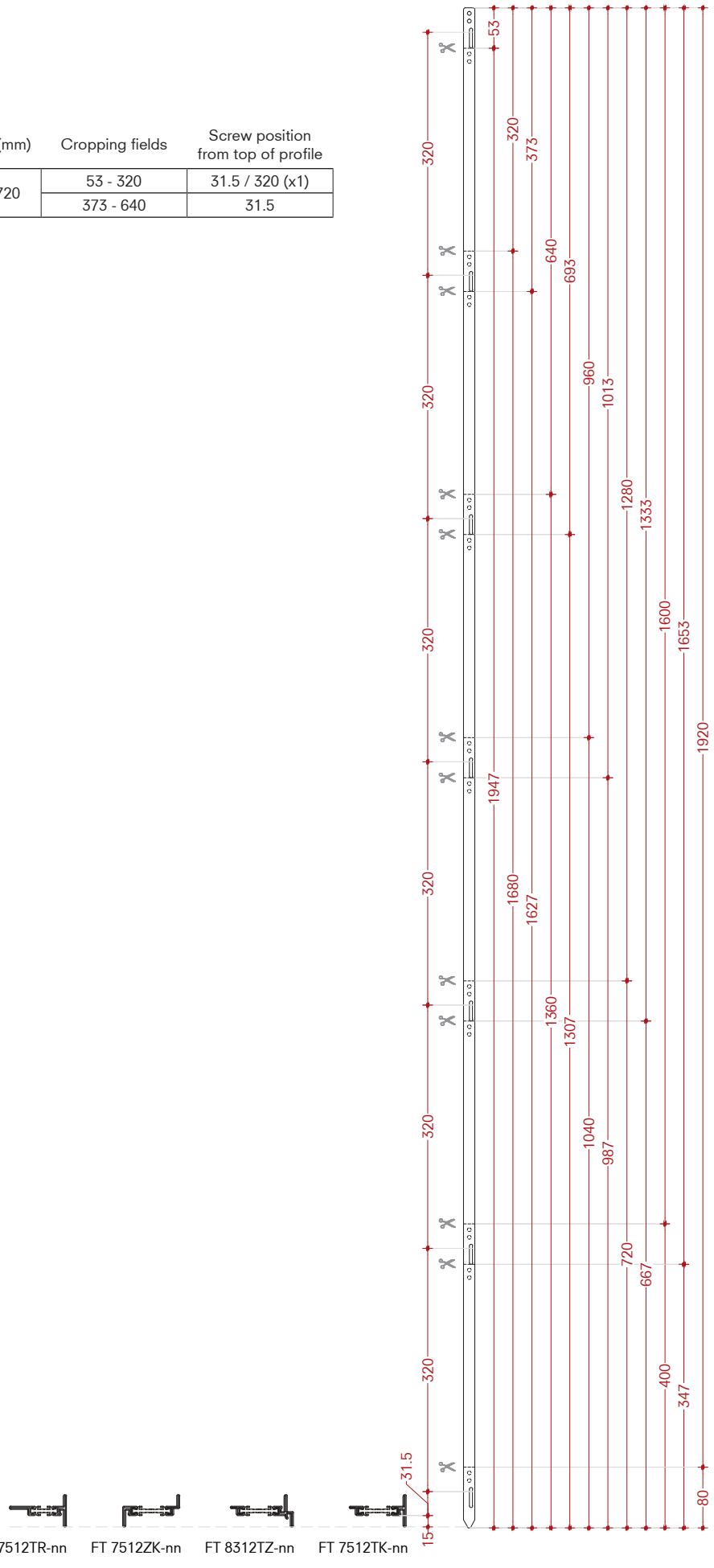
Hinweis:
Darstellung DIN Rechts.

Die Position der Befestigungsschraube bezieht sich auf den Profilkörper.

Remarque:
Seule la droite installation est représentée.

La position de la vis de fixation se rapporte au corps du profilé.

Cod.	L (mm)	Cropping fields	Screw position from top of profile
E99042-04	720	53 - 320	31.5 / 320 (x1)
		373 - 640	31.5



NOTE:
Only right installation is represent.

Fastening screw position is referred to the body of profile.

Hinweis:
Darstellung DIN Rechts.

Die Position der Befestigungsschraube bezieht sich auf den Profilkörper.

Remarque:
Seule la droite installation est représentée.

La position de la vis de fixation se rapporte au corps du profilé.

Installation
Cremone for round rods
Kits for flush profiles

Einbau
Getriebe für Rundchubstangen
Grundgarnitur für Flächenbündige profile

Schéma de montage
Crémone pour tiges rondes
Kits pour profilés coplanaires

K99082

Height 400 - 1000 mm

H99026-26 n°01 piece
E99141-26 n°01 piece
E99144-26 n°04 pieces
E99145-26 n°02 pieces

K99082

Höhe 400 - 1000 mm

K99082

Hauteur 400 - 1000 mm

K99083

Height 1001 - 1500 mm

H99026-26 n°01 piece
E99142-26 n°01 piece
E99144-26 n°04 pieces
E99145-26 n°02 pieces

K99083

Höhe 1001 - 1500 mm

K99083

Hauteur 1001 - 1500 mm

K99084

Height 1501 - 3000 mm

H99026-26 n°01 piece
E99143-26 n°01 piece
E99144-26 n°07 pieces
E99145-26 n°02 pieces

K99084

Höhe 1501 - 3000 mm

K99084

Hauteur 1501 - 3000 mm

K99085

Height 3001 - 3200 mm

H99026-26 n°01 piece
E99141-26 n°01 piece
E99143-26 n°01 piece
E99144-26 n°08 pieces
E99145-26 n°02 pieces

K99085

Höhe 3001 - 3200 mm

K99085

Hauteur 3001 - 3200 mm

Installation
Cremone for round rods
Kits for overlapped profiles

Einbau
Getriebe für Rundchubstangen
Grundgarnitur für Überlappende profile

Schéma de montage
Crémone pour tiges rondes
Kits pour profilés superposés

K99096

Height 400 - 1000 mm

H99026-26 n°01 piece
E99141-26 n°01 piece
E99144-26 n°04 pieces
E99148-26 n°02 pieces

K99096

Höhe 400 - 1000 mm

K99096

Hauteur 400 - 1000 mm

K99097

Height 1001 - 1500 mm

H99026-26 n°01 piece
E99142-26 n°01 piece
E99144-26 n°04 pieces
E99148-26 n°02 pieces

K99097

Höhe 1001 - 1500 mm

K99097

Hauteur 1001 - 1500 mm

K99098

Height 1501 - 3000 mm

H99026-26 n°01 piece
E99143-26 n°01 piece
E99144-26 n°07 pieces
E99148-26 n°02 pieces

K99098

Höhe 1501 - 3000 mm

K99098

Hauteur 1501 - 3000 mm

K99099

Height 3001 - 3200 mm

H99026-26 n°01 piece
E99141-26 n°01 piece
E99143-26 n°01 piece
E99144-26 n°08 pieces
E99148-26 n°02 pieces

K99099

Höhe 3001 - 3200 mm

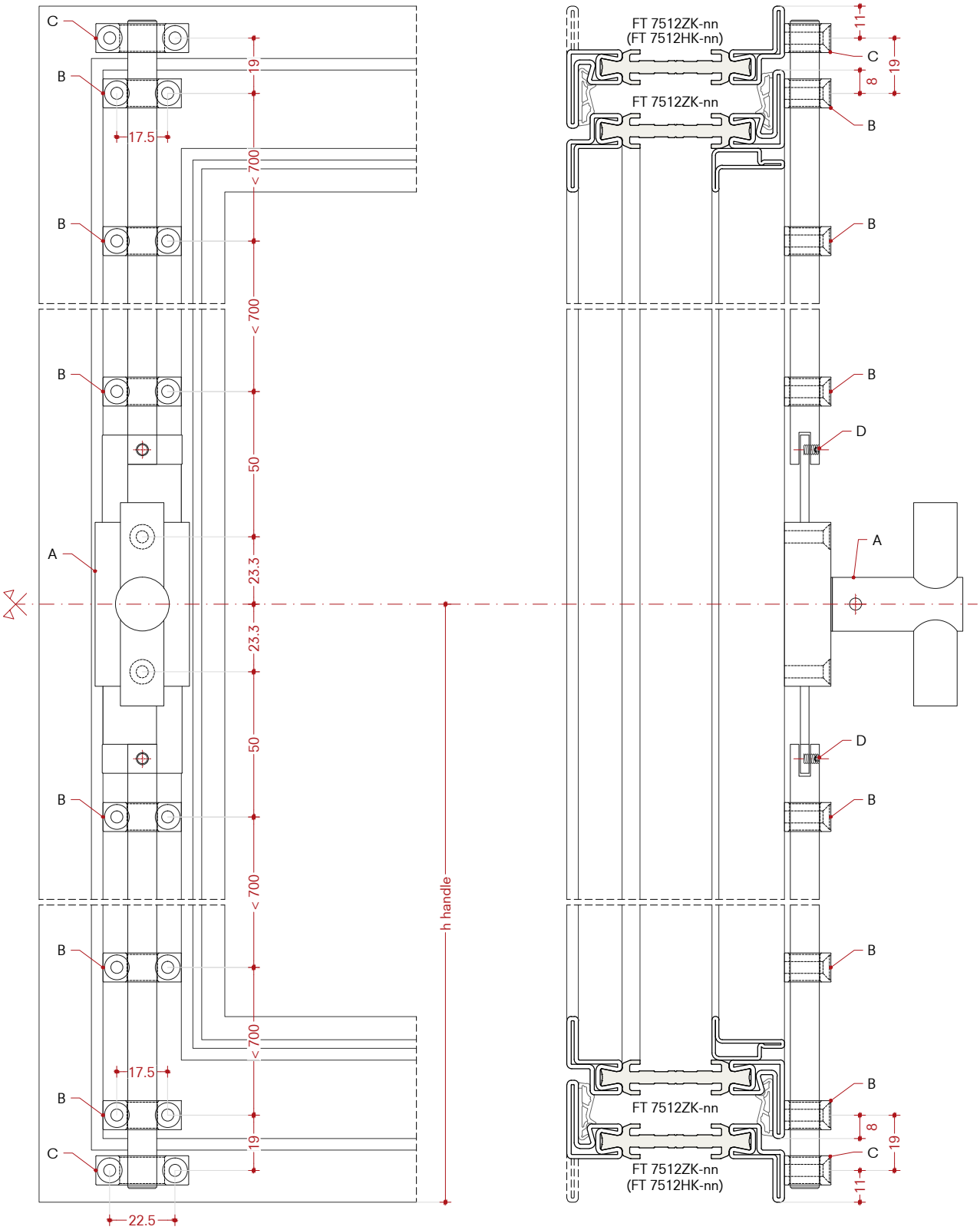
K99099

Hauteur 3001 - 3200 mm

Installation
Cremone for round rods
Single leaf window
Flush profiles

Einbau
Getriebe für Rundchubstangen
Einflügliges Fenster
Flächenbündige profile

Schéma de montage
Crémone pour tiges rondes
Fenêtre à un vantail
Profilés coplanaires



A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Strike plate E99145-26
D) Stud

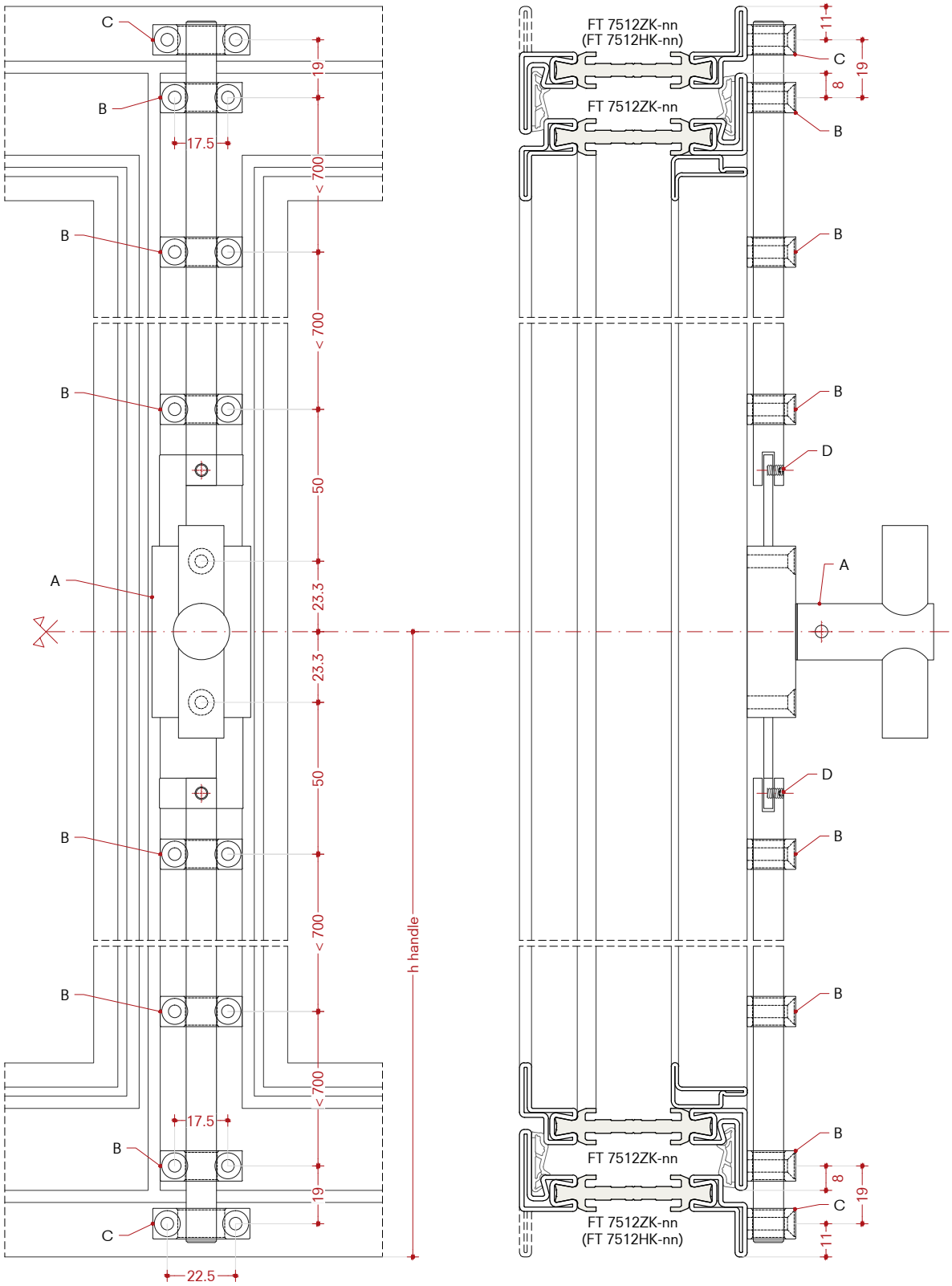
A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Verriegelungstück E99145-26
D) Pilzzapfenverriegelung

A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Gâche E99145-26
D) Galet

Installation
Cremone for round rods
Double leaf window
Flush profiles

Einbau
Getriebe für Rundchubstangen
Zweiflügliges Fenster
Flächenbündige profile

Schéma de montage
Crémone pour tiges rondes
Fenêtre à deux vantaux
Profilés coplanaires



A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Strike plate E99145-26
D) Stud

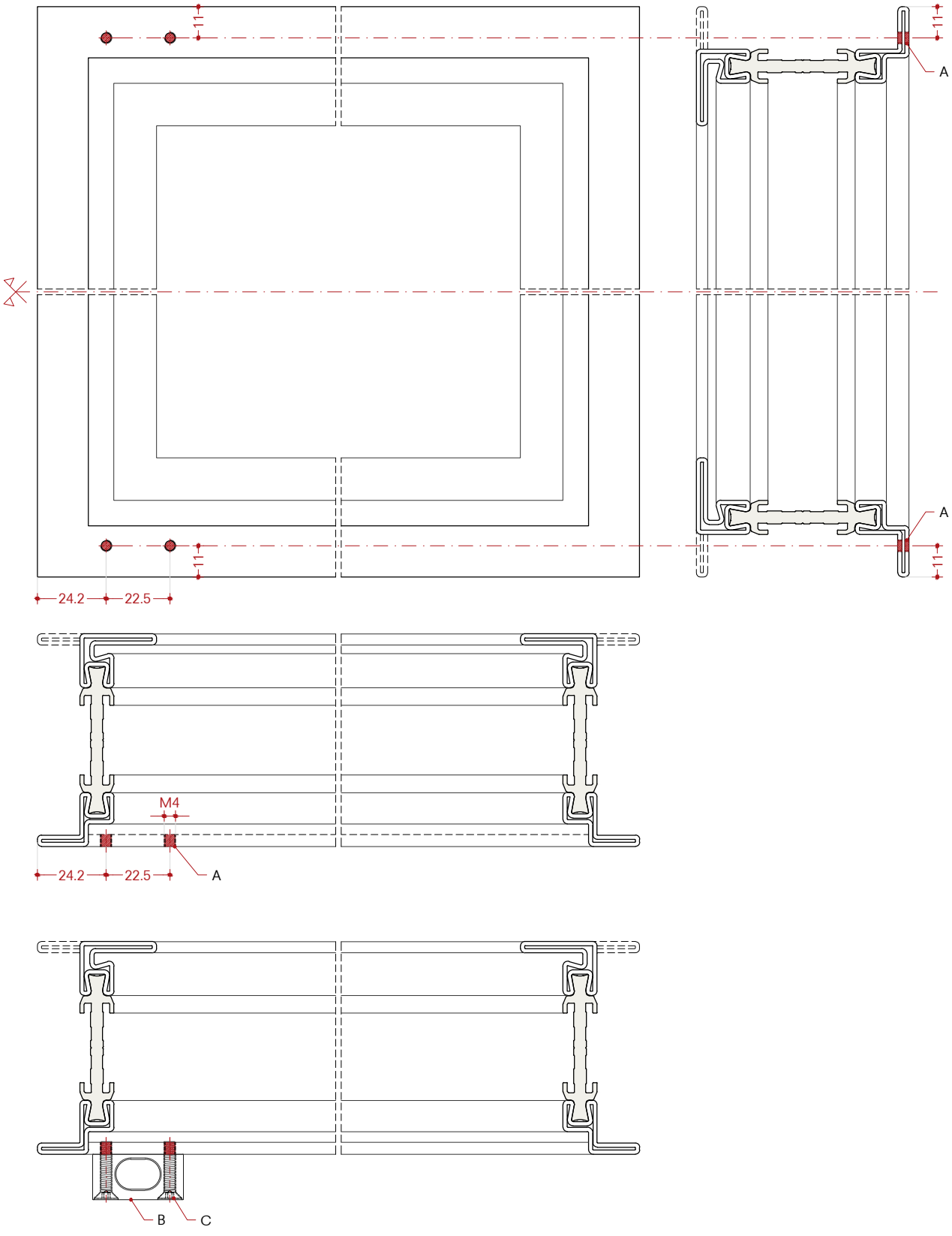
A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Verriegelungstück E99145-26
D) Pilzzapfenverriegelung

A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Gâche E99145-26
D) Galet

Installation
Cremone for round rods
Flush profiles
Frame profile

Einbau
Getriebe für Rundchubstangen
Flächenbündige profile
Rahmenprofil

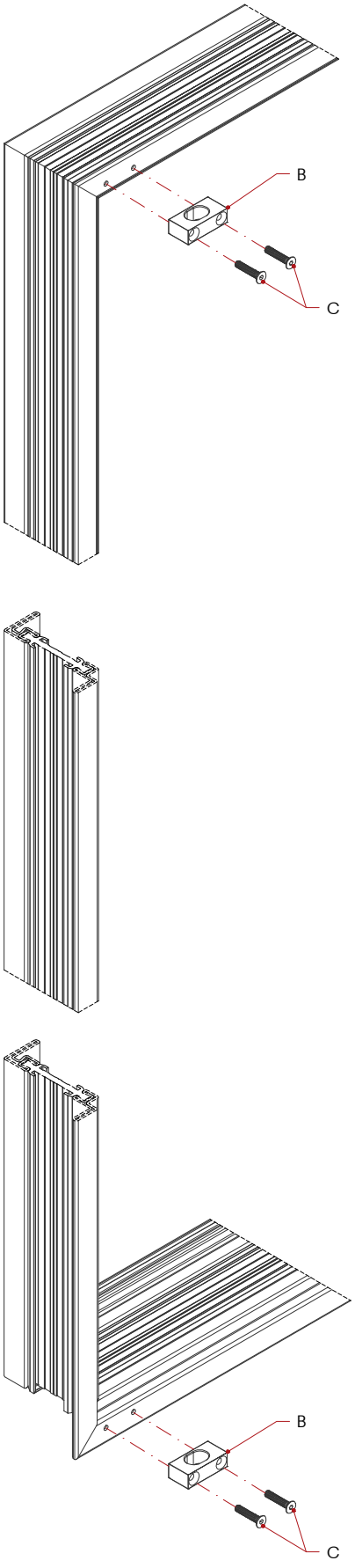
Schéma de montage
Crémone pour tiges rondes
Profilés coplanaires
Profilé dormant



A) M4 holes
B) Strike plate E99145-26
C) Fastening with M4x20 mm ISO10642 screws

A) Bohrungen M4
B) Verriegelungstück E99145-26
C) Befestigung mit M4x20 mm ISO10642

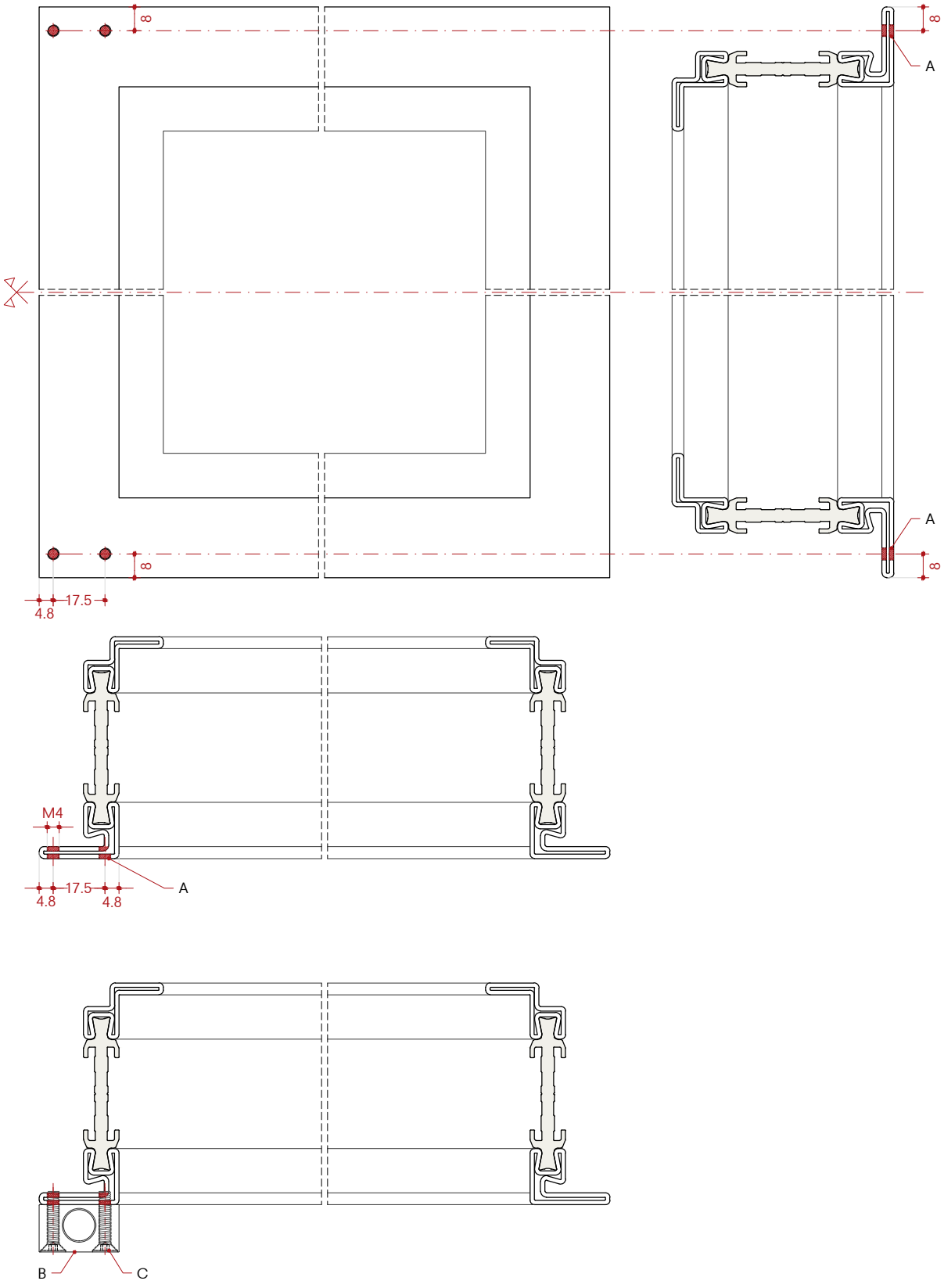
A) Trous M4
B) Gâche E99145-26
C) Fixation avec vis M4x20 mm ISO10642


B
C
B
C

Installation
Cremone for round rods
Flush profiles
Leaf profile

Einbau
Getriebe für Rundchubstangen
Flächenbündige profile
Flügelprofil

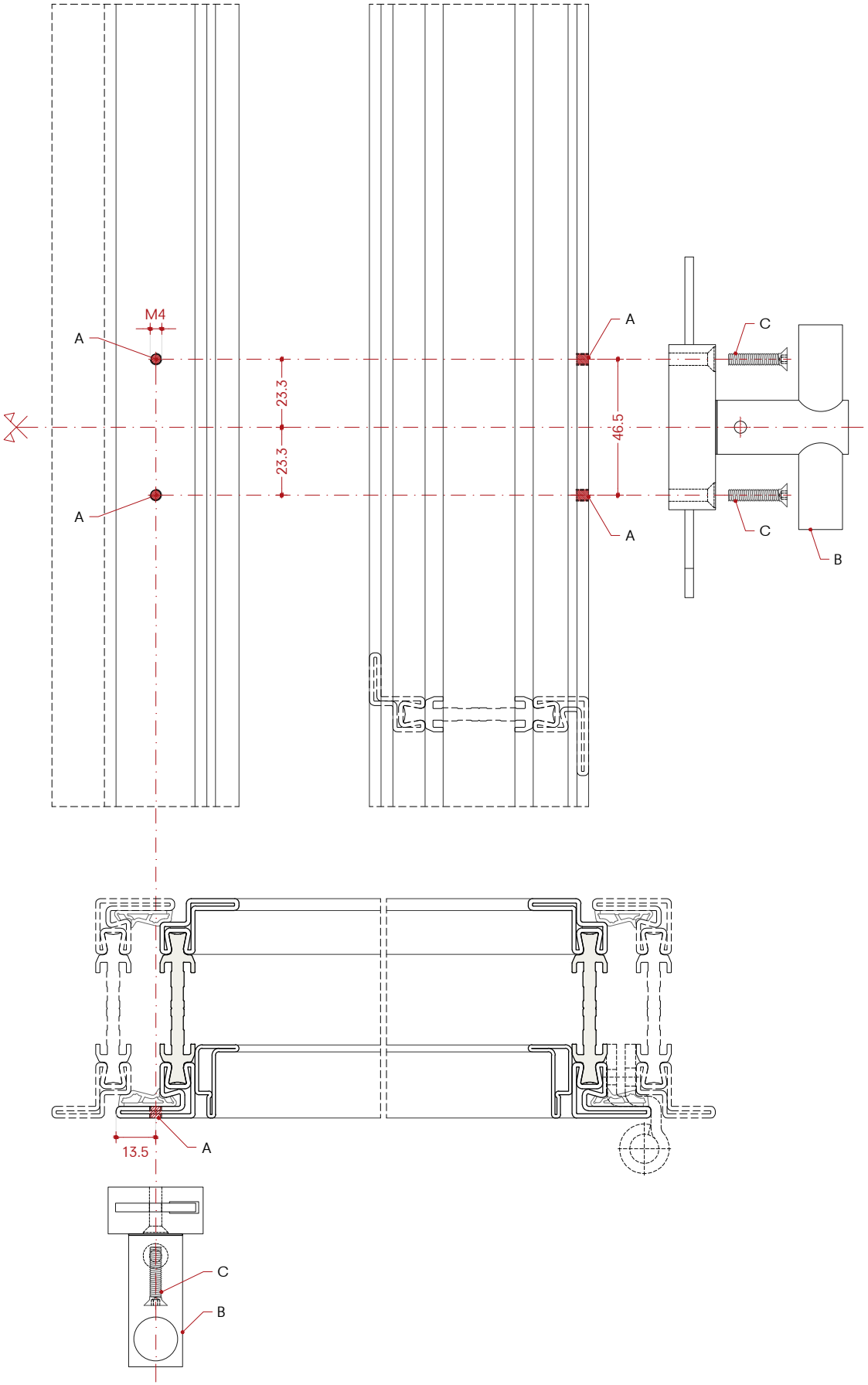
Schéma de montage
Crémone pour tiges rondes
Profilés coplanaires
Profilé ouvrant



A) M4 holes
B) Pass through guide E99144-26
C) Fastening with M4x20 mm ISO10642 screws

A) Bohrungen M4
B) Durchführung E99144-26
C) Befestigung mit M4x20 mm ISO10642

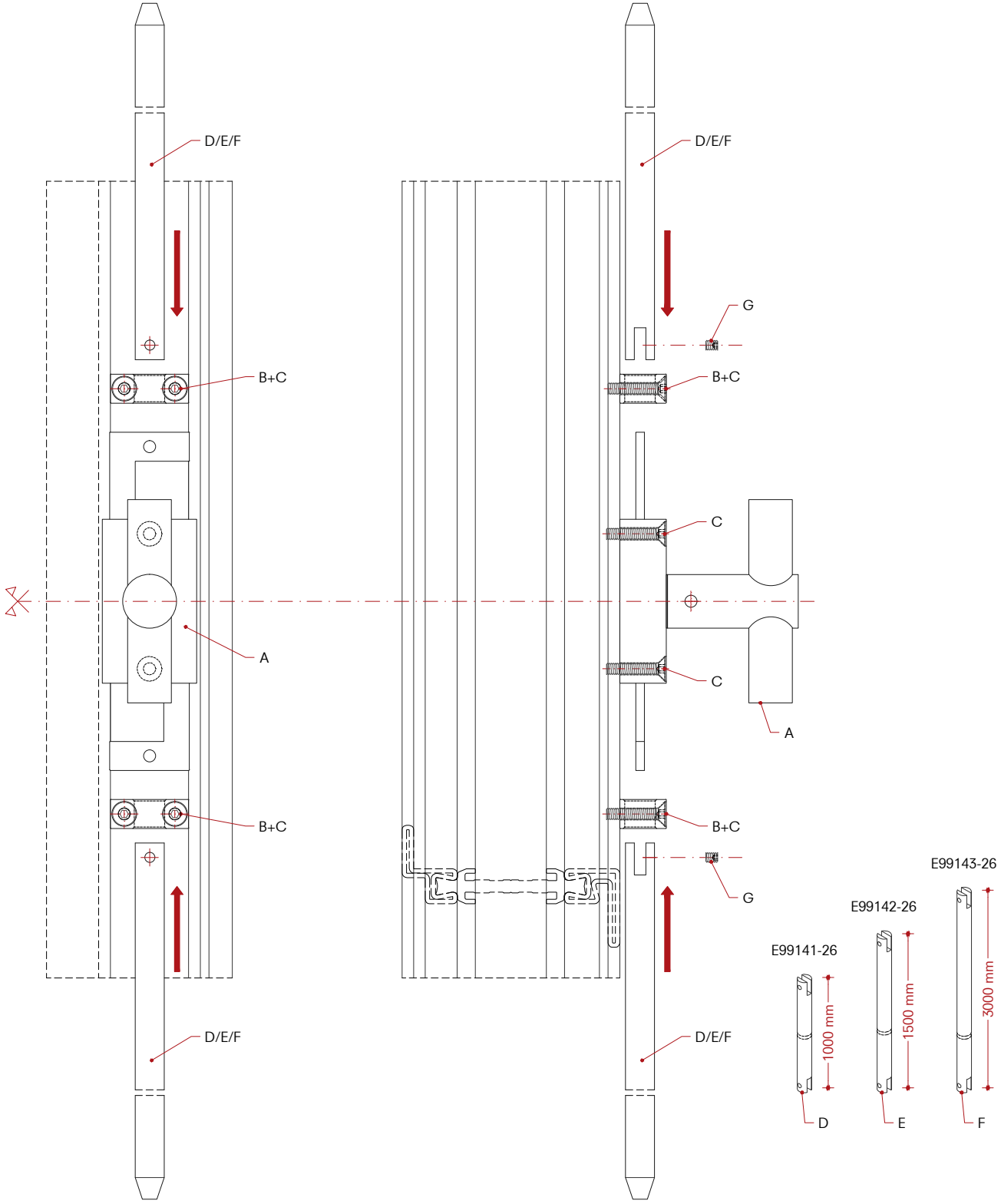
A) Trous M4
B) Guide E99144-26
C) Fixation avec vis M4x20 mm ISO10642



A) M4 holes
B) Handle and cremone H99026-26
C) Fastening with M4x20 mm ISO10642 screws

A) Bohrungen M4
B) Griff mit Getriebe H99026-26
C) Befestigung mit M4x20 mm ISO10642

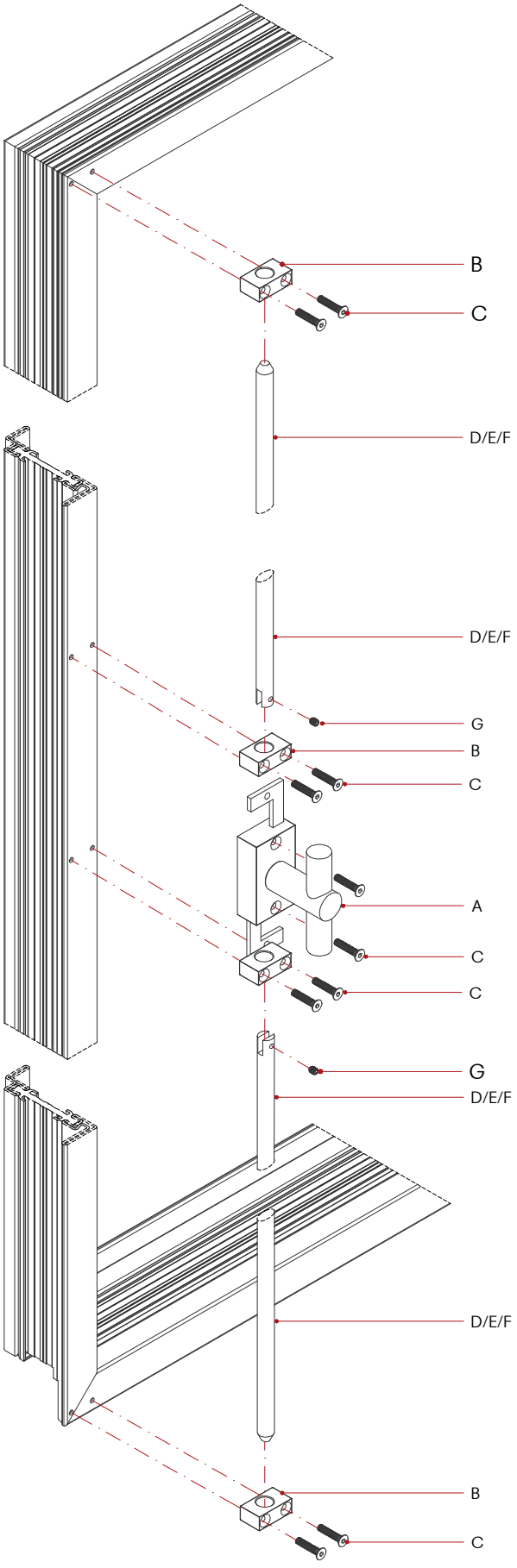
A) Trous M4
B) Poignée et crémone H99026-26
C) Fixation avec vis M4x20 mm ISO10642



A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Fastening with M4x20 mm ISO10642 screws
D/E/F) Round cremone rod
G) Stud

A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Befestigung mit M4x20 mm ISO10642
D/E/F) Rundstange für Getriebe
G) Pilzzapfenverriegelung

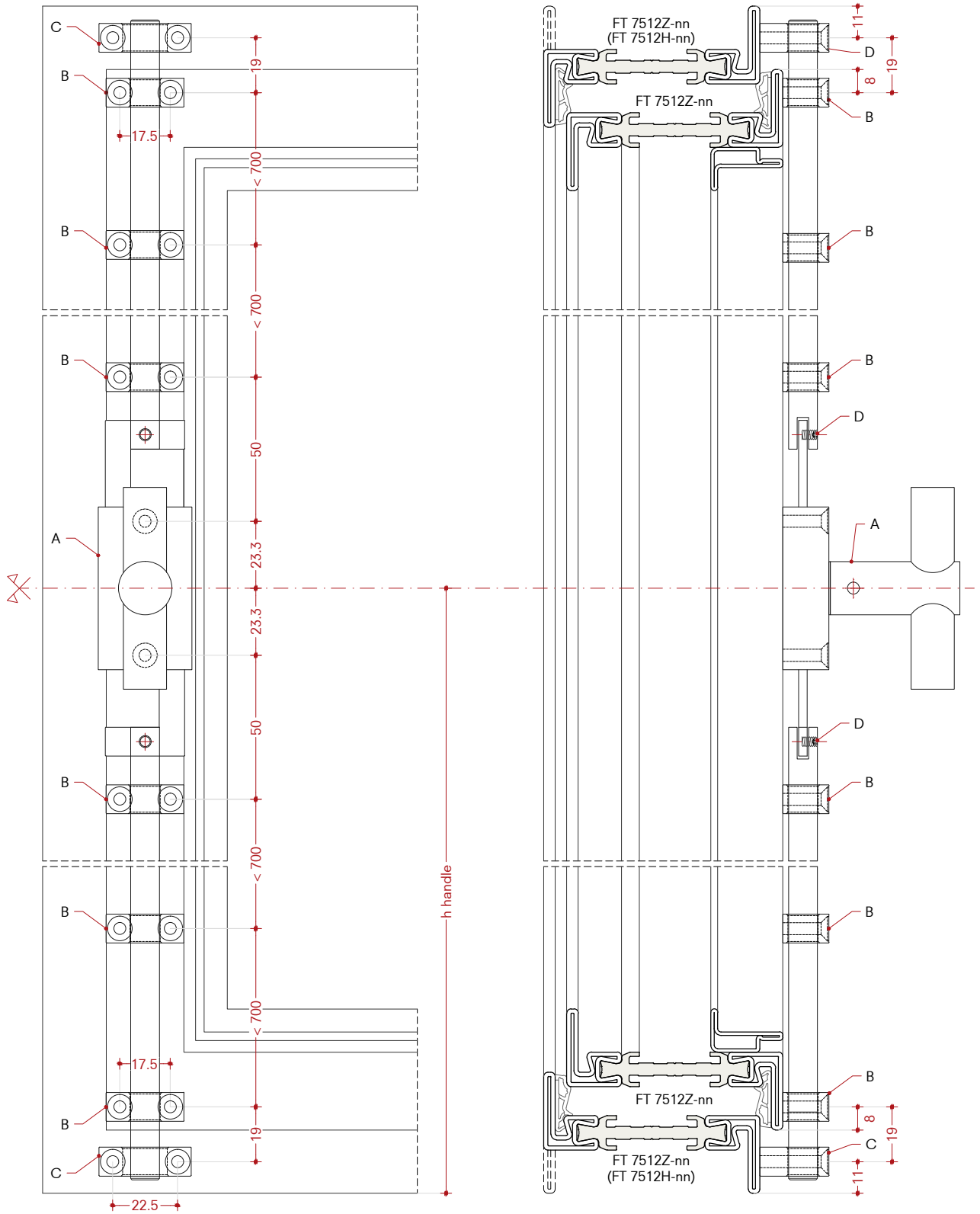
A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Fixation avec vis M4x20 mm ISO10642
D/E/F) Tige ronde pour crémone
G) Galet


B
C
D/E/F
D/E/F
G
B
C
A
C
C
G
D/E/F
D/E/F
B
C

Installation
Cremone for round rods
Single leaf window
Overlapped profiles

Einbau
Getriebe für Rundchubstangen
Einflügliges Fenster
Überlappende profile

Schéma de montage
Crémone pour tiges rondes
Fenêtre à un vantail
Profilés superposés



A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Strike plate E99148-26
D) Stud

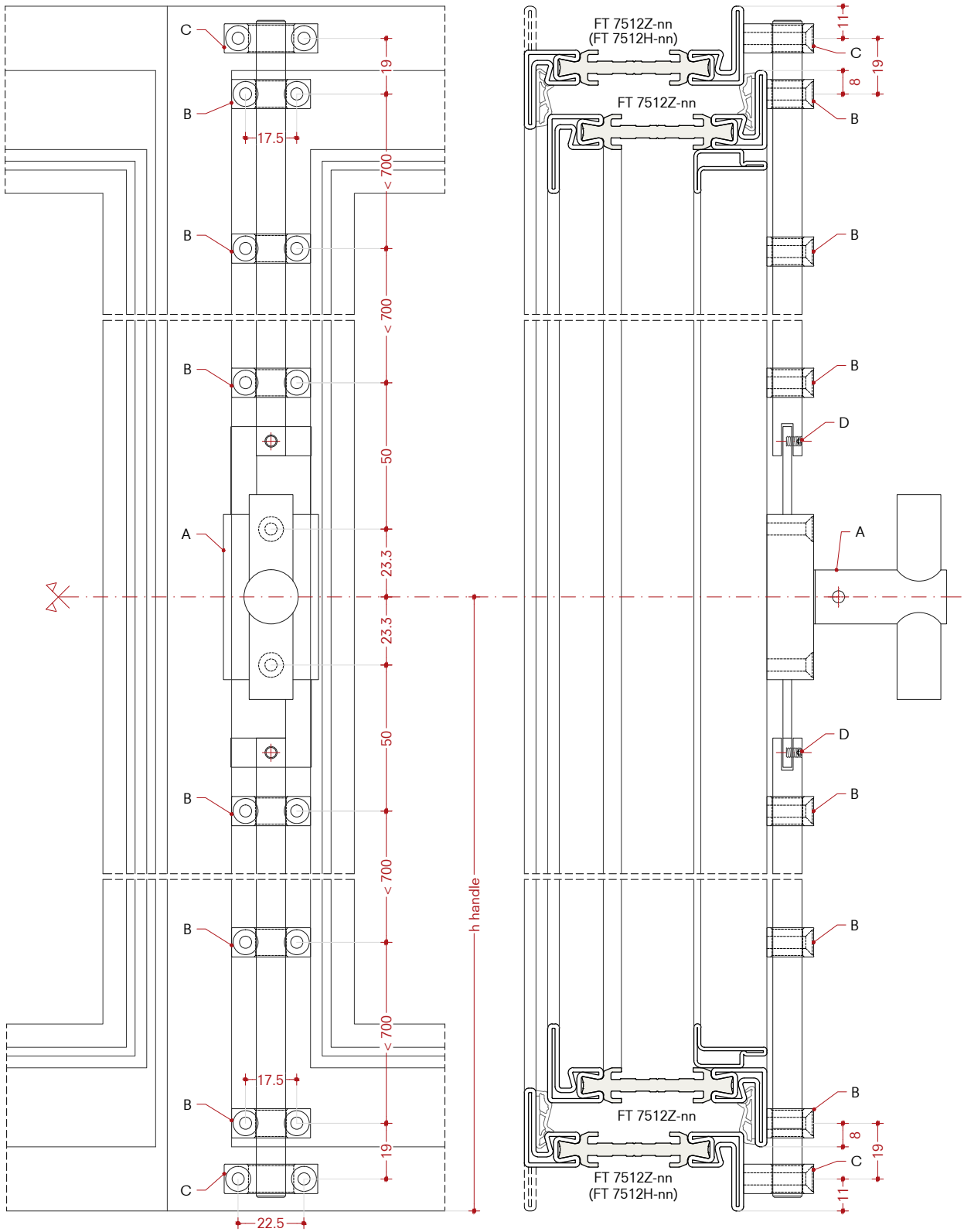
A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Verriegelungstück E99148-26
D) Pilzzapfenverriegelung

A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Gâche E99148-26
D) Galet

Installation
Cremone for round rods
Double leaf window
Overlapped profiles

Einbau
Getriebe für Rundchubstangen
Zweiflügliges Fenster
Überlappende profile

Schéma de montage
Crémone pour tiges rondes
Fenêtre à deux vantaux
Profilés superposés



A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Strike plate E99148-26
D) Stud

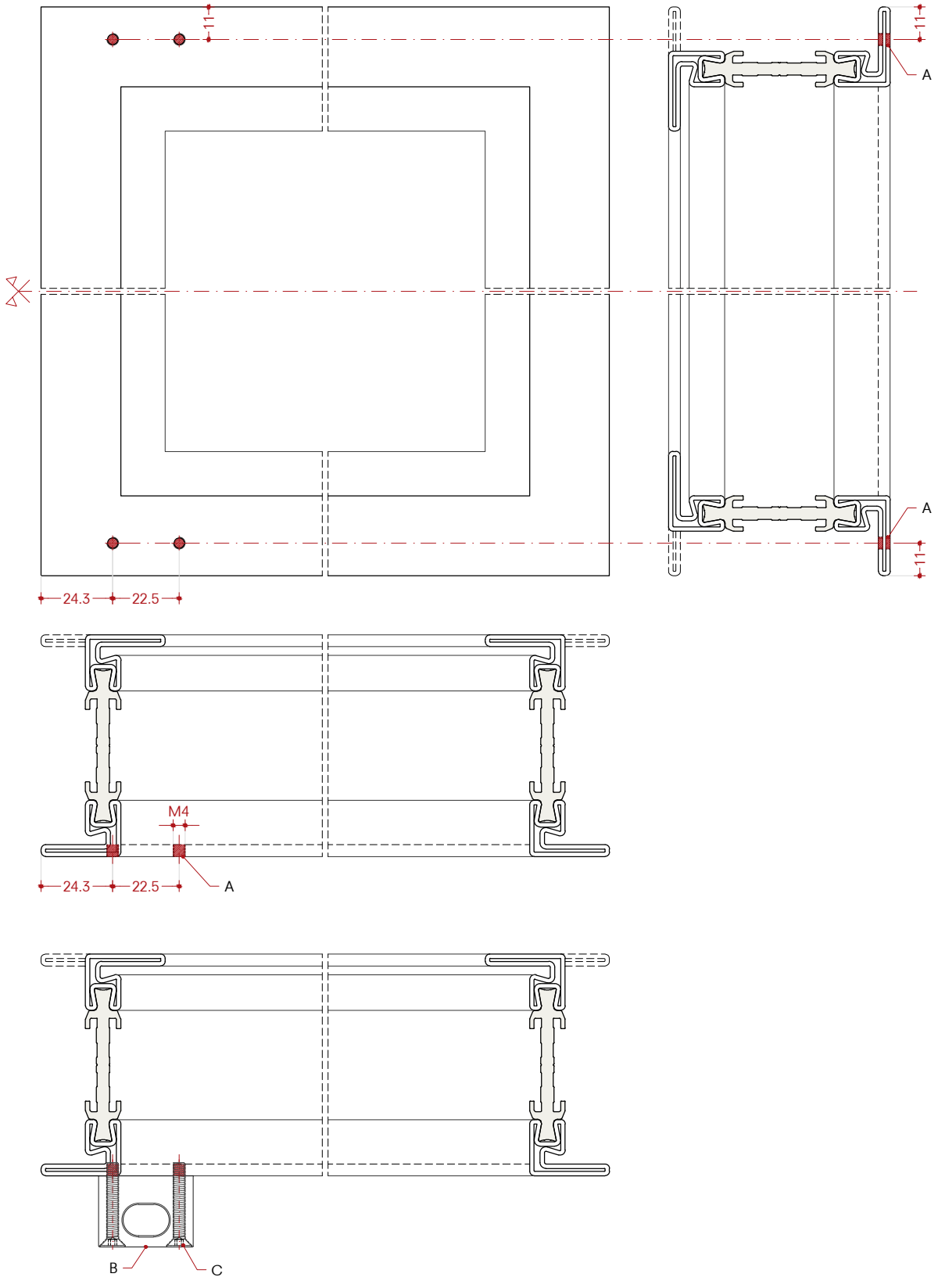
A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Verriegelungstück E99148-26
D) Pilzzapfenverriegelung

A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Gâche E99148-26
D) Galet

Installation
Cremone for round rods
Overlapped profiles
Frame profile

Einbau
Getriebe für Rundchubstangen
Überlappende profile
Rahmenprofil

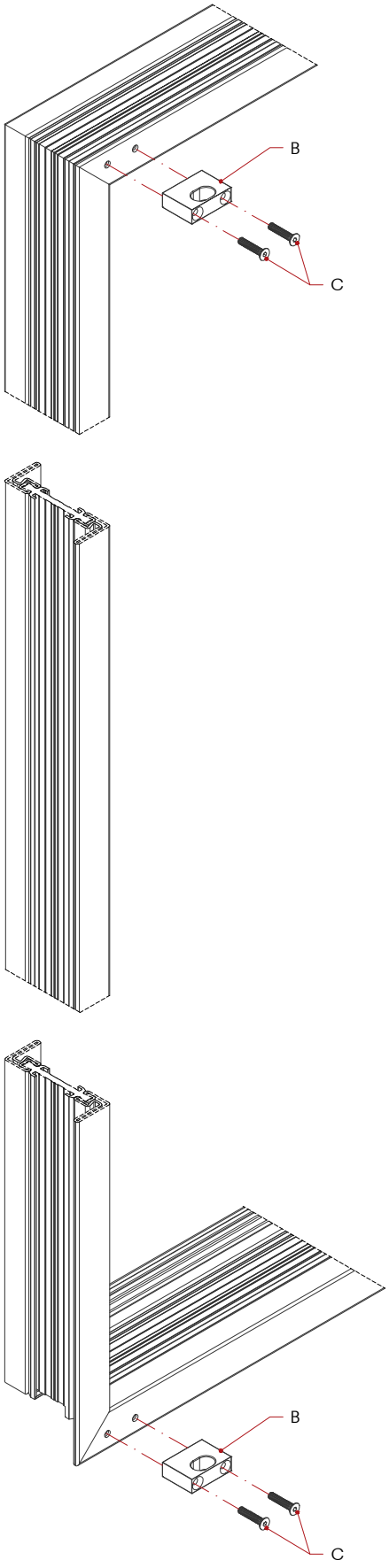
Schéma de montage
Crémone pour tiges rondes
Profilés superposés
Profilé dormant



A) M4 holes
B) Strike plate E99148-26
C) Fastening with M4x28 mm ISO10642 screws

A) Bohrungen M4
B) Verriegelungstück E99148-26
C) Befestigung mit M4x28 mm ISO10642

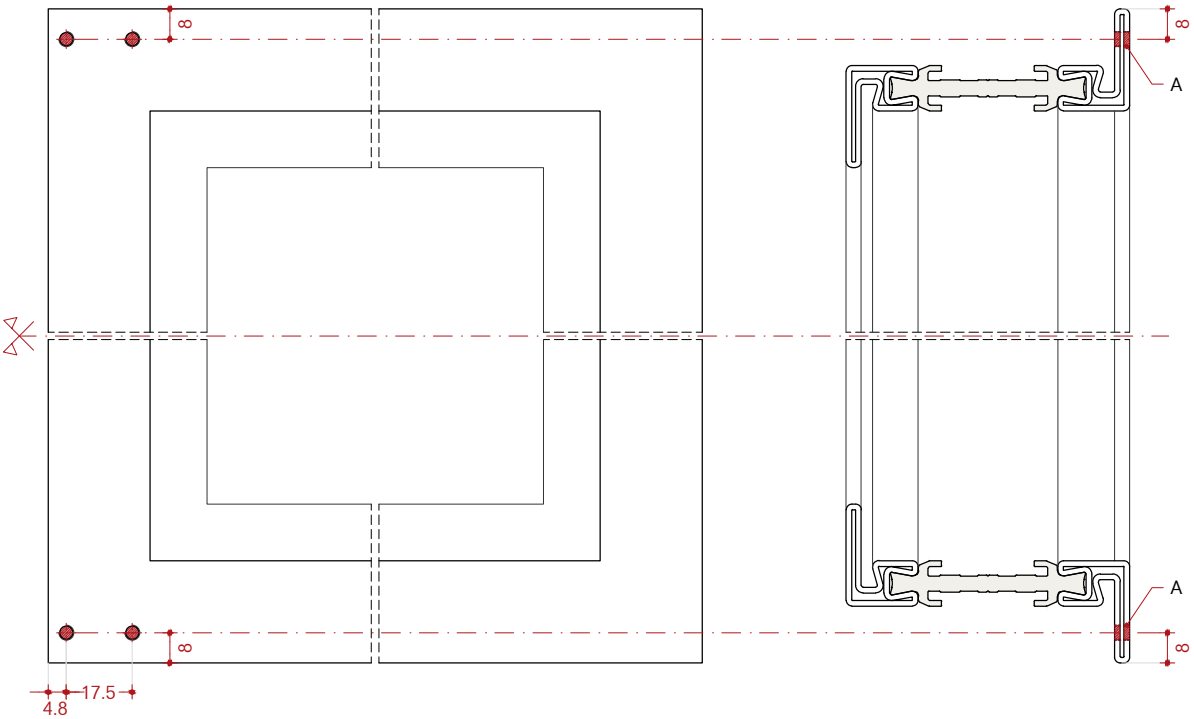
A) Trous M4
B) Gâche E99148-26
C) Fixation avec vis M4x28 mm ISO10642

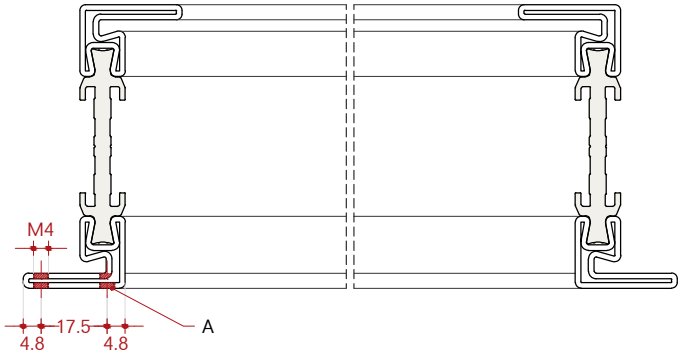

B
C
B
C

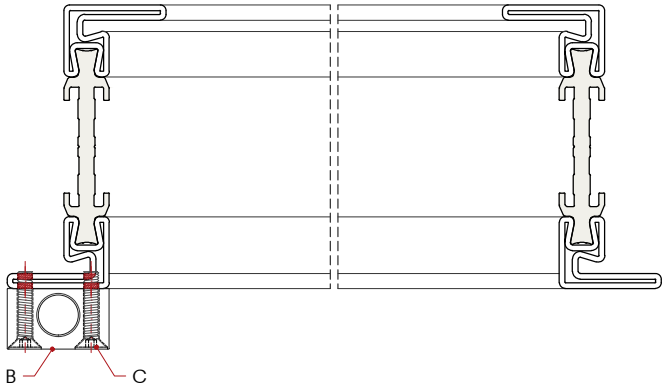
Installation
Cremone for round rods
Overlapped profiles
Leaf profile

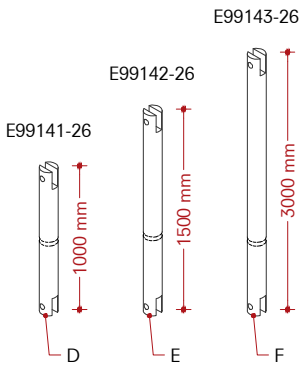
Einbau
Getriebe für Rundchubstangen
Überlappende profile
Flügelprofil

Schéma de montage
Crémone pour tiges rondes
Profilés superposés
Profilé ouvrant





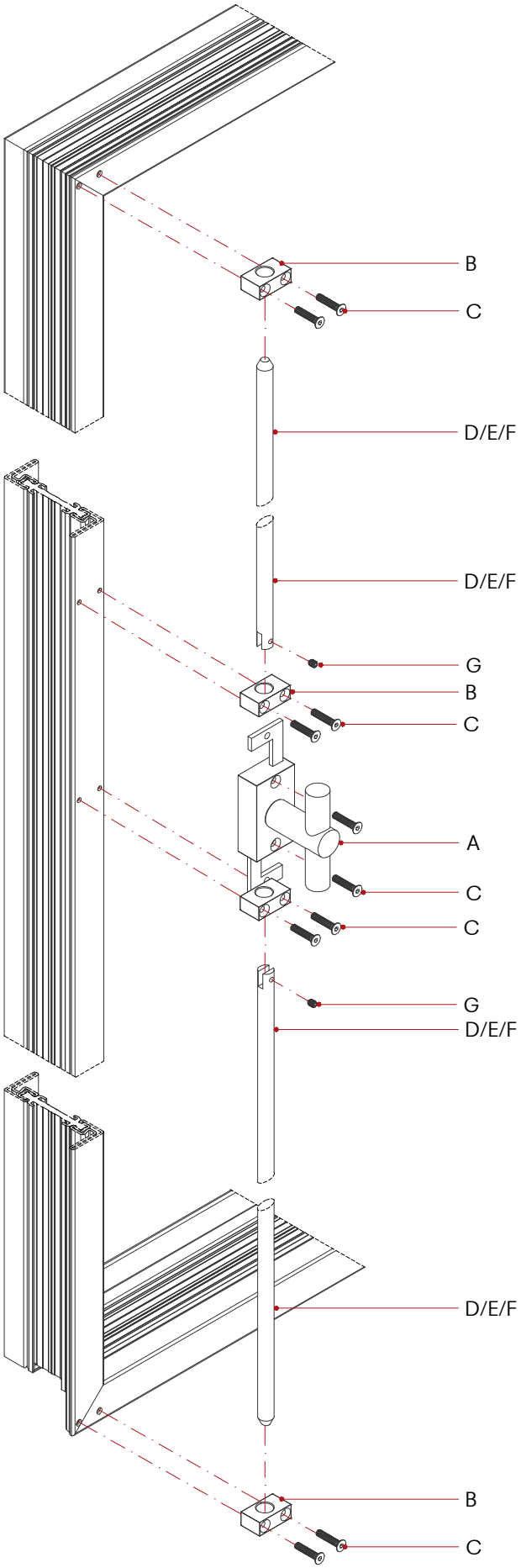




A) Handle and cremone H99026-26
B) Pass through guide E99144-26
C) Fastening with M4x20 mm ISO10642 screws
D/E/F) Round cremone rod
G) Stud

A) Griff mit Getriebe H99026-26
B) Durchführung E99144-26
C) Befestigung mit M4x20 mm ISO10642
D/E/F) Rundstange für Getriebe
G) Pilzzapfenverriegelung

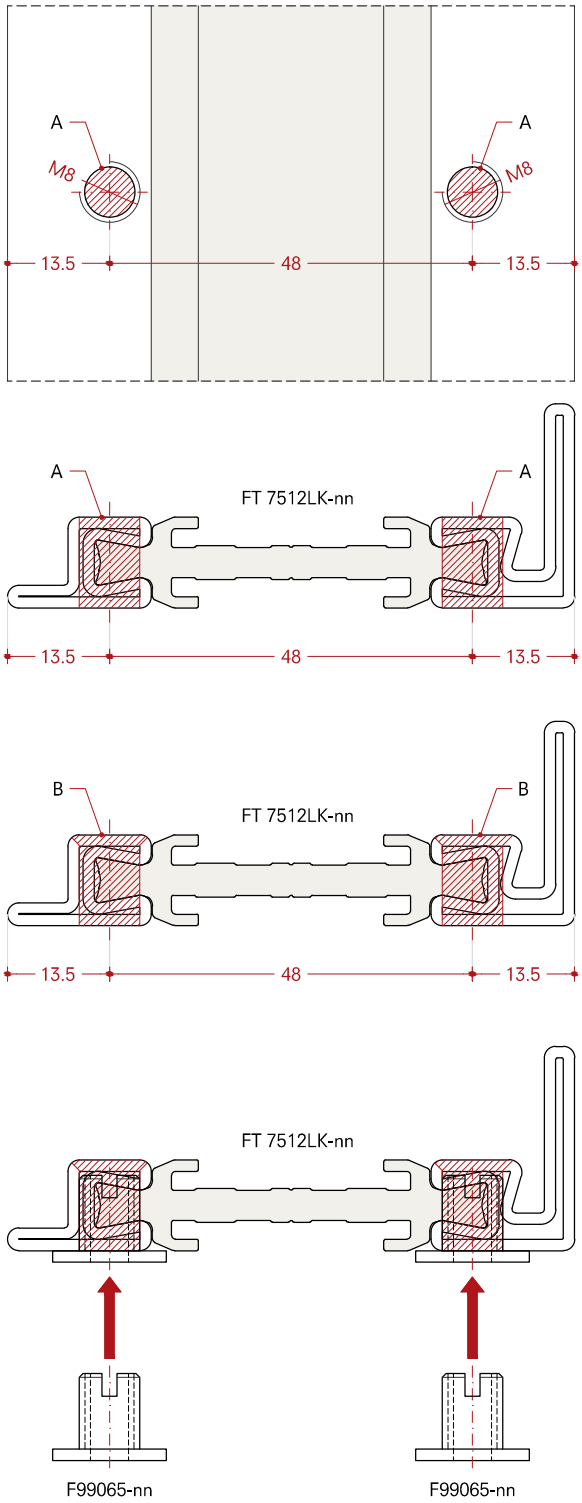
A) Poignée et crémone H99026-26
B) Guide E99144-26
C) Fixation avec vis M4x20 mm ISO10642
D/E/F) Tige ronde pour crémone
G) Galet


B
C
D/E/F
D/E/F
G
B
C
A
C
C
G
D/E/F
D/E/F
B
C

Installation
Adjustment bush F99065-nn
Flush and overlapped profiles

Einbau
Montagebuchse F99065-nn
Flächenbündige und Überlappende profile

Schéma de montage
Douille de réglage F99065-nn
Profilés coplanaires et superposés



Note:
Install F99065-nn after painting.

A) M8 hole on frame profile
B) Deburring hole on the internal side of the frame profile

Anmerkung:
Installieren Sie F99065-nn nach dem beschichten.

A) Bohrung M8 am Rahmenprofil
B) Entgraten an der Innenseite des Rahmenprofils

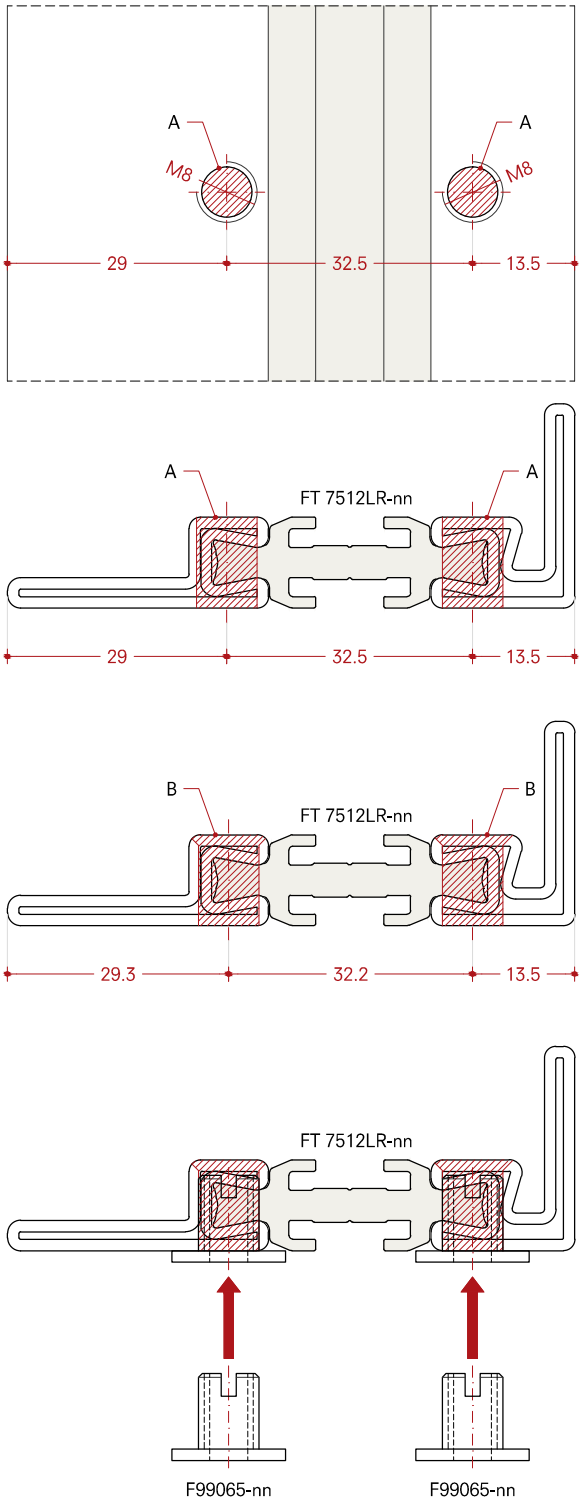
Remarque:
Installer F99065-nn après la peinture.

A) Trou M8 sur profilé dormant
B) Trou évasé sur le côté intérieur du profilé dormant

Installation
Adjustment bush F99065-nn
Tilt&Turn profiles

Einbau
Montagebuchse F99065-nn
Kipp-Fenster

Schéma de montage
Douille de réglage F99065-nn
Fênetre oscillo-battant



Note:
Install F99065-nn after painting.

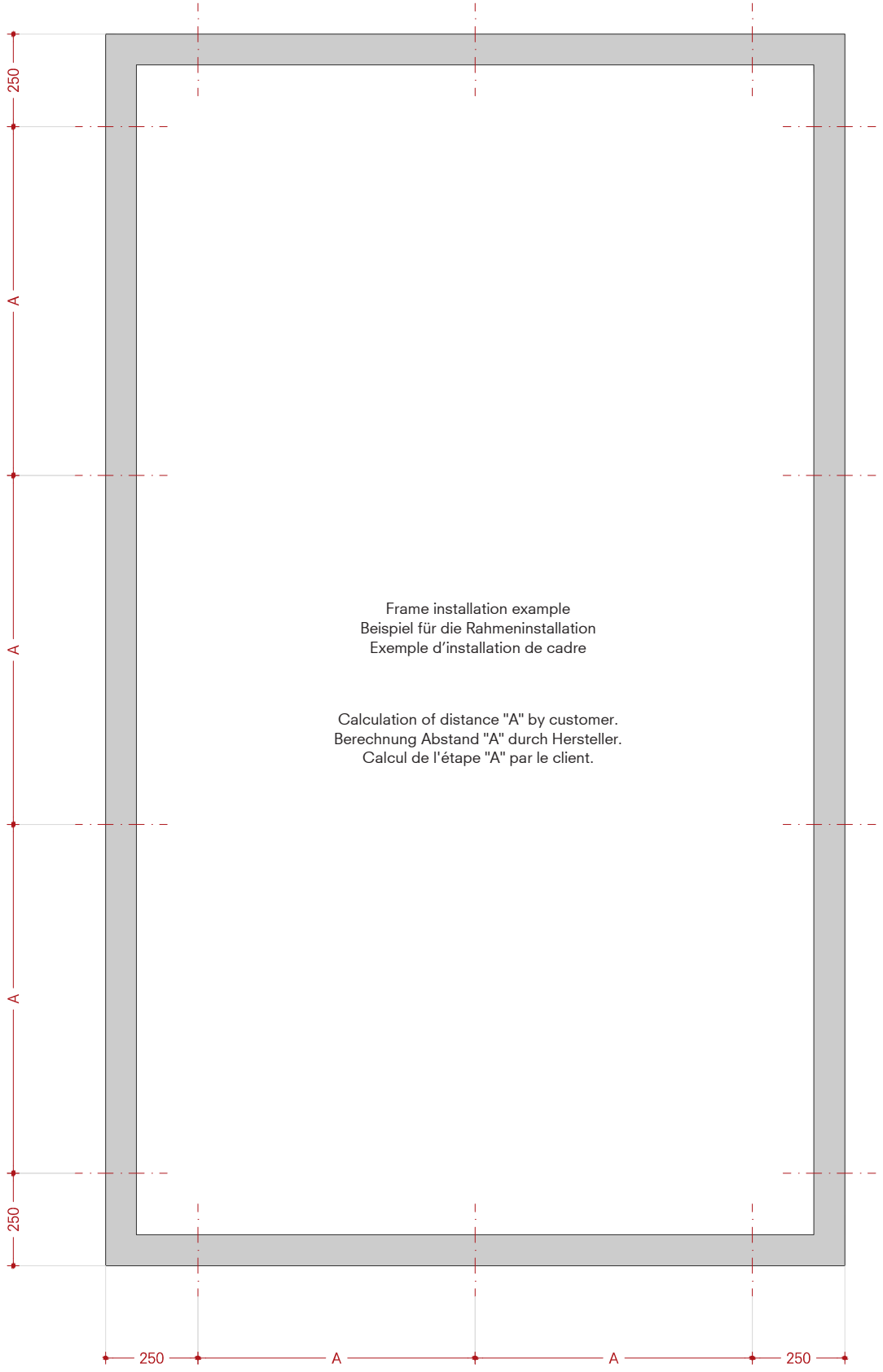
A) M8 hole on frame profile
B) Deburring hole on the internal side of the frame profile

Anmerkung:
Installieren Sie F99065-nn nach dem beschichten.

A) Bohrung M8 am Rahmenprofil
B) Entgraten an der Innenseite des Rahmenprofils

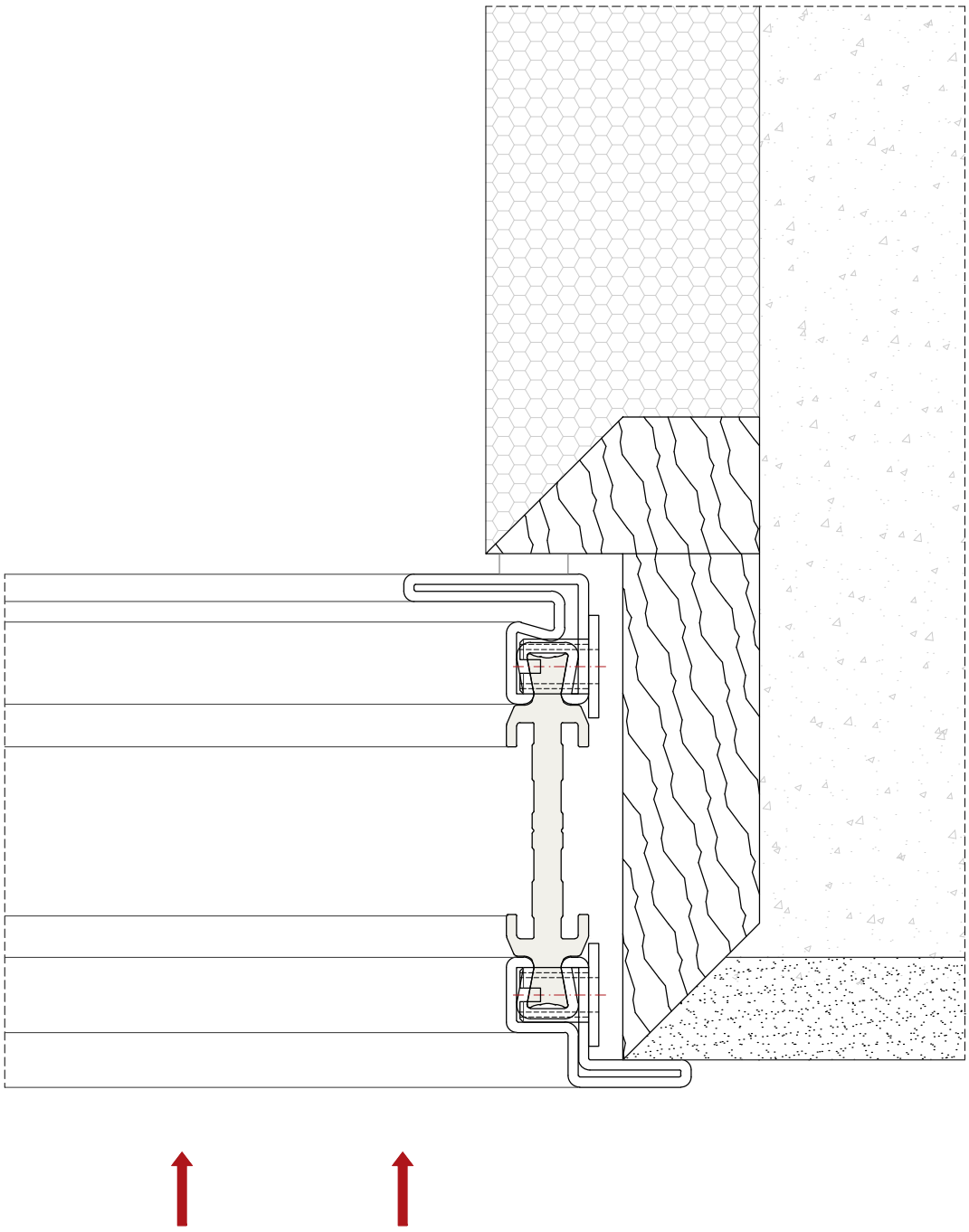
Remarque:
Installer F99065-nn après la peinture.

A) Trou M8 sur profilé dormant
B) Trou évasé sur le côté intérieur du profilé dormant



Frame installation example
Beispiel für die Rahmeninstallation
Exemple d'installation de cadre

Calculation of distance "A" by customer.
Berechnung Abstand "A" durch Hersteller.
Calcul de l'étape "A" par le client.



Note:
Put the frame inside the subframe with F99065-nn completely screwed.

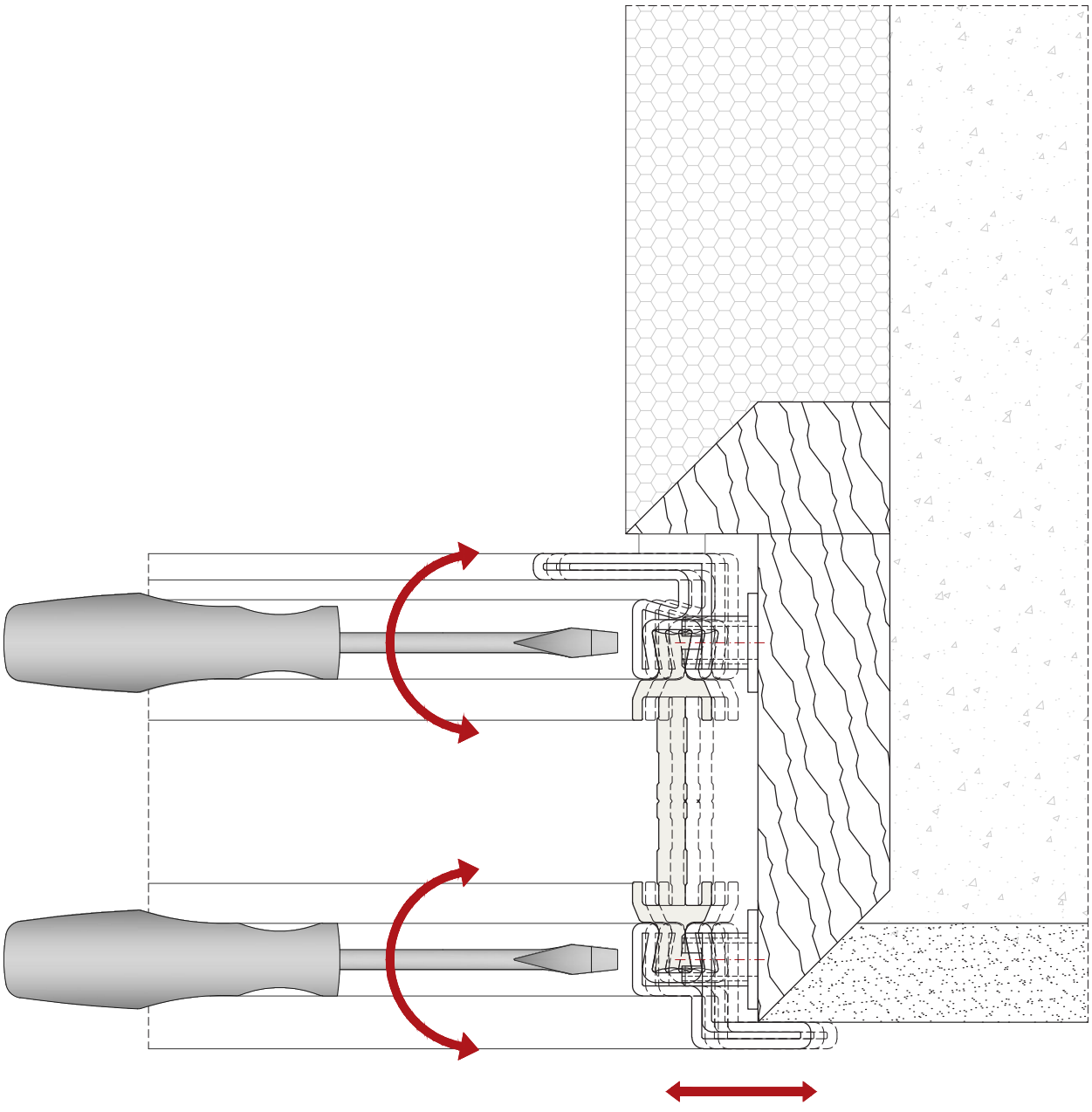
Wall connection solution is indicative.

Anmerkung:
Setzen Sie den Rahmen in den Hilfsrahmen ein mit F99065-nn komplett verschraubt.

Bauanschlüsse ist Richtwert.

Remarque:
Mettre le cadre à l'intérieur du sous-châssis avec F99065-nn complètement vissé.

La solution de raccordement mural est indicative.



Note:
Adjust F99065-nn with the screwdriver all around the frame and find the right position.

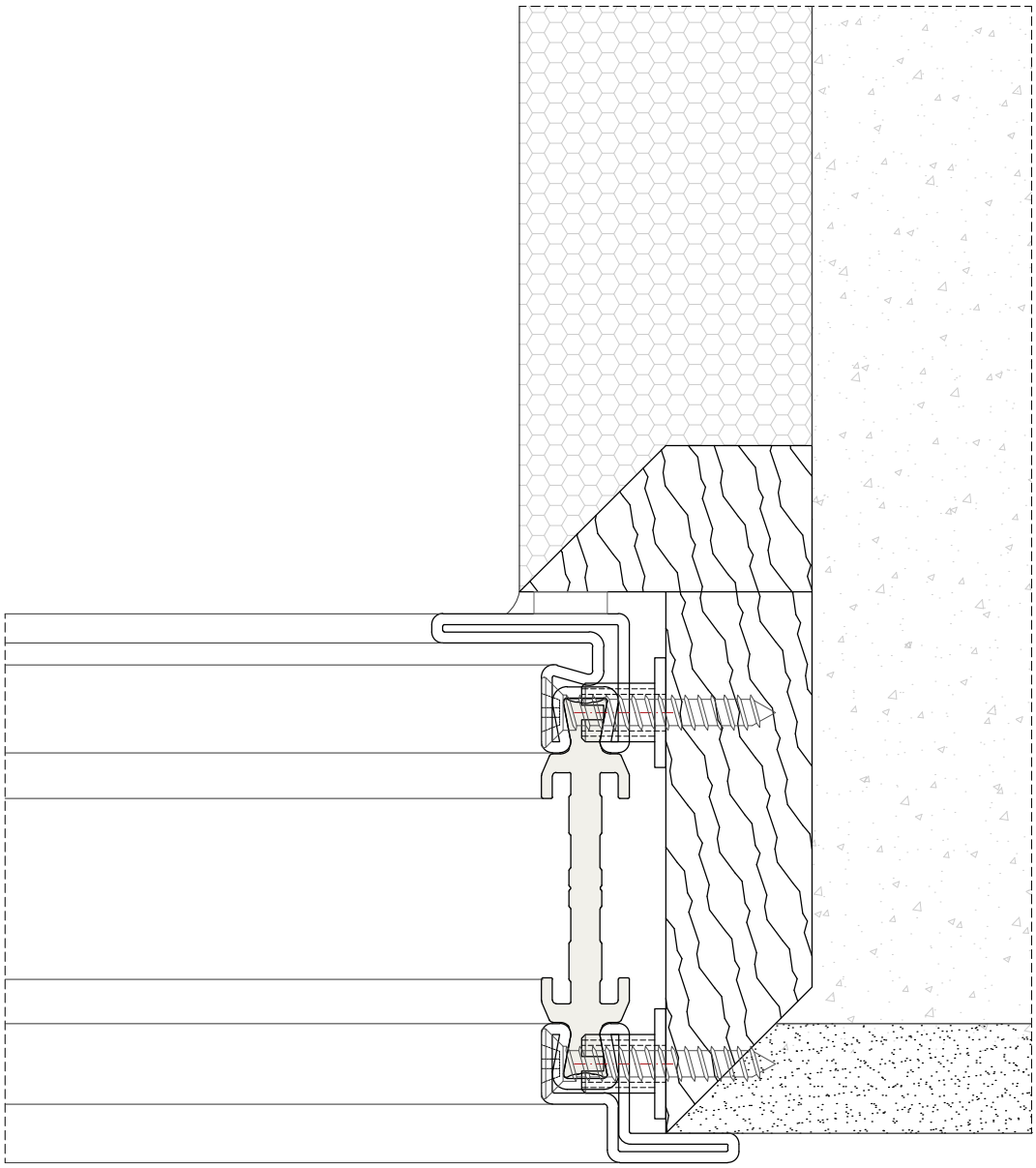
Wall connection solution is indicative.

Anmerkung:
Stellen Sie F99065-nn mit dem Schraubendreher einrund um den Rahmen und finden Sie die richtige Position.

Bauanschlüsse ist Richtwert.

Remarque:
Régler F99065-nn avec le tournevis tout autour du cadre et trouvez la bonne position.

La solution de raccordement mural est indicative.



Note:
Fastening with Ø4.8 mm screws.

Wall connection solution is indicative.

Anmerkung:
Befestigung mit Schrauben Ø4.8 mm

Bauanschlüsse ist Richtwert.

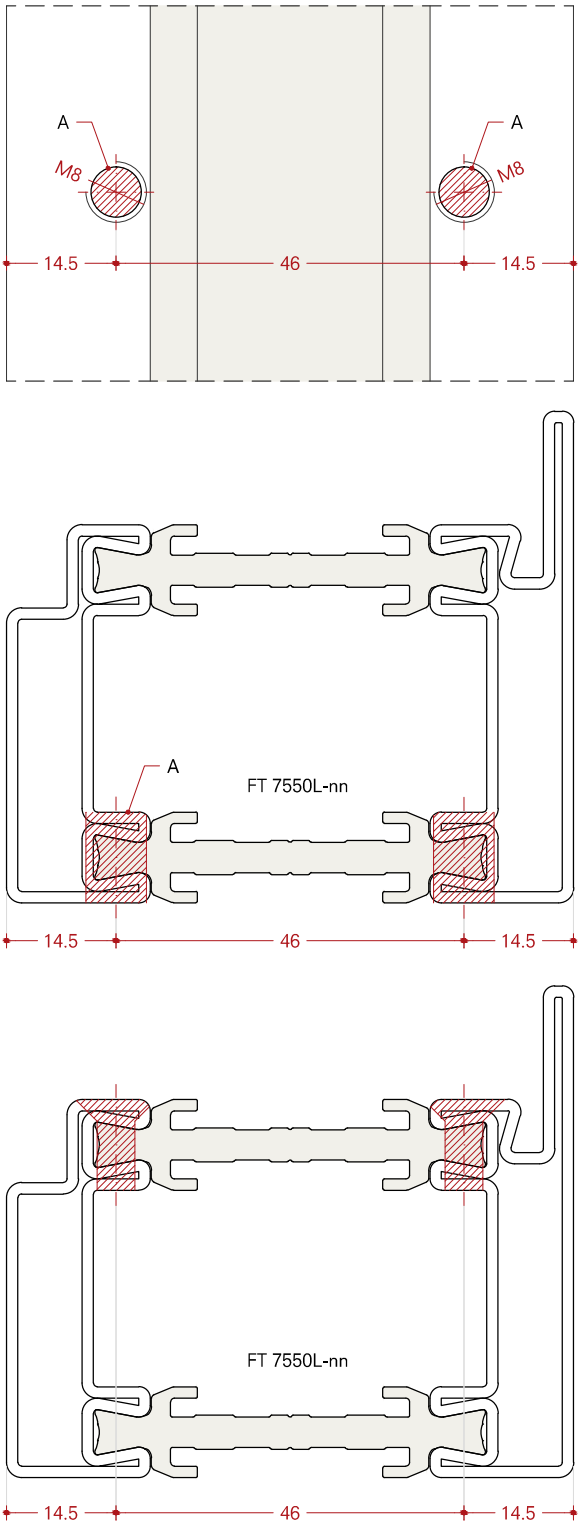
Remarque:
Fixation avec vis Ø4.8 mm

La solution de raccordement mural est indicative.

Installation
Adjustment bush F99065-nn
Flush profiles

Einbau
Montagebuchse F99065-nn
Flächenbündige profile

Schéma de montage
Douille de réglage F99065-nn
Profilés coplanaires



Note:
Install F99065-nn after painting.

A) M8 hole on frame profile
B) Deburring hole on the internal side of the frame profile

Anmerkung:
Installieren Sie F99065-nn nach dem beschichten.

A) Bohrung M8 am Rahmenprofil
B) Entgraten an der Innenseite des Rahmenprofils

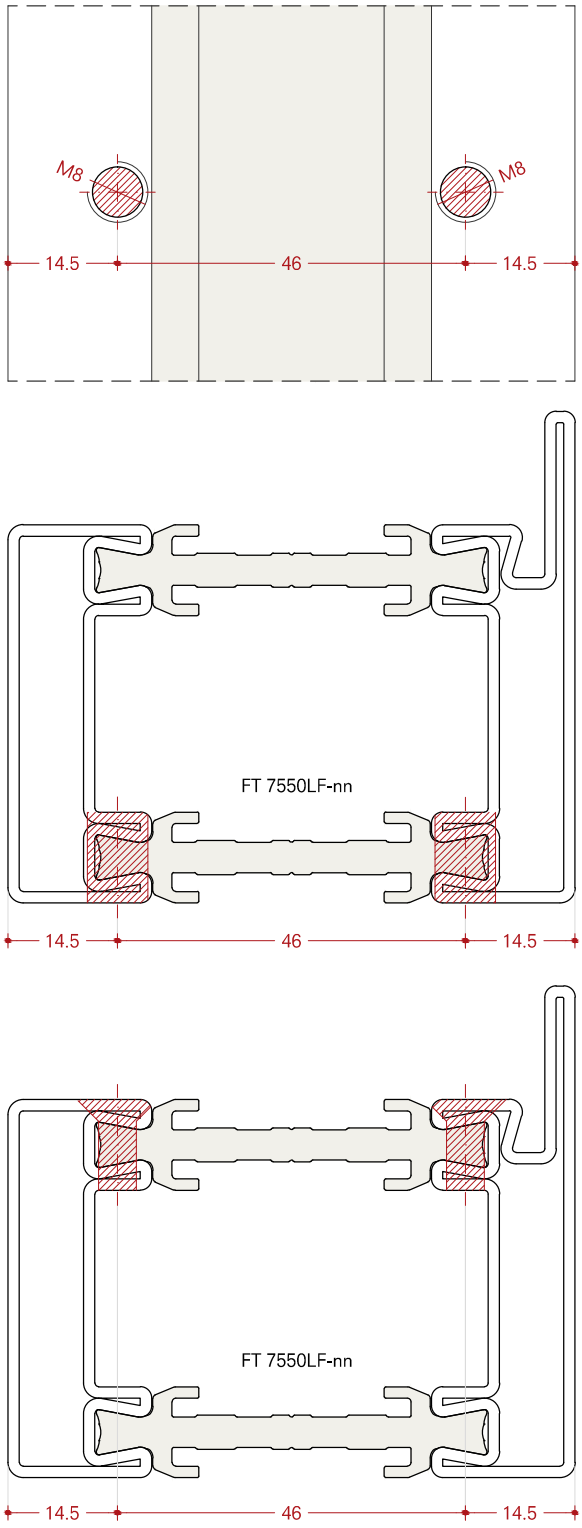
Remarque:
Installer F99065-nn après la peinture.

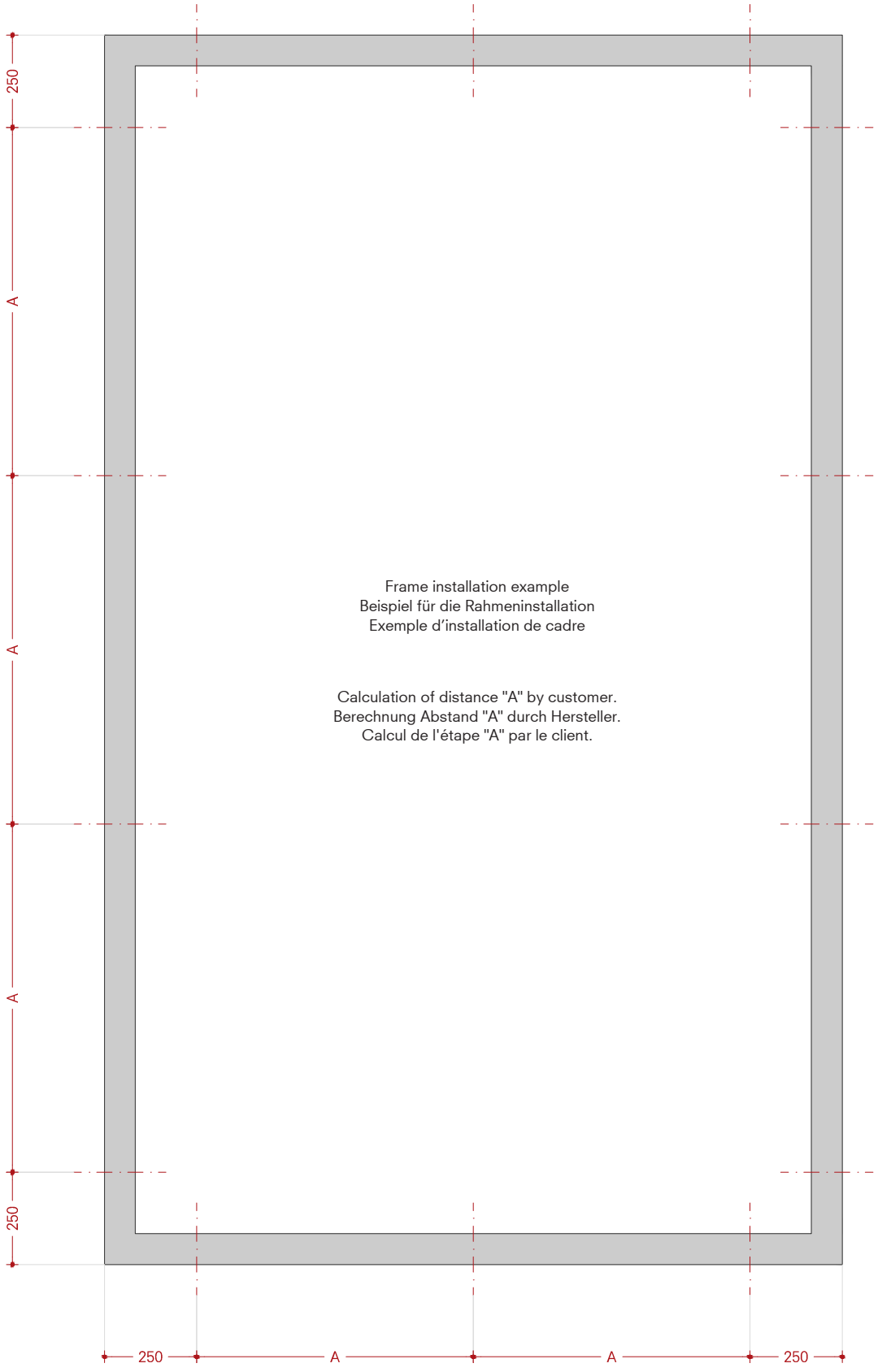
A) Trou M8 sur profilé dormant
B) Trou évasé sur le côté intérieur du profilé dormant

Installation
Adjustment bush F99065-nn
Overlapped profiles

Einbau
Montagebuchse F99065-nn
Überlappende profile

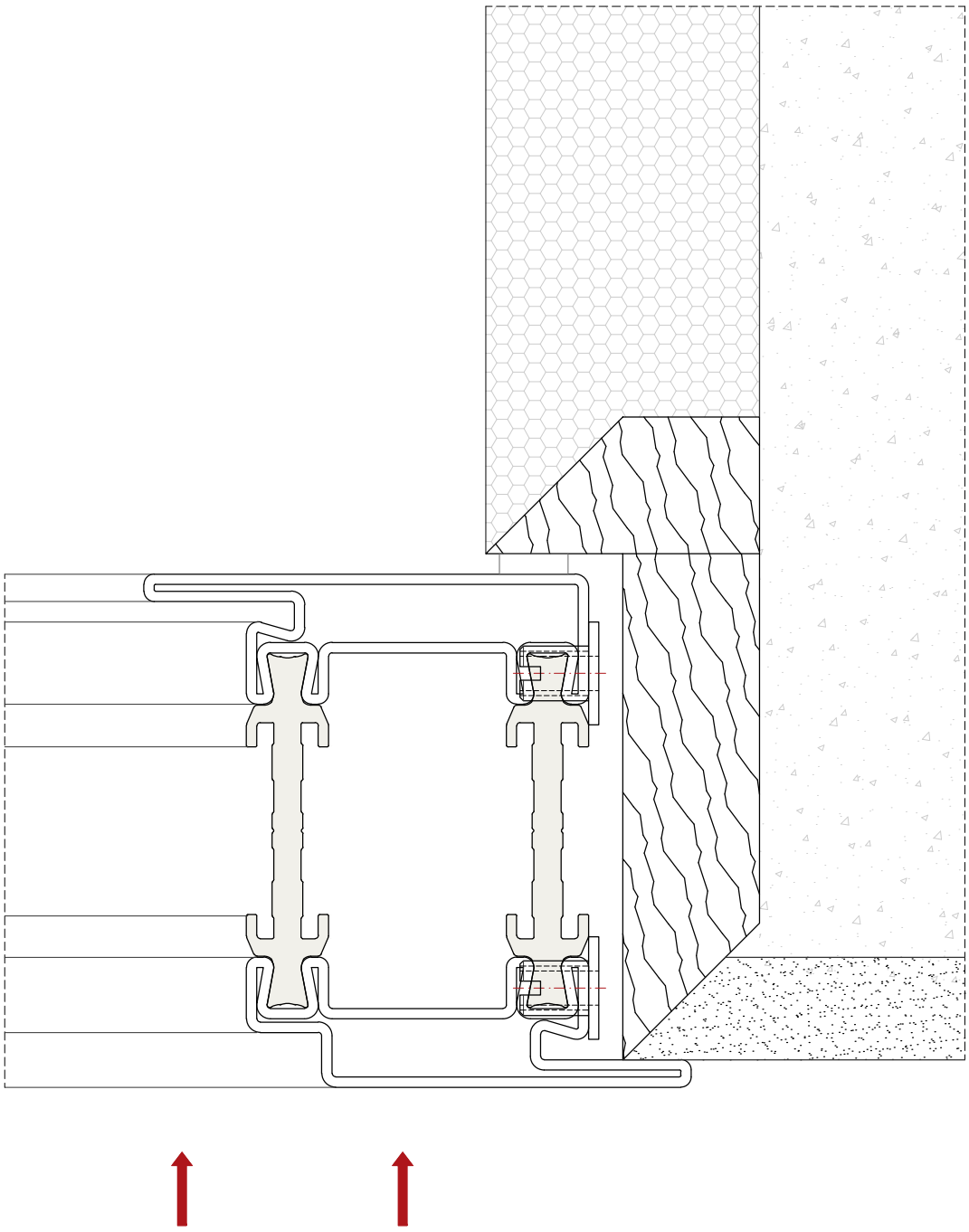
Schéma de montage
Douille de réglage F99065-nn
Profilés superposés





Frame installation example
Beispiel für die Rahmeninstallation
Exemple d'installation de cadre

Calculation of distance "A" by customer.
Berechnung Abstand "A" durch Hersteller.
Calcul de l'étape "A" par le client.



Note:
Put the frame inside the subframe with F99065-nn completely screwed.

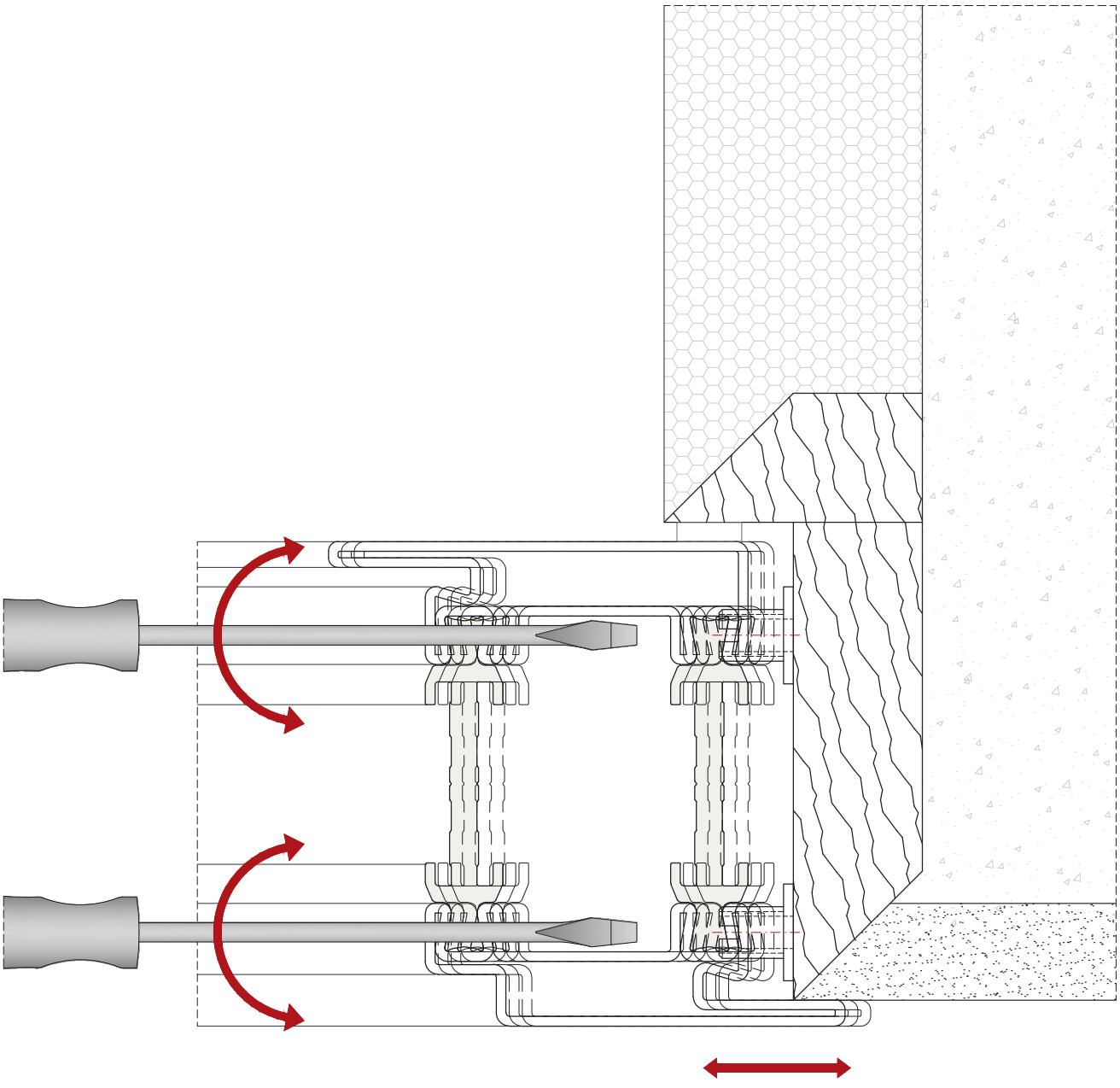
Wall connection solution is indicative.

Anmerkung:
Setzen Sie den Rahmen in den Hilfsrahmen ein mit F99065-nn komplett verschraubt.

Bauanschlüsse ist Richtwert.

Remarque:
Mettre le cadre à l'intérieur du sous-châssis avec F99065-nn complètement vissé.

La solution de raccordement mural est indicative.



Note:
Adjust F99065-nn with the screwdriver all around the frame and find the right position.

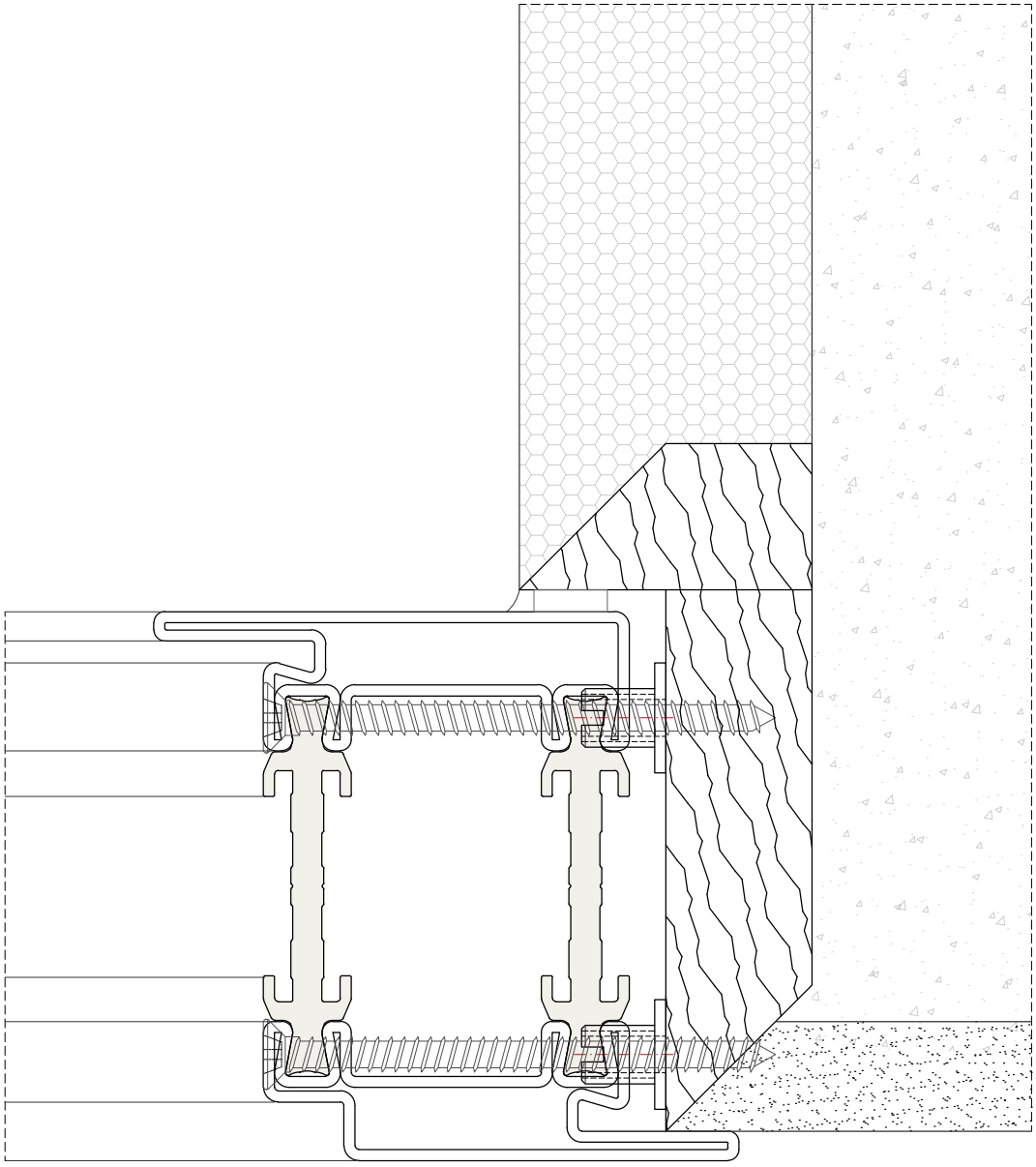
Wall connection solution is indicative.

Anmerkung:
Stellen Sie F99065-nn mit dem Schraubendreher einrund um den Rahmen und finden Sie die richtige Position.

Bauanschlüsse ist Richtwert.

Remarque:
Régler F99065-nn avec le tournevis tout autour du cadre et trouvez la bonne position.

La solution de raccordement mural est indicative.



Note:
Fastening with Ø4.8 mm screws.

Wall connection solution is indicative.

Anmerkung:
Befestigung mit Schrauben Ø4.8 mm

Bauanschlüsse ist Richtwert.

Remarque:
Fixation avec vis Ø4.8 mm

La solution de raccordement mural est indicative.

Multipoint steel rods installation, with Graz

Montage Multipoint Stahlstangen, mit Graz

Montage Multipoint tiges de acier, avec Graz

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:2 - 1:4

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:2 - 1:4

Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:2 - 1:4

Multipoint steel rods, with Graz configuration

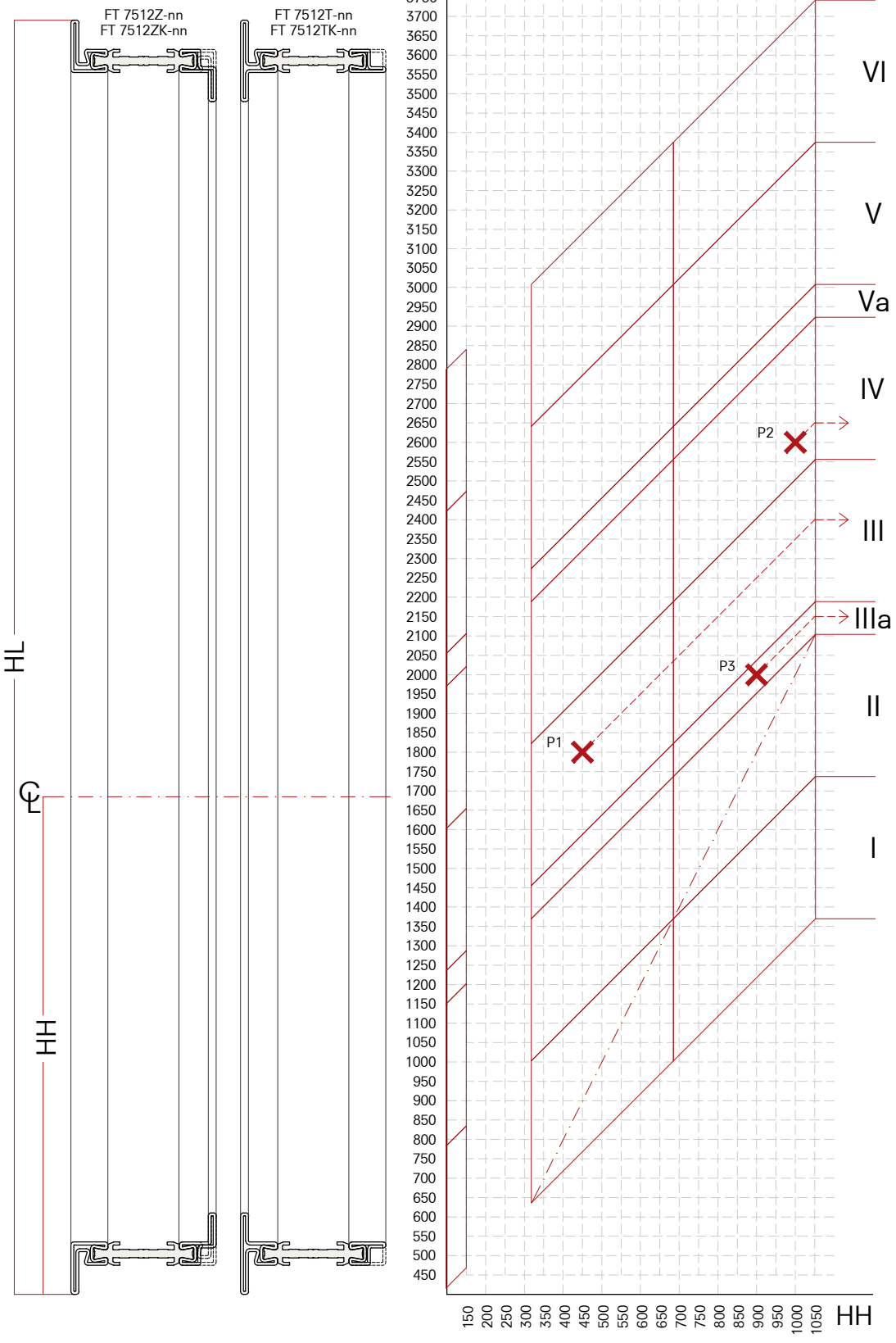
INPUT: HL = Height Leaf
HH = Height Handle
OUTPUT: Two CoFiCo (CONFIGURATION FIELD COORDINATES)
I; II; IIIa; III; IV; Va; V; VI and alfa; beta; gamma.
The two CoFiCo define the solution in the following pages.
= Symmetric handle
= Examples:
P1 (1800 / 450 mm) -> III + ß
P2 (2600 / 1000 mm) -> IV + Y
P3 (2000 / 900 mm) -> IIIa + Y

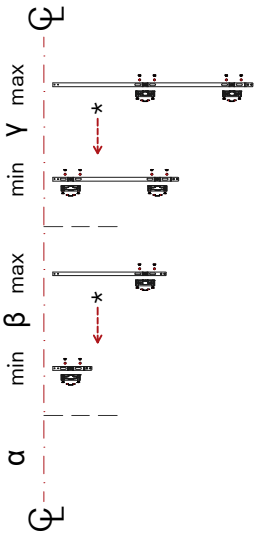
Multipoint Stahlstangen, mit Graz-Konfiguration

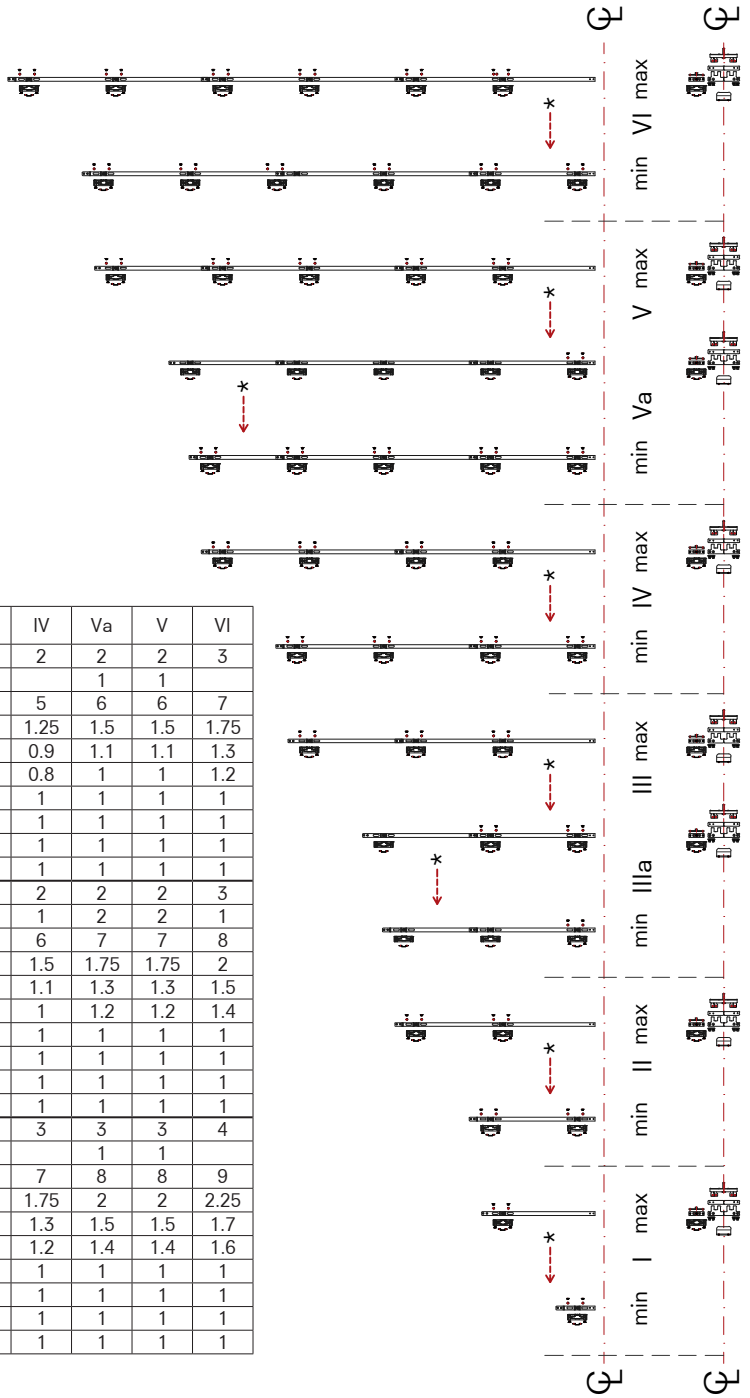
INPUT: HL = Höhe Flügel
HH = Griffsitz Mittig
OUTPUT: Zwei CoFiCo (CONFIGURATION FIELD COORDINATES)
I; II; IIIa; III; IV; Va; V; VI und alfa; beta; gamma.
Zwei CoFiCos definieren die Lösung auf den folgenden Seiten.
= Symmetrischer Griff
= Examples:
P1 (1800 / 450 mm) -> III + ß
P2 (2600 / 1000 mm) -> IV + Y
P3 (2000 / 900 mm) -> IIIa + Y

Multipoint tiges de acier, avec Graz configuration

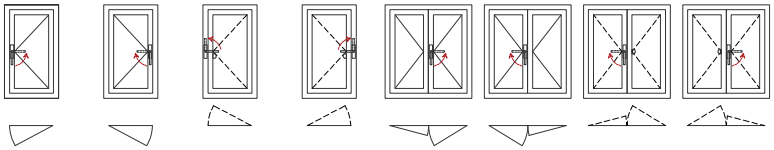
INPUT: HL = hauteur du vantail
HH = hauteur de la poignée
OUTPUT: Deux CoFiCo (CONFIGURATION FIELD COORDINATES)
I; II; IIIa; III; IV; Va; V; VI et alfa; beta; gamma.
Les deux CoFiCos définissent la solution sur les pages suivantes.
= Poignée symétrique
= Examples:
P1 (1800 / 450 mm) -> III + ß
P2 (2600 / 1000 mm) -> IV + Y
P3 (2000 / 900 mm) -> IIIa + Y







			I	II	IIIa	III	IV	Va	V	VI
α	E99378-03			1	1	1	2	2	2	3
	E99379-03		1		1	1		1	1	
	Q99182-11		2	3	4	4	5	6	6	7
	E99134-03		0.5	0.75	1	1	1.25	1.5	1.5	1.75
	D99702-08		0.3	0.5	0.7	0.7	0.9	1.1	1.1	1.3
	D99706-08		0.2	0.4	0.6	0.6	0.8	1	1	1.2
	K99100		1	1	1	1	1	1	1	1
	E99353-03	default: 1	1	1	1	1	1	1	1	1
	E9965X-03	define "X"	1	1	1	1	1	1	1	1
	H99020-nn	only open out	1	1	1	1	1	1	1	1
β	E99378-03		0	1	1	1	2	2	2	3
	E99379-03		2	1	2	2	1	2	2	1
	Q99182-11		3	4	5	5	6	7	7	8
	E99134-03		0.75	1	1.25	1.25	1.5	1.75	1.75	2
	D99702-08		0.5	0.7	0.9	0.9	1.1	1.3	1.3	1.5
	D99706-08		0.4	0.6	0.8	0.8	1	1.2	1.2	1.4
	K99100		1	1	1	1	1	1	1	1
	E99353-03	default: 1	1	1	1	1	1	1	1	1
	E9965X-03	define "X"	1	1	1	1	1	1	1	1
	H99020-nn	only open out	1	1	1	1	1	1	1	1
γ	E99378-03		1	2	2	2	3	3	3	4
	E99379-03		1		1	1		1	1	
	Q99182-11		4	5	6	6	7	8	8	9
	E99134-03		1	1.25	1.5	1.5	1.75	2	2	2.25
	D99702-08		0.7	0.9	1.1	1.1	1.3	1.5	1.5	1.7
	D99706-08		0.6	0.8	1	1	1.2	1.4	1.4	1.6
	K99100		1	1	1	1	1	1	1	1
	E99353-03	default: 1	1	1	1	1	1	1	1	1
	E9965X-03	define "X"	1	1	1	1	1	1	1	1
	H99020-nn	only open out	1	1	1	1	1	1	1	1



	O		O		O	O	
O		O		O			O

E99652-03 (L)
E99653-03 (R)

⟵ ✶ Cropping of rods.

⟵ ✶ Zuschneiden Verriegelungsstange.

⟵ ✶ Recadrage des tige de ligne.

Note:
For double-hung window, the basic configuration is defined with 2 flush bolts E99021-35.
If different flush bolt sizes are used, the hardware must be recalculated.

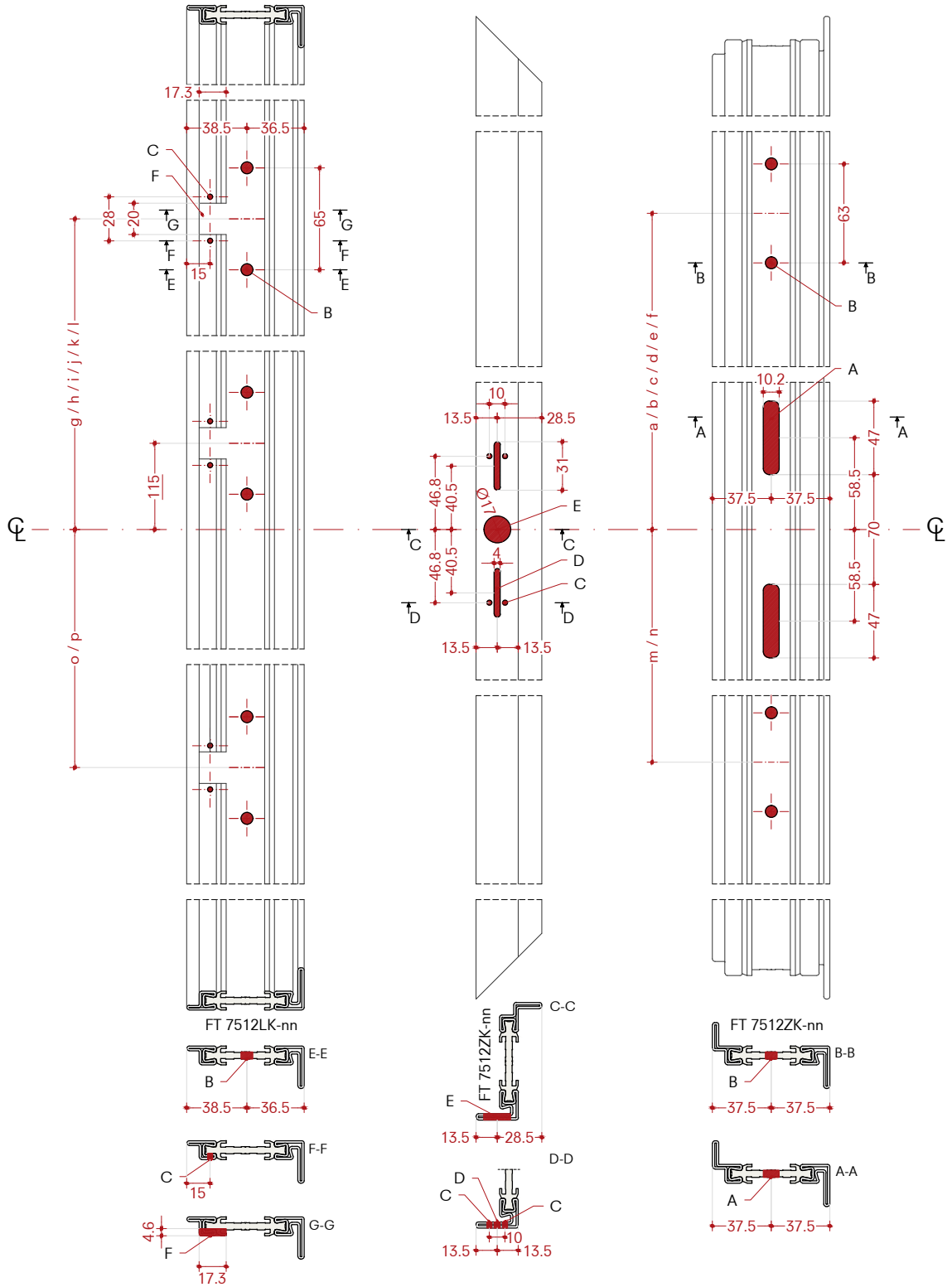
Anmerkung:
Bei Drehfenstern ist die Grundkonfiguration durch die Verwendung von 2 Riegeln E99021-35 definiert.
Wenn andere Schraubengrößen verwendet werden, müssen die Beschläge neu berechnet werden.

Remarque:
Pour les fenêtres à deux battants, la configuration de base est définie par l'utilisation de 2 boulons E99021-35.
Si des tailles de boulons différentes sont utilisées, le matériel doit être recalculé.

Multipoint steel rods installation, with Graz
Single leaf window
Open in - Right opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach innen öffnend - DIN rechts
Flächenbündige profile

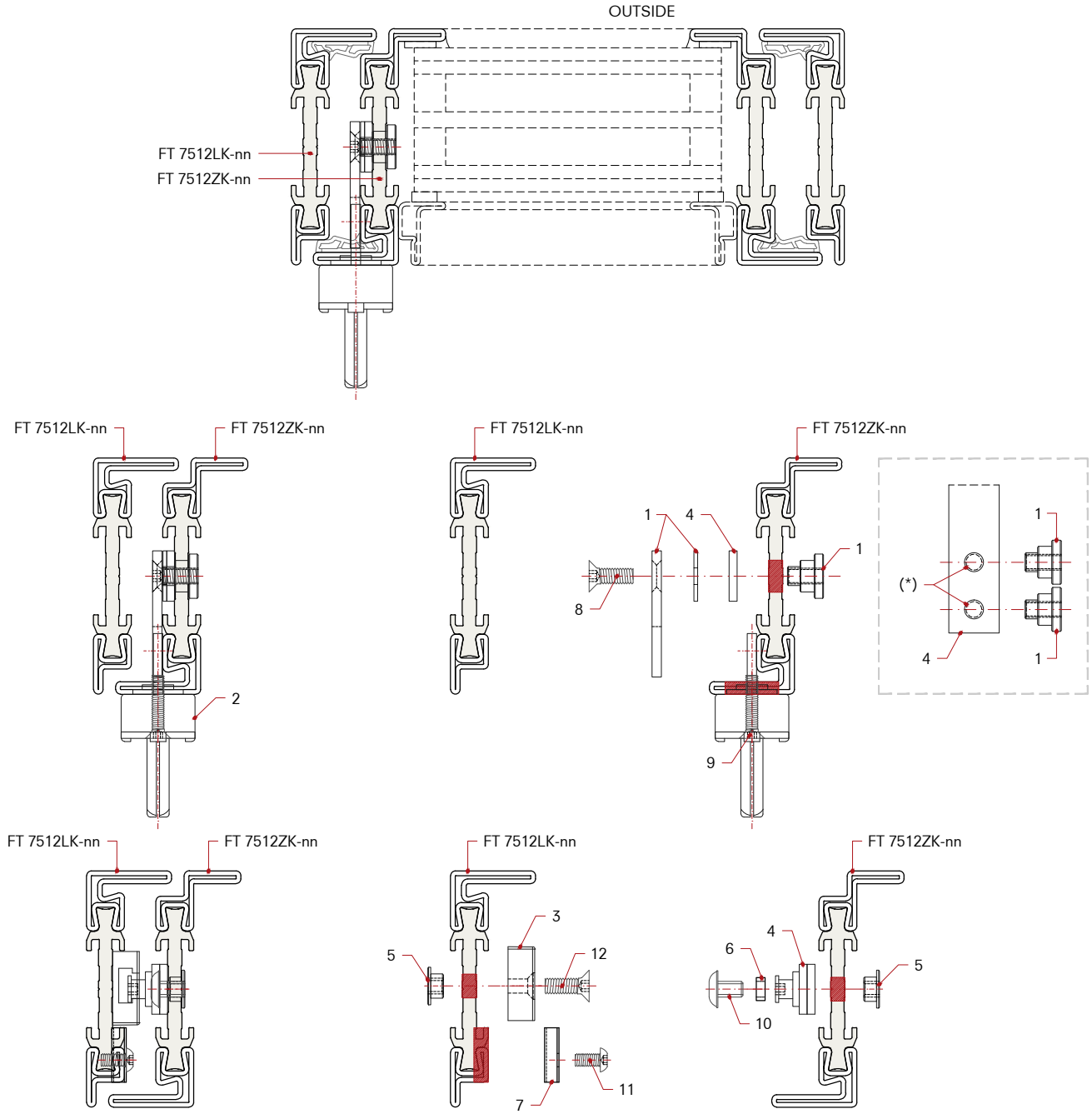
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture intérieure - Droite
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm

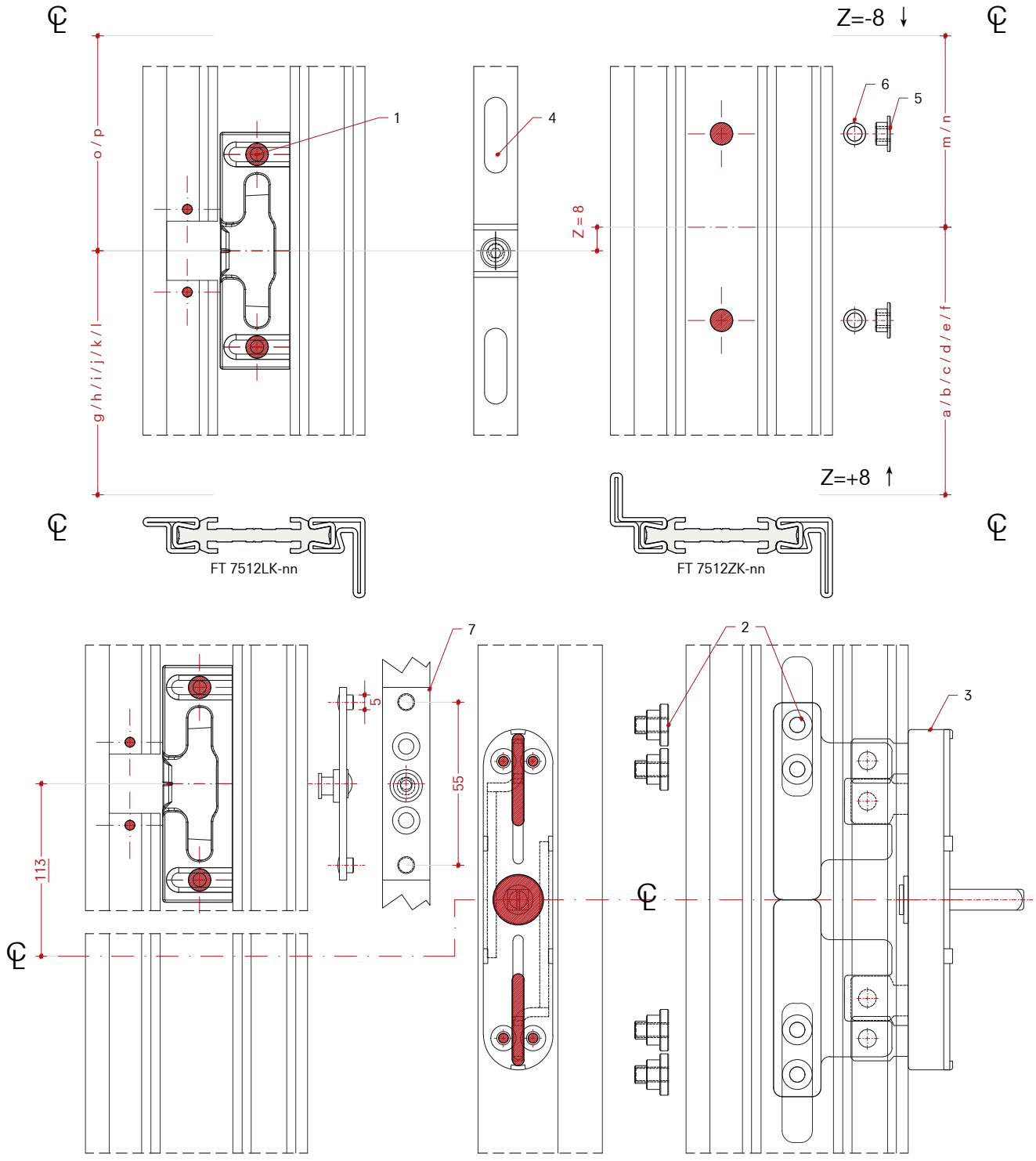
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

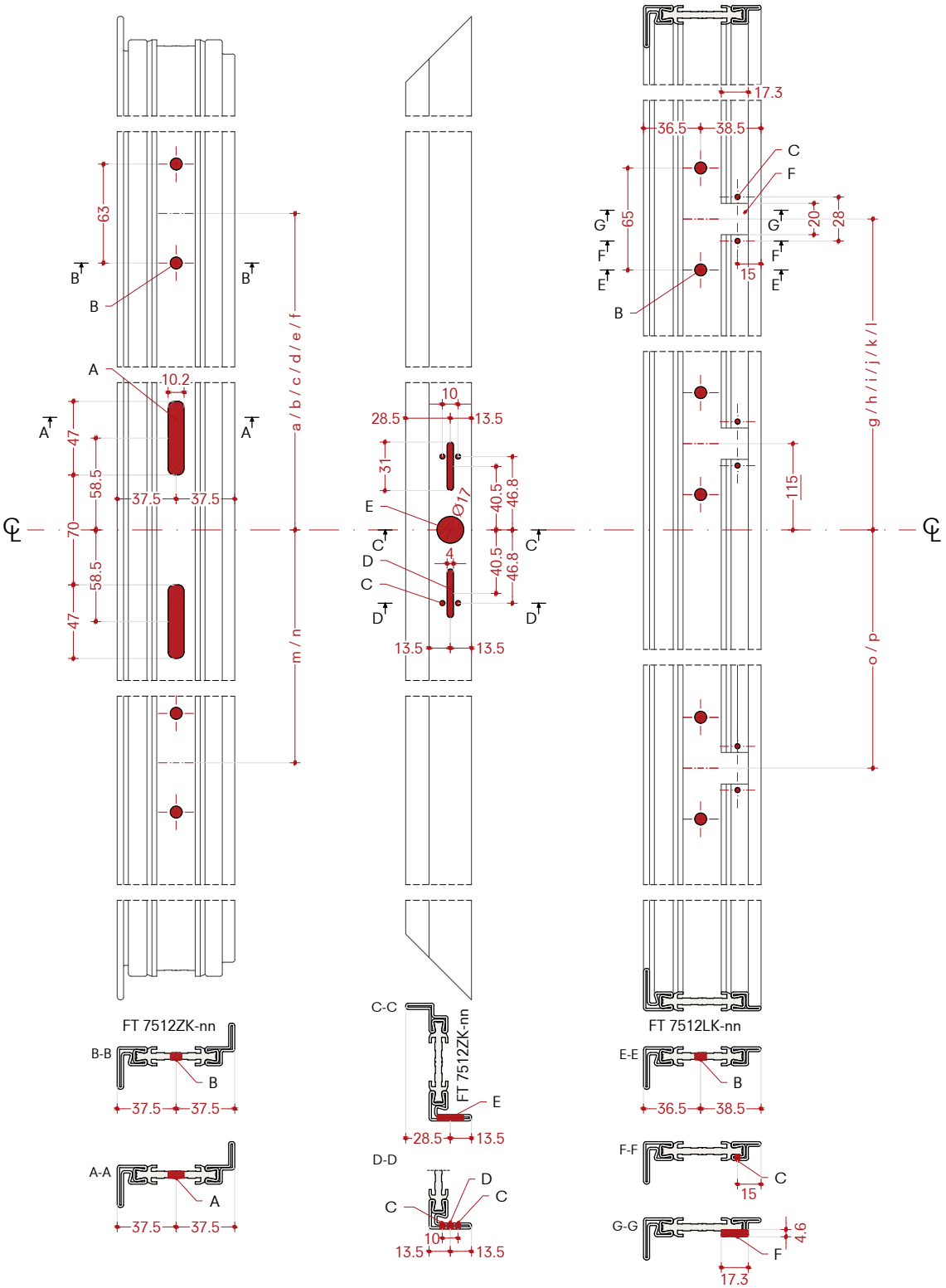
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open in - Left opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach innen öffnend - DIN links
Flächenbündige profile

Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture intérieure - Gauche
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
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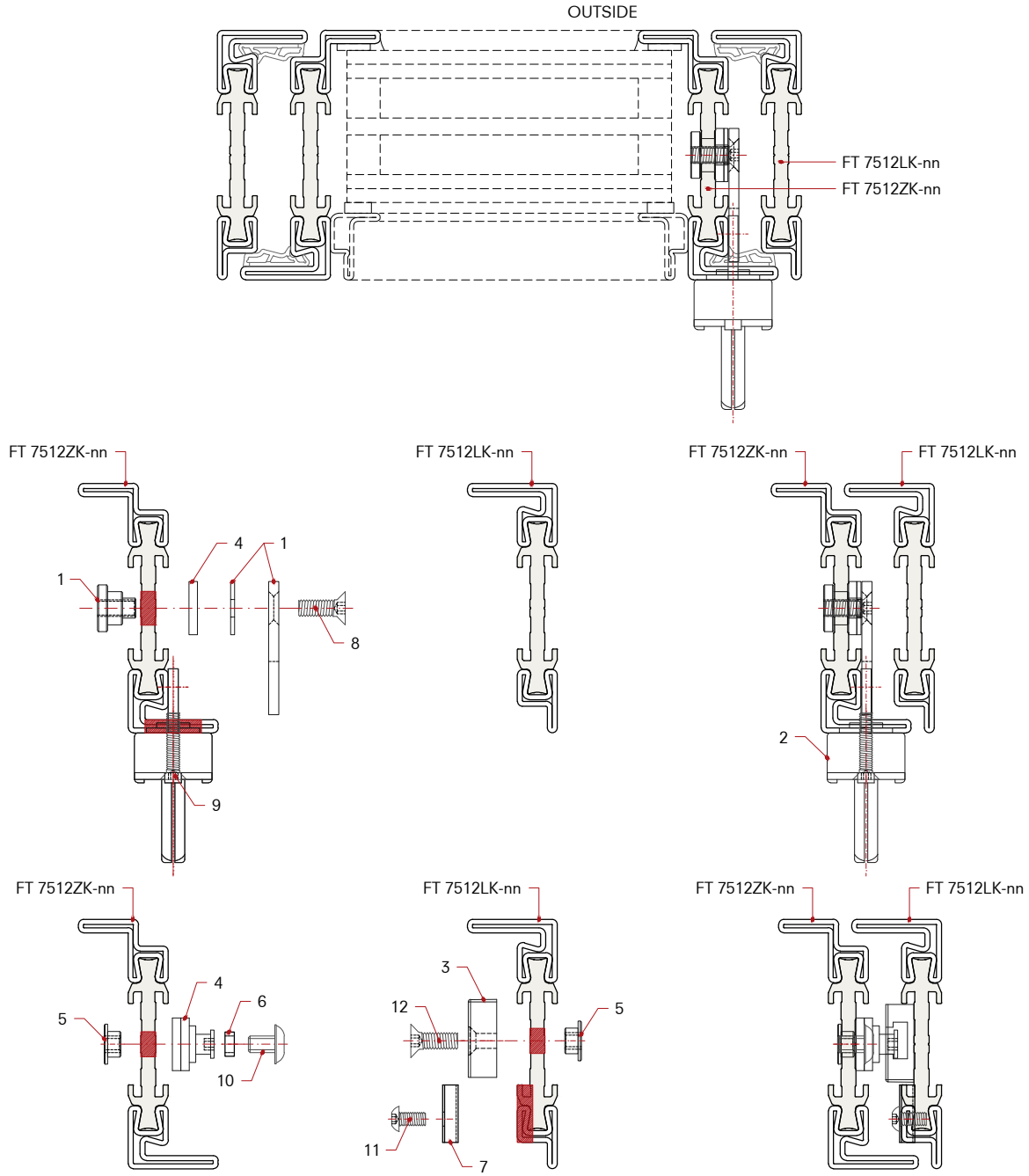
F) Fräsung 17.3x4.6x20 mm

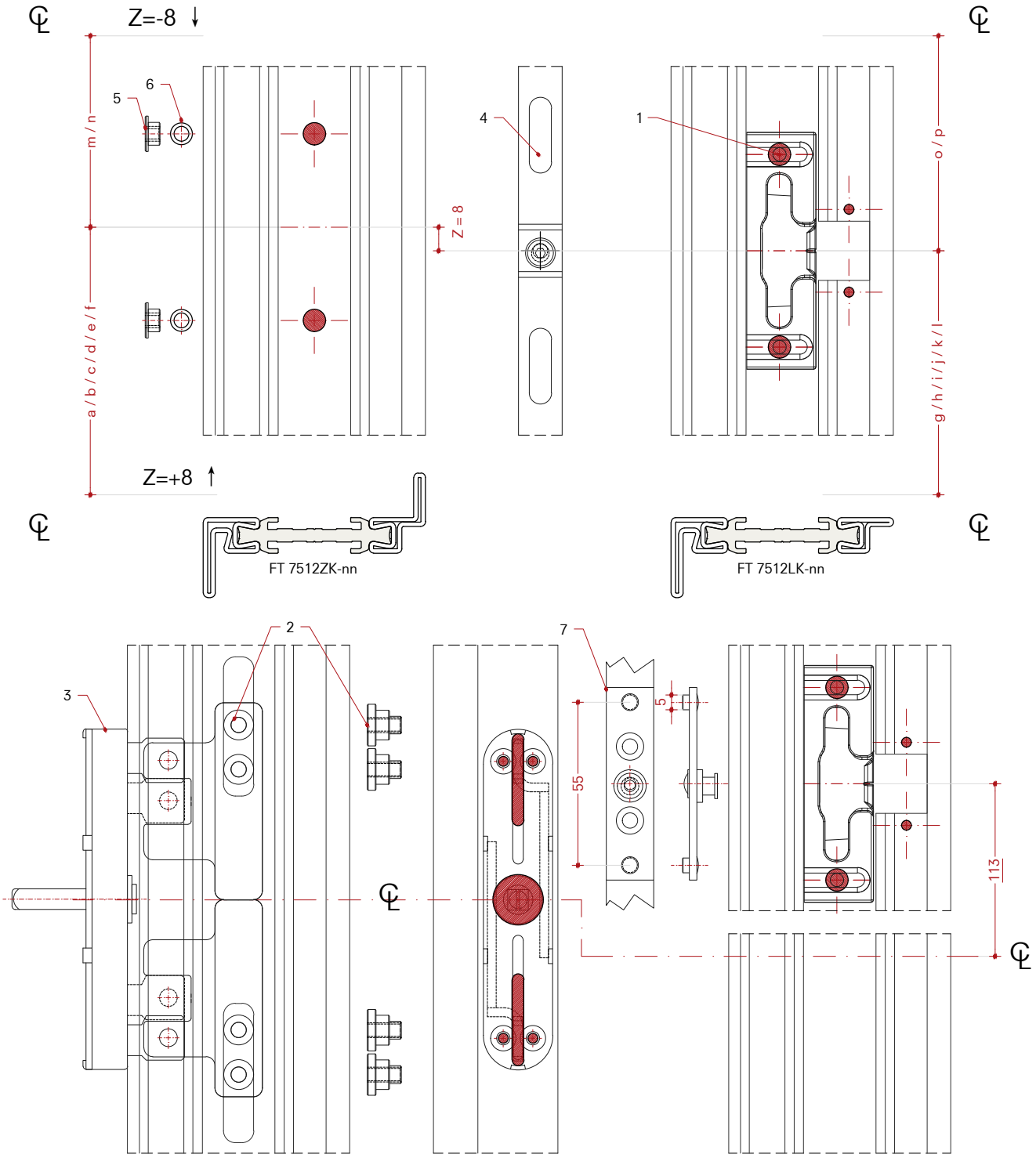
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

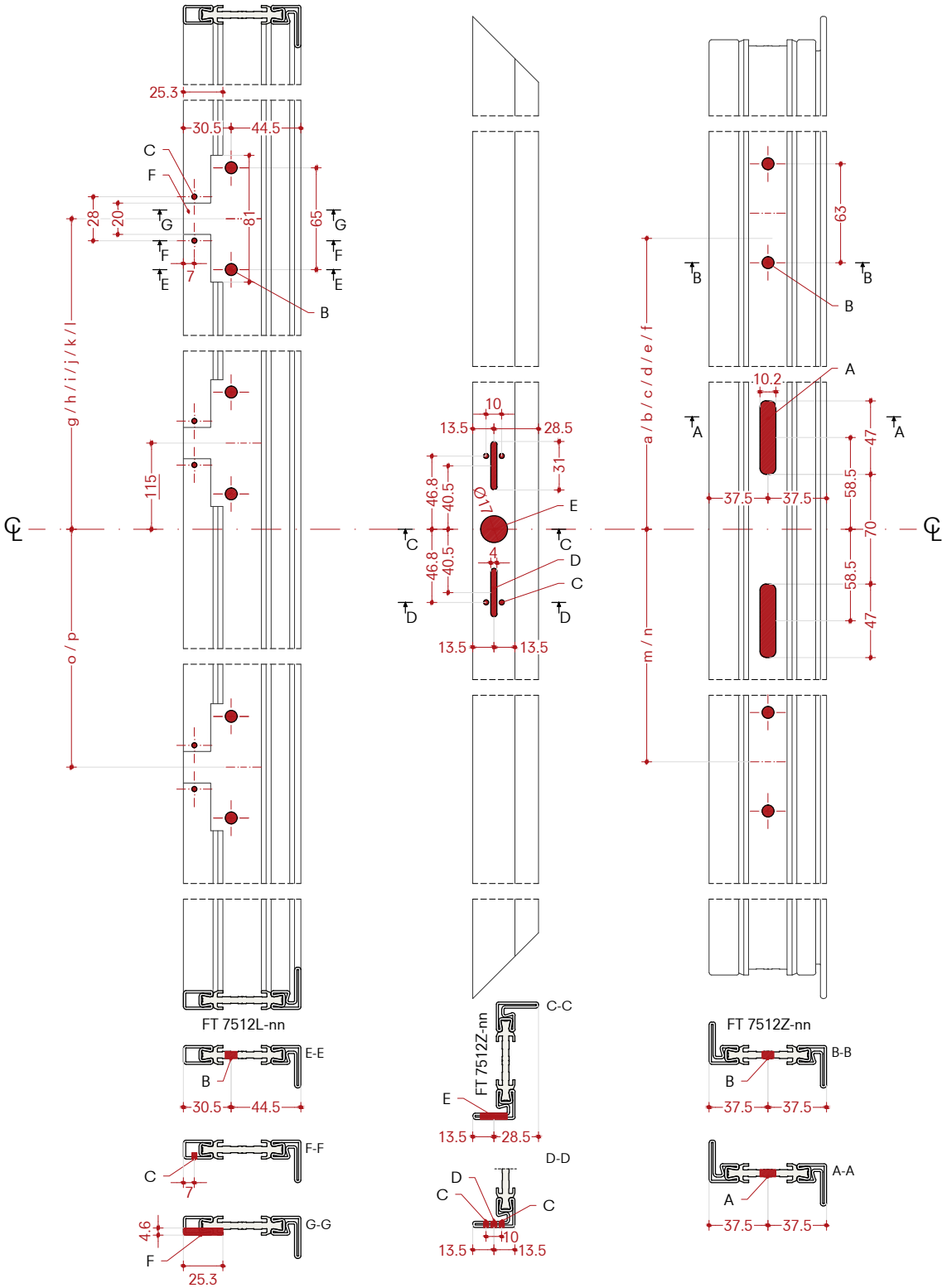
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open in - Right opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach innen öffnend - DIN rechts
Überlappende profile

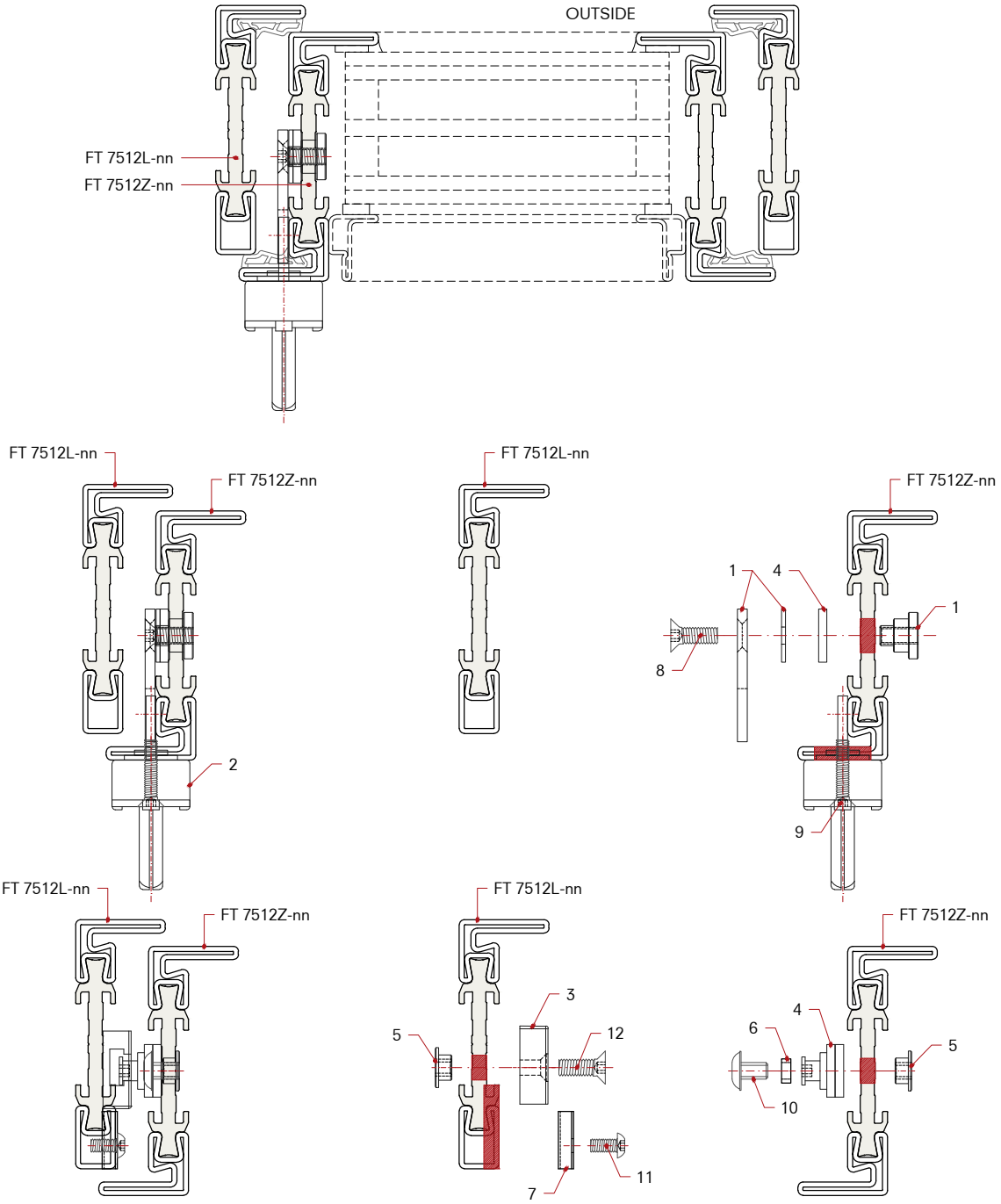
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture intérieure - Droite
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 25.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 25.3x4.6x20 mm

Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 25.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
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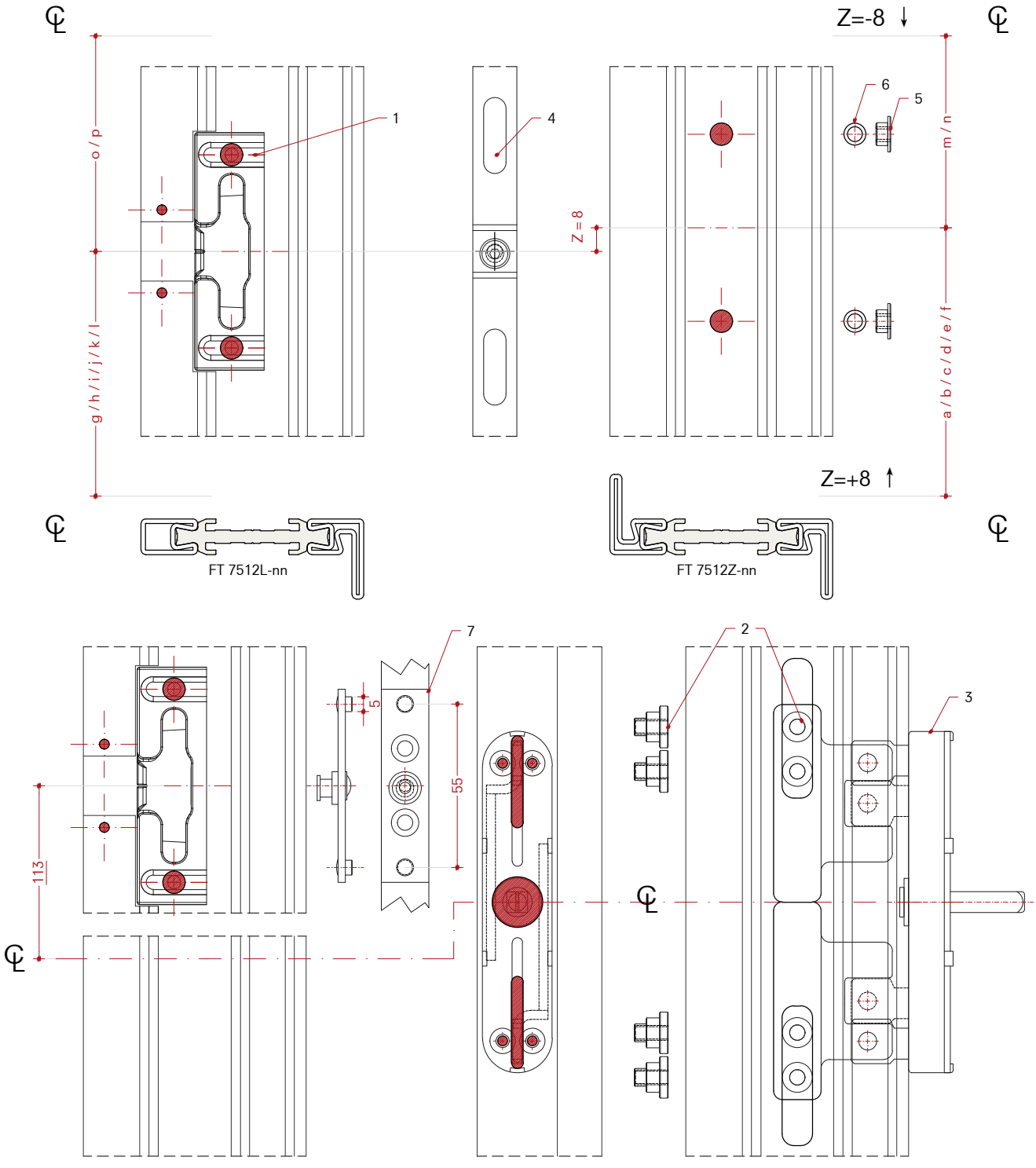


Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

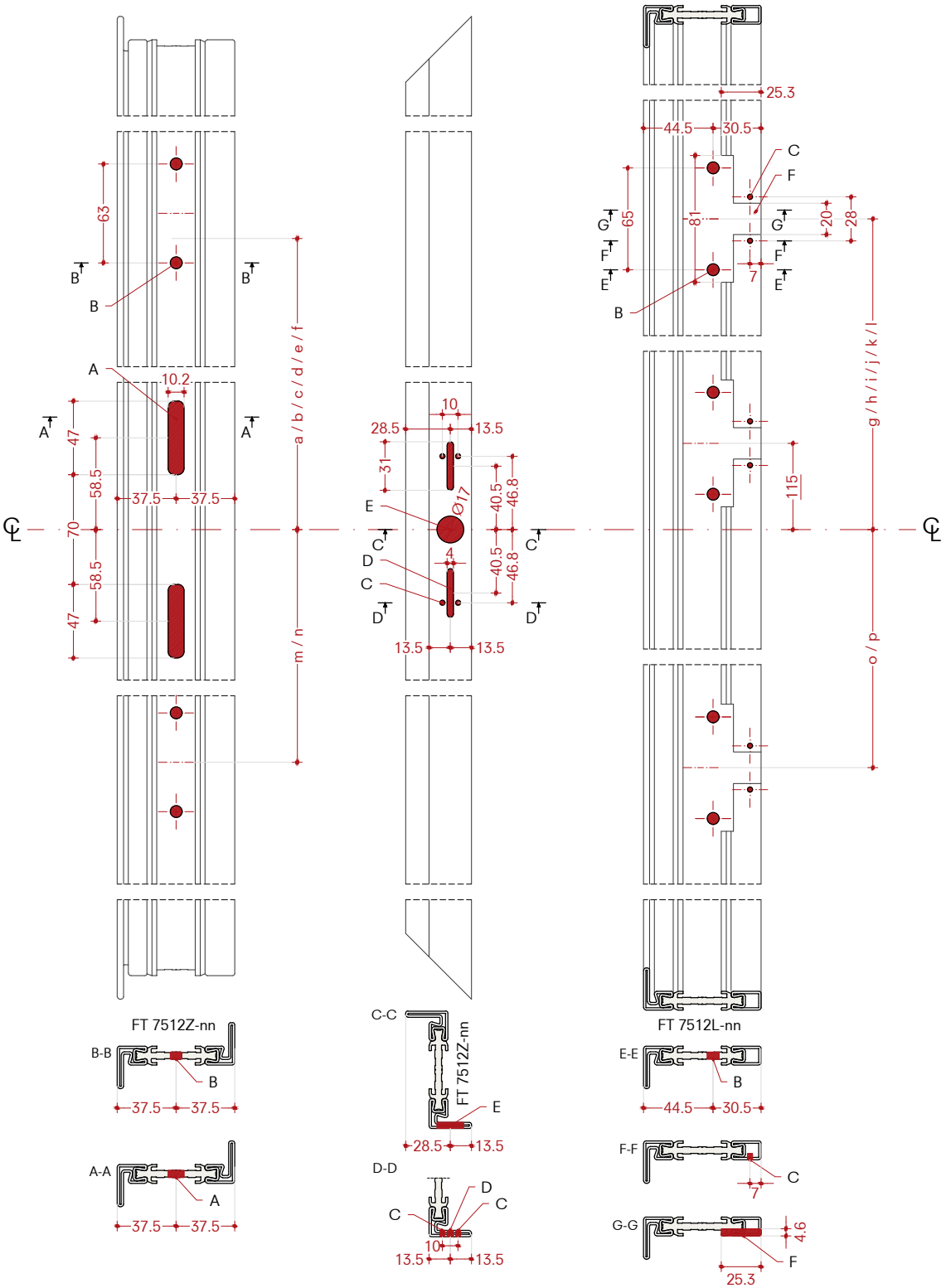
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open in - Left opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach innen öffnend - DIN links
Überlappende profile

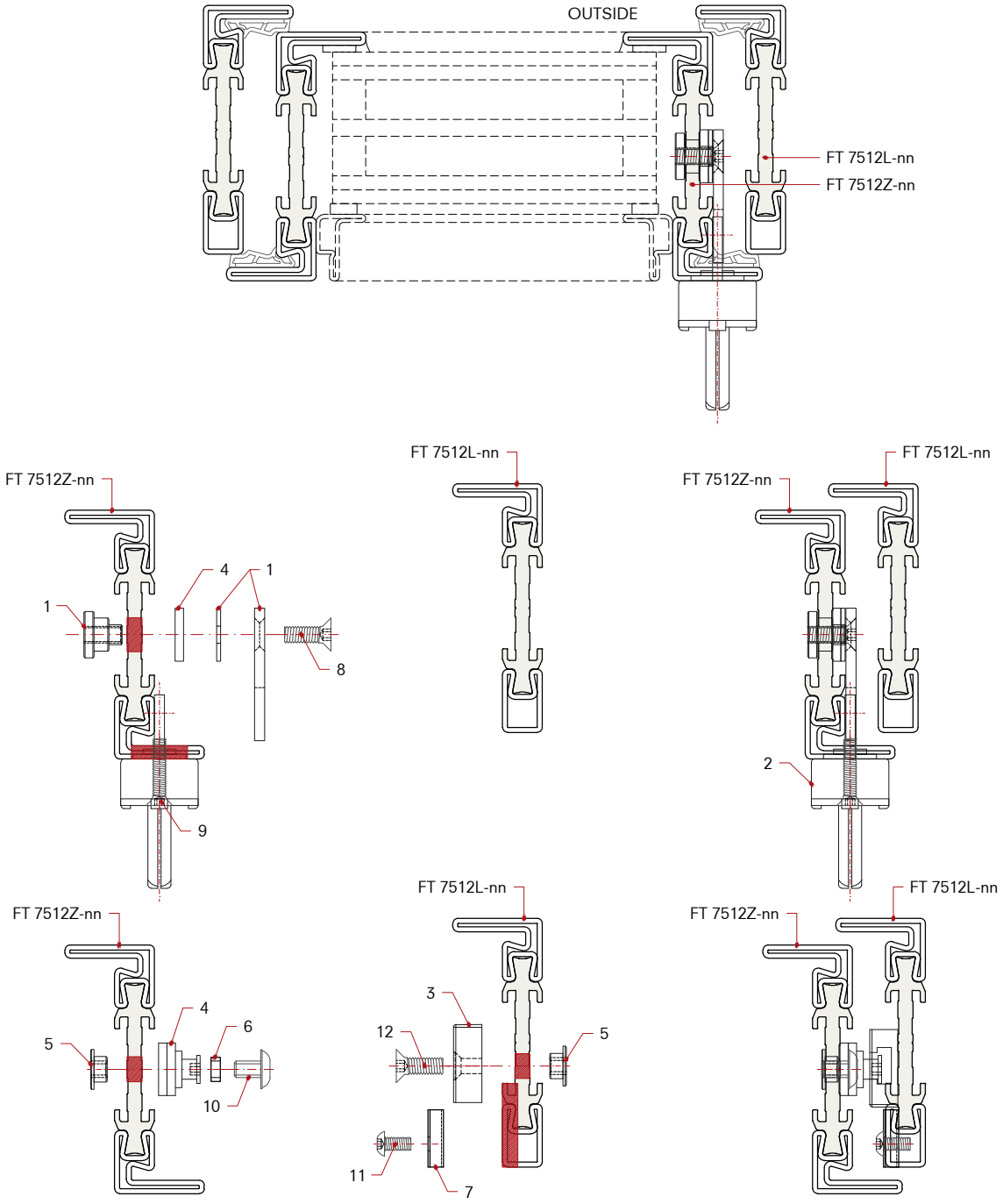
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture intérieure - Gauche
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 25.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 25.3x4.6x20 mm

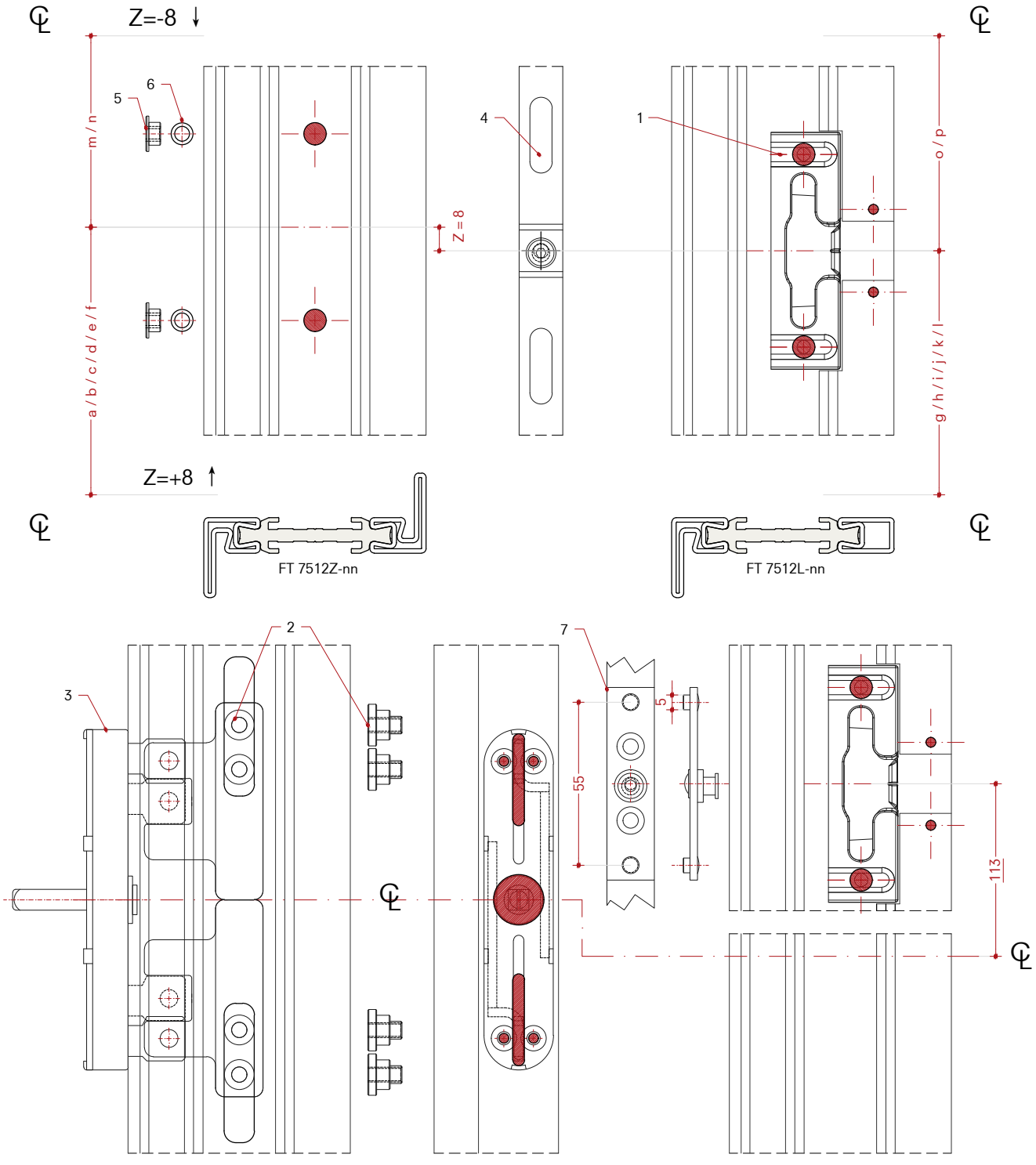
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 25.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

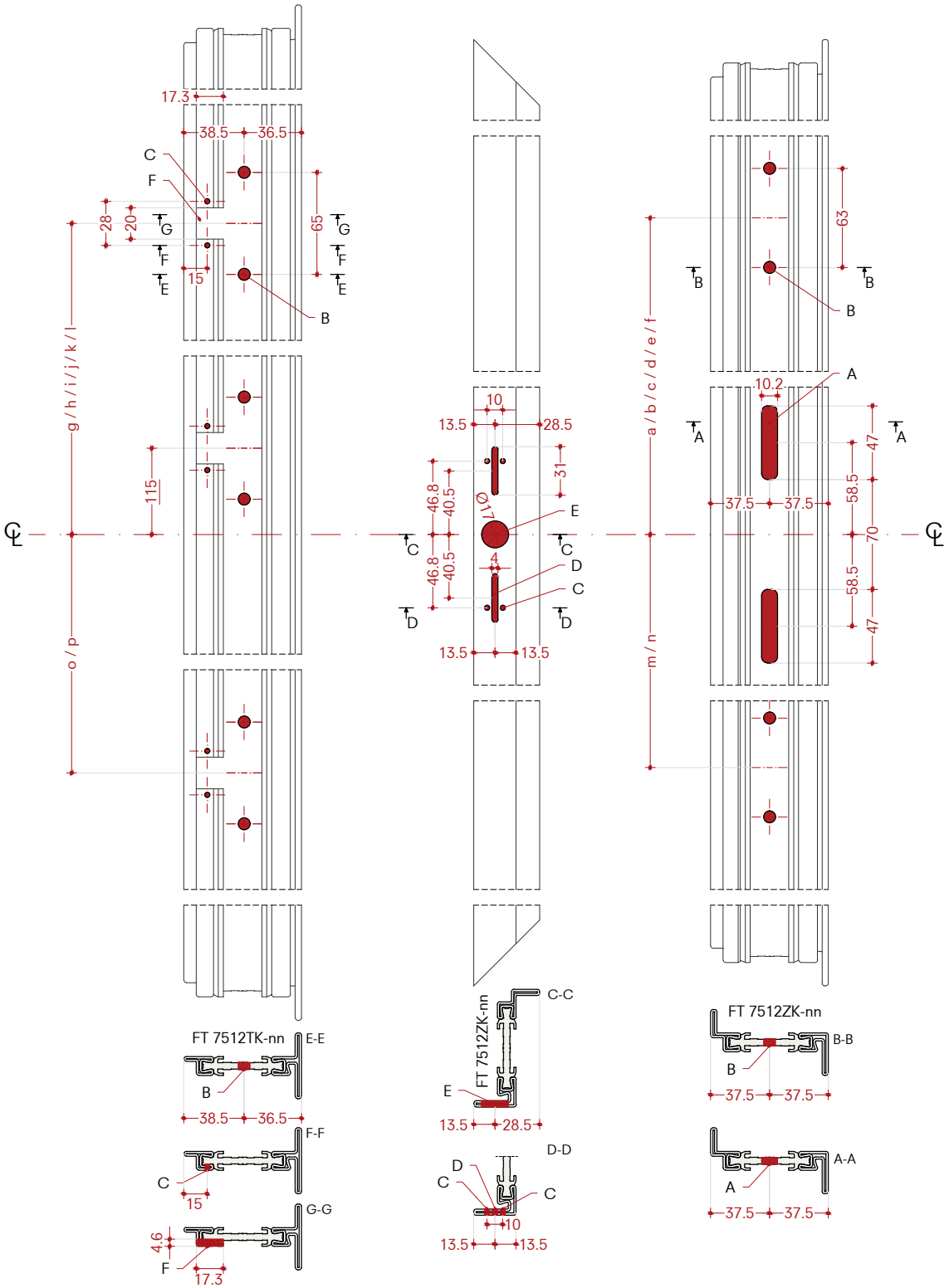
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open in - Right opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
Flächenbündige profile

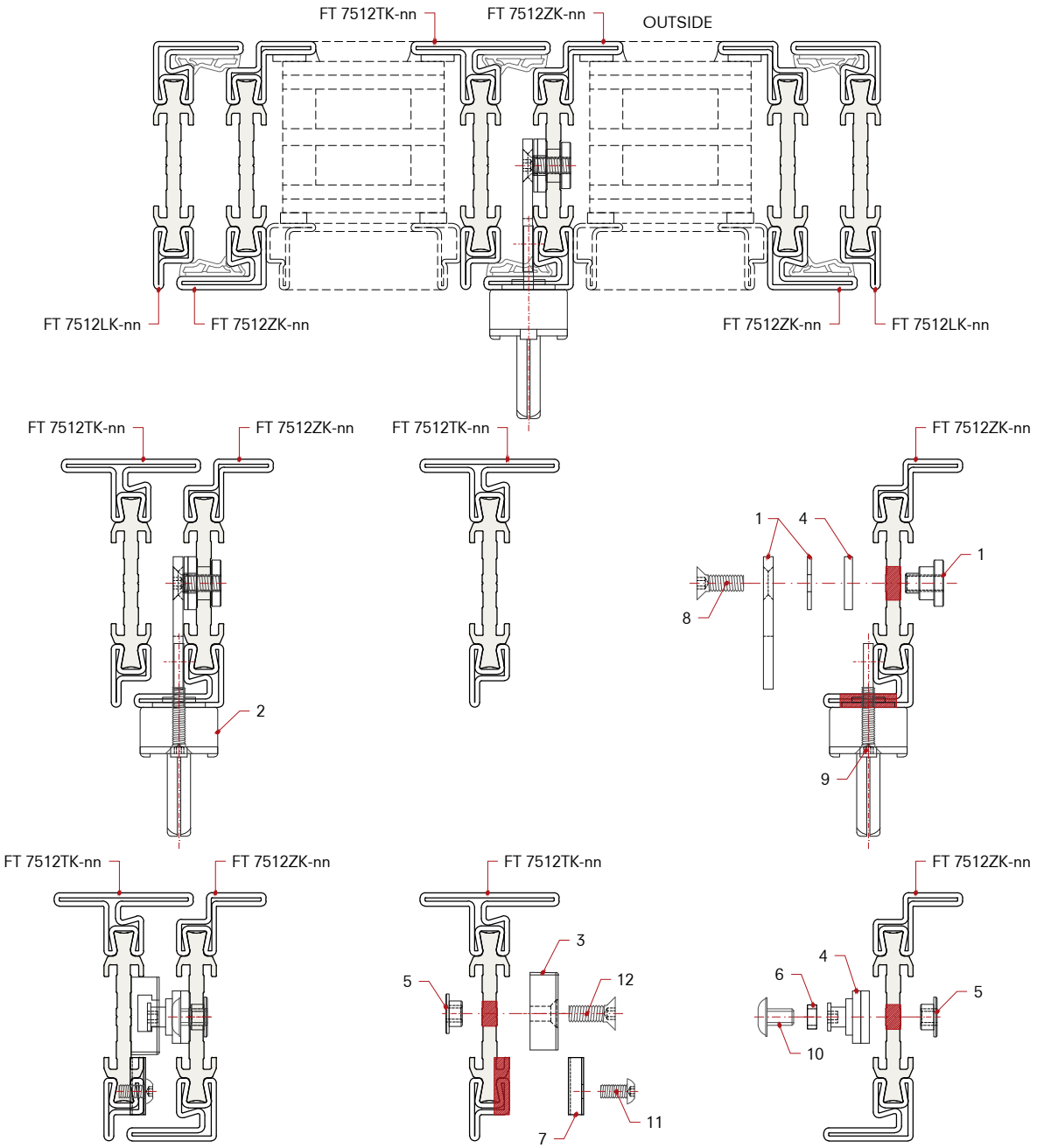
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture intérieure - Droite
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm

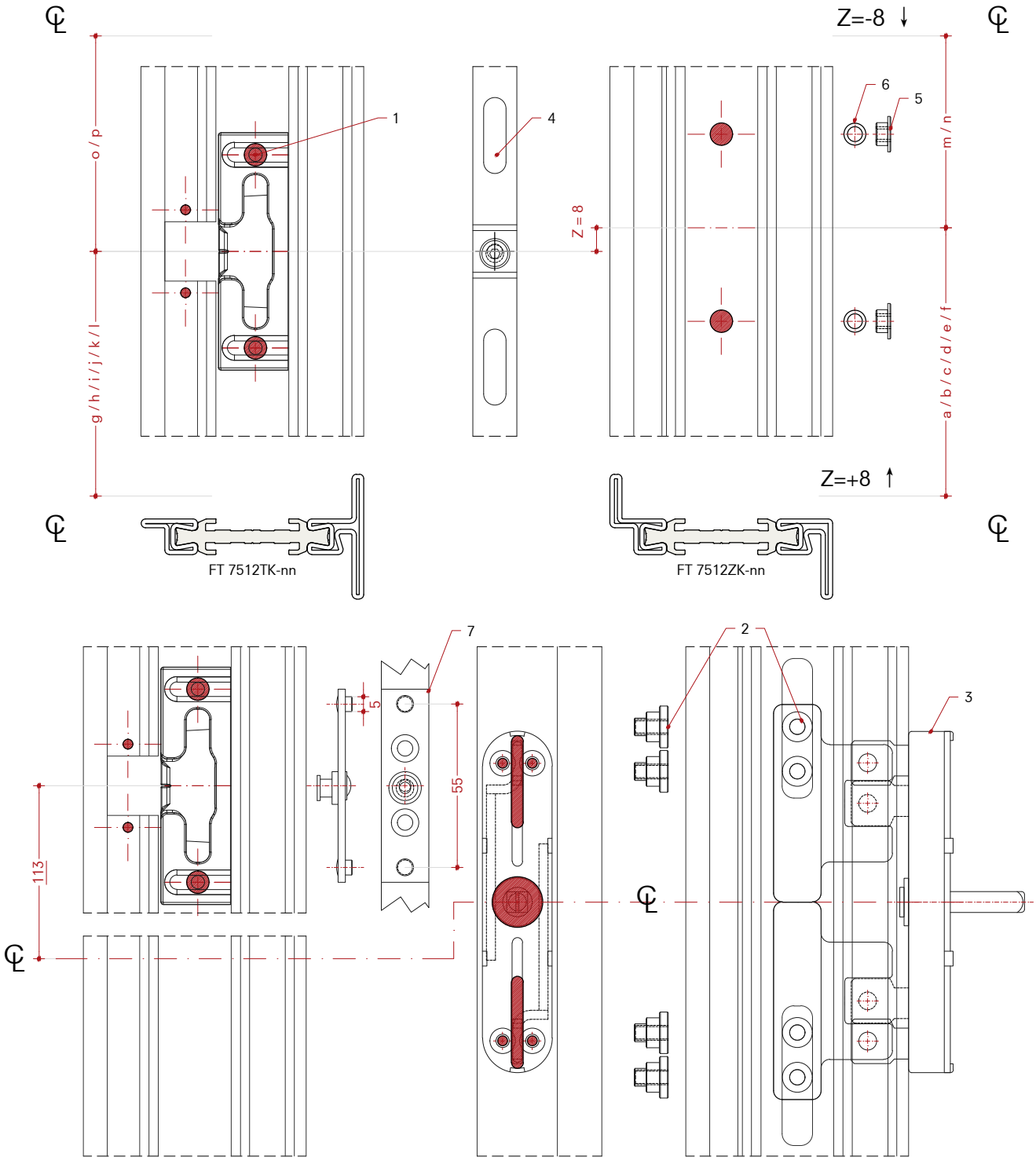
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

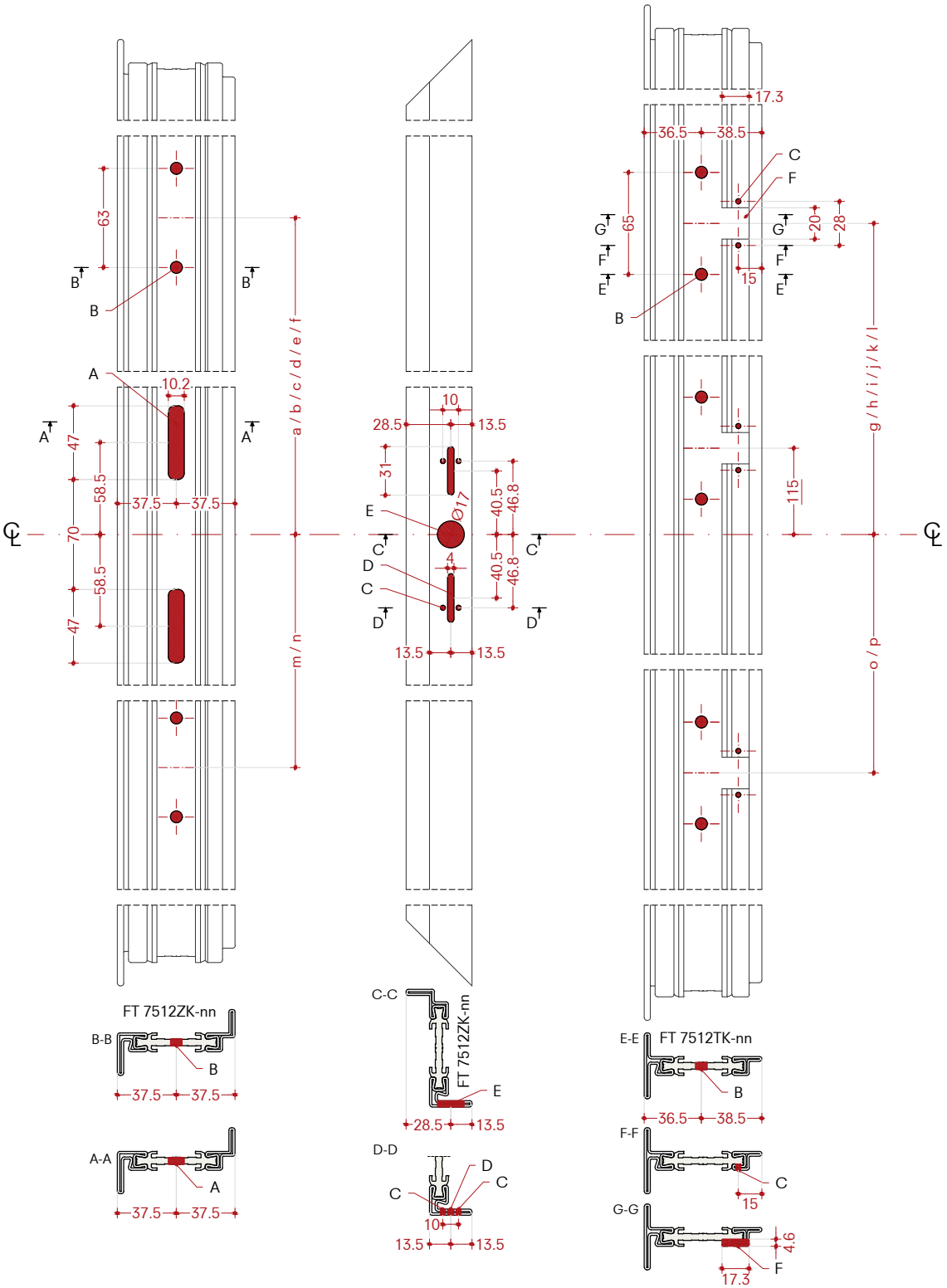
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open in - Left opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach innen öffnend - DIN links
Flächenbündige profile

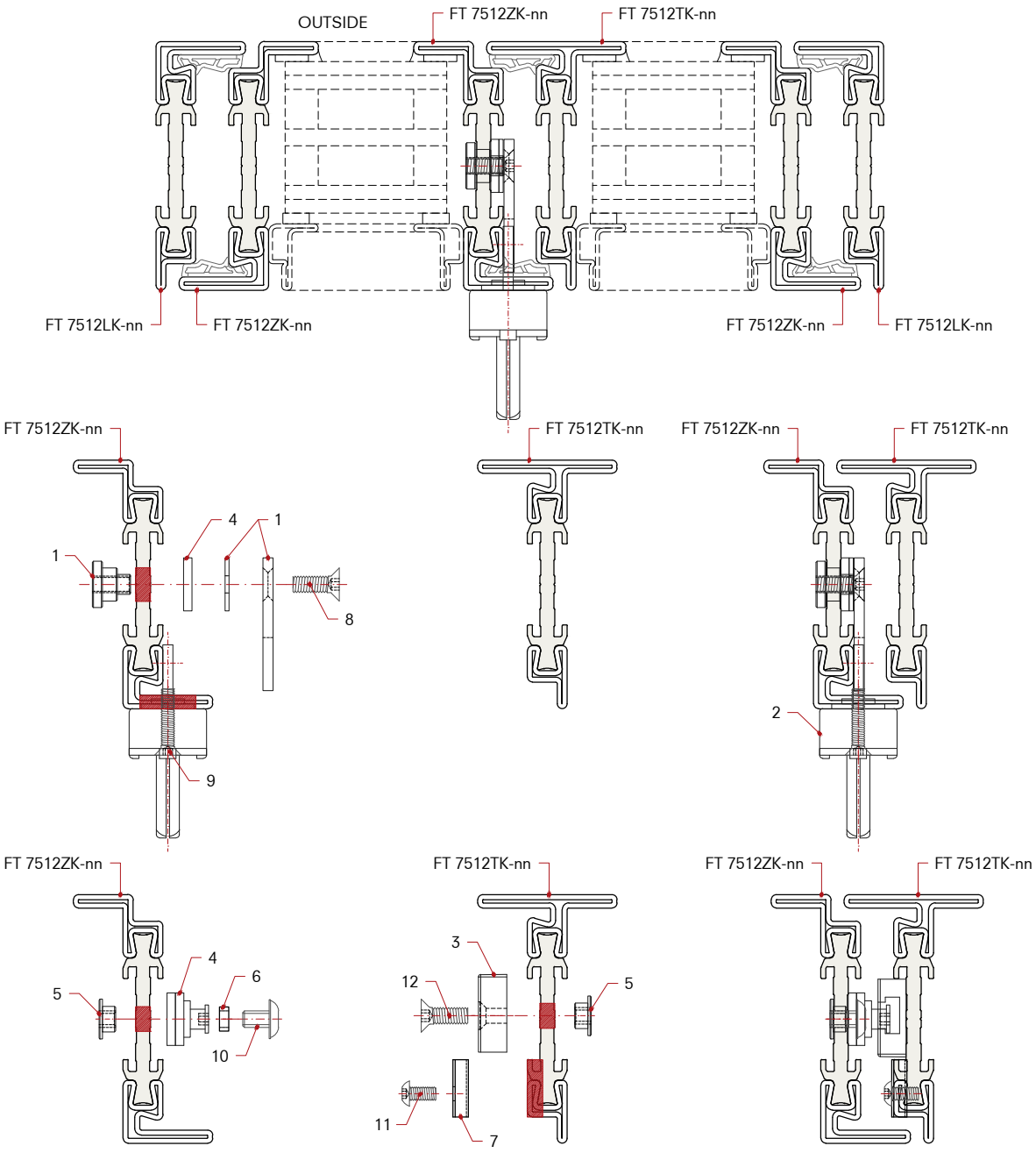
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture intérieure - Guache
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm

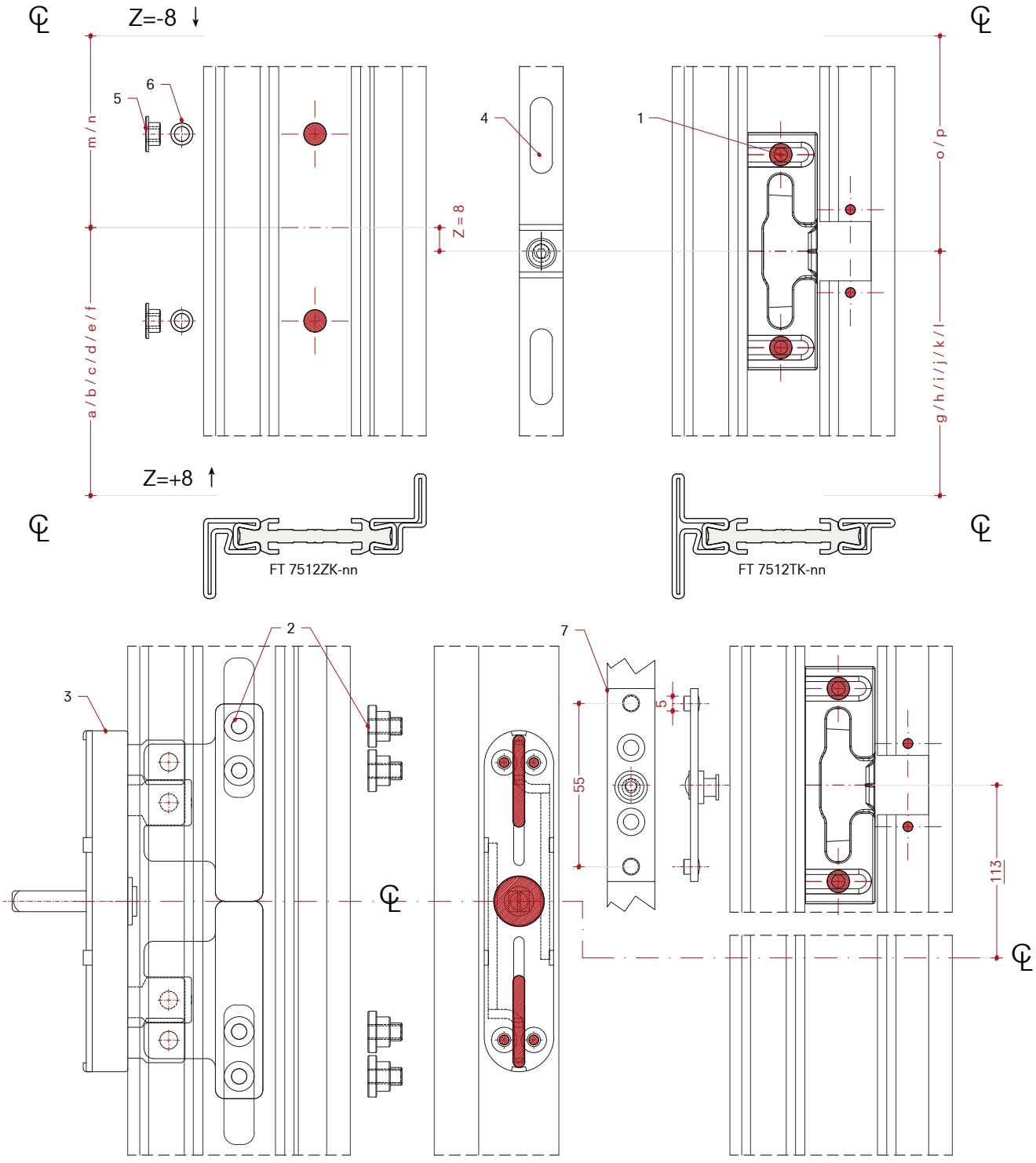
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

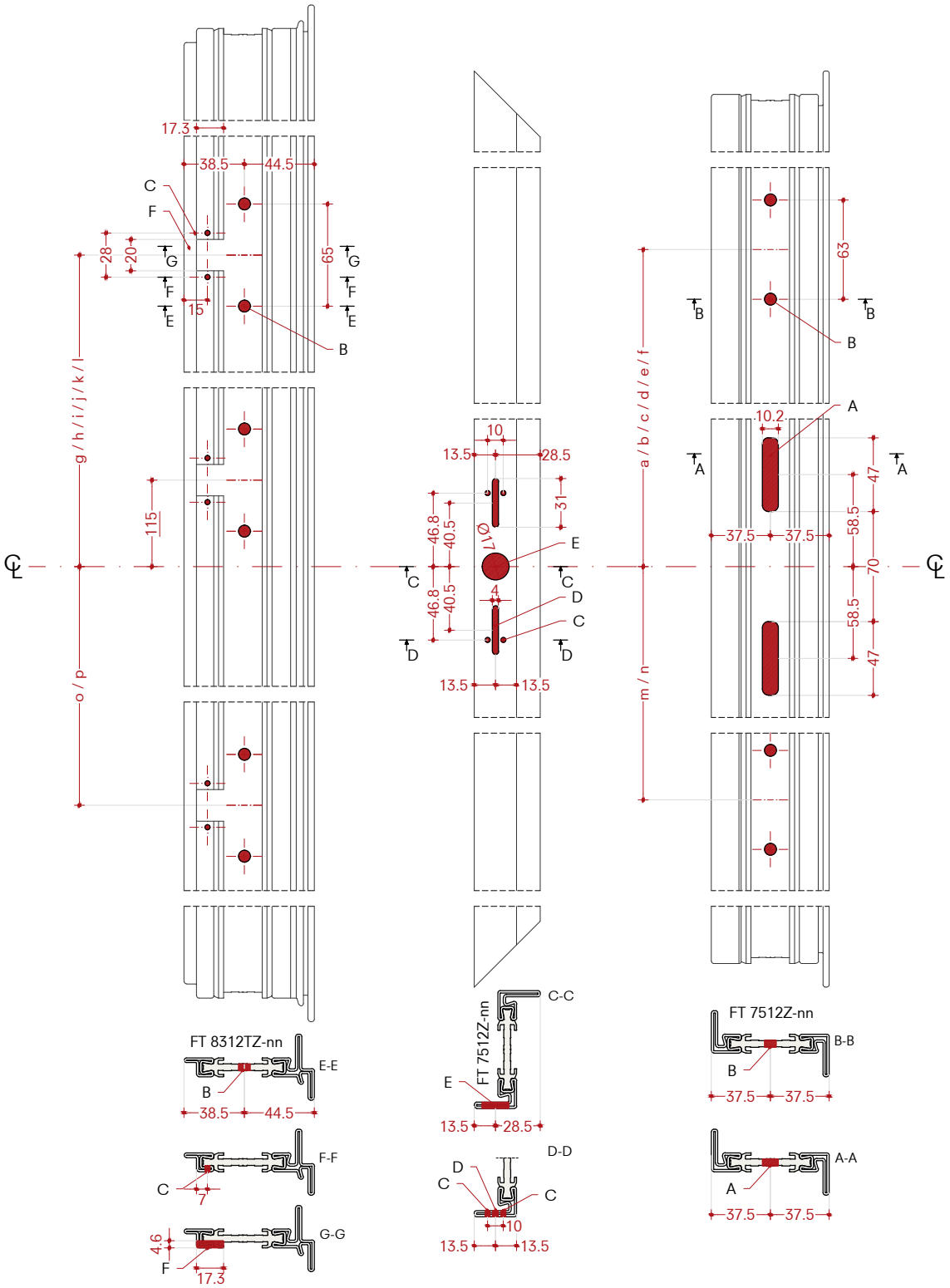
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open in - Right opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
Überlappende profile

Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture intérieure - Droite
Profilés superposés

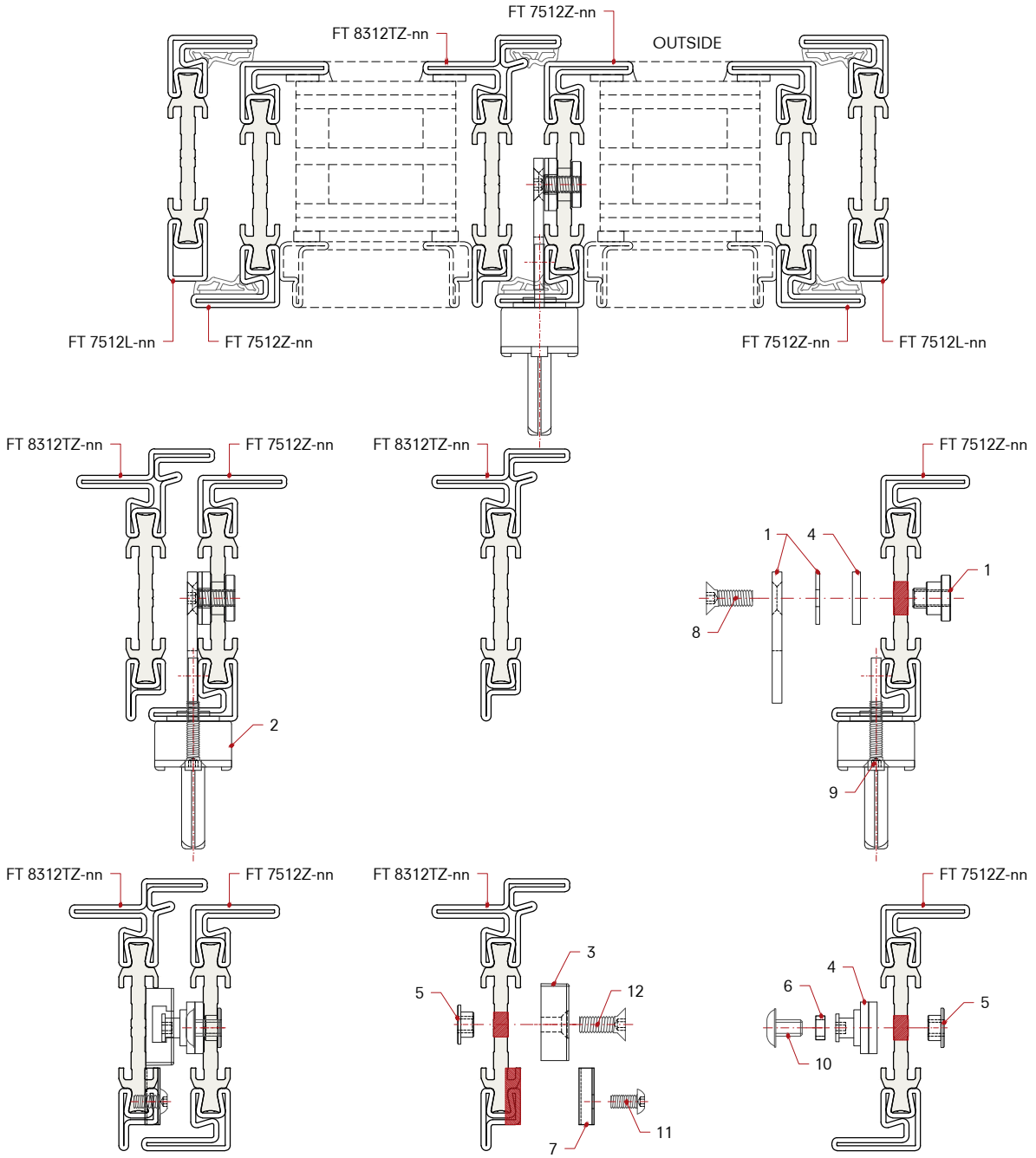


Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm

Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm

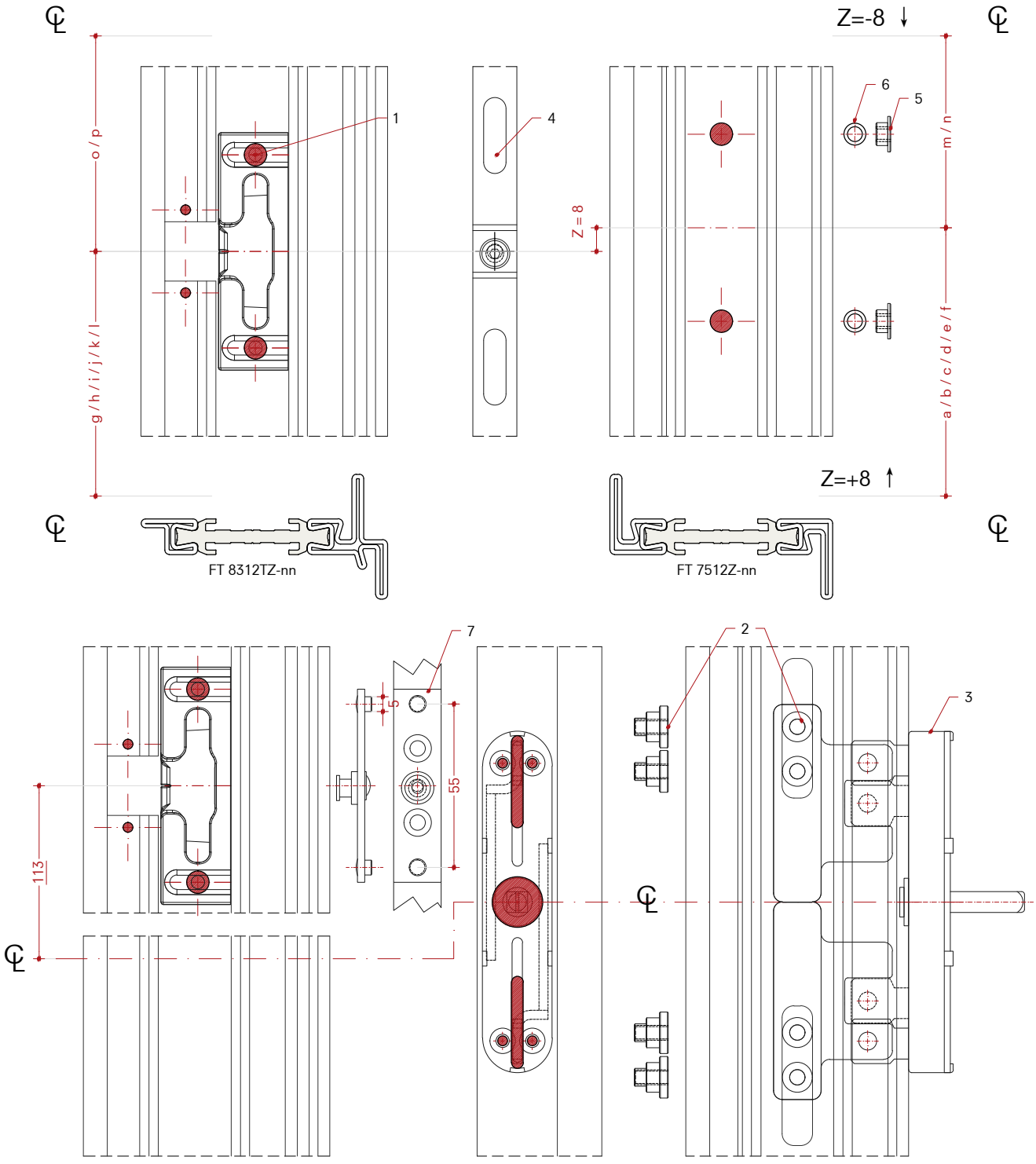
5.5 Multipoint steel rods installation, with Graz
Montage Multipoint Stahlstangen, mit Graz
Montage Multipoint tiges de acier, avec Graz



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

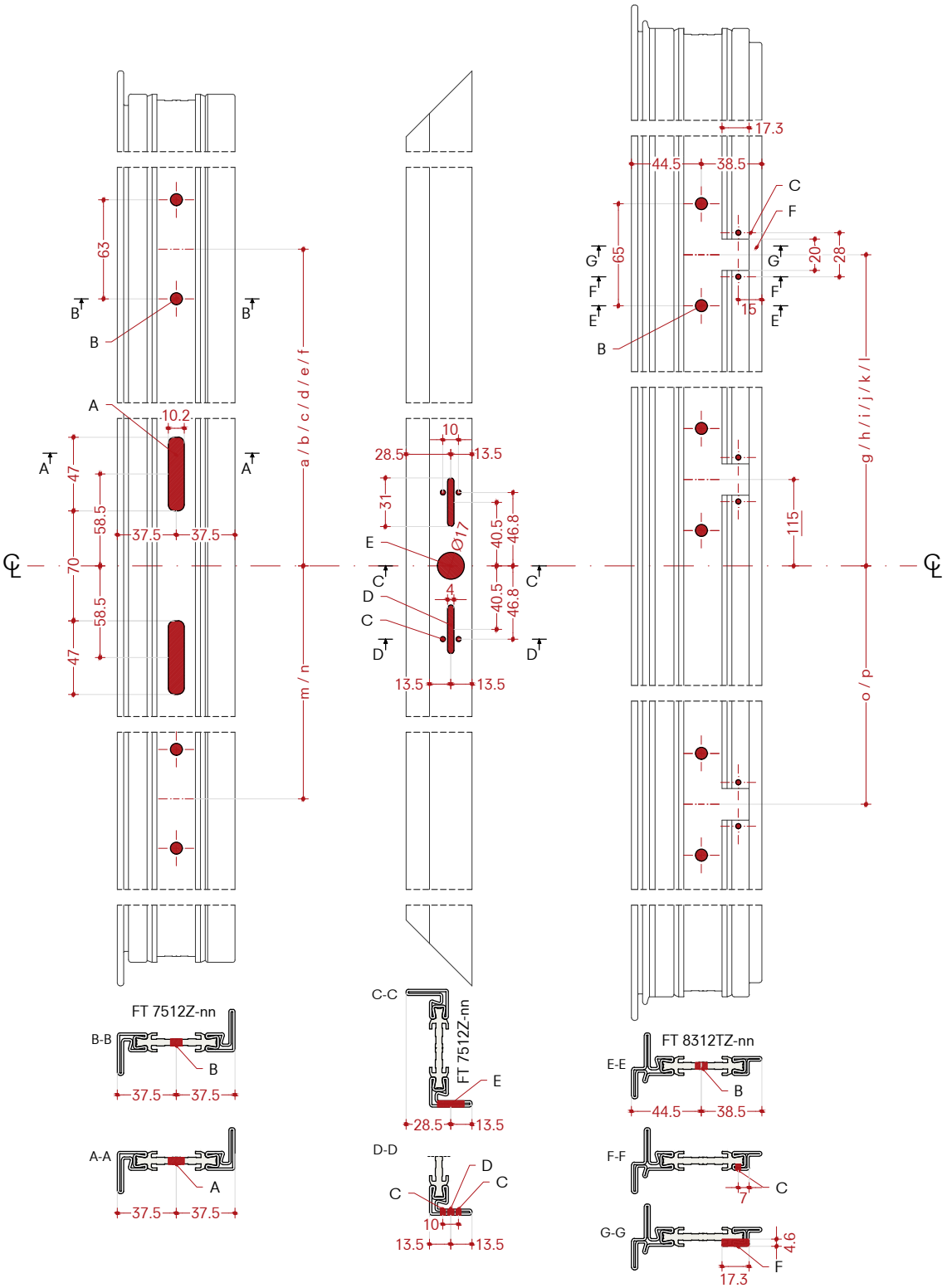
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open in - Left opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach innen öffnend - DIN links
Überlappende profile

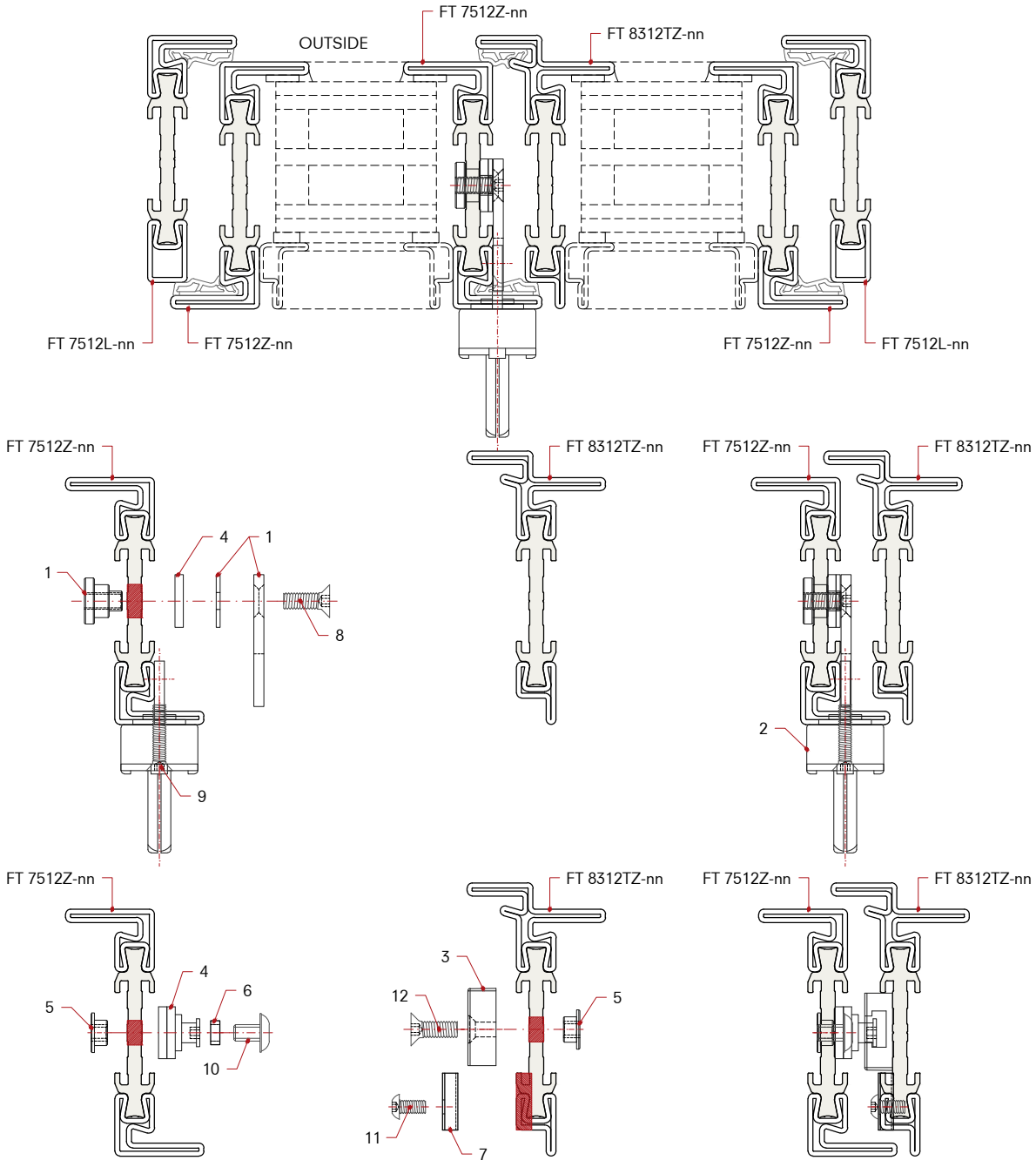
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture intérieure - Gauche
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm

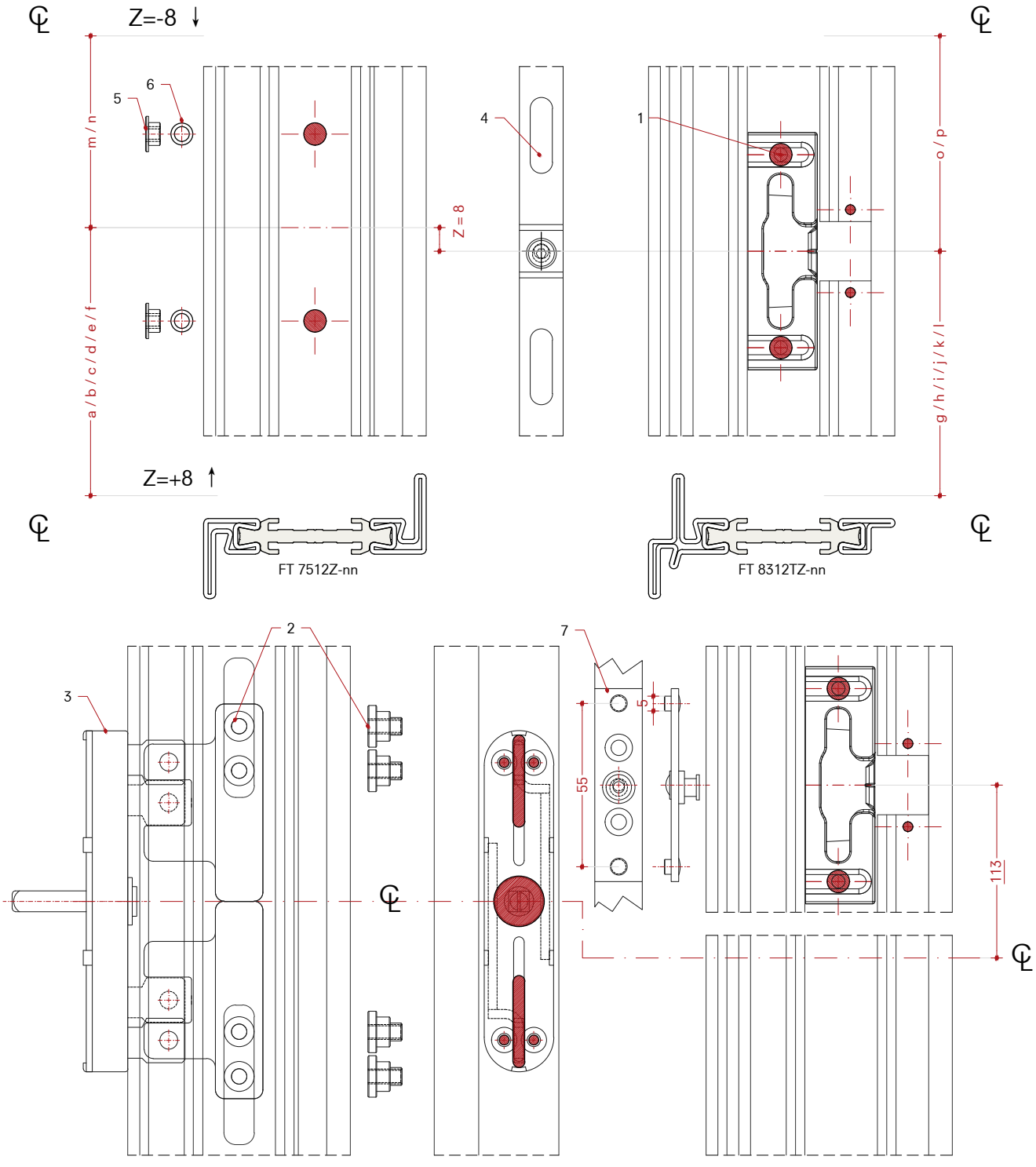
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

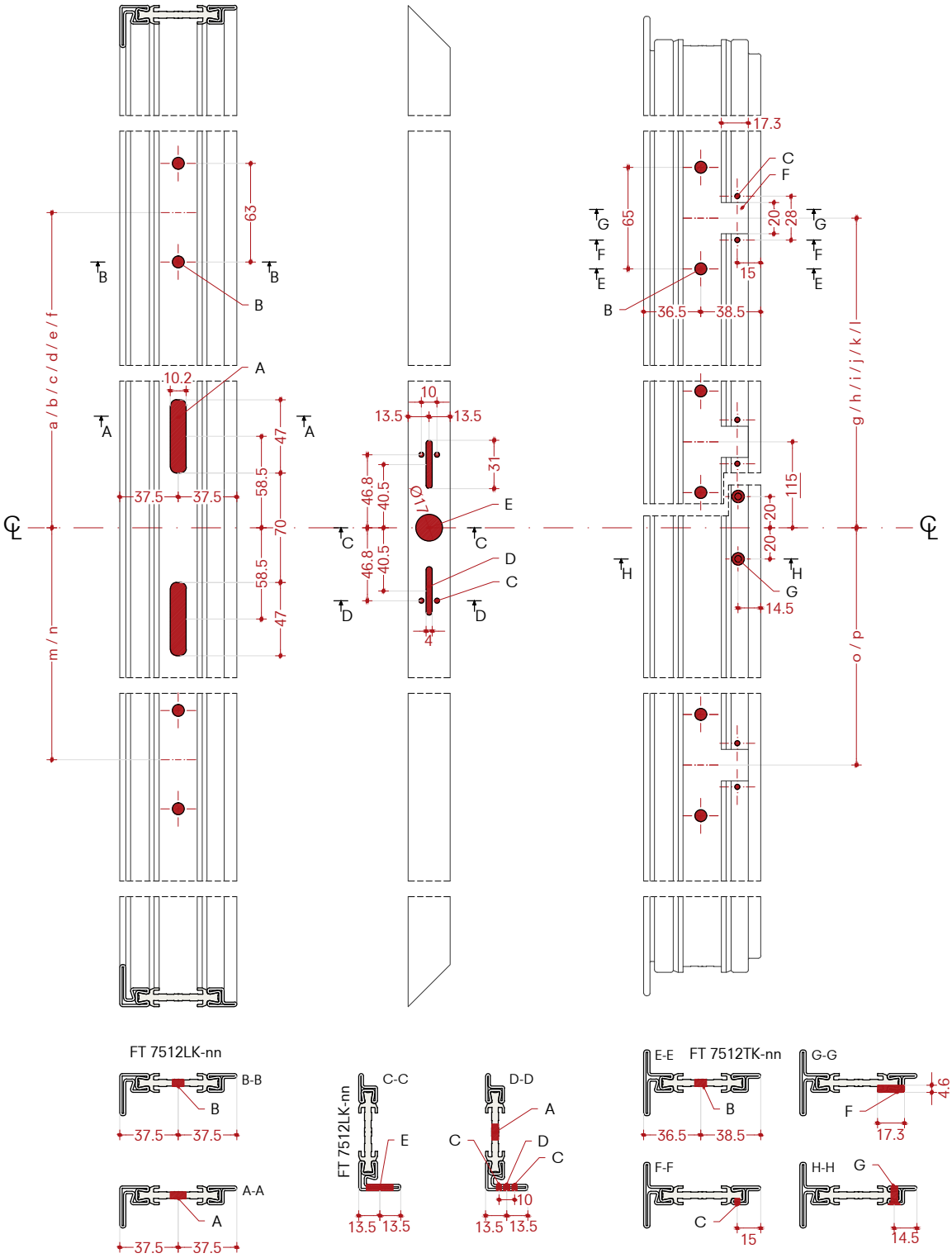
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open out - Right opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach außen öffnend - DIN rechts
Flächenbündige profile

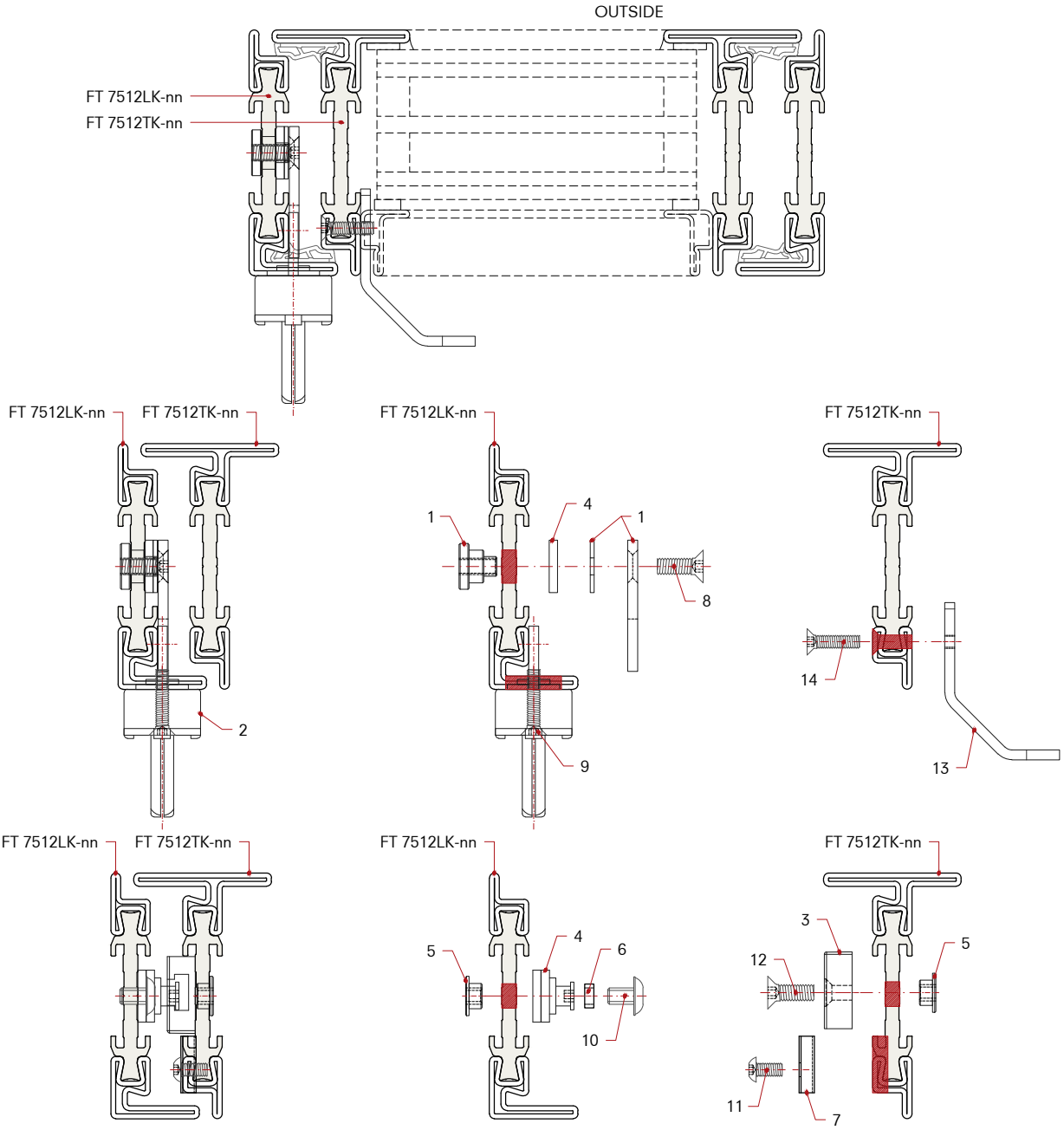
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture extérieure - Droite
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

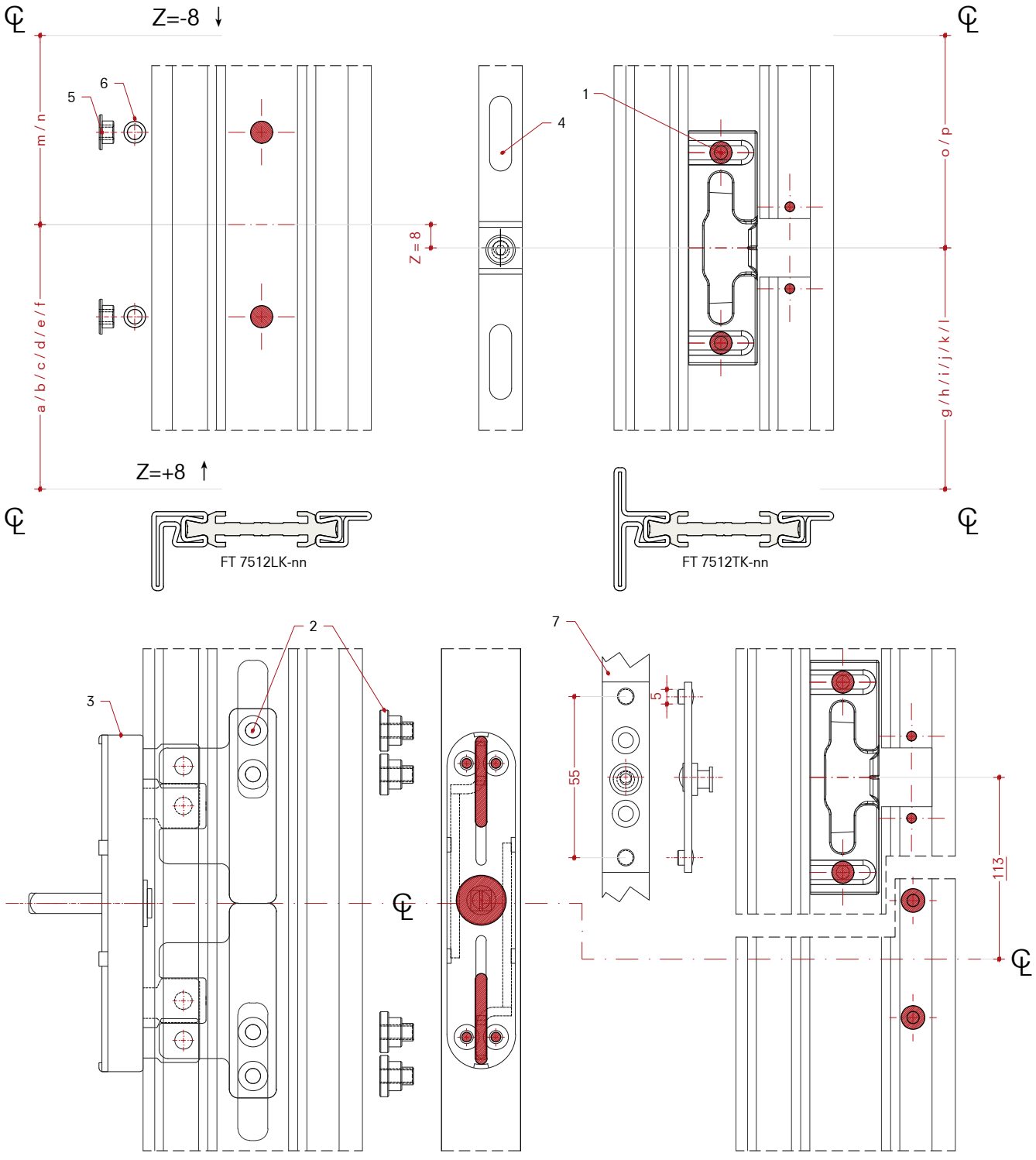
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

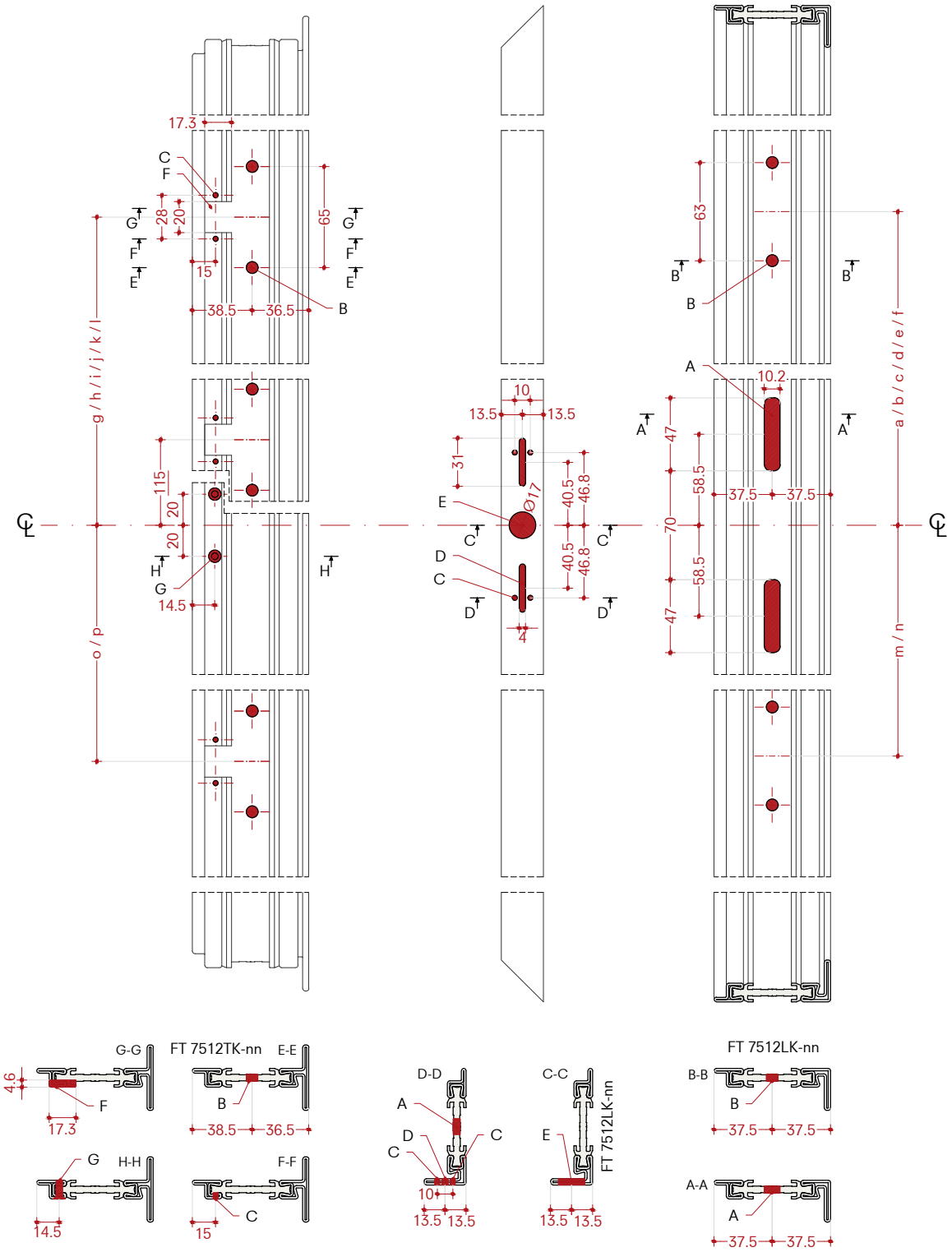
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open out - Left opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach außen öffnend - DIN links
Flächenbündige profile

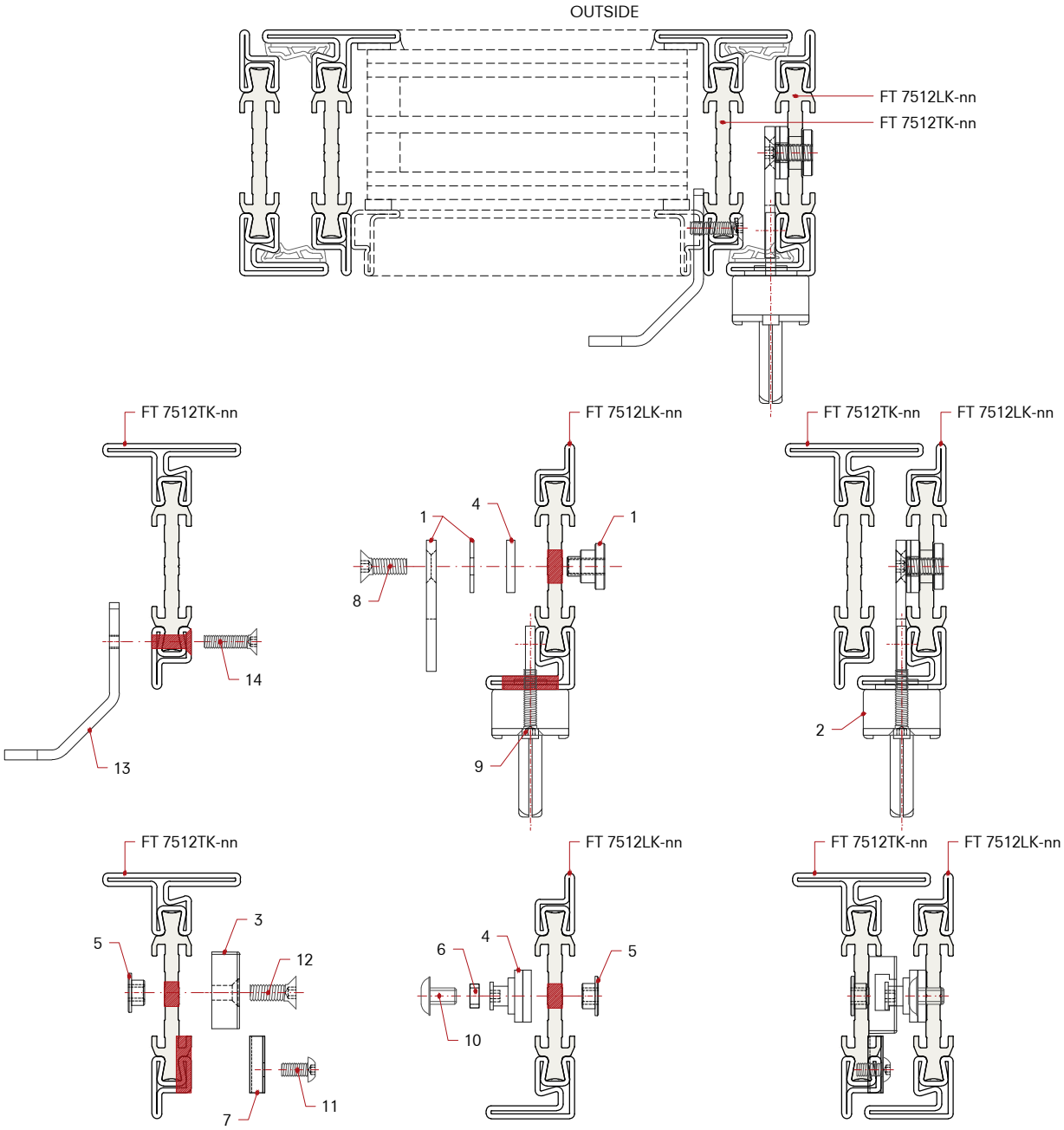
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture extérieure - Gauche
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

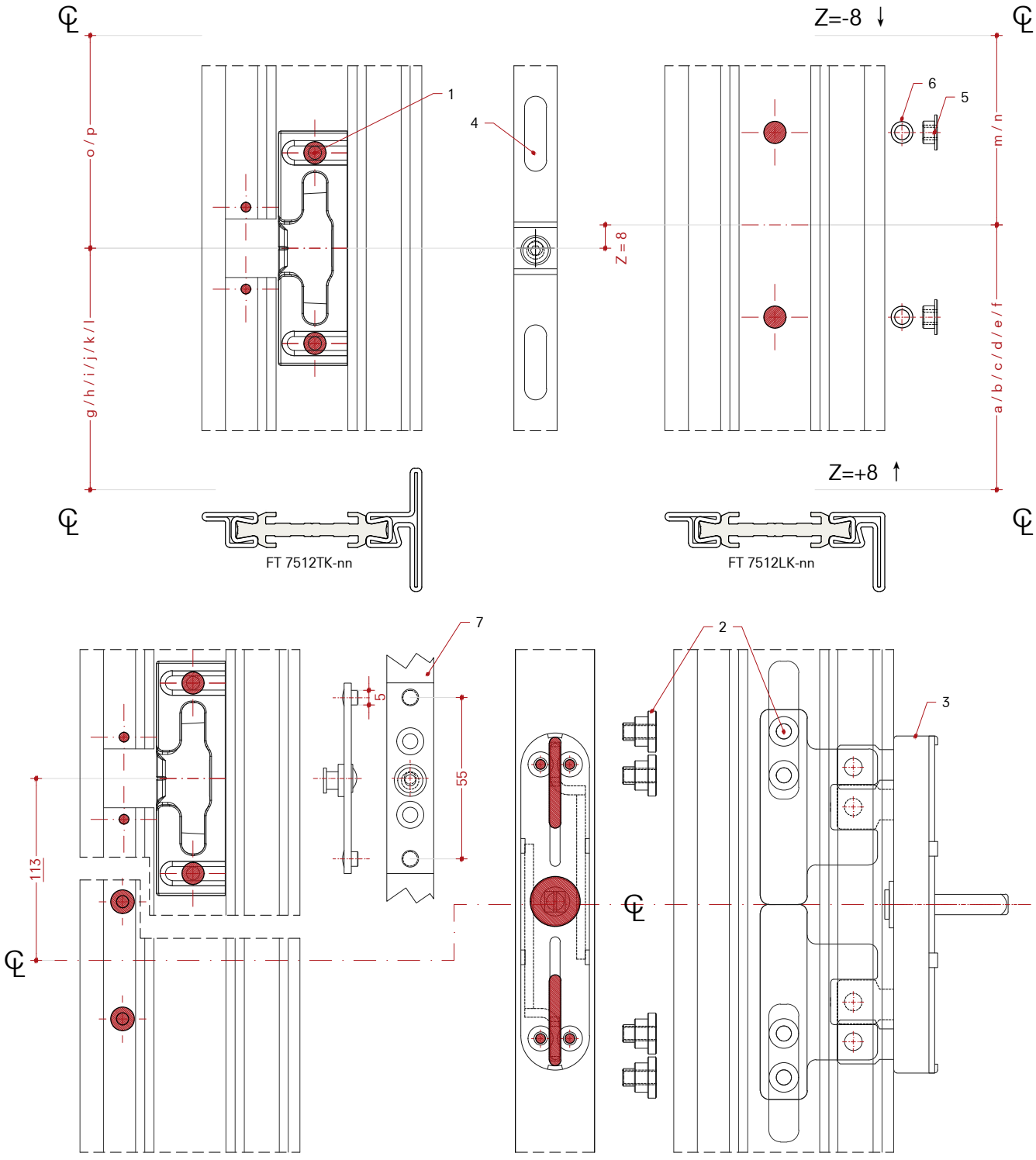
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

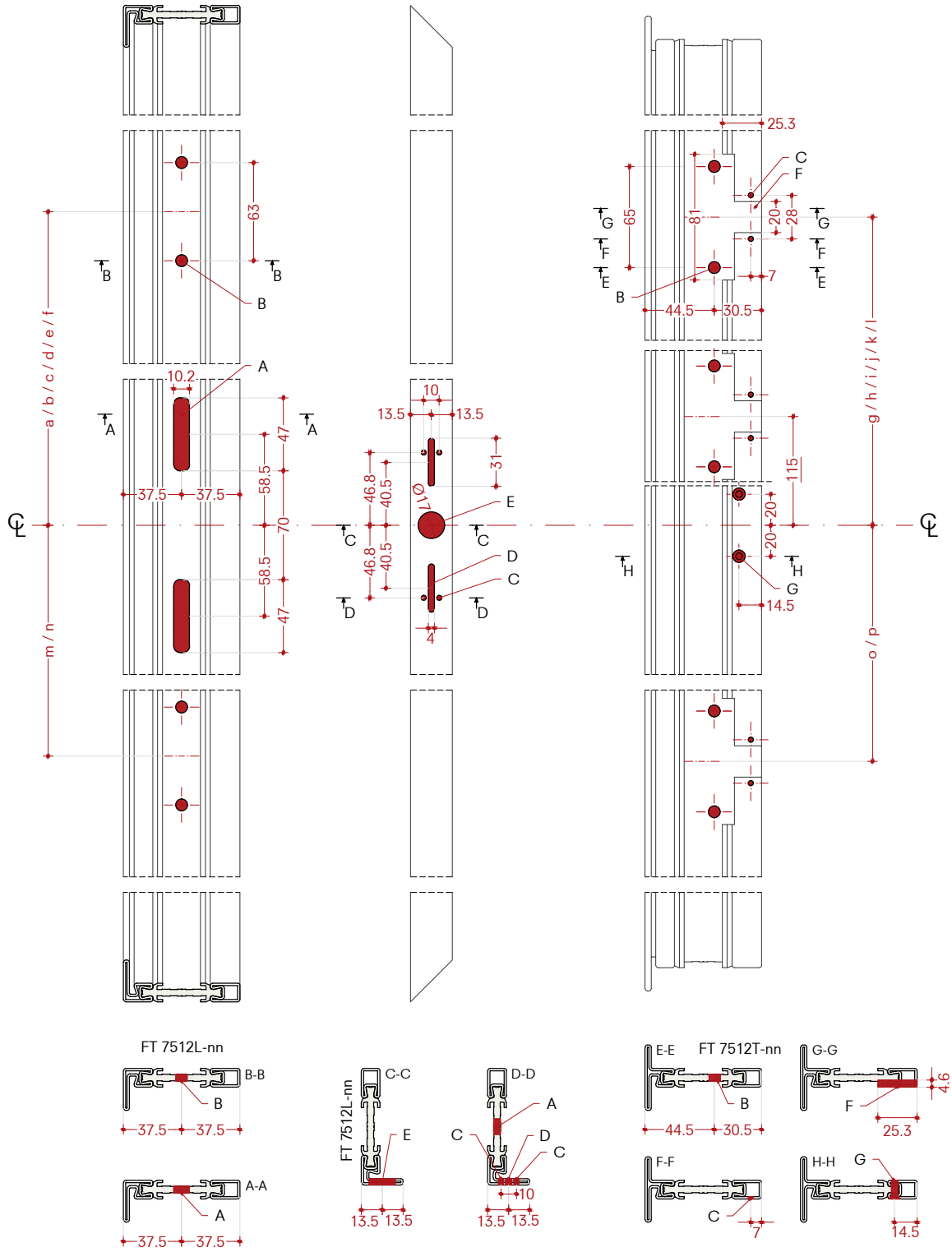
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open out - Right opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach außen öffnend - DIN rechts
Überlappende profile

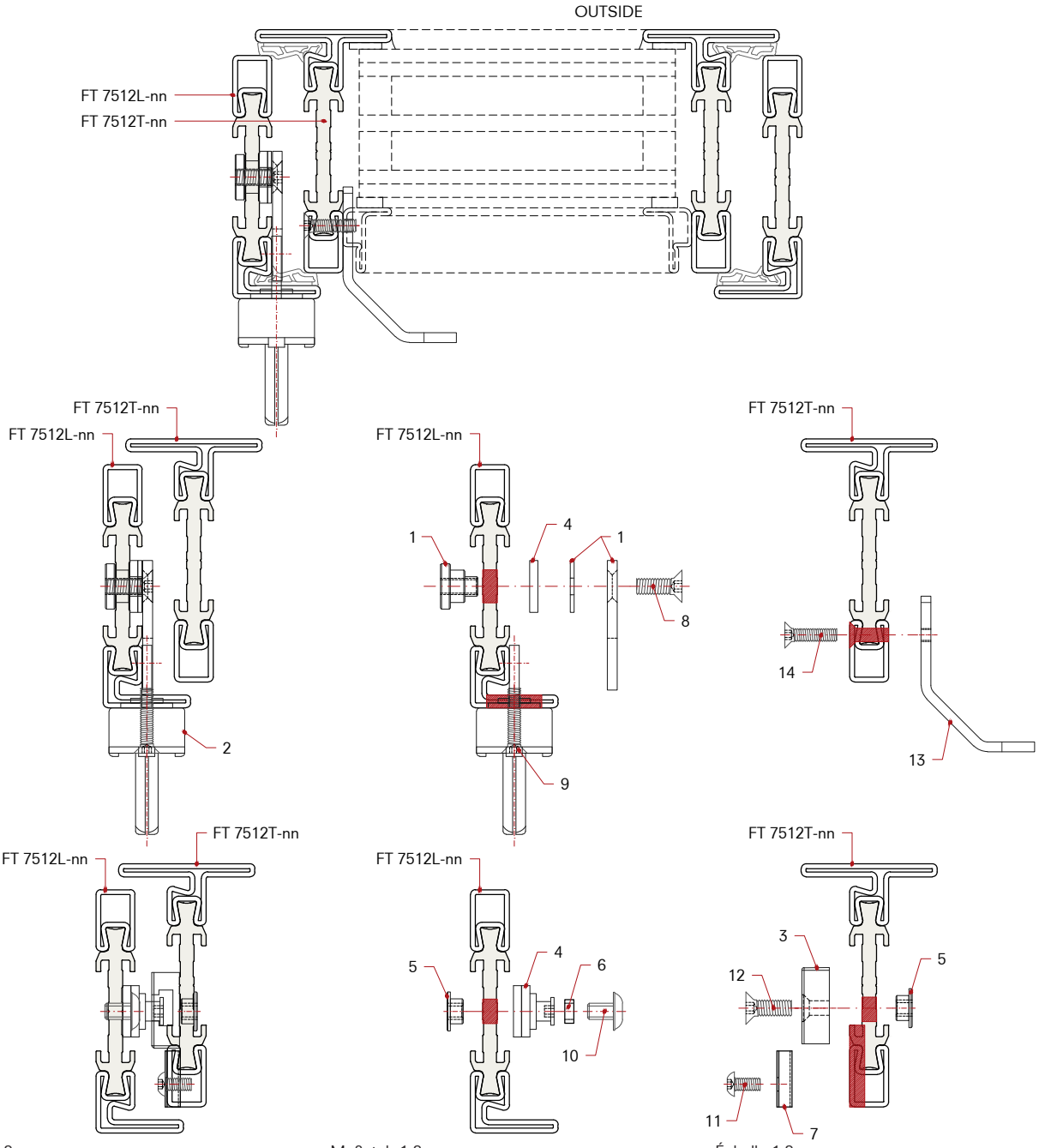
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture extérieure - Droite
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 25.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 25.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

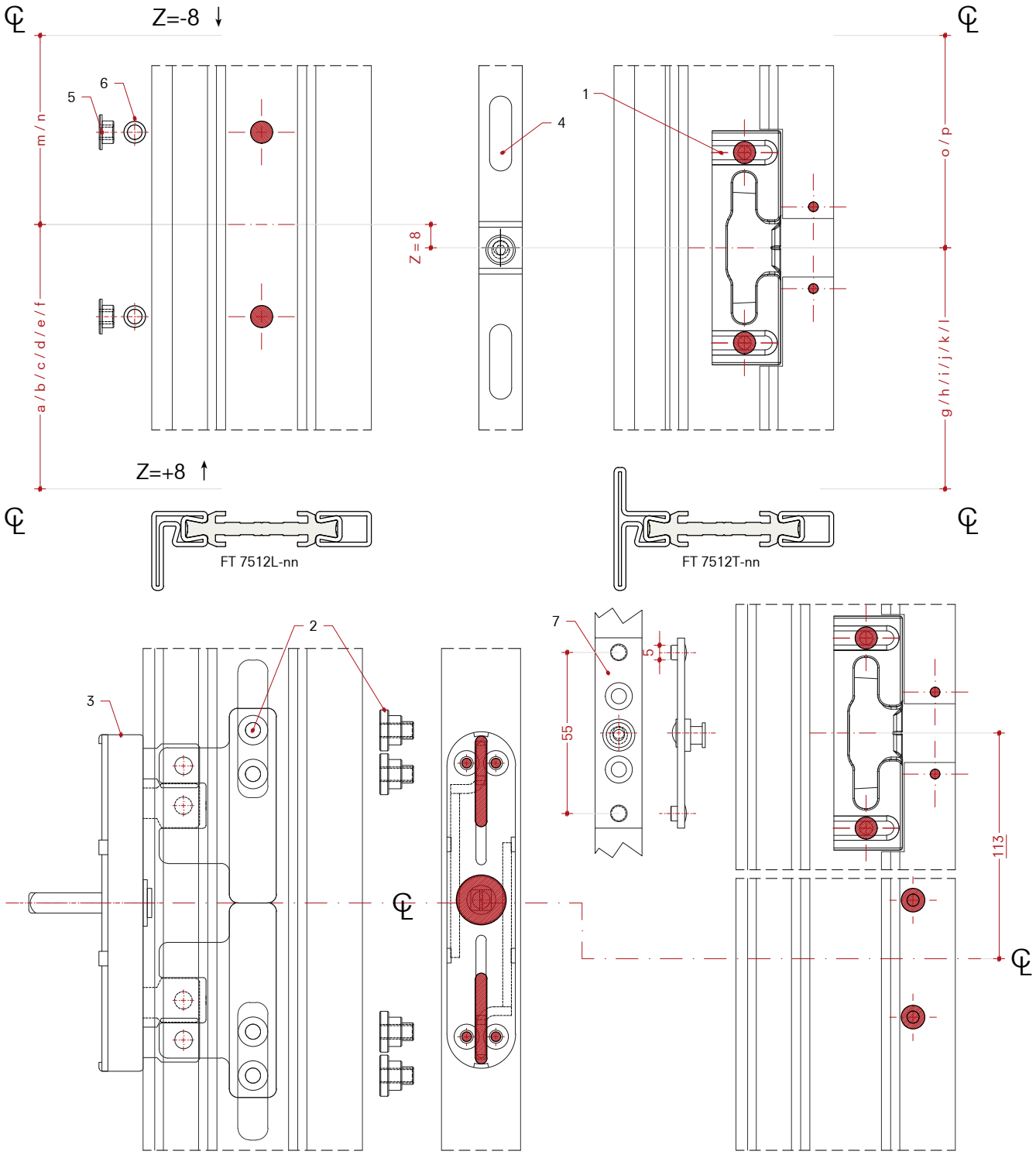
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 25.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

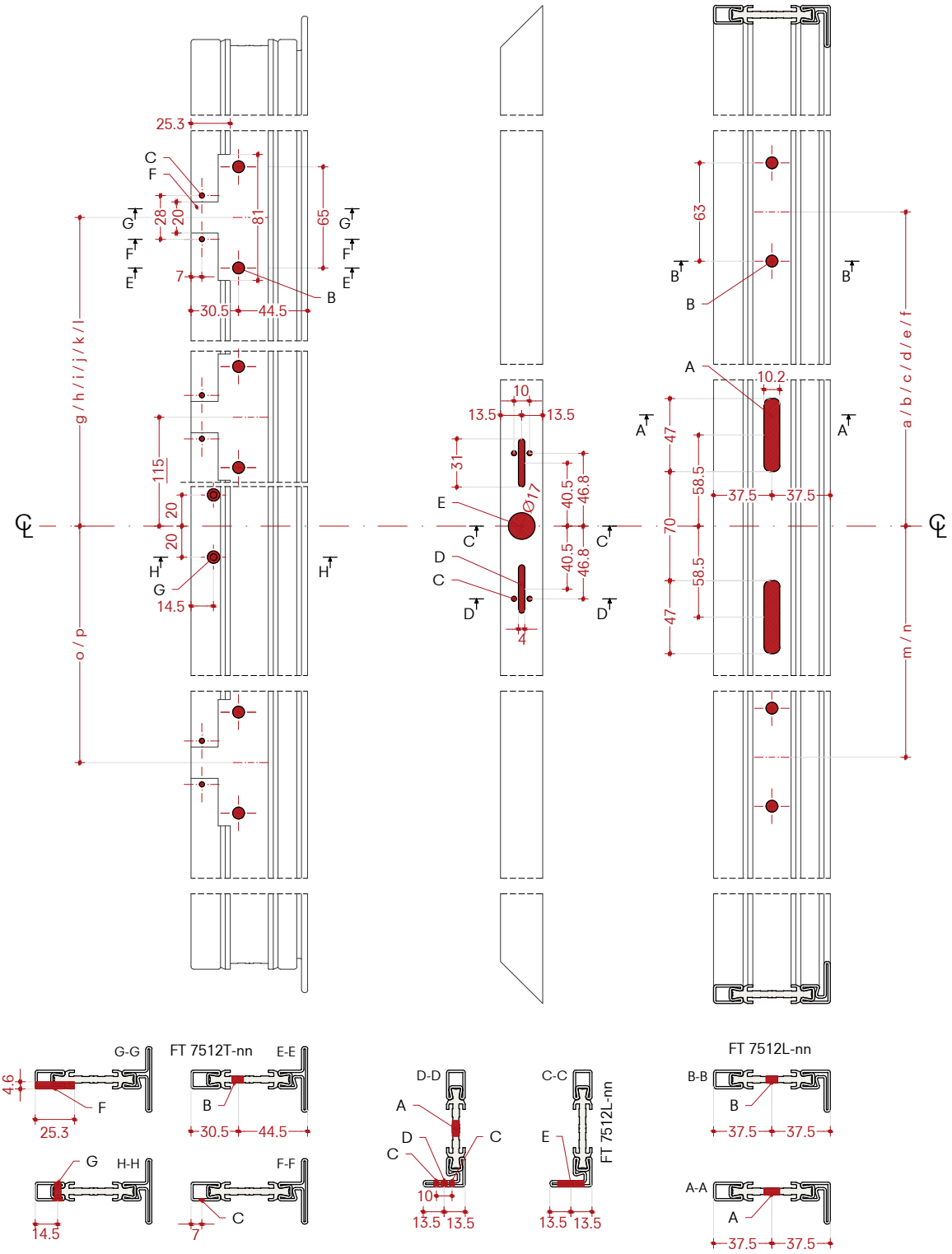
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Single leaf window
Open out - Left opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Einflüglige Fenster
Nach außen öffnend - DIN links
Überlappende profile

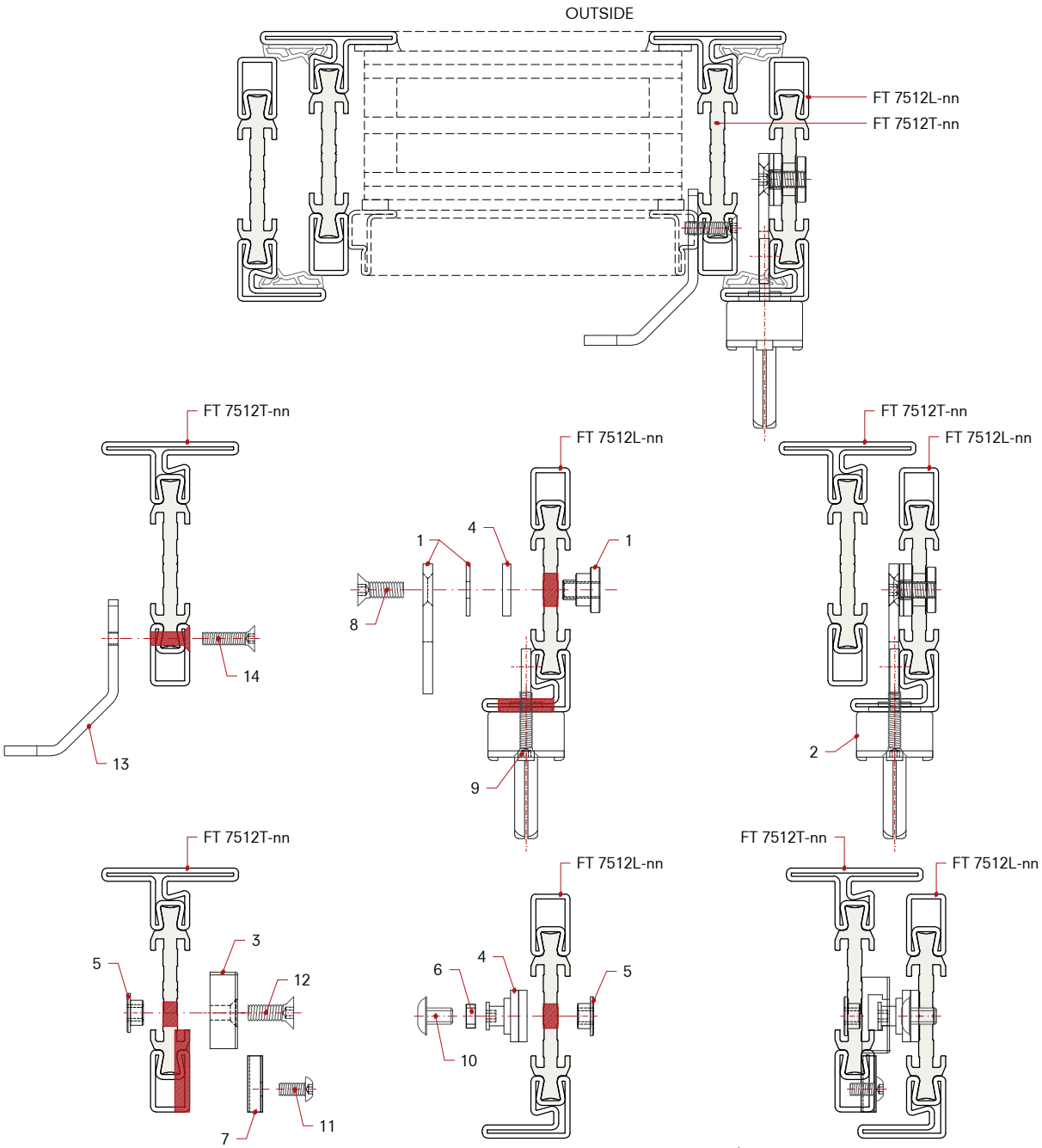
Montage Multipoint tiges de acier, avec Graz
Fenêtre à un vantail
Ouverture extérieure - Gauche
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 25.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 25.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

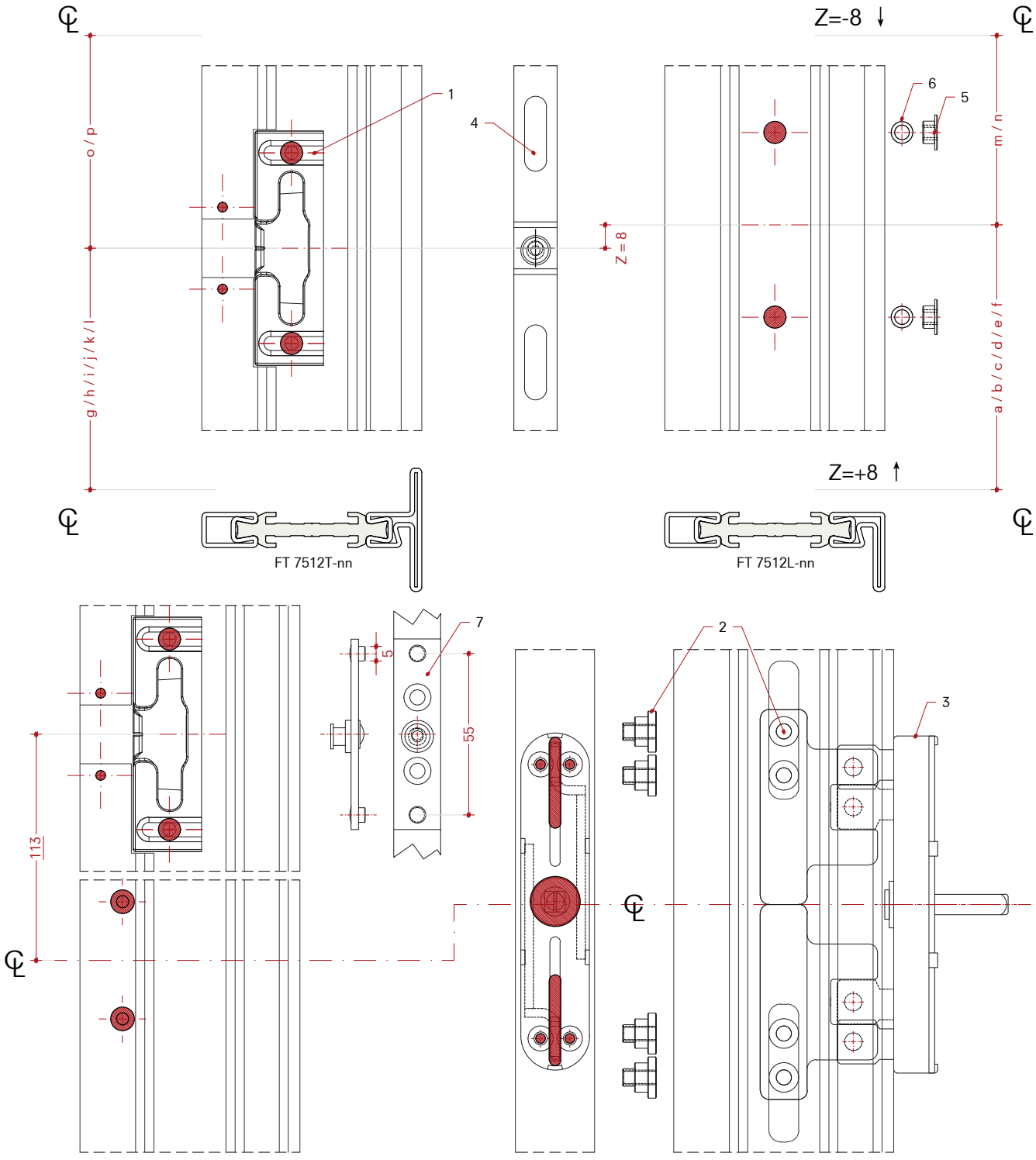
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 25.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

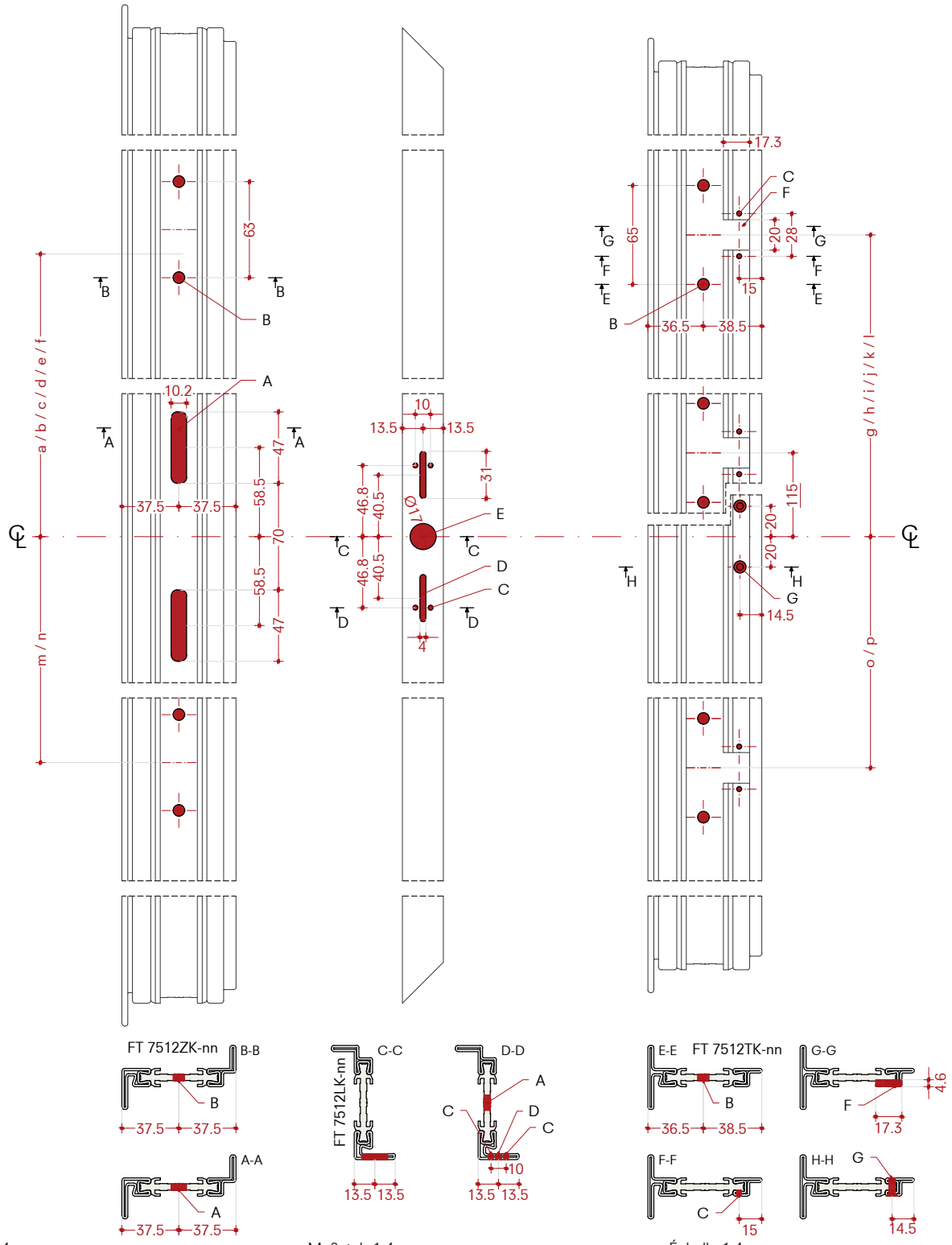
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open out - Right opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
Flächenbündige profile

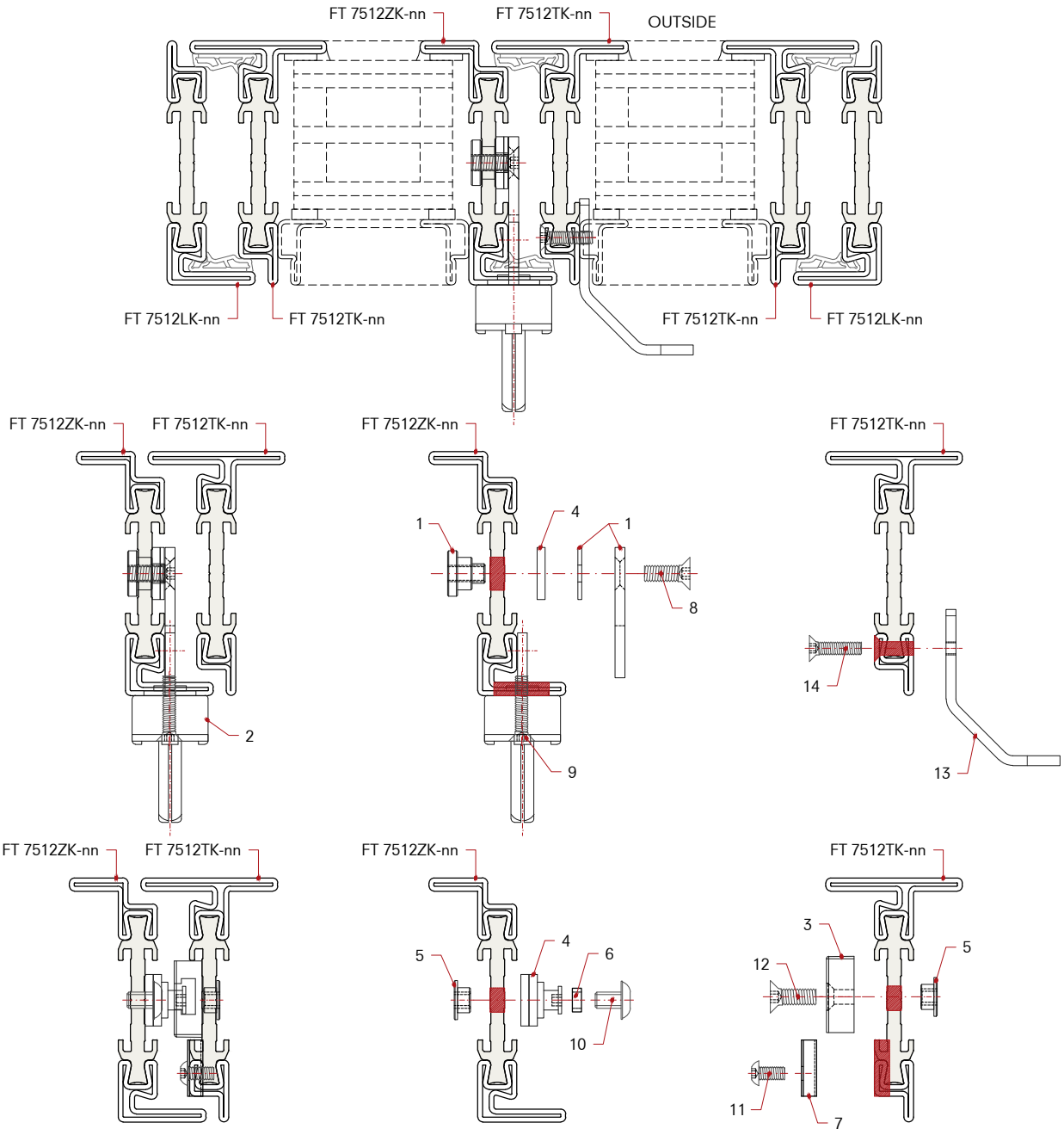
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture extérieure - Droite
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

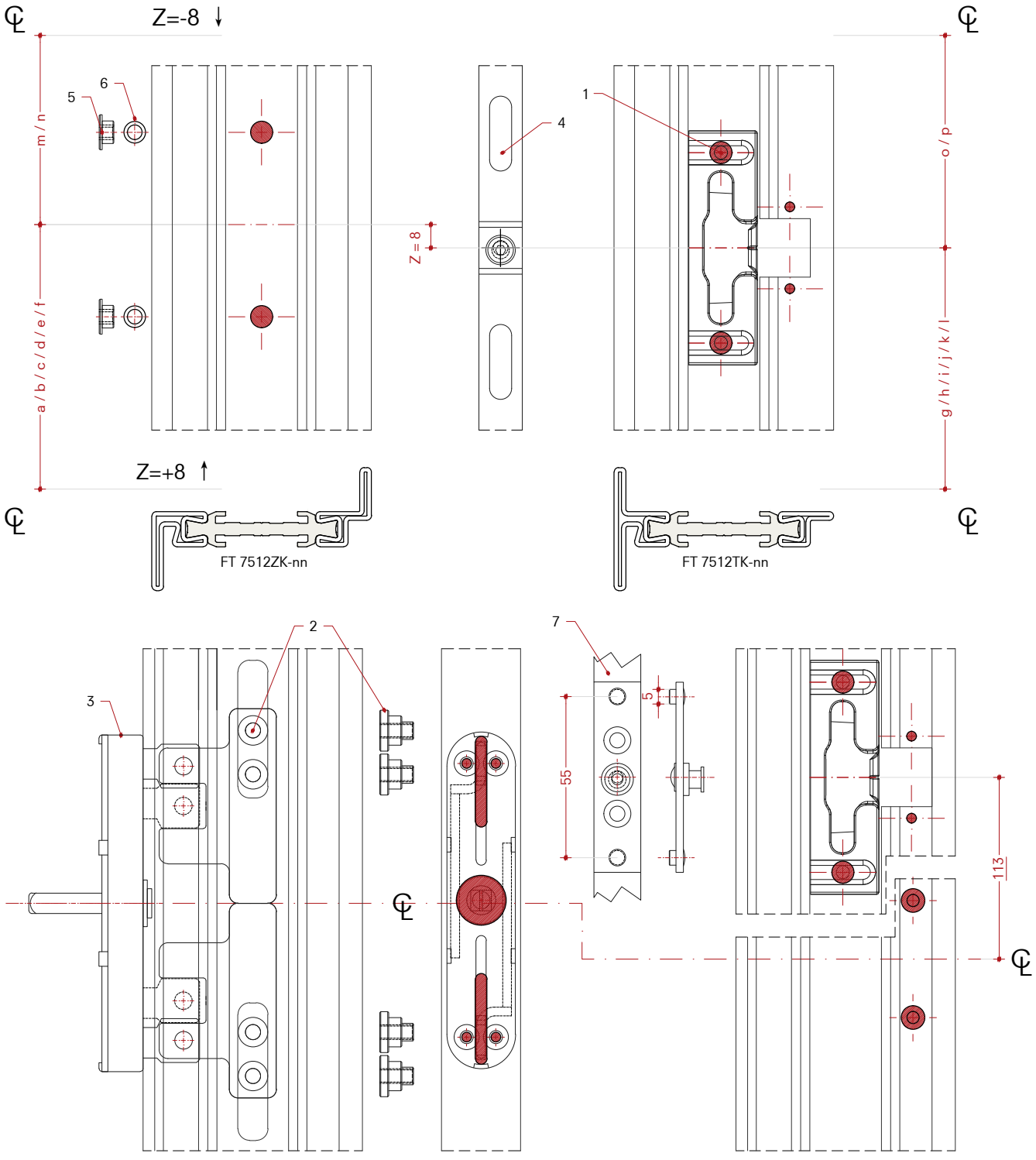
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

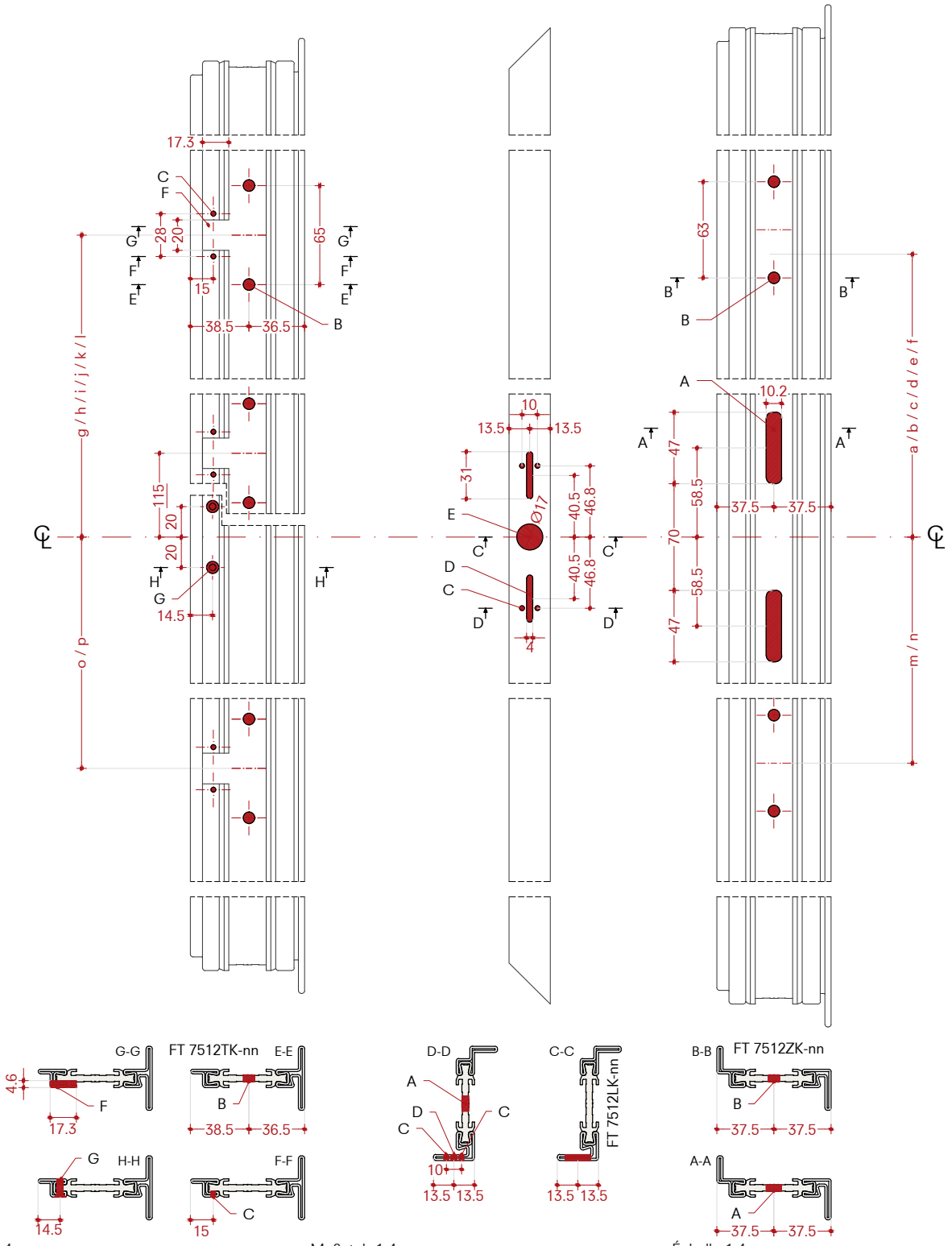
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open out - Left opening
Flush profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach außen öffnend - DIN links
Flächenbündige profile

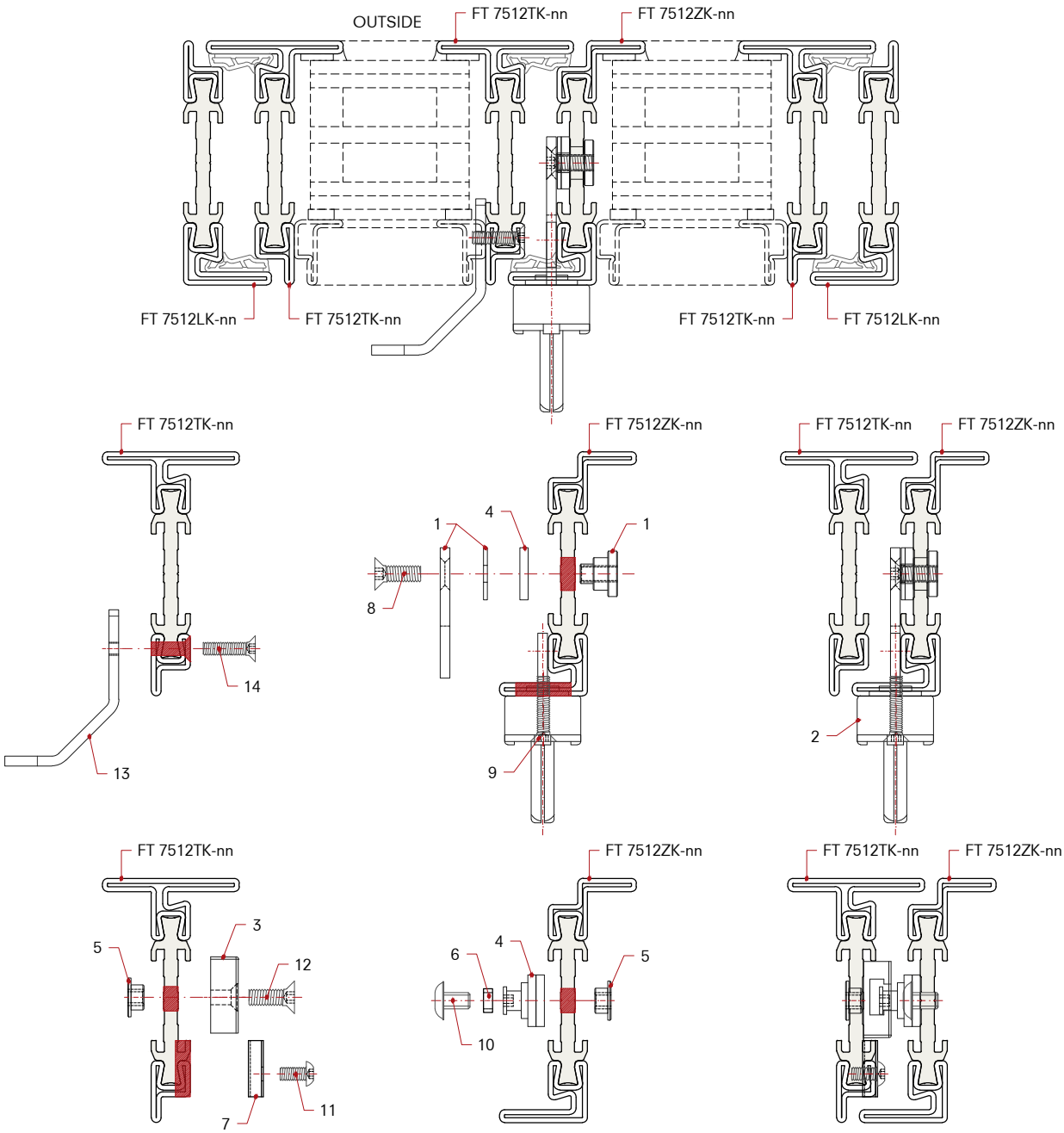
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture extérieure - Gauche
Profilés coplanaires



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

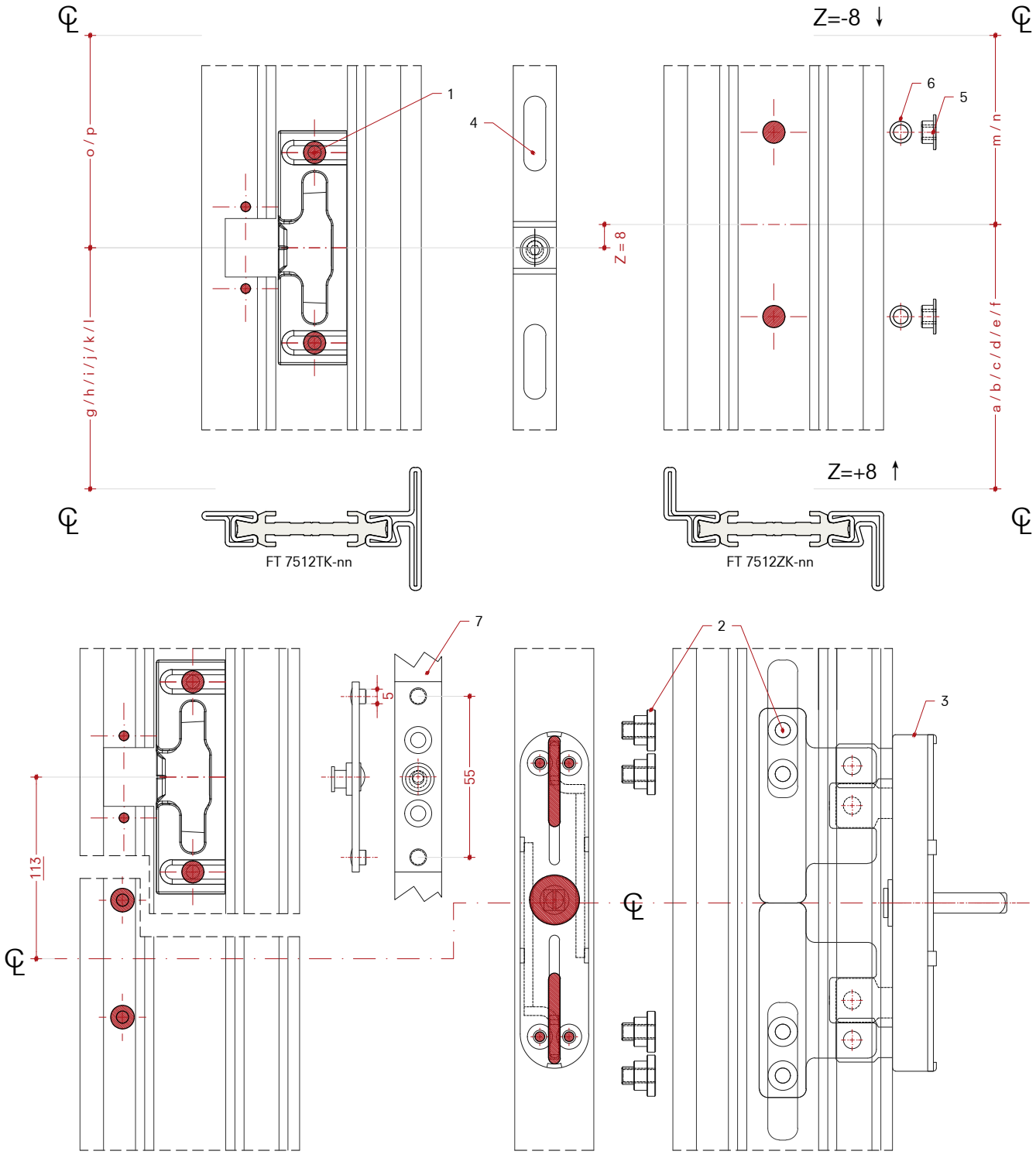
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

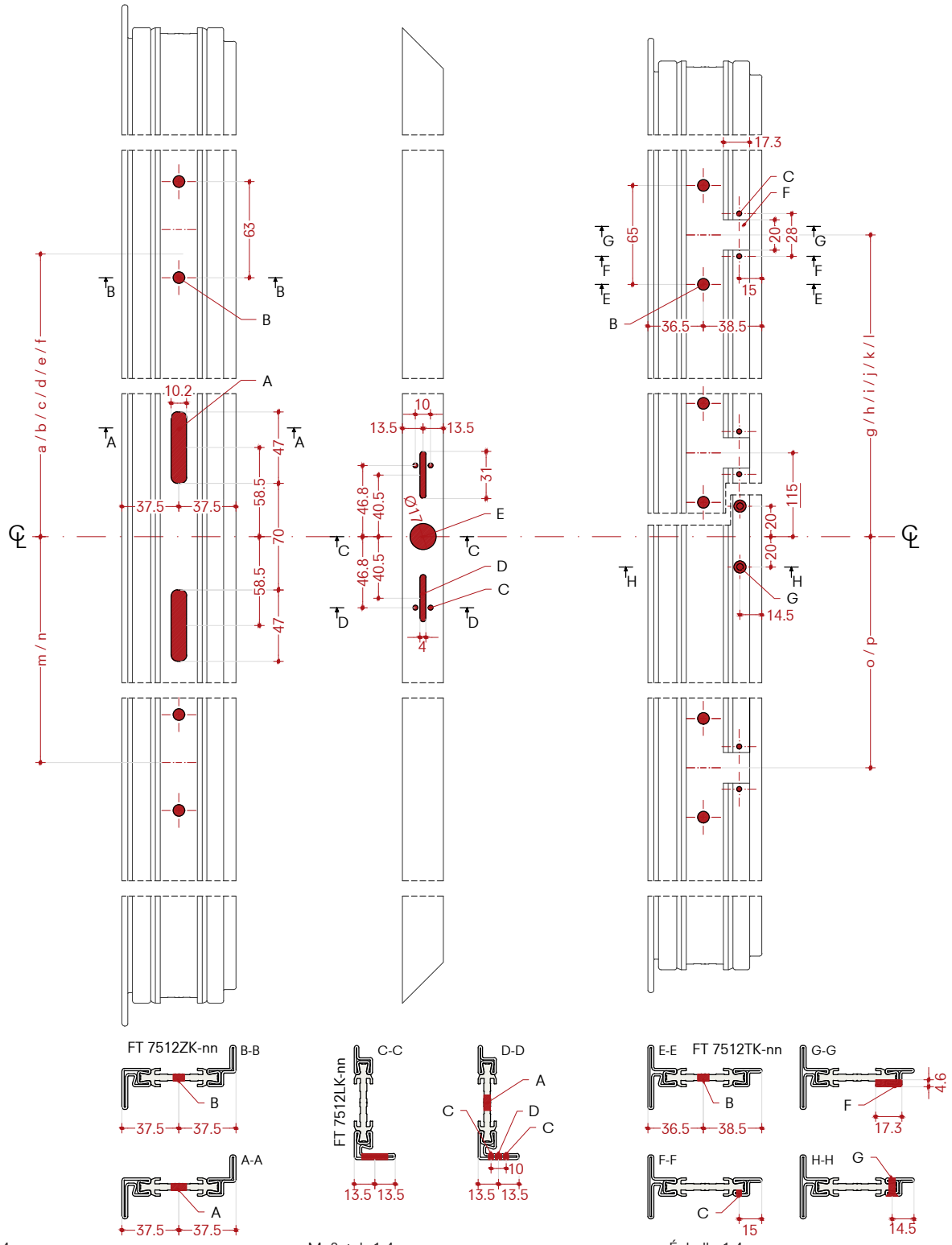
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open out - Right opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
Überlappende profile

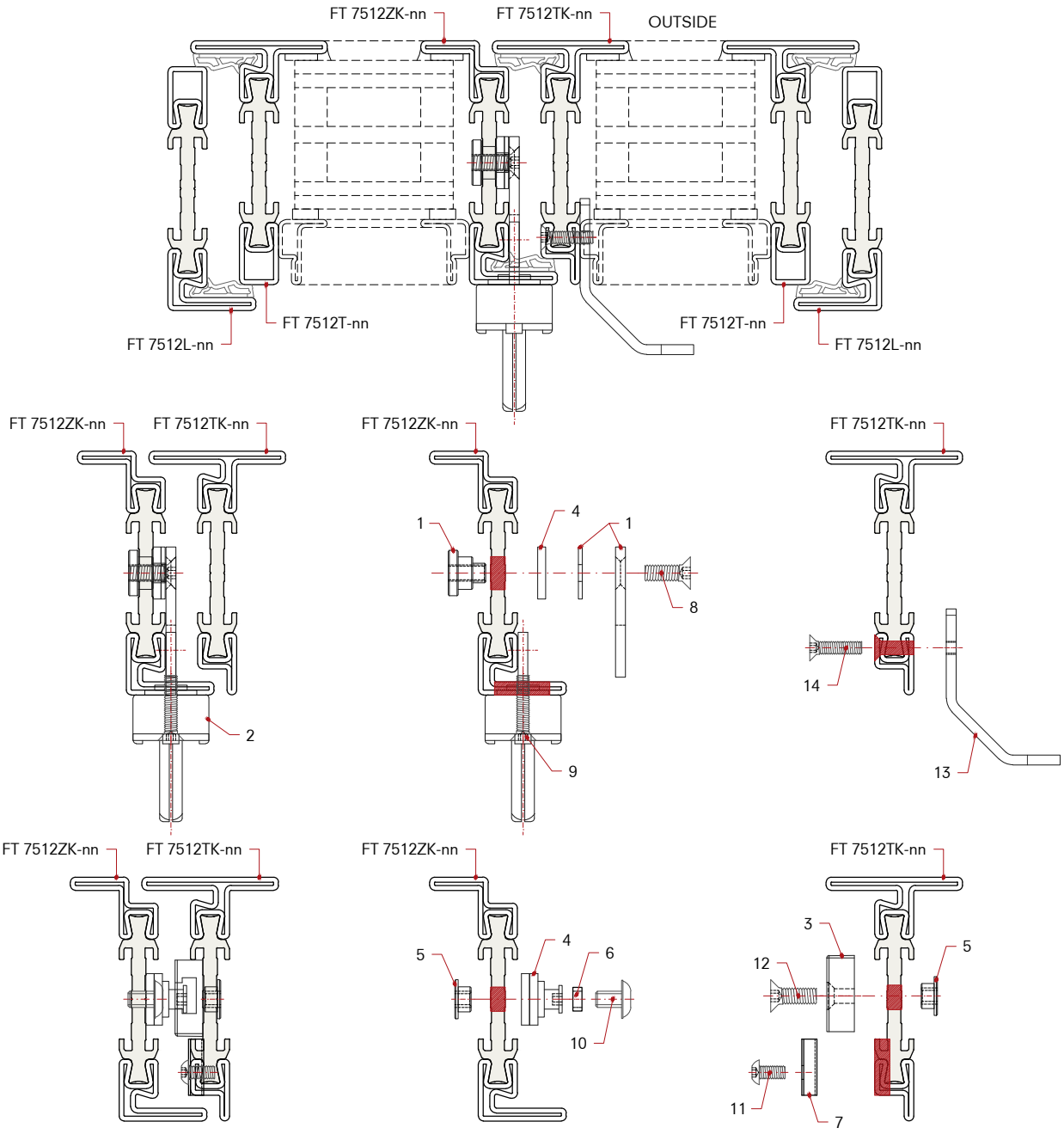
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture extérieure - Droite
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

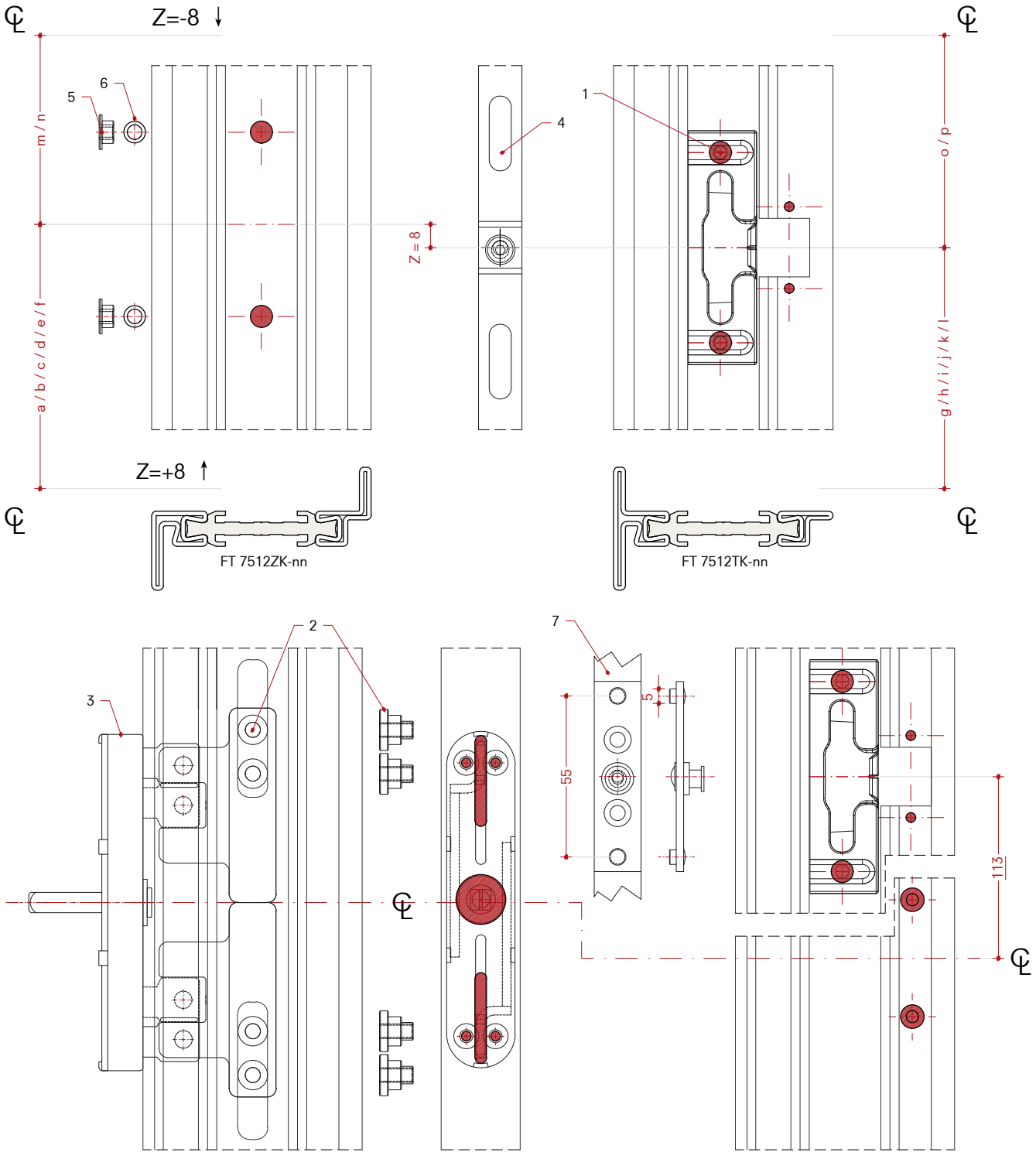
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99653-03 (right opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99653-03 (DIN rechts)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99653-03 (ouverture droite)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99653-03 (right opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

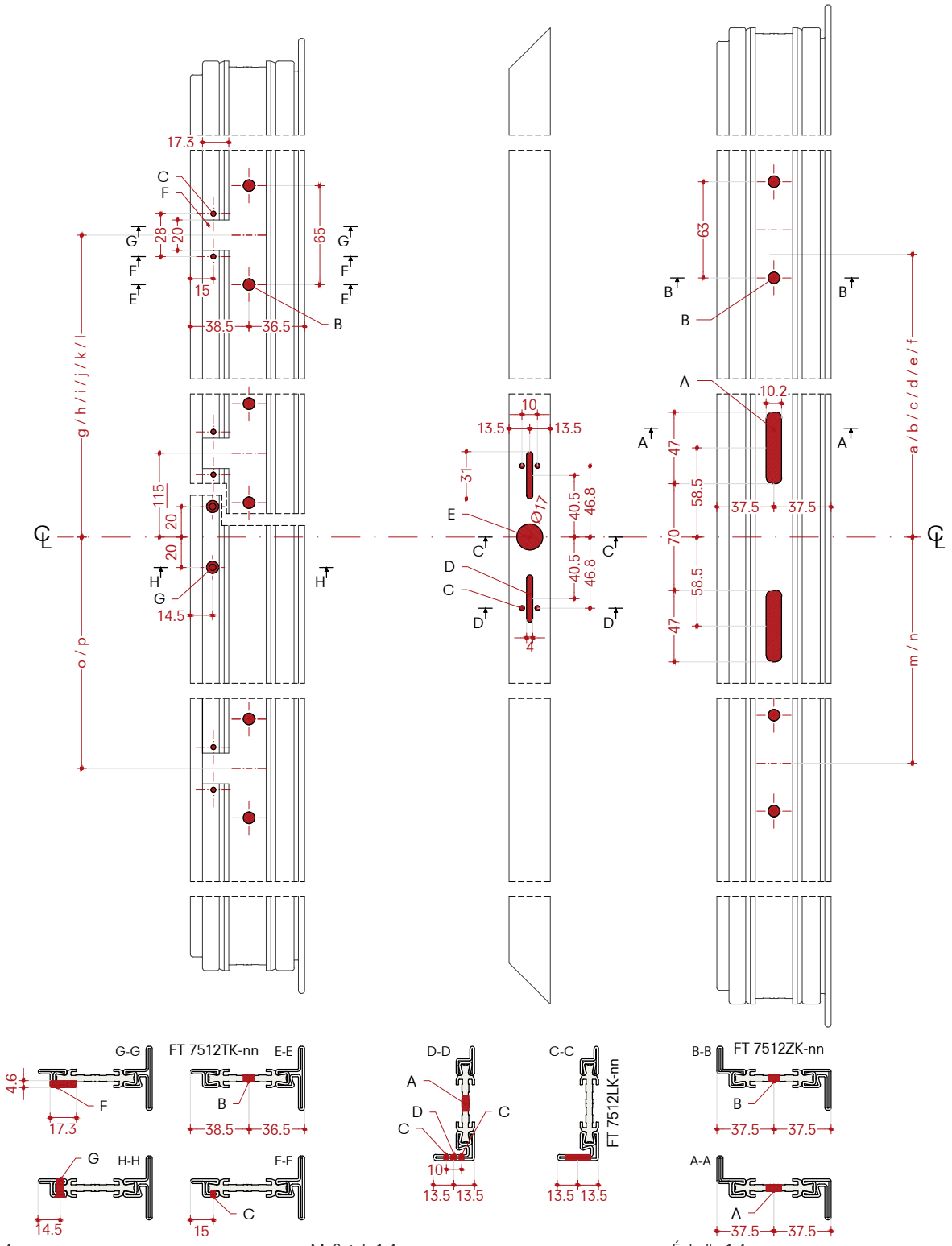
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99653-03 (DIN rechts)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99653-03 (ouverture droite)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Double leaf window
Open out - Left opening
Overlapped profiles

Montage Multipoint Stahlstangen, mit Graz
Zweiflügliges Fenster
Nach außen öffnend - DIN links
Überlappende profile

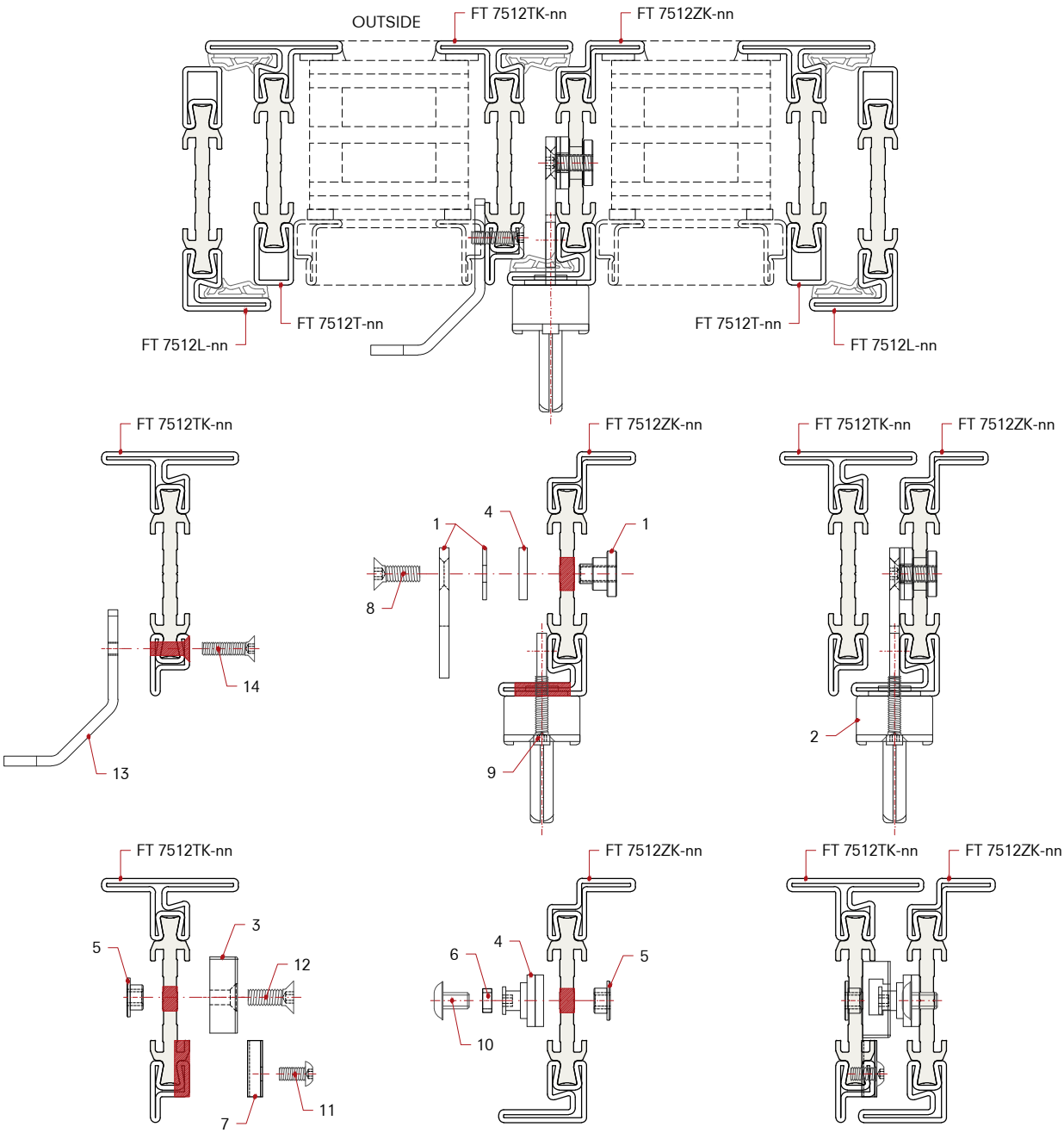
Montage Multipoint tiges de acier, avec Graz
Fenêtre à deux vantaux
Ouverture extérieure - Gauche
Profilés superposés



Scale 1:4
A) Cut out 47x10.2 mm
B) Ø7.5 mm holes to be checked
C) Ø3.2 mm threaded M4 holes
D) Cut out 31x4 mm
E) Ø17 mm hole
F) Cut out 17.3x4.6x20 mm
G) Ø4.2 mm countersunk holes

Maßstab 1:4
A) Fräsung 47x10.2 mm
B) Bohrungen Ø7.5 mm überprüft werden
C) Bohrungen Ø3.2 mm Gewinde M4
D) Fräsung 31x4 mm
E) Bohrung Ø17 mm
F) Fräsung 17.3x4.6x20 mm
G) Senkbohrungen Ø4.2 mm

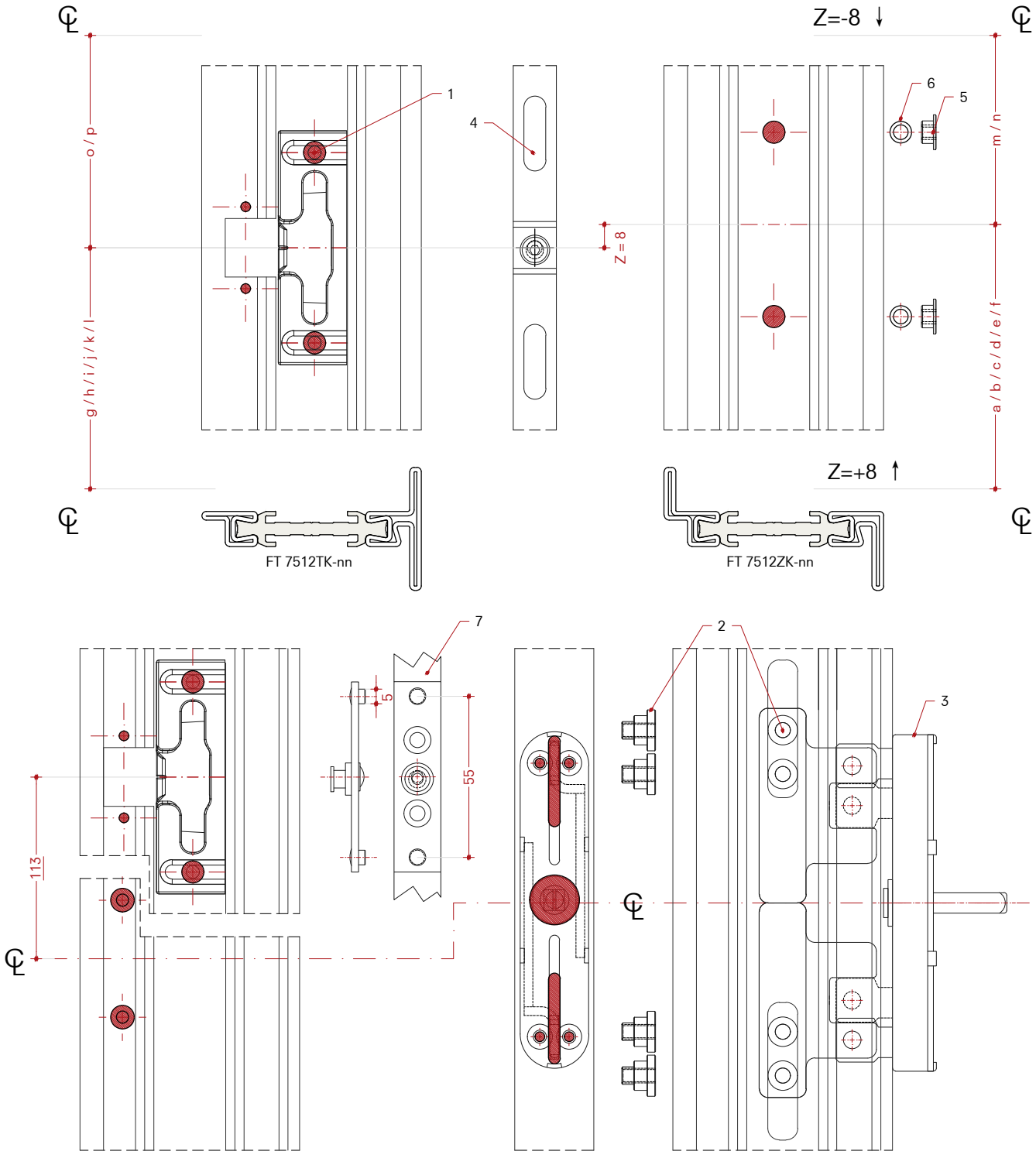
Échelle 1:4
A) Fraisage 47x10.2 mm
B) Trous Ø7.5 mm à vérifier
C) Trous Ø3.2 mm fileté M4
D) Fraisage 31x4 mm
E) Trou Ø17 mm
F) Fraisage 17.3x4.6x20 mm
G) Trous fraisé Ø4.2 mm



Scale 1:2
1) Drive block with shim K99100
2) Graz E99652-03 (left opening)
3) Strike plate
4) Rod E9937X-03
(*) Enlarge the lower holes of the rod to Ø6 mm
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Coutout cover E99134-04
8) Fastening with M5x14 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M5x8 mm screws. Do not overtighten and add medium thread-locker.
11) Fastening with M4x8 mm ISO7380 screws (not included)
12) Fastening with M5x14 mm ISO10642 screws (not included)
13) Handle H99020-nn
14) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Mitnehmerstück mit Unterlag K99100
2) Graz E99652-03 (DIN links)
3) Schließblech
4) Verriegelungsstange E9937X-03
(*) Erweitern Sie die unteren Löcher der Verriegelungsstange auf Ø6 mm
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Gefräster Deckel E99134-04
8) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M5x8 mm Schrauben. Schraube nicht zu fest anziehen und mittlere Schraubensicherung hinzufügen.
11) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
12) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
13) Griff H99020-nn
14) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Bloc d'entraînement avec plate K99100
2) Graz E99652-03 (ouverture gauche)
3) Gâche
4) Tige de ligne E9937X-03
(*) Élargir les trous inférieurs de la tige à Ø6 mm
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Couverture fraisée E99134-04
8) Fixation avec vis M5x14 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M5x8 mm Ne serrez pas excessivement et n'ajoutez pas de frein-filet moyen.
11) Fixation avec vis M4x8 mm ISO7380 (non inclus)
12) Fixation avec vis M5x14 mm ISO10642 (non inclus)
13) Poignée H99020-nn
14) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate
2) Drive block with shim K99100
3) Graz E99652-03 (left opening)
4) Rod E9937X-03
5) M5 brass bushing D99702-08
6) Brass washer D99706-08
7) Additional point (see the dedicated installation page at the end of chapter)

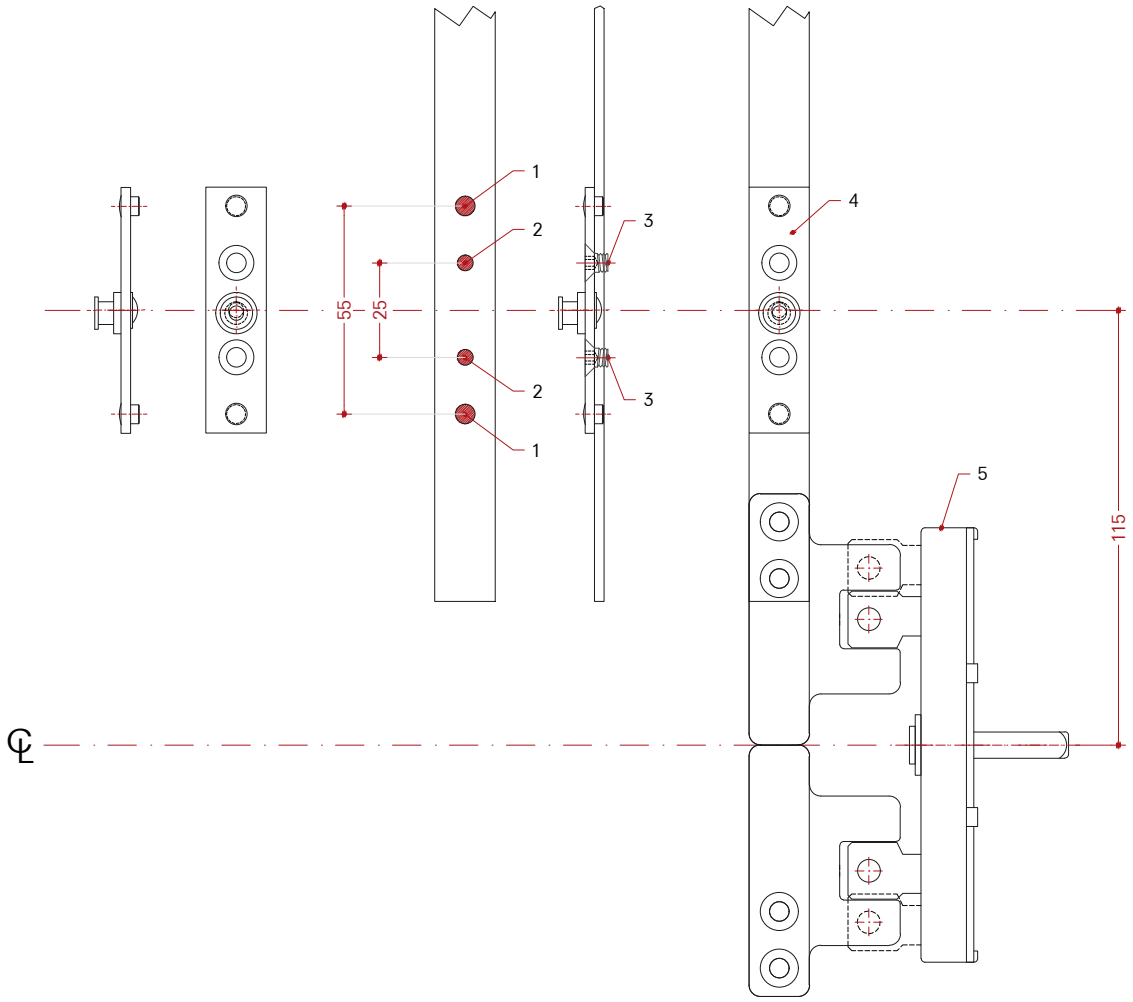
Maßstab 1:2
1) Schließblech
2) Mitnehmerstück mit Unterlag K99100
3) Graz E99652-03 (DIN links)
4) Verriegelungsstange E9937X-03
5) Messingbuchse M5 D99702-08
6) Messingscheibe D99706-08
7) Zusatzpunkt (siehe die entsprechende Installationsseite am Ende des Kapitels)

Échelle 1:2
1) Gâche
2) Bloc d'entraînement avec plate K99100
3) Graz E99652-03 (ouverture gauche)
4) Tige de ligne E9937X-03
5) Boîte en laiton M5 D99702-08
6) Rondelle en laiton D99706-08
7) Point supplémentaire (voir la page d'installation dédiée en fin de chapitre)

Multipoint steel rods installation, with Graz
Additional locking point

Montage Multipoint Stahlstangen, mit Graz
Zusatzverriegelung

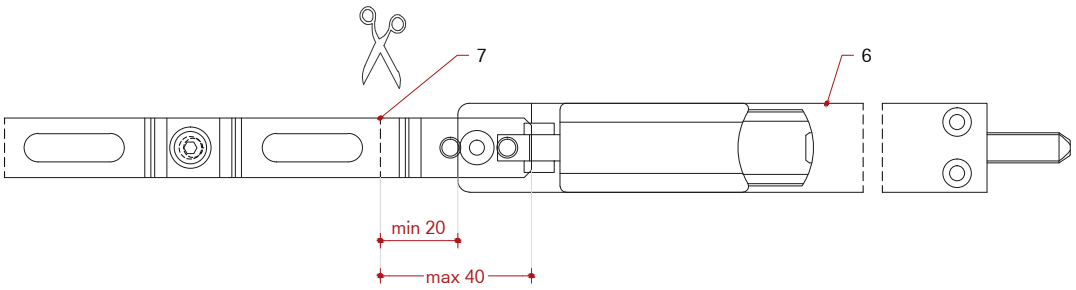
Montage Multipoint tiges de acier, avec Graz
Point supplémentaire



Cropping of rod ending
Open out, double leaf
(flush bolt and rod on the same profile)

Verriegelungsstangeschnitt
Nach außen öffnend, Zweiflüglige
(Kantriegel und Stange auf gleichem Profil)

Coupé au bout de la tige
Ouverture extérieure, deux vantaux
(Verrou à bascule et tige sur le même profil)



Scale 1:2
1) Ø5.2 mm holes
2) Ø4.2 mm threaded M5 holes
3) Fastening with M5x6 mm ISO10642 screws (not provided) and cut the screws
4) Additional point E99353-03
5) Graz E9965X-03
6) Flush bolt
7) Rod cropping

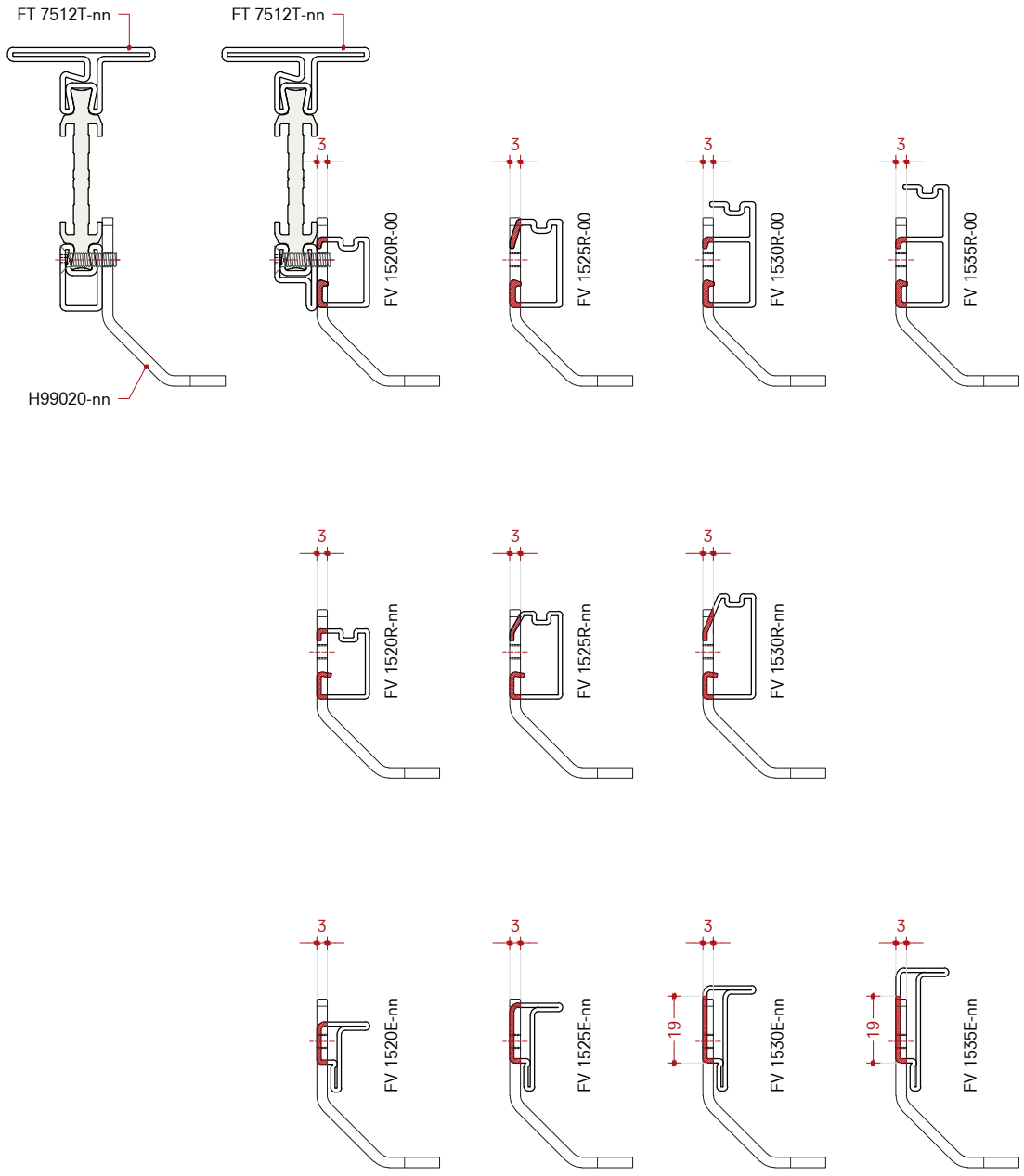
Maßstab 1:2
1) Bohrungen Ø5.2 mm
2) Bohrungen Ø4.2 mm Gewinde M5
3) Befestigung mit M5x6 mm ISO10642 Schrauben (Eigenfertigung) und Schrauben kürzen
4) Zusatzpunkt E99353-03
5) Graz E9965X-03
6) Kantriegel
7) Verriegelungsstangeschnitt

Échelle 1:2
1) Trous Ø5.2 mm
2) Trous Ø4.2 mm fileté M5
3) Fixation avec vis M5x6 mm ISO10642 (non inclus) et couper la vis
4) Point supplémentaire E99353-03
5) Graz E9965X-03
6) Verrou à bascule
7) Coupe de la tige

Multipoint steel rods installation, with Graz
Glazing beads processing
Open out only

Montage Multipoint Stahlstangen, mit Graz
Bearbeitung Glashalteleisten
Nur nach außen öffnend

Montage Multipoint tiges de acier, avec Graz
Usinages des parcloses
Ouverture extérieure seulement



Scale 1:2

Cutout length: 60.5 mm centered on handle center line.

Maßstab 1:2

Ausschnitte Länge 60.5 mm zentriert auf Griff Mittellinie.

Échelle 1:2

Découpes de longueur 60.5 mm centrées sur l'axe de la poignée.

Multipoint aluminum rods installation, with Graz and Mono

Montage Multipoint Aluminiumstangen, mit Graz und Mono

Montage Multipoint tiges de aluminium, avec Graz et Mono

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:2 - 1:4

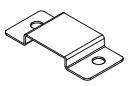
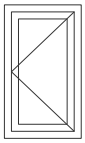
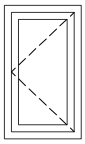
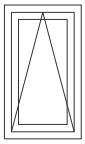
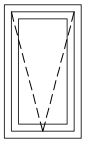
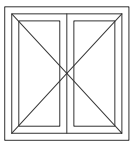
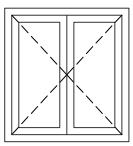
Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:2 - 1:4

Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:2 - 1:4

Leaf dimension limits — Flügelabmessungen — Limites dimensionnelles de ouvrant

					E99134-04 	
L min		Single leaf window Einflügliges Fenster Fenêtre à un vantail	Open in Nach innen öffnend Ouvrant vers l'intérieur	Flush profiles Flächenbündige profile Profilés coplanaires		**400 mm**
				Overlapped profiles Überlappende profile Profilés superposés		**650 mm**
L min		Single leaf window Einflügliges Fenster Fenêtre à un vantail	Open out Nach außen öffnend Ouvrant vers l'extérieur	Flush profiles Flächenbündige profile Profilés coplanaires	●	**350 mm**
				Overlapped profiles Überlappende profile Profilés superposés	●	**450 mm**
H min		Bottom hung window Kipp-Fenster Fênetre à soufflet	Open in Nach innen öffnend Ouvrant vers l'intérieur	Flush profiles Flächenbündige profile Profilés coplanaires		**400 mm**
				Overlapped profiles Überlappende profile Profilés superposés		**650 mm**
H min		Top hung projecting window Senkklapp-Fenster Fênetre à l'italienne	Open out Nach außen öffnend Ouvrant vers l'extérieur	Flush profiles Flächenbündige profile Profilés coplanaires	●	**350 mm**
				Overlapped profiles Überlappende profile Profilés superposés	●	**450 mm**
L min		Double leaf window Zweiflügliges Fenster Fenêtre à deux vantaux	Open in Nach innen öffnend Ouvrant vers l'intérieur	Flush profiles Flächenbündige profile Profilés coplanaires		**400 mm**
				Overlapped profiles Überlappende profile Profilés superposés		**650 mm**
L min		Double leaf window Zweiflügliges Fenster Fenêtre à deux vantaux	Open out Nach außen öffnend Ouvrant vers l'extérieur	Flush profiles Flächenbündige profile Profilés coplanaires	●	**350 mm**
				Overlapped profiles Überlappende profile Profilés superposés	●	**450 mm**

L min = Minimum leaf length
H min = Minimum leaf height
● Cut out cover E99134-04

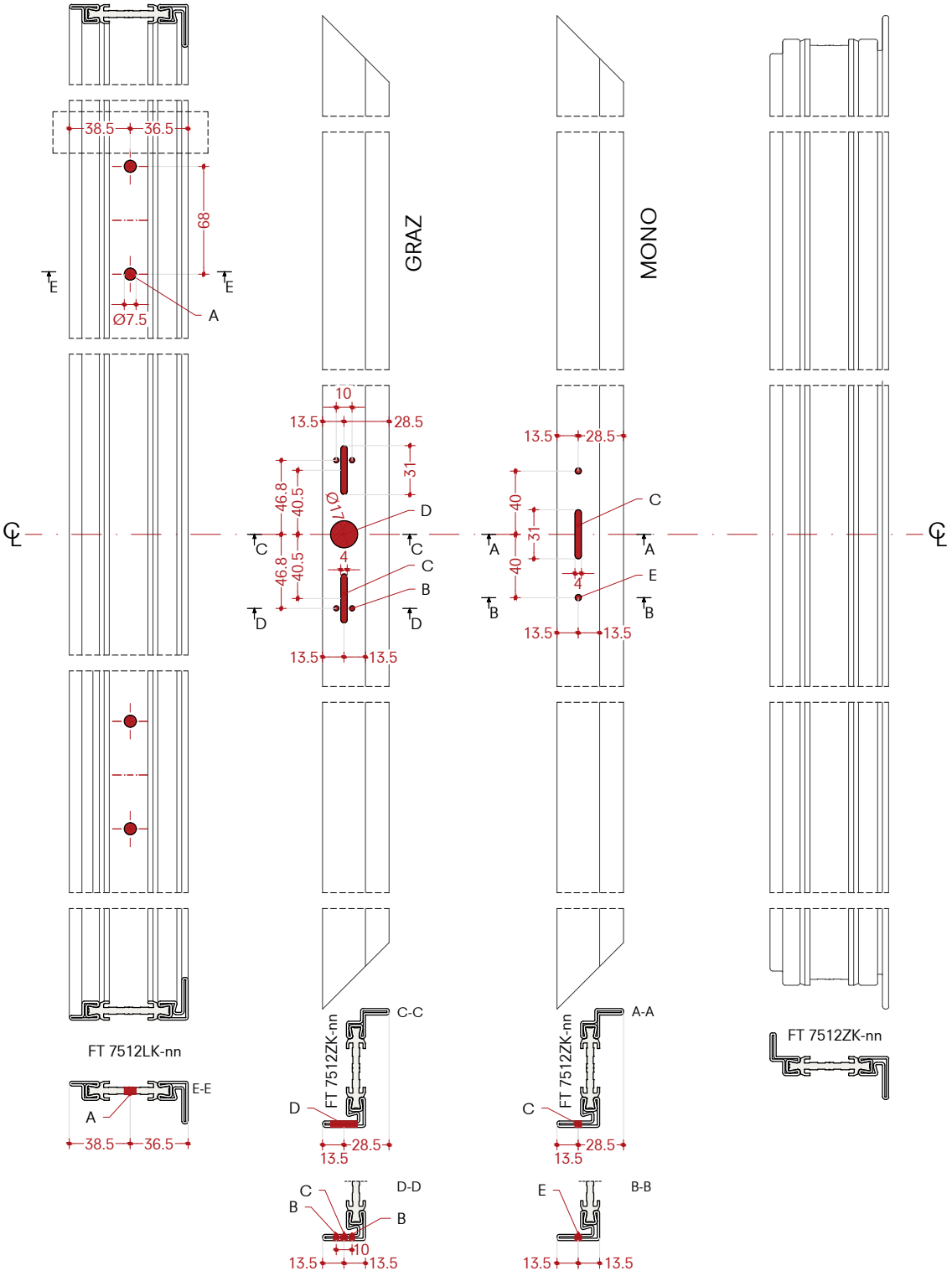
L min = Minimale Flügel Länge
H min = Minimale Flügelhöhe
● Gefräster Deckel E99134-04

L min = Longueur minimale de ouvrant
H min = Hauteur minimale de ouvrant
● Couverture fraisée E99134-04

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open in - Right opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach innen öffnend - DIN rechts
Flächenbündige profile

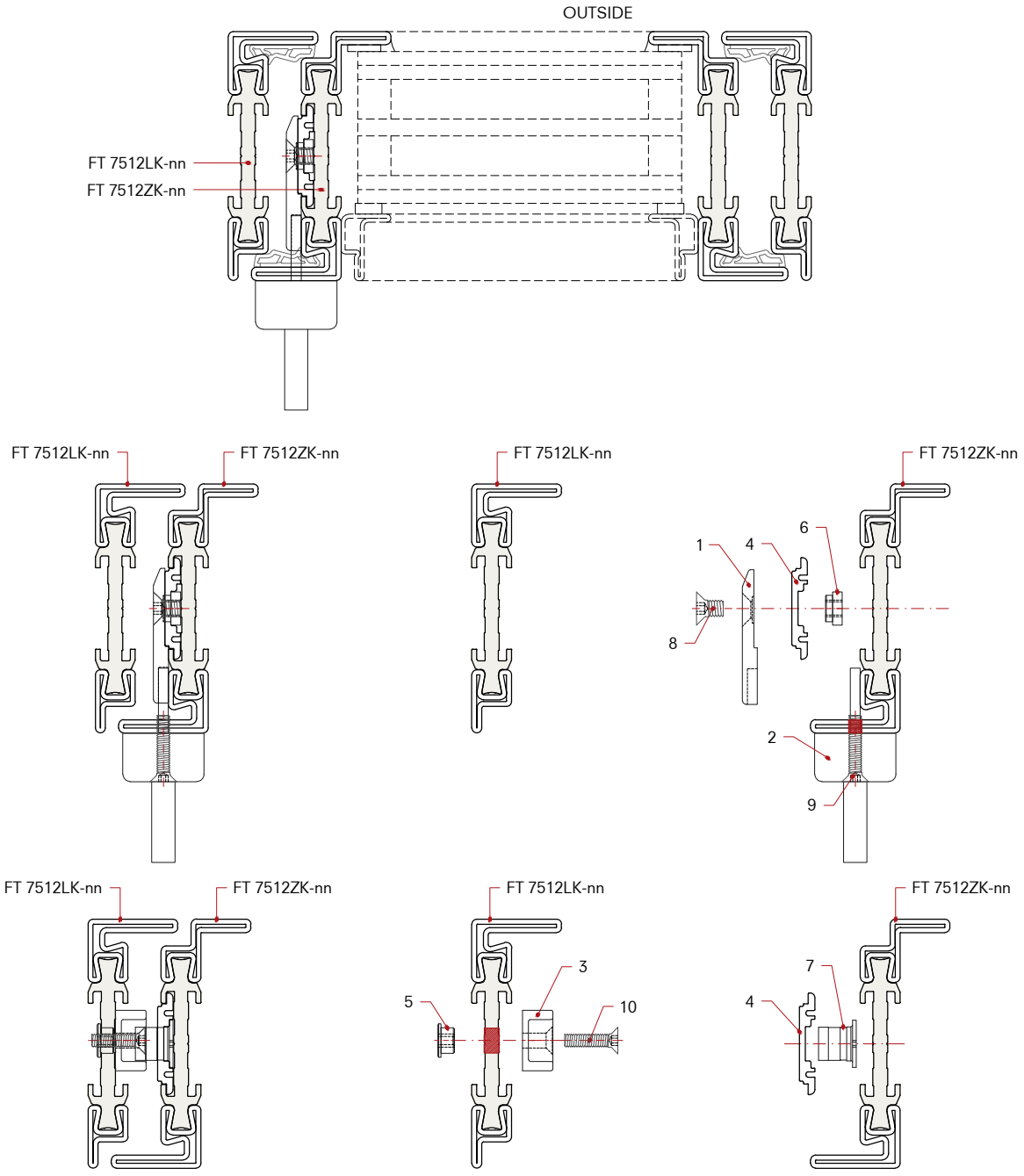
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture intérieure - Ouverture droite
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

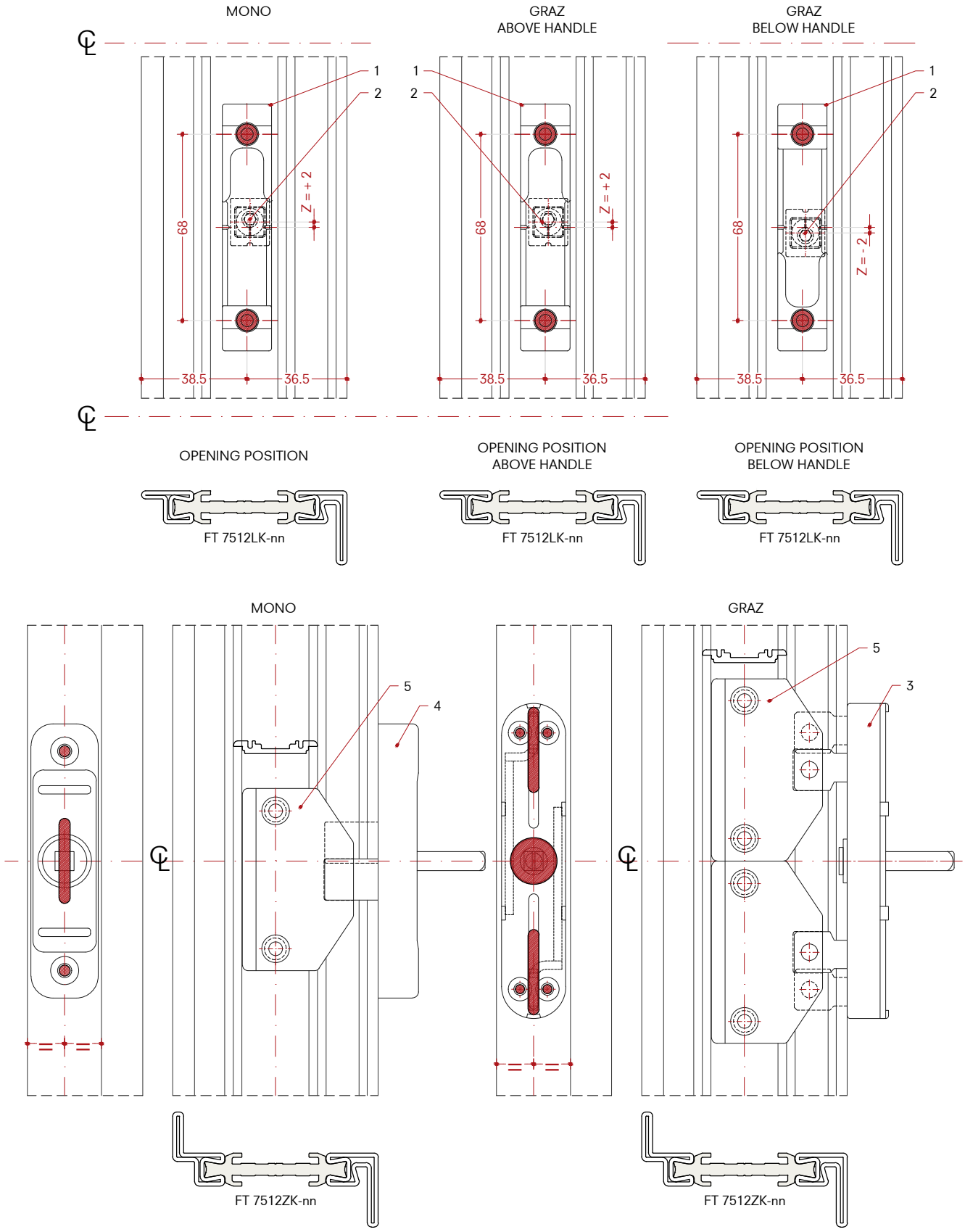
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

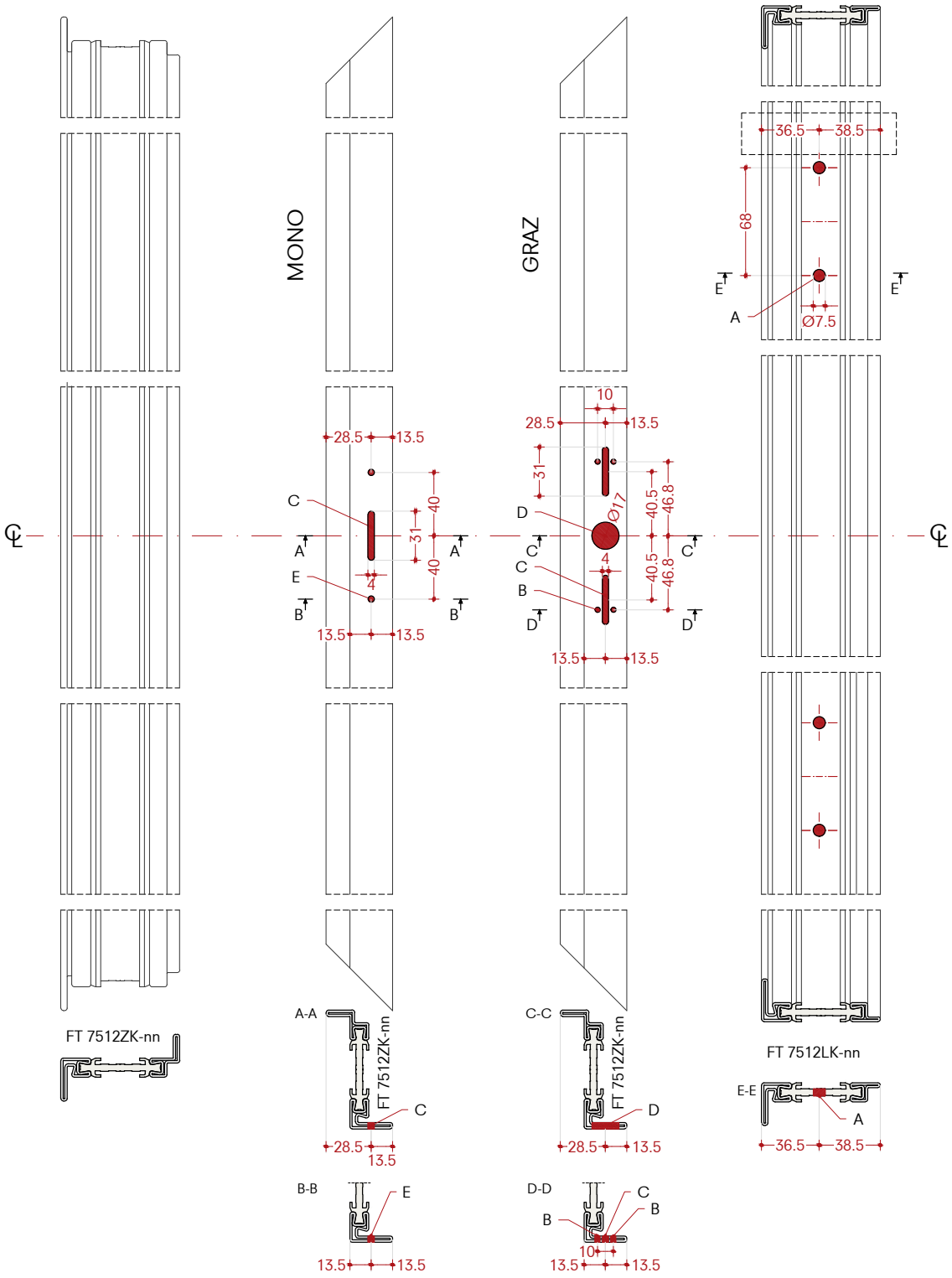
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open in - Left opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach innen öffnend - DIN links
Flächenbündige profile

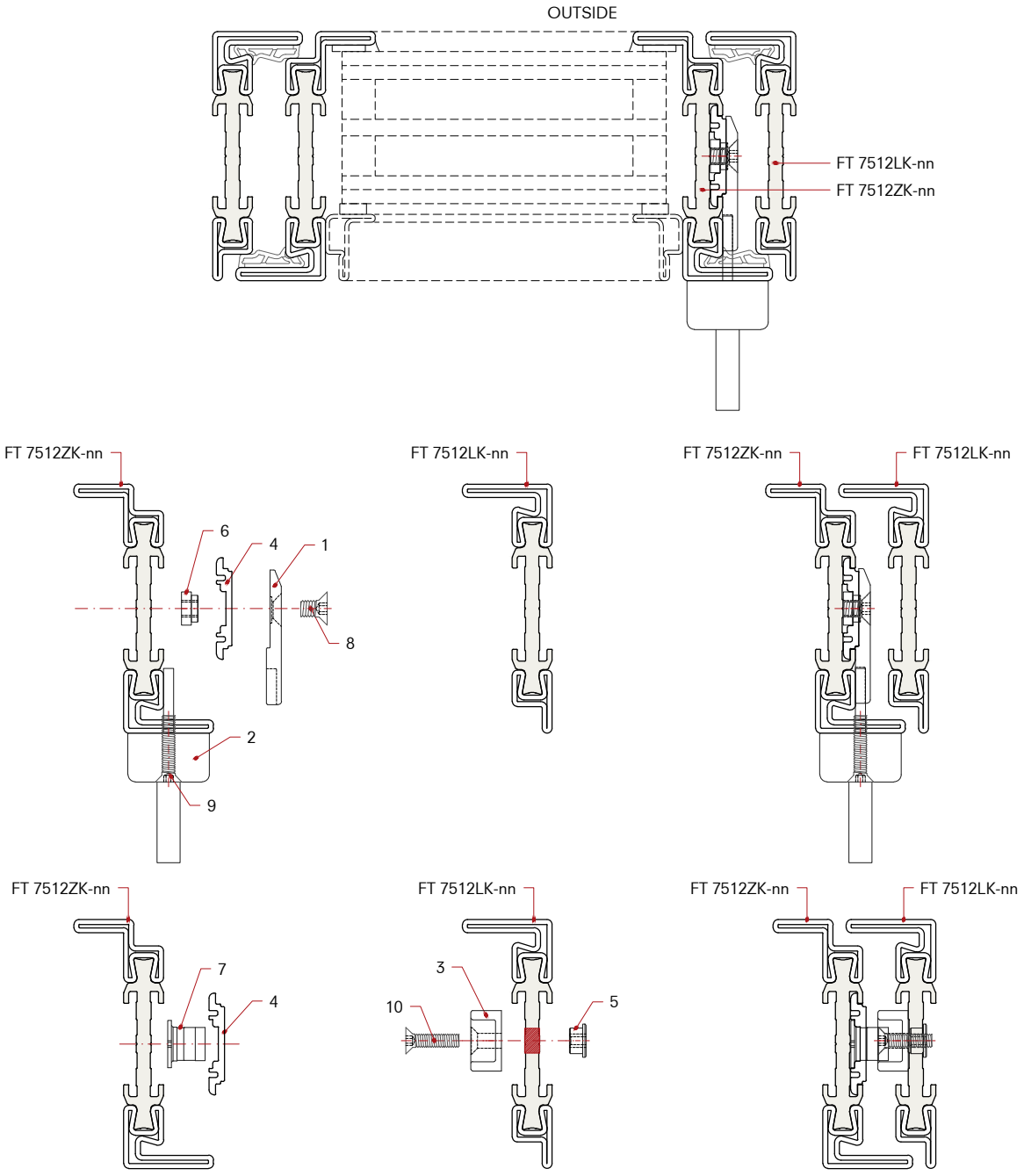
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture intérieure - Ouverture gauche
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

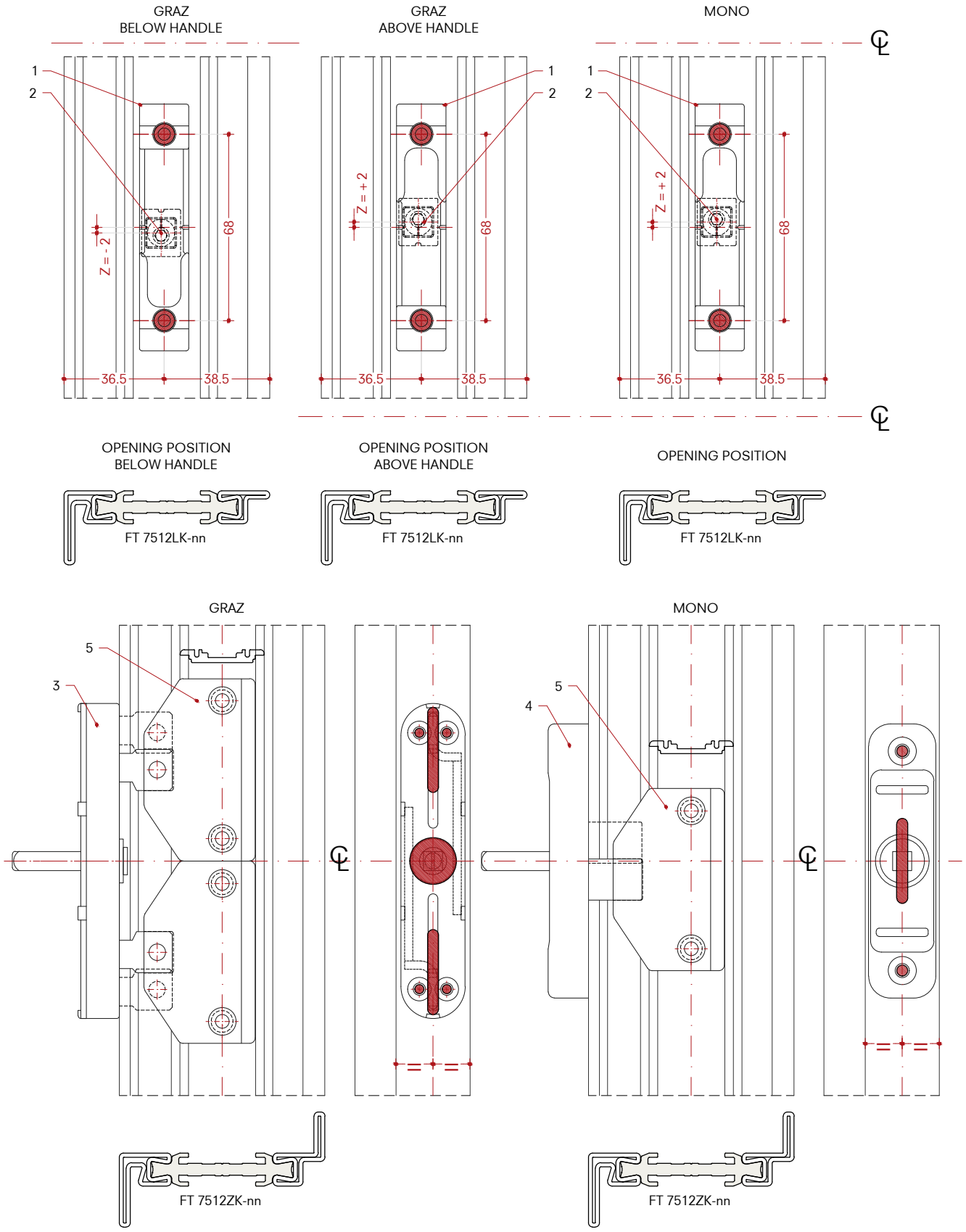
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

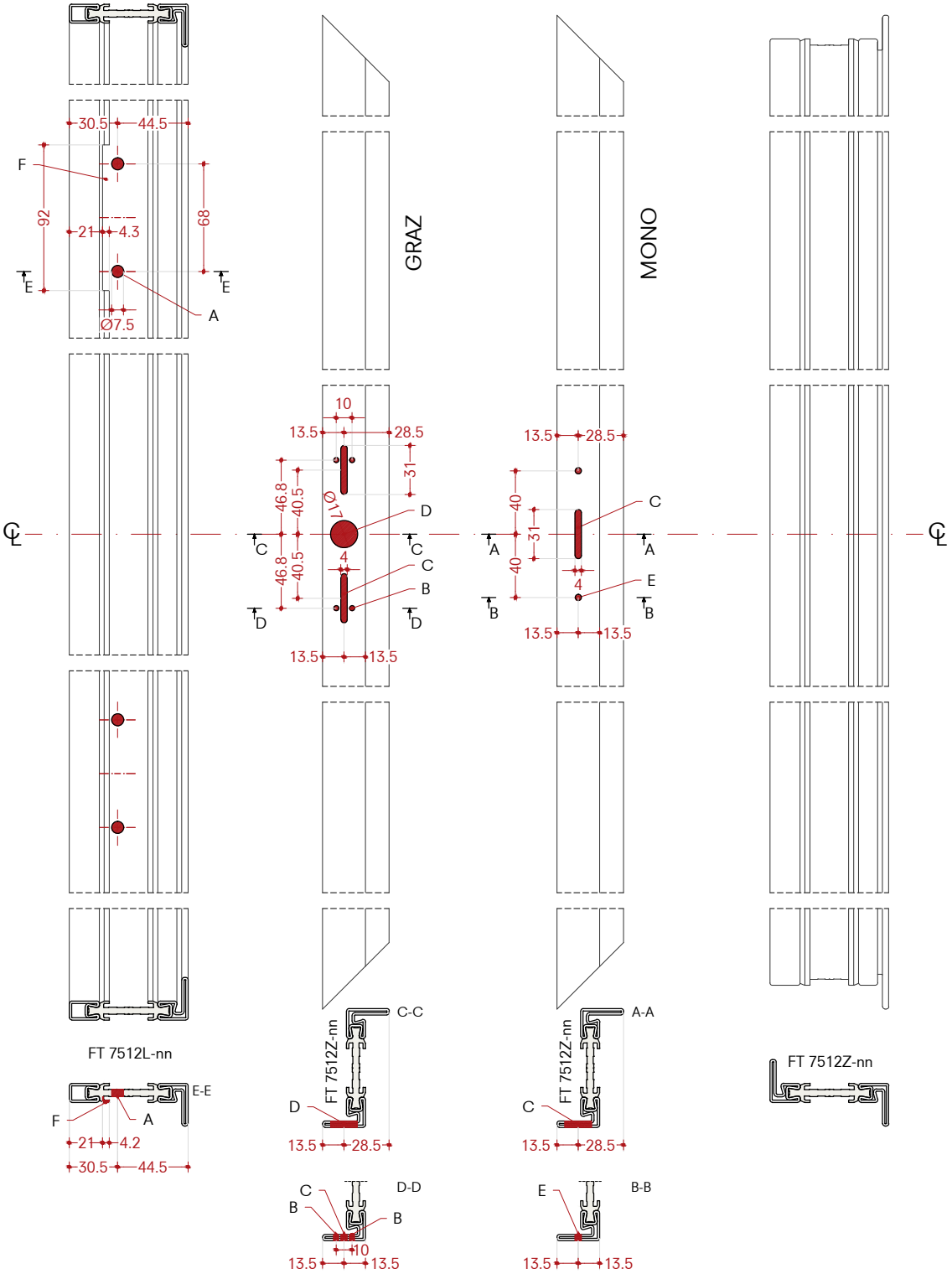
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open in - Right opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach innen öffnend - DIN rechts
Überlappende profile

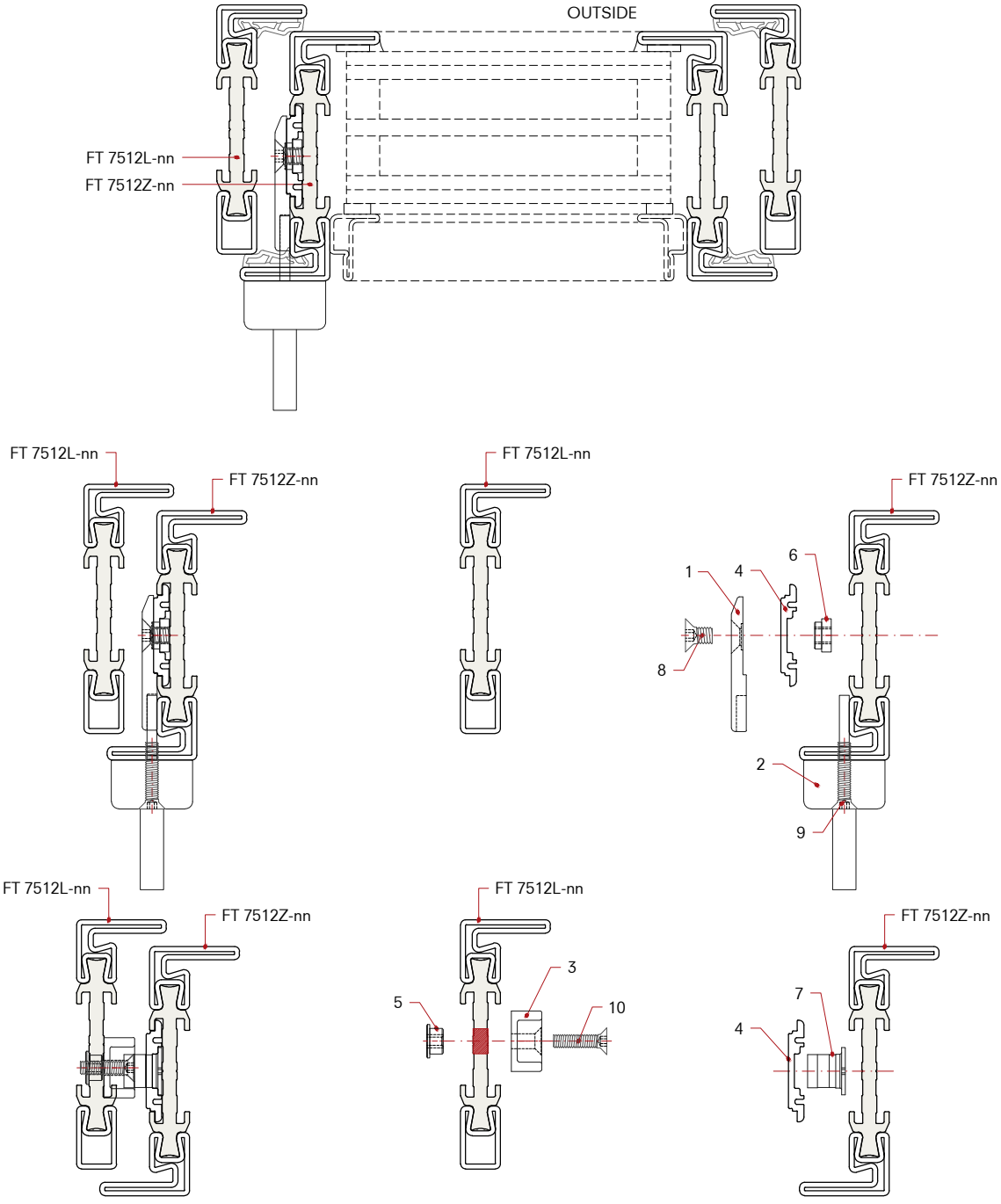
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture intérieure - Ouverture droite
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Cut out 92x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Fräsung 92x4 mm

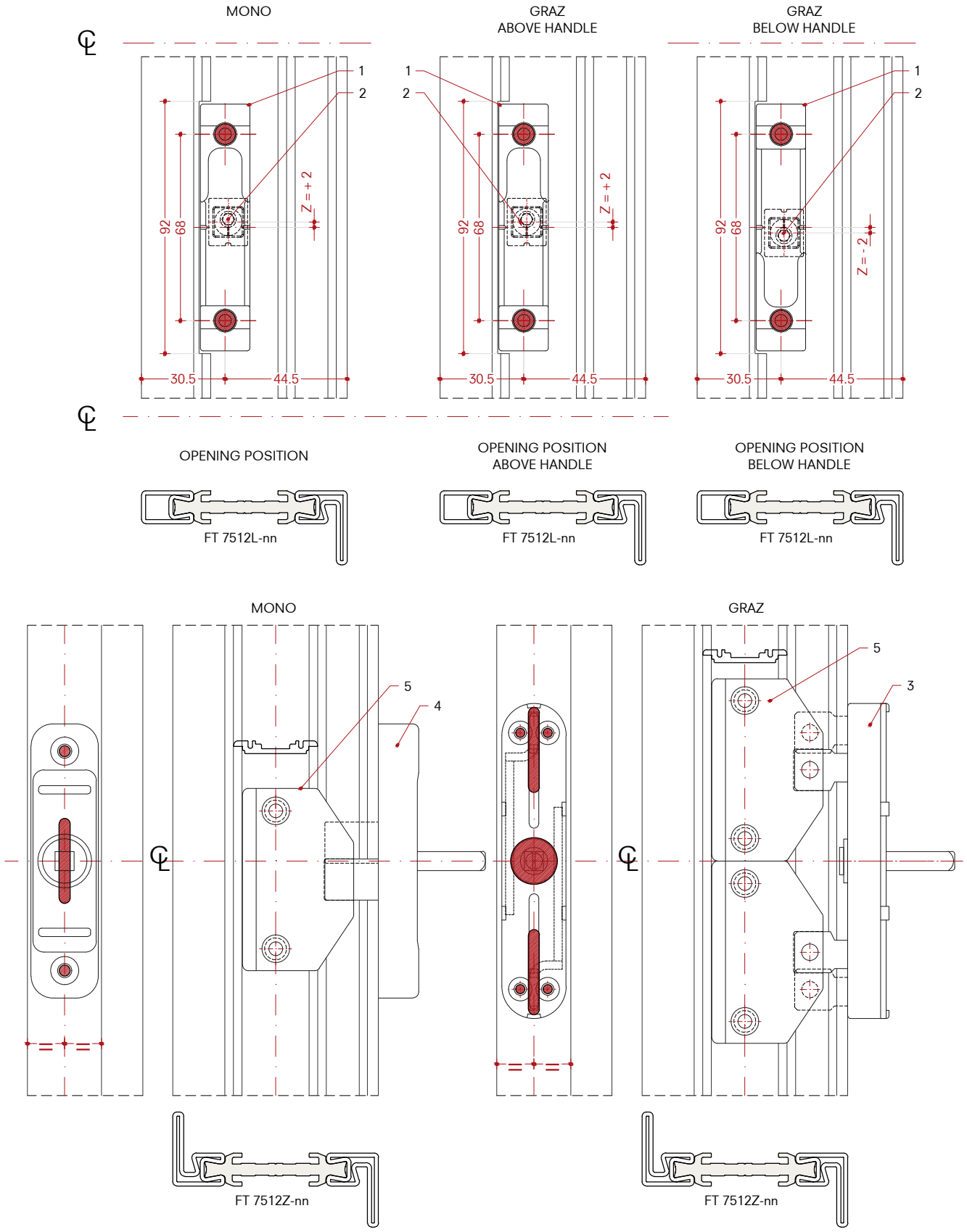
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Fraisage 92x4 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

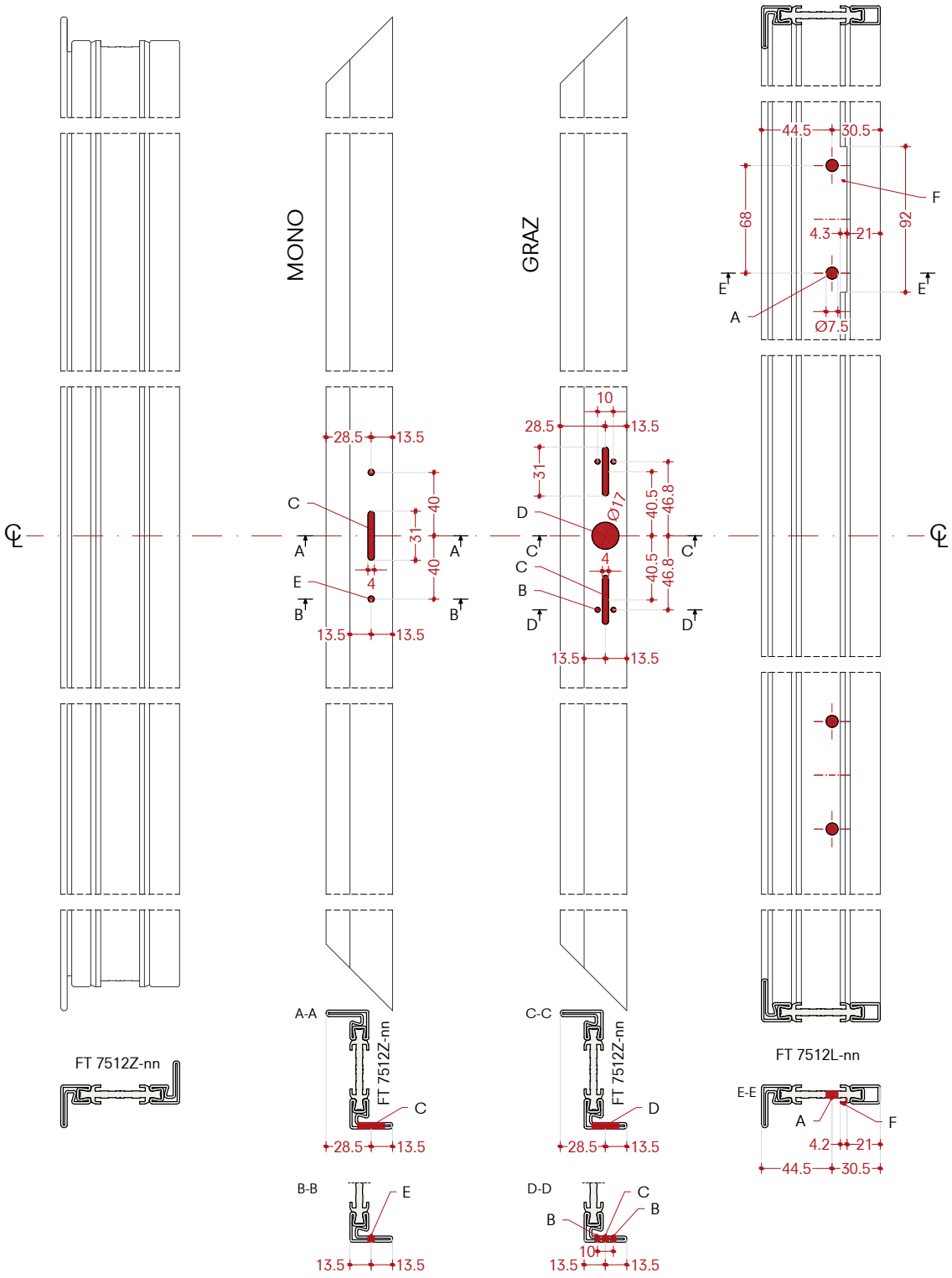
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open in - Left opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach innen öffnend - DIN links
Überlappende profile

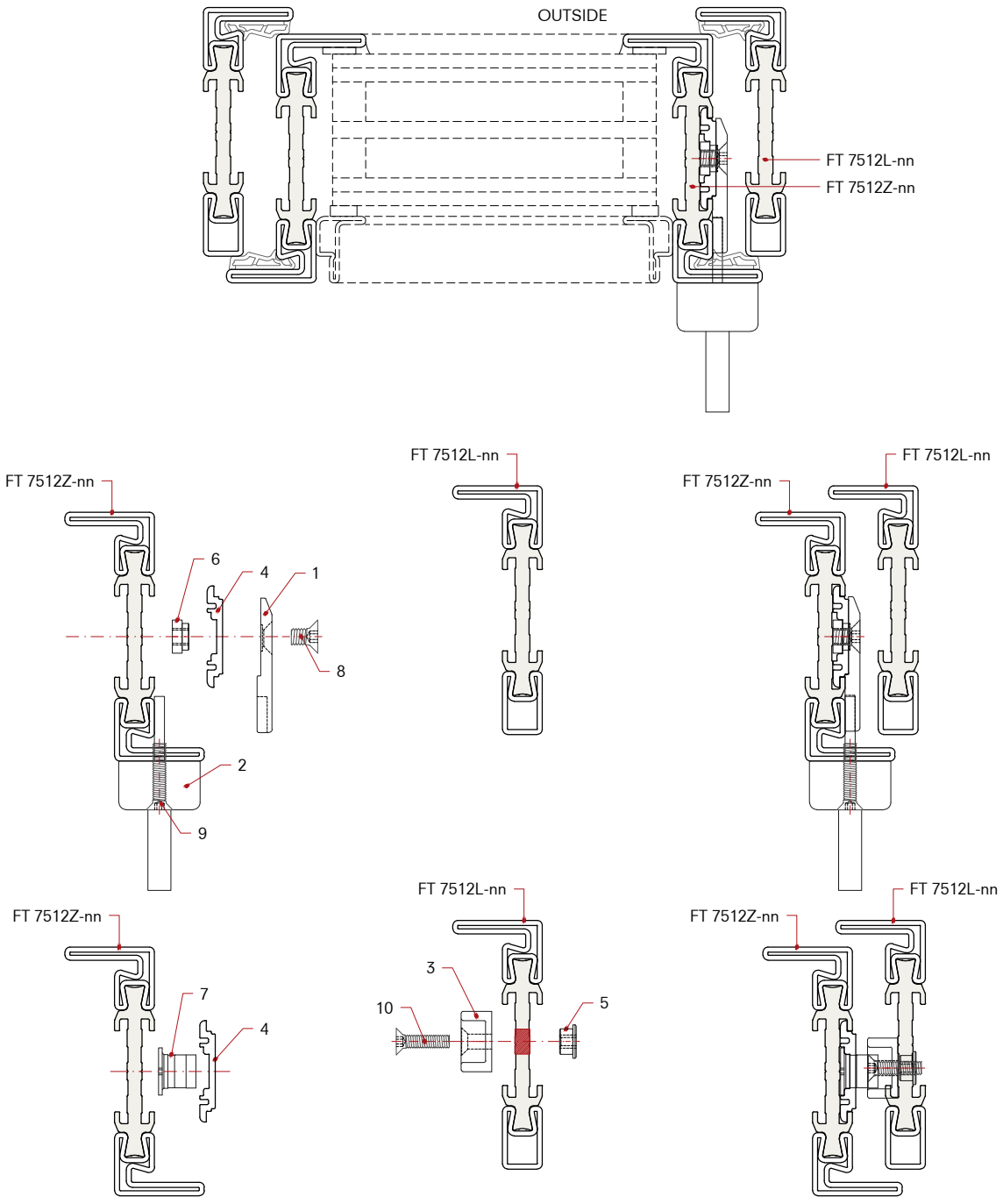
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture intérieure - Ouverture gauche
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Cut out 92x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Fräsung 92x4 mm

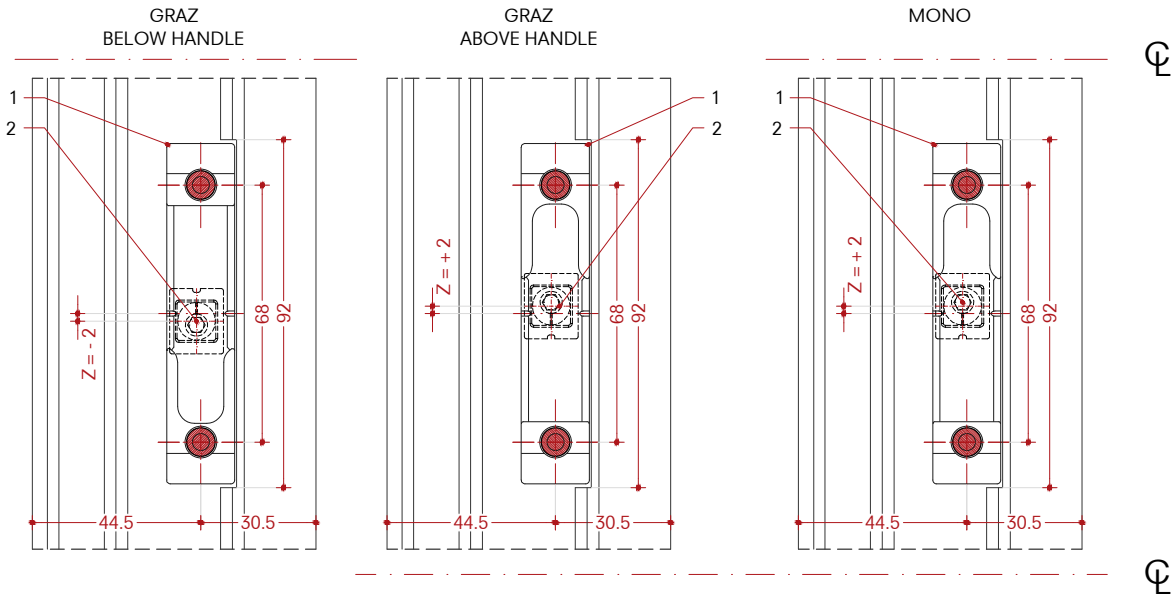
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Fraisage 92x4 mm

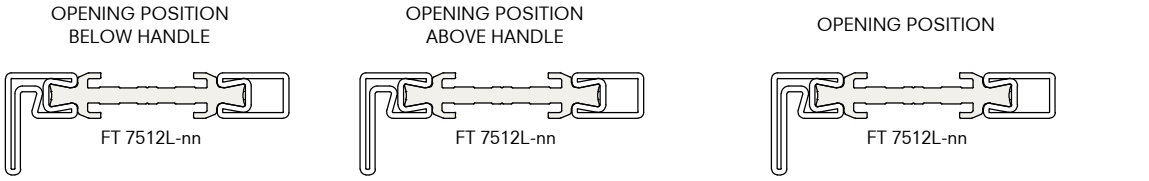


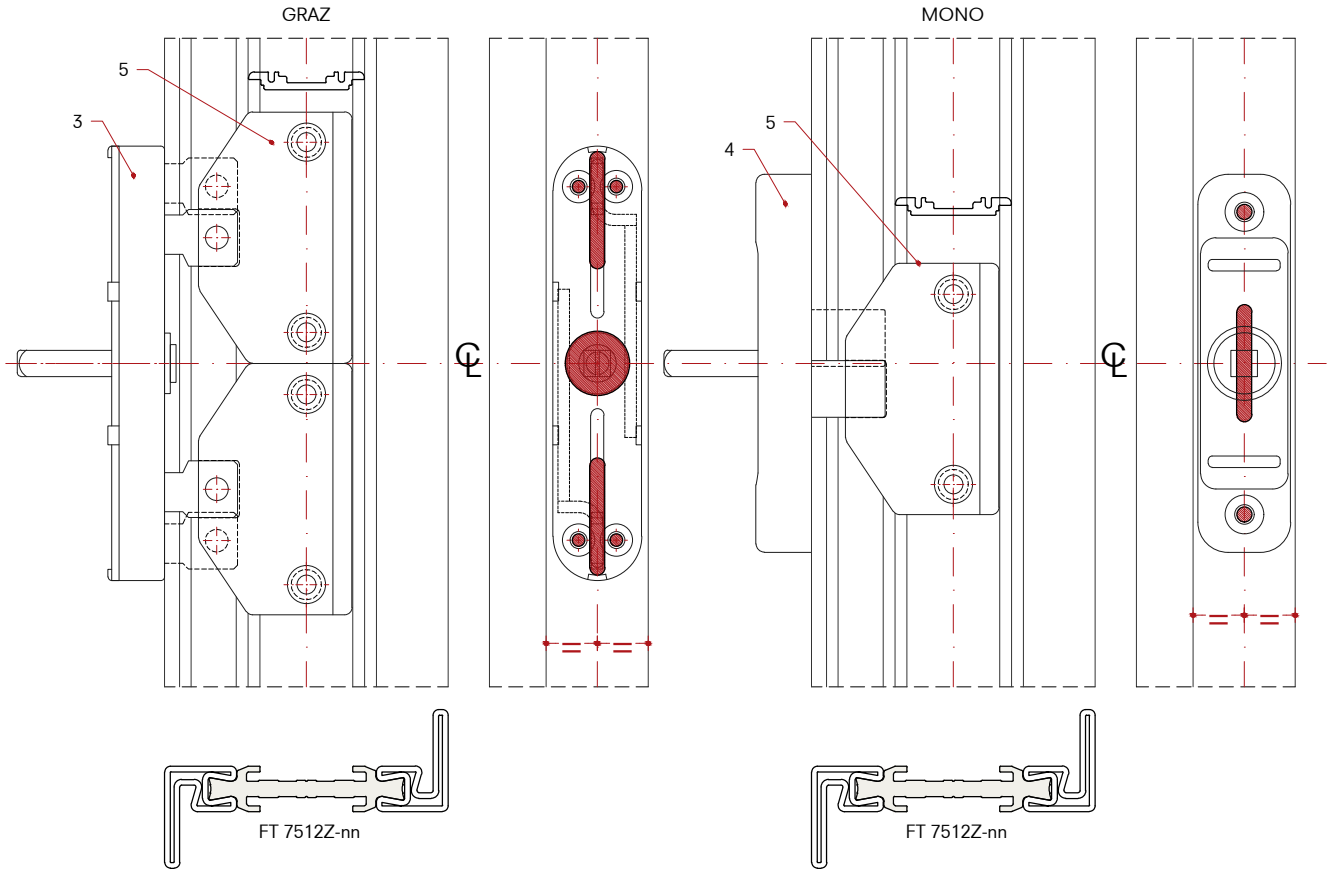
Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)







Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

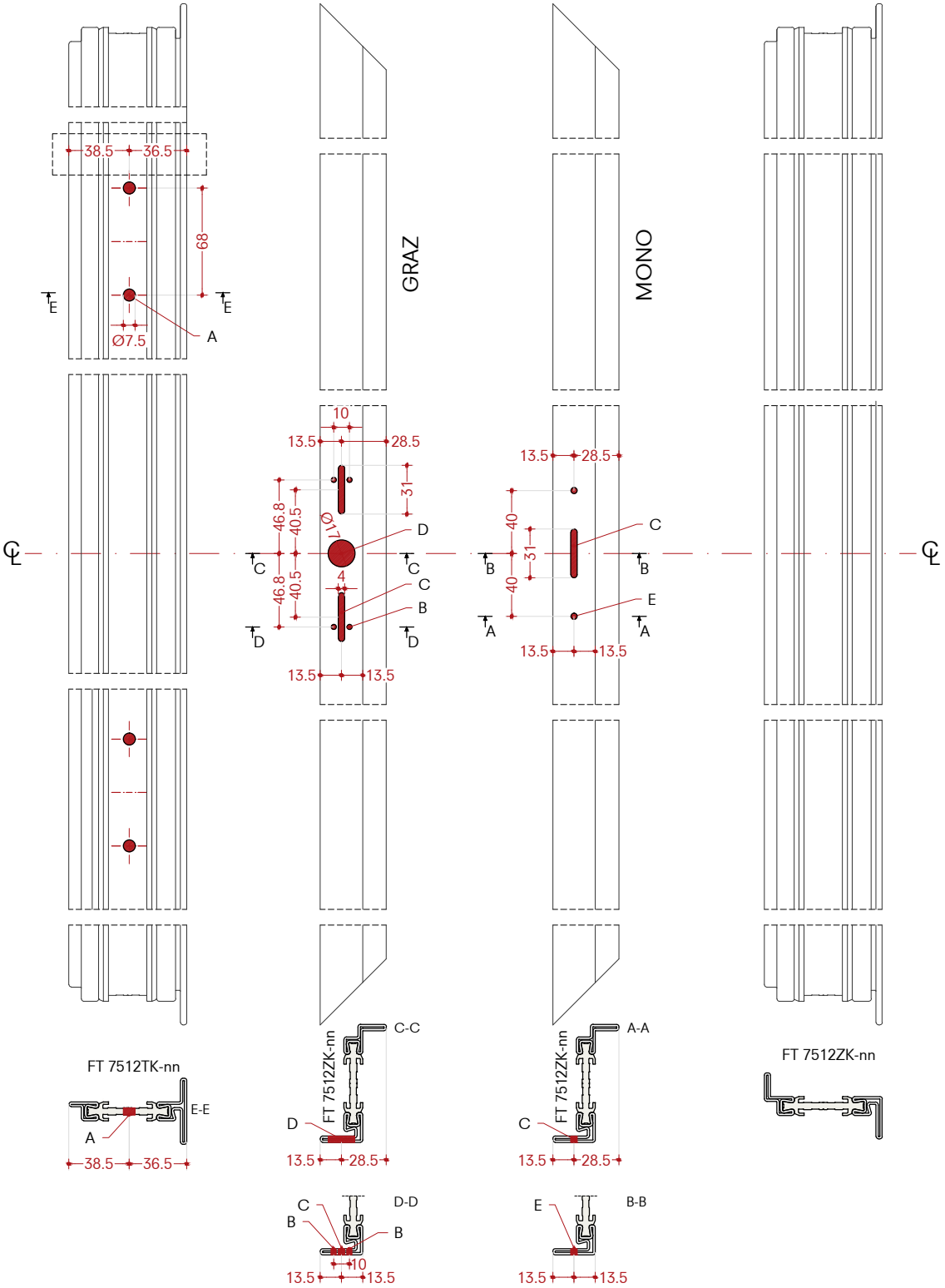
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open in - Right opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
Flächenbündige profile

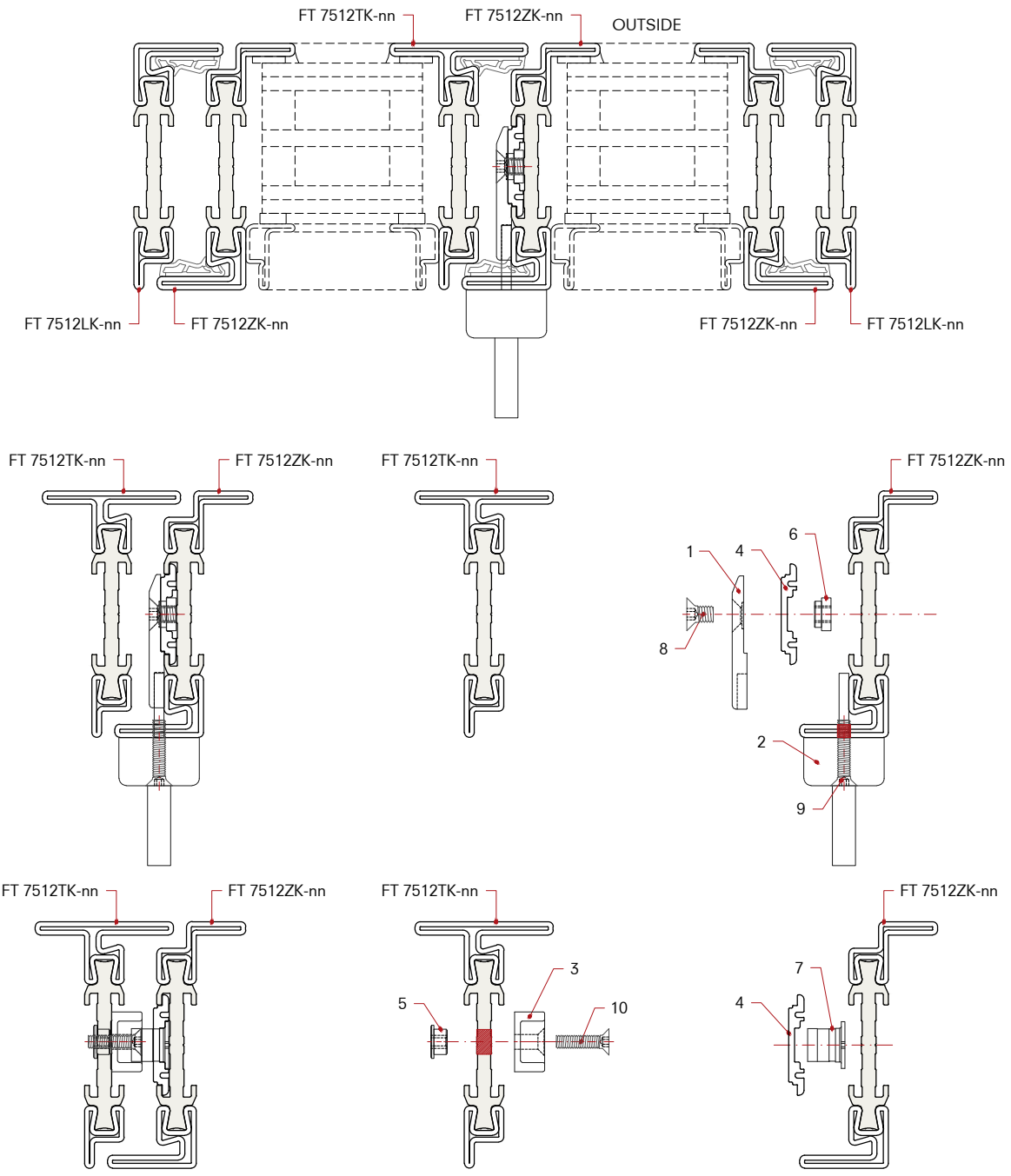
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture droite
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

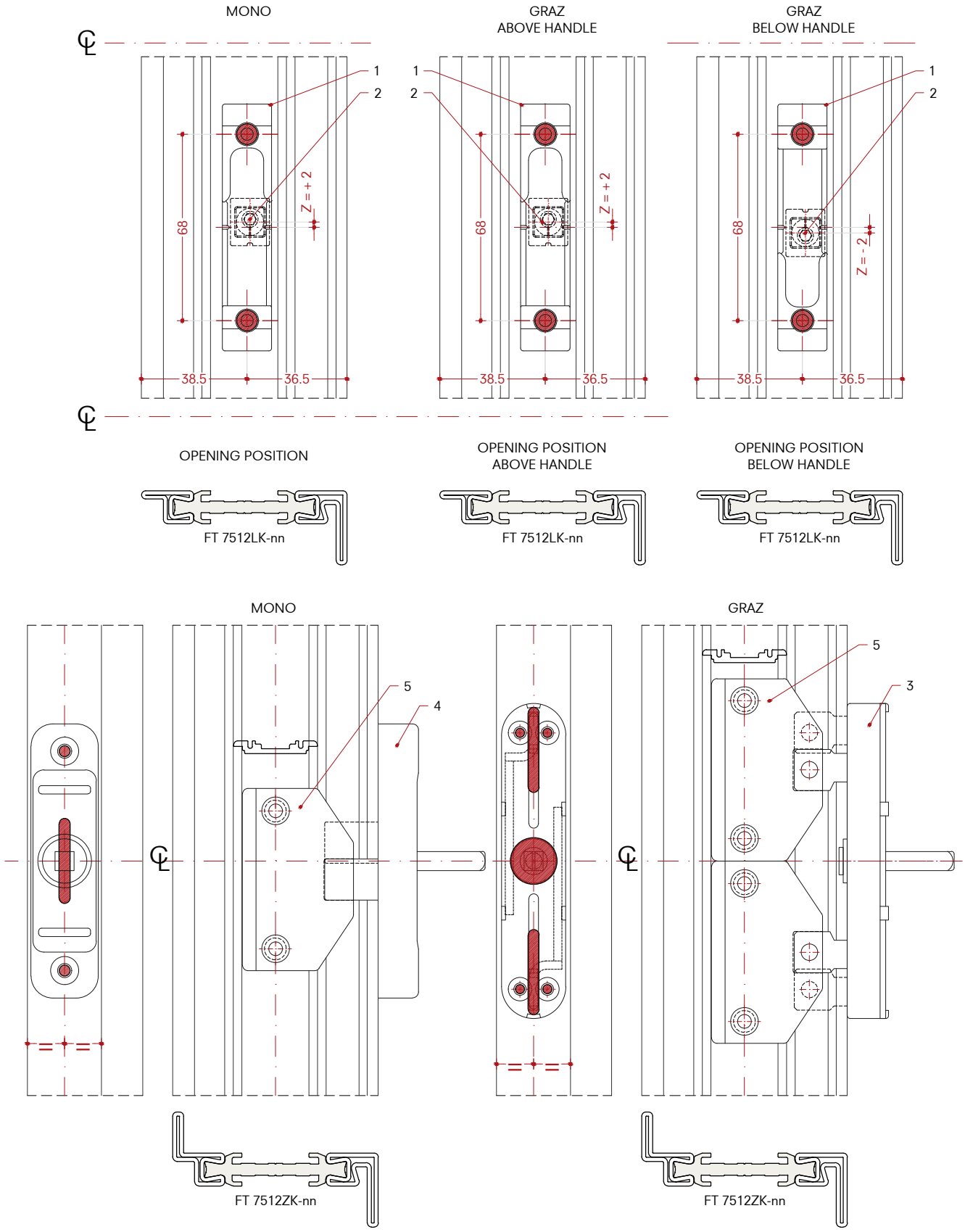
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

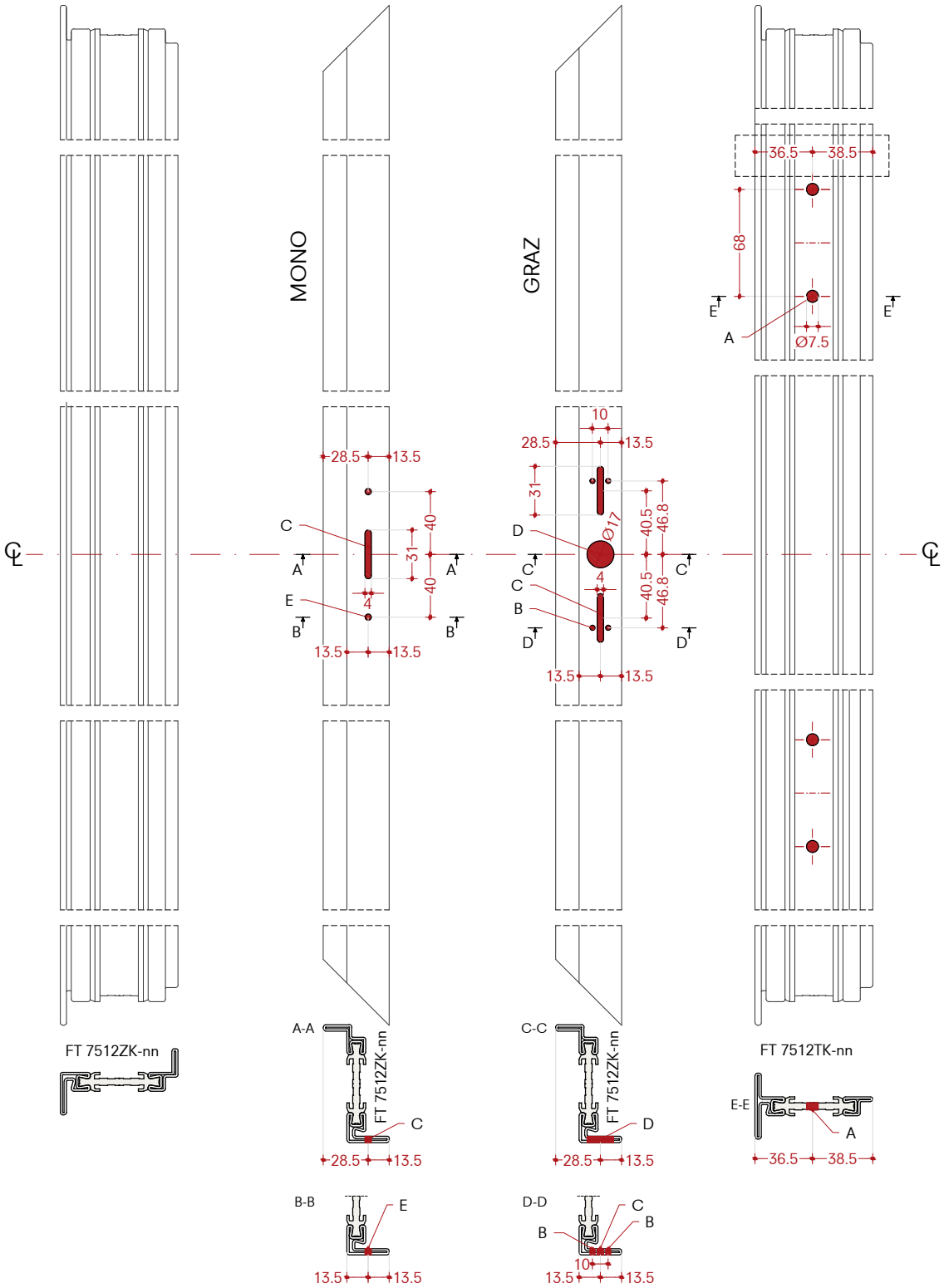
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open in - Left opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach innen öffnend - DIN links
Flächenbündige profile

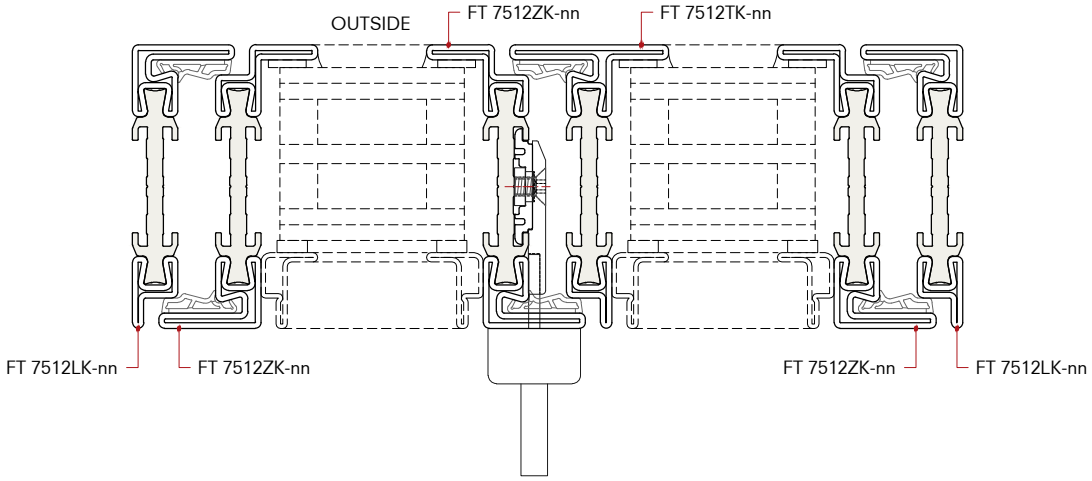
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture gauche
Profilés coplanaires

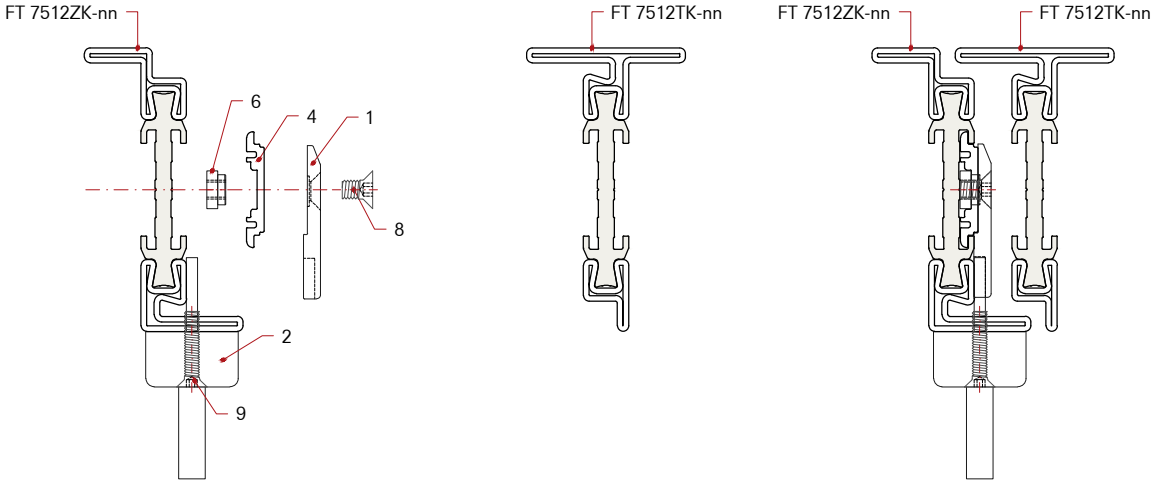


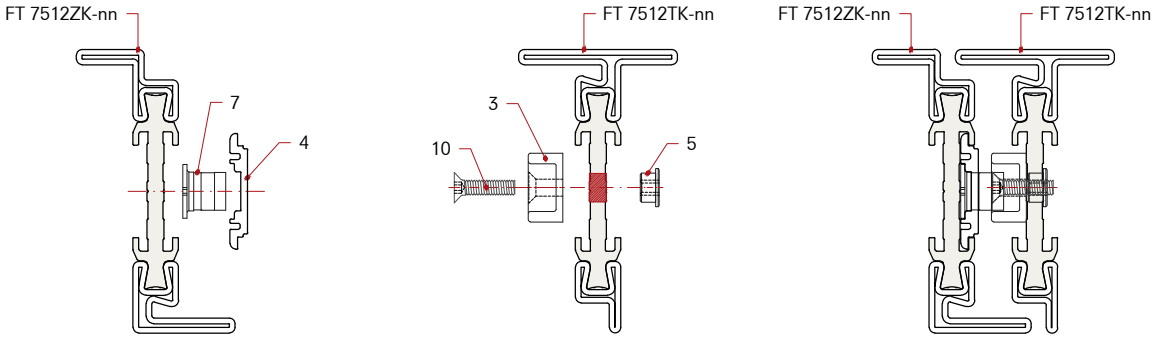
Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



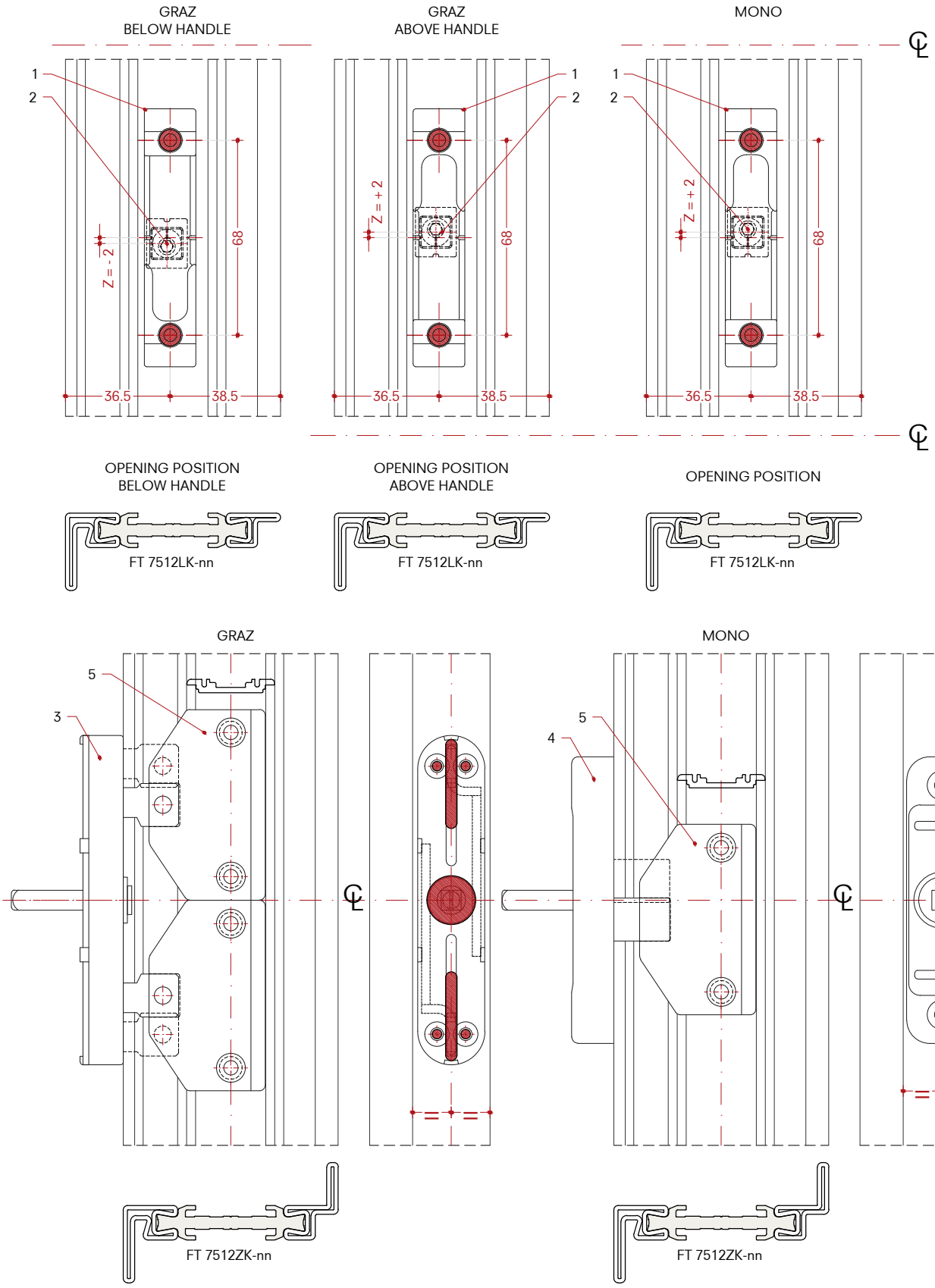




Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

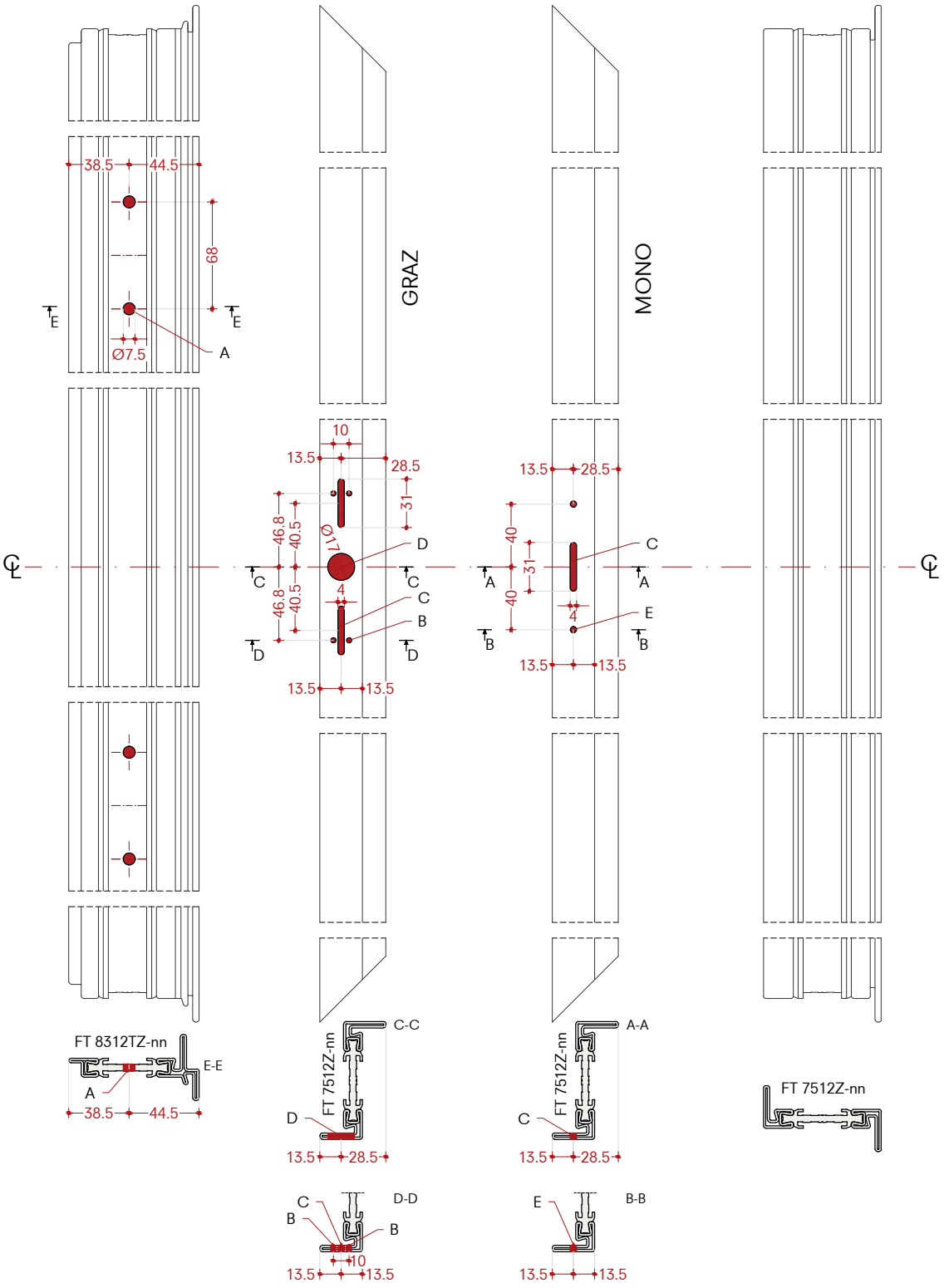
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation
Double leaf window
Open in - Right opening
Overlapped profiles

Montage Multipoint Aluminiumstangen
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
Überlappende profile

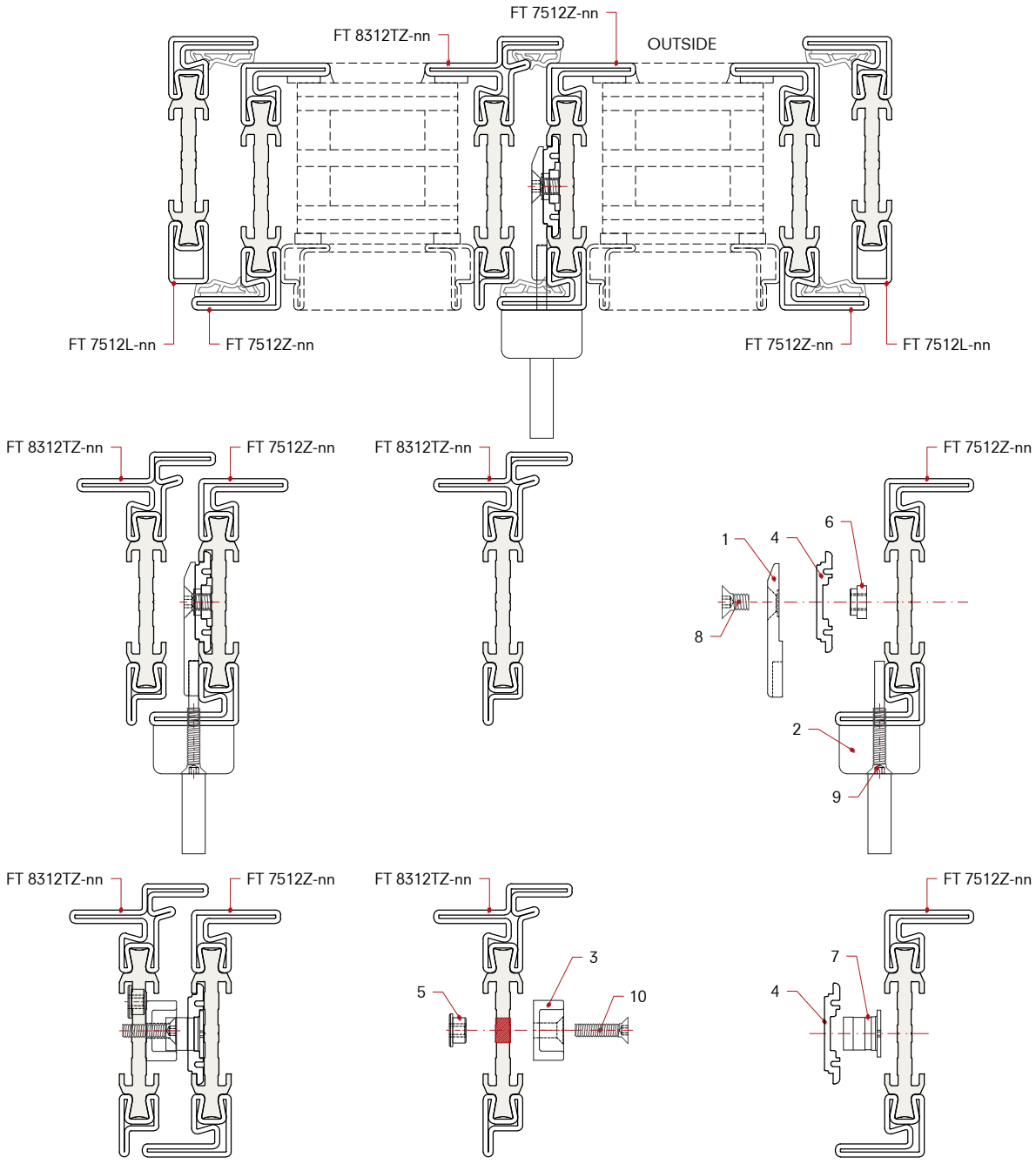
Montage Multipoint tiges de aluminium
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture droite
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

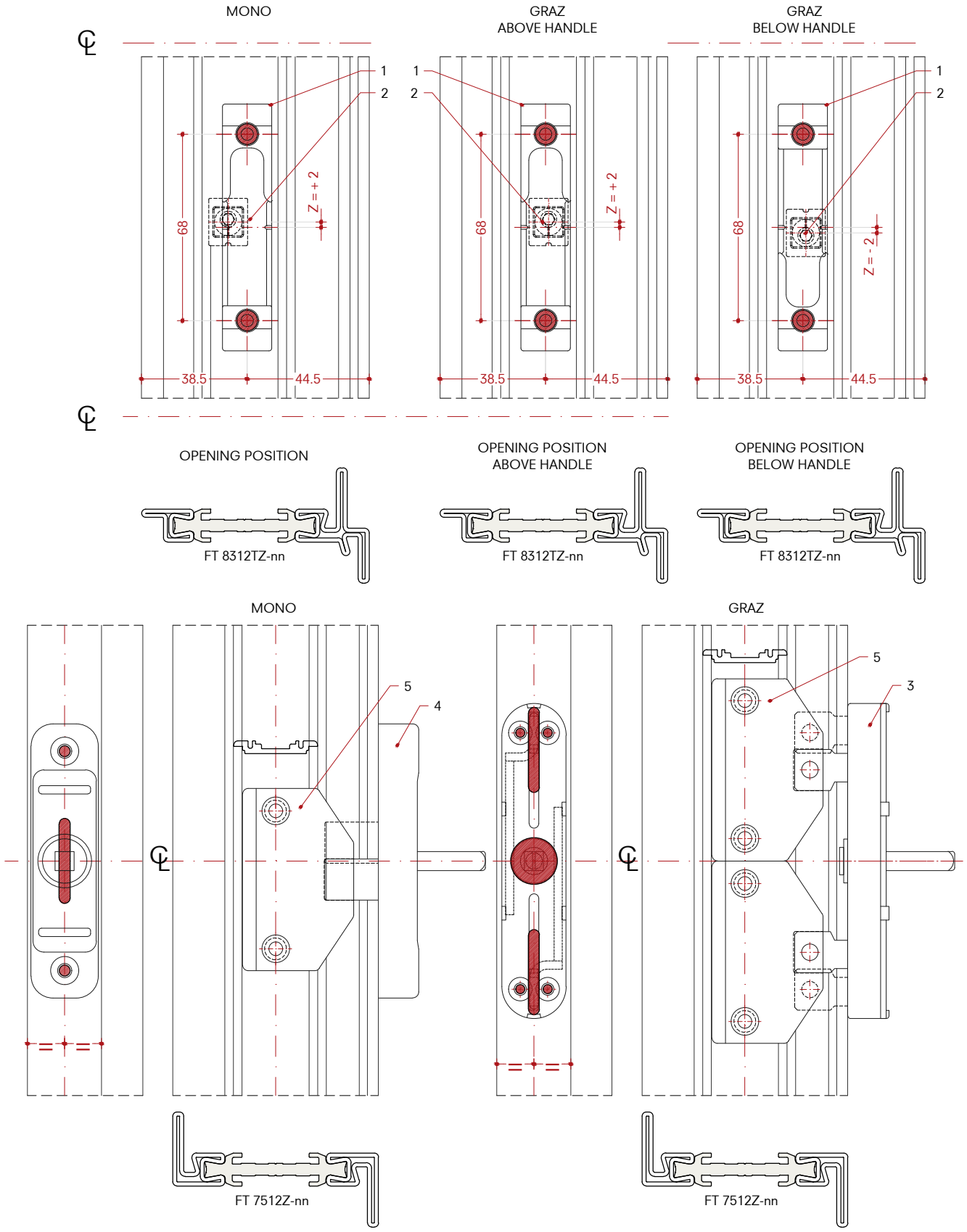
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

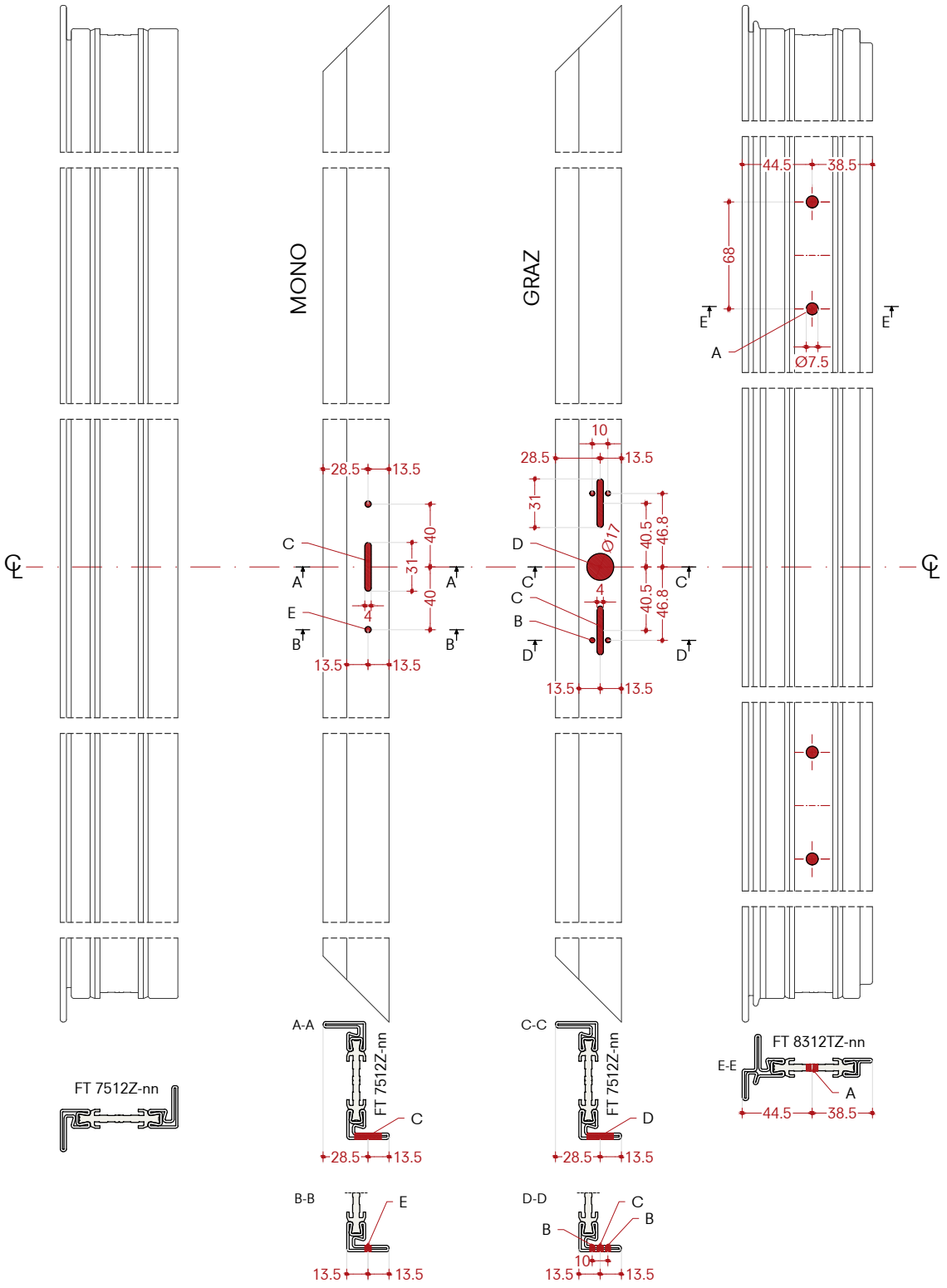
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open in - Left opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach innen öffnend - DIN links
Überlappende profile

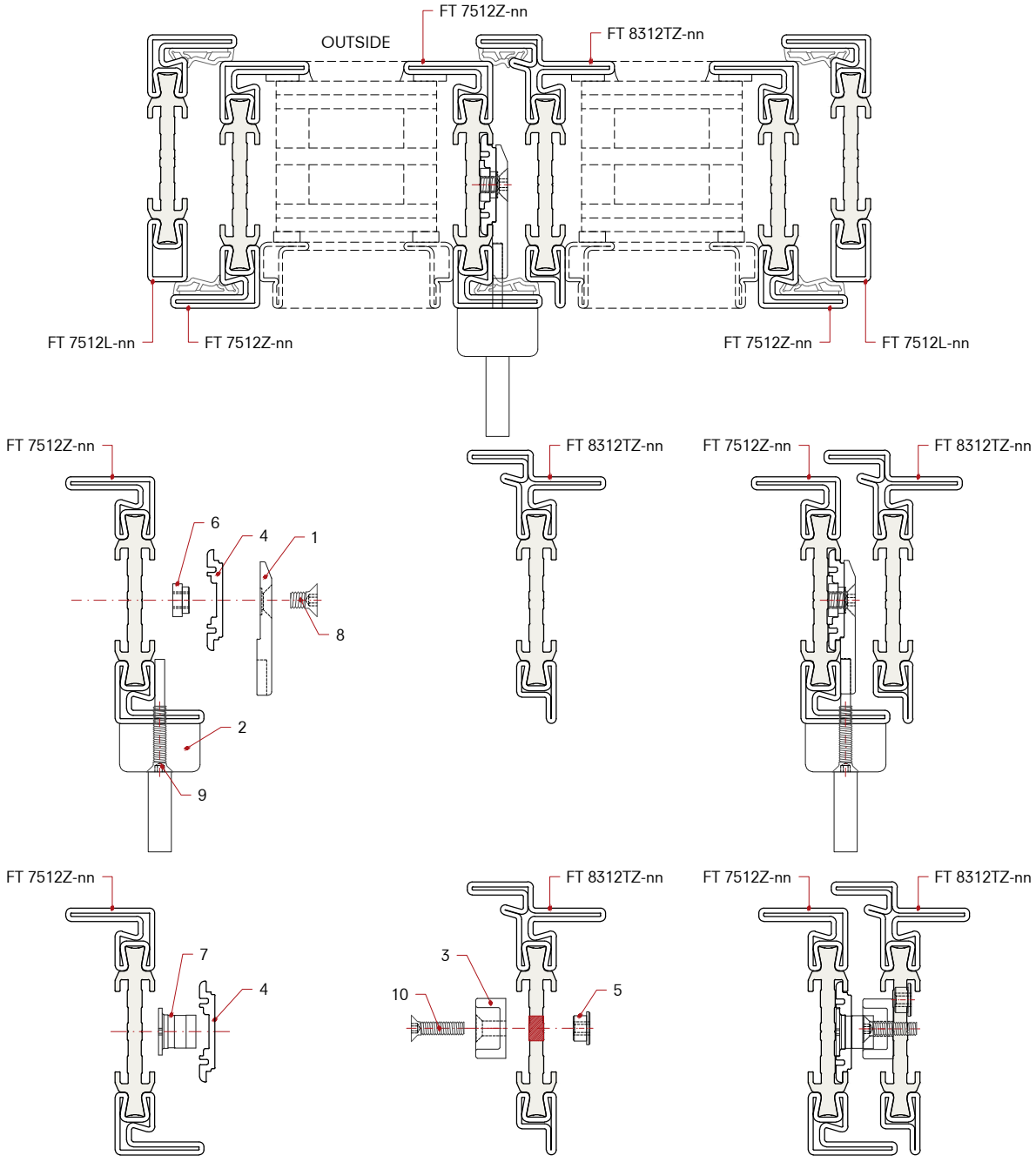
, mit Graz und MonoMontage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture gauche
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5

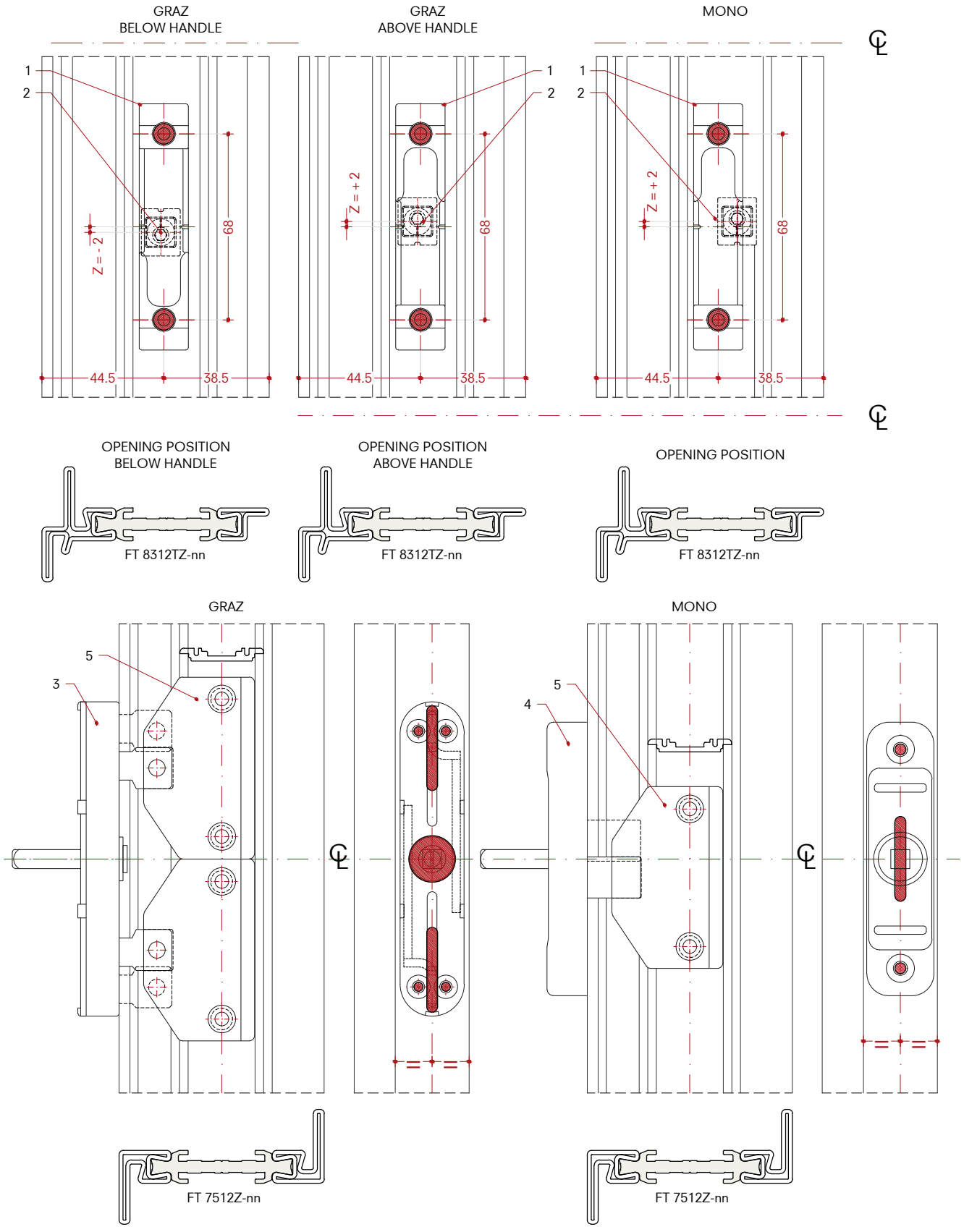
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

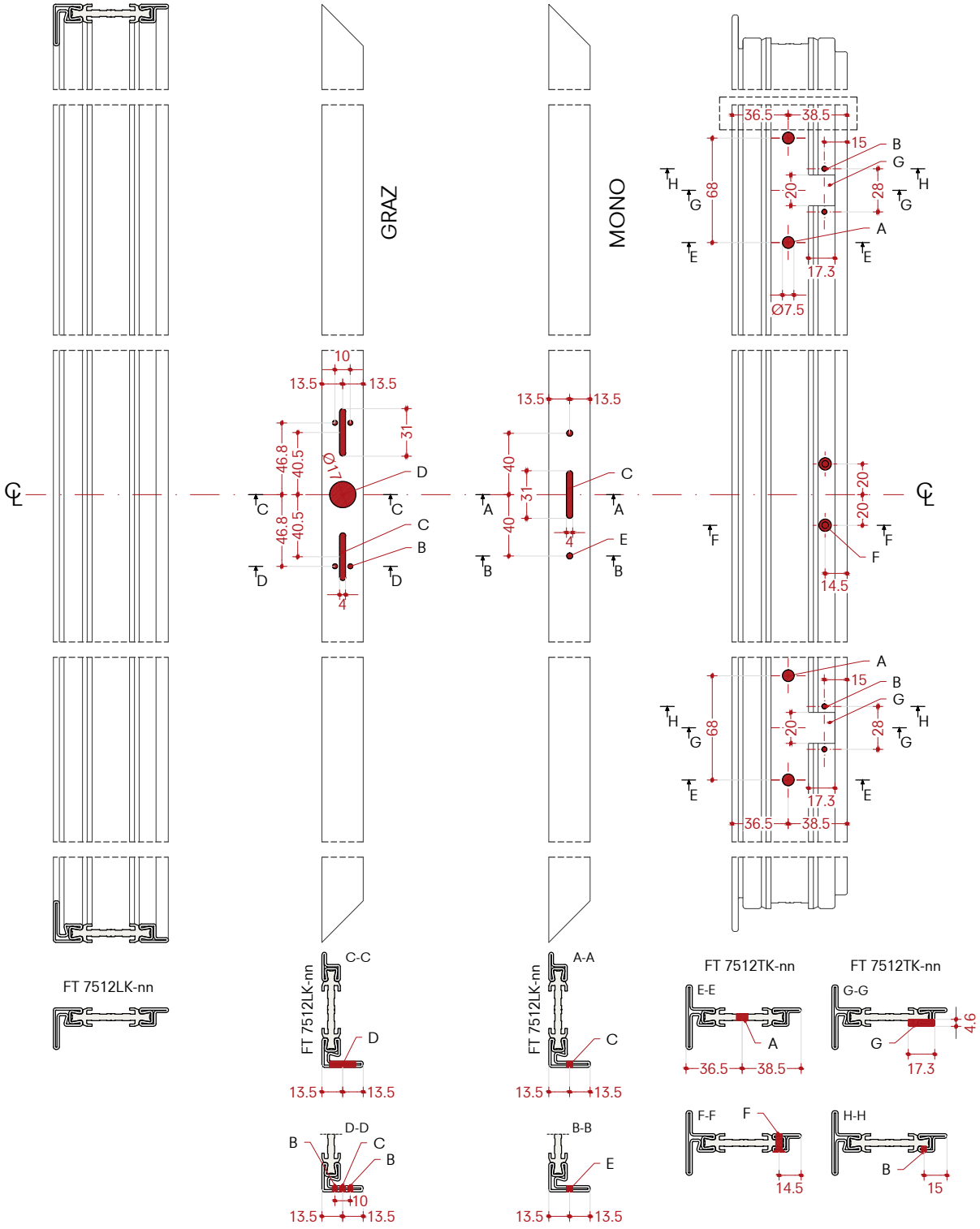
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open out - Right opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach außen öffnend - DIN rechts
Flächenbündige profile

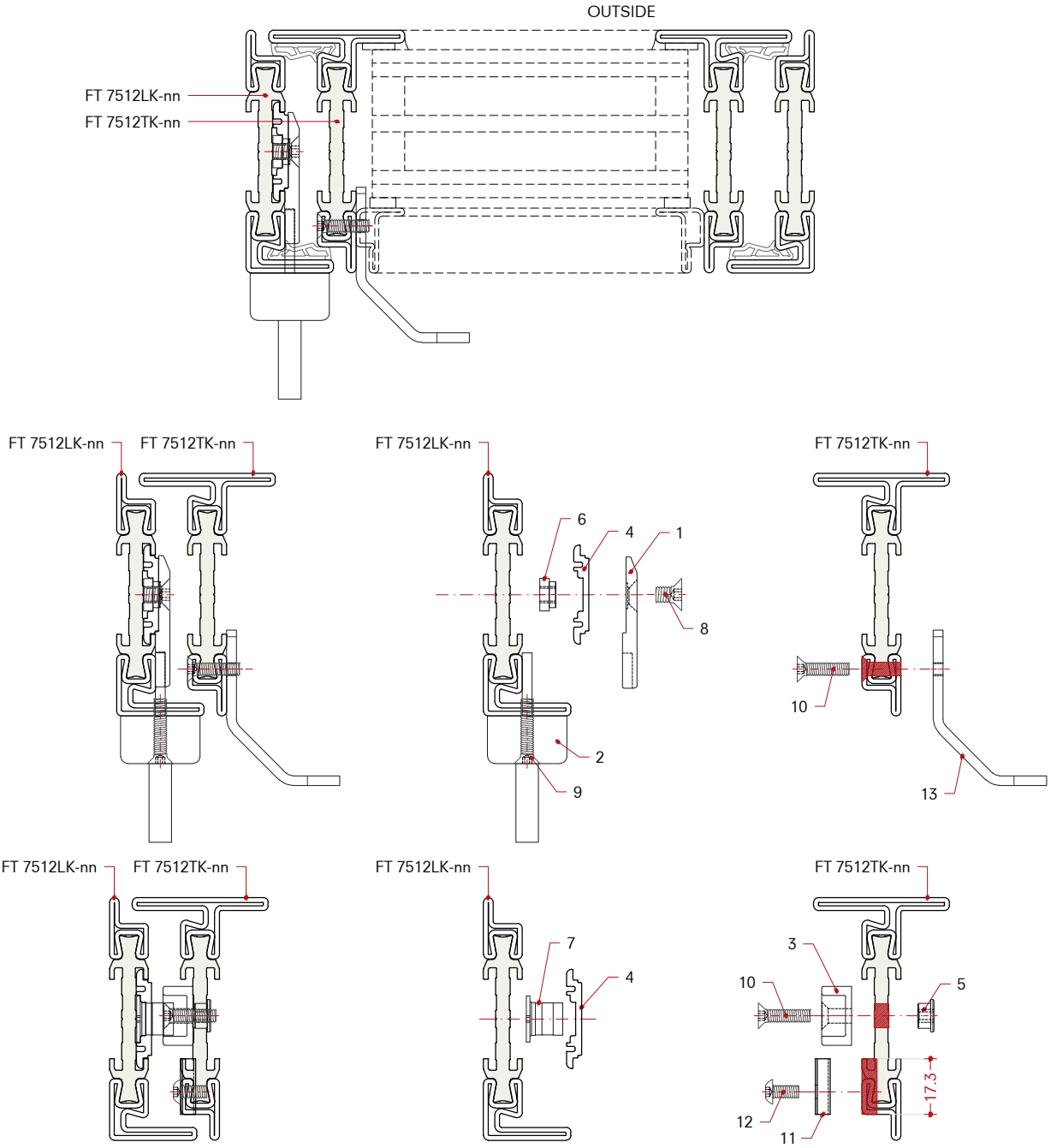
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture extérieure - Ouverture droite
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

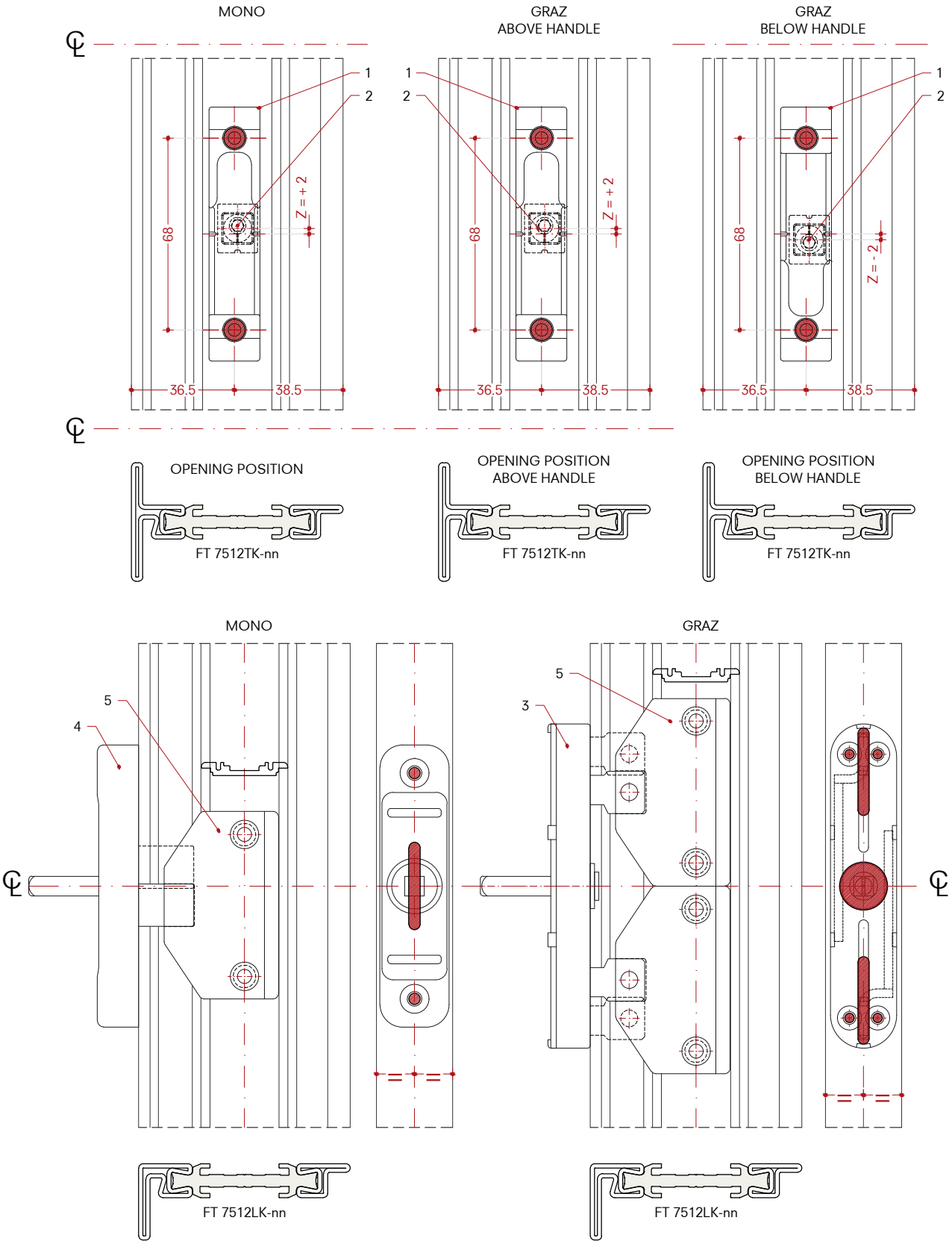
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

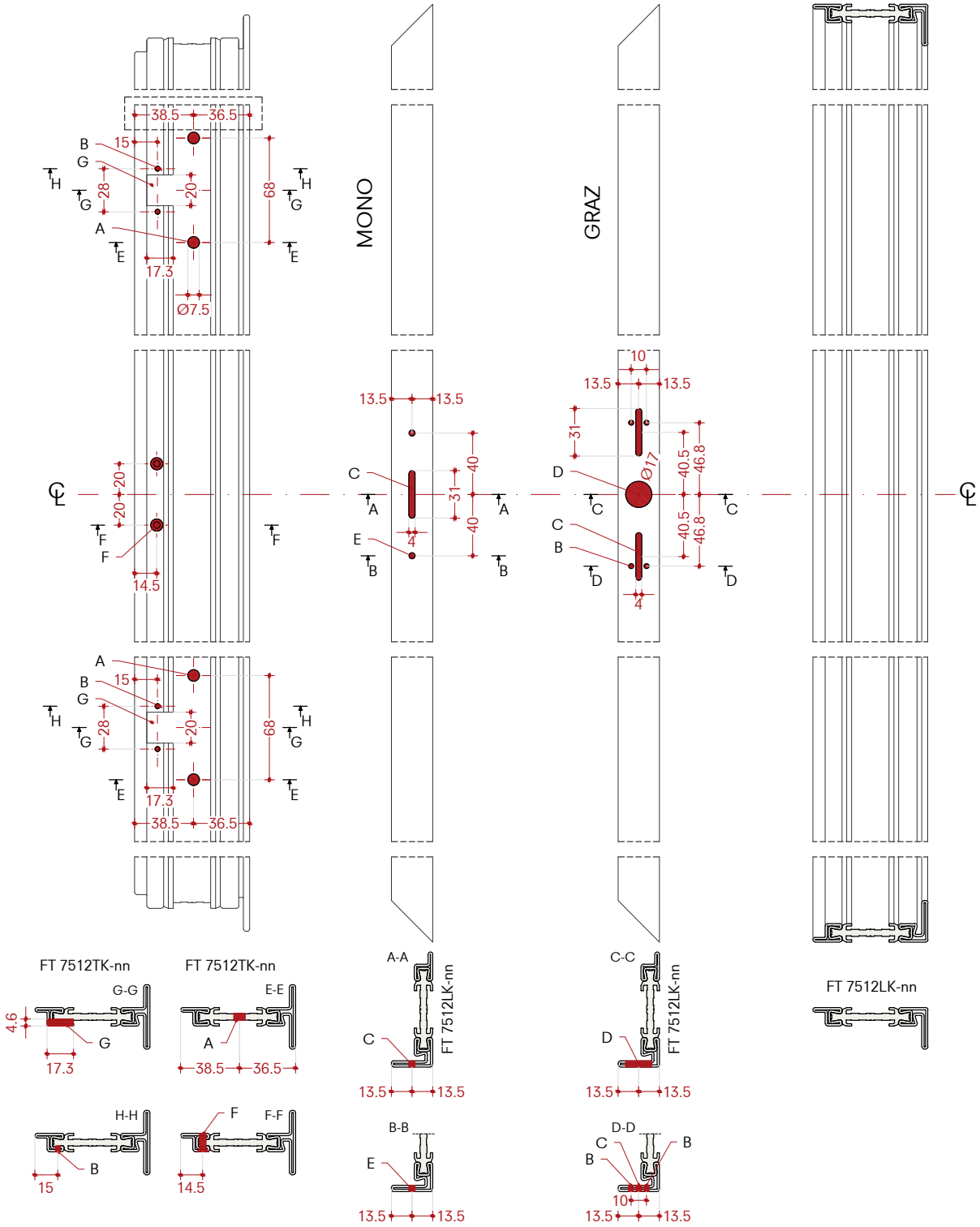
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open out - Left opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach außen öffnend - DIN links
Flächenbündige profile

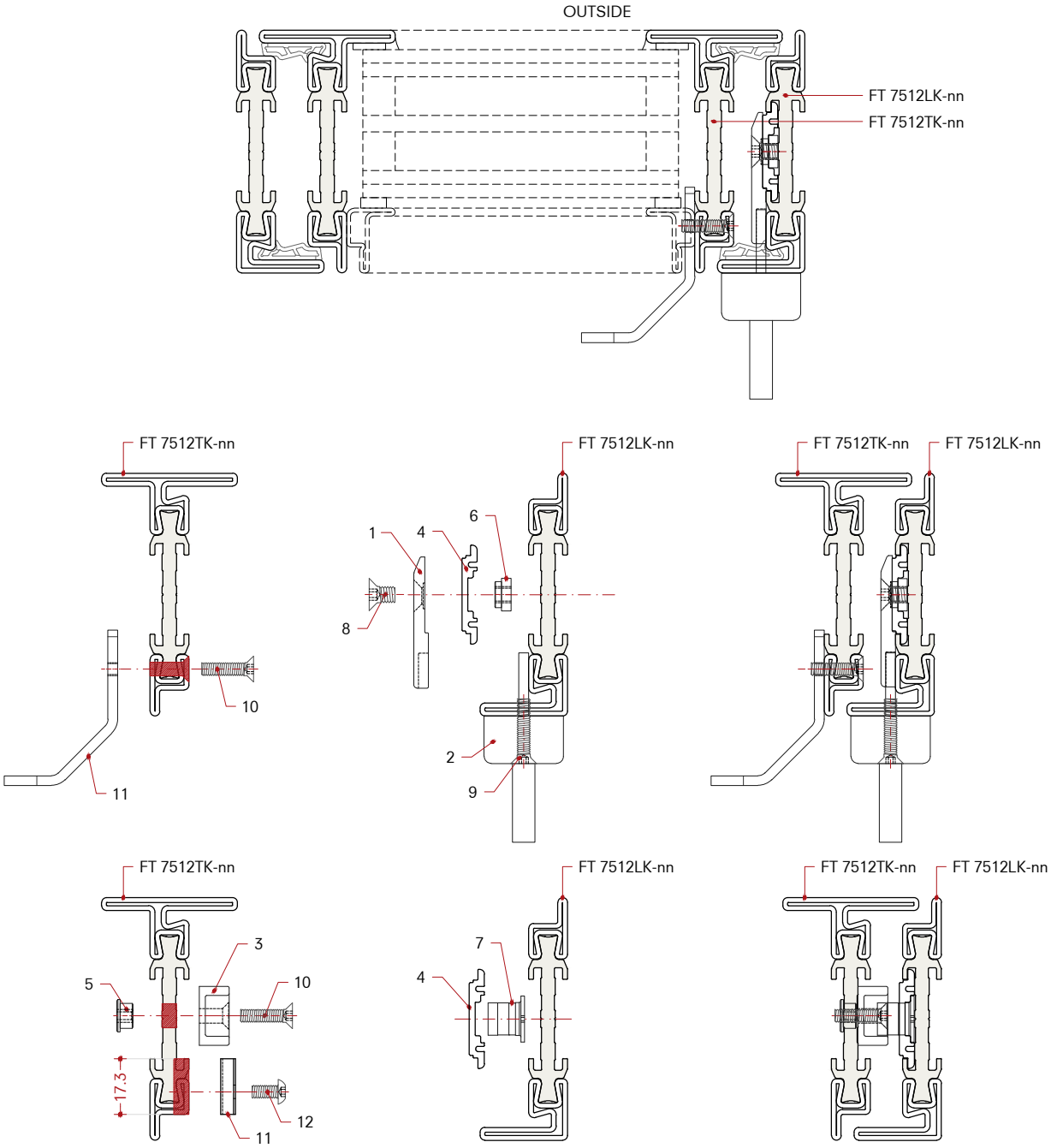
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture extérieure - Ouverture gauche
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

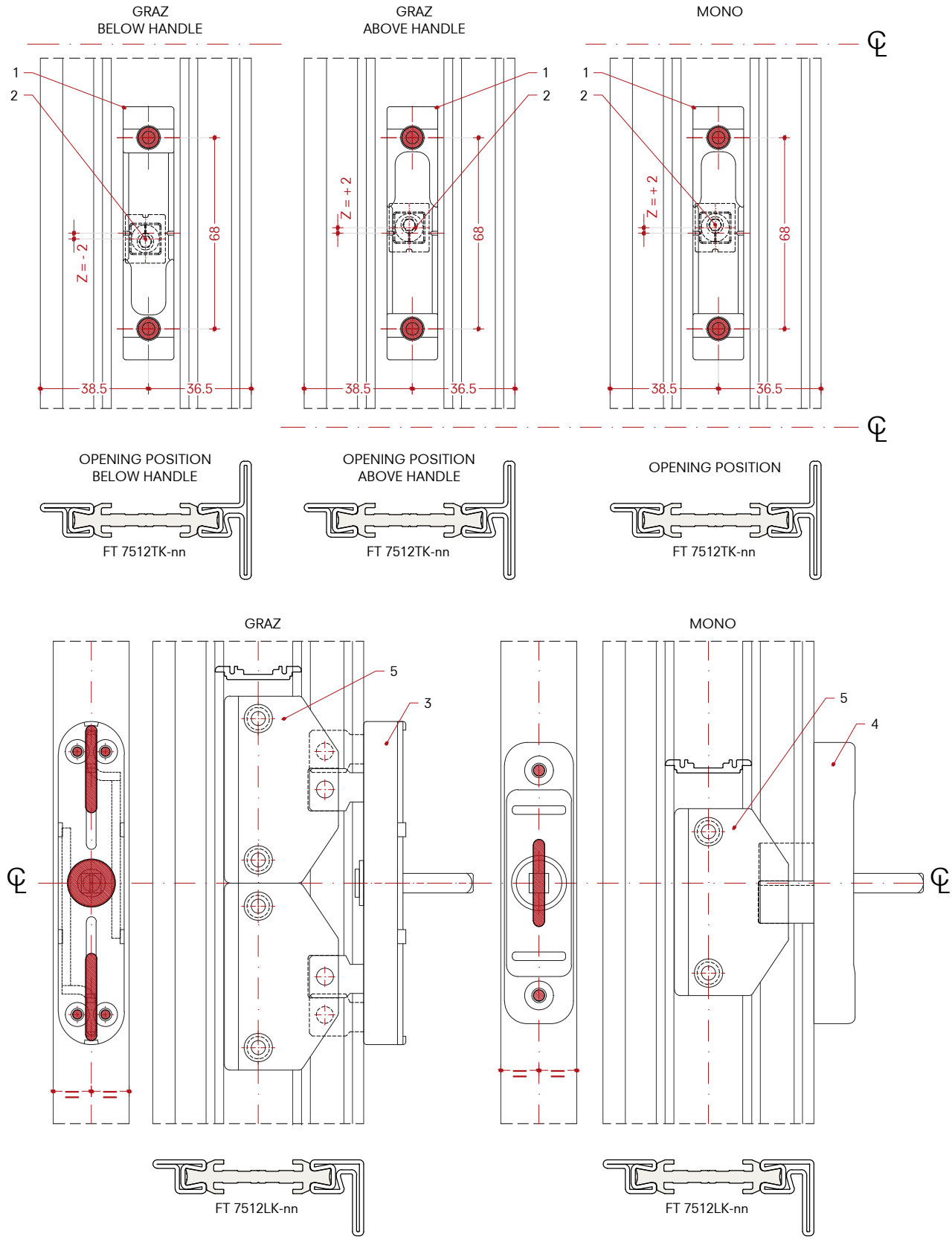
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

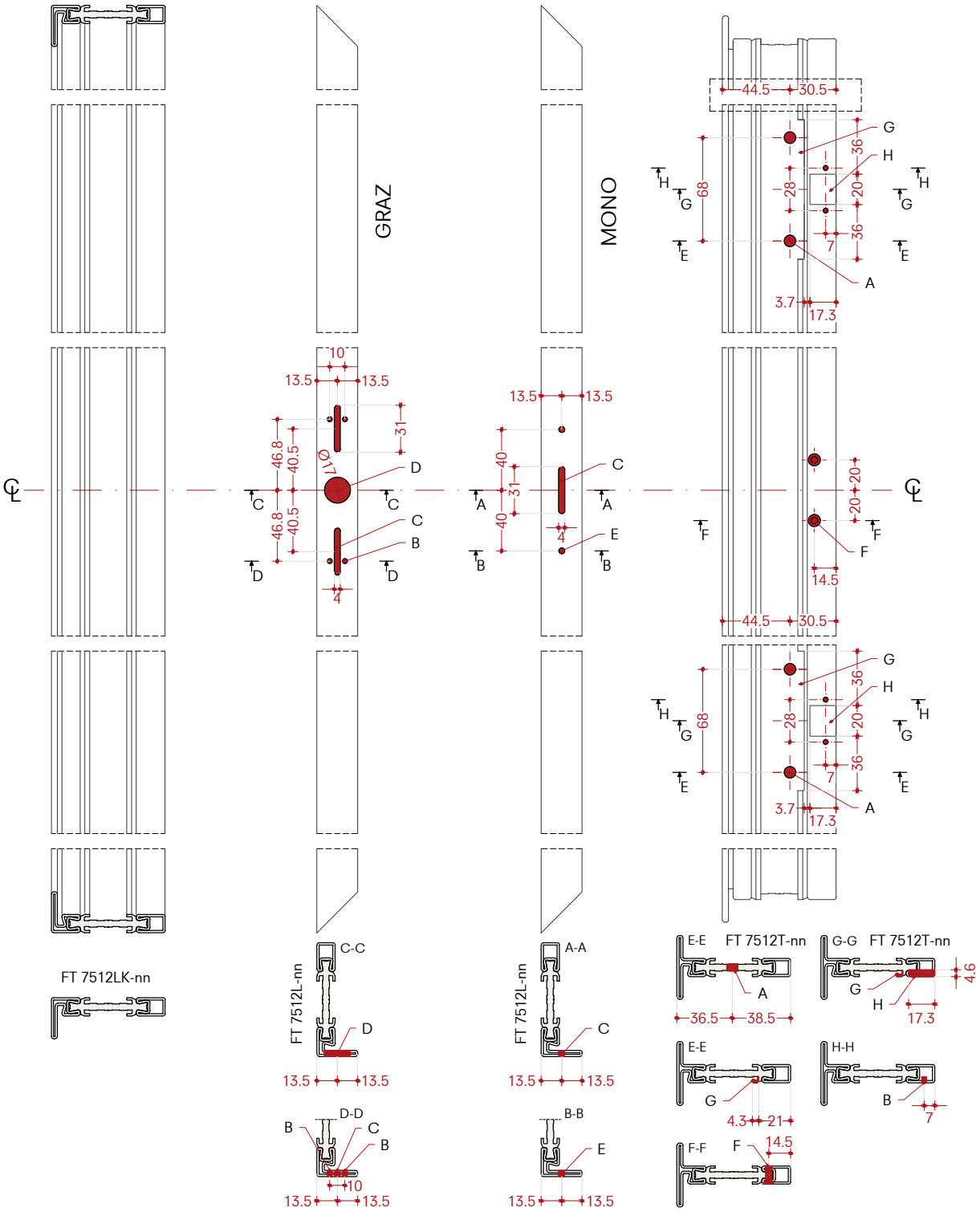
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open out - Right opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach außen öffnend - DIN rechts
Überlappende profile

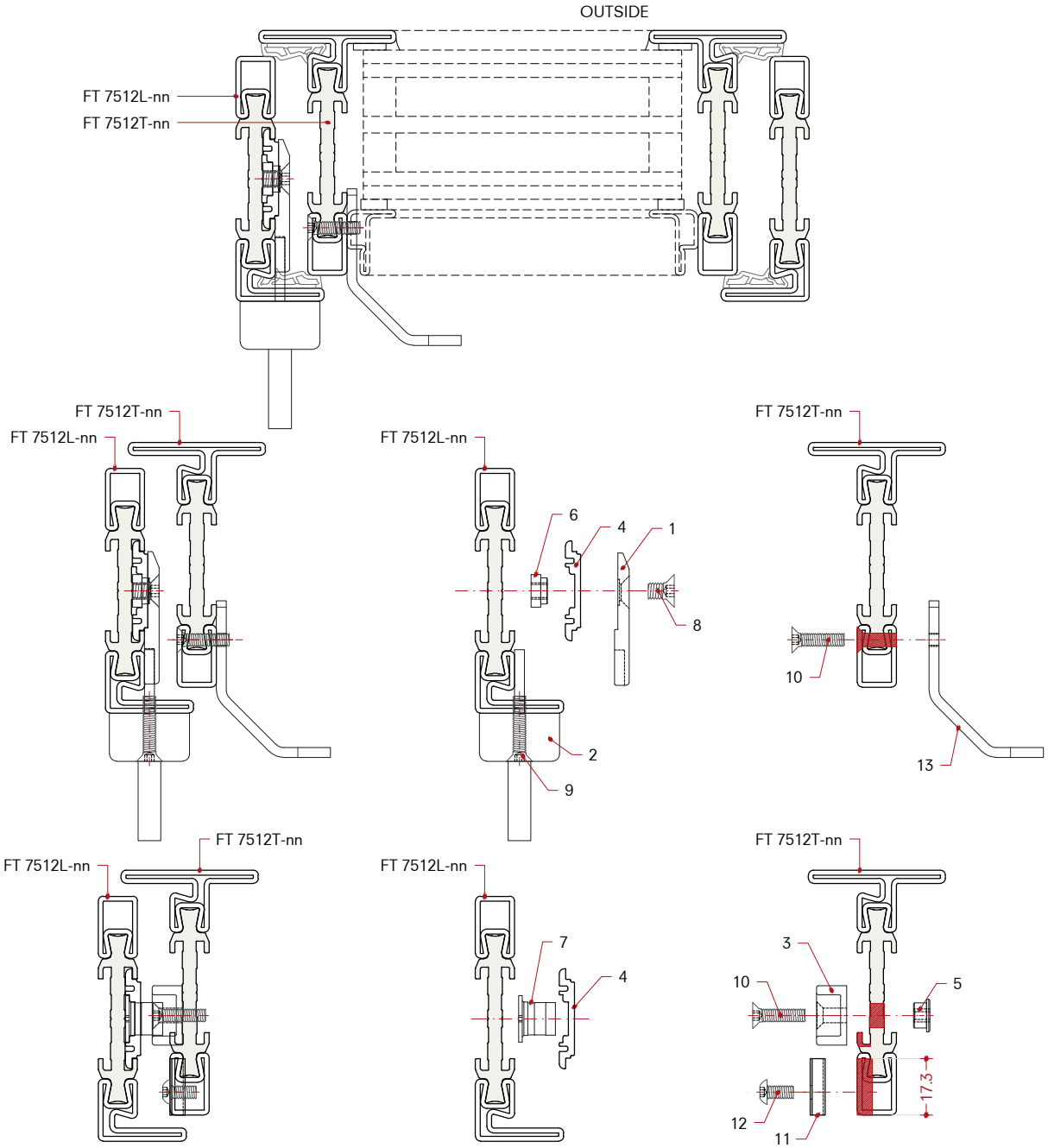
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture extérieure - Ouverture droite
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 92x4.3x3.8 mm
H) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 92x4.3x3.8 mm
H) Fräsung 20x17.3x4.6 mm

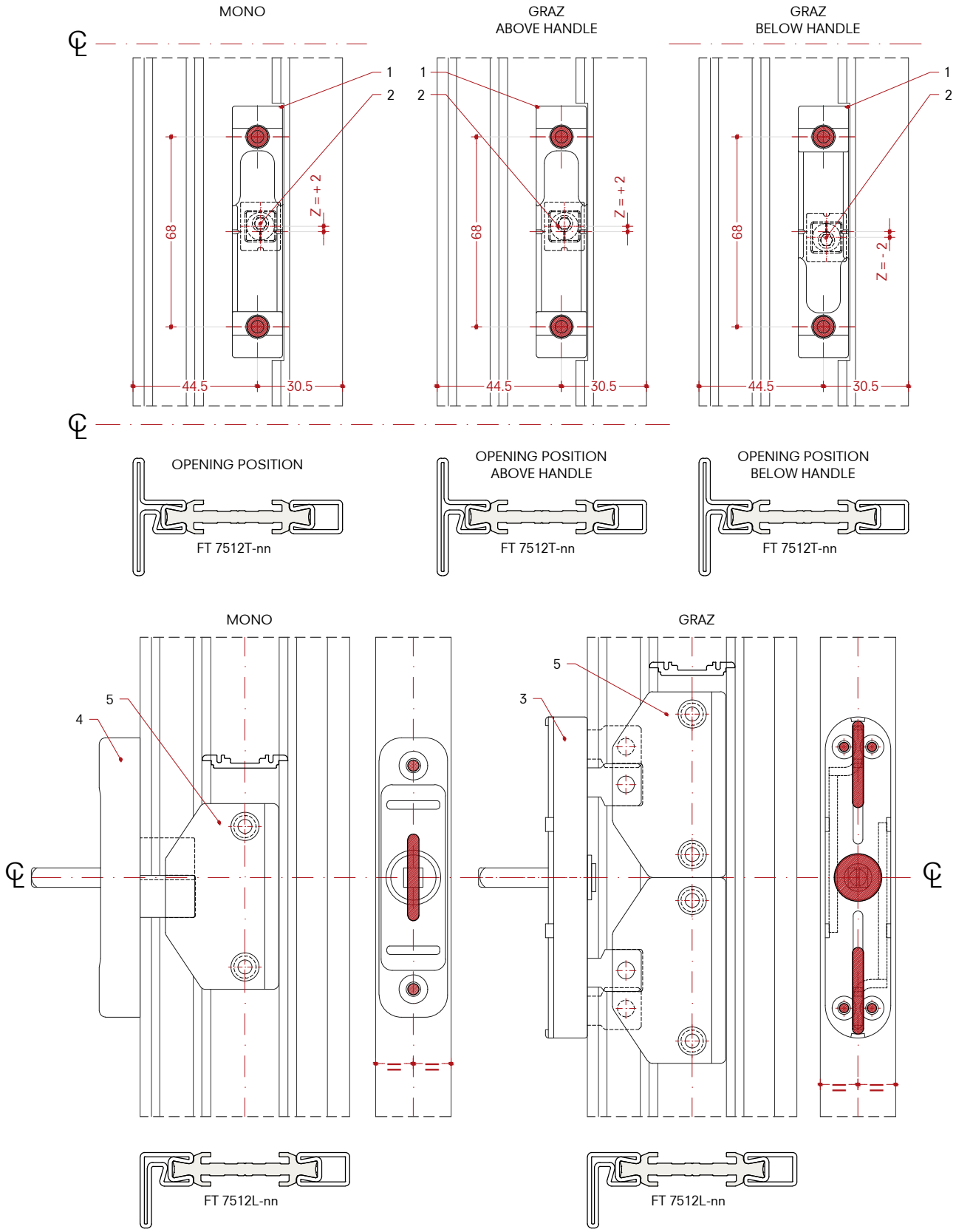
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 92x4.3x3.8 mm
H) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

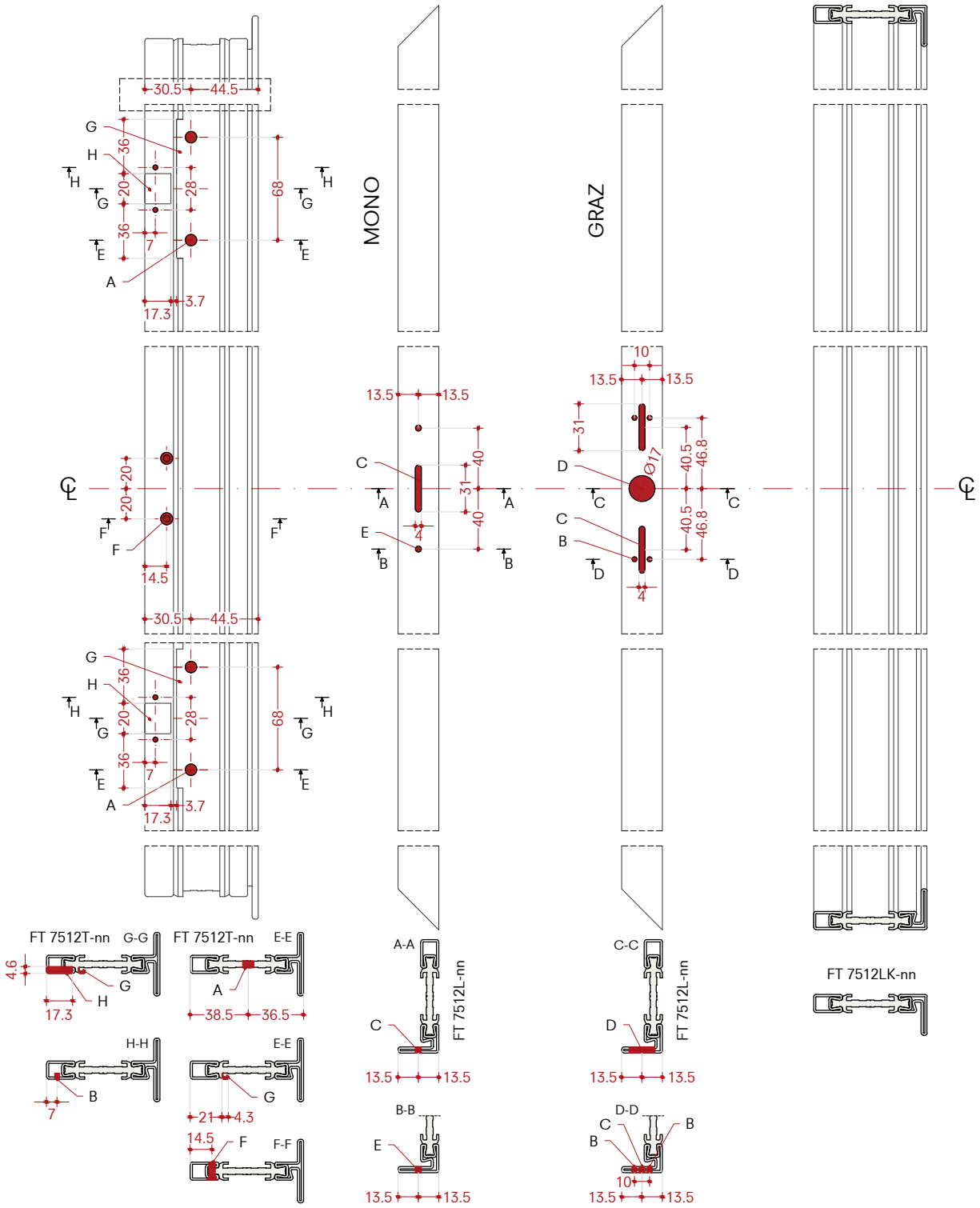
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Single leaf window
Open out - Left opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Einflüglige Fenster
Nach außen öffnend - DIN links
Überlappende profile

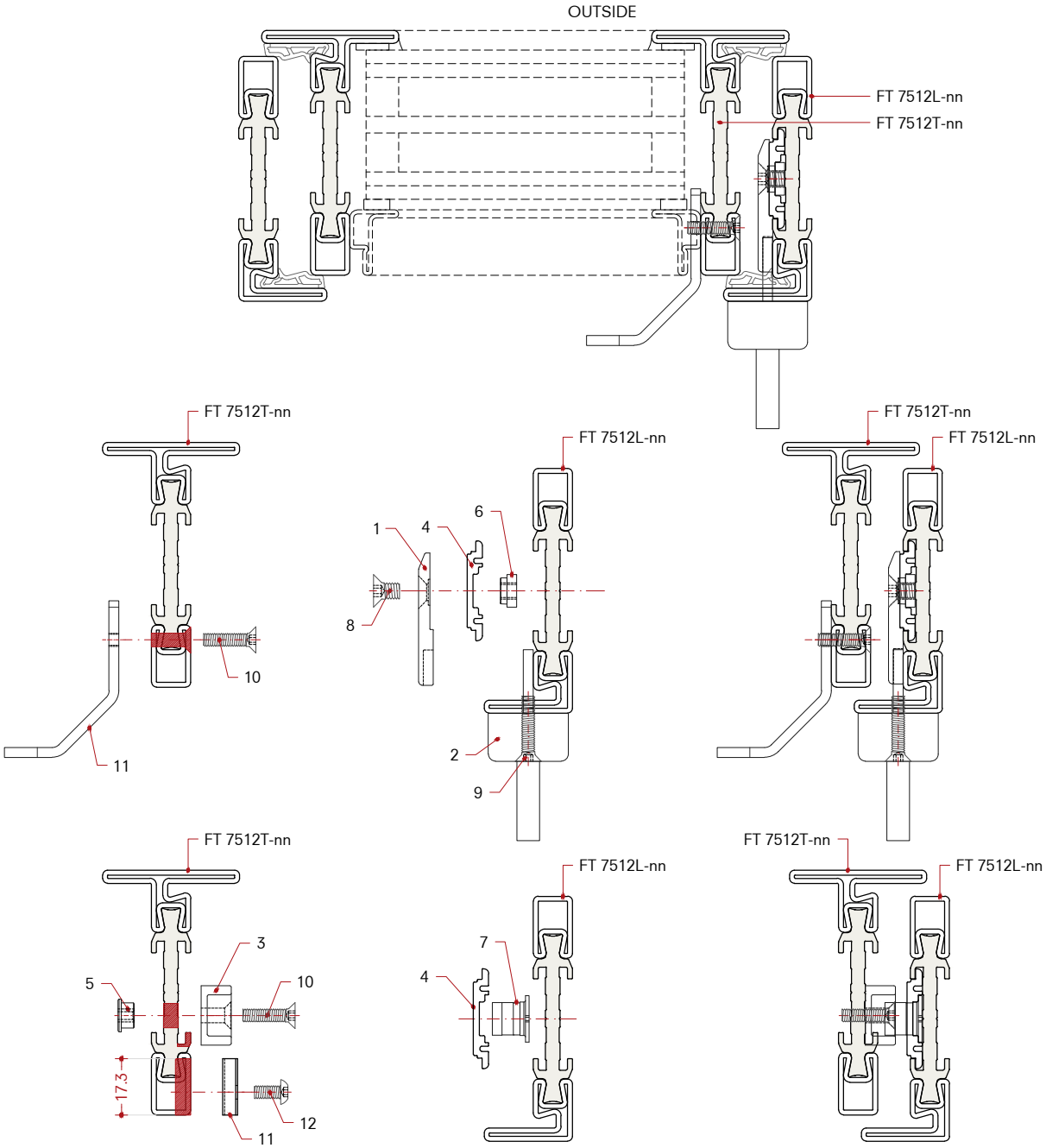
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à un vantail
Ouverture extérieure - Ouverture gauche
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 92x4.3x3.8 mm
H) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 92x4.3x3.8 mm
H) Fräsung 20x17.3x4.6 mm

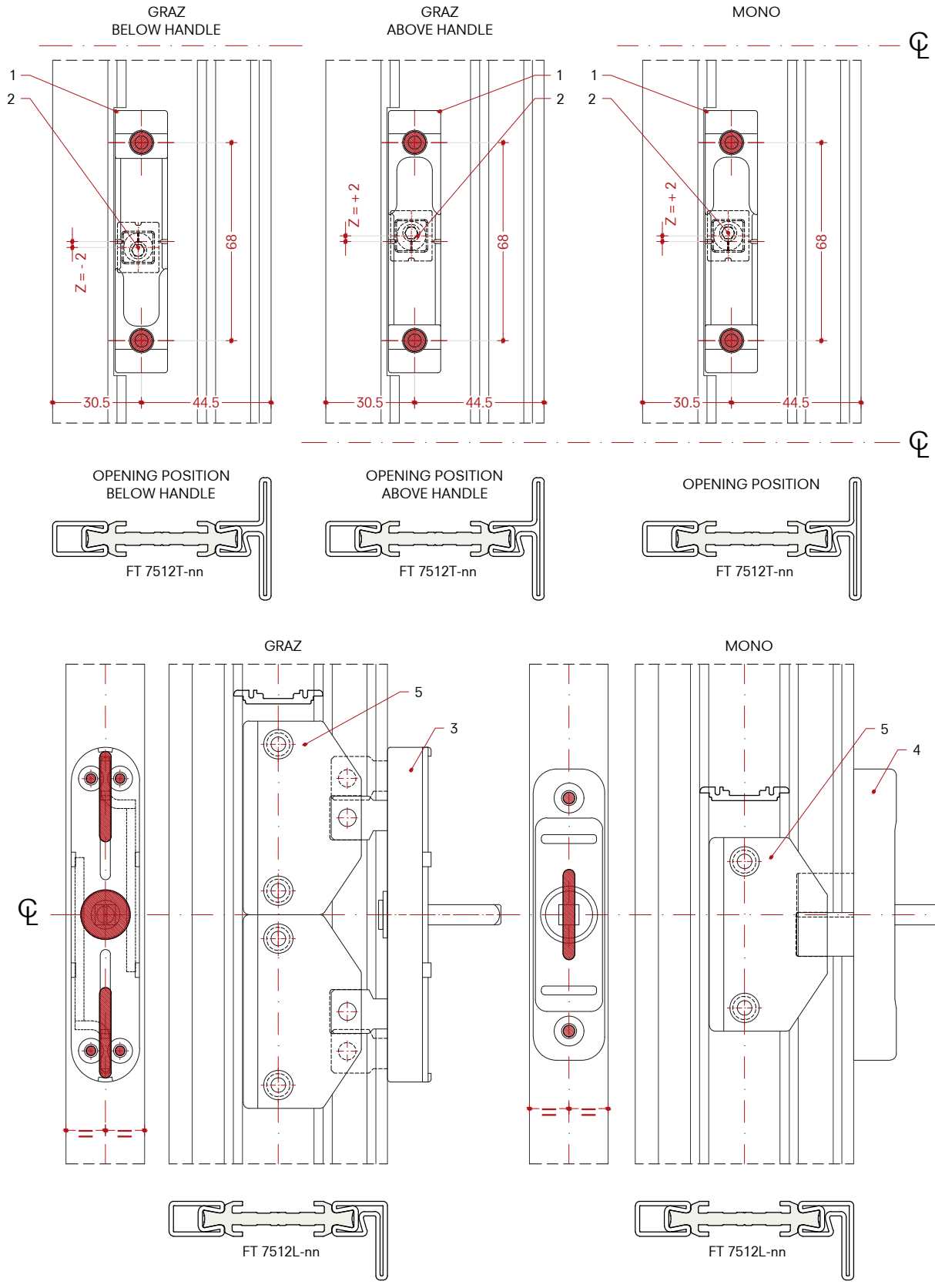
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 92x4.3x3.8 mm
H) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

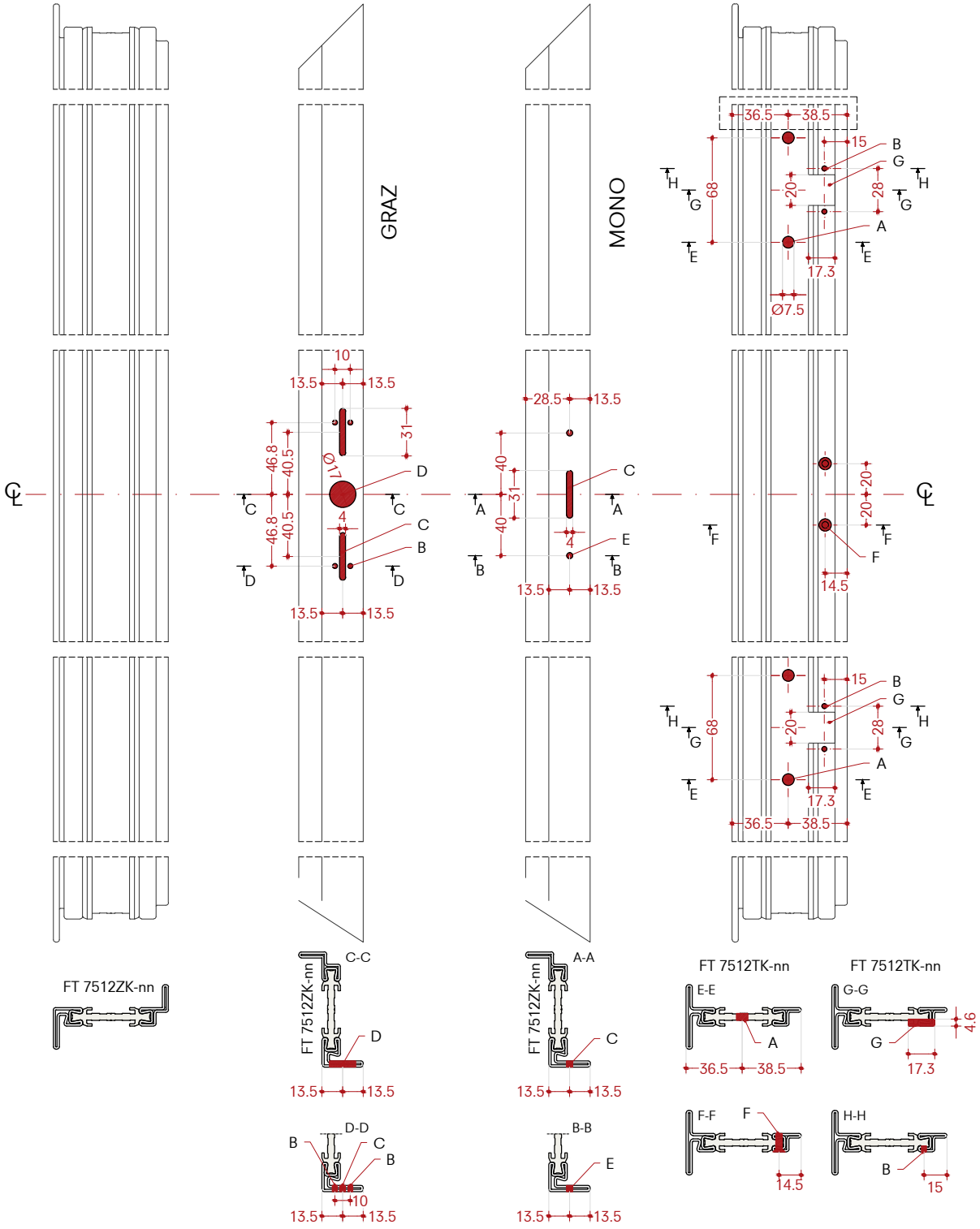
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open out - Right opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
Flächenbündige profile

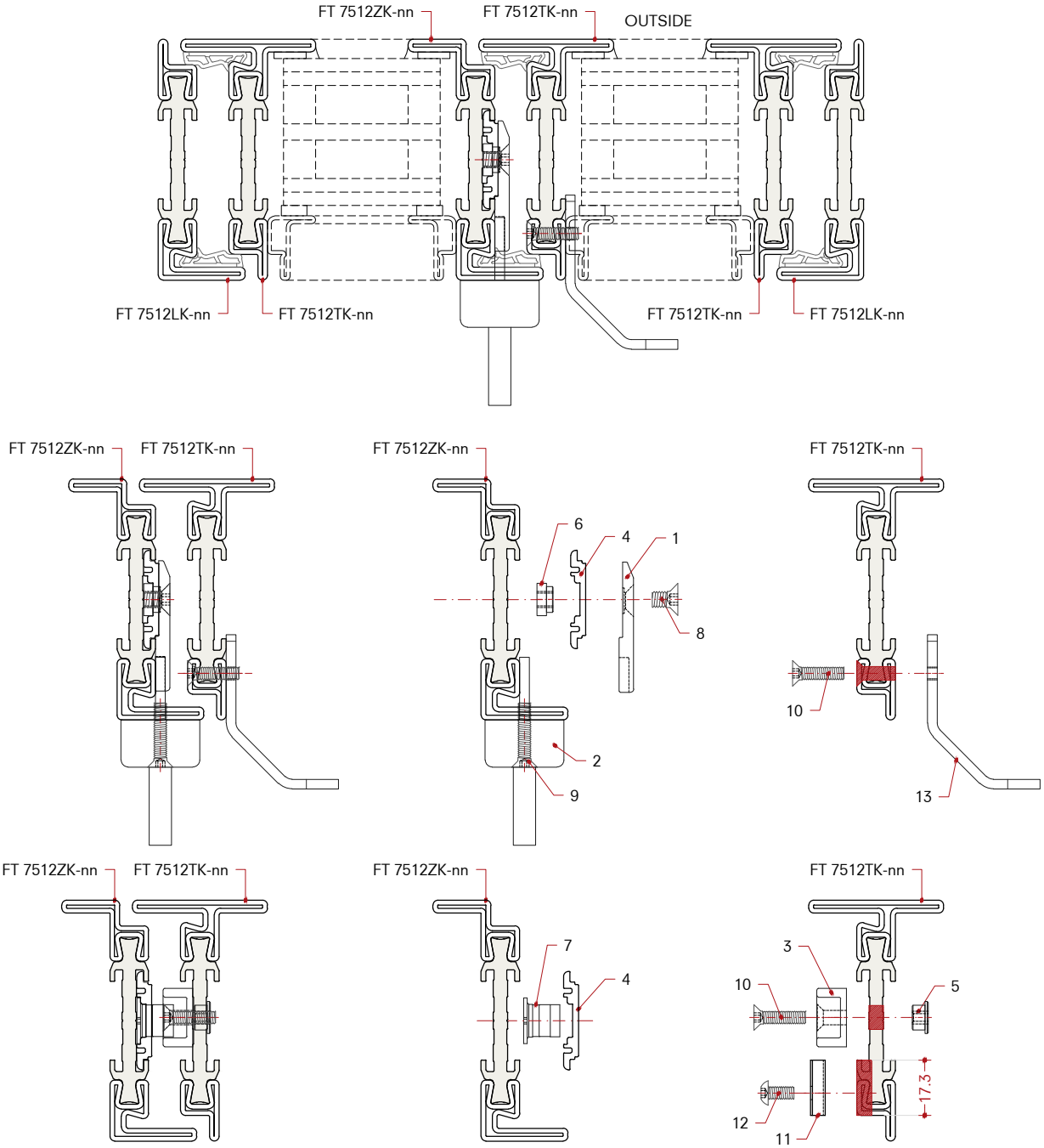
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture droite
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

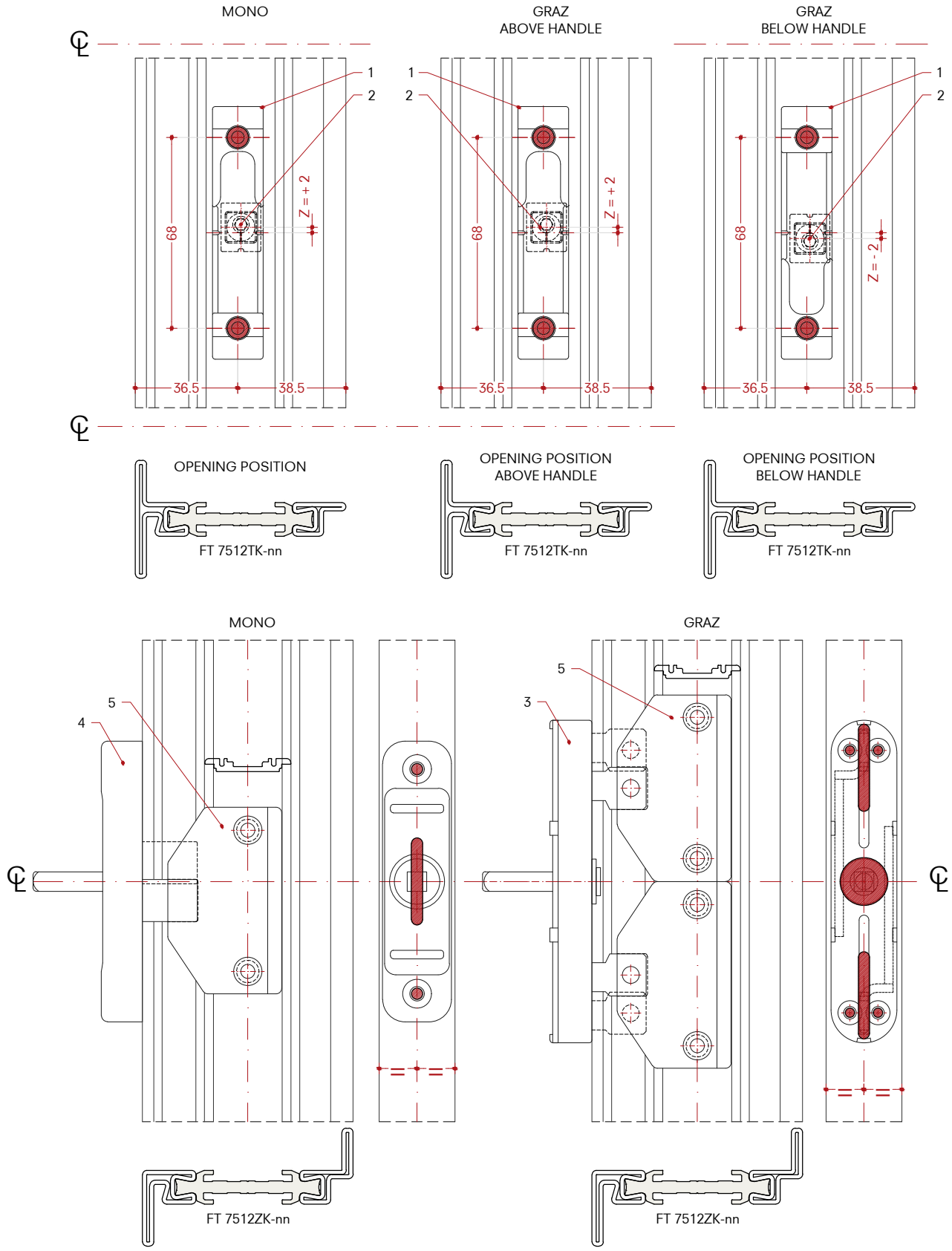
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

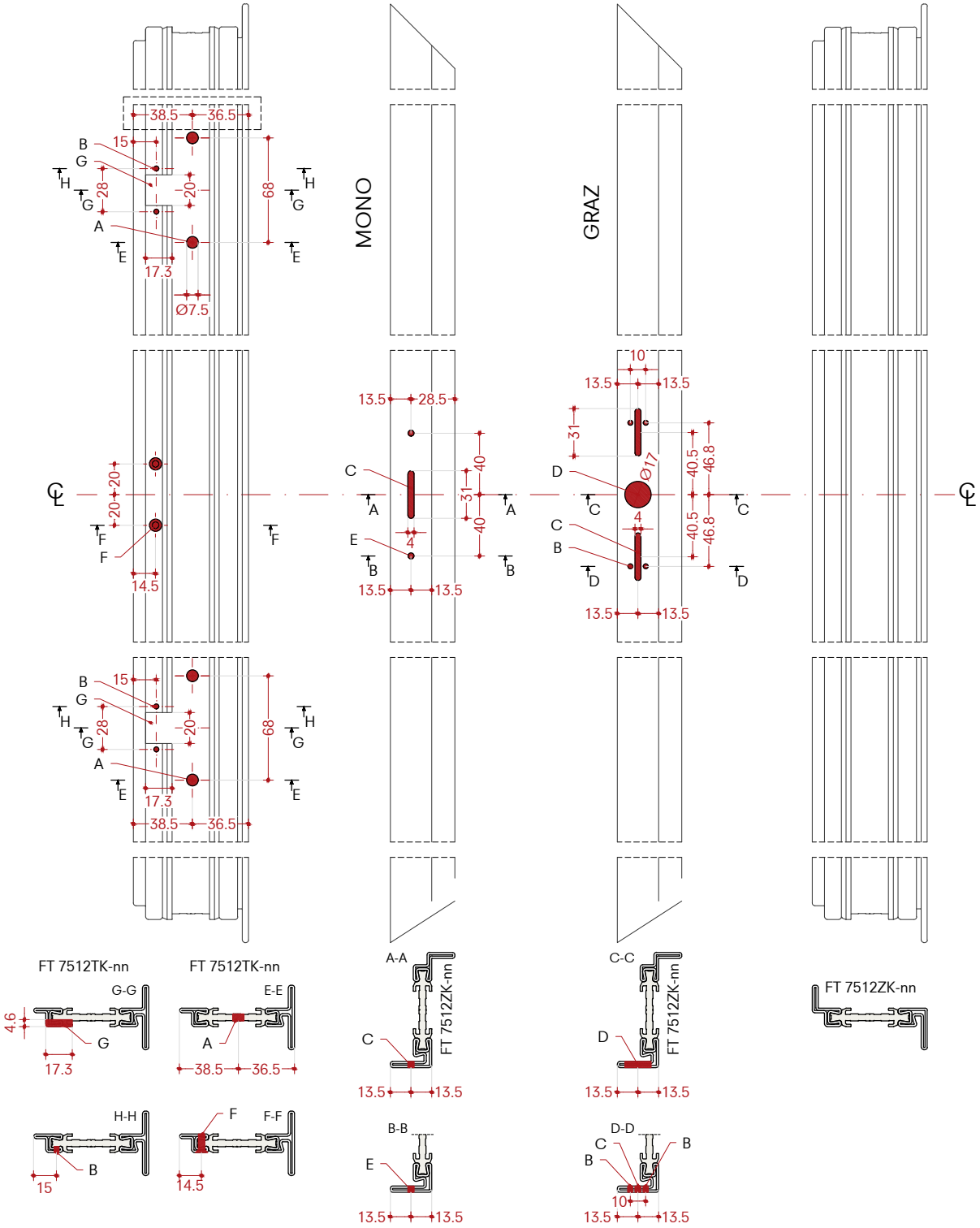
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open out - Left opening
Flush profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach außen öffnend - DIN links
Flächenbündige profile

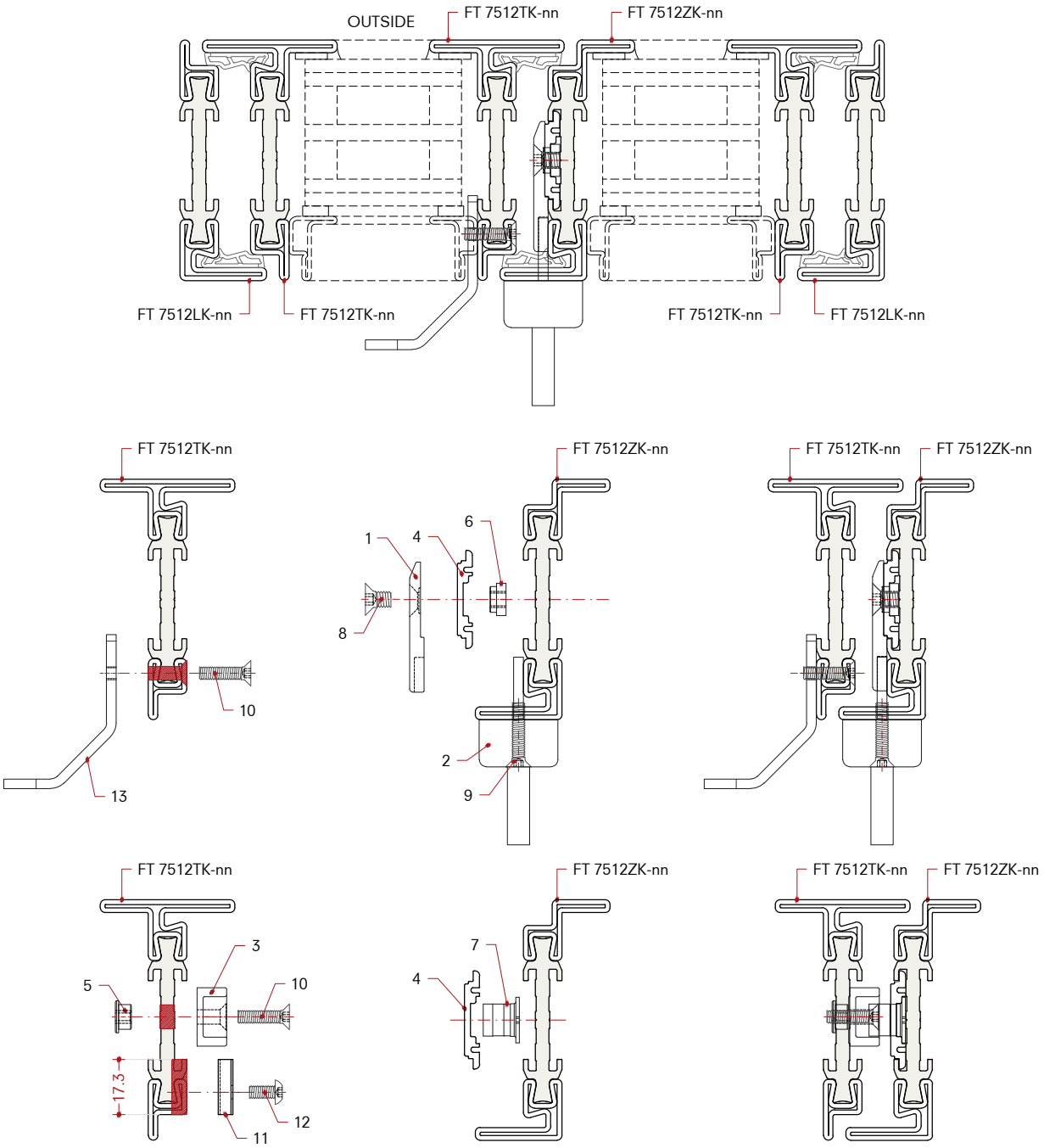
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture gauche
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

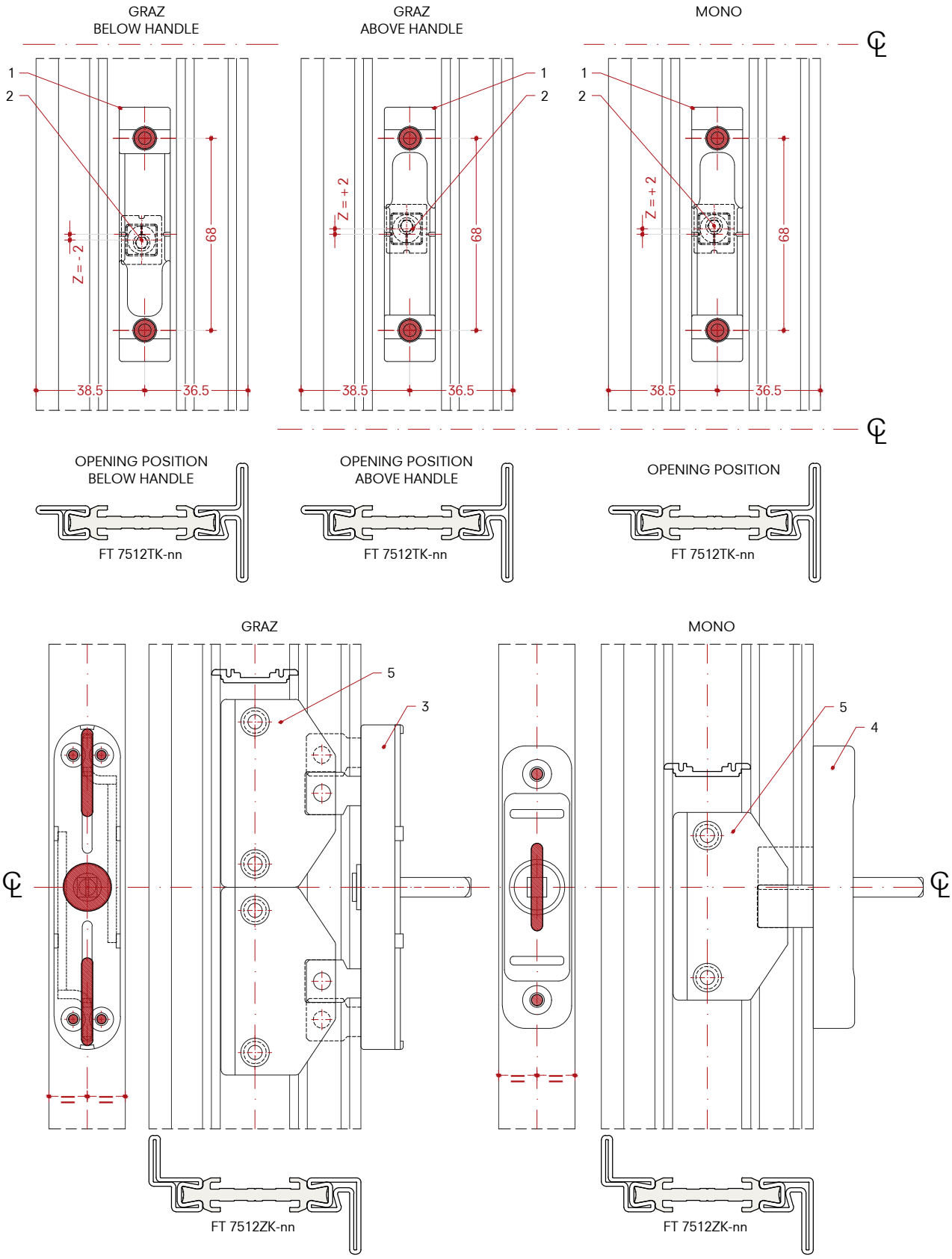
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

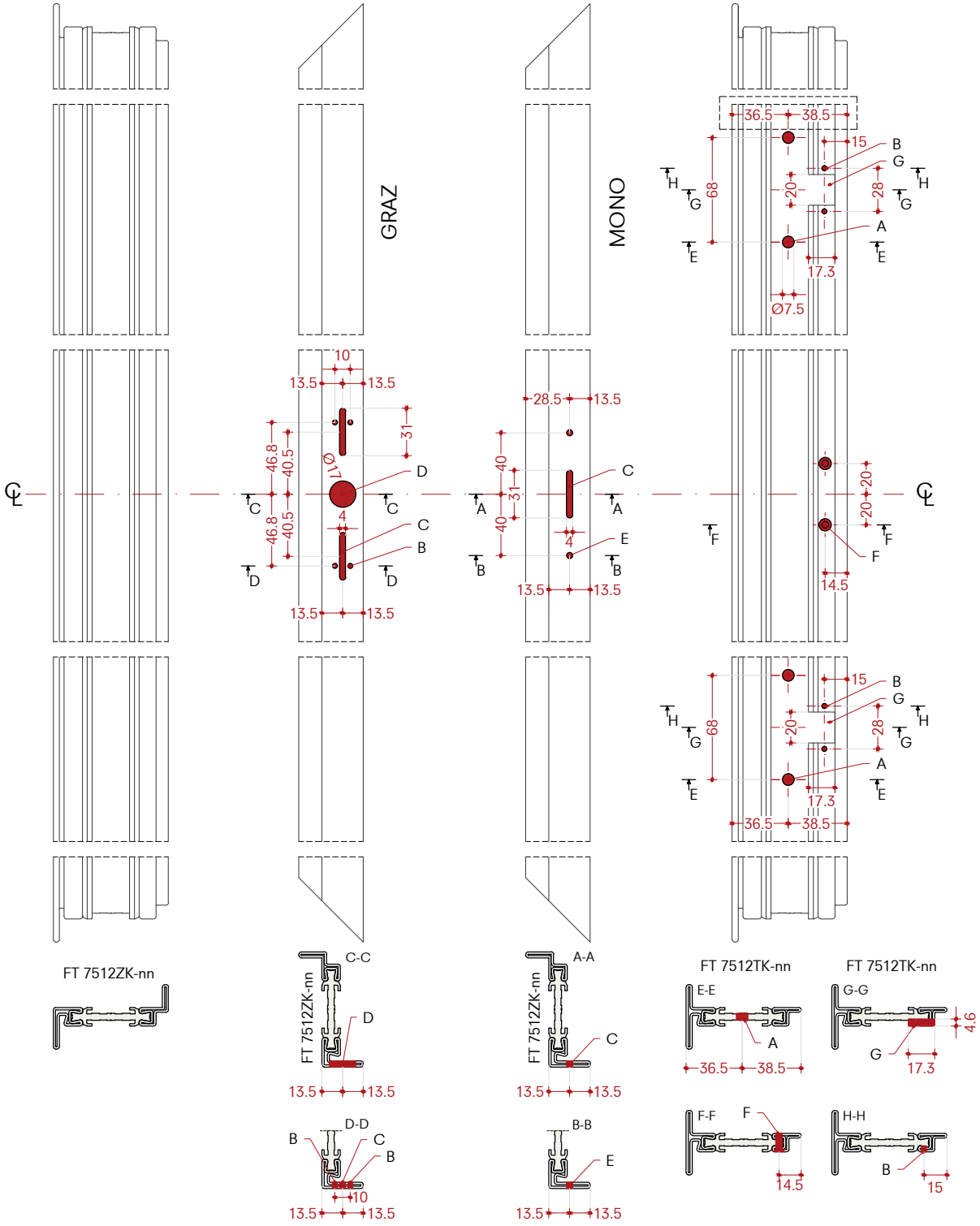
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open out - Right opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
Überlappende profile

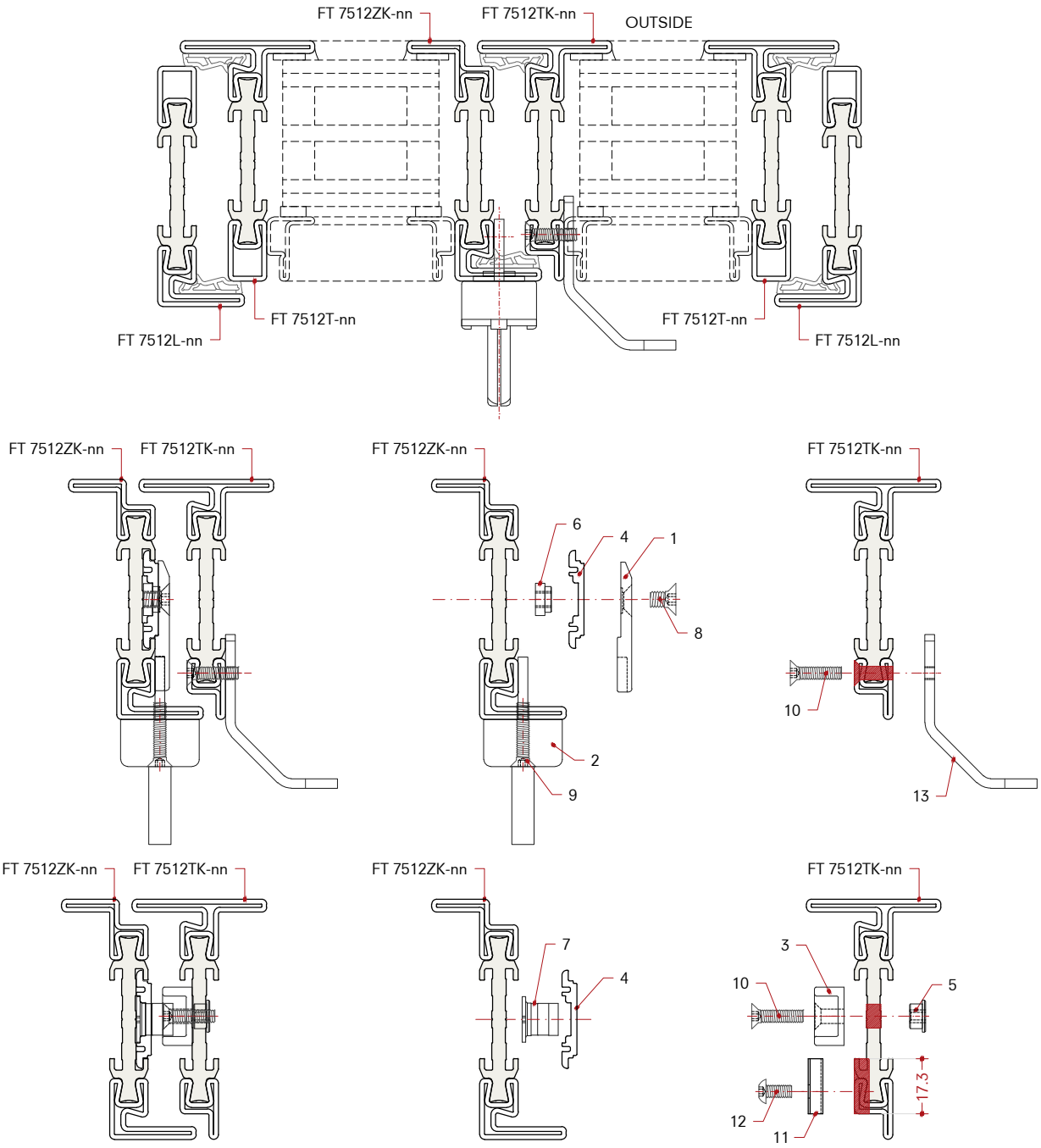
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture droite
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

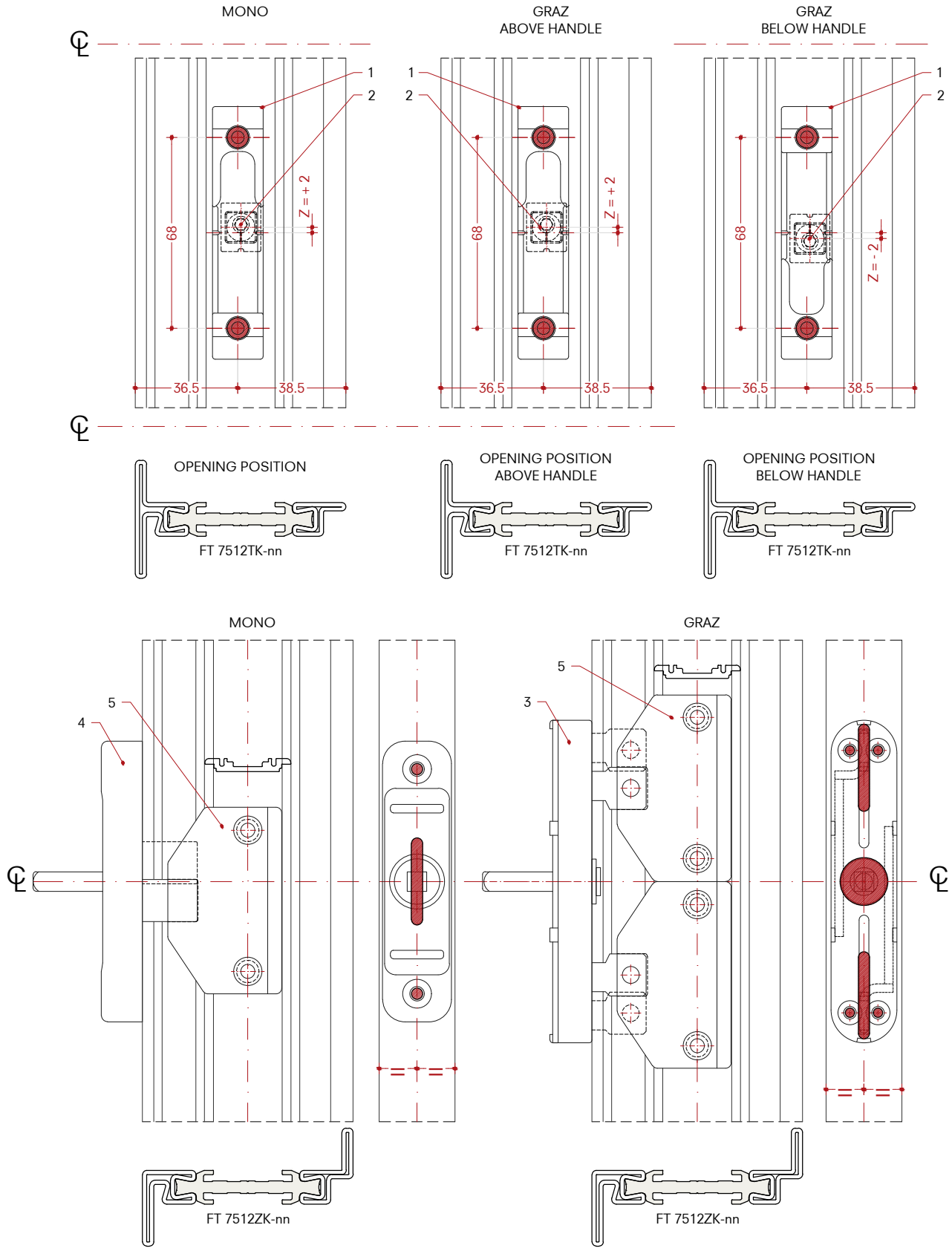
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99653-03 or Mono E99658-11 (right configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99653-03 oder Mono E99658-11 (DIN rechts Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99653-03 ou Mono E99658-11 (configuration droite)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99653-03
4) Mono E99658-11 (right configuration)
5) Cremone gear connection E99391-87

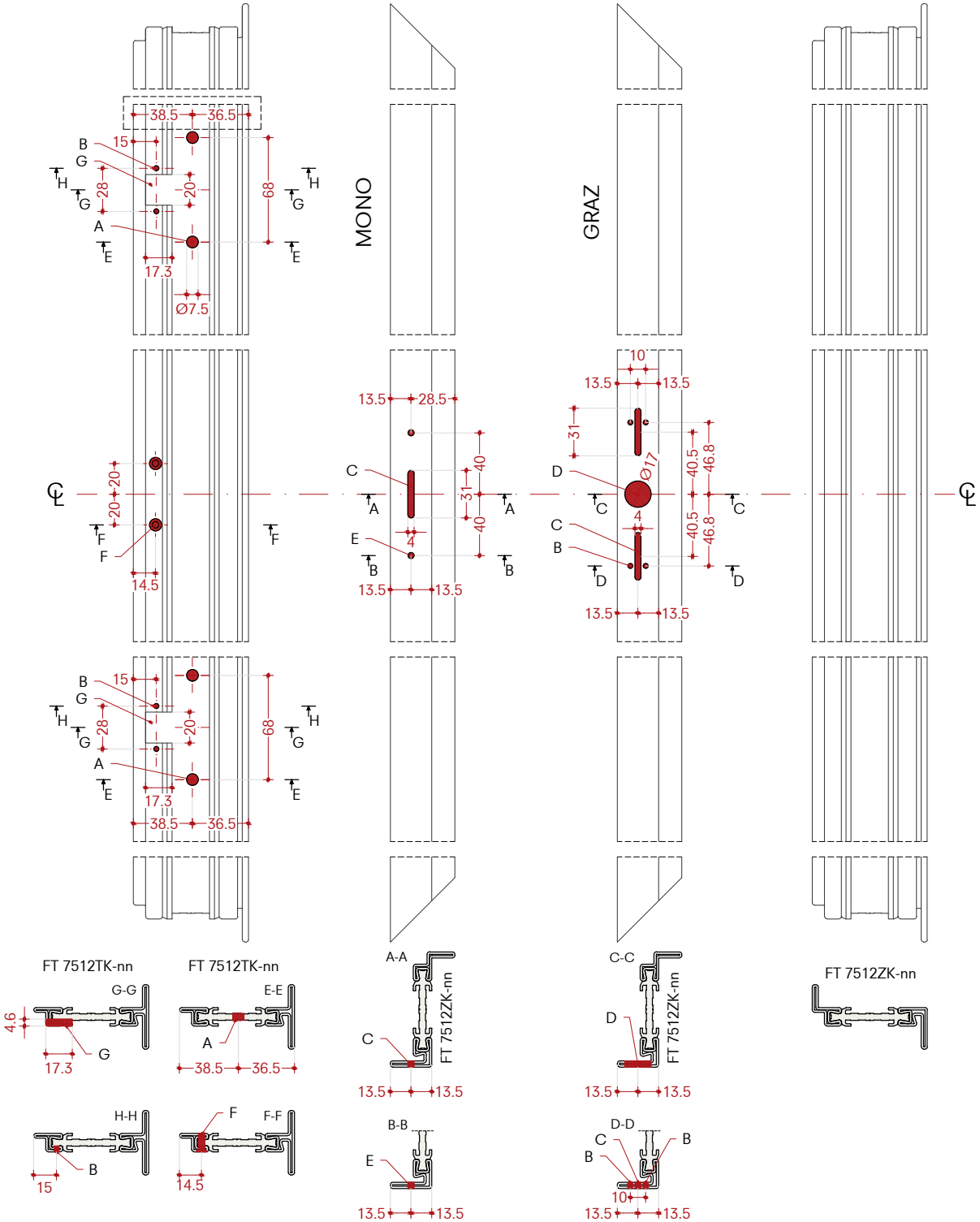
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99653-03
4) Mono E99658-11 (DIN rechts Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99653-03
4) Mono E99658-11 (configuration droite)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Double leaf window
Open out - Left opening
Overlapped profiles

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Zweiflügliges Fenster
Nach außen öffnend - DIN links
Überlappende profile

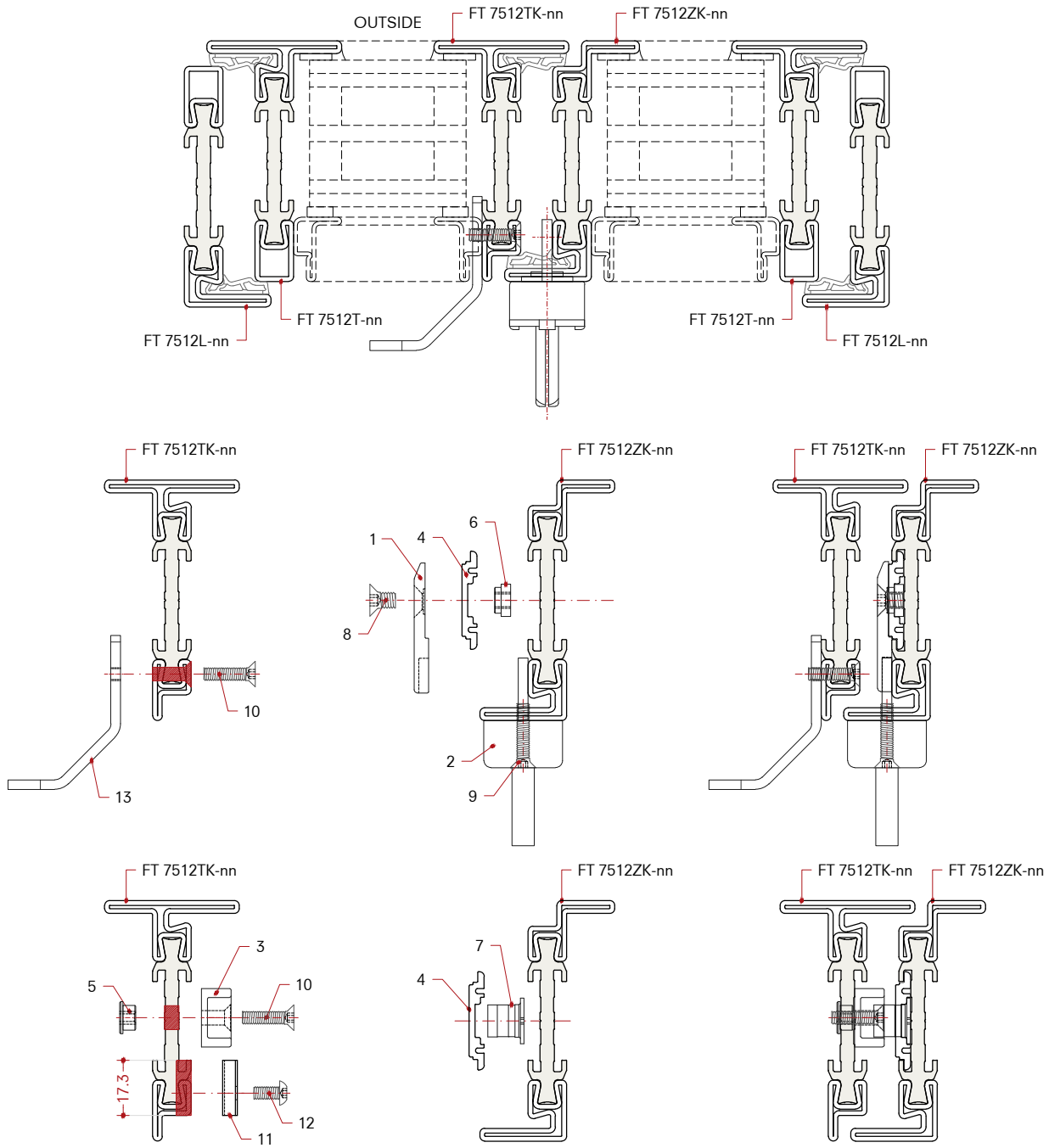
Montage Multipoint tiges de aluminium, avec Graz et Mono
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture gauche
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø3.2 mm threaded M4 holes
C) Cut out 31x4 mm
D) Ø17 mm hole
E) Ø4 mm threaded M5 holes
F) Ø4.2 mm countersunk holes
G) Cut out 20x17.3x4.6 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø3.2 mm Gewinde M4
C) Fräsung 31x4 mm
D) Bohrung Ø17 mm
E) Bohrungen Ø4 mm Gewinde M5
F) Senkbohrungen Ø4.2 mm
G) Fräsung 20x17.3x4.6 mm

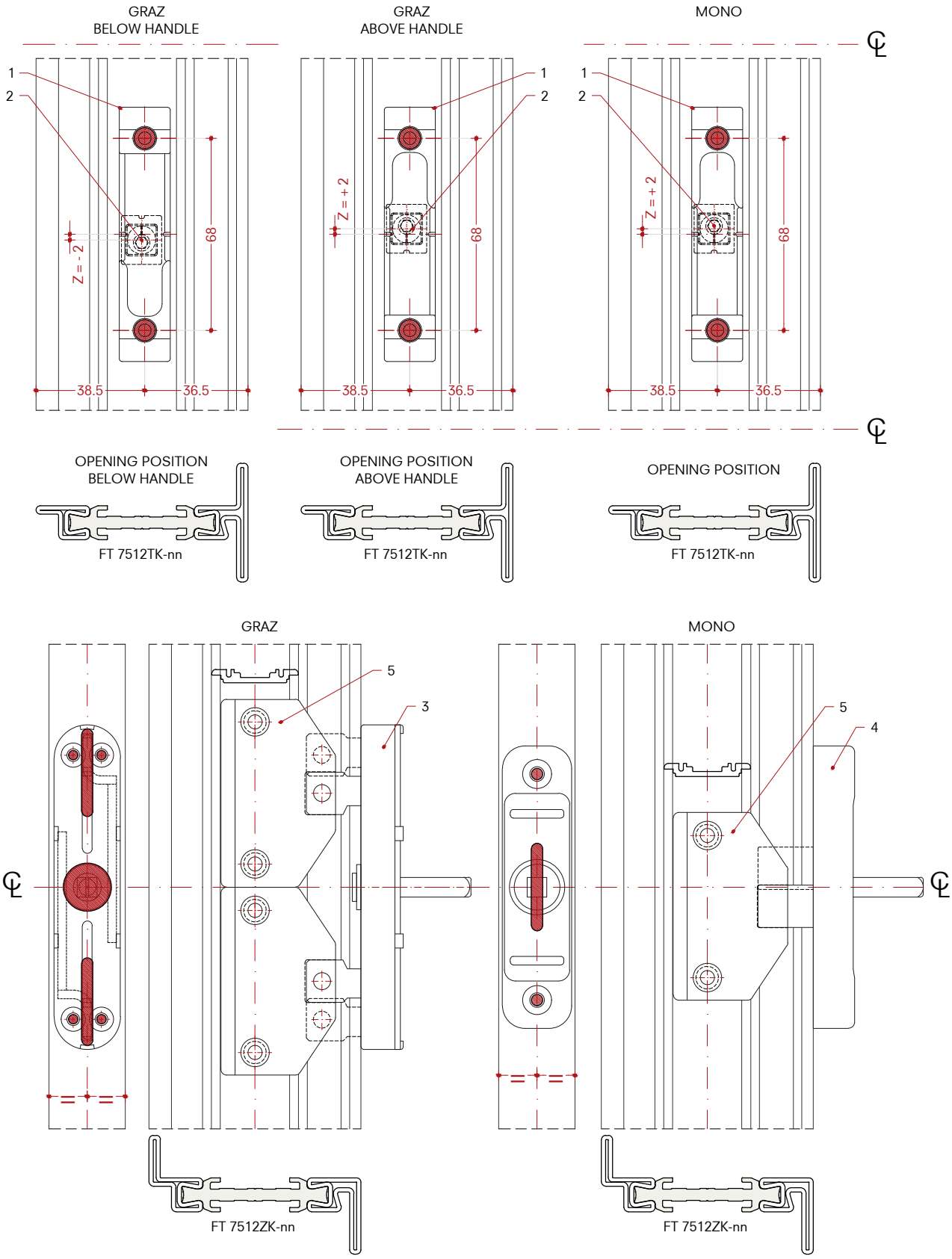
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø3.2 mm fileté M4
C) Fraisage 31x4 mm
D) Trou Ø17 mm
E) Trous Ø4 mm fileté M5
F) Trous fraisé Ø4.2 mm
G) Fraisage 20x17.3x4.6 mm



Scale 1:2
1) Cremone gear connection E99391-87
2) Graz E99652-03 or Mono E99658-11 (left configuration)
3) Strike plate E99389-11
4) Aluminum rail E99383-53
5) M4 brass bushing D99704-08
6) Bush D99709-02
7) Stud E99397-03
8) Fastening with M5x8 mm ISO10642 screws (not included)
9) Fastening with M4x20 mm ISO10642 screws (not included)
10) Fastening with M4x16 mm ISO10642 screws (not included)
11) Coutout cover E99134-04
12) Fastening with M4x8 mm ISO7380 screws (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99391-87
2) Graz E99652-03 oder Mono E99658-11 (DIN links Konfiguration)
3) Schließblech E99389-11
4) Multipunktverriegelungstange E99383-53
5) Messingbuchse M4 D99704-08
6) Buchse D99709-02
7) Verriegelung E99397-03
8) Befestigung mit M5x8 mm ISO10642 Schrauben (Eigenfertigung)
9) Befestigung mit M4x20 mm ISO10642 Schrauben (Eigenfertigung)
10) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
11) Gefräster Deckel E99134-04
12) Befestigung mit M4x8 mm ISO7380 Schrauben (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99391-87
2) Graz E99652-03 ou Mono E99658-11 (configuration gauche)
3) Gâche E99389-11
4) Tige verrouillage de aluminium E99383-53
5) Boîte en laiton M4 D99704-08
6) Bague D99709-02
7) Galet E99397-03
8) Fixation avec vis M5x8 mm ISO10642 (non inclus)
9) Fixation avec vis M4x20 mm ISO10642 (non inclus)
10) Fixation avec vis M4x16 mm ISO10642 (non inclus)
11) Couverture fraisée E99134-04
12) Fixation avec vis M4x8 mm ISO7380 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Graz E99652-03
4) Mono E99658-11 (left configuration)
5) Cremone gear connection E99391-87

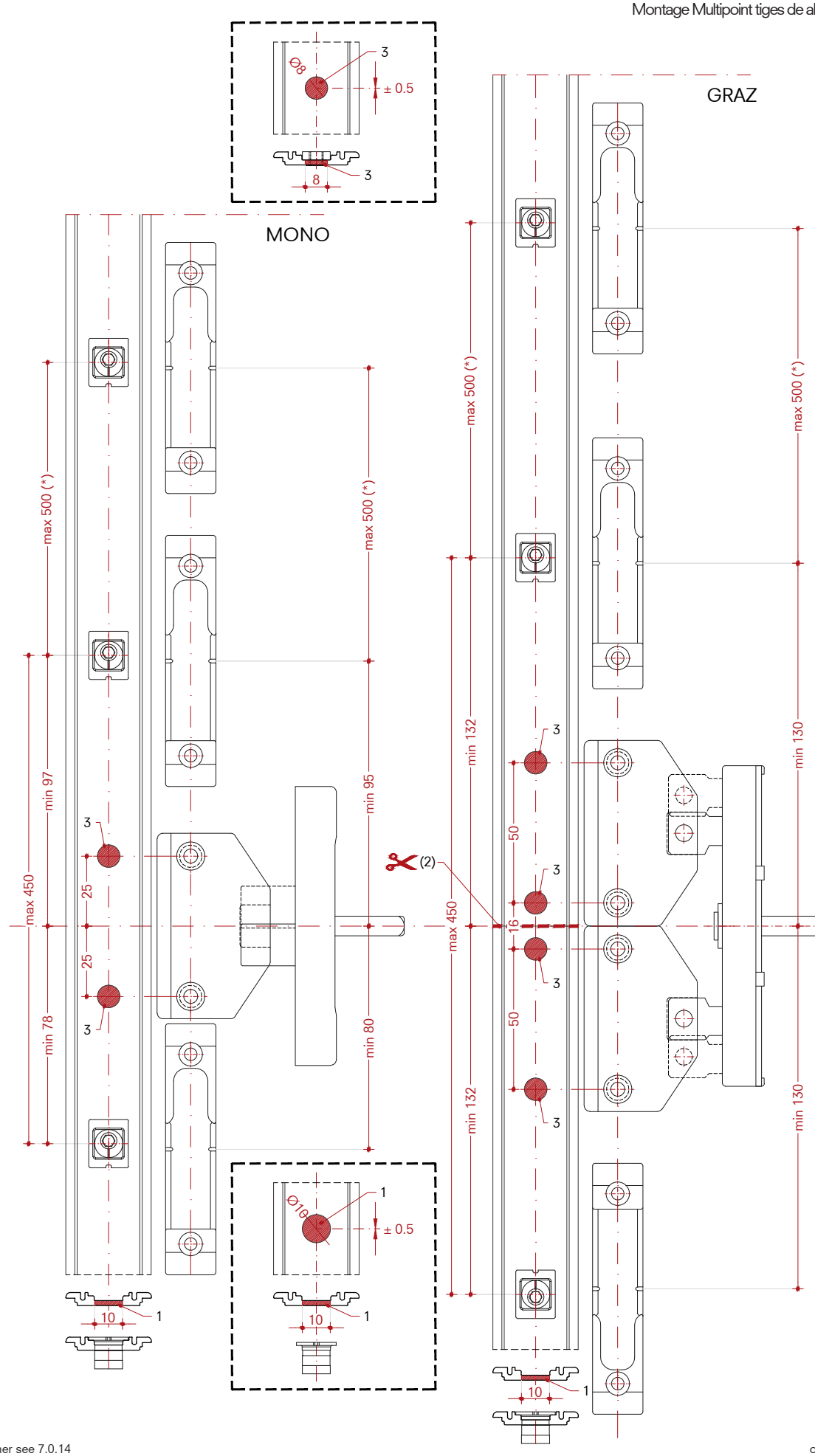
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Graz E99652-03
4) Mono E99658-11 (DIN links Konfiguration)
5) Verbindungsstück E99391-87

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Graz E99652-03
4) Mono E99658-11 (configuration gauche)
5) Connexion E99391-87

Multipoint aluminum rods installation, with Graz and Mono
Rail, stud and strike plate position

Montage Multipoint Aluminiumstangen, mit Graz und Mono
Verriegelungstange, Verriegelungsstück und Position Schließteil

Montage Multipoint tiges de aluminium, avec Graz et Mono
Position du tige, galet et arrêtoir



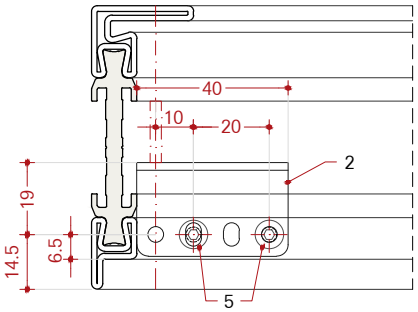
Scale 1:2
1) Ø10 mm holes
2) Rail cut
3) Ø8 mm holes
(*) Maximum distance to be reduced in case of heavy wind load conditions. Maximum distance 700 mm in case of long flush bolt on 2nd leaf. In this case shoot bolt on 1st leaf open-in is mandatory.

Maßstab 1:2
1) Bohrungen Ø10 mm
2) Verriegelungstangeschnitt
3) Bohrungen Ø8 mm
(*) Maximaler Abstand, der bei starker Windlast reduziert werden muss. Maximaler Abstand 700 mm bei langer Kantriegel am Standflügel. In diesem Fall ist Schließriegel am Gangflügel aufgehend zwingend erforderlich.

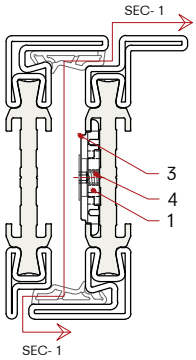
Échelle 1:2
1) Trous Ø10 mm
2) Coupe de tige verrouillage
3) Trous Ø8 mm
(*) Distance maximale à réduire en cas de fortes charges de vent. Distance maximum 700 mm en cas de verrou à bascule long sur 2e ouvrant. Dans ce cas, verrou à bascule fermé sur 1er ouvrant ouverture intérieure duest obligatoire.

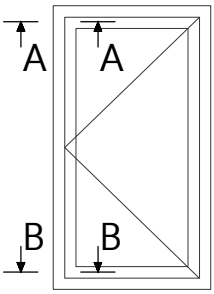
Single leaf window - Open in - Flush profiles - Right opening (Left opening is specular)

FOR GRAZ SECTION B-B & A-A(SPECULAR)

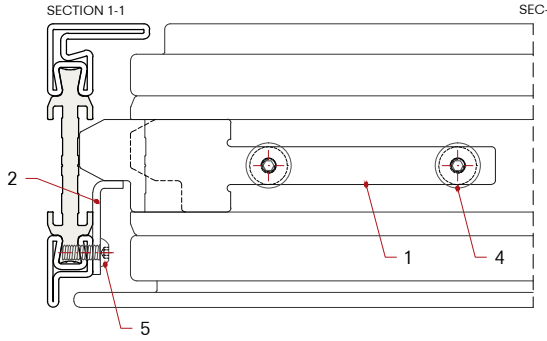


MONO INCLUDES ONLY SECTION A-A



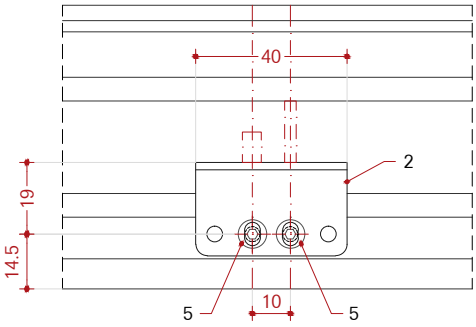


SECTION 1-1

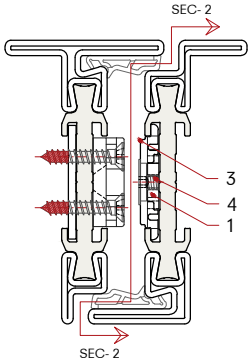


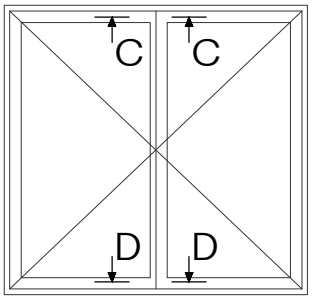
Double leaf window - Open in - Flush profiles - Right opening (Left opening is specular)

FOR GRAZ SECTION D-D & C-C(SPECULAR)

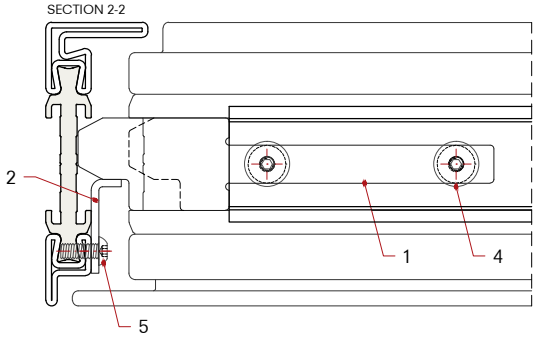


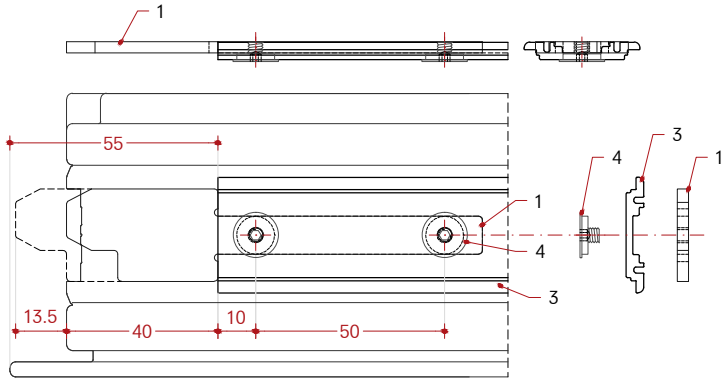
MONO INCLUDES ONLY SECTION C-C





SECTION 2-2





UPPER / LOWER SHOOT BOLT (OPEN IN ONLY)

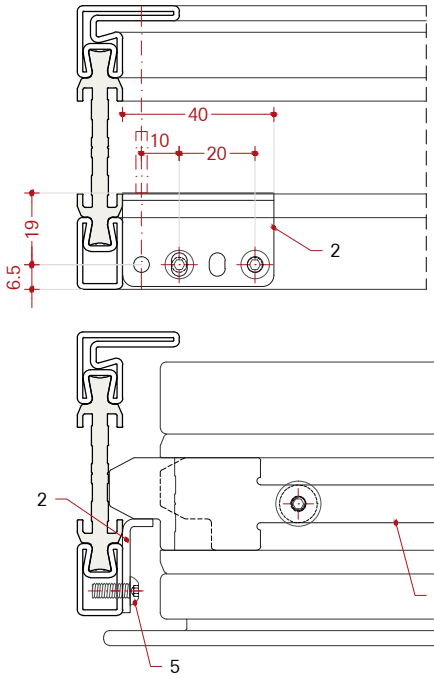
Scale 1:2
1) Shoot bolt K99108
2) Strike plate (provided)
3) Aluminum rail E99383-53
4) Bush for shoot bolt (provided)
5) Fastening with M4x10 mm ISO7380 screws (not included)

Maßstab 1:2
1) Kantriegel K99108
2) Schließblech (Inbegriffen)
3) Multipunktverriegelungstange E99383-53
4) Buchse für Kantriegel (Inbegriffen)
5) Befestigung mit M4x10 mm ISO7380 Schrauben (Eigenfertigung)

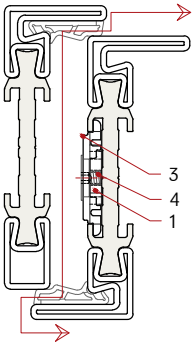
Échelle 1:2
1) Verrou à entailler K99108
2) Gâche (inclus)
3) Tige verrouillage de aluminium E99383-53
4) Bague pour verrou à entailler (inclus)
5) Fixation avec vis M4x10 mm ISO7380 (non inclus)

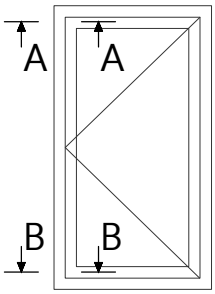
Single leaf window - Open in - Overlapped profiles - Right opening (Left opening is specular)

FOR GRAZ SECTION B-B &
A-A(SPECULAR)



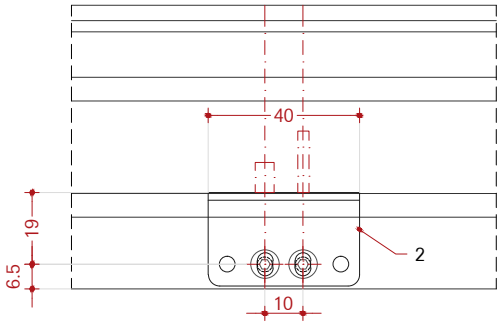
MONO INCLUDES ONLY
SECTION A-A



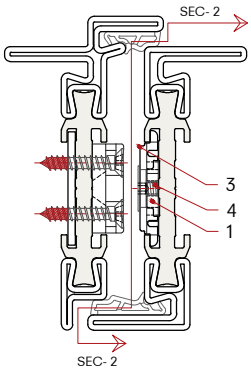


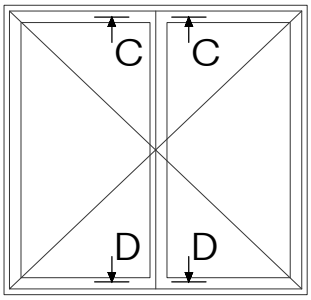
Double leaf window - Open in - Overlapped profiles - Right opening (Left opening is specular)

FOR GRAZ SECTION D-D &
C-C(SPECULAR)

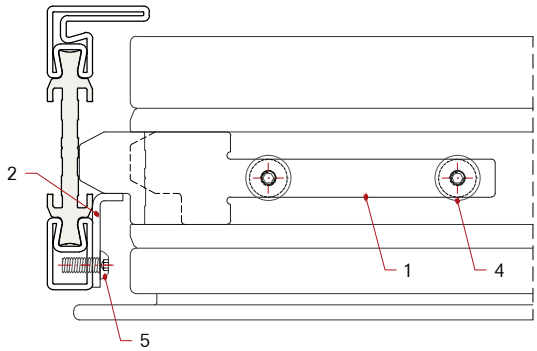


MONO INCLUDES ONLY
SECTION C-C





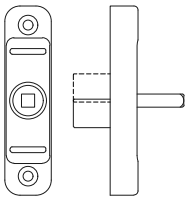
SECTION 2-2



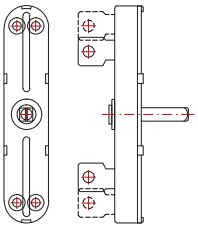
Scale 1:2
1) Shoot bolt K99108
2) Strike plate (provided)
3) Aluminum rail E99383-53
4) Bush for shoot bolt (provided)
5) Fastening with M4x10 mm ISO7380 screws (not included)

Maßstab 1:2
1) Kantriegel K99108
2) Schließblech (Inbegriffen)
3) Multipunktverriegelungstange E99383-53
4) Buchse für Kantriegel (Inbegriffen)
5) Befestigung mit M4x10 mm ISO7380 Schrauben (Eigenfertigung)

Échelle 1:2
1) Verrou à entailler K99108
2) Gâche (inclus)
3) Tige verrouillage de aluminium E99383-53
4) Bague pour verrou à entailler (inclus)
5) Fixation avec vis M4x10 mm ISO7380 (non inclus)

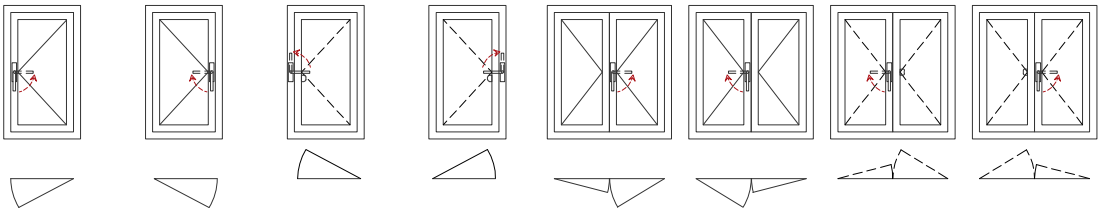


E99658-11

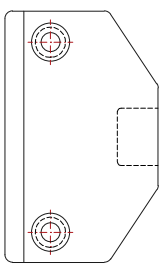


E99652-03
E99653-03

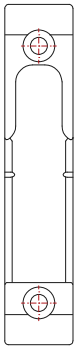
GRAZ				
opening	leaves	hand	cremone	
Open in	1 Leaf	Right opening	E99653-03	standard installation
Open in	1 Leaf	Left opening	E99652-03	standard installation
Open in	2 Leaves	Right opening	E99653-03	standard installation
Open in	2 Leaves	Left opening	E99652-03	standard installation
Open out	1 Leaf	Right opening	E99653-03	horizontal handle when closed
Open out	1 Leaf	Left opening	E99652-03	horizontal handle when closed
Open out	2 Leaves	Right opening	E99652-03	standard installation
Open out	2 Leaves	Left opening	E99653-03	standard installation
MONO				
opening	leaves	hand	cremone	
Open in	1 Leaf	Right opening	E99658-11	R as delivered - standard installation
Open in	1 Leaf	Left opening	E99658-11	switch R to L - standard installation
Open in	2 Leaves	Right opening	E99658-11	R as delivered - standard installation
Open in	2 Leaves	Left opening	E99658-11	switch R to L - standard installation
Open out	1 Leaf	Right opening	E99658-11	R as delivered - horizontal handle when closed
Open out	1 Leaf	Left opening	E99658-11	switch R to L - horizontal handle when closed
Open out	2 Leaves	Right opening	E99658-11	switch R to L - standard installation
Open out	2 Leaves	Left opening	E99658-11	R as delivered - standard installation



E99652-03 (L)		O		O		O	O	
E99653-03 (R)	O		O		O			O
E99658-11 (R)		O		O		O	O	
E99658-11 (L)	O		O		O			O

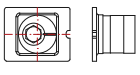


E99391-87

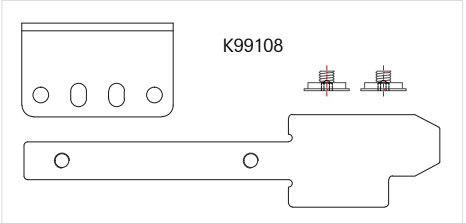


E99389-11

E99383-53



E99397-03



Multipoint aluminum rods installation, with lever handle

Montage Multipoint Aluminiumstangen, mit Hebelgriff

Montage Multipoint tiges de aluminium, avec crémone à levier

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:2 - 1:4

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:2 - 1:4

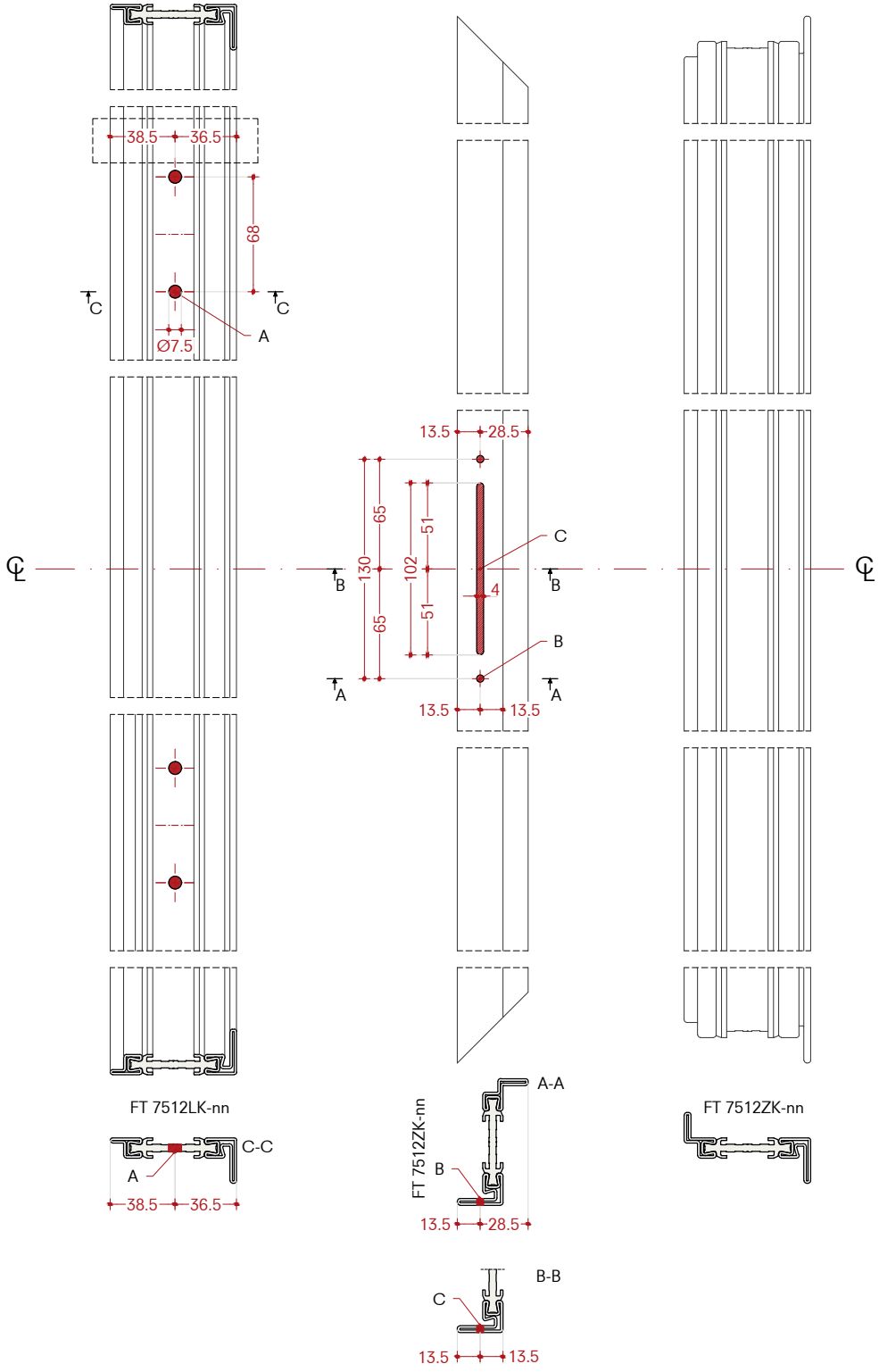
Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:2 - 1:4

Multipoint aluminum rods installation with lever handle
Single leaf window
Open in - Right opening
(left opening is the mirror image)
Flush profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Einflüglige Fenster
Nach innen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Flächenbündige profile

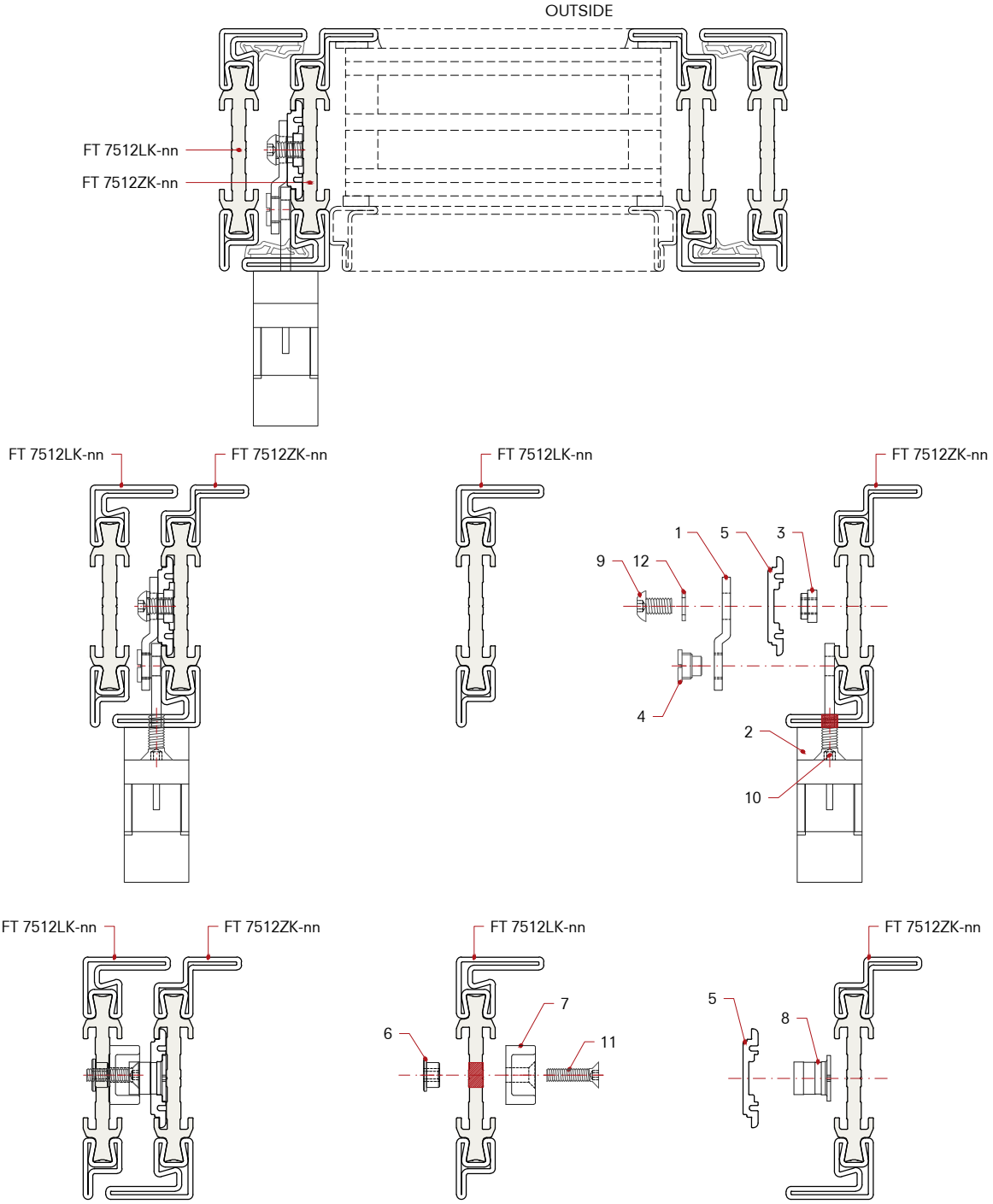
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à un vantail
Ouverture intérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm

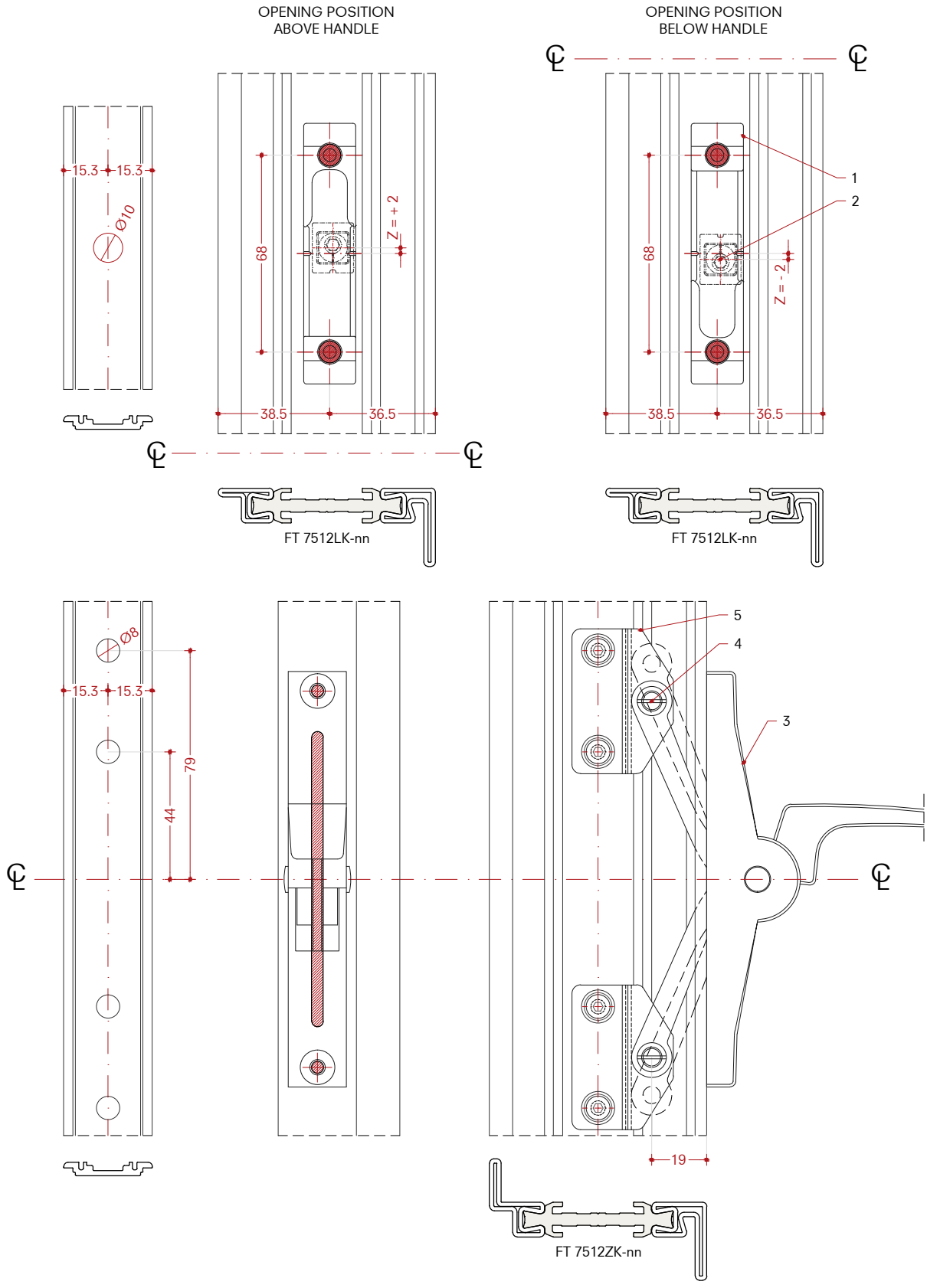
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

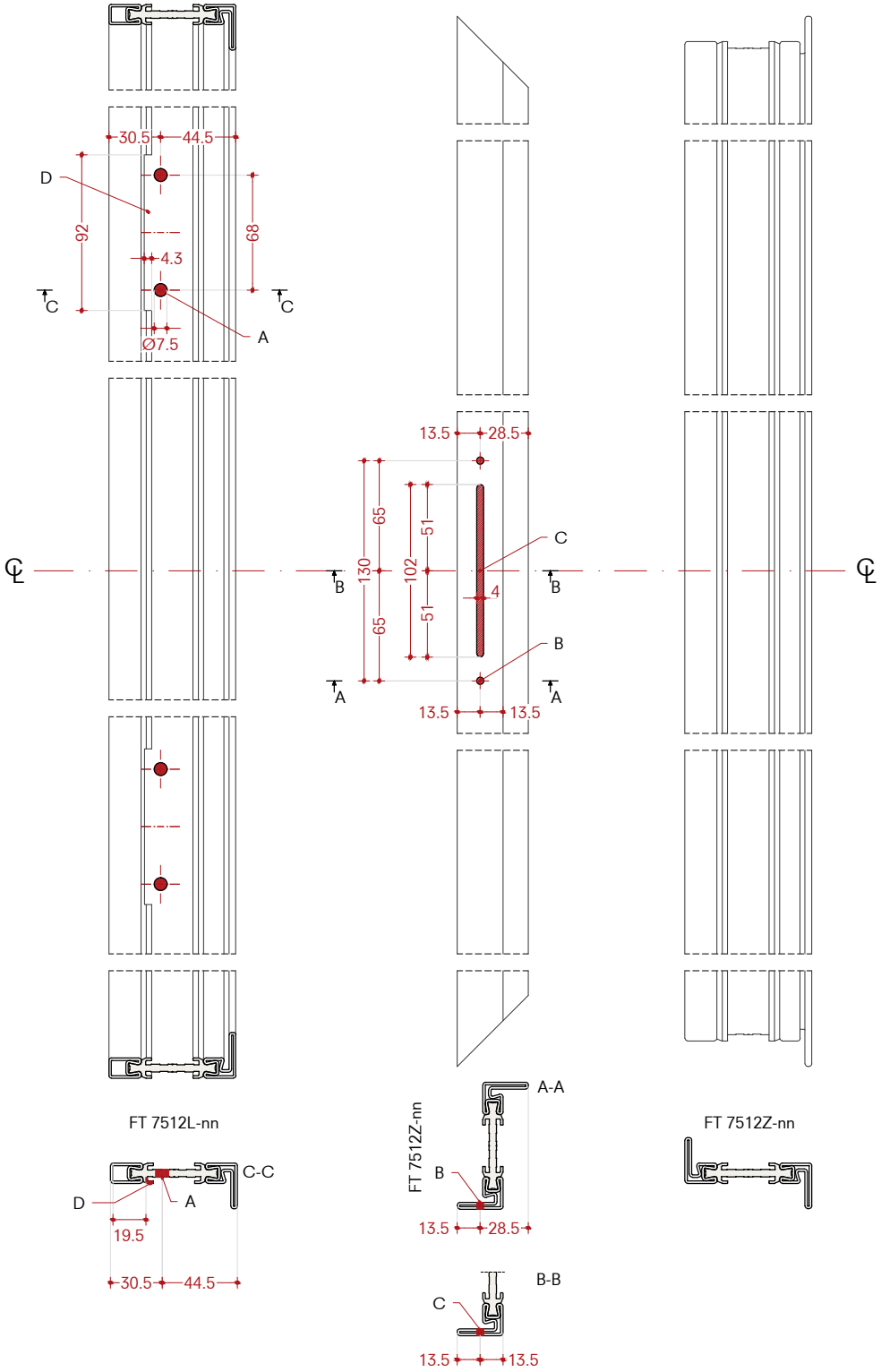
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Single leaf window
Open in - Right opening
(left opening is the mirror image)
Overlapped profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Einflüglige Fenster
Nach innen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Überlappende profile

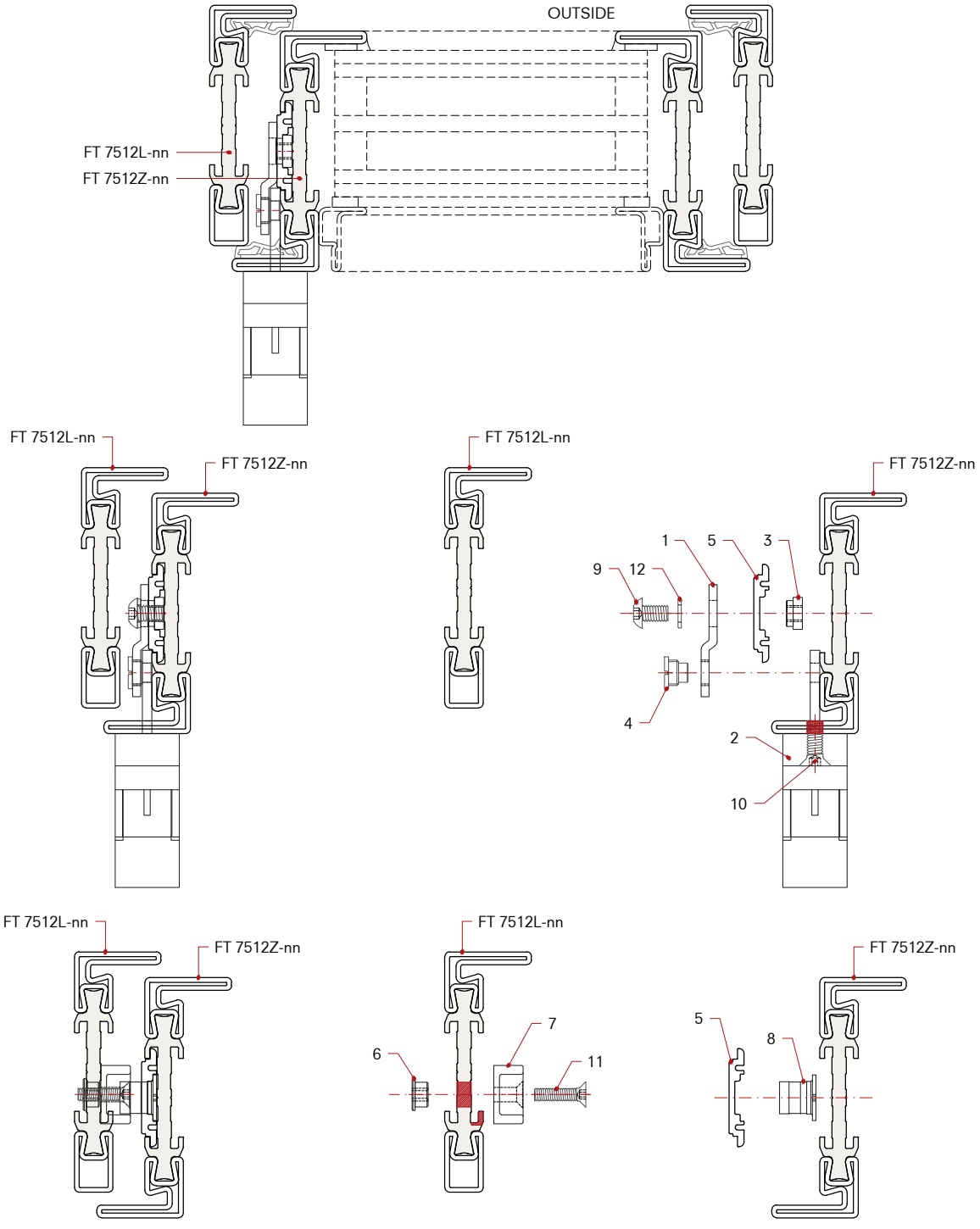
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à un vantail
Ouverture intérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm
D) Cut out 92x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm
D) Fräsung 92x4 mm

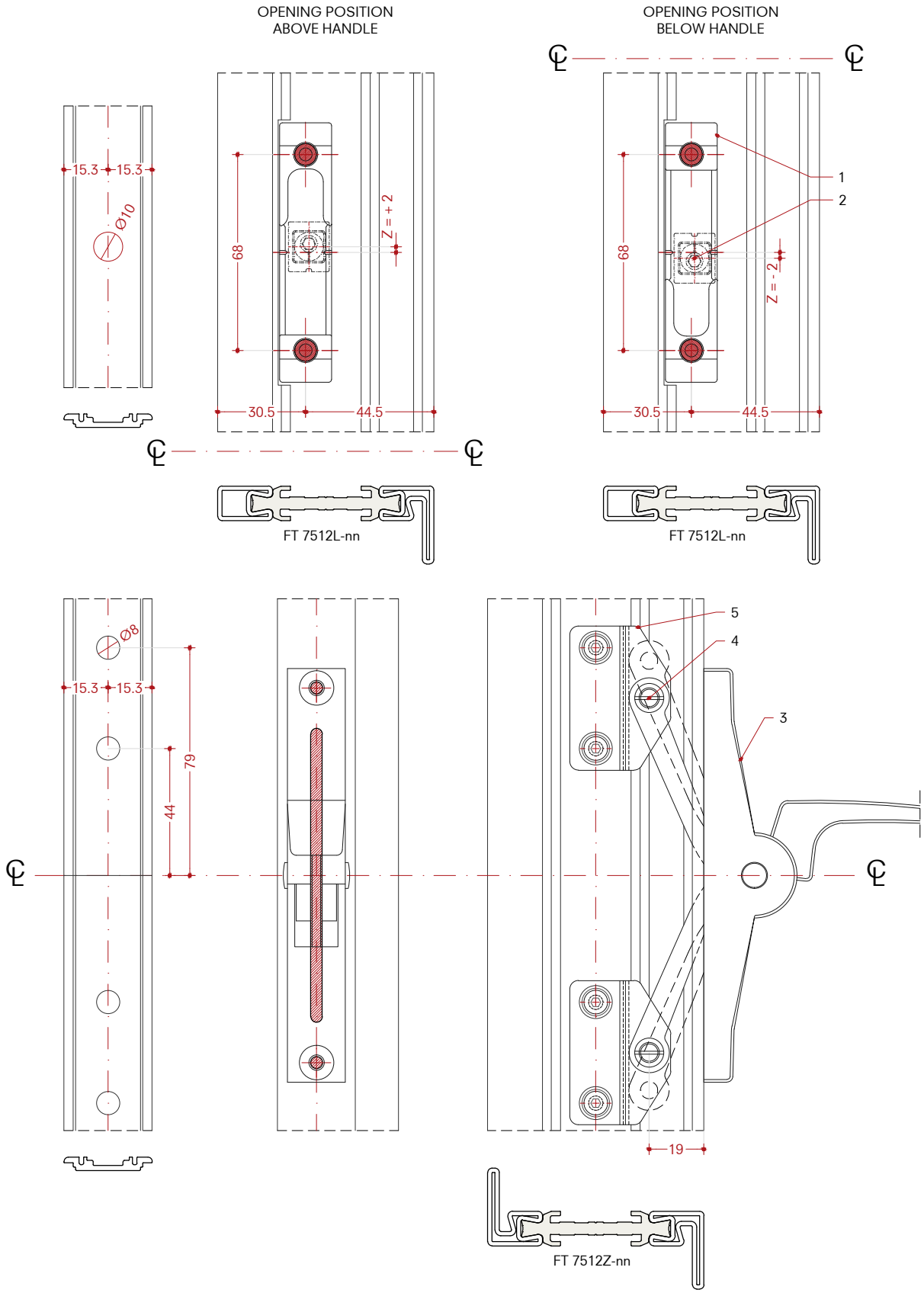
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm
D) Fraisage 92x4 mm



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

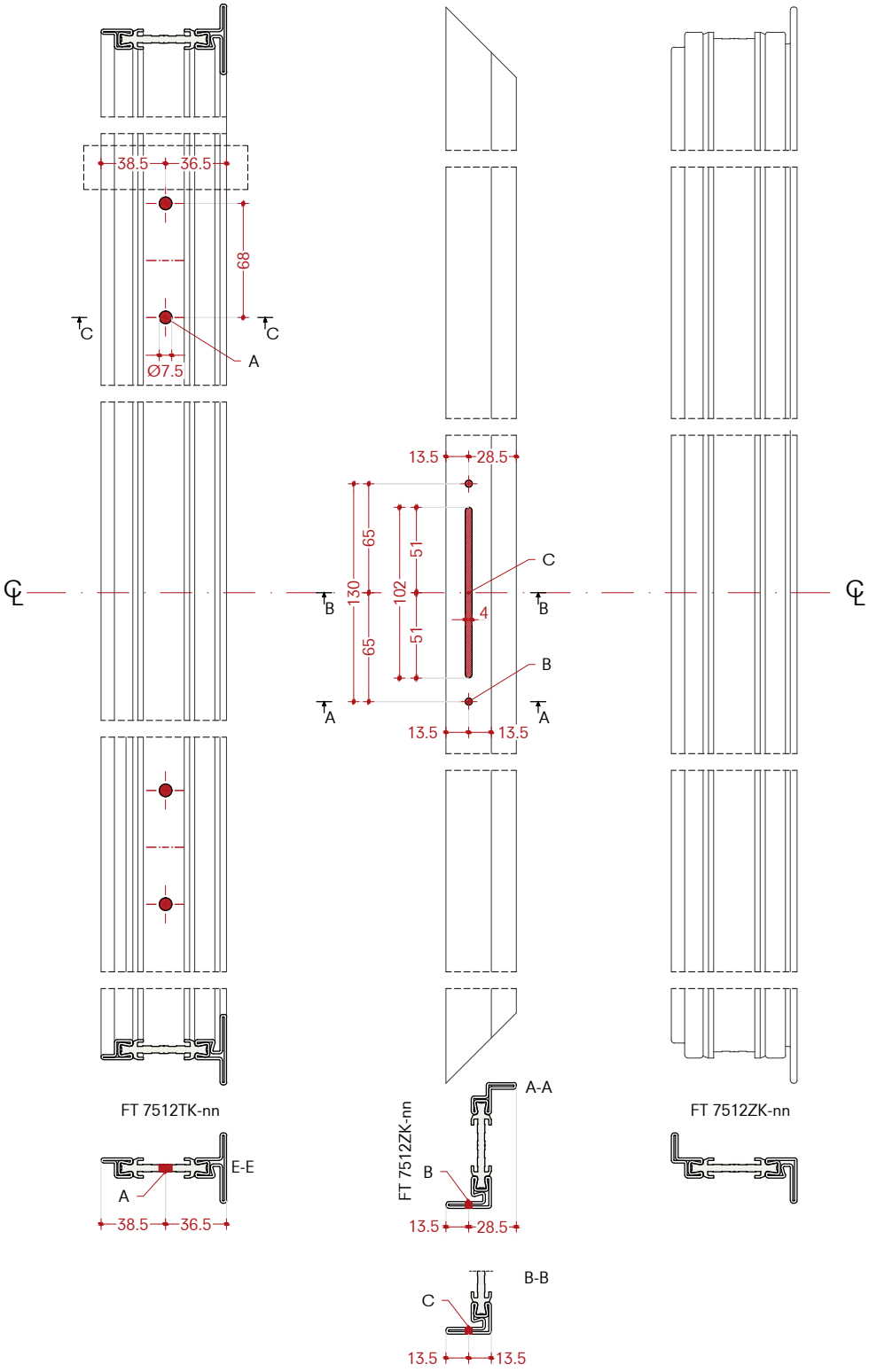
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Double leaf window
Open in - Right opening
(left opening is the mirror image)
Flush profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Flächenbündige profile

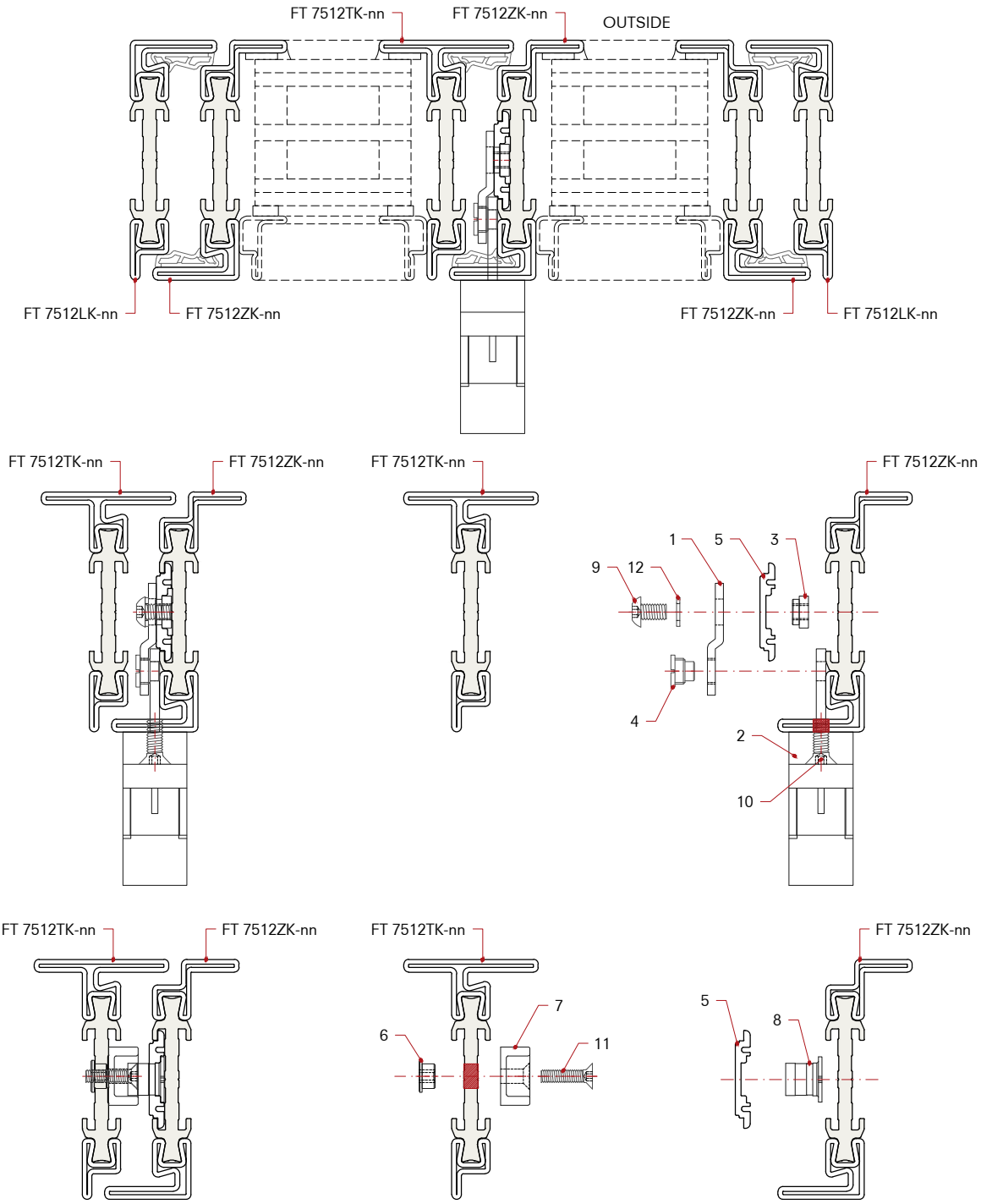
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm

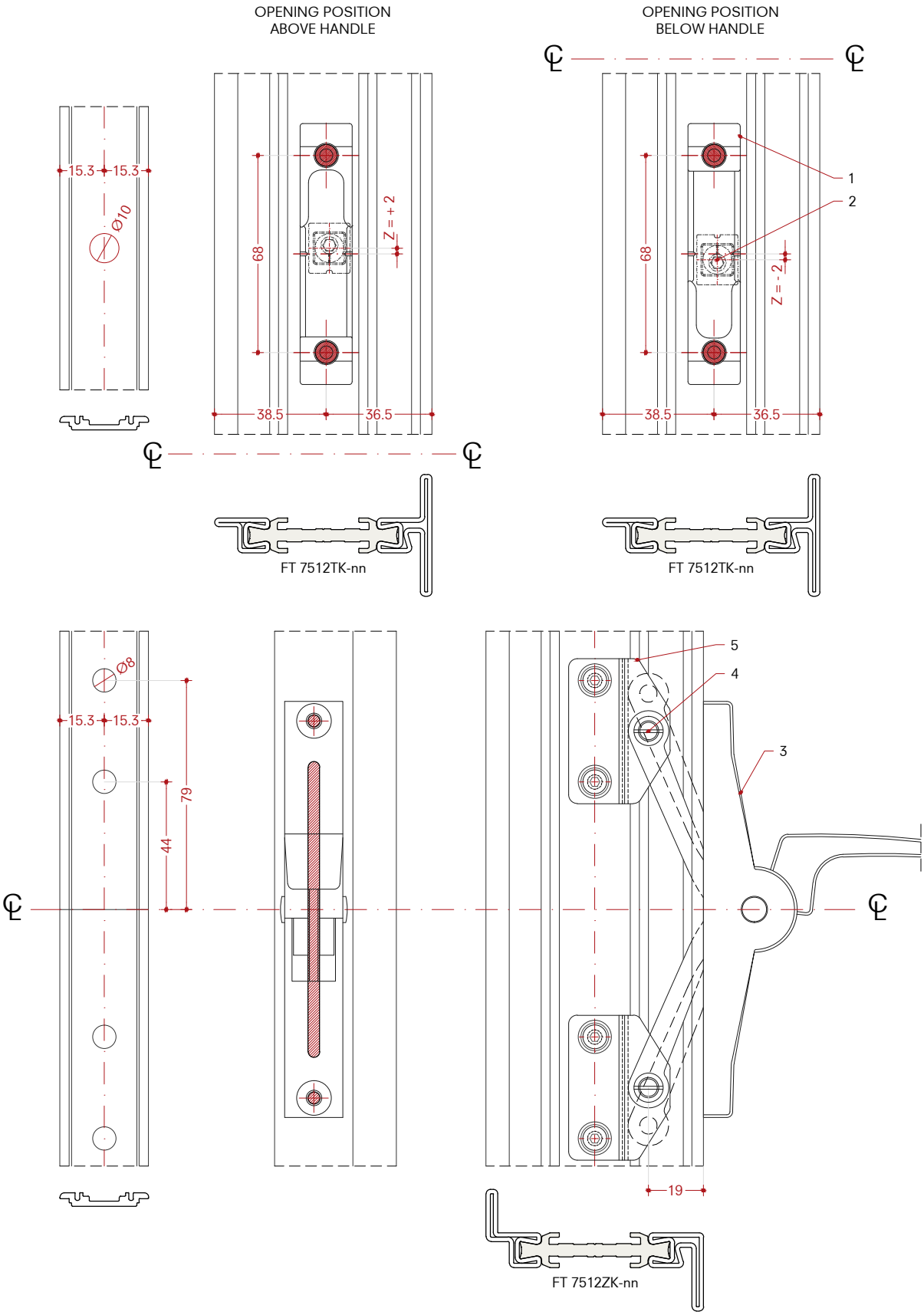
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

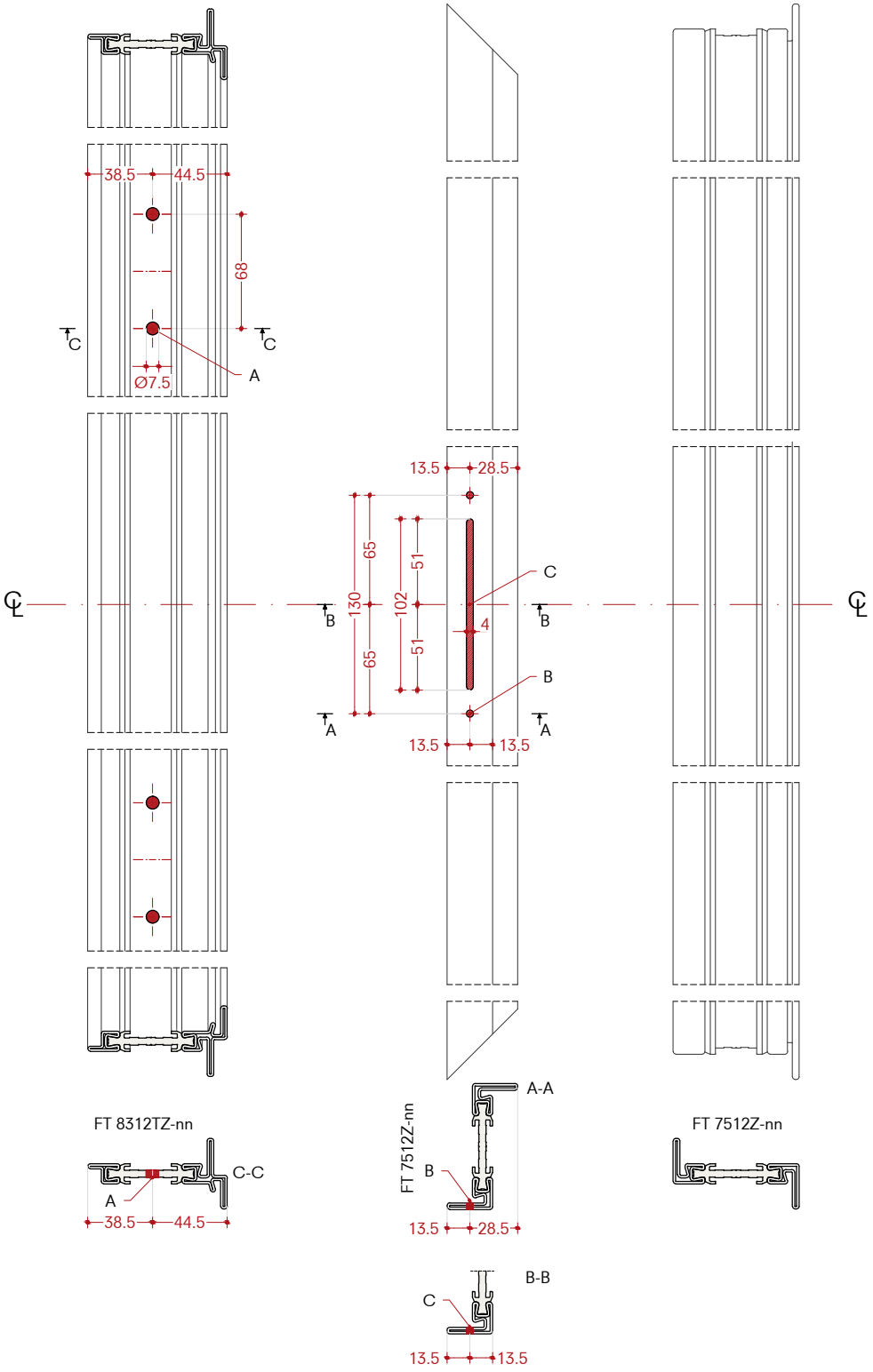
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Double leaf window
Open in - Right opening
(left opening is the mirror image)
Overlapped profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Zweiflügliges Fenster
Nach innen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Überlappende profile

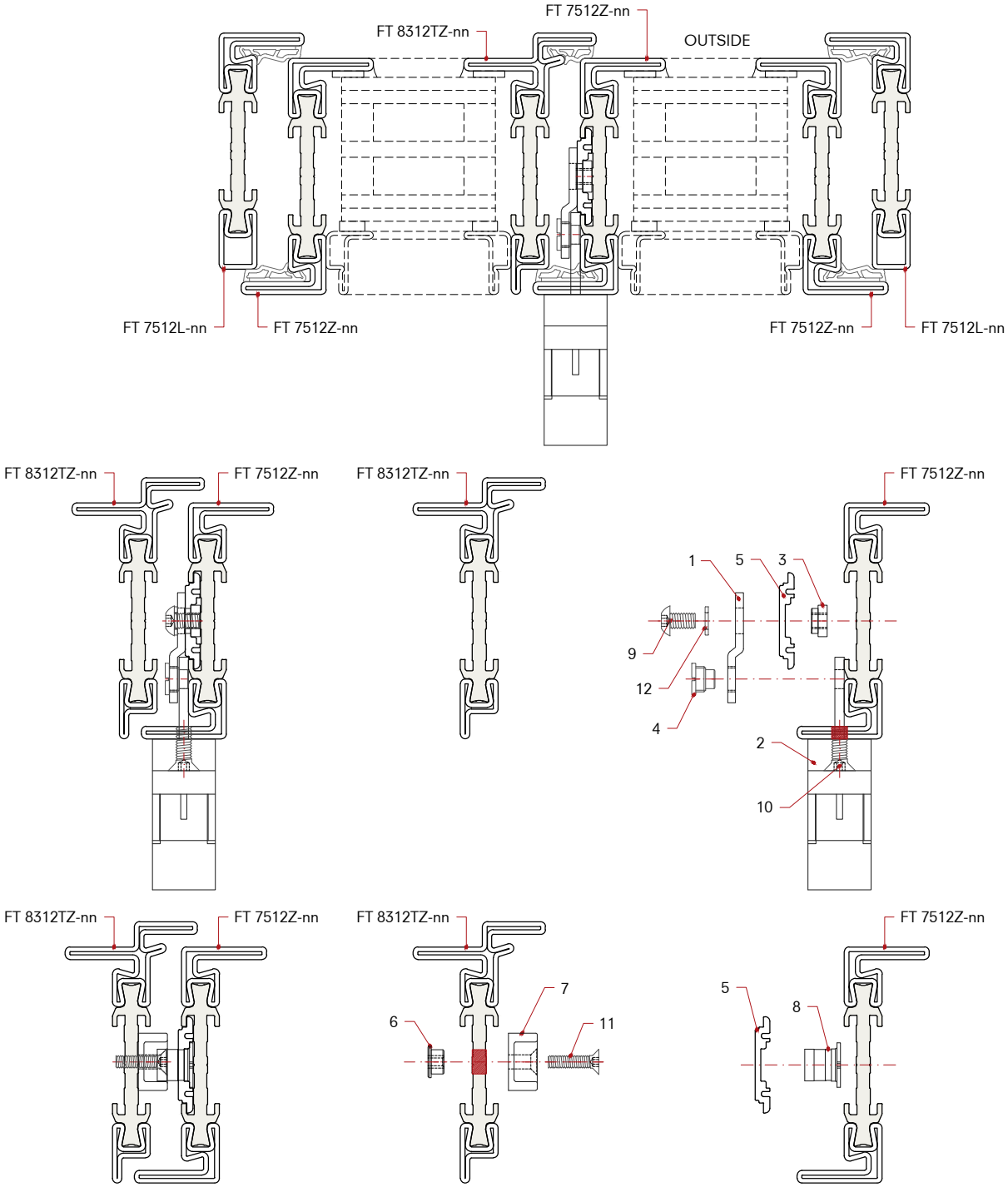
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à deux vantaux
Ouverture intérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm

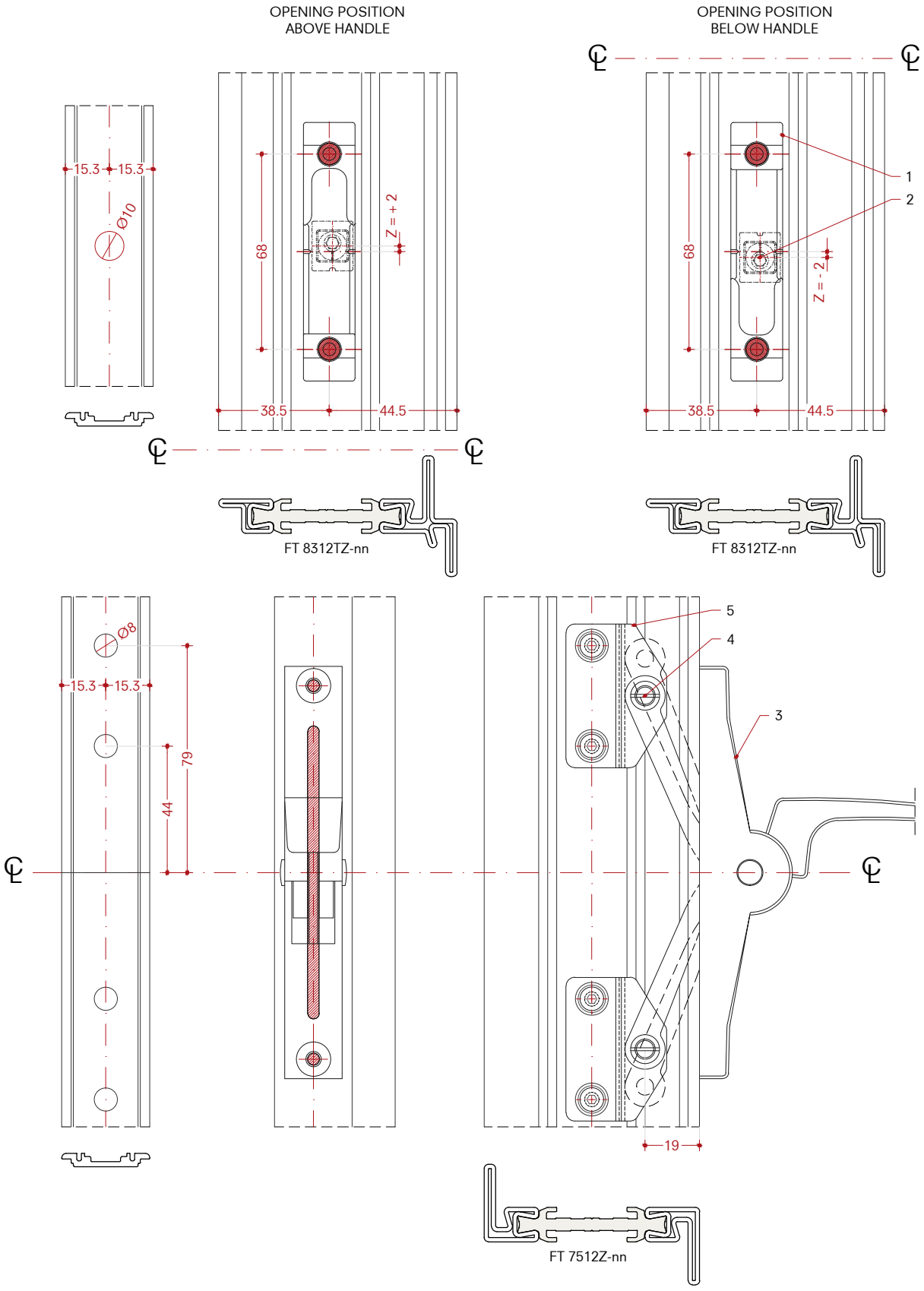
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

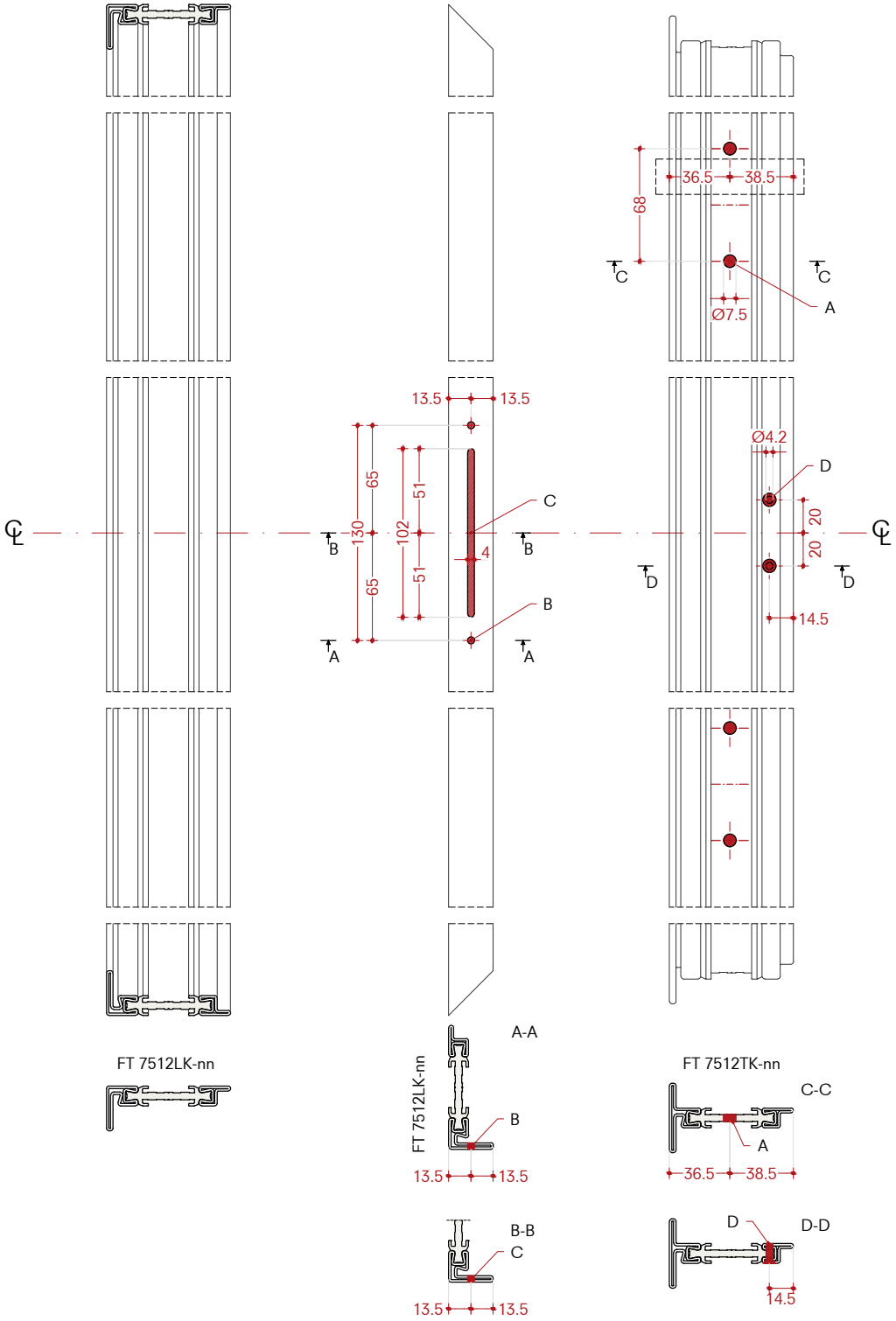
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Single leaf window
Open out - Right opening
(left opening is the mirror image)
Flush profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Einflüglige Fenster
Nach außen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Flächenbündige profile

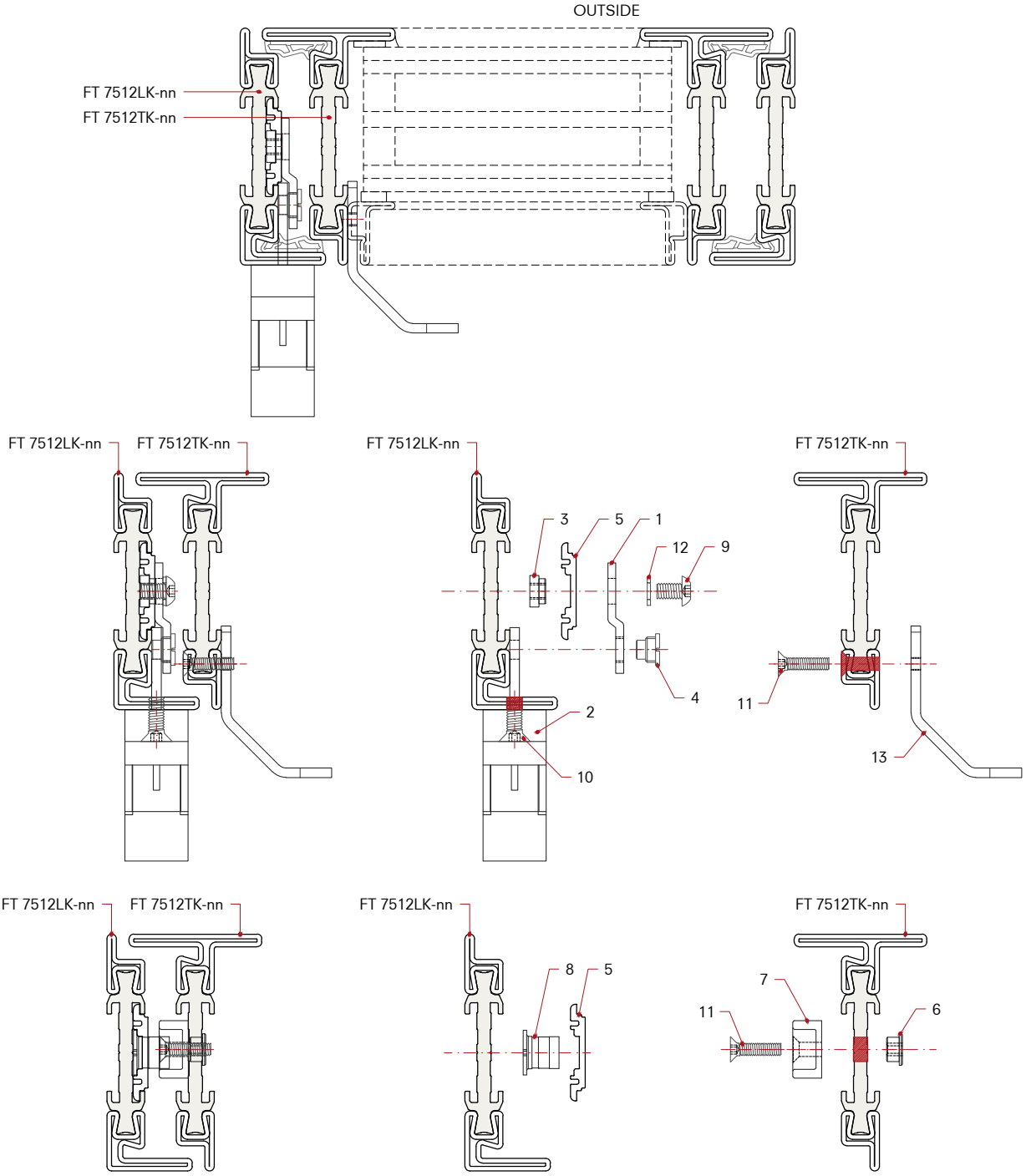
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à un vantail
Ouverture extérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm
D) Ø4.2 mm countersunk threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm
D) Senkbohrungen Ø4.2 mm Gewinde M5

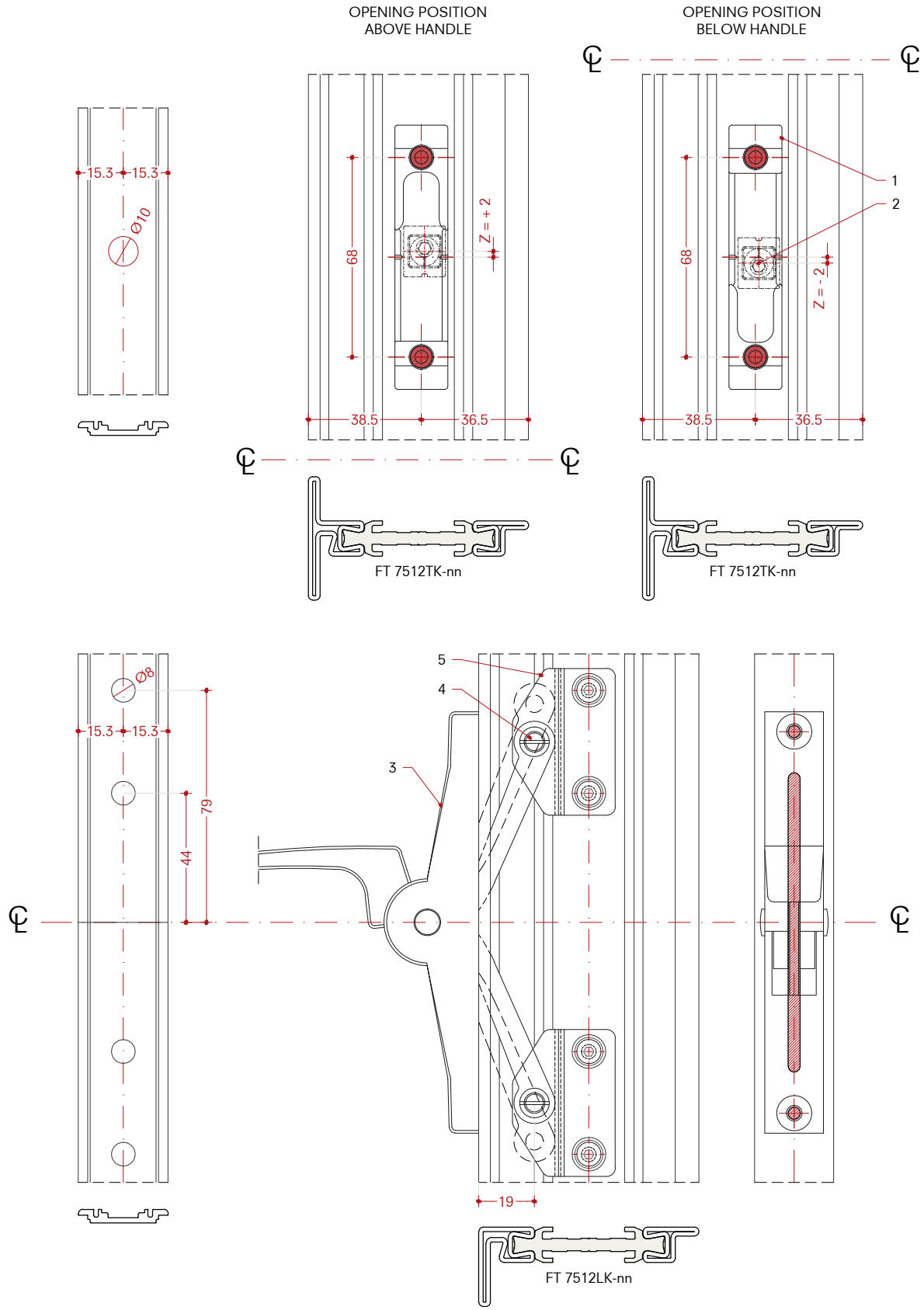
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm
D) Trous fraisé Ø4.2 mm fileté M5



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

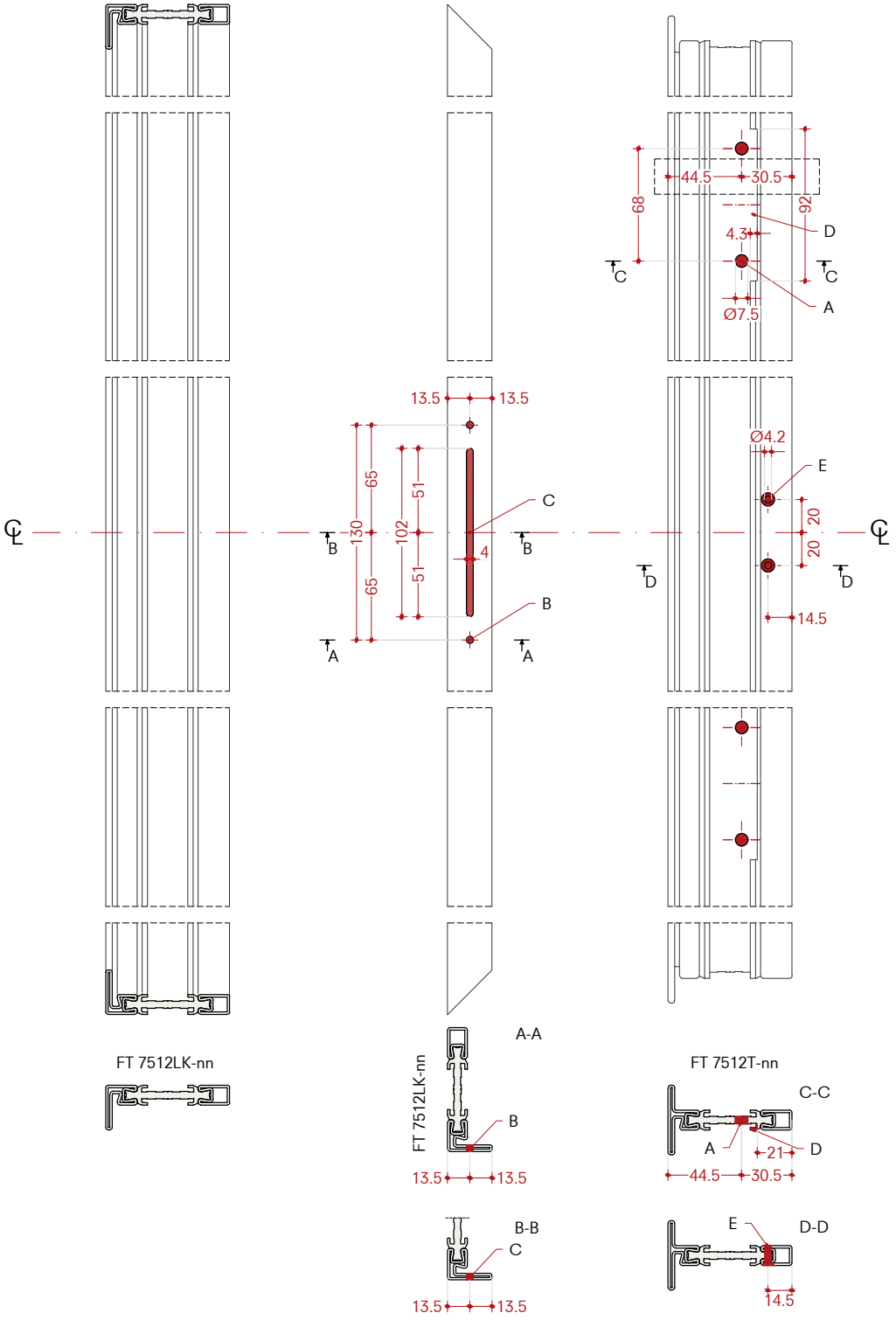
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Single leaf window
Open out - Right opening
(left opening is the mirror image)
Overlapped profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Einflüglige Fenster
Nach außen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Überlappende profile

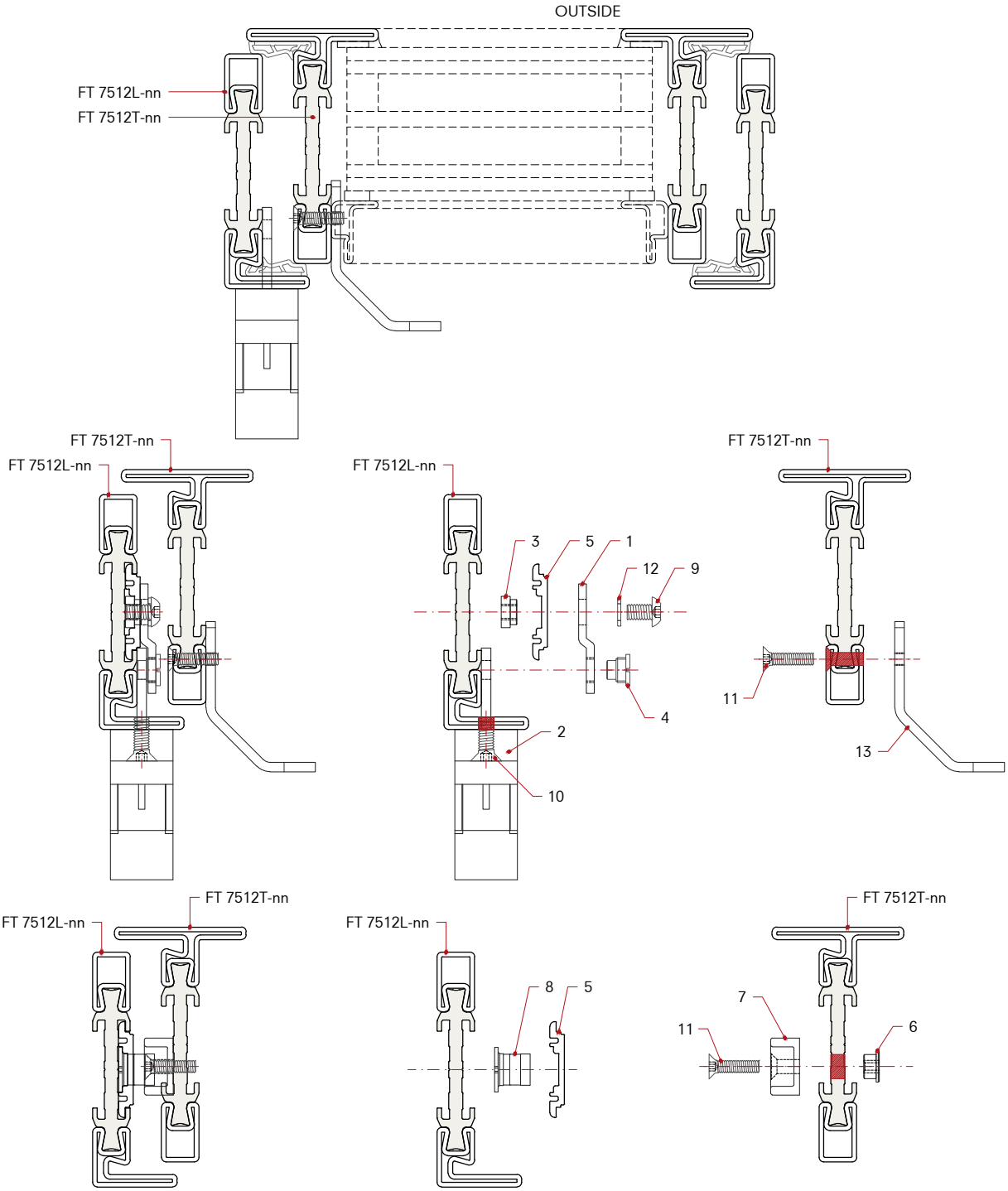
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à un vantail
Ouverture extérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm
D) Cut out 92x4 mm
E) Ø4.2 mm countersunk threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm
D) Fräsung 92x4 mm
E) Senkbohrungen Ø4.2 mm Gewinde M5

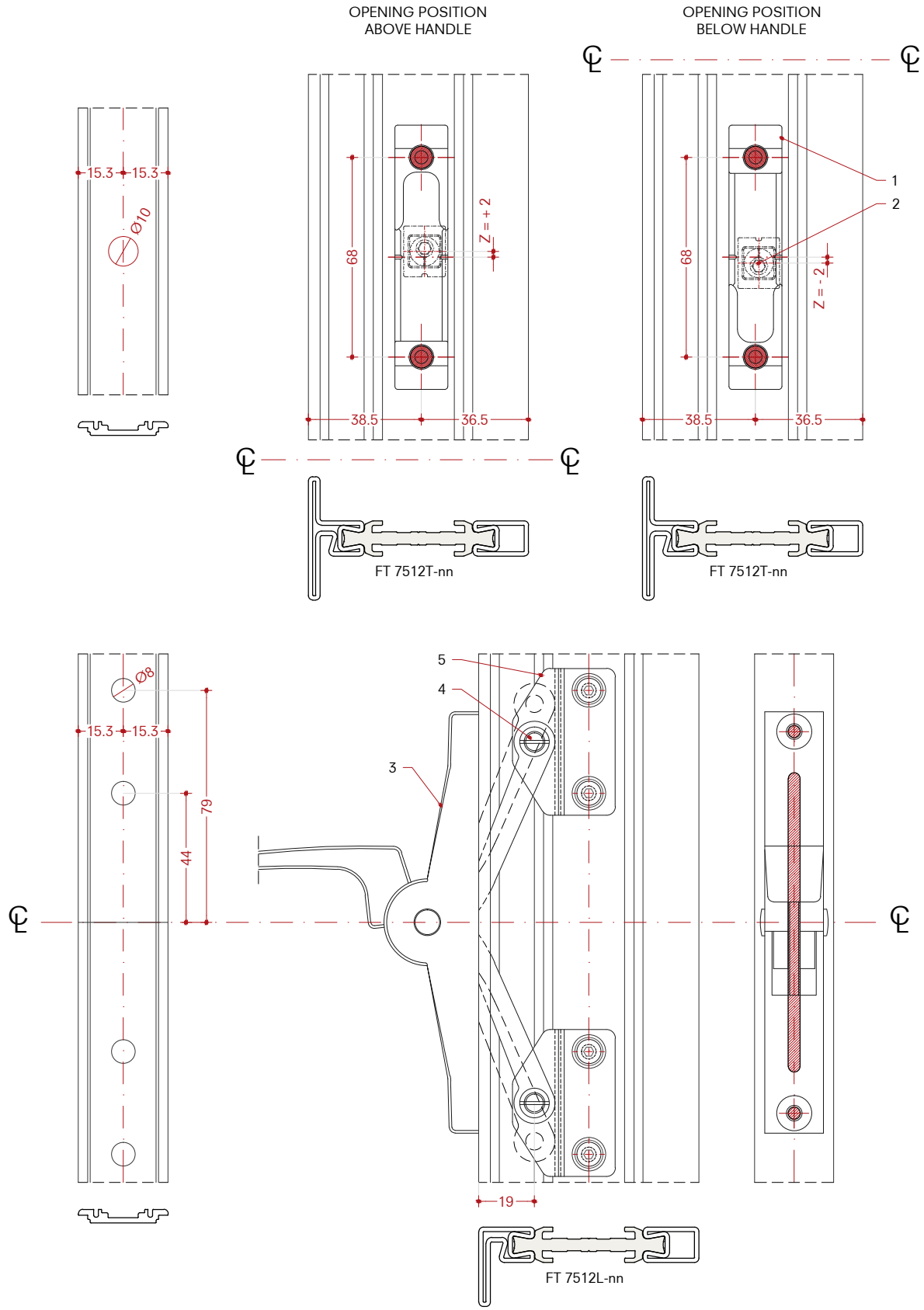
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm
D) Fraisage 92x4 mm
E) Trous fraisé Ø4.2 mm fileté M5



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

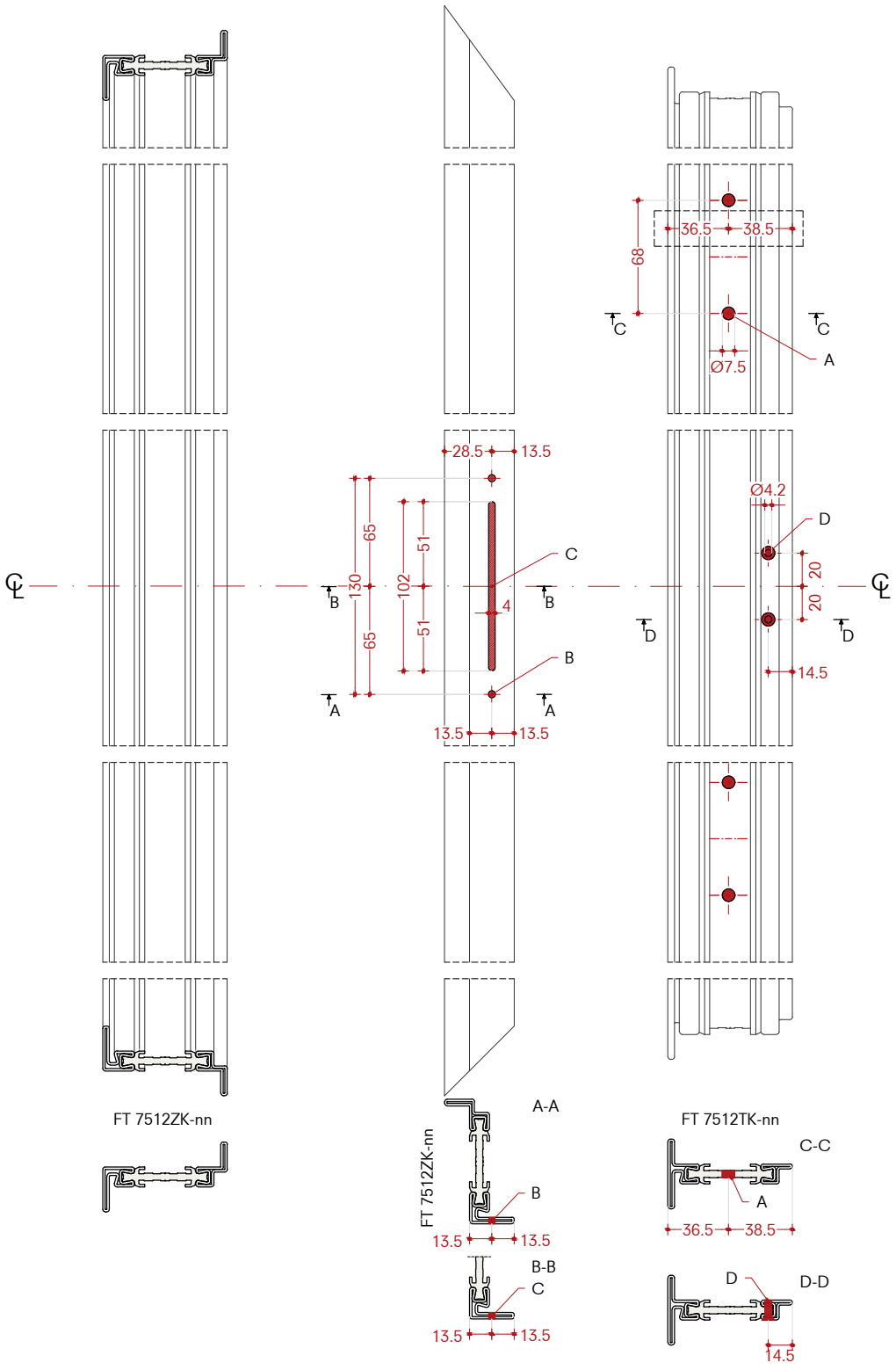
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Double leaf window
Open out - Right opening
(left opening is the mirror image)
Flush profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Flächenbündige profile

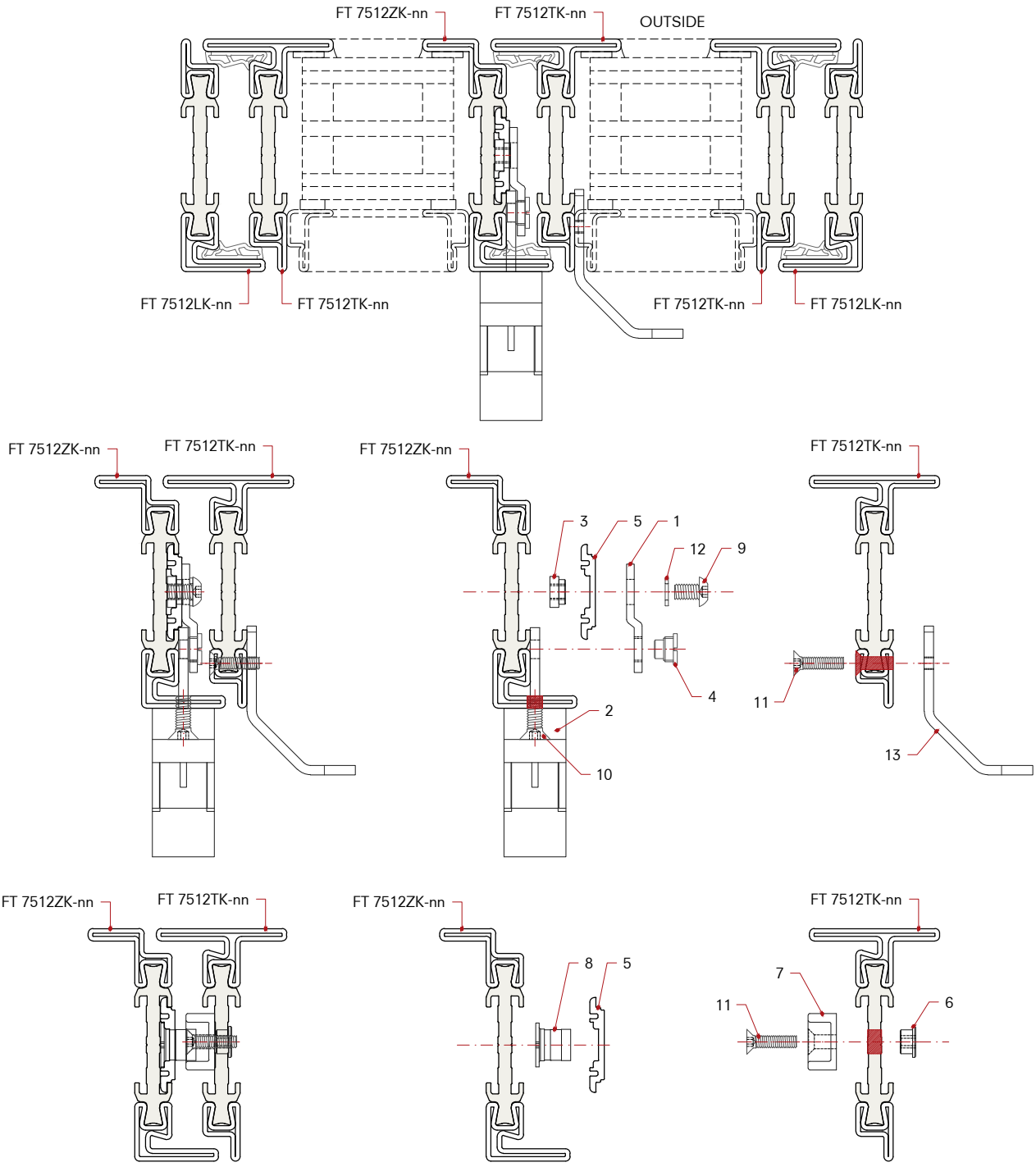
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés coplanaires



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm
D) Ø4.2 mm countersunk threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm
D) Senkbohrungen Ø4.2 mm Gewinde M5

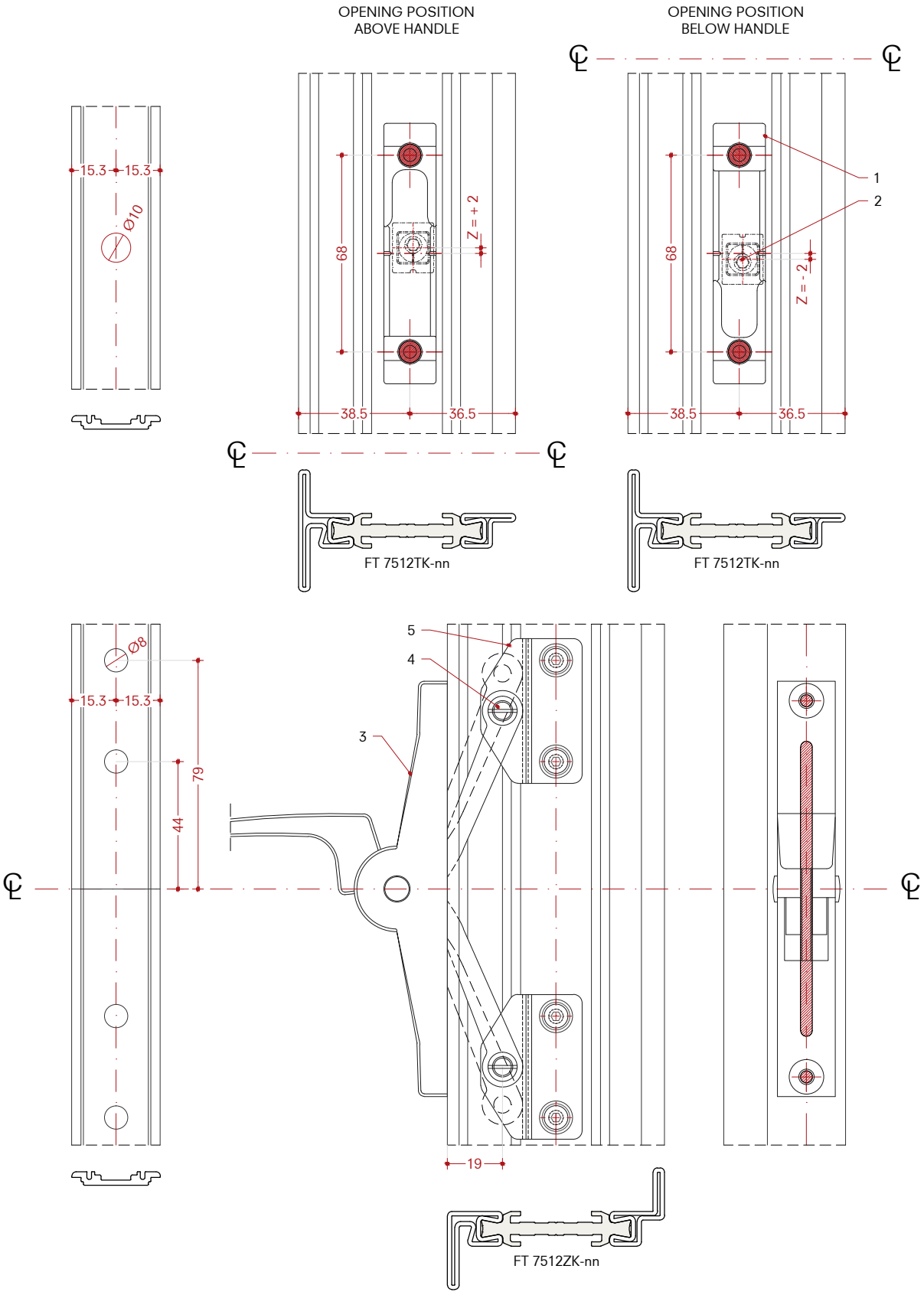
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm
D) Trous fraisé Ø4.2 mm fileté M5



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

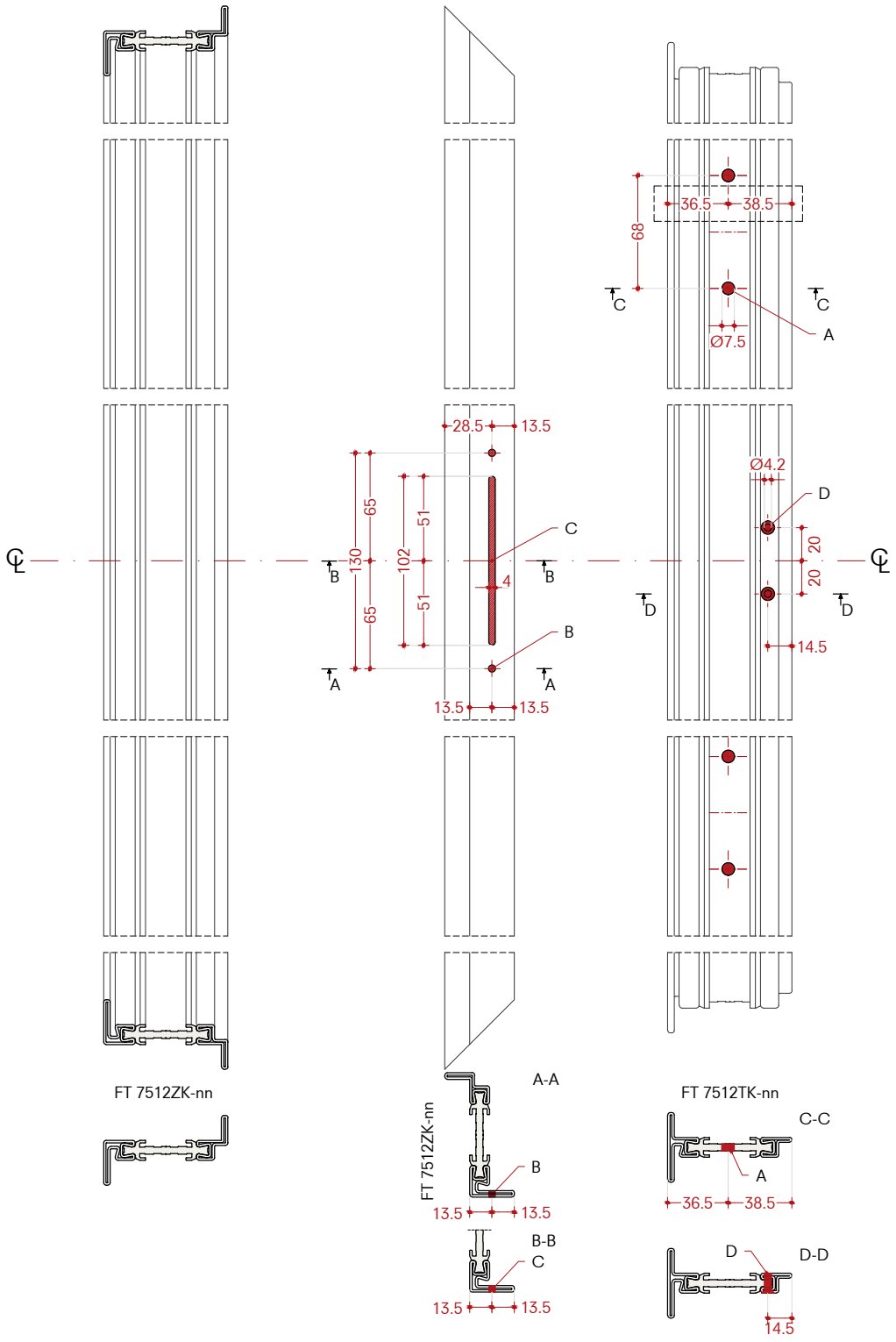
Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Double leaf window
Open out - Right opening
(left opening is the mirror image)
Overlapped profiles

Montage Multipoint Aluminiumstangen mit Hebelgriff
Zweiflügliges Fenster
Nach außen öffnend - DIN rechts
(DIN links Öffnung ist das Spiegelbild)
Überlappende profile

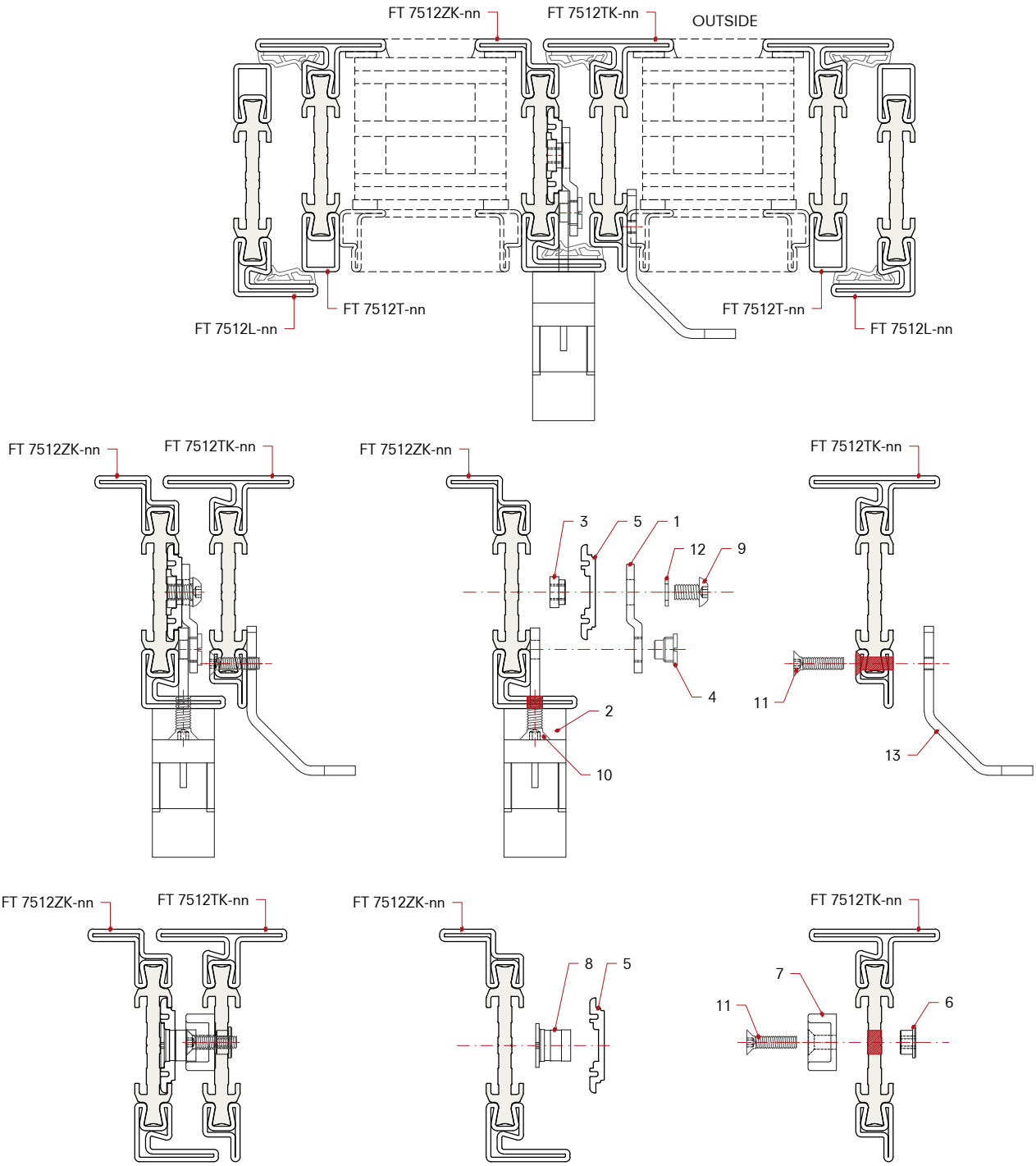
Montage Multipoint tiges de aluminium avec crémone à levier
Fenêtre à deux vantaux
Ouverture extérieure - Ouverture droite
(ouverture gauche inversé en miroir)
Profilés superposés



Scale 1:4
A) Ø7.5 mm holes to be checked
B) Ø4.2 mm threaded M5 holes
C) Cut out 102x4 mm
D) Ø4.2 mm countersunk threaded M5 holes

Maßstab 1:4
A) Bohrungen Ø7.5 mm überprüft werden
B) Bohrungen Ø4.2 mm Gewinde M5
C) Fräsung 102x4 mm
D) Senkbohrungen Ø4.2 mm Gewinde M5

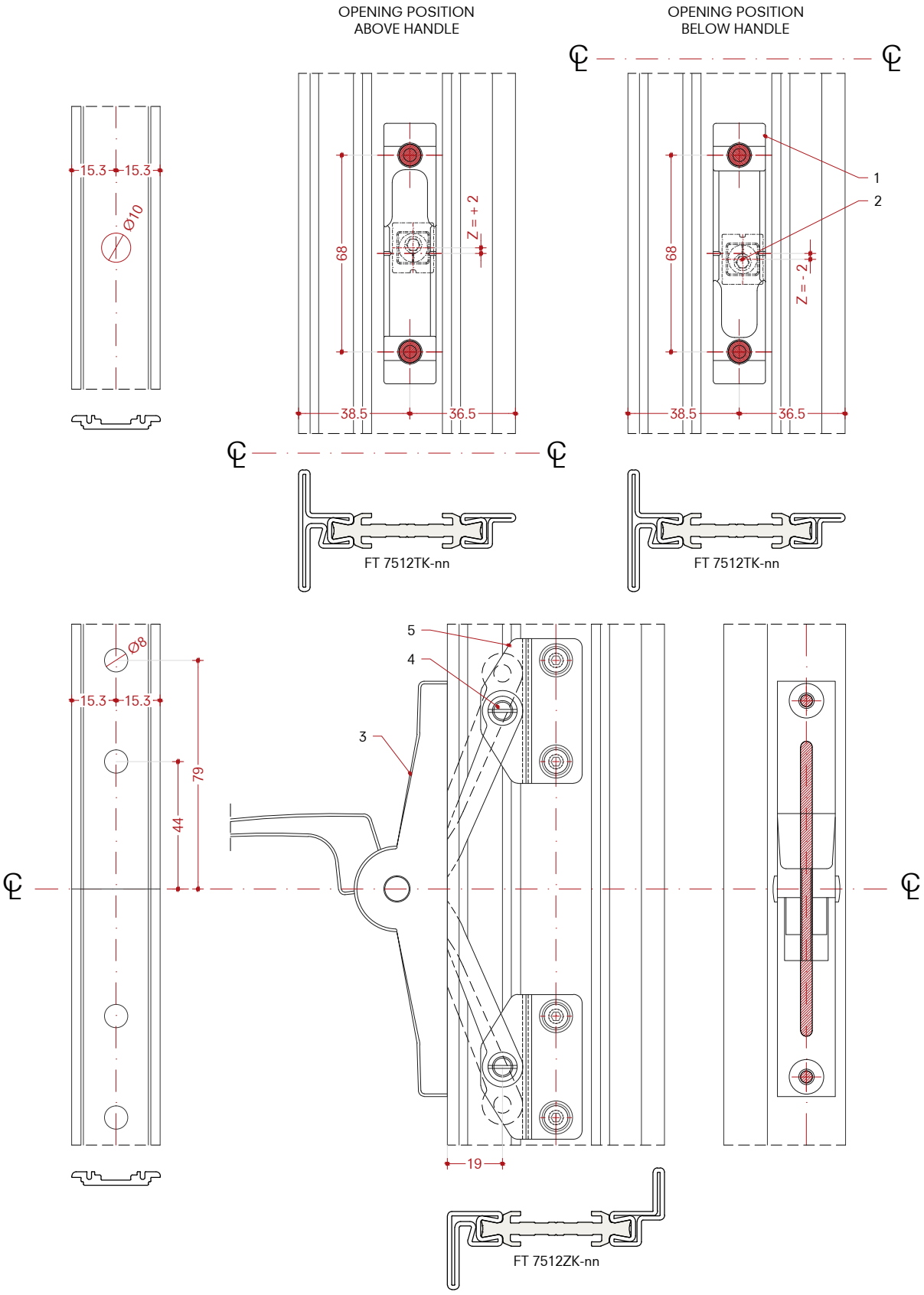
Échelle 1:4
A) Trous Ø7.5 mm à vérifier
B) Trous Ø4.2 mm fileté M5
C) Fraisage 102x4 mm
D) Trous fraisé Ø4.2 mm fileté M5



Scale 1:2
1) Cremone gear connection E99398-02
2) Lever handle H99001-nn or H99003-nn
3) Bush D99709-02
4) Bush D99714-02
5) Aluminum rail E99383-53
6) M4 brass bushing D99704-08
7) Strike plate E99389-11
8) Stud E99397-03
9) Fastening with M5x8 mm ISO7380 screws (not included)
10) Fastening with M5x14 mm ISO10642 screws (not included)
11) Fastening with M4x16 mm ISO10642 screws (not included)
12) Washer M5 DIN433 (not included)
13) Handle H99020-nn

Maßstab 1:2
1) Verbindungsstück E99398-02
2) Hebelgriff H99001-nn or H99003-nn
3) Buchse D99709-02
4) Buchse D99714-02
5) Multipunktverriegelungstange E99383-53
6) Messingbuchse M4 D99704-08
7) Schließblech E99389-11
8) Verriegelung E99397-03
9) Befestigung mit M5x8 mm ISO7380 Schrauben (Eigenfertigung)
10) Befestigung mit M5x14 mm ISO10642 Schrauben (Eigenfertigung)
11) Befestigung mit M4x16 mm ISO10642 Schrauben (Eigenfertigung)
12) Scheibe M5 DIN433 (Eigenfertigung)
13) Griff H99020-nn

Échelle 1:2
1) Connexion E99398-02
2) Crémone à levier H99001-nn or H99003-nn
3) Bague D99709-02
4) Bague D99714-02
5) Tige verrouillage de aluminium E99383-53
6) Boîte en laiton M4 D99704-08
7) Gâche E99389-11
8) Galet E99397-03
9) Fixation avec vis M5x8 mm ISO7380 (non inclus)
10) Fixation avec vis M5x14 mm ISO10642 (non inclus)
11) Fixation avec vis M4x16 mm ISO10642 (non inclus)
12) Rondelle M5 DIN433 (non inclus)
13) Poignée H99020-nn



Scale 1:2
1) Strike plate E99389-11
2) Stud E99397-03, position on leaf
3) Lever handle H99001-nn or H99003-nn
4) Bush D99714-02
5) Cremone gear connection E99398-02

Maßstab 1:2
1) Schließblech E99389-11
2) Verriegelung E99397-03, position an der Flügel
3) Hebelgriff H99001-nn or H99003-nn
4) Buchse D99714-02
5) Verbindungsstück E99398-02

Échelle 1:2
1) Gâche E99389-11
2) Galet E99397-03, position sur ouvrant
3) Crémone à levier H99001-nn or H99003-nn
4) Bague D99714-02
5) Connexion E99398-02

Multipoint aluminum rods installation with lever handle
Rail, stud and keeps position

Montage Multipoint Aluminiumstangen mit Hebelgriff
Verriegelungstange, Verriegelungsstück und Position Schließteil

Montage Multipoint tiges de aluminium avec crémone à levier
Position du tige, galet et arrêtoir

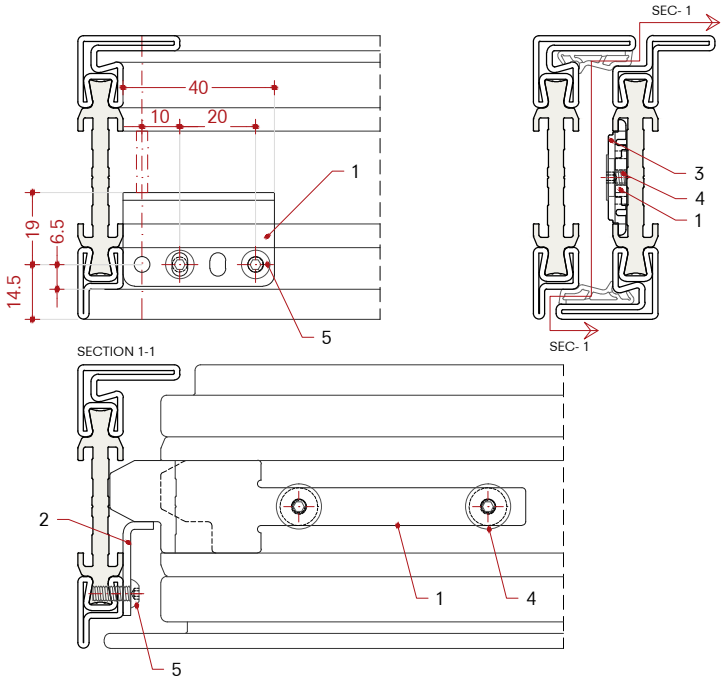
Scale 1:2
1) Ø10 mm holes
2) Rail cut
3) Ø8 mm holes
(*) Maximum distance to be reduced in case of heavy wind load conditions. Maximum distance 700 mm in case of long flush bolt on 2nd leaf. In this case shoot bolt on 1st leaf open-in is mandatory.

Maßstab 1:2
1) Bohrungen Ø10 mm
2) Verriegelungstangenschnitt
3) Bohrungen Ø8 mm
(*) Maximaler Abstand, der bei starker Windlast reduziert werden muss. Maximaler Abstand 700 mm bei langer Kantriegel am Standflügel. In diesem Fall ist Schließriegel am Gangflügel aufgehend zwingend erforderlich.

Échelle 1:2
1) Trous Ø10 mm
2) Coupe de tige verrouillage
3) Trous Ø8 mm
(*) Distance maximale à réduire en cas de fortes charges de vent. Distance maximum 700 mm en cas de verrou à bascule long sur 2e ouvrant. Dans ce cas, verrou à bascule fermé sur 1er ouvrant ouverture intérieure duest obligatoire.

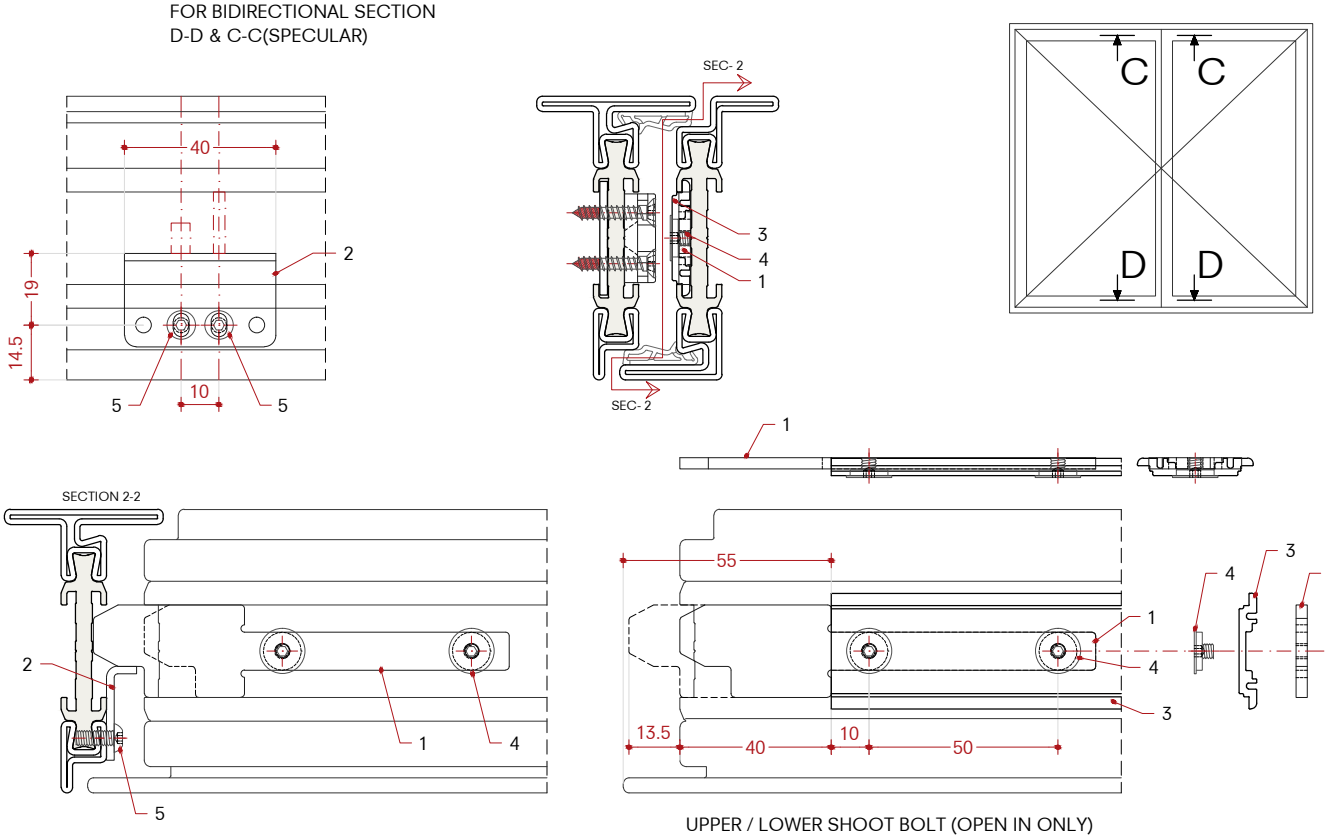
Single leaf window - Open in - Flush profiles - Right opening (Left opening is specular)

FOR BIDIRECTIONAL SECTION
B-B & A-A(SPECULAR)



Double leaf window - Open in - Flush profiles - Right opening (Left opening is specular)

FOR BIDIRECTIONAL SECTION
D-D & C-C(SPECULAR)



UPPER / LOWER SHOOT BOLT (OPEN IN ONLY)

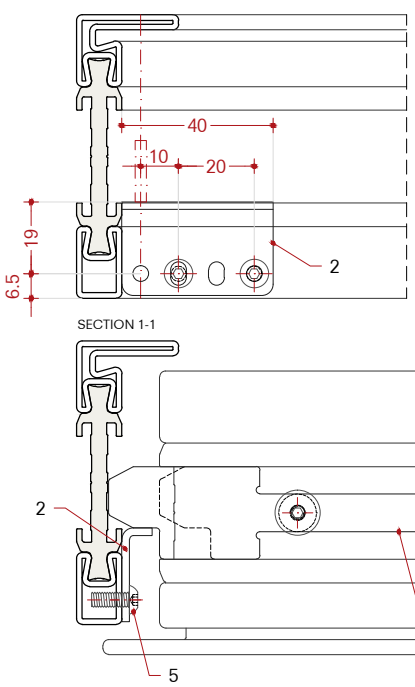
Scale 1:2
1) Shoot bolt K99108
2) Strike plate (provided)
3) Aluminum rail E99383-53
4) Bush for shoot bolt (provided)
5) Fastening with M4x10 mm ISO7380 screws (not included)

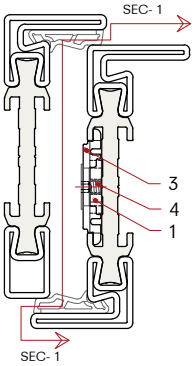
Maßstab 1:2
1) Kantriegel K99108
2) Schließblech (Inbegriffen)
3) Multipunktverriegelungstange E99383-53
4) Buchse für Kantriegel (Inbegriffen)
5) Befestigung mit M4x10 mm ISO7380 Schrauben (Eigenfertigung)

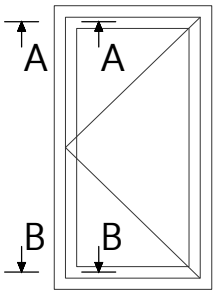
Échelle 1:2
1) Verrou à entailler K99108
2) Gâche (inclus)
3) Tige verrouillage de aluminium E99383-53
4) Bague pour verrou à entailler (inclus)
5) Fixation avec vis M4x10 mm ISO7380 (non inclus)

Single leaf window - Open in - Overlapped profiles - Right opening (Left opening is specular)

FOR BIDIRECTIONAL SECTION
B-B & A-A(SPECULAR)

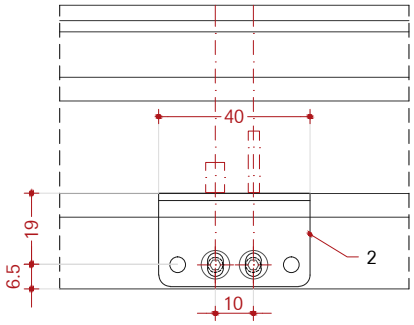


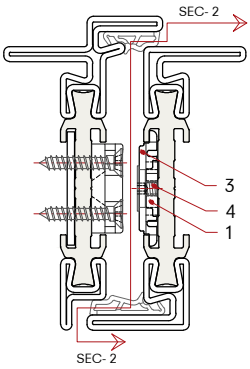


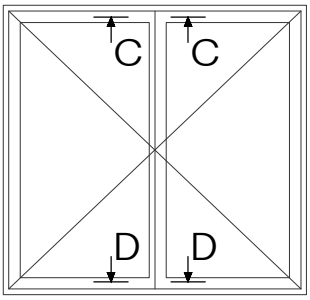


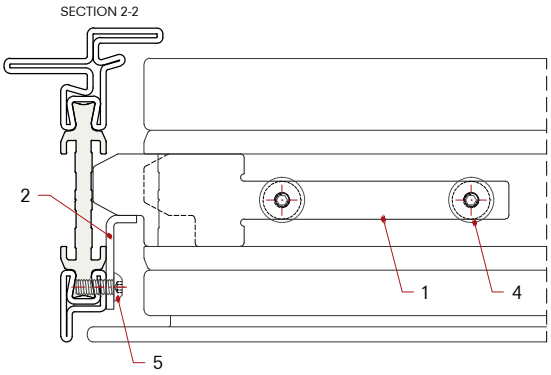
Double leaf window - Open in - Overlapped profiles - Right opening (Left opening is specular)

FOR BIDIRECTIONAL SECTION
D-D & C-C(SPECULAR)





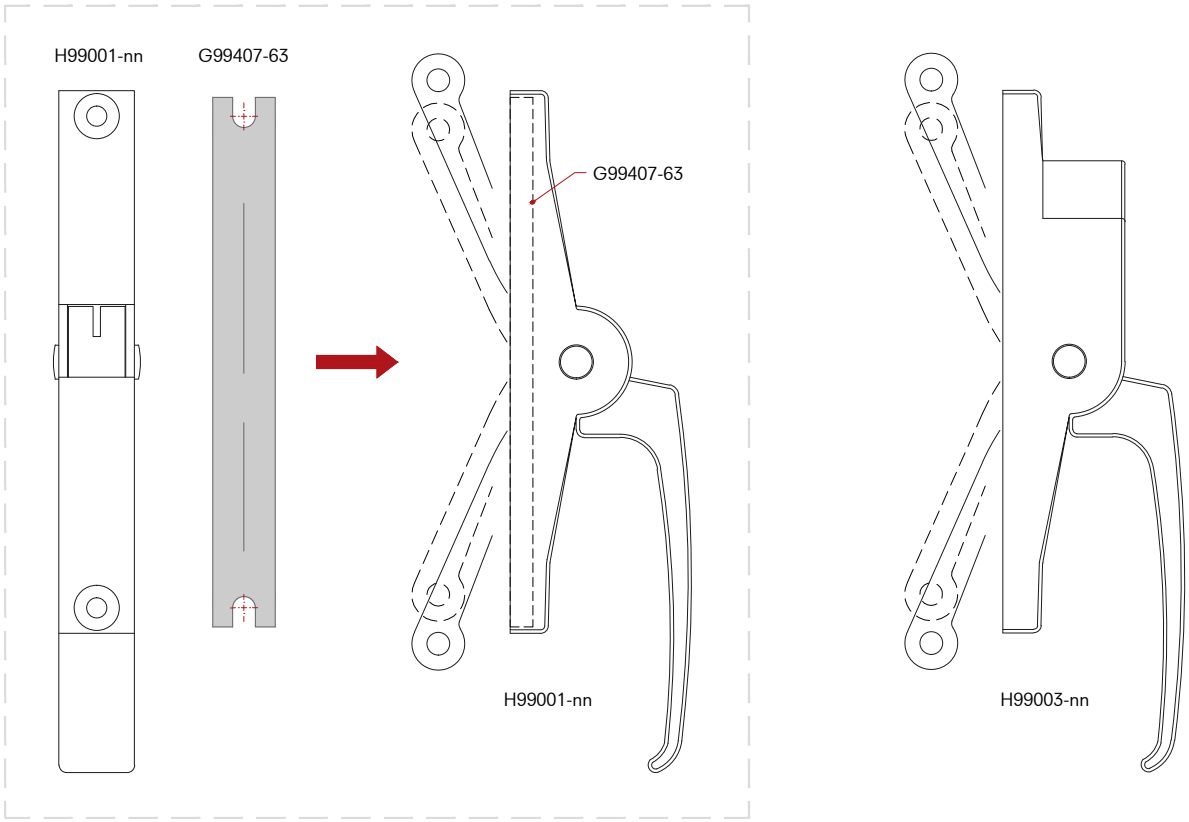




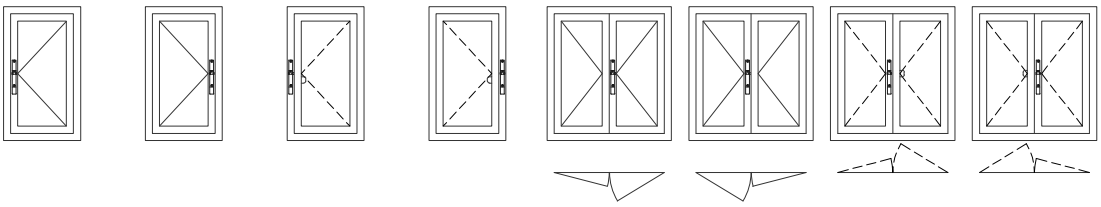
Scale 1:2
1) Shoot bolt K99108
2) Strike plate (provided)
3) Aluminum rail E99383-53
4) Bush for shoot bolt (provided)
5) Fastening with M4x10 mm ISO7380 screws (not included)

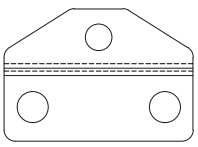
Maßstab 1:2
1) Kantriegel K99108
2) Schließblech (Inbegriffen)
3) Multipunktverriegelungstange E99383-53
4) Buchse für Kantriegel (Inbegriffen)
5) Befestigung mit M4x10 mm ISO7380 Schrauben (Eigenfertigung)

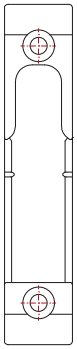
Échelle 1:2
1) Verrou à entailler K99108
2) Gâche (inclus)
3) Tige verrouillage de aluminium E99383-53
4) Bague pour verrou à entailler (inclus)
5) Fixation avec vis M4x10 mm ISO7380 (non inclus)

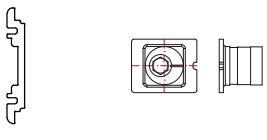


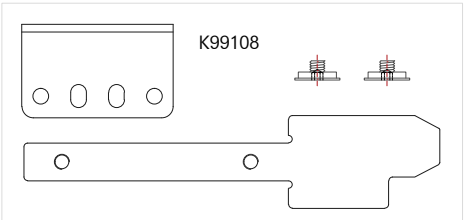
BIDIRECTIONAL CREMONE GEAR		
opening	leaves	
Open in	1 Leaf	standard installation on leaf
Open in	2 Leaves	standard installation on 1st leaf
Open out	1 Leaf	installation on frame
Open out	2 Leaves	installation on 2nd leaf




E99398-02


E99389-11





Installation Tilt&Turn fittings

Einbau Dreh-Kippfenster Beschläge

Montage fênetre oscillo-battant accessoires

5.8

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:1 - 1:2

Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:1 - 1:2

Tilt&Turn windows

Basic kits

Dreh-Kippfenster

Grundgarnitur

Fênetre oscillo-battant

Kits de base

K88001
Standard windows

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

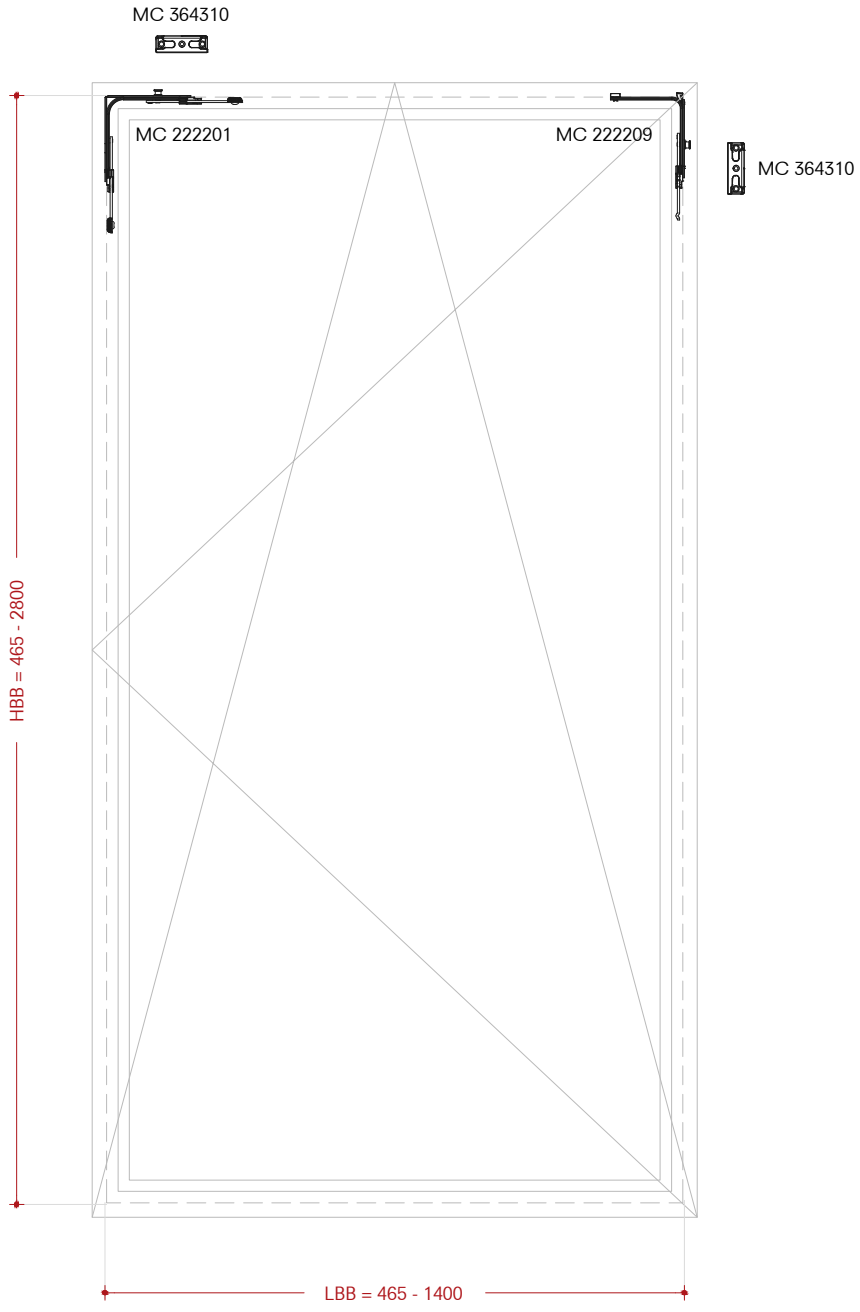
MC 222201 n°01 piece
MC 222209 n°01 piece
MC 364310 n°02 pieces

K88001
Standardfenster

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

K88001
Fenêtres standards

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



Tilt&Turn windows

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

Dreh-Kippfenster

Grundgarnitur

K88002

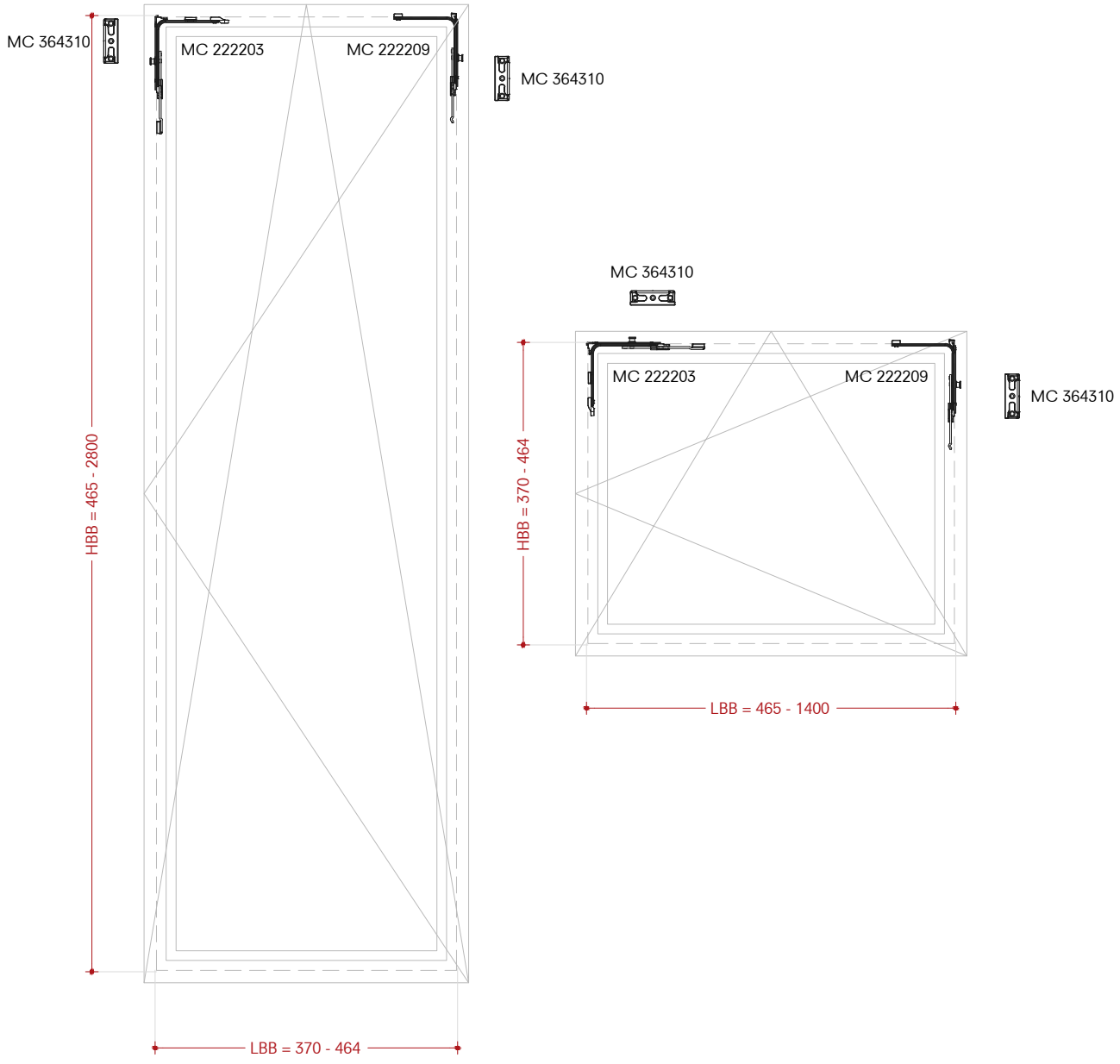
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

Fênetre oscillo-battant

Kits de base

K88002

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



Tilt&Turn windows

Basic kits

Dreh-Kippfenster

Grundgarnitur

Fênetre oscillo-battant

Kits de base

K88117
Only for double leaf windows

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

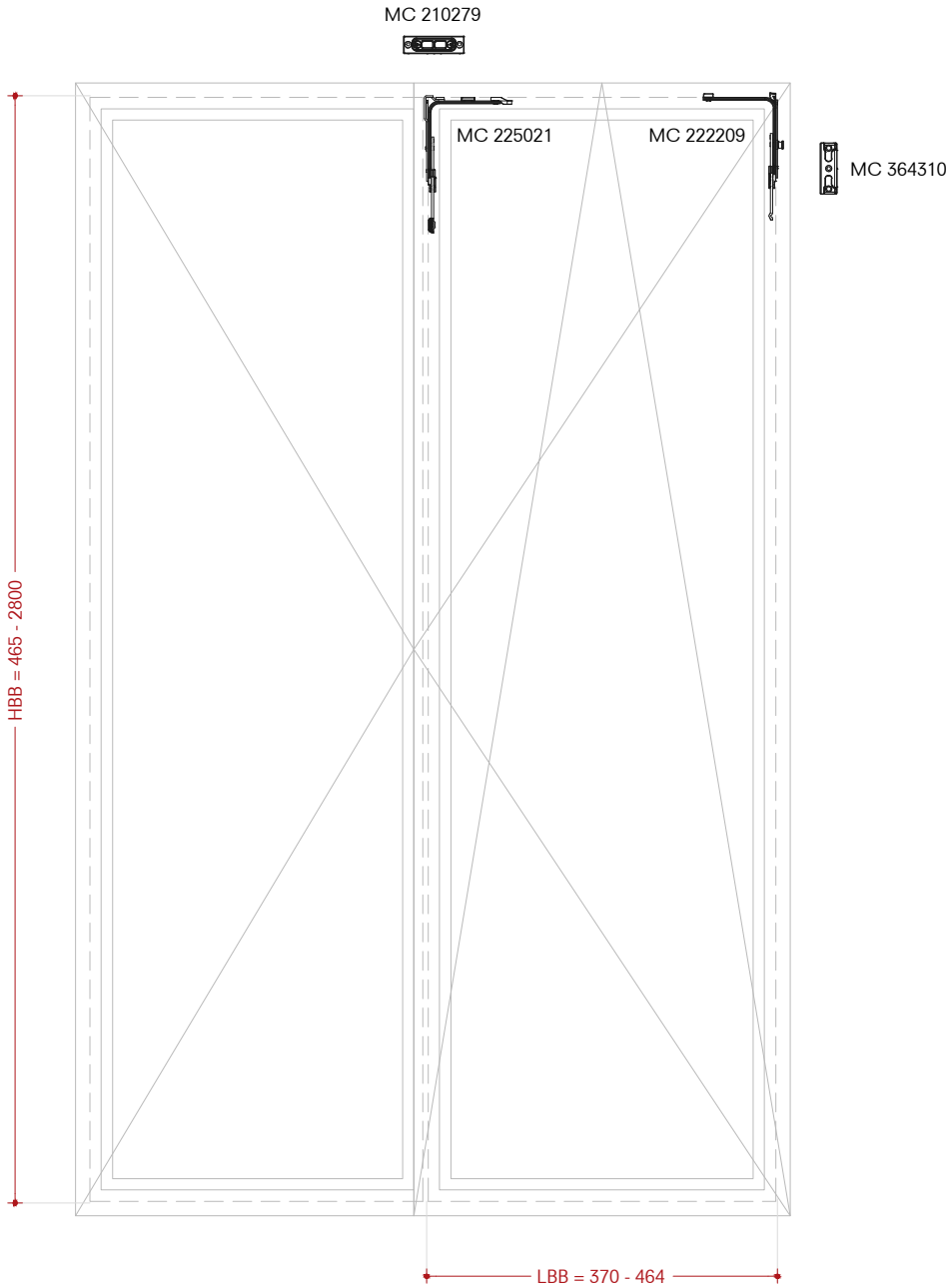
K88117
Nur für zweiflügelige Fenster

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

K88117
Seulement pour fenêtres à deux vantaux

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

MC 225021 n°01 piece
MC 222209 n°01 piece
MC 210279 n°01 piece
MC 364310 n°01 piece



Tilt&Turn windows

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

Dreh-Kippfenster

Garnitur Getriebe

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

Fênetre oscillo-battant

Kits d'équipement

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

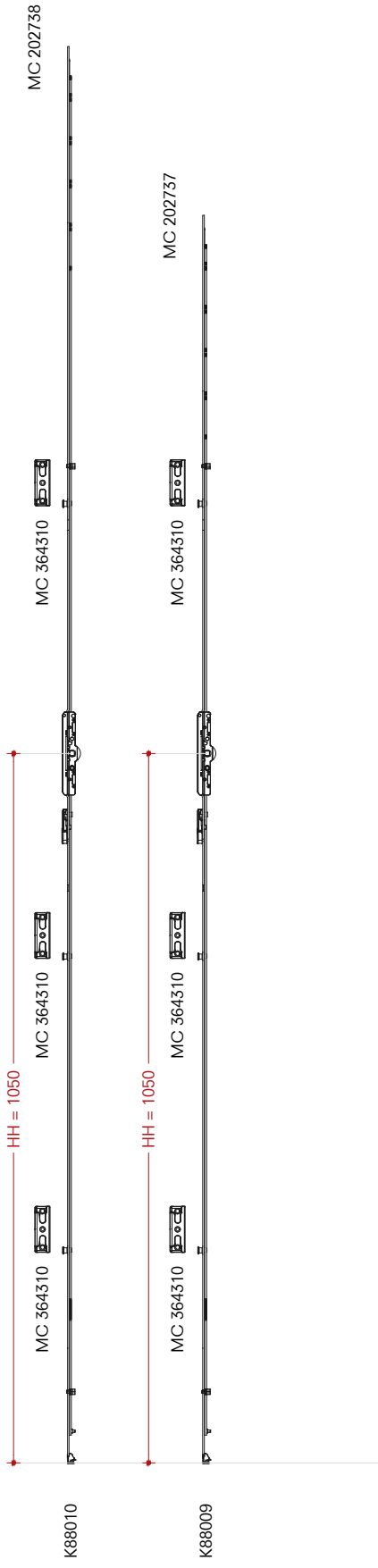
HH = 700 mm
HBB = 1591 - 2650 mm

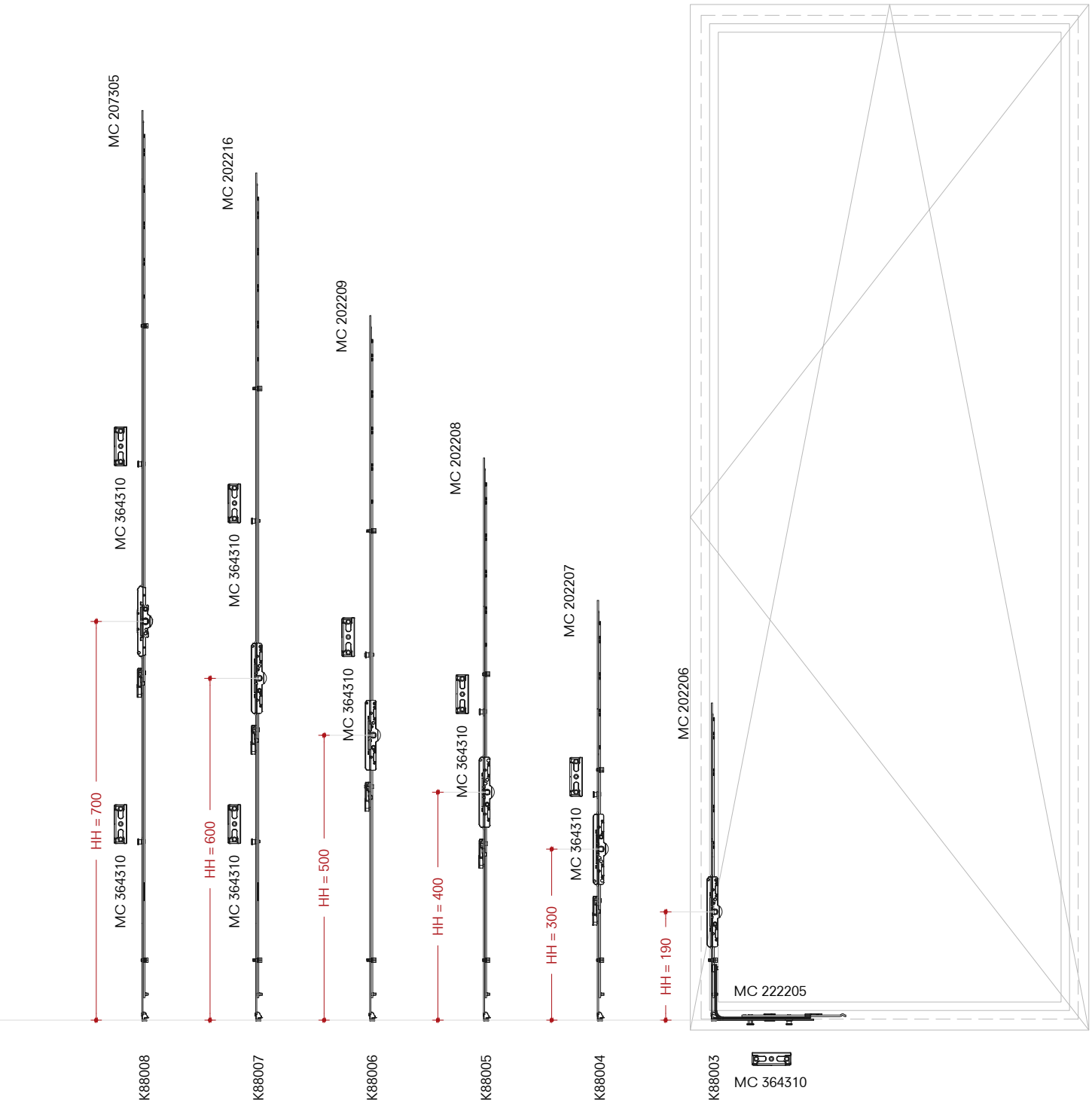
K88009

HH = 1050 mm
HBB = 1701 - 2900 mm

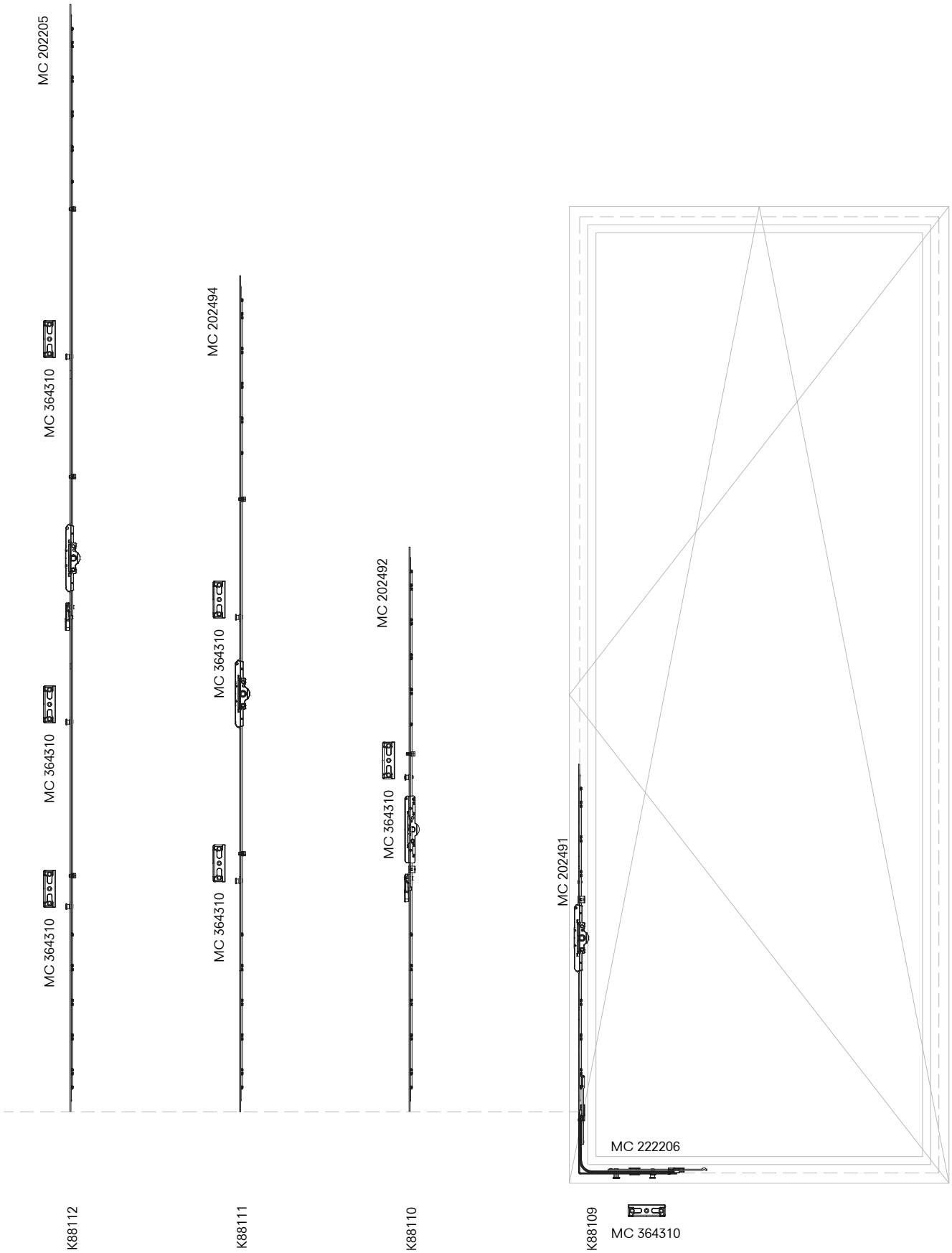
K88010

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

Tilt&Turn windows	**Dreh-Kippfenster**	**Fênetre oscillo-battant**
Double croppable gear kits	Beidseitig kürzbare Garnitur	Kits d'équipement à double recadrage
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		


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

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

Dreh-Kippfenster

Garnitur Getriebeverlängerung

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

Fênetre oscillo-battant

Kits extension d'équipement

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

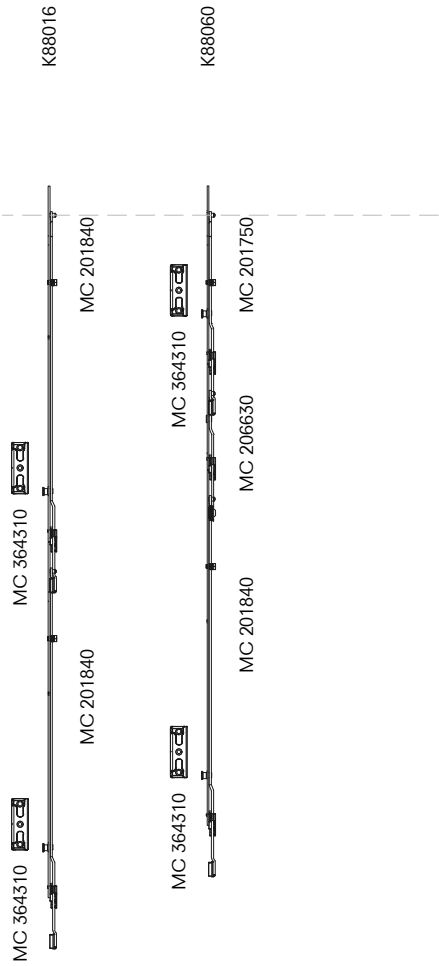
611 - 705 mm

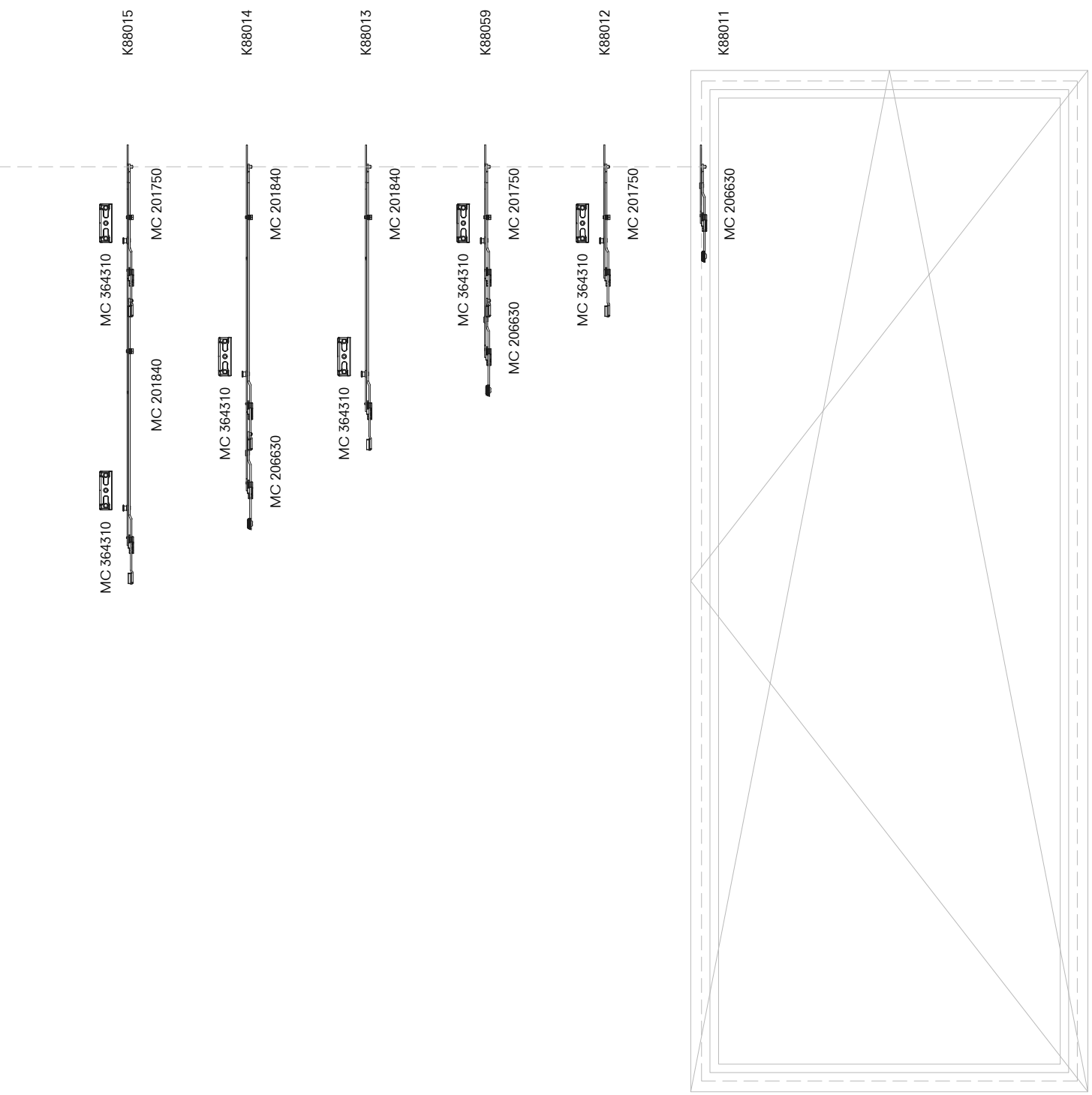
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630

Tilt&Turn windows

Scissors and hinges kits
Right opening

Dreh-Kippfenster

Garnitur Scheren und Bänder
DIN rechts

Fênetre oscillo-battant

Kits pinces et paumelles
Ouverture droite

K88017

LBB = 370 - 600 mm

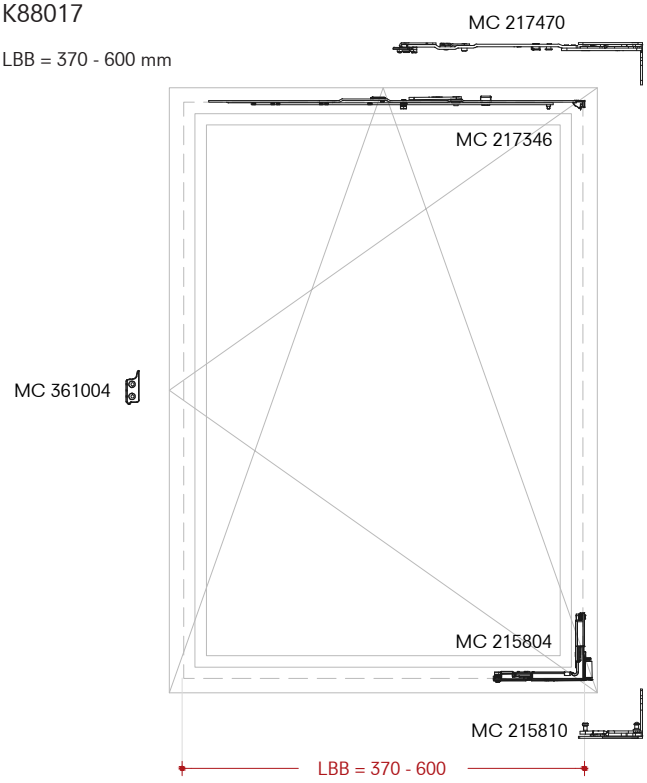
MC 217470 n°01 piece
MC 217346 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88017

LBB = 370 - 600 mm

K88017

LBB = 370 - 600 mm



K88018

LBB = 601 - 800 mm

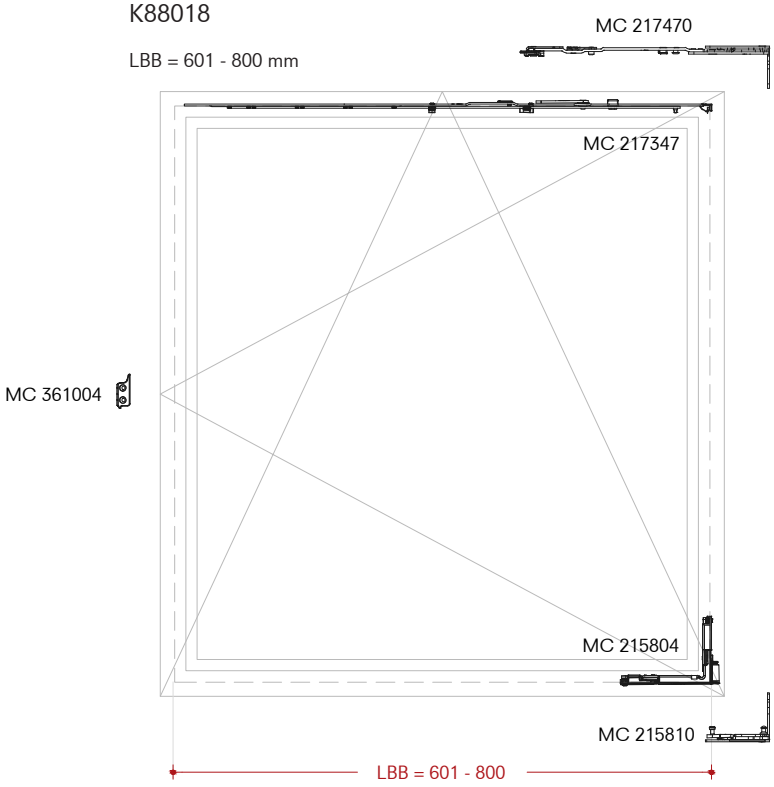
MC 217470 n°01 piece
MC 217347 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece

K88018

LBB = 601 - 800 mm

K88018

LBB = 601 - 800 mm



K88019

LBB = 801 - 1050 mm

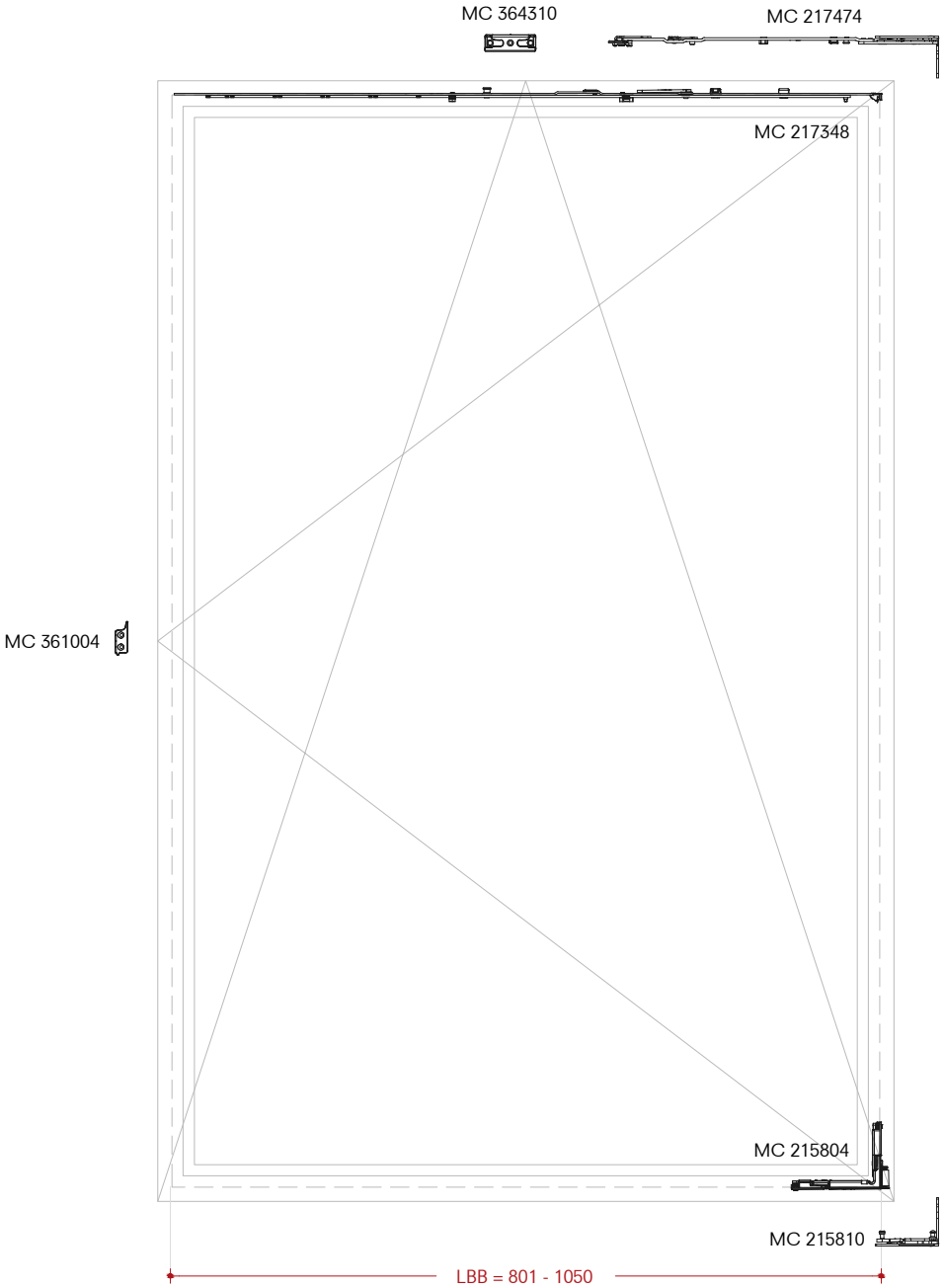
MC 217474 n°01 piece
MC 217348 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88019

LBB = 801 - 1050 mm

K88019

LBB = 801 - 1050 mm



Tilt&Turn windows

Scissors and hinges kits
Right opening

Dreh-Kippfenster

Garnitur Scheren und Bänder
DIN rechts

Fênetre oscillo-battant

Kits pinces et paumelles
Ouverture droite

K88020

LBB = 1051 - 1285 mm

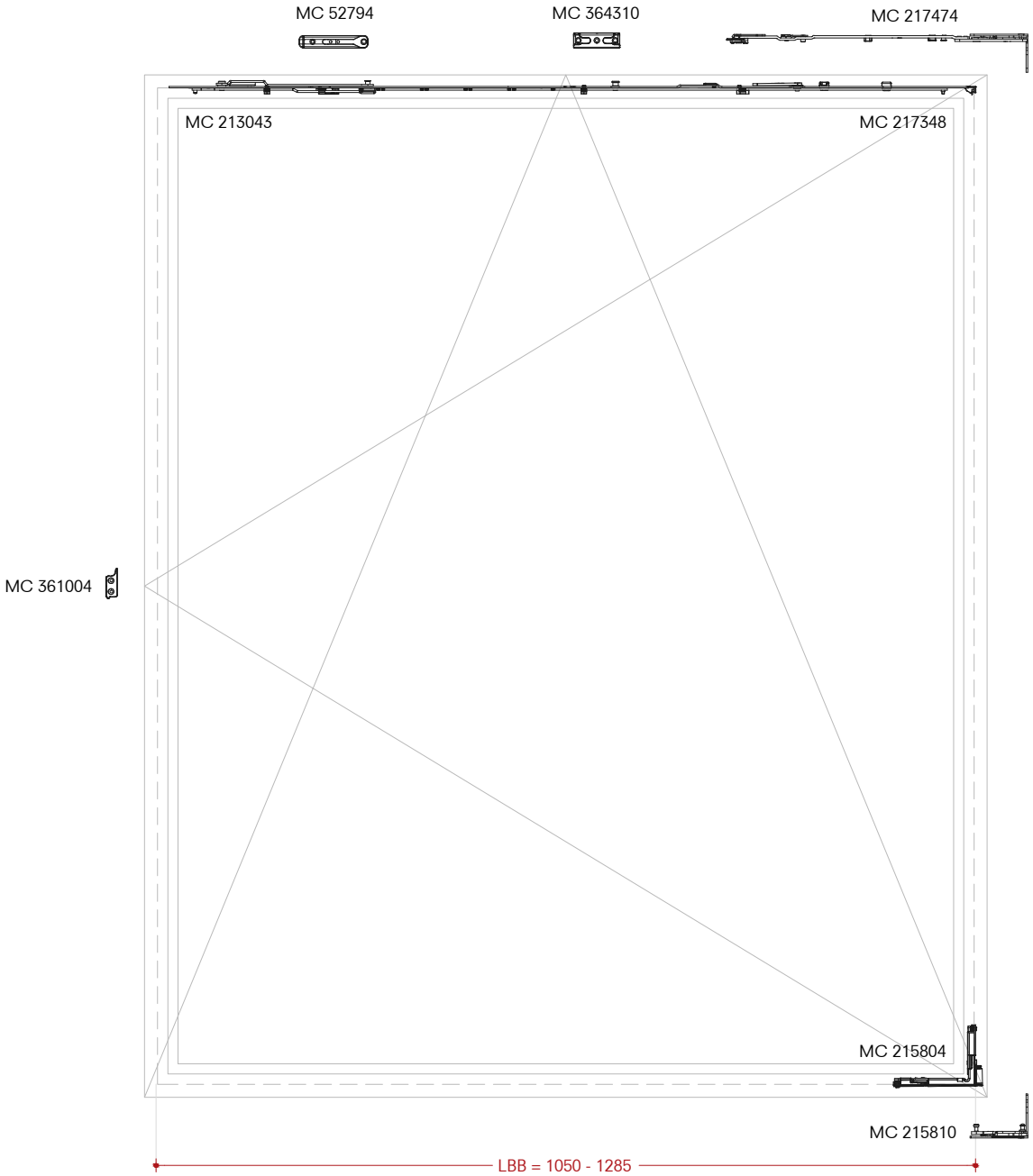
MC 217474 n°01 piece
MC 217348 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88020

LBB = 1051 - 1285 mm

K88020

LBB = 1051 - 1285 mm



K88021

LBB = 1286 - 1400 mm

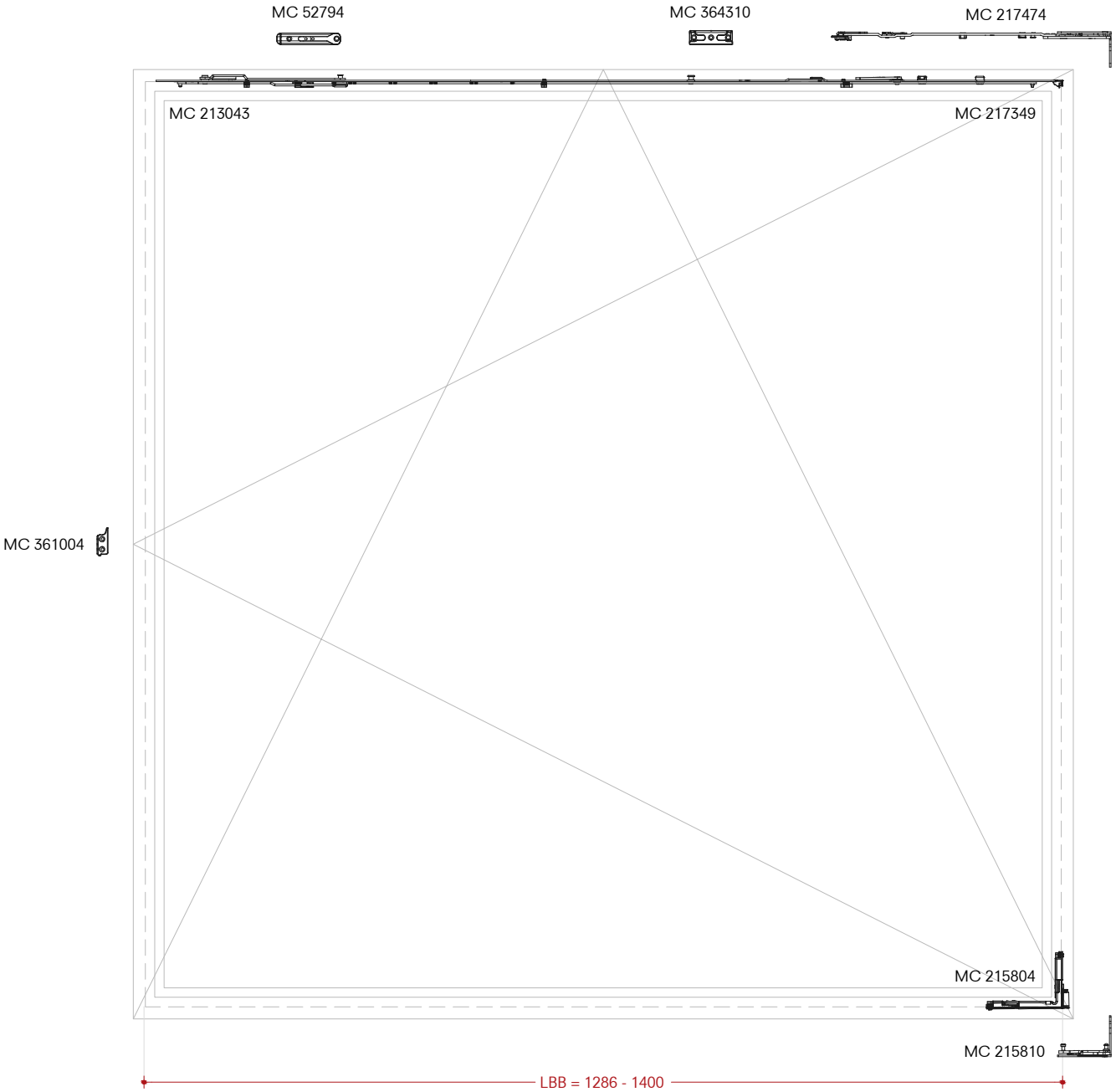
MC 217474 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece
MC 361004 n°01 piece
MC 364310 n°01 piece

K88021

LBB = 1286 - 1400 mm

K88021

LBB = 1286 - 1400 mm



Tilt&Turn windows

Scissors and hinges kits
Left opening

Dreh-Kippfenster

Garnitur Scheren und Bänder
DIN links

Fênetre oscillo-battant

Kits pinces et paumelles
Ouverture gauche

K88022

LBB = 370 - 600 mm

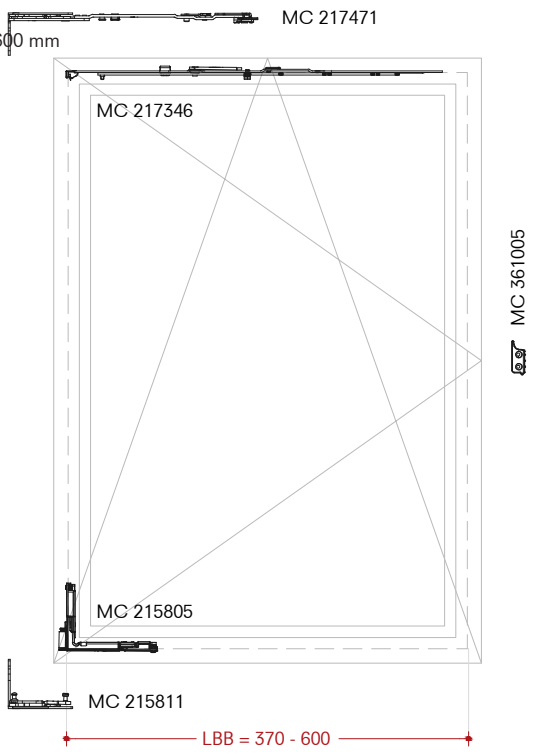
MC 217471 n°01 piece
MC 217346 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88022

LBB = 370 - 600 mm

K88022

LBB = 370 - 600 mm



K88023

LBB = 601 - 800 mm

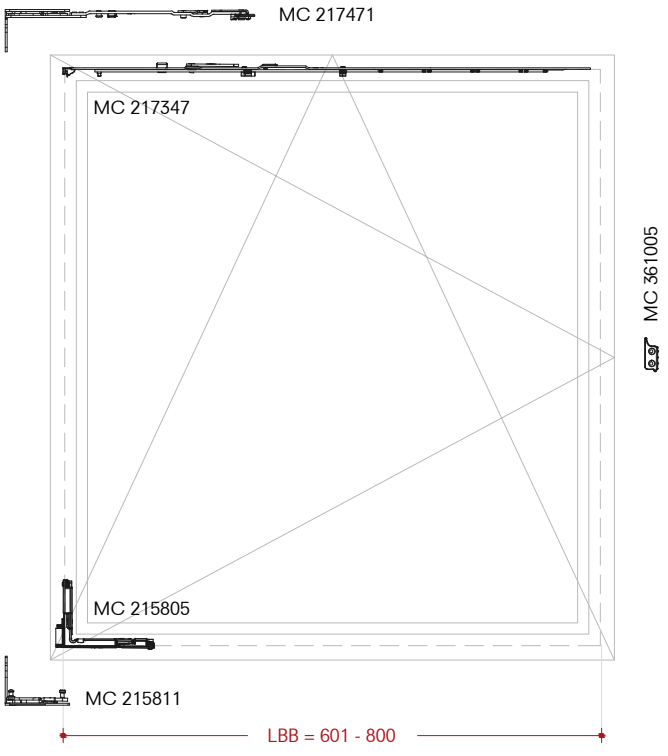
MC 217471 n°01 piece
MC 217347 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece

K88023

LBB = 601 - 800 mm

K88023

LBB = 601 - 800 mm



K88024

LBB = 801 - 1050 mm

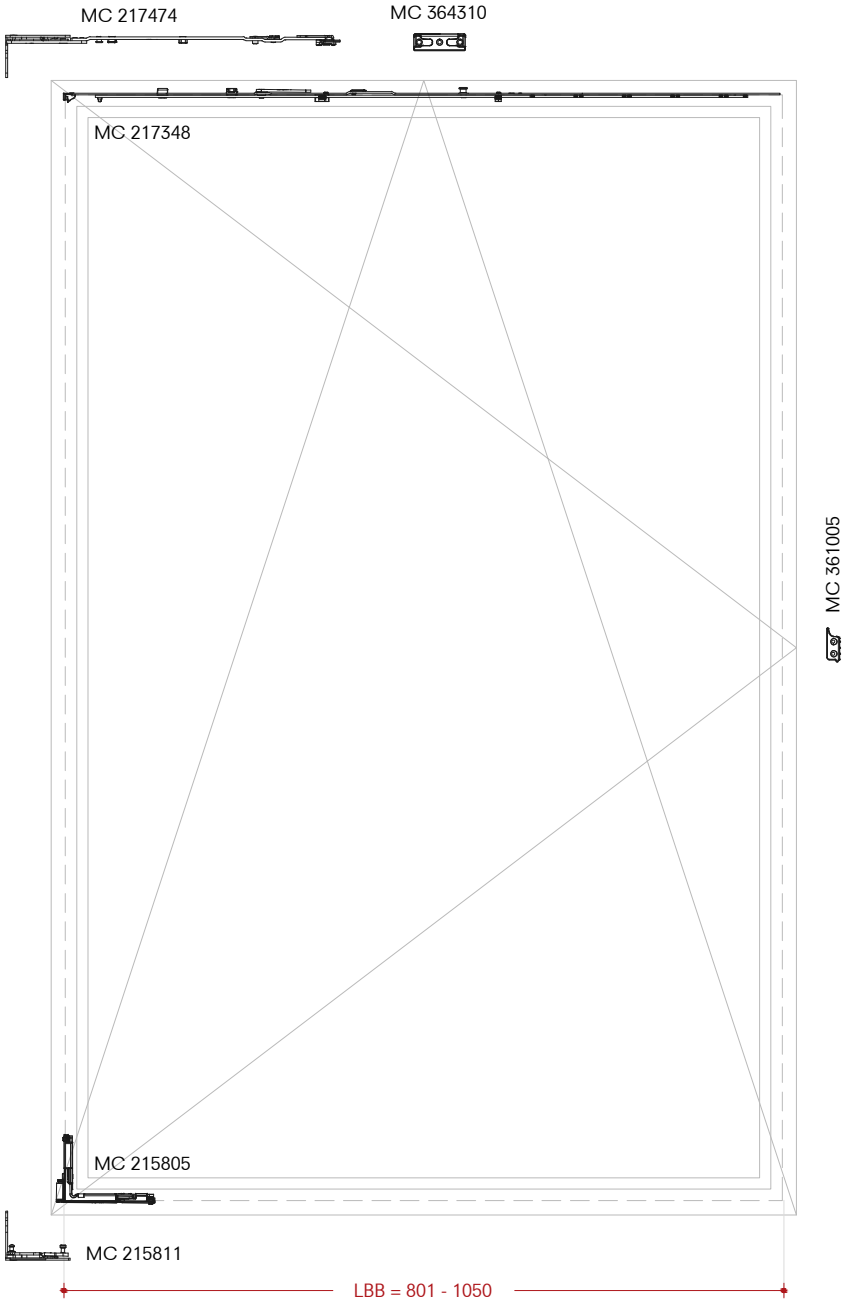
MC 217475 n°01 piece
MC 217348 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88024

LBB = 801 - 1050 mm

K88024

LBB = 801 - 1050 mm



Tilt&Turn windows

Scissors and hinges kits
Left opening

Dreh-Kippfenster

Garnitur Scheren und Bänder
DIN links

Fênetre oscillo-battant

Kits pinces et paumelles
Ouverture gauche

K88025

LBB = 1051 - 1285 mm

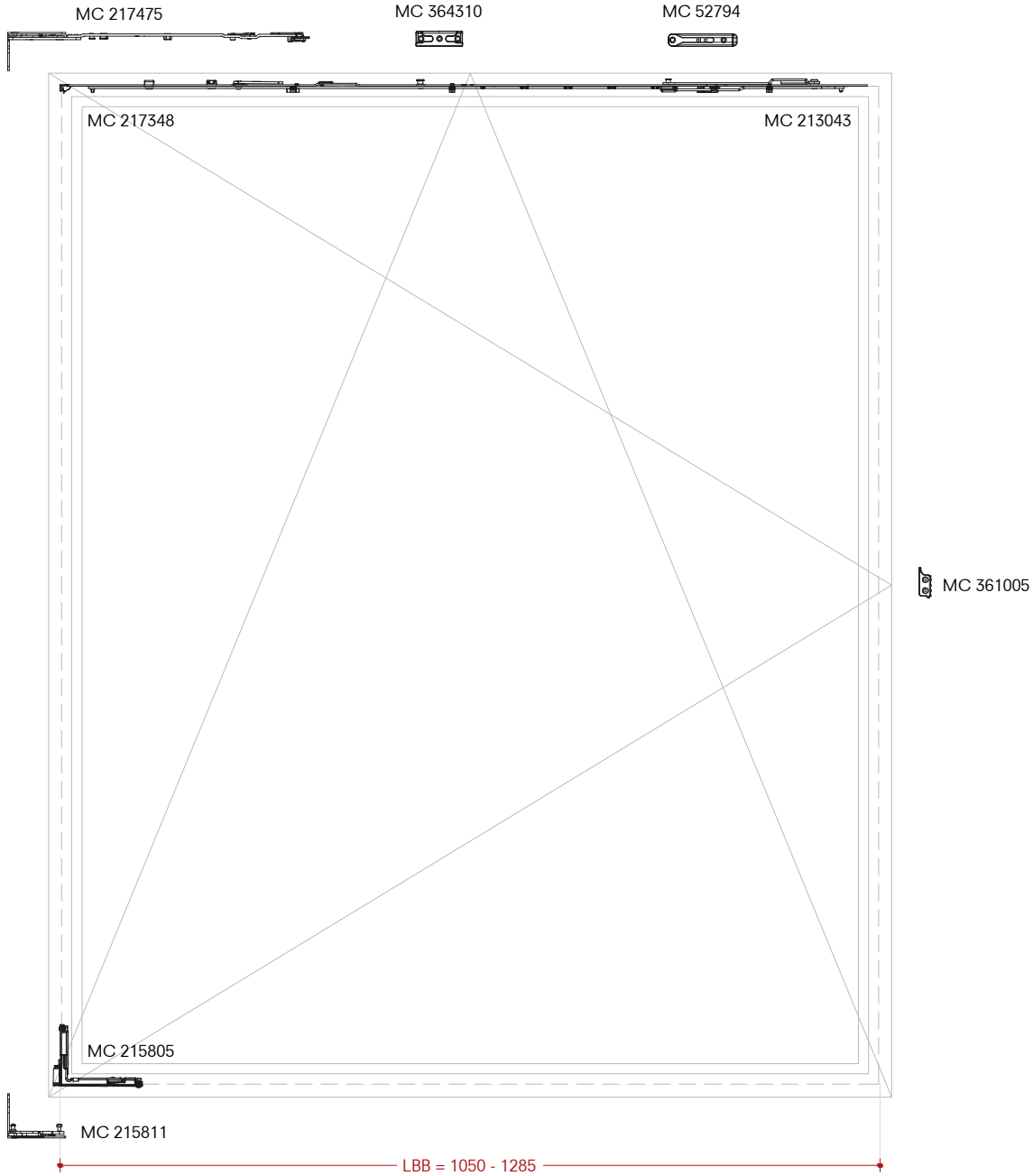
K88025

LBB = 1051 - 1285 mm

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



K88026

LBB = 1286 - 1400 mm

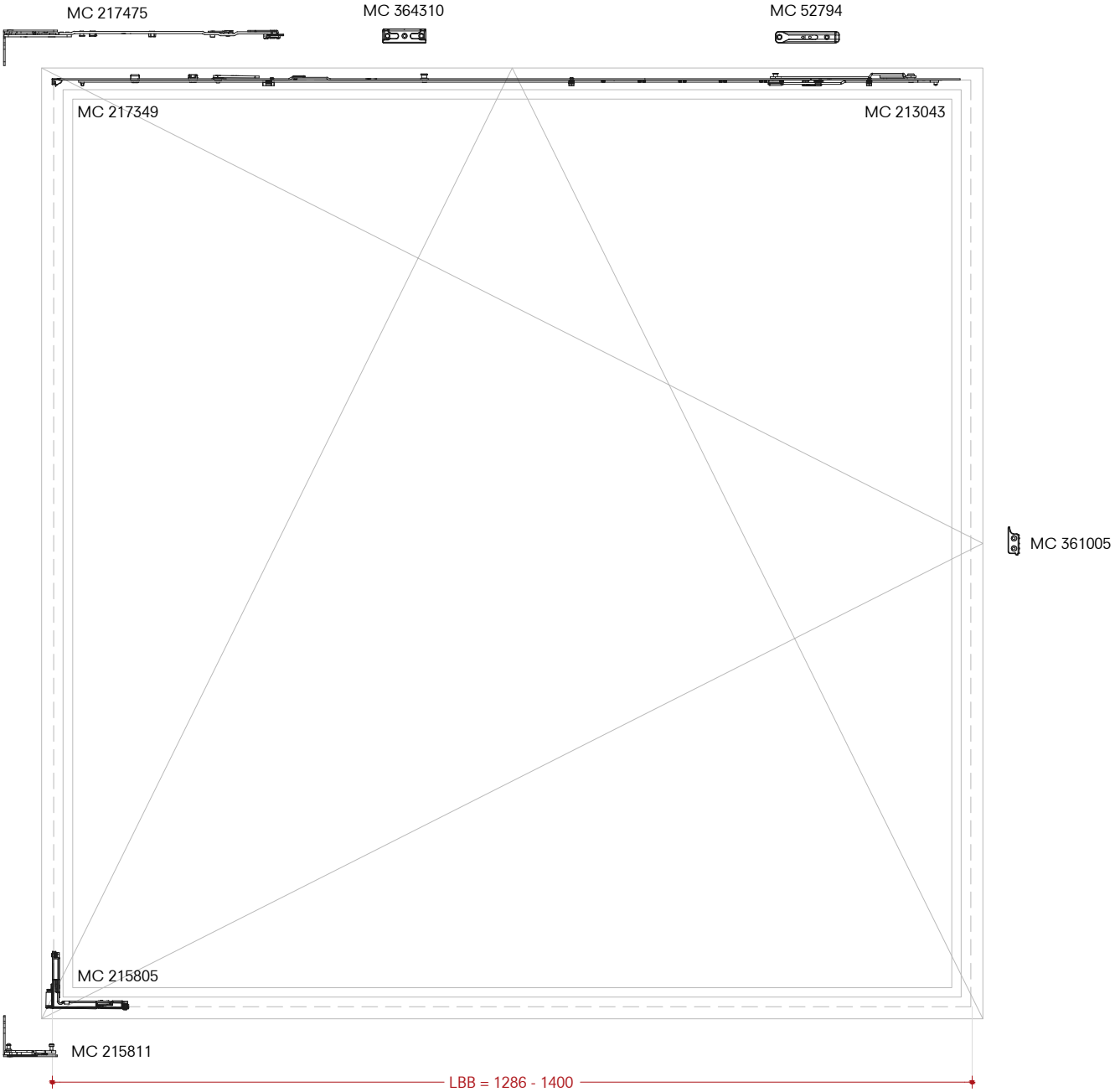
MC 217475 n°01 piece
MC 217349 n°01 piece
MC 213043 n°01 piece
MC 52794 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece
MC 361005 n°01 piece
MC 364310 n°01 piece

K88026

LBB = 1286 - 1400 mm

K88026

LBB = 1286 - 1400 mm



Tilt&Turn windows

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

Dreh-Kippfenster

Garnitur Zusatzverriegelung Bandseite

K88027

HBB = 801 - 1280 mm

K88028

HBB = 1281 - 1500 mm

K88029

HBB = 1501 - 1700 mm

K88030

HBB = 1701 - 2800 mm

Fênetre oscillo-battant

Point de verrouillage supplémentaire côté paumelle

K88027

HBB = 801 - 1280 mm

K88028

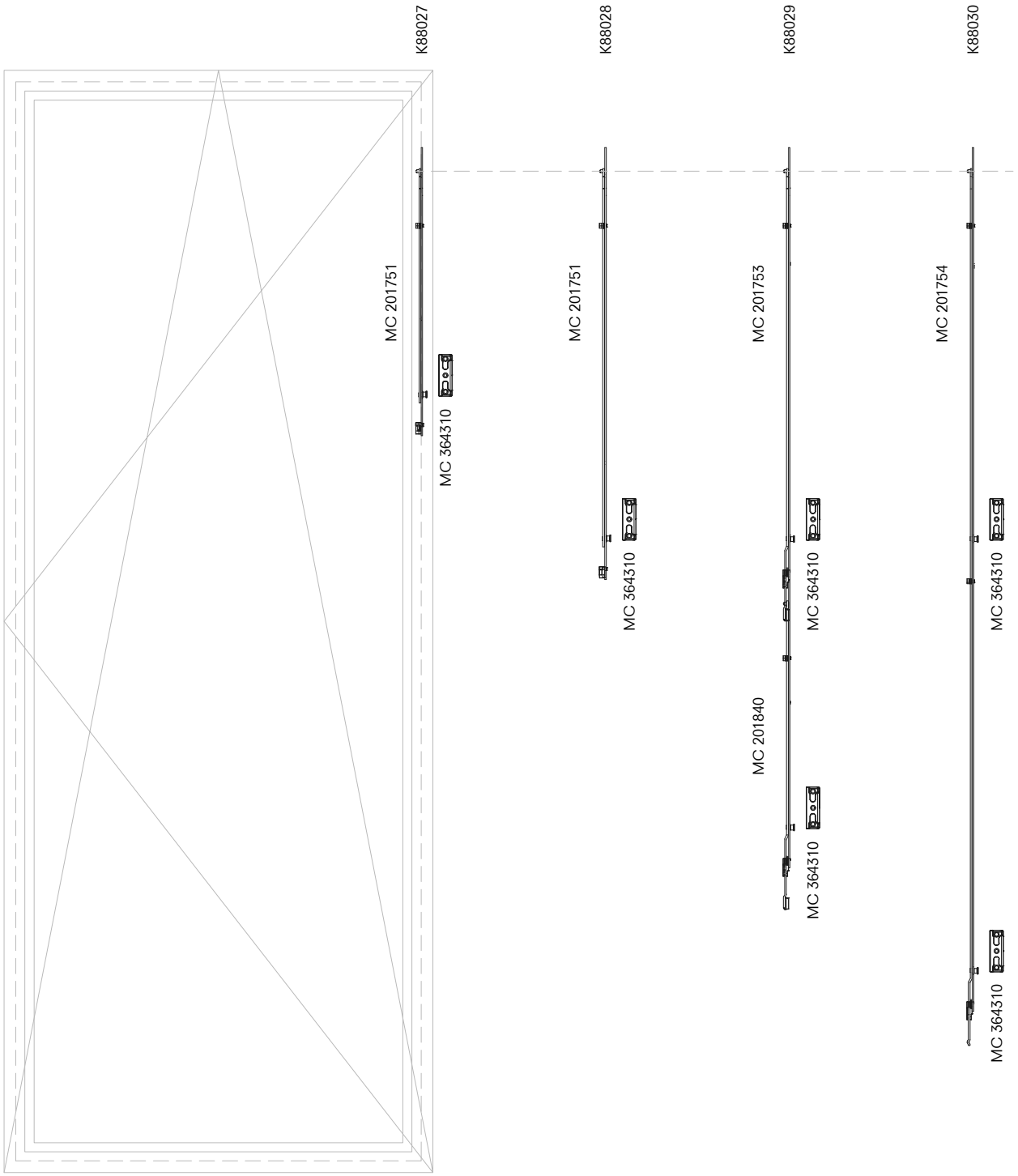
HBB = 1281 - 1500 mm

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

Additional bottom side locking point

Dreh-Kippfenster

Zusätzliche Verriegelungen Unterseite

Fênetre oscillo-battant

Point de verrouillage supplémentaire côté inférieur

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

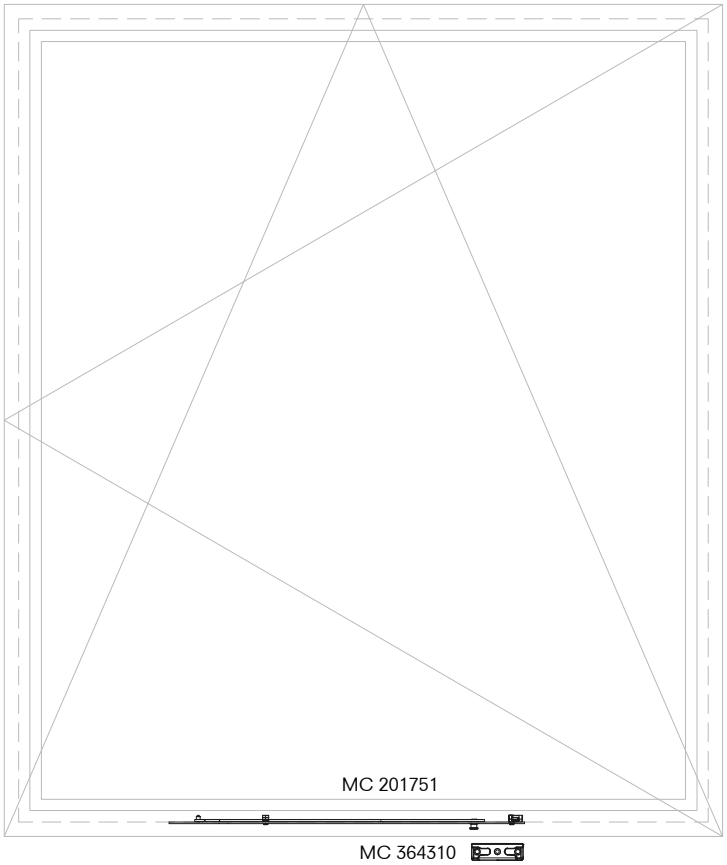
MC 201752 n°01 piece
MC 364310 n°01 piece

K88032

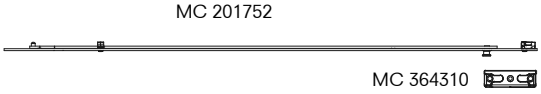
LBB = 1281 - 1400 mm

K88032

LBB = 1281 - 1400 mm



K88031



K88032

Tilt&Turn windows

Hinges kits 2nd leaf

Dreh-Kippfenster

Garnitur Scheren- und Bandlager Standflügel

Fênetre oscillo-battant

Kits paumelles 2e ouvrant

K88034

Right hinges

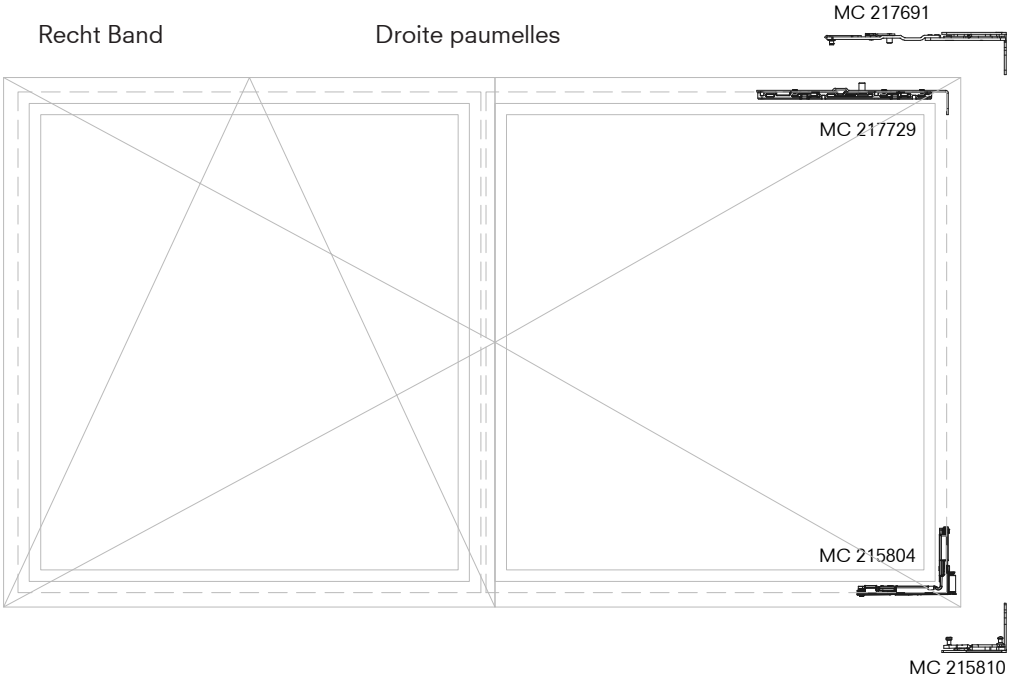
MC 217691 n°01 piece
MC 217729 n°01 piece
MC 215804 n°01 piece
MC 215810 n°01 piece

K88034

Recht Band

K88034

Droite paumelles



K88035

Left hinges

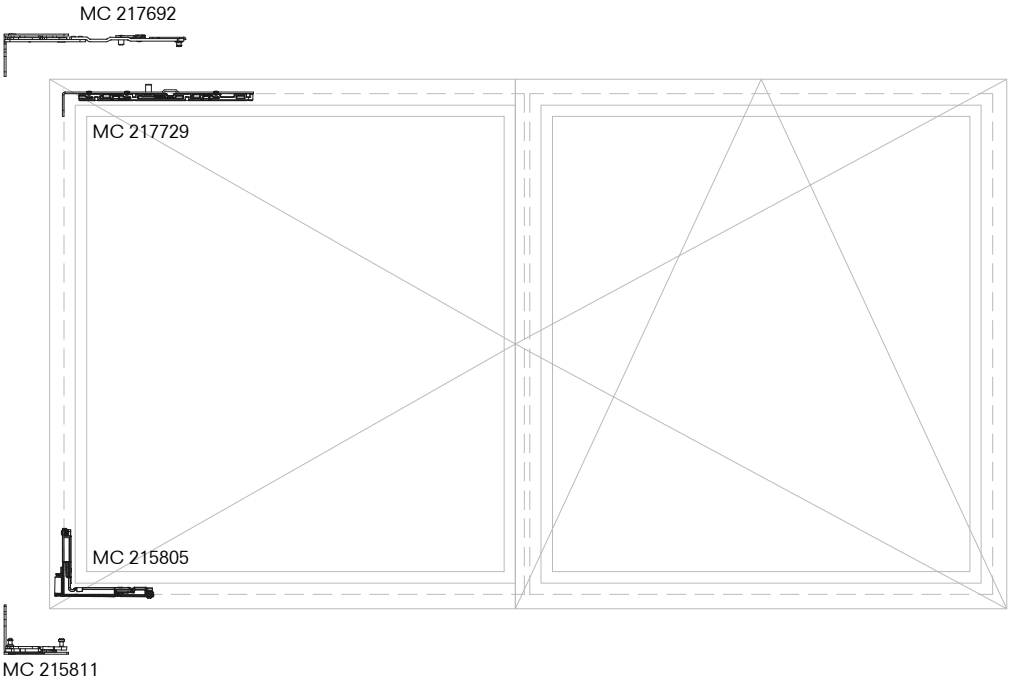
MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece

K88035

Link Band

K88035

Gauche paumelles



Tilt&Turn windows

Concealed compression locks kits

Dreh-Kippfenster

Anpressverschluss verdeckt

Fênetre oscillo-battant

Kits de serrures à compression cachée

K88036

HBB = 1280 - 2000 mm

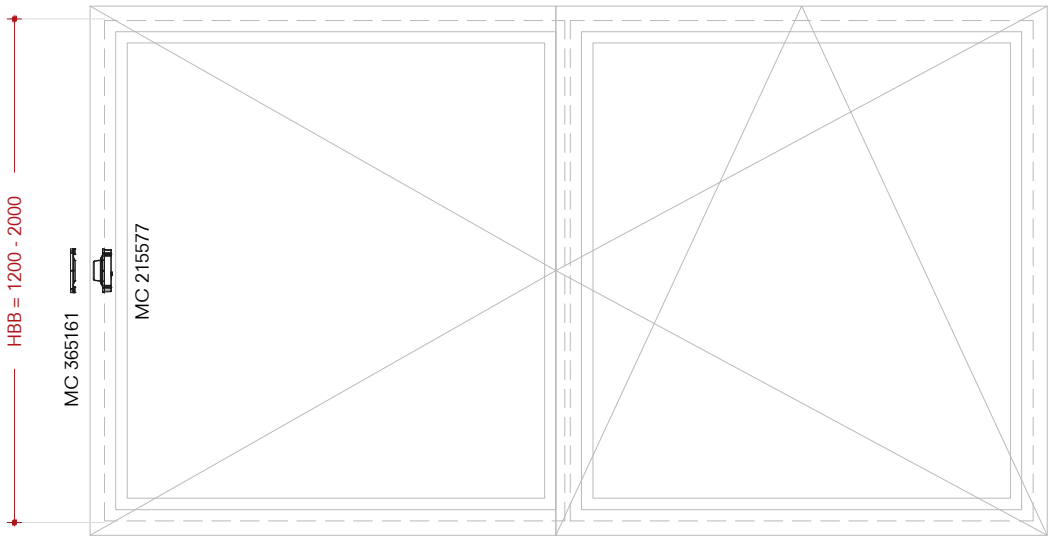
MC 215577 n°01 piece
MC 365161 n°01 piece

K88036

HBB = 1280 - 2000 mm

K88036

HBB = 1280 - 2000 mm



K88037

HBB = 2001 - 2800 mm

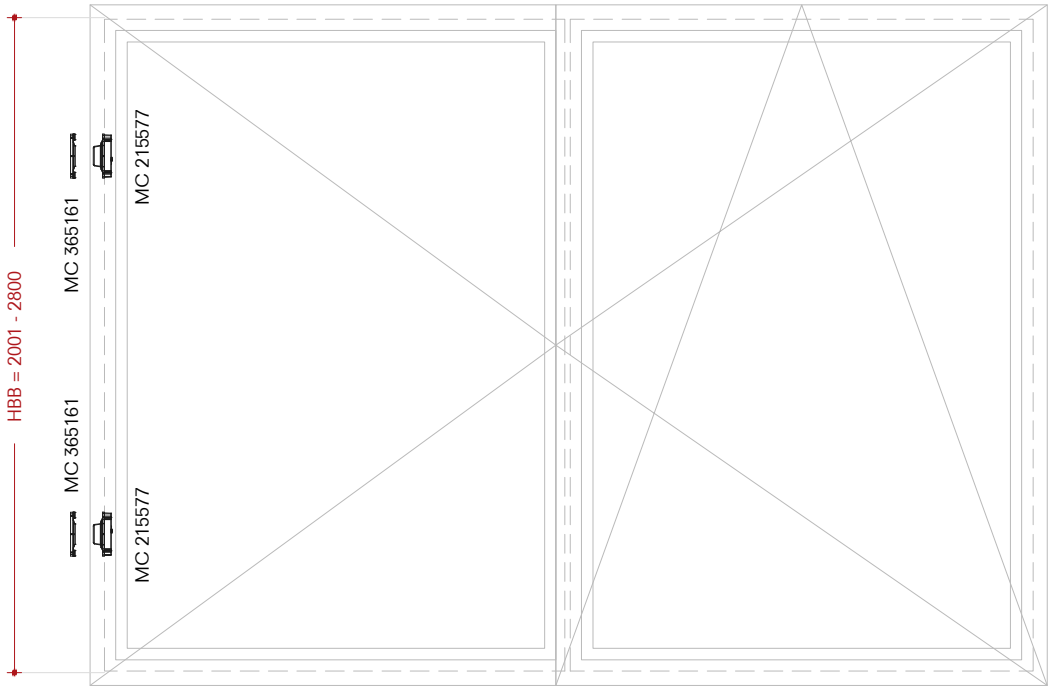
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm



Tilt&Turn windows

French casement lock
extendable

Dreh-Kippfenster

Stulpflügelverschluss
verlängerbar

Fênetre oscillo-battant

Serrure à battants française
extensible

K88038

LBB = 370 - 800 mm

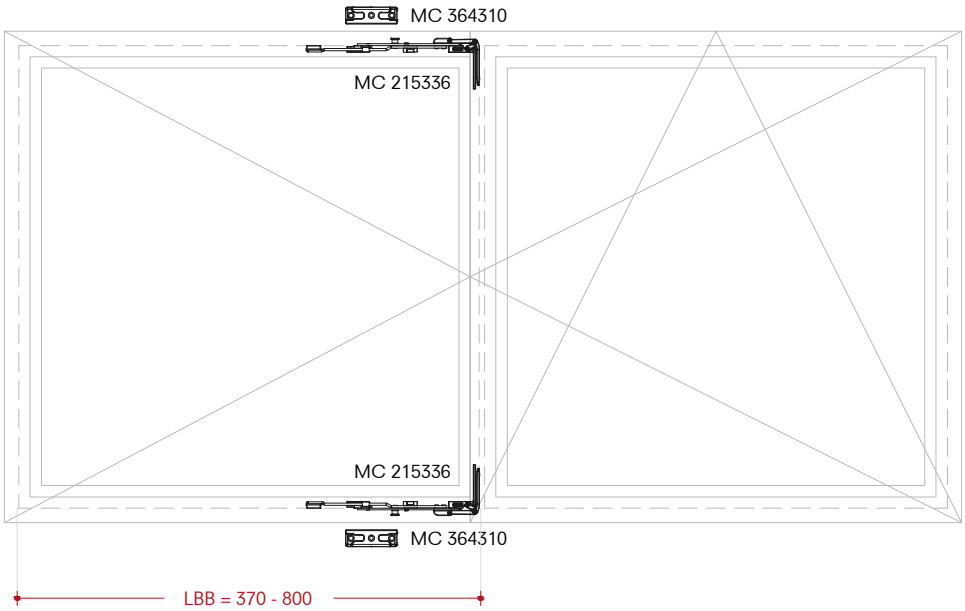
MC 215336 n°02 pieces
MC 364310 n°02 pieces

K88038

LBB = 370 - 800 mm

K88038

LBB = 370 - 800 mm



K88039

LBB = 801 - 1400 mm

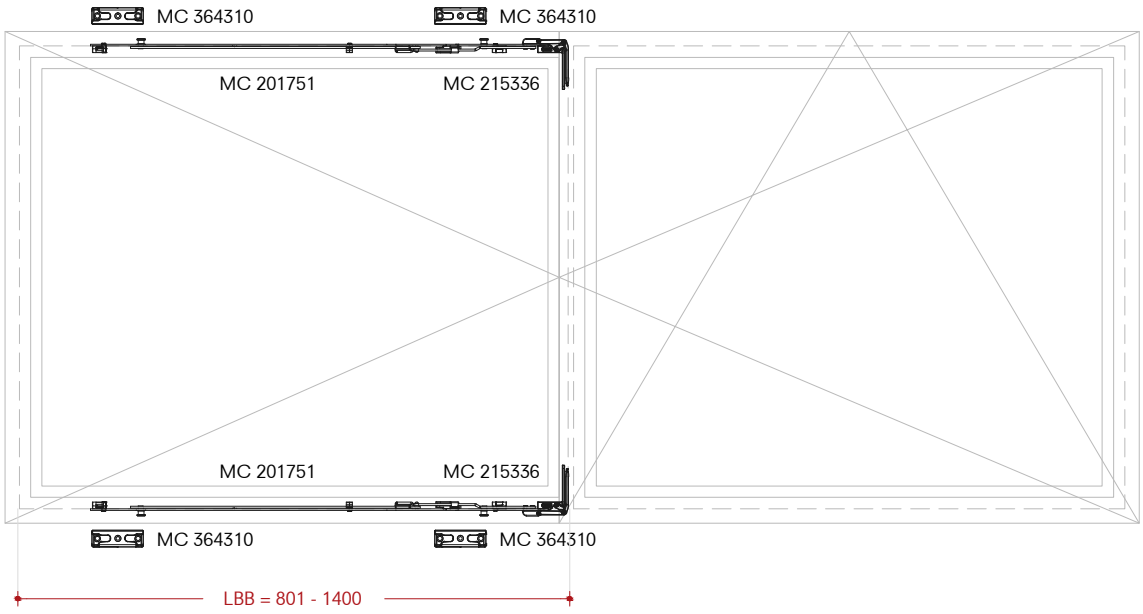
MC 215336 n°02 pieces
MC 201751 n°02 pieces
MC 364310 n°04 pieces

K88039

LBB = 801 - 1400 mm

K88039

LBB = 801 - 1400 mm



Tilt&Turn windows

Roller snap catch

K88201

Dreh-Kippfenster

Rollschnapper

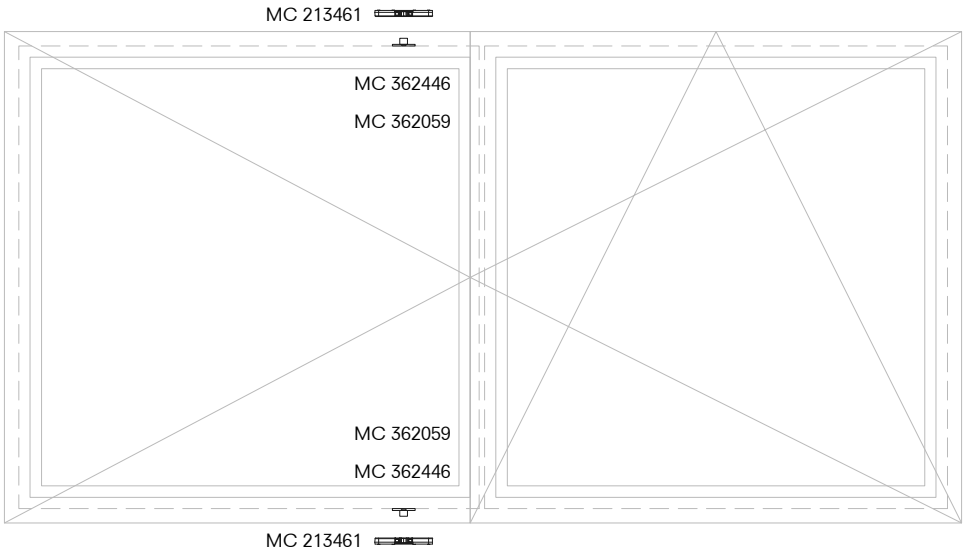
K88201

Fênetre oscillo-battant

Loquet à rouleau

K88201

MC 213461 n°02 pieces
MC 362059 n°02 pieces
MC 362446 n°02 pieces



Tilt&Turn windows

Extendable french casement lock + upper roller snap catch

Dreh-Kippfenster

Stulpflügelverschluss verlängerbar + obere Rolle Schnappverschluss

Fênetre oscillo-battant

Serrure à battant français extensible + mousqueton à galet supérieur

K88041

LBB = 370 - 800 mm

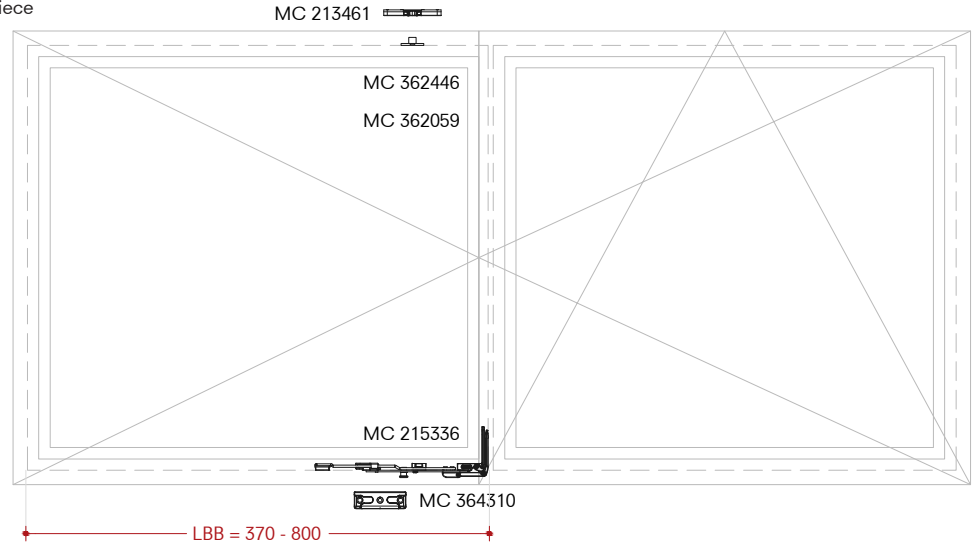
K88041

LBB = 370 - 800 mm

K88041

LBB = 370 - 800 mm

MC 213461 n°01 piece
MC 362059 n°01 piece
MC 362446 n°01 piece
MC 215336 n°01 piece
MC 364310 n°01 piece



K88042

LBB = 801 - 1280 mm

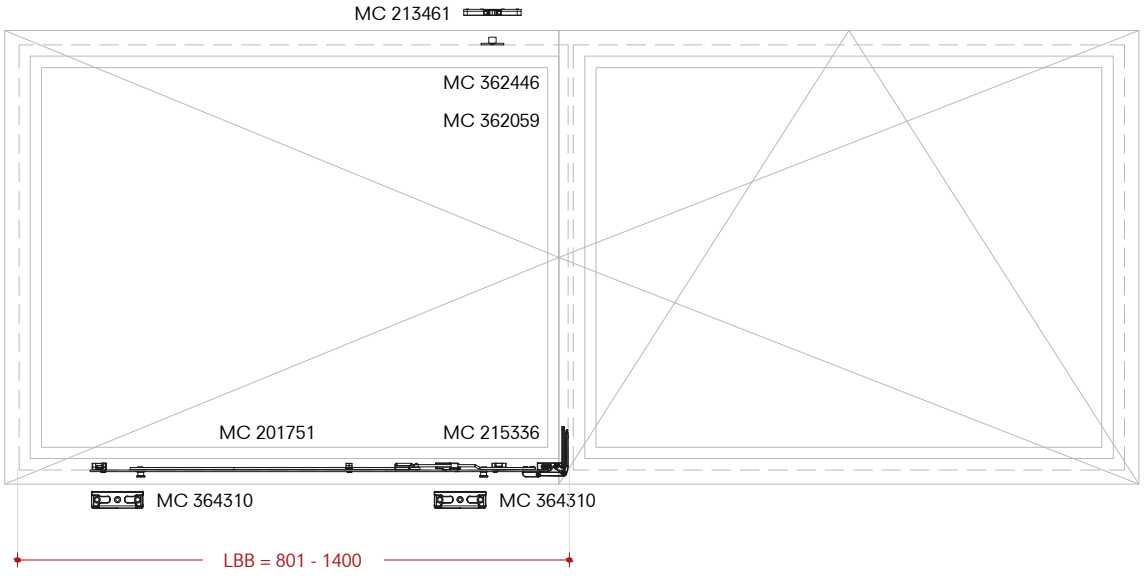
K88042

LBB = 801 - 1280 mm

K88042

LBB = 801 - 1280 mm

MC 213461 n°01 piece
MC 362059 n°01 piece
MC 362446 n°01 piece
MC 215336 n°01 piece
MC 201751 n°01 piece
MC 364310 n°02 pieces



Tilt&Turn windows

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Dreh-Kippfenster

Türverschluss

K88061

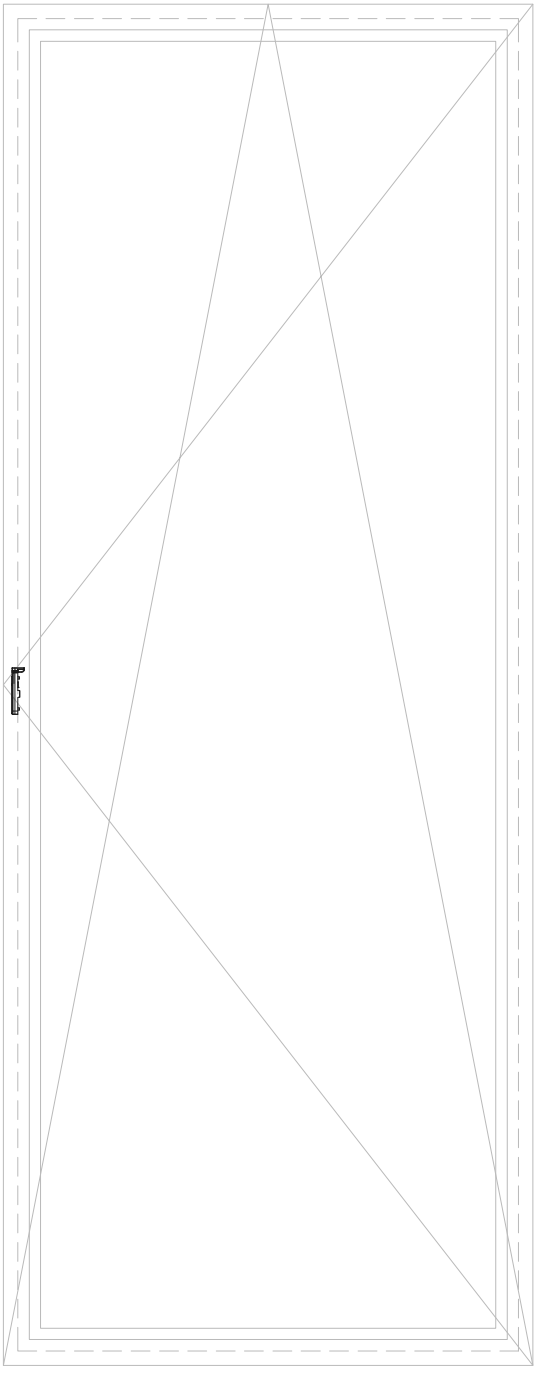
HBB = 661 - 2800 mm

Fênetre oscillo-battant

Loquet de porte

K88061

HBB = 661 - 2800 mm



Tilt&Turn windows

Opening restrictor

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

Dreh-Kippfenster

Öffnungsbegrenzer

K88033

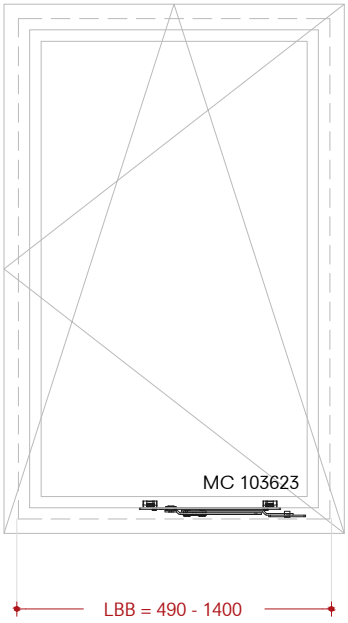
LBB = 490 - 1400 mm

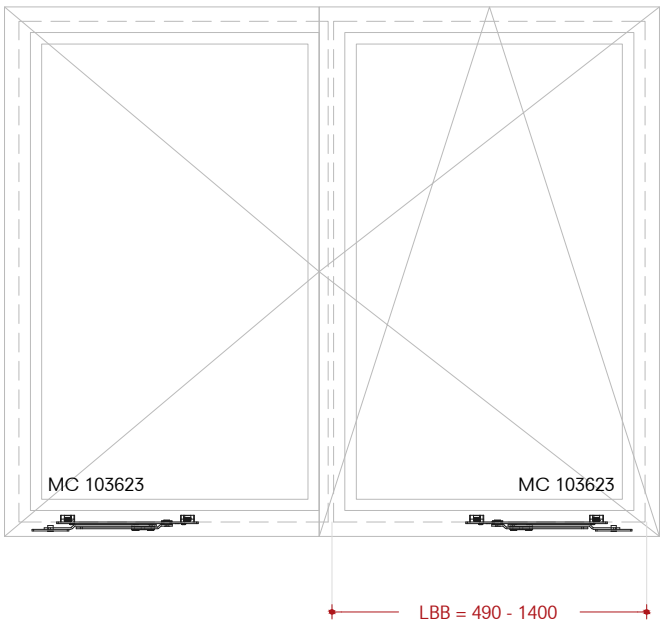
Fênetre oscillo-battant

Compas de limitation d'ouverture

K88033

LBB = 490 - 1400 mm





Tilt&Turn windows

Load transfer 180 kg

Dreh-Kippfenster

Lastabtragung 180 kg

Fênetre oscillo-battant

Tige de support 180 kg

E99510-02

Right

MC 105336 n°01 piece

E99510-02

Recht

E99510-02

Droite

E99511-02

Left

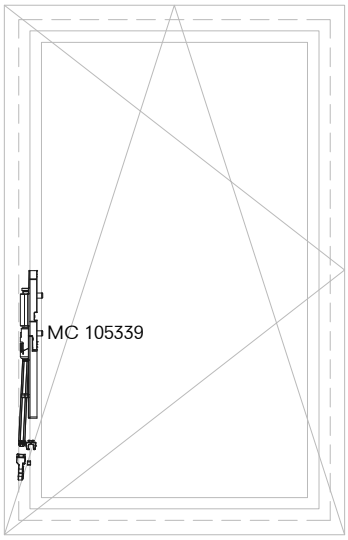
MC 105339 n°01 piece

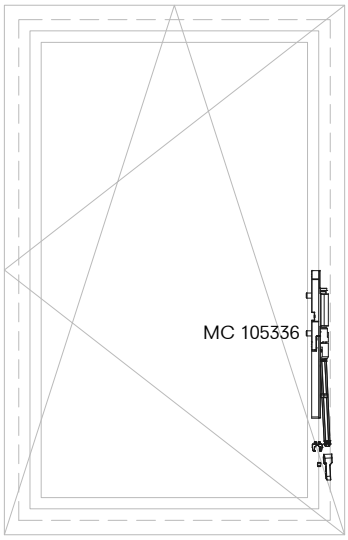
E99511-02

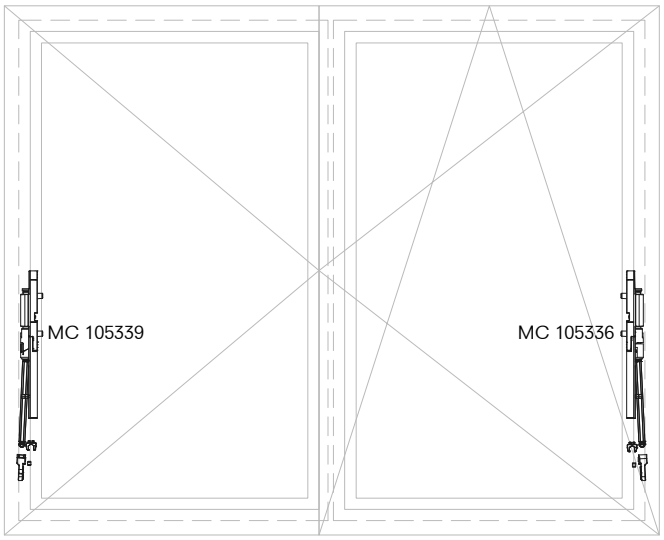
Link

E99511-02

Gauche







Tilt&Turn windows

Alarm contact

K99062

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

Dreh-Kippfenster

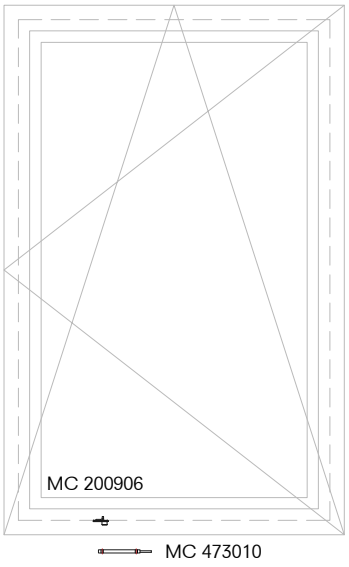
Alarmkontakt

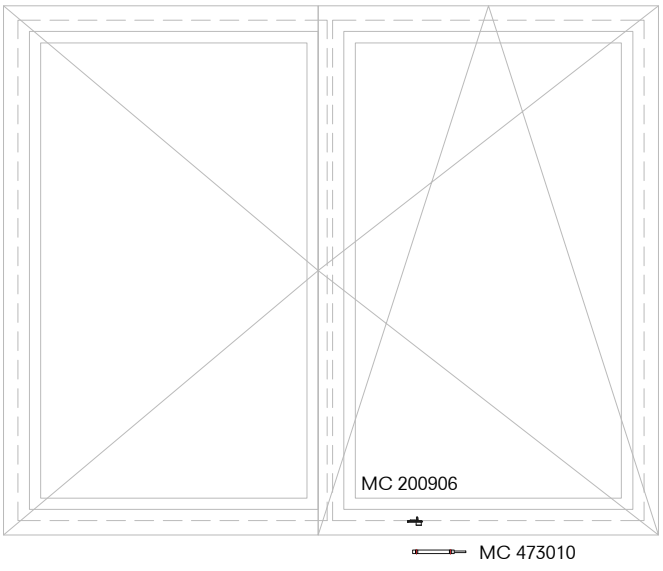
K99062

Fênetre oscillo-battant

Contact d'alarme

K99062





Tilt&Turn windows

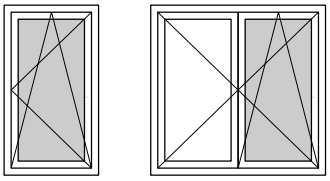
Determination of LBB
(Groove Hardware Lenght)

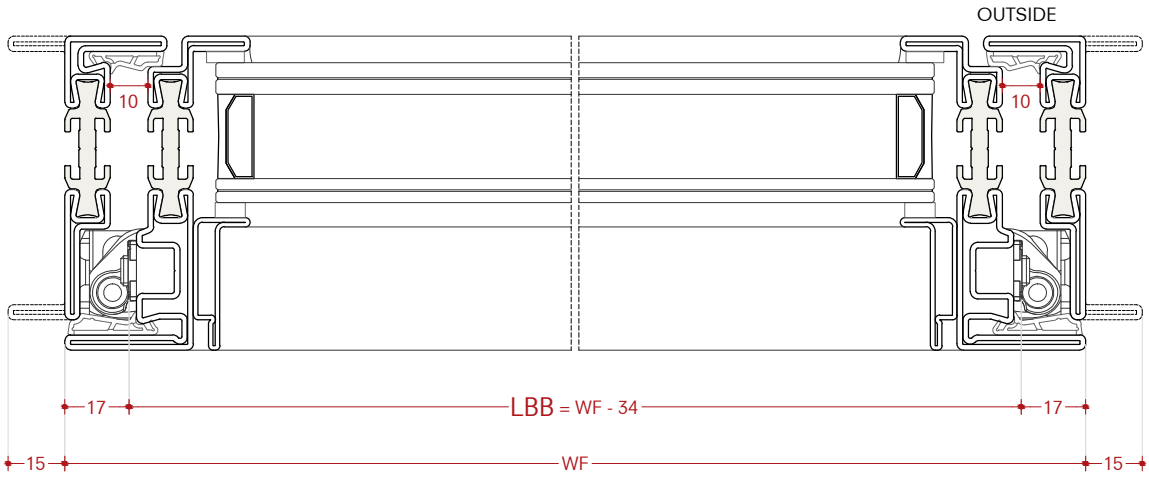
Dreh-Kippfenster

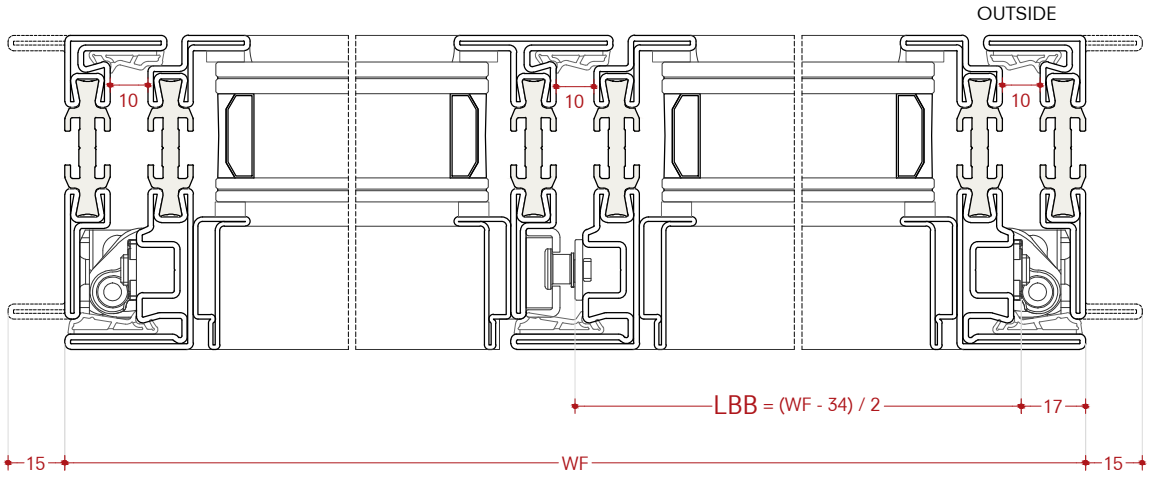
Bestimmung von LBB
(Beschlagnutbreite)

Fênetre oscillo-battant

Détermination du LBB
(largeur de rainure de quincaillerie)







Tilt&Turn windows

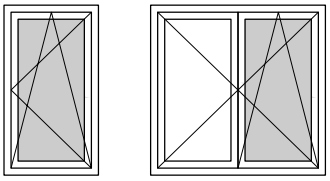
Determination of HBB
(Groove Hardware Height)

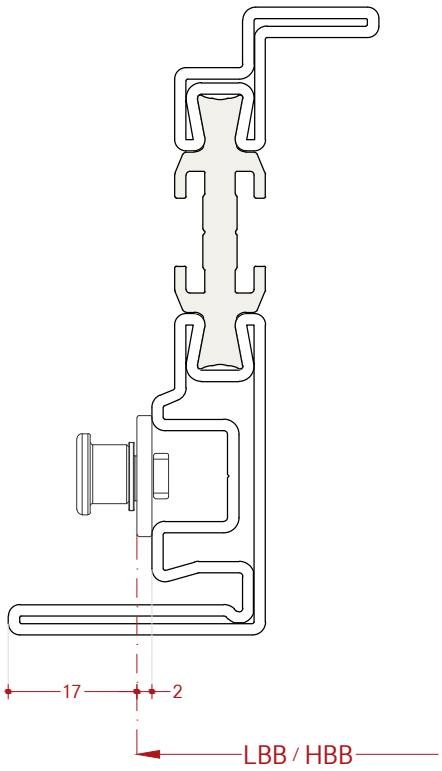
Dreh-Kippfenster

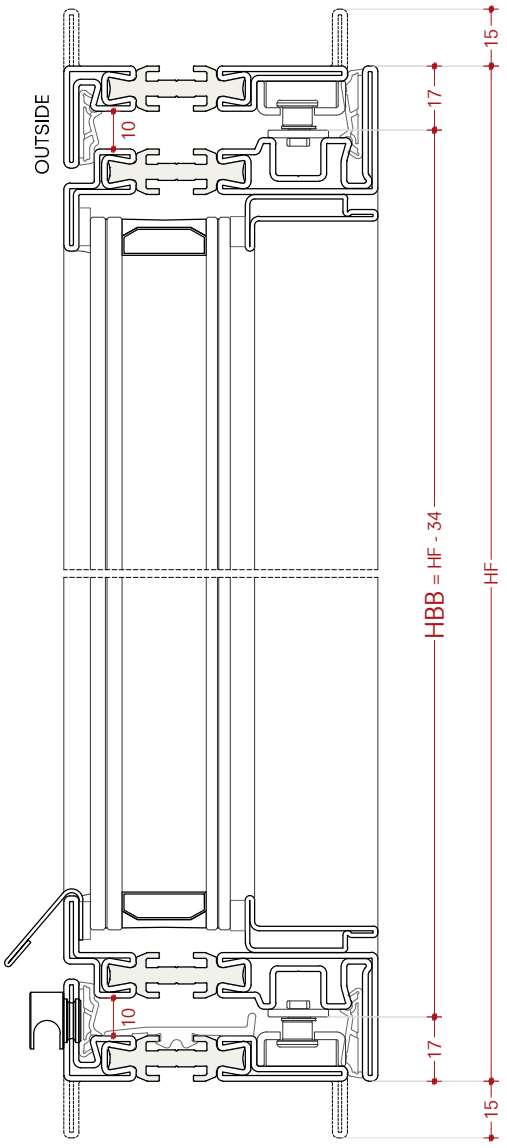
Bestimmung von HBB
(Höhe der Beschlagnut)

Fênetre oscillo-battant

Détermination du HBB
(hauteur de rainure de quincaillerie)







Tilt&Turn windows

Dreh-Kippfenster

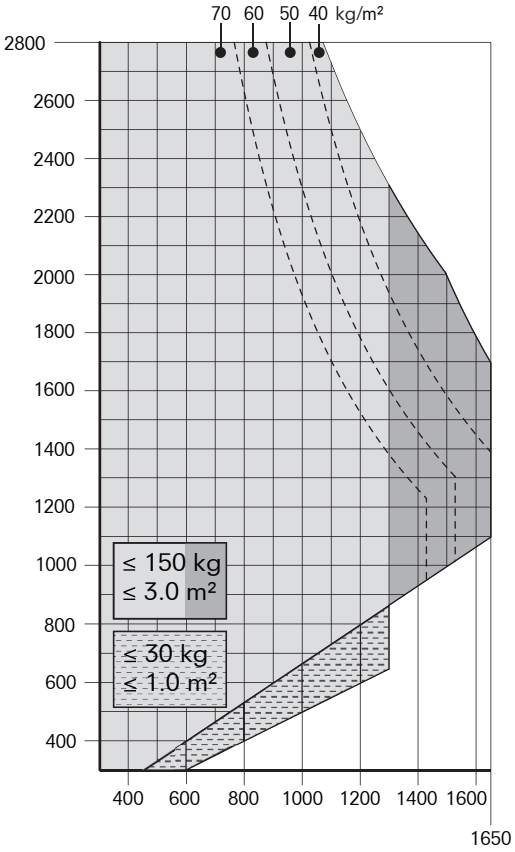
Fênetre oscillo-battant

Load capacity tables

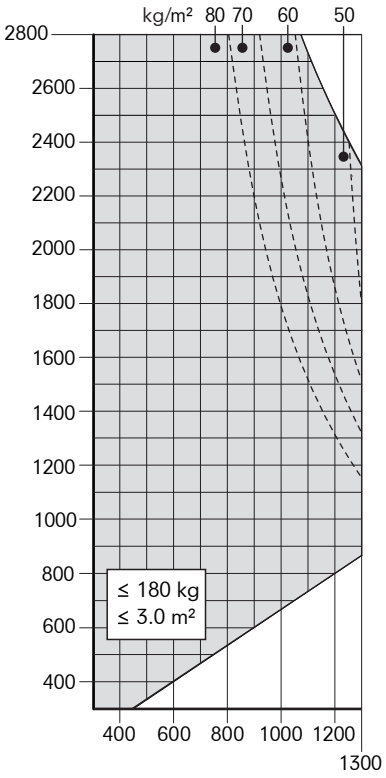
Gewichtstabellen

Capacité maximale

T&T window concealed accessories capacity
Dreh-Kipp-Fensterzubehör verdeckt
Fênetre oscillo-battant accessoires cachée



T&T window concealed accessories capacity
with support rod E99510-02 / E99511-02
Dreh-Kipp-Fensterzubehör verdeckt
mit Lastabtragung E99510-02 / E99511-02
Fênetre oscillo-battant accessoires cachée
avec tige de support E99510-02 / E99511-02



Standard handle height

Standard-Griffhöhe

Hauteur de poignée standard

	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

Dreh-Kippfenster

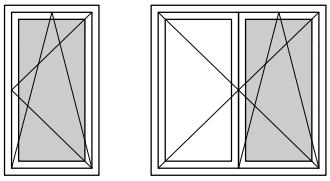
Fênetre oscillo-battant

Step #1 - Basic kit choice

Schritt #1 - Auswahl Grdundgarnitur

Étape #1 - Choix de kit de base

	LBB min	LBB max	HBB min	HBB max
K88001	465	1400	455	2800
K88002	370	464	455	2800
K88002	465	815	370	454
K88117 (*)	370	464	455	2800



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

(*) Only for double leaf windows with K88041 - K88042 - K88201

LBB = Beschlagnutbreite
HBB = Höhe der Beschlagnut

(*) Nur für zweiflügelige Fenster mit K88041 - K88042 - K88201

LBB = largeur de rainure de quincaillerie
HBB = hauteur de rainure de quincaillerie

(*) Seulement pour fenêtres à deux vantaux avec K88041 - K88042 - K88201

Step #2 - Gear kit choice

Schritt #2 - Garnitur Getriebe

Étape #2 - Choix de kit d'équipement

	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 = Griffsitz Mittig
HDG = Gangführungshöhe
CRP = Schnittmaß
HCRN = Eckhöhe
HBB = Höhe der Beschlagnut

(*) = Bestätigung der technischen Abteilung erforderlich für Abmessungen größer 2800 mm

HH = hauteur de la poignée
HDG = hauteur du guide de vitesse
CRP = mesure de coupe
HCRN = hauteur d'angle
HBB = hauteur de rainure de quincaillerie

(*) = Confirmation du service technique nécessaire pour les dimensions supérieures à 2800 mm

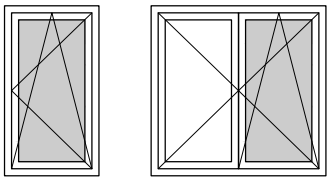
Step #3 - Extension kits choice

Schritt #3 - Garnitur Getriebeverlängerung

Étape #3 - Choix de kit extension d'équipement

HBB * - HCRN - HDG = Extension kit lenght / Getriebeverlängerung Länge / largeur kit extension

	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 = Min Länge (mm)
MaxL = Max Länge (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 = largeur minimal (mm)
MaxL = largeur maximum (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

Schritt #4 - Garnitur Scheren und Bänder

Étape #4 - Choix de kit pinces et paumelles

Left / Link / Gauche

	LBB min	LBB max
K88022	370	600
K88023	601	800
K88024	801	1050
K88025	1051	1285
K88026	1286	1400

Right / Recht / Droite

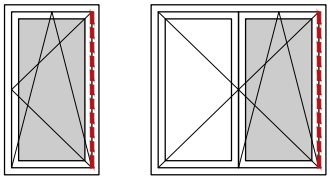
	LBB min	LBB max
K88017	370	600
K88018	601	800
K88019	801	1050
K88020	1051	1285
K88021	1286	1400

Step #5 - Additional hinge side locking point choice

Schritt #5 - Garnitur Zusatzverriegelung Bandseite

Étape #5 - Choix point de verrouillage supplémentaire côté paumelle

	HBB min	HBB max
K88027	801	1280
K88028	1281	1500
K88029	1501	1700
K88030	1701	2800

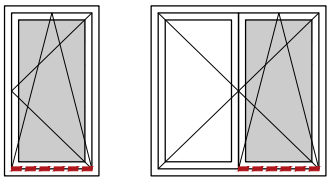


Step #6 - Additional bottom side locking point choice

Schritt #6 - Garnitur Zusatzverriegelung Bandunterseite

Étape #6 - Choix point de verrouillage supplémentaire côté inférieur

	LBB min	LBB max
K88031	800	1280
K88032	1281	1400



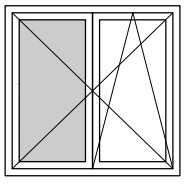
Step #7 - 2nd leaf hinges kit choice

Schritt #7 - Garnitur Scheren und Bänder Standflügel

Étape #7 - Choix kit paumelles 2e ouvrant

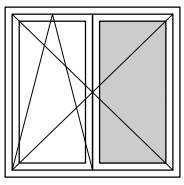
Left / Link / Gauche

	LBB min	LBB max	HBB min	HBB max
K88035	370	1400	365	2800



Right / Recht / Droite

	LBB min	LBB max	HBB min	HBB max
K88034	370	1400	365	2800

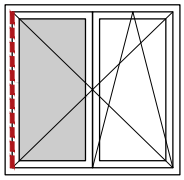


Step #8 - Concealed compression lock kit choice for 2nd leaf

Schritt #8 - Standflügel Anpressverschluss verdeckt

Étape #8 - Choix kit de serrure à compression caché pour 2e ouvrant

	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800



Step #9 - 2nd leaf lock choice

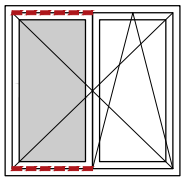
Choose option A or B or C

Schritt #9 - Verriegelung Standflügel

Wählen Sie Option A oder B oder C

Étape #9 - Choix serrure 2e ouvrant

Choisissez l'option A ou B ou C



A - Extendable french casement lock choice

A - Stulpflügelverschluss verlängerbar

A - Choix serrure à battants française extensible

	LBB min	LBB max
K88038	370	800
K88039	801	1400

B - Roller snap catch

B - Rollschnapper

B - Loquet à rouleau

	LBB min	LBB max
K88201	370	1400

C - Extendable french casement lock + upper roller snap catch

C - Stulpflügelverschluss verlängerbar + obere Rolle Schnappverschluss

C - Serrure à battant français extensible + mousqueton à galet supérieur

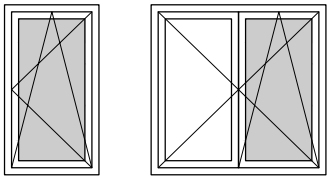
	LBB min	LBB max
K88041	370	800
K88042	801	1400

Step #10 - Door catch choice

Schritt #10 - Türverschluss

Étape #10 - Choix loquet de porte

	HBB min	HBB max
K88061	661	2800

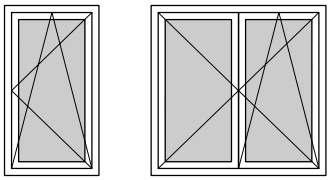


Step #11 - Opening restrictor choice

Schritt #11 - Öffnungsbegrenzer

Étape #11 - Choix compas de limitation d'ouverture

	LBB min	LBB max
K88033	490	1400

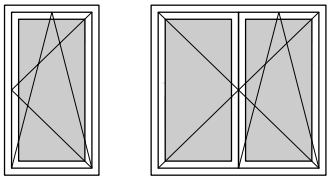


Step #12 - Load transfer 180 kg choice

Schritt #12 - Lastabtragung 180 kg

Étape #12 - Choix tige de support 180 kg

		HBB min	HBB max
E99510-02	**Right**	2000	2800
E99511-02	**Left**	2000	2800

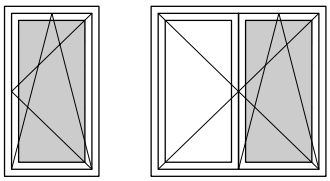


Step #13 - Alarm contact choice

Schritt #13 - Alarmkontakt

Étape #13 - Choix contact d'alarme

K99062



Step #14 - Double croppable gear kits choice

(Instead of Step #2 and #3)

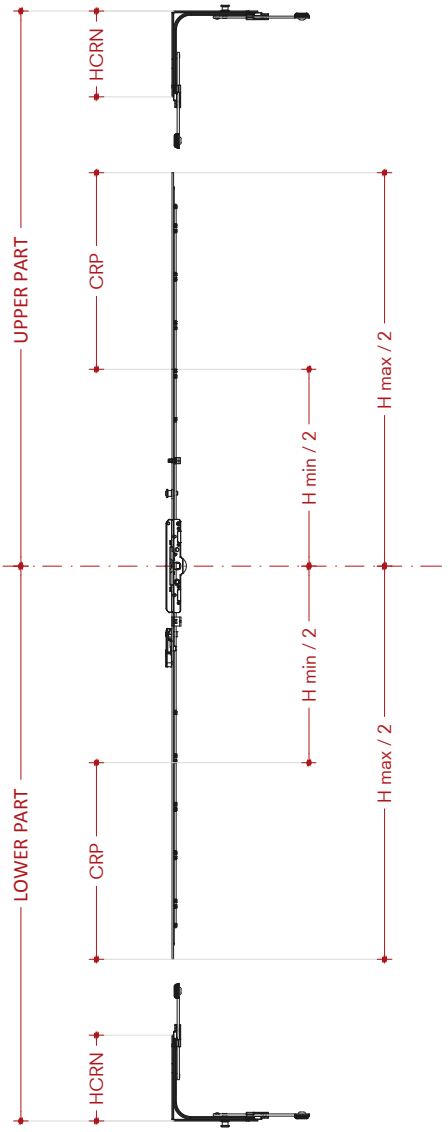
Schritt #14 - Beidseitig kürzbare Garnitur

(Anstelle von Schritt #2 und #3)

Étape #14 - Choix Kits d'équipement à double recadrage

(Au lieu des étapes #2 et #3)

	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.

Wählen Sie den kleinsten Wert und finden Sie das passende Garnitur Getriebe zwischen den Bereichsspalten Hmin/2 und Hmax/2

Choisissez la plus petite valeur et trouvez le bon kit d'équipement entre les colonnes de plage Hmin/2 et 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.

* Bei negativem Wert werden keine Verlängerungen benötigt.

* avec une valeur négative, aucune extension n'est nécessaire.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

HH = Griffsitz Mittig
HDG = Gangführungshöhe
CRP = Schnittmaß
HCRN = Eckhöhe
HBB = Höhe der Beschlagnut

HH = hauteur de la poignée
HDG = hauteur du guide de vitesse
CRP = mesure de coupe
HCRN = hauteur d'angle
HBB = hauteur de rainure de quincaillerie

Side hung windows

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

Drehfenster

Grundgarnitur

K88043

Standardfenster

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

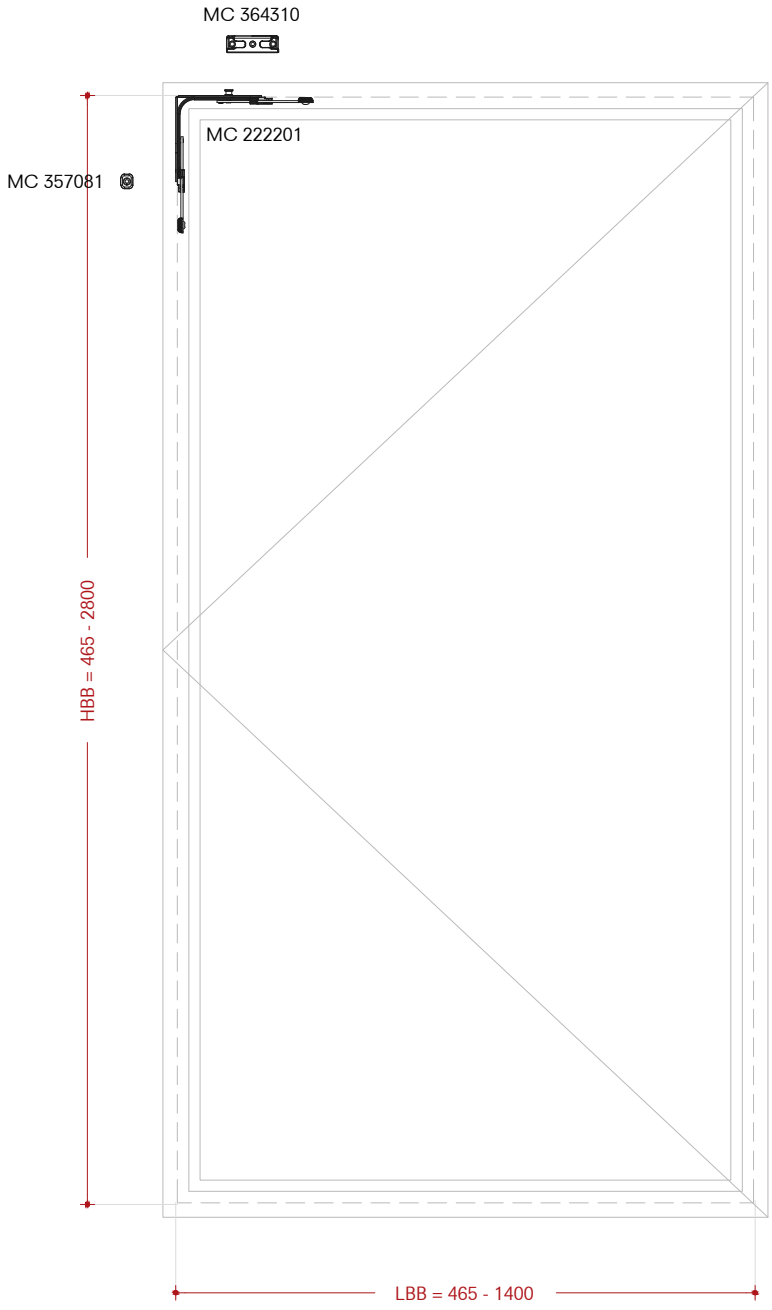
Fênetre battante

Kits de base

K88043

Fenêtres standards

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



Side hung windows

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

Drehfenster

Grundgarnitur

K88044

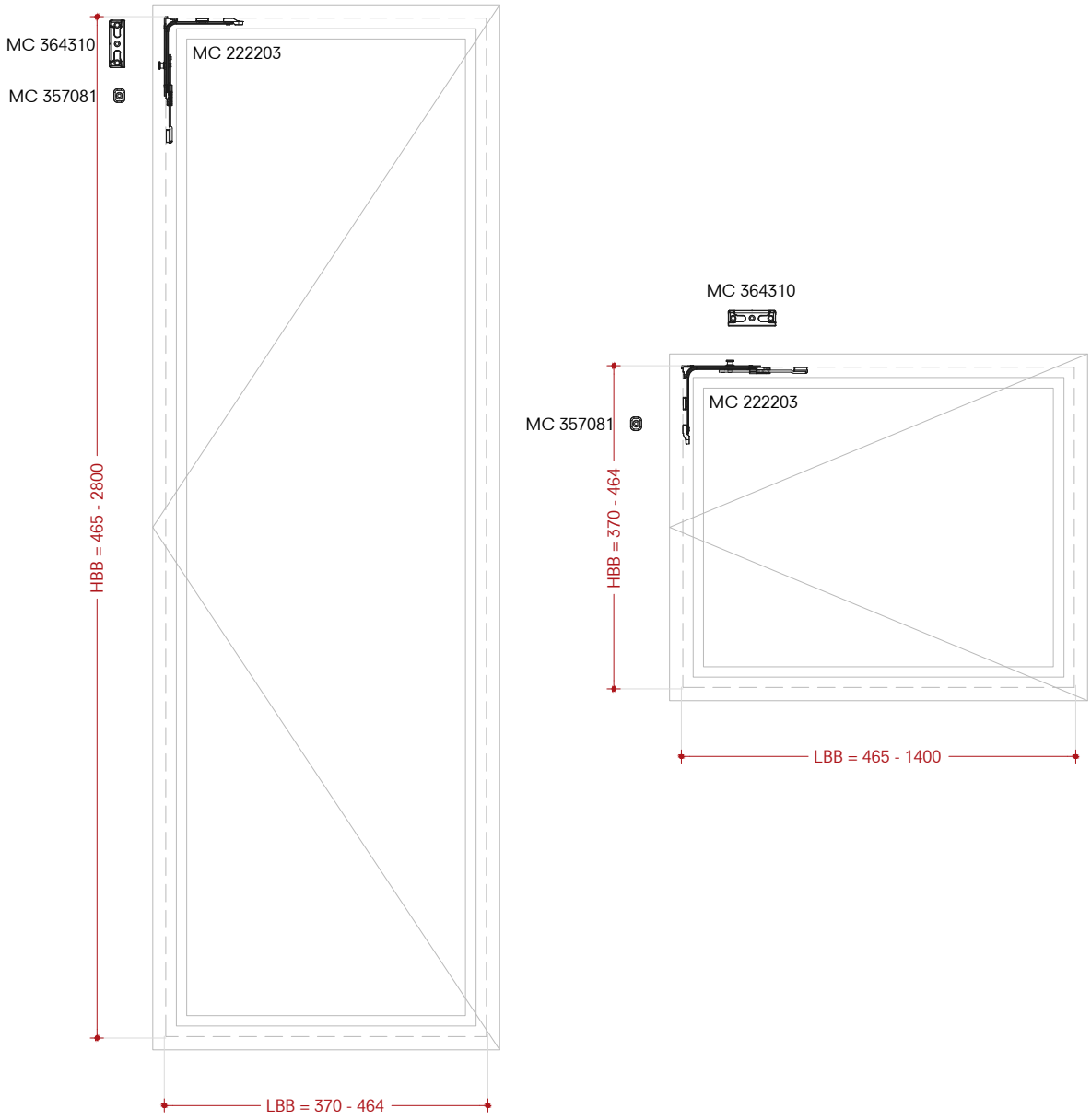
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

Fênetre battante

Kits de base

K88044

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



Side hung windows

Basic kits

K88118
Only for double leaf windows

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

MC 225021 n°01 piece
MC 210279 n°01 piece
MC 357081 n°01 piece

Drehfenster

Grundgarnitur

K88118
Nur für zweiflügelige Fenster

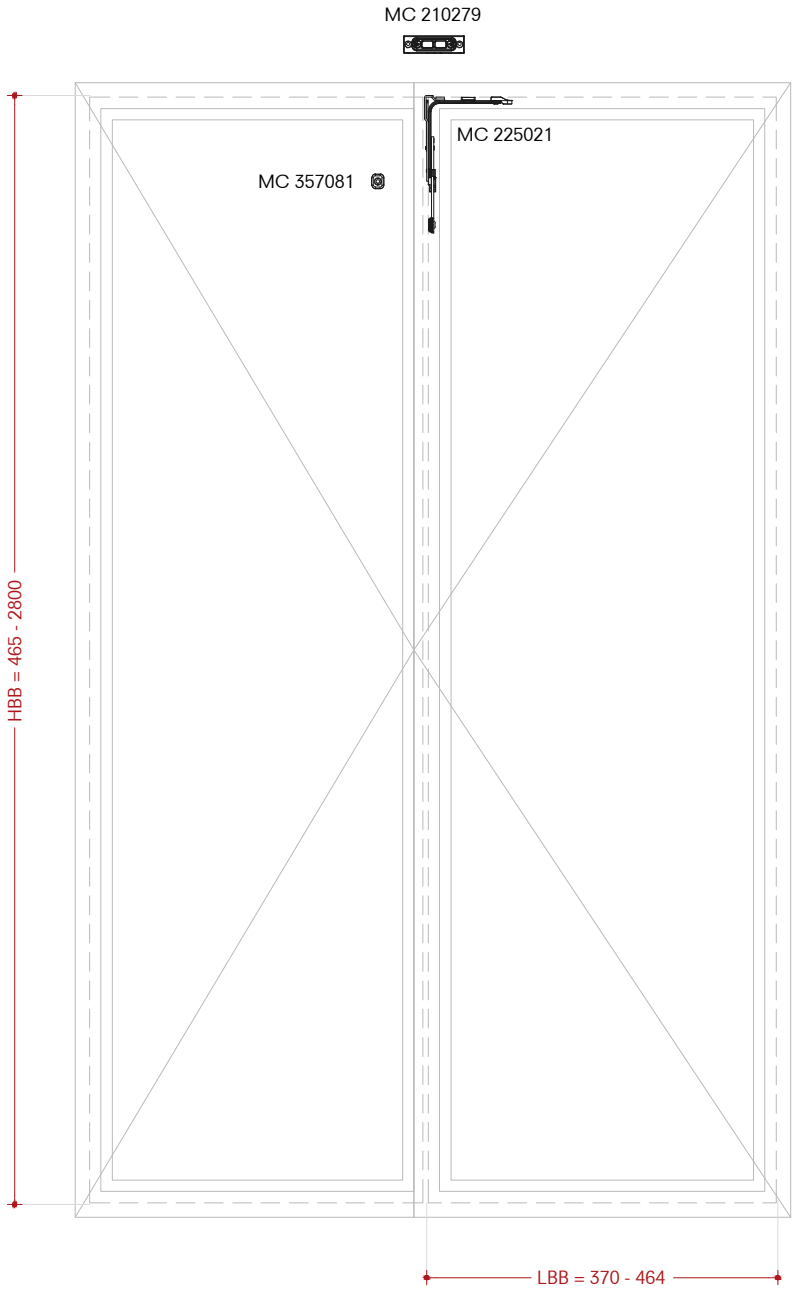
LBB = 370 - 464 mm
HBB = 455 - 2800 mm

Fênetre battante

Kits de base

K88118
Seulement pour fenêtres à deux vantaux

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



Side hung windows

Gear kits

Drehfenster

Garnitur Getriebe

Fênetre battante

Kits d'équipement

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

K88003
HH = 190 mm
HBB = 340 - 1608 mm

K88004
HH = 300 mm
HBB = 661 - 1790 mm

K88005
HH = 400 mm
HBB = 841 - 2040 mm

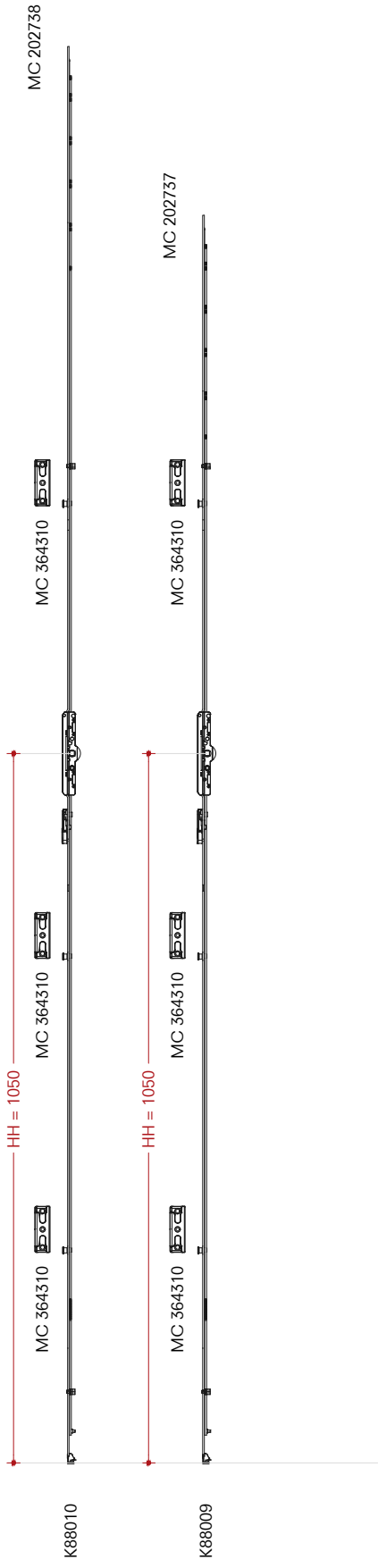
K88006
HH = 500 mm
HBB = 1091 - 2290 mm

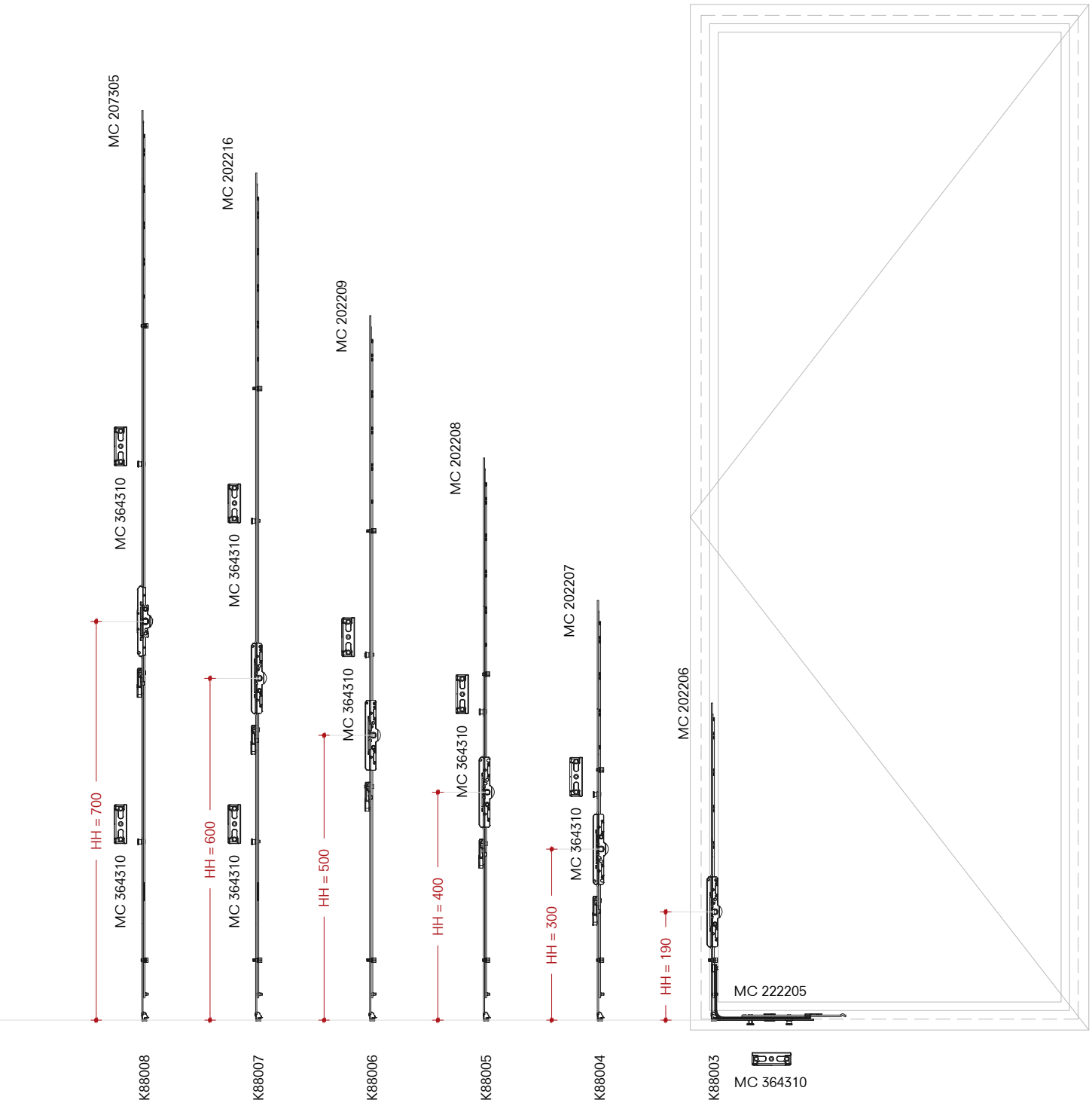
K88007
HH = 600 mm
HBB = 1341 - 2540 mm

K88008
HH = 700 mm
HBB = 1591 - 2650 mm

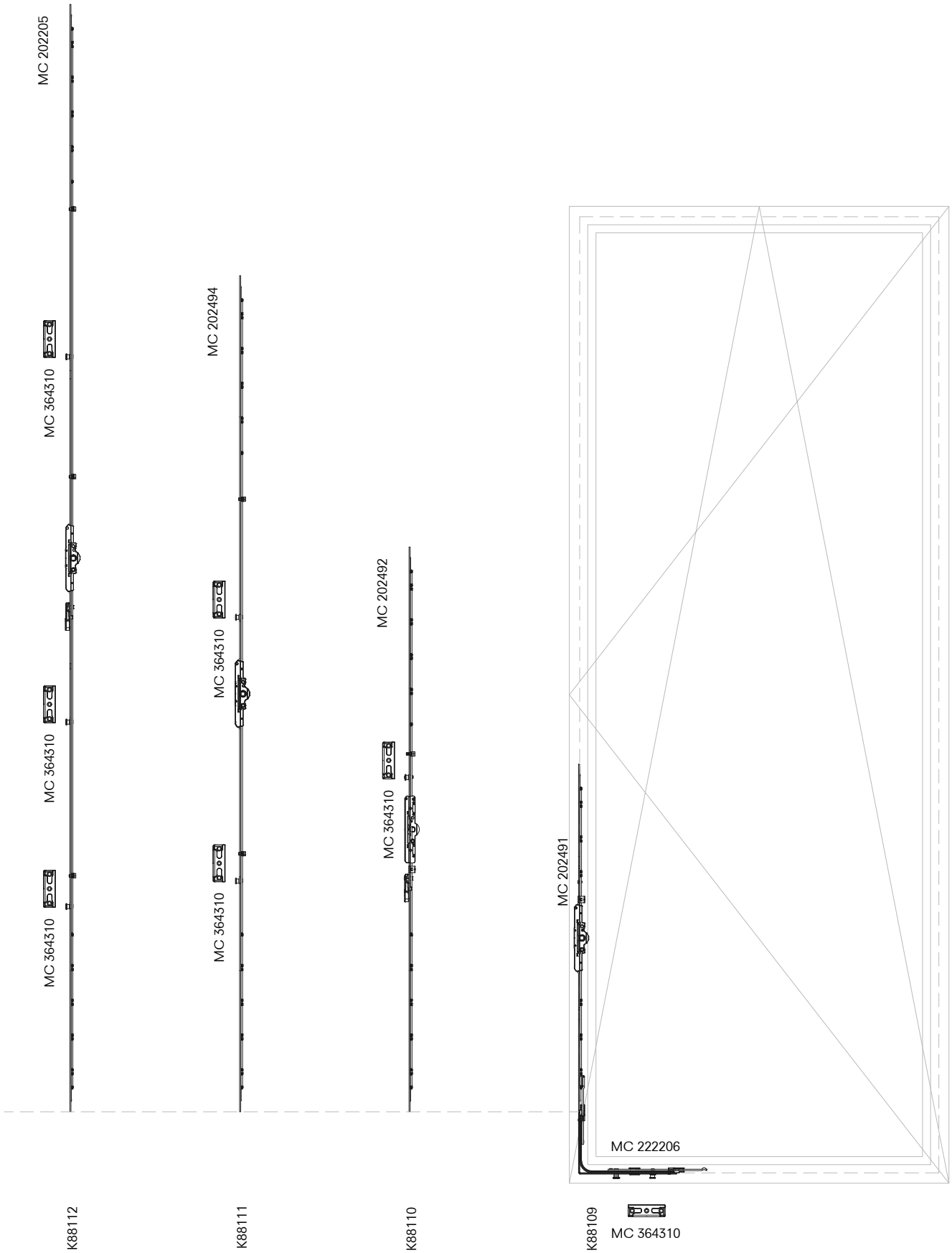
K88009
HH = 1050 mm
HBB = 1701 - 2900 mm

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	**Drehfenster**	**Fênetre battante**
Double croppable gear kits	Beidseitig kürzbare Garnitur	Kits d'équipement à double recadrage
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		


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

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

Drehfenster

Garnitur Getriebeverlängerung

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

Fênetre battante

Kits extension d'équipement

K88011

0 - 140 mm

K88012

141 - 235 mm

K88059

236 - 375 mm

K88013

376 - 470 mm

K88014

471 - 610 mm

K88015

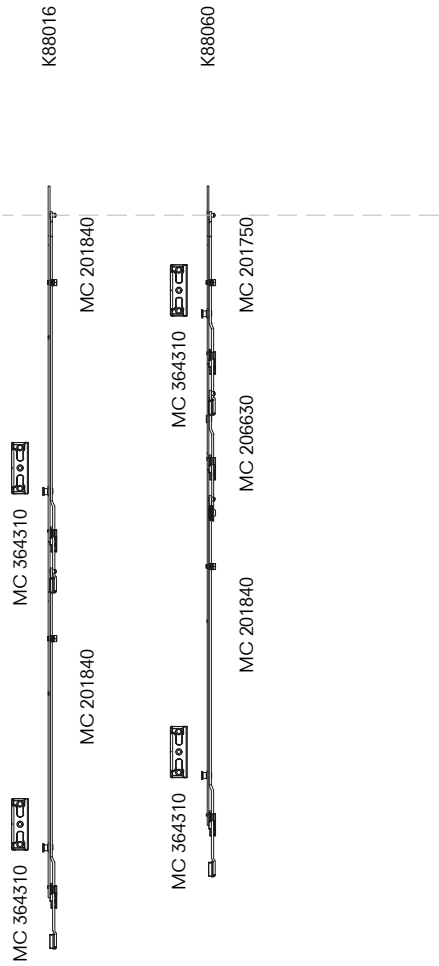
611 - 705 mm

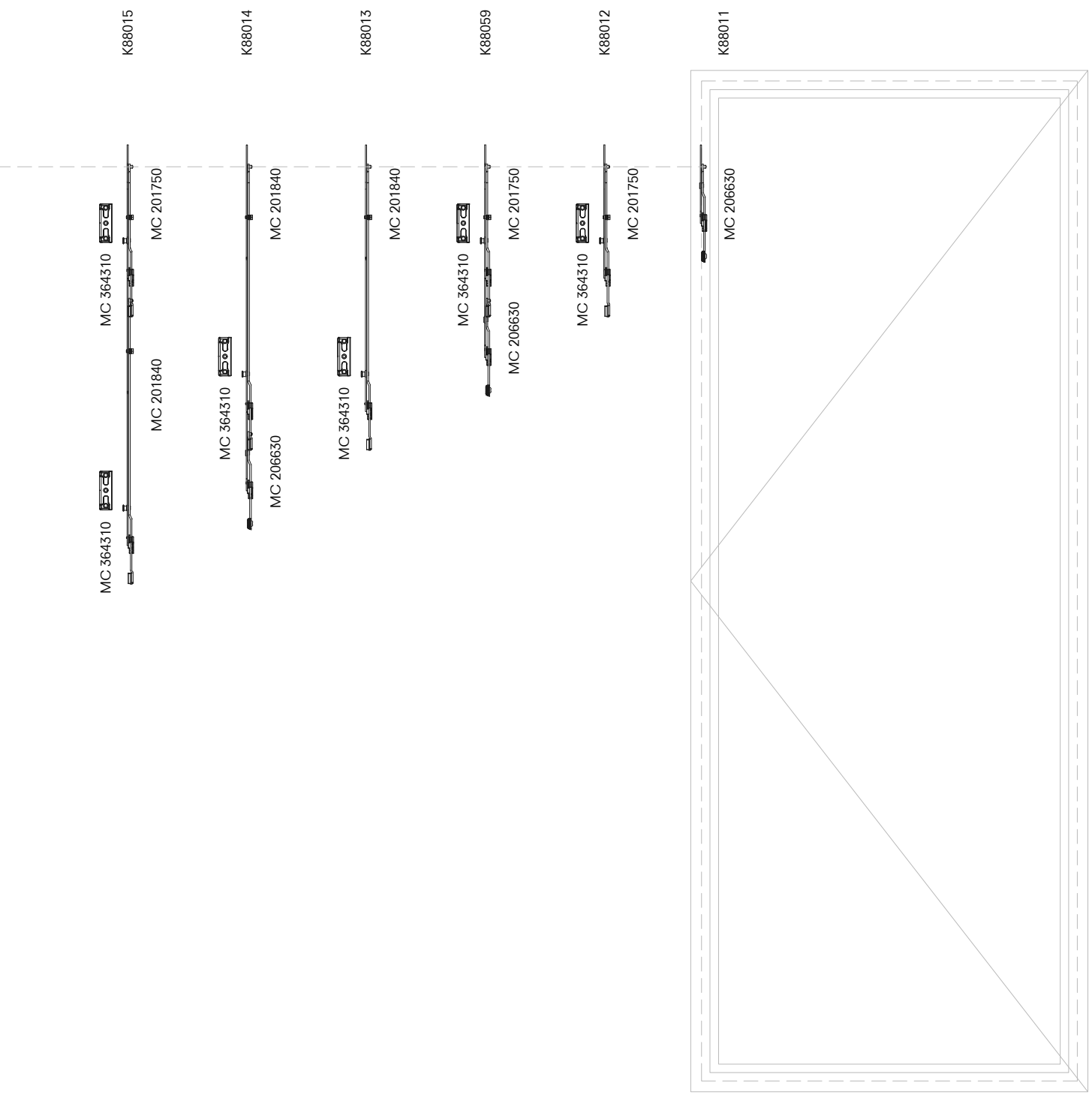
K88060

706 - 845 mm

K88016

846 - 940 mm




K88015
K88014
K88013
K88059
K88012
K88011
MC 364310
MC 201750
MC 201840
MC 206630

Side hung windows

Hinges kits

Drehfenster

Garnitur Bänder

Fênetre battante

Kits paumelles

K88034

Right hinges

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

K88034

Recht Band

K88034

Droite paumelles

K88035

Left hinges

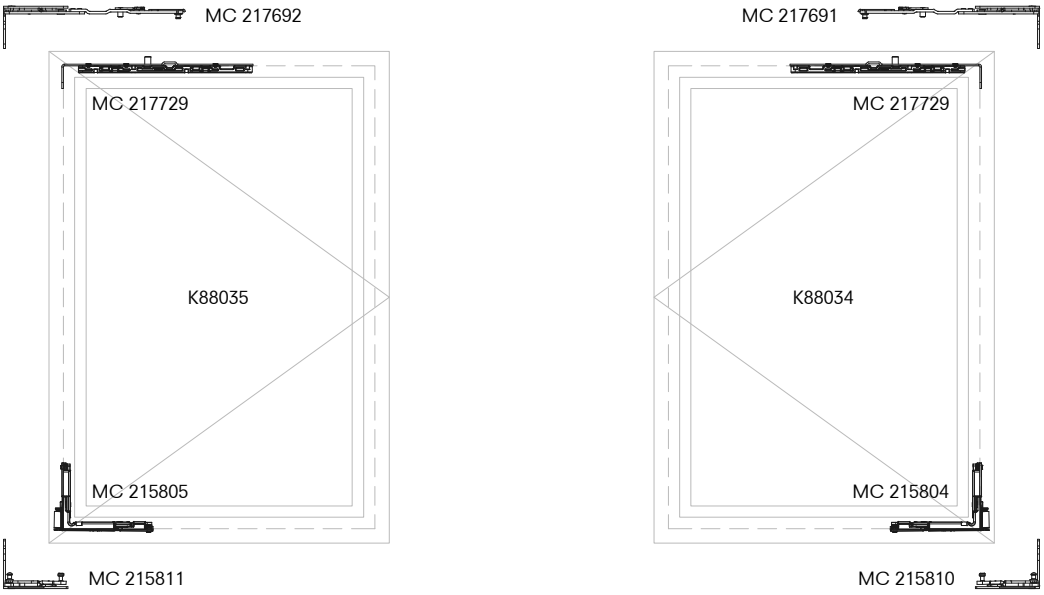
MC 217692 n°01 piece
MC 217729 n°01 piece
MC 215805 n°01 piece
MC 215811 n°01 piece

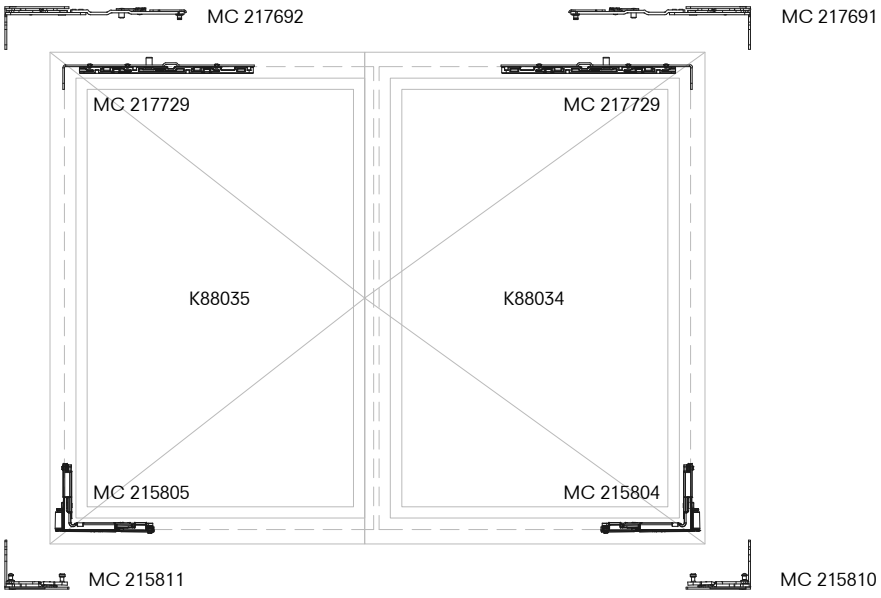
K88035

Link Band

K88035

Gauche paumelles





Side hung windows

Additional top and bottom locking point

K88045

LBB = 801 - 1280 mm

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

Drehfenster

Zusätzlich oben und unten Verriegelungspunkt

K88045

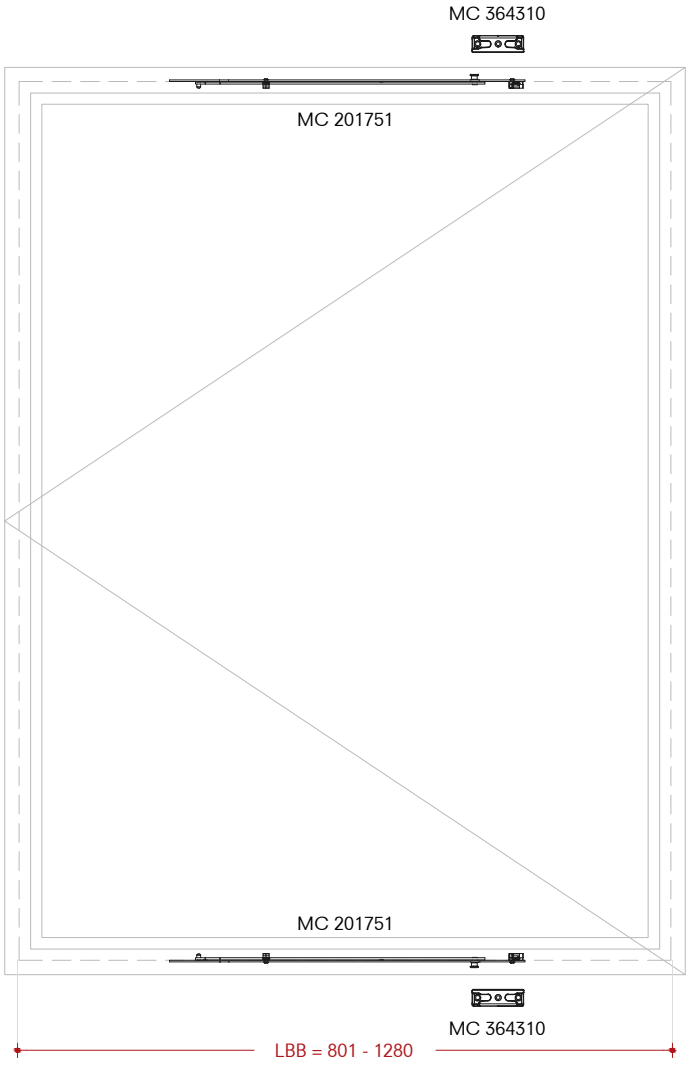
LBB = 801 - 1280 mm

Fênetre battante

Haut et bas supplémentaires point de verrouillage

K88045

LBB = 801 - 1280 mm



Side hung windows

Additional top and bottom locking point

K88046

LBB = 1281 - 1400 mm

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

Drehfenster

Zusätzlich oben und unten Verriegelungspunkt

K88046

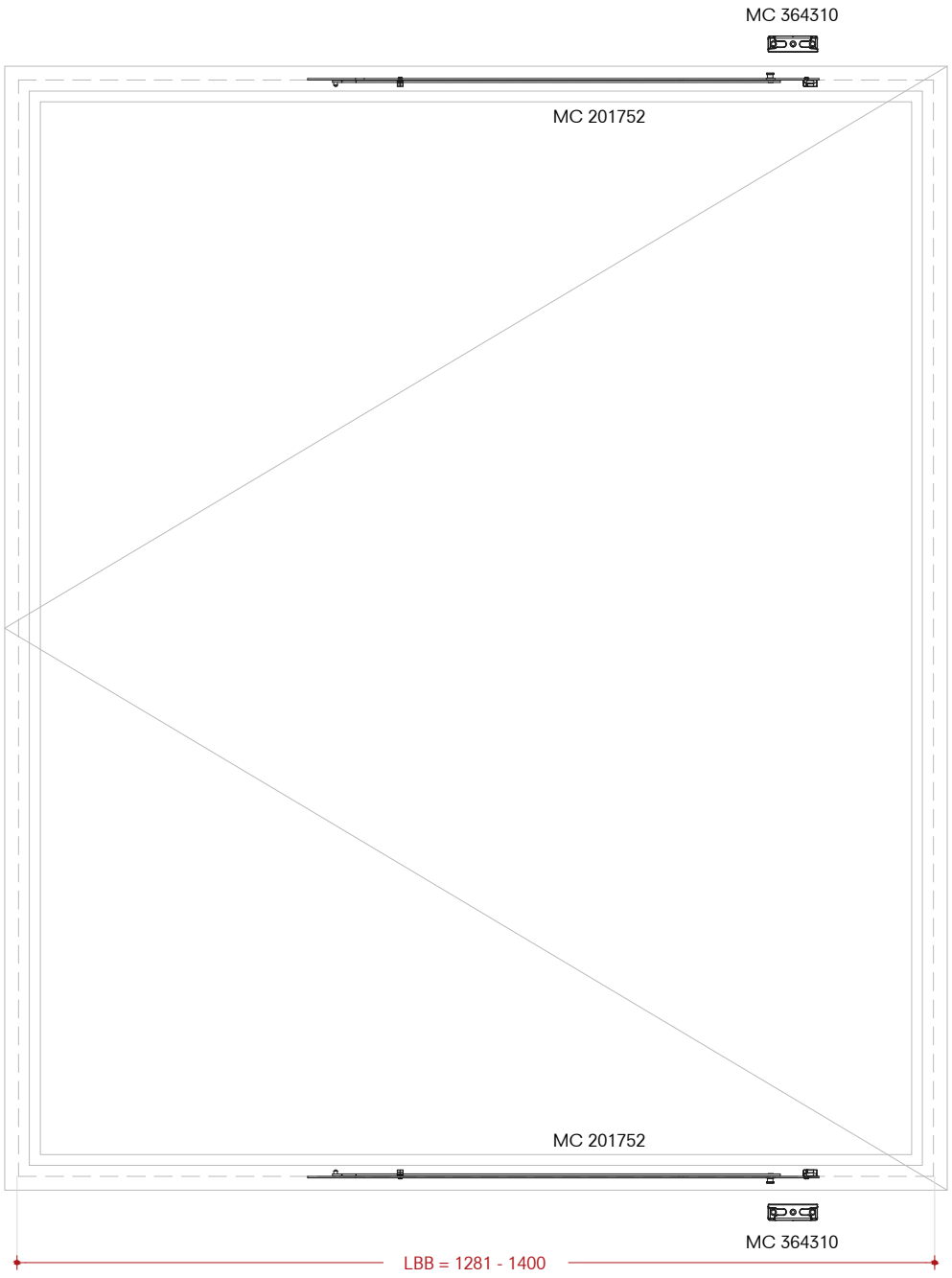
LBB = 1281 - 1400 mm

Fênetre battante

Haut et bas supplémentaires point de verrouillage

K88046

LBB = 1281 - 1400 mm



Side hung windows

Lifting component

K88047

Right

MC 361004 n°01 piece

Drehfenster

Hebekomponente

K88047

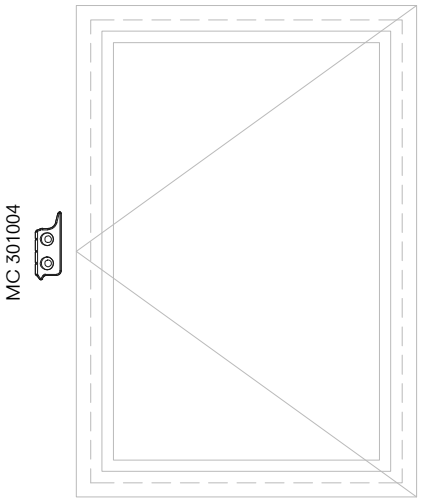
Recht

Fênetre battante

Composant de levage

K88047

Droite



K88048

Left

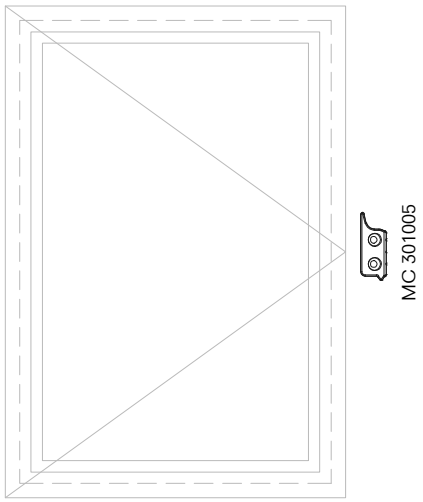
MC 361005 n°01 piece

K88048

Link

K88048

Gauche



Side hung windows

Concealed compression locks kits

Drehfenster

Anpressverschluss verdeckt

Fênetre battante

Kits de serrures à compression cachée

K88036

HBB = 1280 - 2000 mm

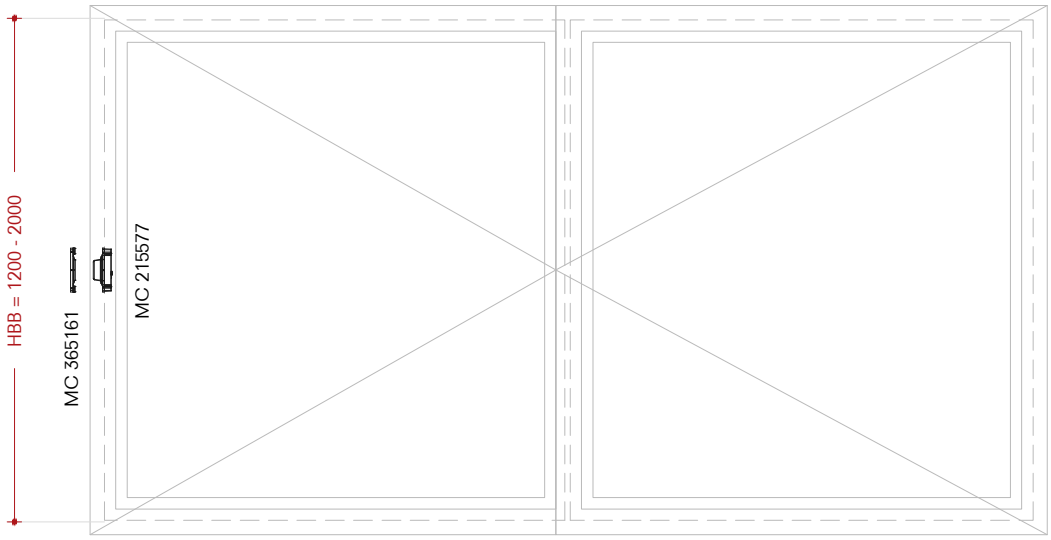
MC 215577 n°01 piece
MC 365161 n°01 piece

K88036

HBB = 1280 - 2000 mm

K88036

HBB = 1280 - 2000 mm



K88037

HBB = 2001 - 2800 mm

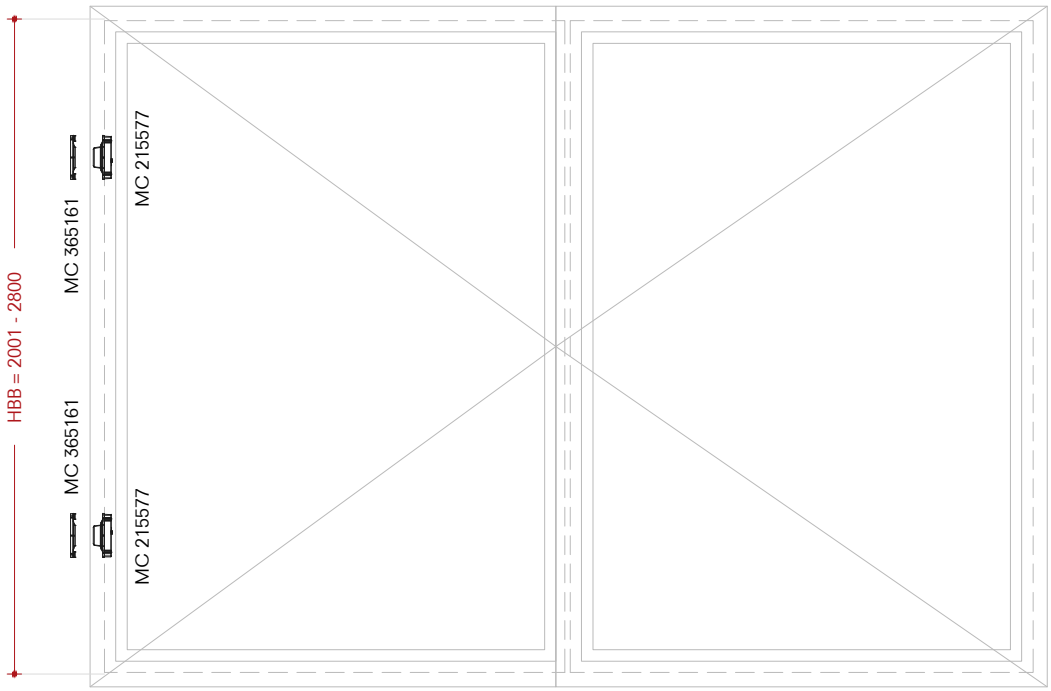
MC 215577 n°01 piece
MC 365161 n°01 piece

K88037

HBB = 2001 - 2800 mm

K88037

HBB = 2001 - 2800 mm



Side hung windows

French casement lock extendable

Drehfenster

Stulpflügelverschluss verlängerbar

Fênetre battante

Serrure à battants française extensible

K88038

LBB = 370 - 800 mm

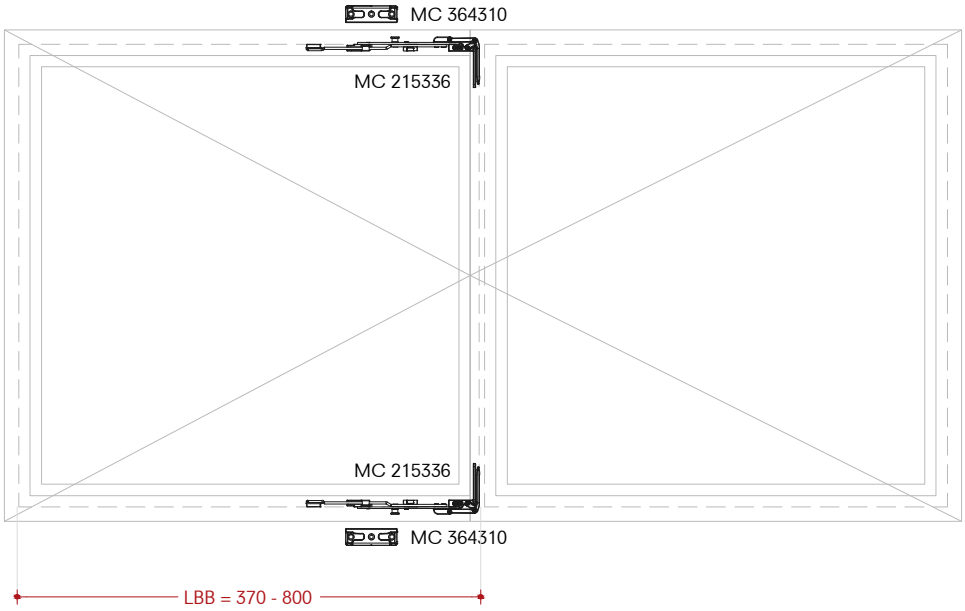
MC 215336 n°02 pieces
MC 364310 n°02 pieces

K88038

LBB = 370 - 800 mm

K88038

LBB = 370 - 800 mm



K88039

LBB = 801 - 1400 mm

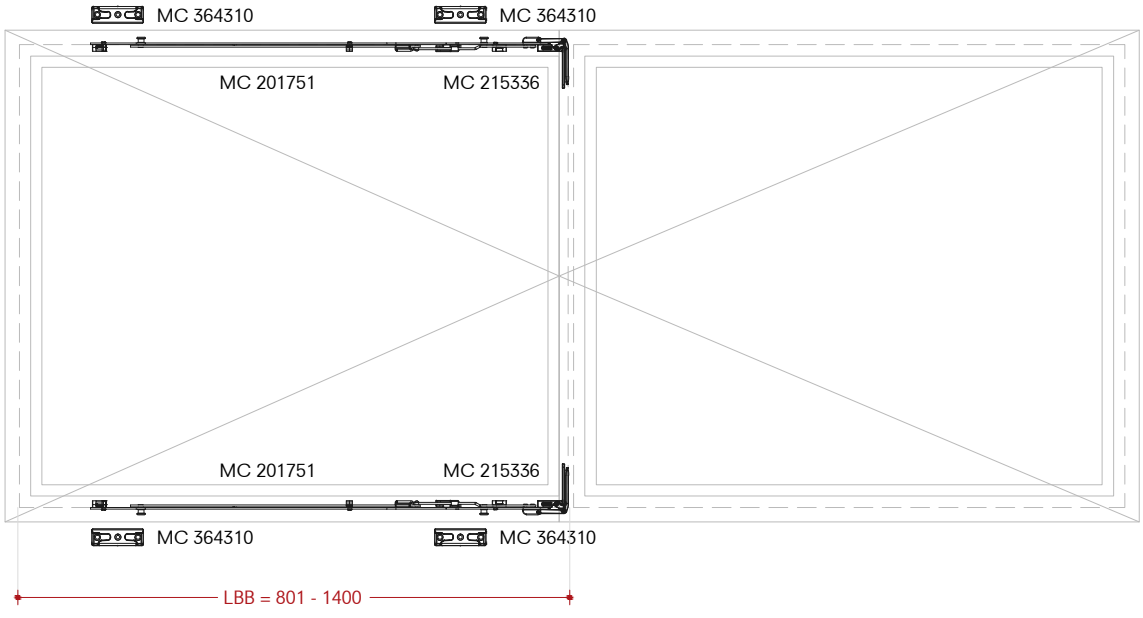
MC 215336 n°02 pieces
MC 201751 n°02 pieces
MC 364310 n°04 pieces

K88039

LBB = 801 - 1400 mm

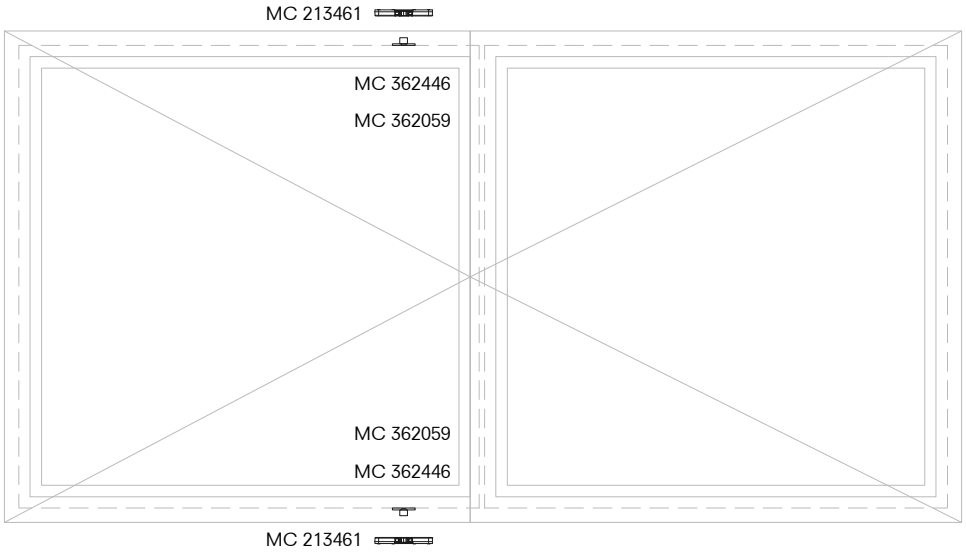
K88039

LBB = 801 - 1400 mm



Side hung windows	Drehfenster	Fênetre battante
Roller snap catch	Rollschnapper	Loquet à rouleau
K88201	K88201	K88201

MC 213461 n°02 pieces
MC 362059 n°02 pieces
MC 362446 n°02 pieces



Side hung windows

Extendable french casement lock + upper roller snap catch

Drehfenster

Stulpflügelverschluss verlängerbar + obere Rolle Schnappverschluss

Fênetre battante

Serrure à battant français extensible + mousqueton à galet supérieur

K88041

LBB = 370 - 800 mm

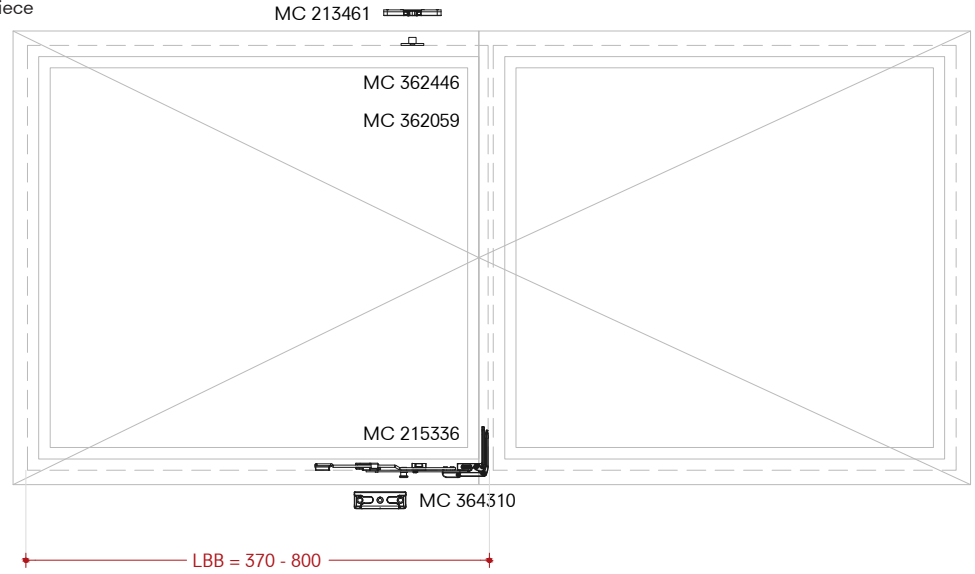
MC 213461 n°01 piece
MC 362059 n°01 piece
MC 362446 n°01 piece
MC 215336 n°01 piece
MC 364310 n°01 piece

K88041

LBB = 370 - 800 mm

K88041

LBB = 370 - 800 mm



K88042

LBB = 801 - 1280 mm

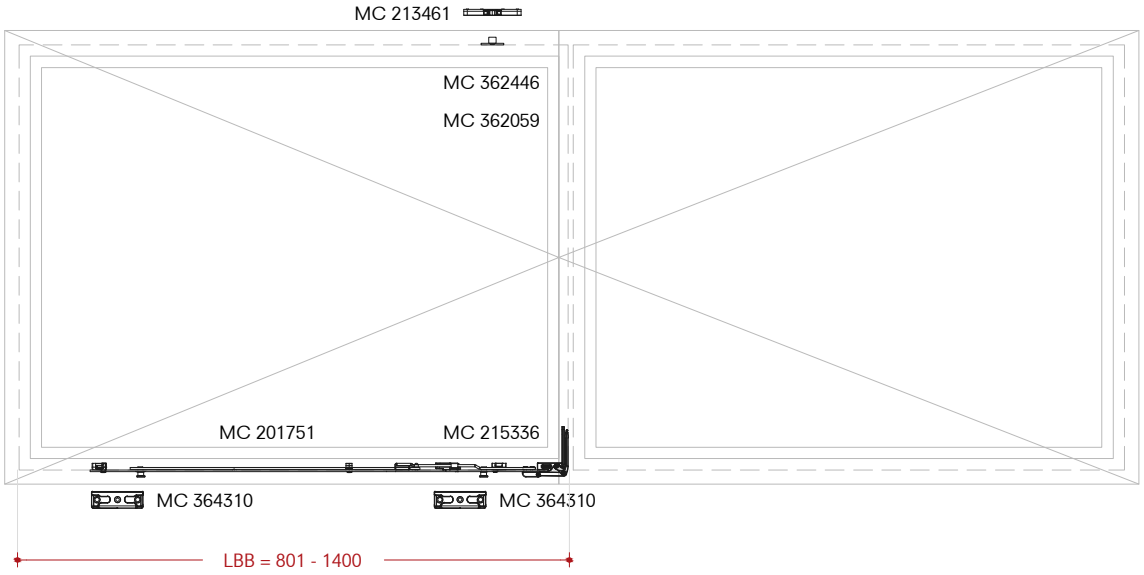
MC 213461 n°01 piece
MC 362059 n°01 piece
MC 362446 n°01 piece
MC 215336 n°01 piece
MC 201751 n°01 piece
MC 364310 n°01 piece

K88042

LBB = 801 - 1280 mm

K88042

LBB = 801 - 1280 mm



Side hung windows

Door catch

K88061

HBB = 661 - 2800 mm

MC 201168 n°01 piece

Drehfenster

Türverschluss

K88061

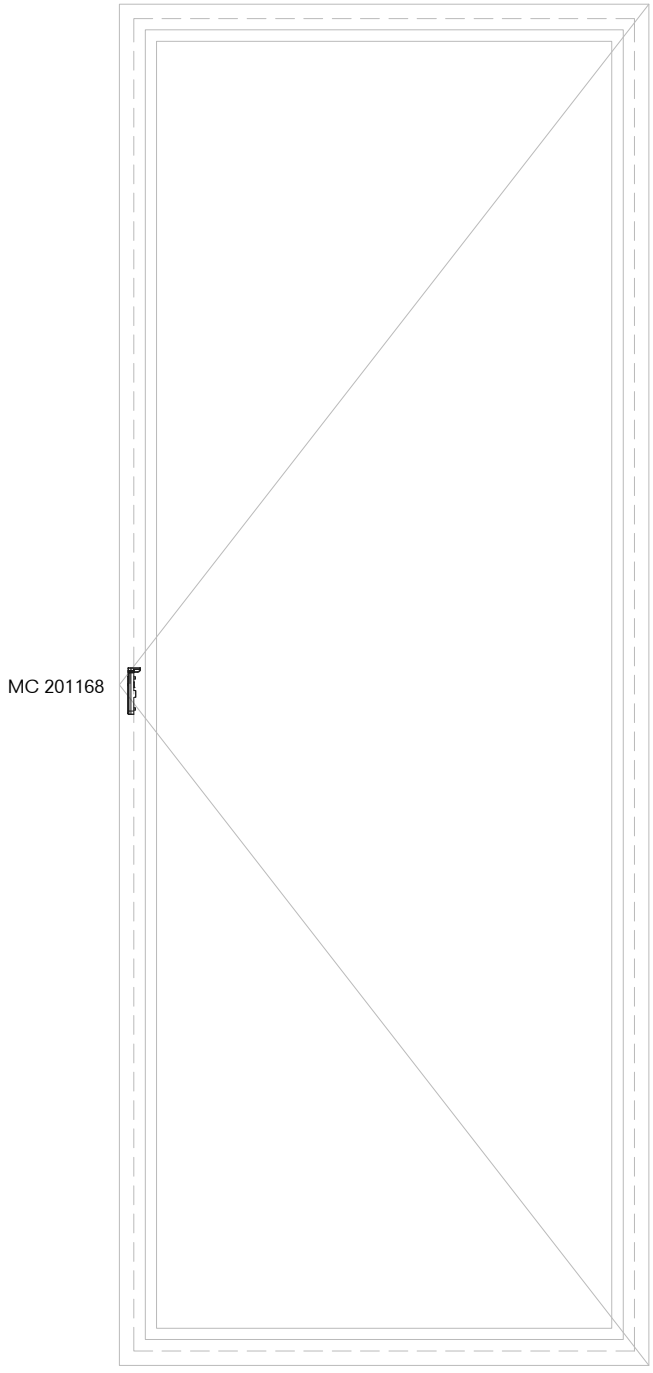
HBB = 661 - 2800 mm

Fênetre battante

Loquet de porte

K88061

HBB = 661 - 2800 mm



Side hung windows

Opening restrictor

K88033

LBB = 490 - 1400 mm

MC 103623 n°01 piece

Drehfenster

Öffnungsbegrenzer

K88033

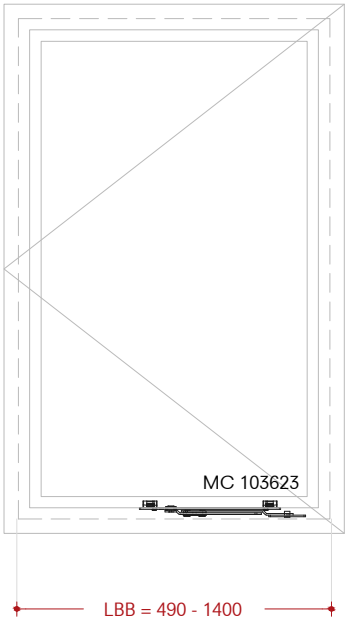
LBB = 490 - 1400 mm

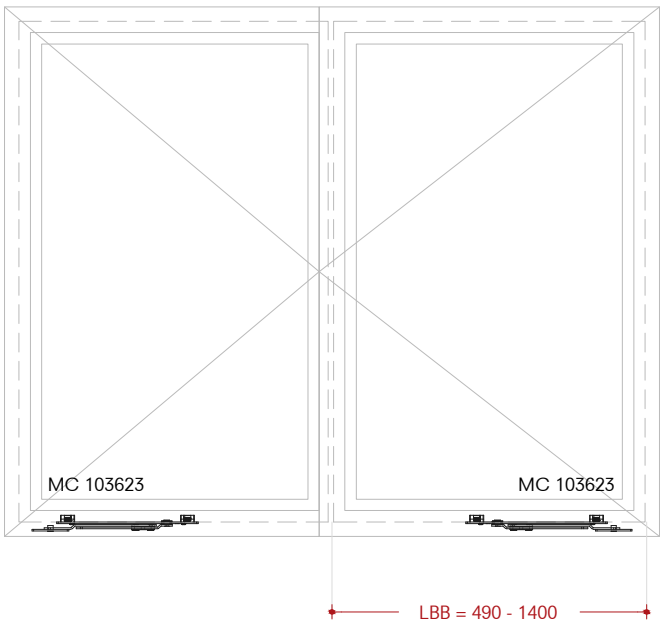
Fênetre battante

Compas de limitation d'ouverture

K88033

LBB = 490 - 1400 mm





Side hung windows

Load transfer 180 kg

Drehfenster

Lastabtragung 180 kg

Fênetre battante

Tige de support 180 kg

E99510-02

Right

MC 105336 n°01 piece

E99510-02

Recht

E99510-02

Droite

E99511-02

Left

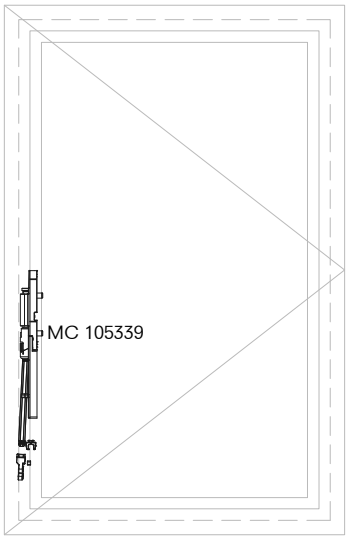
MC 105339 n°01 piece

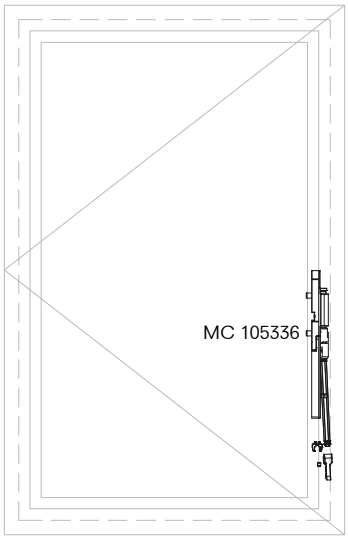
E99511-02

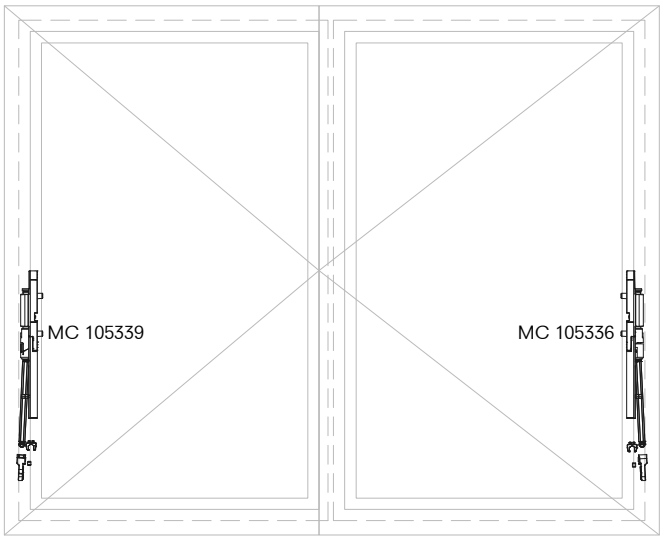
Link

E99511-02

Gauche







Side hung windows

Alarm contact

K99062

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

Drehfenster

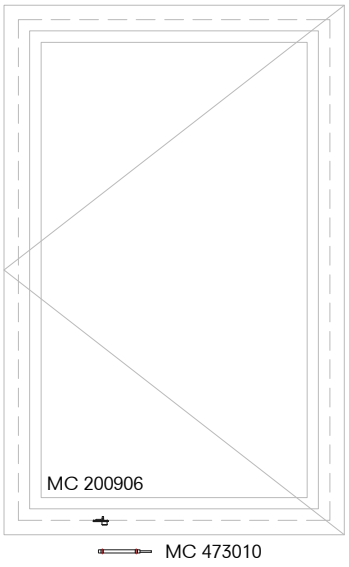
Alarmkontakt

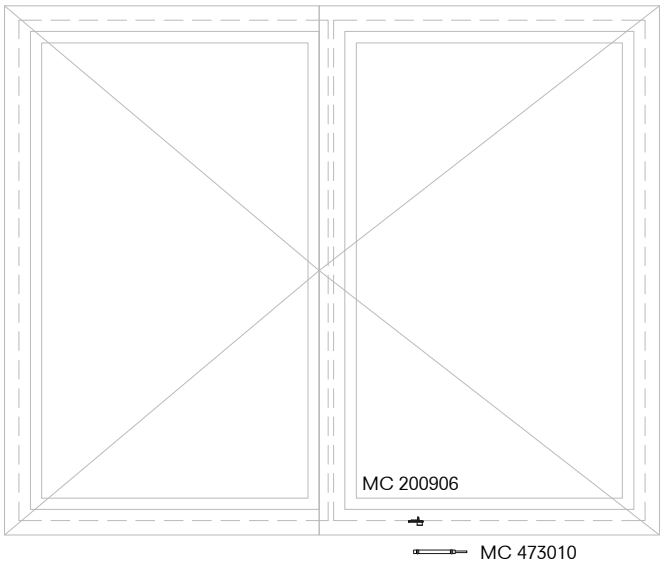
K99062

Fênetre battante

Contact d'alarme

K99062





Side hung windows

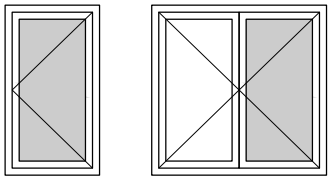
Determination of LBB
(Groove Hardware Lenght)

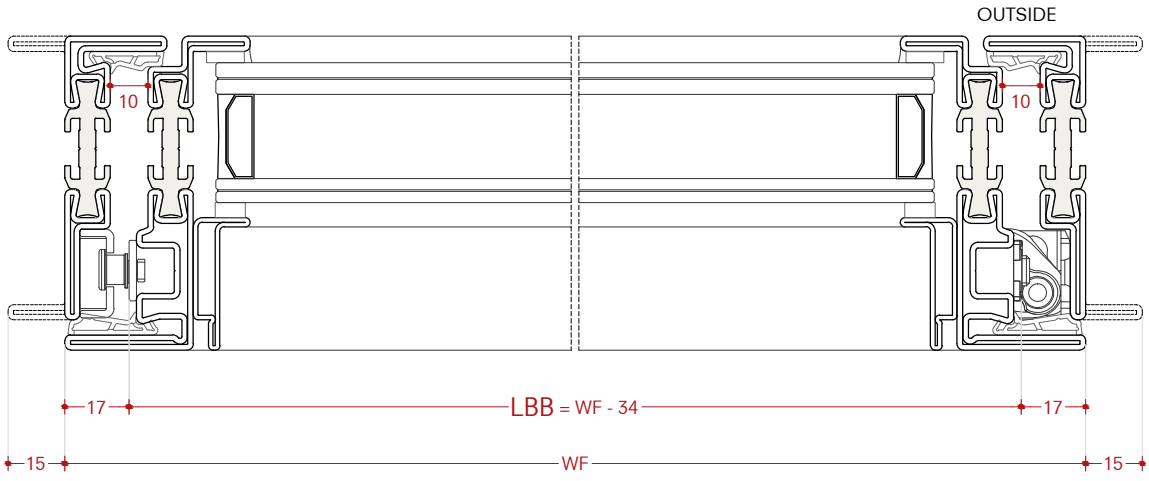
Drehfenster

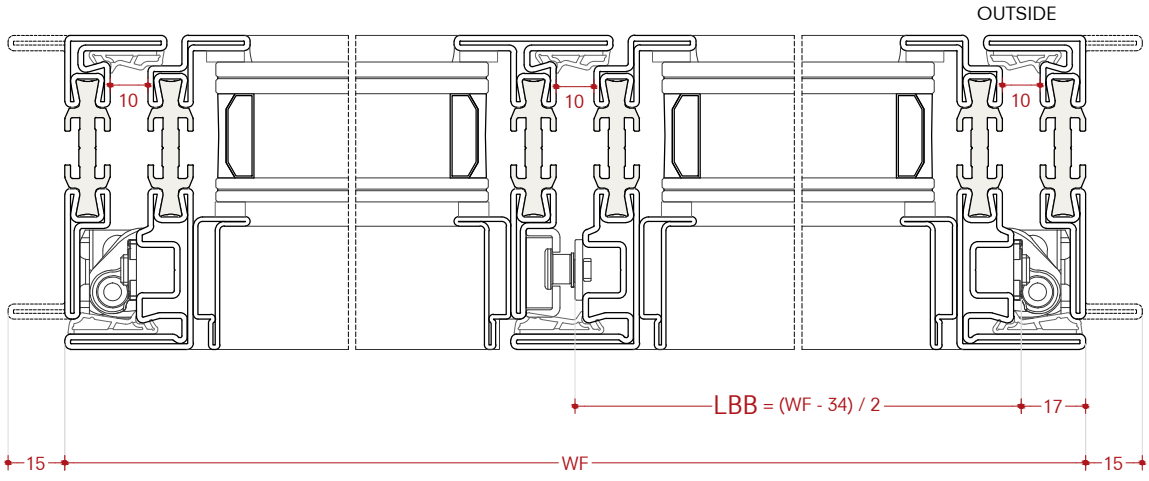
Bestimmung von LBB
(Beschlagnutbreite)

Fênetre battante

Détermination du LBB
(largeur de rainure de quincaillerie)







Side hung windows

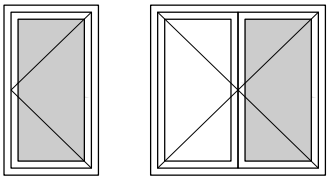
Determination of HBB
(Groove Hardware Height)

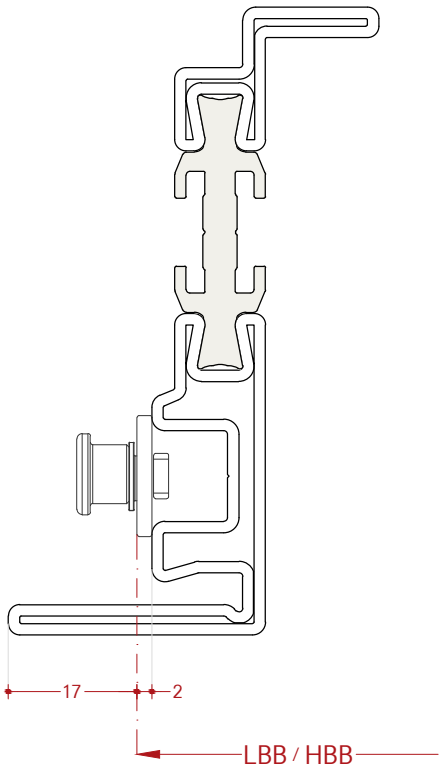
Drehfenster

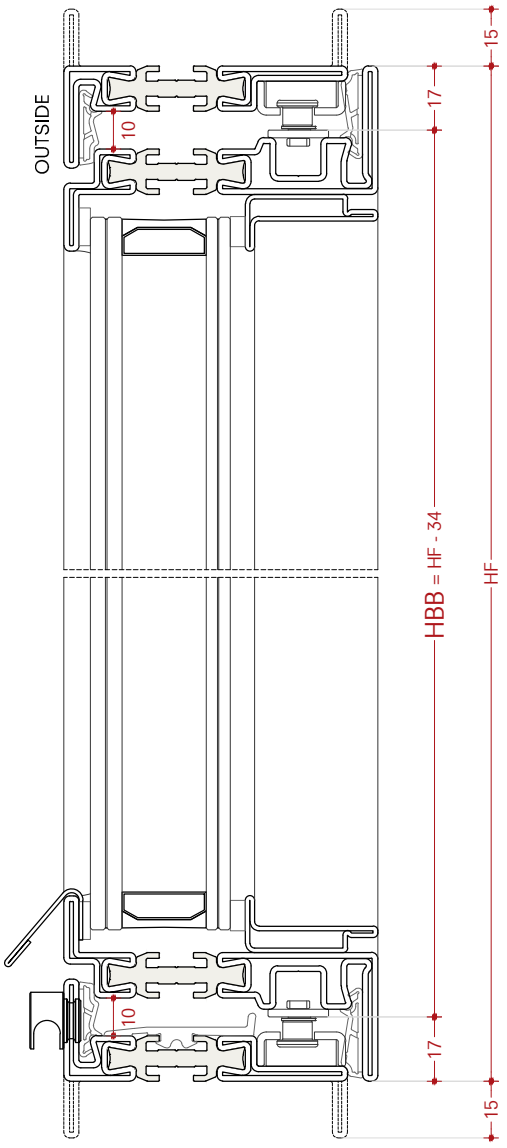
Bestimmung von HBB
(Höhe der Beschlagnut)

Fênetre battante

Détermination du HBB
(hauteur de rainure de quincaillerie)







Side hung windows

Load capacity tables

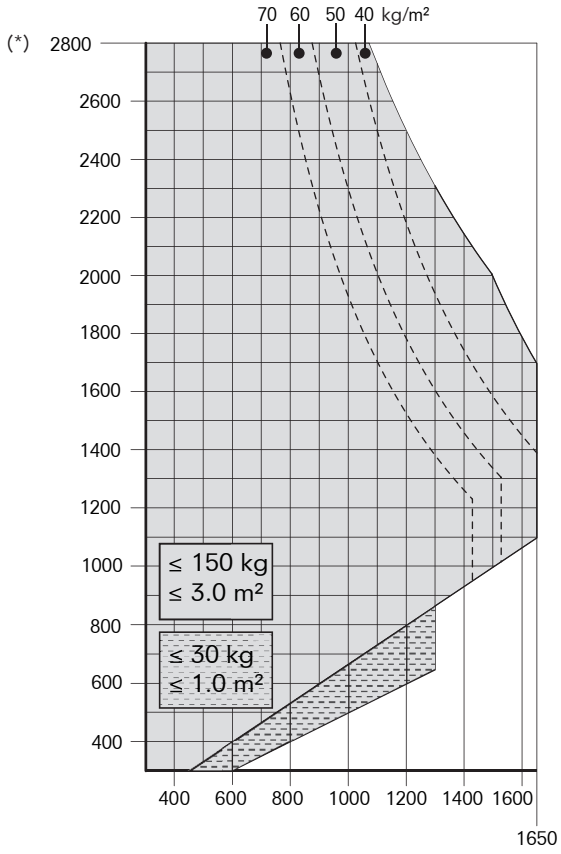
Drehfenster

Gewichtstabellen

Fênetre battante

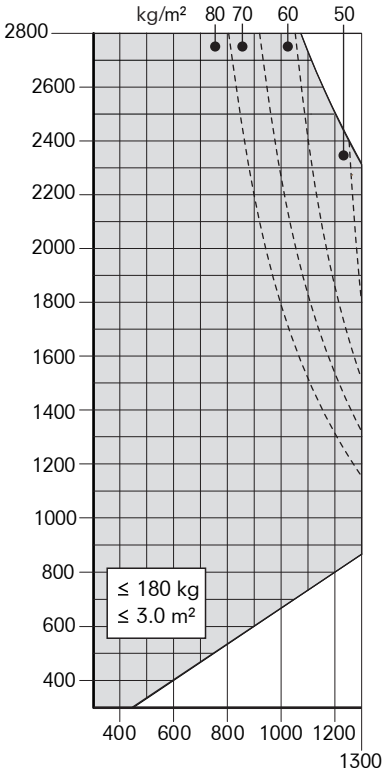
Capacité maximale

Side hung window concealed accessories capacity
Zubehör verdeckt Drehfenster
Fênetre à vantail accessoires cachée



(*) Extendable to a height of 3000 mm using weld-on hinges.

Side hung window concealed accessories capacity
with support rod E99510-02 / E99511-02
Drehfenster verdeckt mit Lastabtragung E99510-02 / E99511-02
Fênetre à vantail accessoires cachée
avec tige de support E99510-02 / E99511-02



(*) Durch Anschweißbänder auf eine Höhe von 3000 mm erweiterbar.

(*) Extensible jusqu'à une hauteur de 3000 mm grâce à des paumelles à souder.

Standard handle height

Standard-Griffhöhe

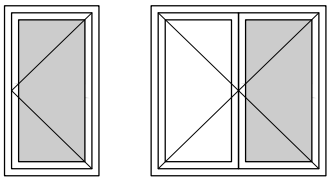
Hauteur de poignée standard

	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

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
K88118 (*)	370	464	455	2800



LBB = Groove Hardware Lenght
HBB = Groove Hardware Height

(*) Only for double leaf windows with K88041 - K88042 - K88201

Drehfenster

Schritt #1 - Auswahl Grdundgarnitur

LBB = Beschlagnutbreite
HBB = Höhe der Beschlagnut

(*) Nur für zweiflügelige Fenster mit K88041 - K88042 - K88201

Fênetre battante

Étape #1 - Choix de kit de base

LBB = largeur de rainure de quincaillerie
HBB = hauteur de rainure de quincaillerie

(*) Seulement pour fenêtres à deux vantaux avec K88041 - K88042 - K88201

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.

Schritt #2 - Garnitur Getriebe

HH = Griffsitz Mittig
HDG = Gangführungshöhe
CRP = Schnittmaß
HCRN = Eckhöhe
HBB = Höhe der Beschlagnut

(*) = Bestätigung der technischen Abteilung erforderlich für Abmessungen größer 2800 mm

Étape #2 - Choix de kit d'équipement

HH = hauteur de la poignée
HDG = hauteur du guide de vitesse
CRP = mesure de coupe
HCRN = hauteur d'angle
HBB = hauteur de rainure de quincaillerie

(*) = Confirmation du service technique nécessaire pour les dimensions supérieures à 2800 mm

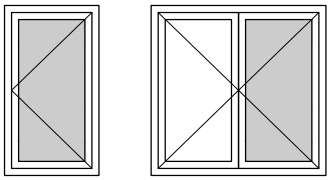
Step #3 - Extension kits choice

Schritt #3 - Garnitur Getriebeverlängerung

Étape #3 - Choix de kit extension d'équipement

HBB * - HCRN - HDG = Extension kit lenght / Getriebeverlängerung Länge / largeur kit extension

	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 = Min Länge (mm)
MaxL = Max Länge (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 = largeur minimal (mm)
MaxL = largeur maximum (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

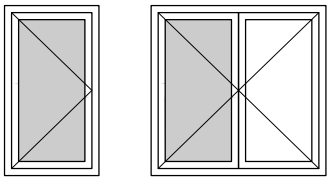
Step #4 - Hinges kit choice

Schritt #4 - Garnitur Bänder

Étape #4 - Choix kit paumelles

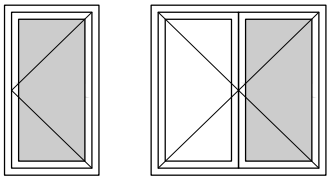
Left / Link / Gauche

	LBB min	LBB max	HBB min	HBB max
K88035	370	1400	365	2800



Right / Recht / Droite

	LBB min	LBB max	HBB min	HBB max
K88034	370	1400	365	2800

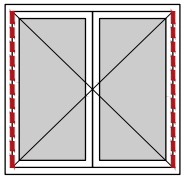


Step #5 - Concealed compression lock kit choice
n°1 kit per leaf

Schritt #5 - Anpressverschluss verdeckt
1x Kit pro Flügel

Étape #5 - Choix kit de serrure à compression caché
n°1 kit par vantail

	HBB min	HBB max
K88036	1280	2000
K88037	2001	2800

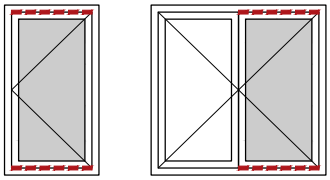


Step #6 - Additional top and bottom locking point choice

Schritt #6 - Zusätzlich oben und unten Verriegelungspunkt

Étape #6 - Choix haut et bas supplémentaires point de verrouillage

	LBB min	LBB max
K88045	801	1280
K88046	1281	1400



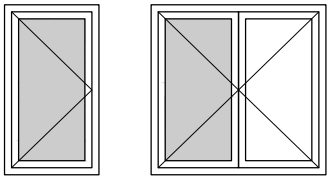
Step #7 - Lifting component choice

Schritt #7 - Hebekomponente

Étape #7 - Choix composant de levage

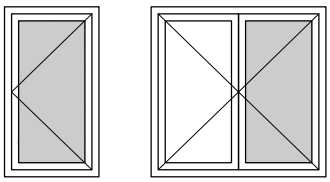
Left / Link / Gauche

K88048



Right / Recht / Droite

K88047



Step #8 - 2nd leaf lock choice

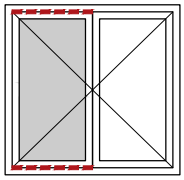
Choose option A or B or C

Schritt #8 - Verriegelung Standflügel

Wählen Sie Option A oder B oder C

Étape #8 - Choix serrure 2e ouvrant

Choisissez l'option A ou B ou C



A - Extendable french casement lock choice

A - Stulpflügelverschluss verlängerbar

A - Choix serrure à battants française extensible

	LBB min	LBB max
K88038	370	800
K88039	801	1400

B - Roller snap catch

B - Rollschnapper

B - Loquet à rouleau

	LBB min	LBB max
K88201	370	1400

C - Extendable french casement lock + upper roller snap catch

C - Stulpflügelverschluss verlängerbar + obere Rolle Schnappverschluss

C - Serrure à battant français extensible + mousqueton à galet supérieur

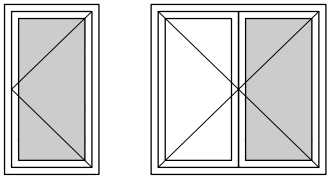
	LBB min	LBB max
K88041	370	800
K88042	801	1400

Step #9 - Door catch choice

Schritt #9 - Türverschluss

Étape #9 - Choix loquet de porte

	HBB min	HBB max
K88061	661	2800

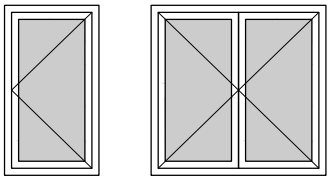


Step #10 - Opening restrictor choice

Schritt #10 - Öffnungsbegrenzer

Étape #10 - Choix compas de limitation d'ouverture

	LBB min	LBB max
K88033	490	1400

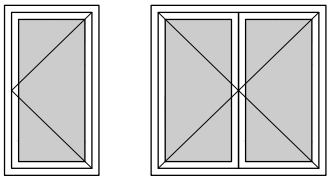


Step #11 - Load transfer 180 kg choice

Schritt #11 - Lastabtragung 180 kg

Étape #11 - Choix tige de support 180 kg

		HBB min	HBB max
E99510-02	**Right**	2000	2800
E99511-02	**Left**	2000	2800

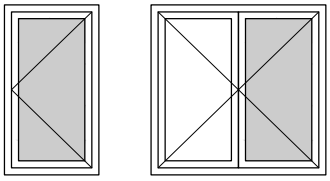


Step #12 - Alarm contact choice

Schritt #12 - Alarmkontakt

Étape #12 - Choix contact d'alarme

K99062

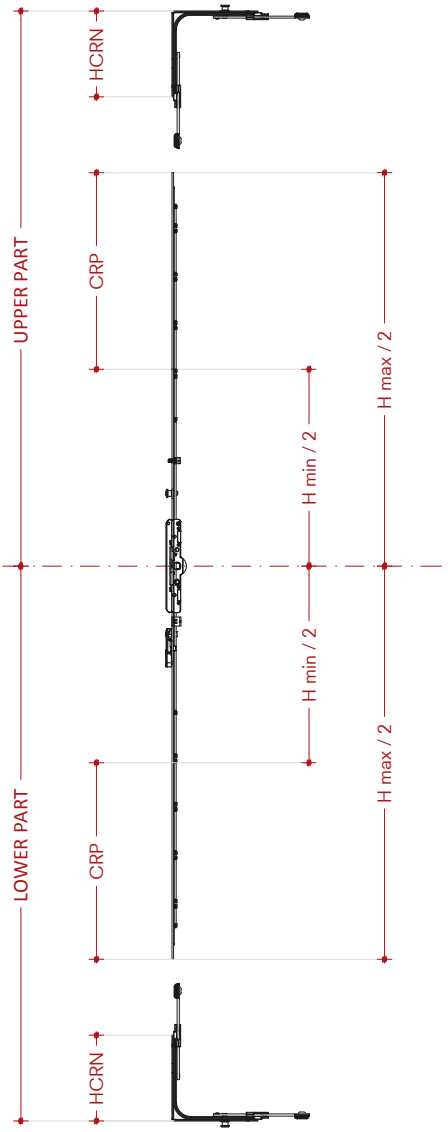


Step #13 - Double croppable gear kits choice
(Instead of Step #2 and #3)

Schritt #13 - Beidseitig kürzbare Garnitur
(Anstelle von Schritt #2 und #3)

Étape #13 - Choix Kits d'équipement à double recadrage
(Au lieu des étapes #2 et #3)

	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.

Wählen Sie den kleinsten Wert und finden Sie das passende Garnitur Getriebe zwischen den Bereichsspalten Hmin/2 und Hmax/2

Choisissez la plus petite valeur et trouvez le bon kit d'équipement entre les colonnes de plage Hmin/2 et 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.

* Bei negativem Wert werden keine Verlängerungen benötigt.

* avec une valeur négative, aucune extension n'est nécessaire.

HH = Height Handle
HDG = Height Drive Gear
CRP = Cropping measures
HCRN = Height Corner
HBB = Groove Hardware Height

HH = Griffsitz Mittig
HDG = Gangführungshöhe
CRP = Schnittmaß
HCRN = Eckhöhe
HBB = Höhe der Beschlagnut

HH = hauteur de la poignée
HDG = hauteur du guide de vitesse
CRP = mesure de coupe
HCRN = hauteur d'angle
HBB = hauteur de rainure de quincaillerie

Bottom hung windows

Gear kits

Kippfenster

Garnitur Getriebe

Fênetre à soufflet

Kits d'équipement

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

K88052

LBB = 1001 - 1400 mm

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

K88052

LBB = 1001 - 1400 mm

K88052

LBB = 1001 - 1400 mm

K88053

LBB = 1401 - 1800 mm

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

K88053

LBB = 1401 - 1800 mm

K88053

LBB = 1401 - 1800 mm

K88054

LBB = 1801 - 2250 mm

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

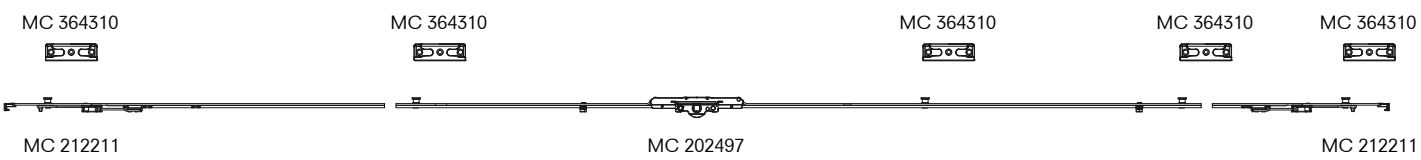
K88054

LBB = 1801 - 2250 mm

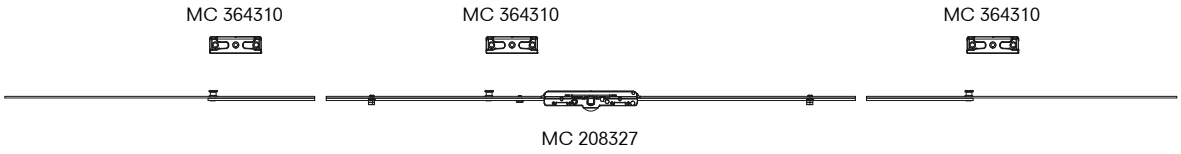
K88054

LBB = 1801 - 2250 mm

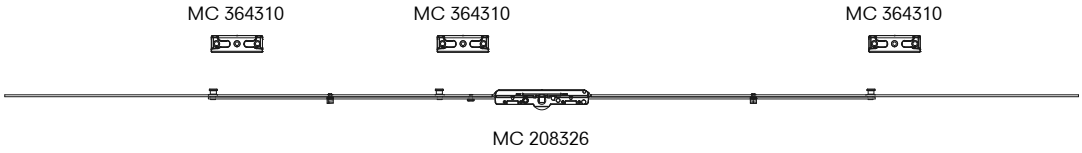
K88054



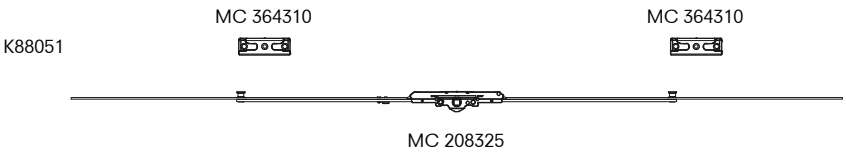
K88053



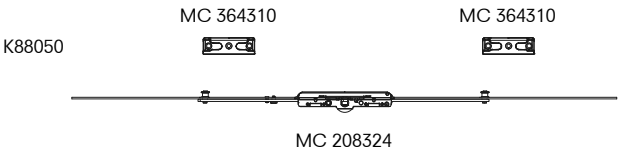
K88052



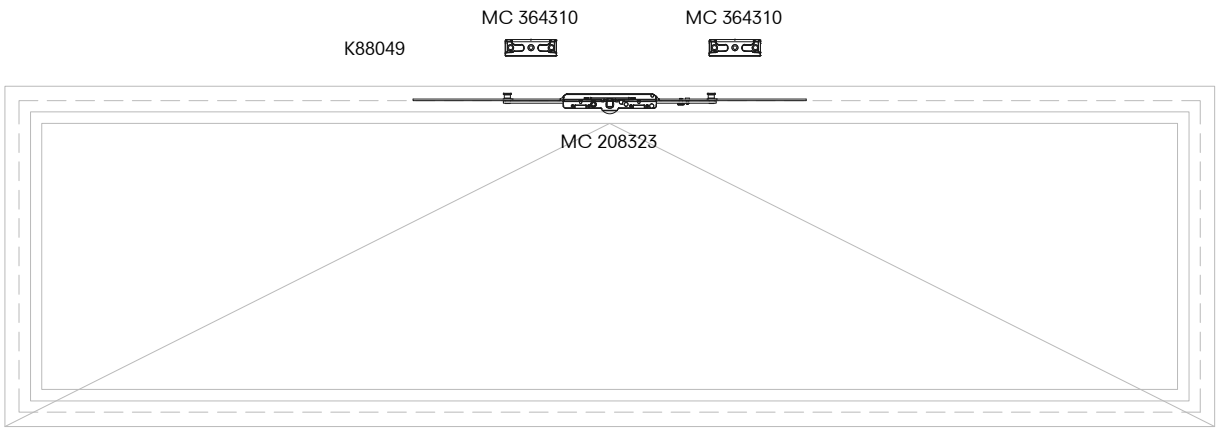
K88051



K88050



K88049



Bottom hung windows

Gear kits

Kippfenster

Garnitur Getriebe

Fênetre à soufflet

Kits d'équipement

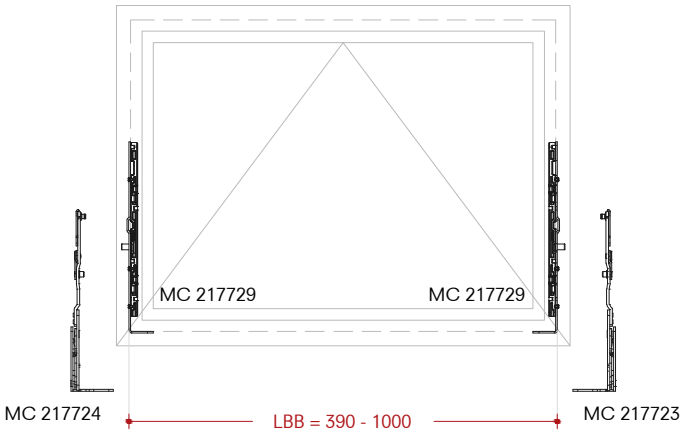
K88055

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

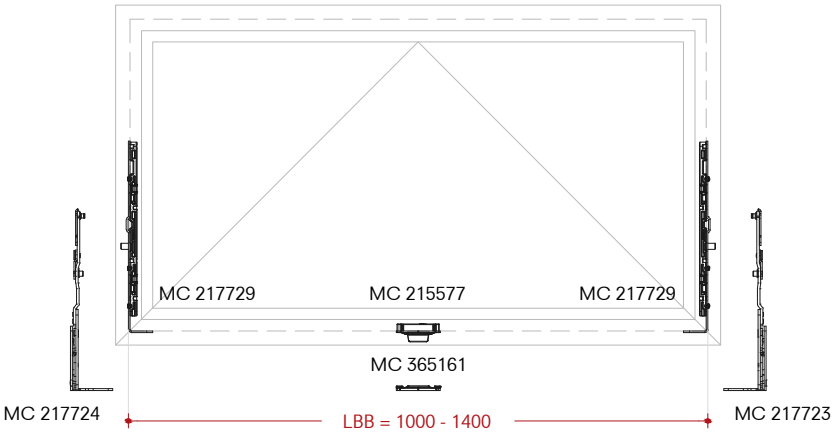
K88056

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

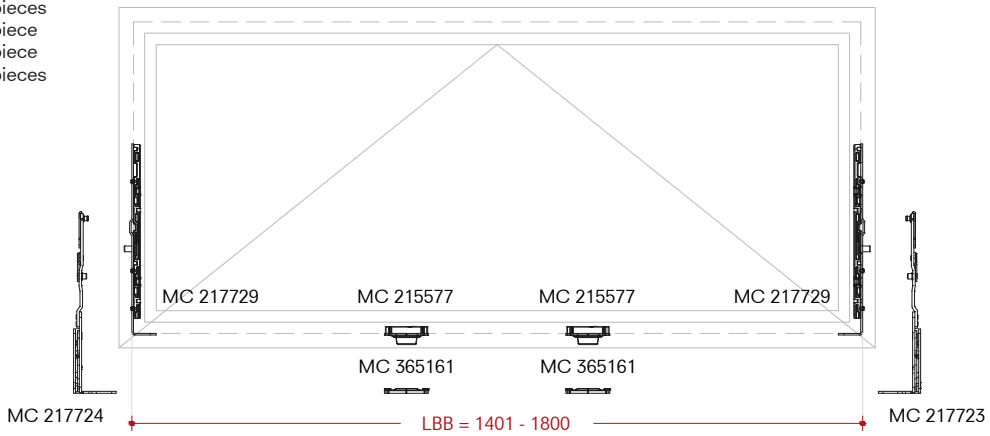
MC 215577 n°02 pieces
MC 365161 n°02 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88057

LBB = 1401 - 1800 mm

K88057

LBB = 1401 - 1800 mm



K88058

LBB = 1801 - 2250 mm

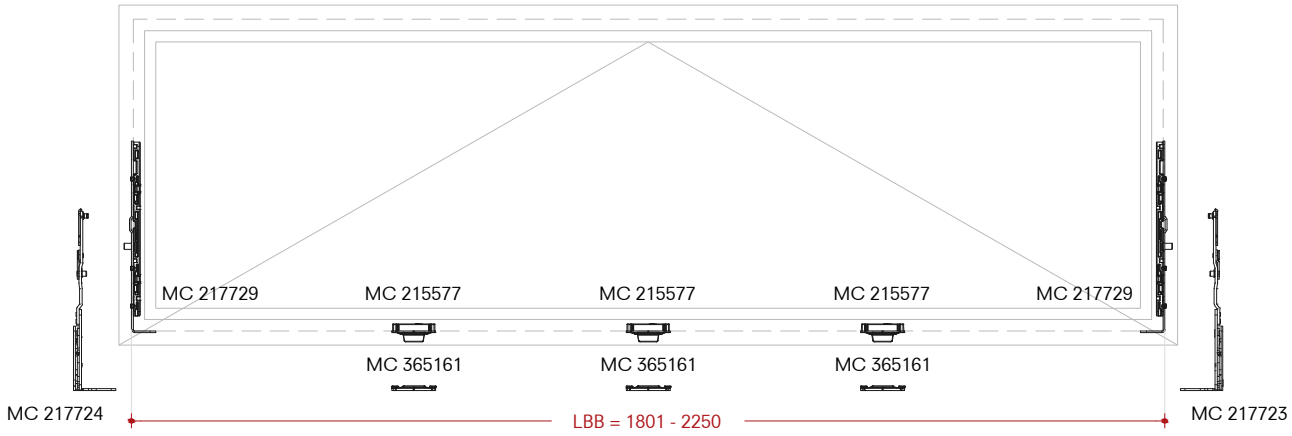
MC 215577 n°03 pieces
MC 365161 n°03 pieces
MC 217723 n°01 piece
MC 217724 n°01 piece
MC 217729 n°02 pieces

K88058

LBB = 1801 - 2250 mm

K88058

LBB = 1801 - 2250 mm



Bottom hung windows

Opening restrictor

E99205-05

With clicks.
HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

Kippfenster

Öffnungsbegrenzer

E99205-05

Mit Klicks.
HBB = 400 - 1200 mm

2x Stück

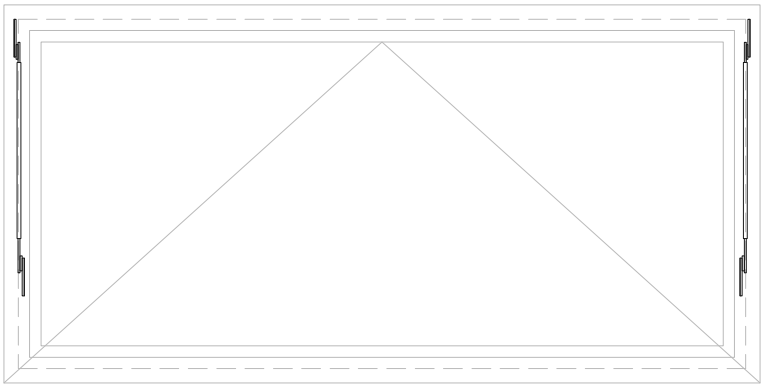
Fênetre à soufflet

Compas de limitation d'ouverture

E99205-05

Avec des clics.
HBB = 400 - 1200 mm

n°02 unités



E99206-03

HBB = 400 - 1200 mm

n°02 pieces

See opening restrictor installation

E99206-03

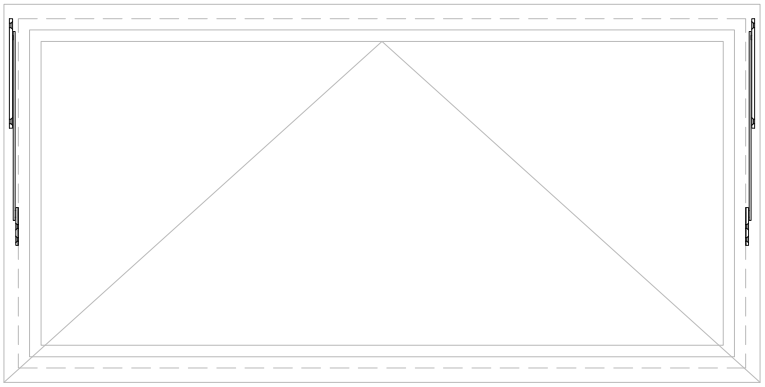
HBB = 400 - 1200 mm

2x Stück

E99206-03

HBB = 400 - 1200 mm

n°02 unités



K88107

HBB = 520 - 620 mm

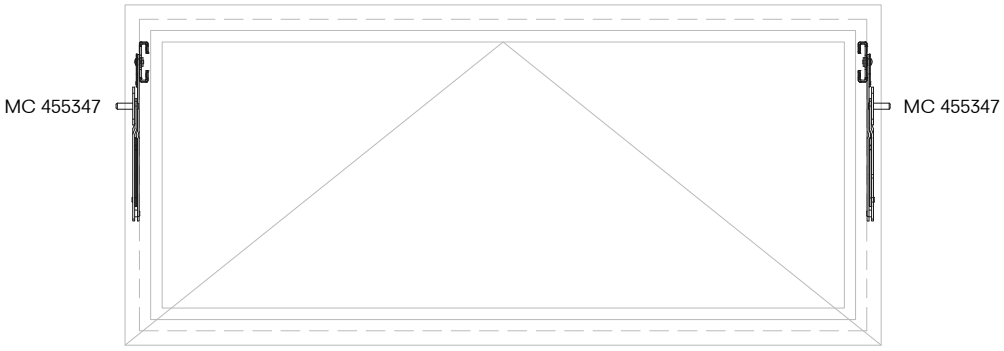
MC 455347 n°02 pieces

K88107

HBB = 520 - 620 mm

K88107

HBB = 520 - 620 mm



K88108

HBB = 621 - 1200 mm

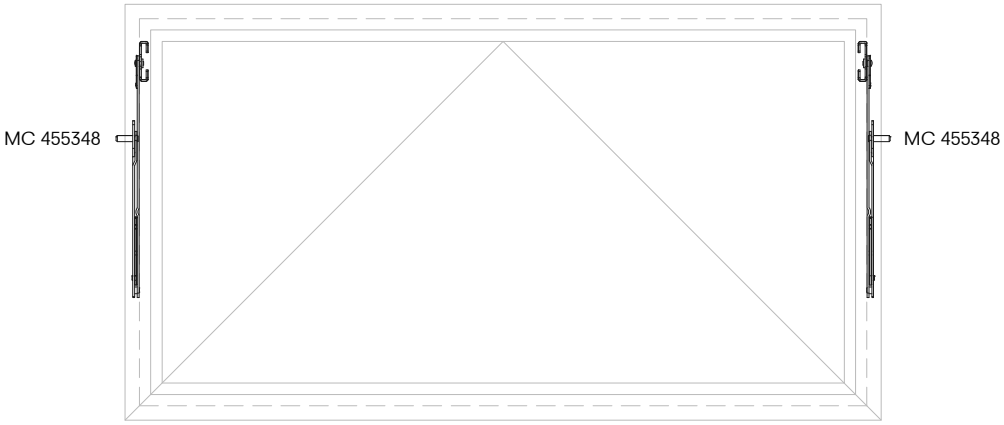
MC 455348 n°02 pieces

K88108

HBB = 621 - 1200 mm

K88108

HBB = 621 - 1200 mm



Bottom hung windows

Alarm contact

K99062

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

Kippfenster

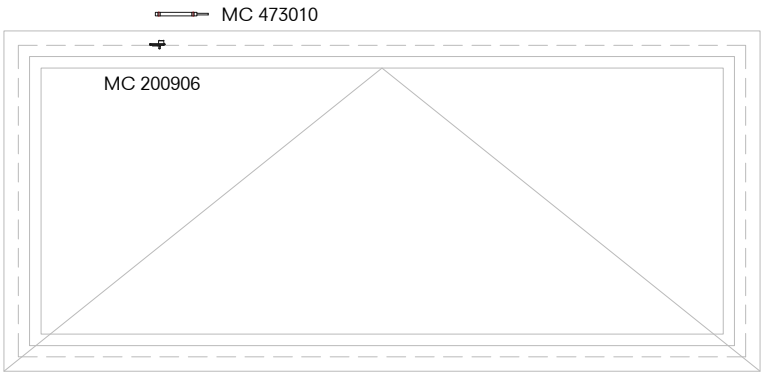
Alarmkontakt

K99062

Fênetre à soufflet

Contact d'alarme

K99062



Bottom hung windows

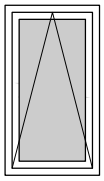
Determination of LBB
(Groove Hardware Lenght)

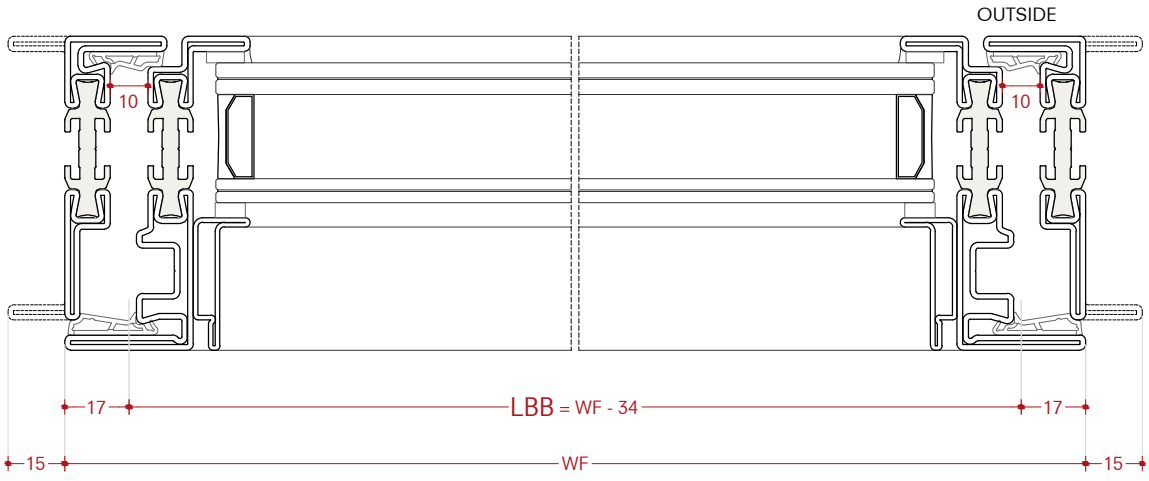
Kippfenster

Bestimmung von LBB
(Beschlagnutbreite)

Fênetre à soufflet

Détermination du LBB
(largeur de rainure de quincaillerie)





Bottom hung windows

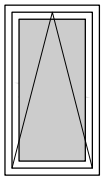
Determination of HBB
(Groove Hardware Height)

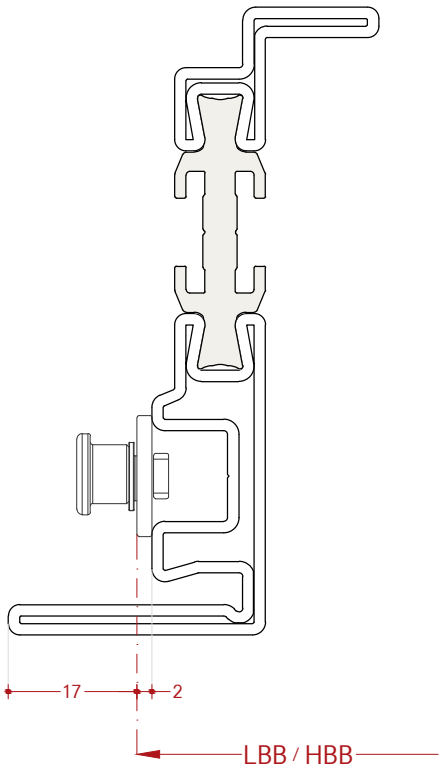
Kippfenster

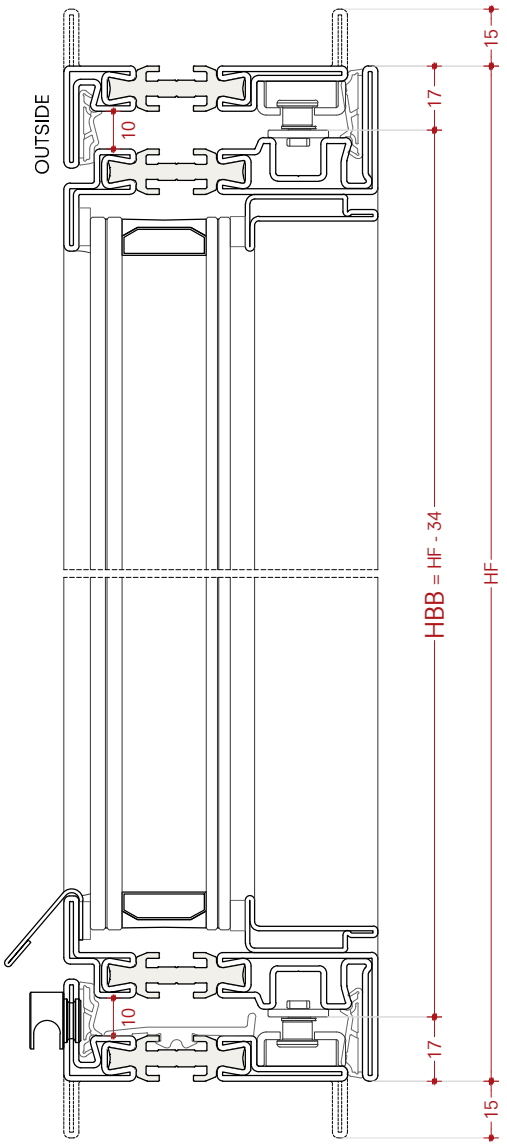
Bestimmung von HBB
(Höhe der Beschlagnut)

Fênetre à soufflet

Détermination du HBB
(hauteur de rainure de quincaillerie)







Bottom hung windows

Load capacity tables

Capacity of bottom hung window with concealed compression locks

Kippfenster

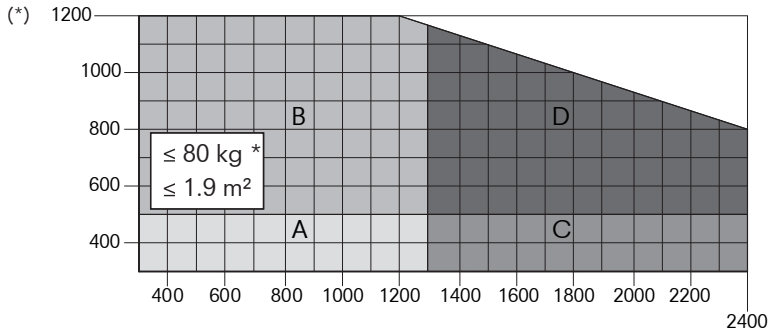
Gewichtstabellen

Gewicht Kippfenster mit Anpressverschluss verdeckt

Fênetre à soufflet

Capacité maximale

Capacité de la fenêtre à soufflet avec serrures à compression cachée



(*) Extendable to a height of 1800 mm using screw-on hinges.

(*) Durch Anschraubband auf eine Höhe von 1800 mm erweiterbar.

(*) Extensible jusqu'à une hauteur de 1800 mm grâce à des paumelles à visser.

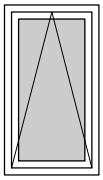
Bottom hung windows **Kippfenster** **Fênetre à soufflet**

Step #1 - Gear kit choice

Schritt #1 - Garnitur Getriebe

Étape #1 - Choix de kit d'équipement

	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

Schritt #2 - Garnitur Bänder

Étape #2 - Choix kit paumelles

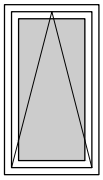
	LBB min	LBB max
K88055	390	1000
K88056	1001	1400
K88057	1401	1800
K88058	1801	2250

Step #3 - Opening restrictor choice

Schritt #3 - Öffnungsbegrenzer

Étape #3 - Choix compas de limitation d'ouverture

	HBB min	HBB max	
E99205-05	400	1200	adjustable opening
E99206-05	400	1200	releasable
K88107	520	620	recommended
K88108	621	1200	recommended



Step #4 - Alarm contact choice

Schritt #4 - Alarmkontakt

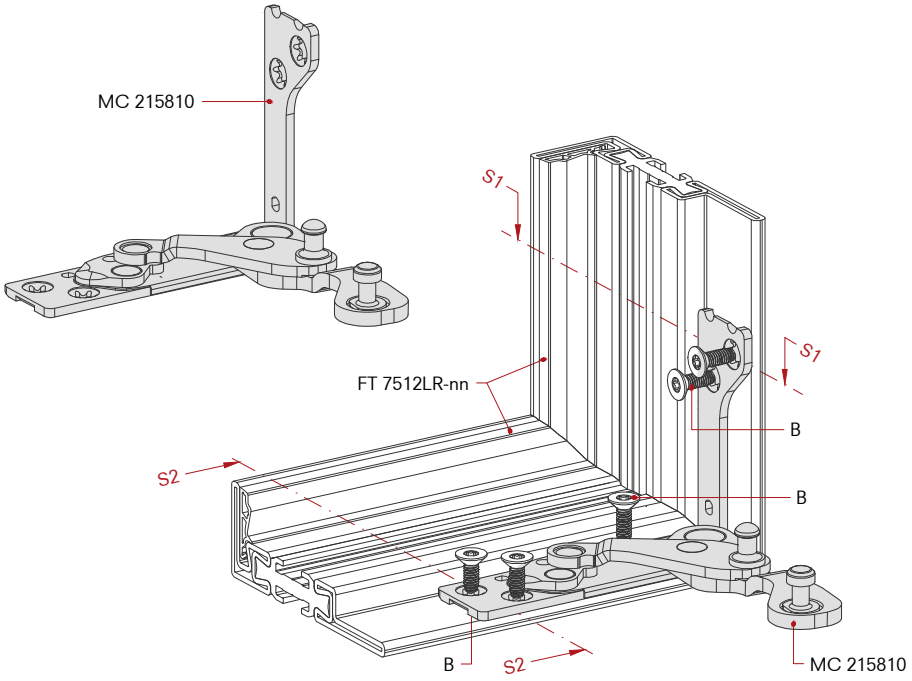
Étape #4 - Choix contact d'alarme

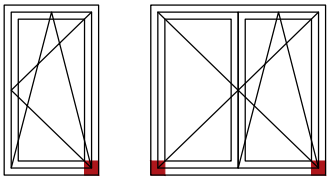
K99062

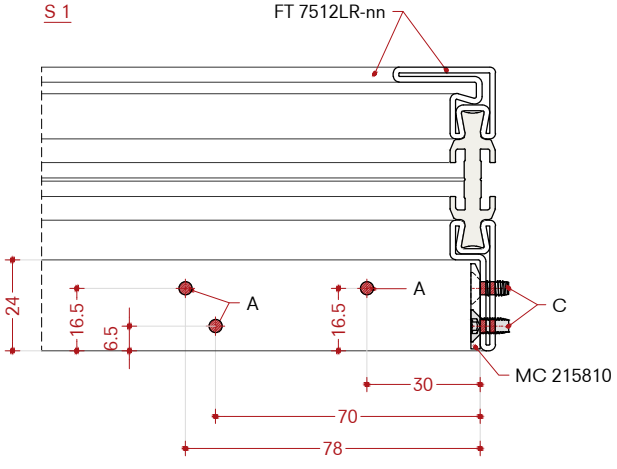
Pivot post
MC 215810 R
MC 215811 L
Leaf weight ≤ 150 kg
Installation on frame

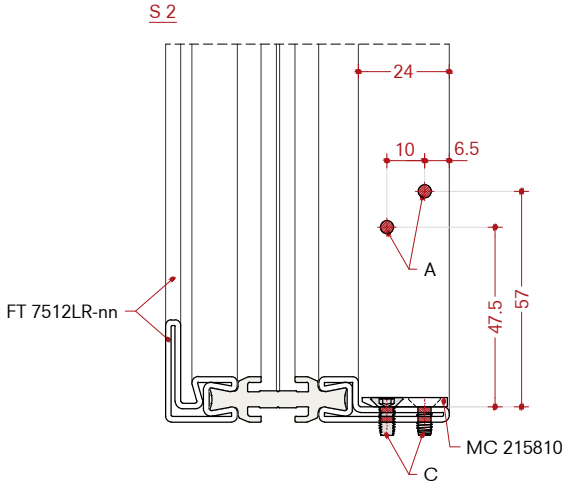
Ecklager
MC 215810 R
MC 215811 L
Flügelgewicht ≤ 150 kg
Einbau im Rahmen

Palier d'angle
MC 215810 R
MC 215811 L
Poids du vantail ≤ 150 kg
Montage sur le cadre









W75TB - 0001 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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x10
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

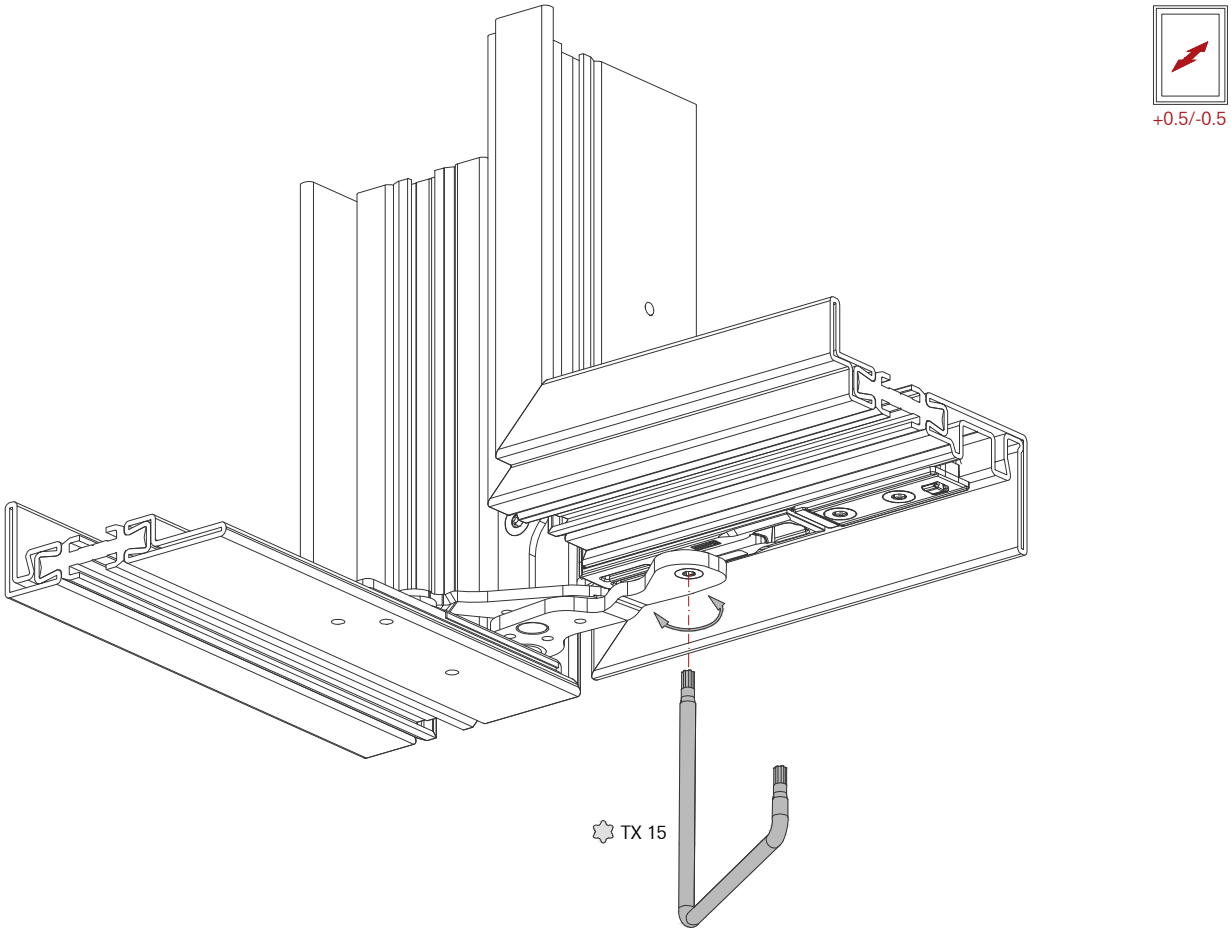
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x10
C) Couper la vis

L = Ouverture gauche
R = Ouverture droite

Pressure adjustment

Anpressdruck Einstellung

Réglage de la pression de contact



Adjustment range ± 0.5 mm with TX 15

L = Left opening
R = Right opening

Einstellbereich ± 0.5 mm mit TX 15

L = DIN links
R = DIN rechts

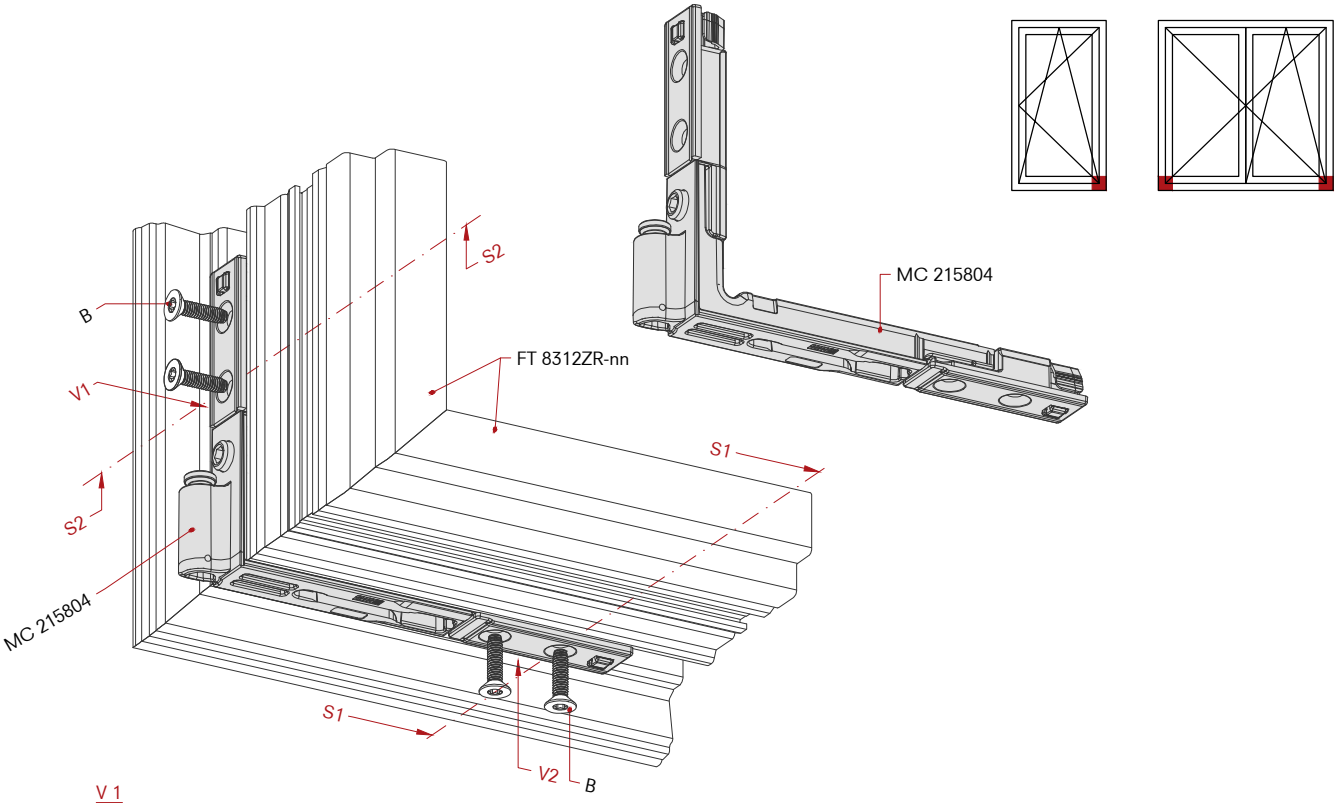
Plage de réglage ± 0.5 mm avec TX 15

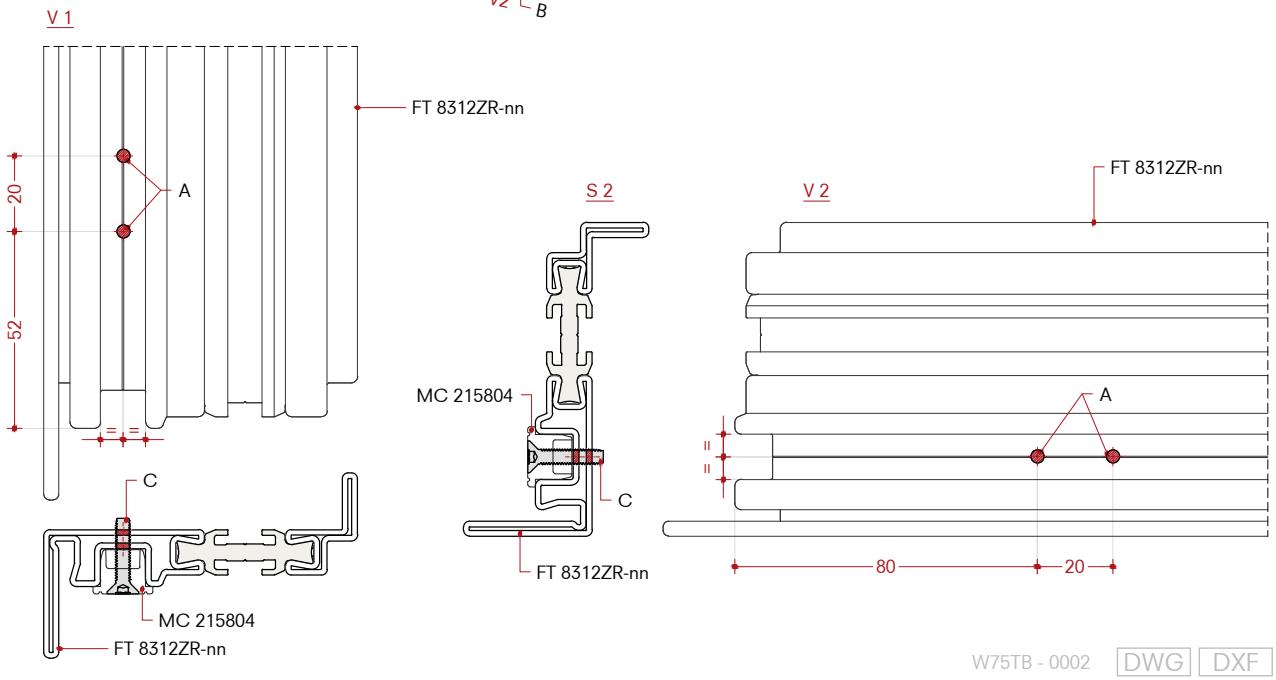
L = Ouverture gauche
R = Ouverture droite

Corner support
MC 215804 R
MC 215805 L
Leaf weight ≤ 150 kg
Installation on leaf

Ecklagerband
MC 215804 R
MC 215805 L
Flügelgewicht ≤ 150 kg
Einbau im Flügel

Fiche d'angle
MC 215804 R
MC 215805 L
Poids du vantail ≤ 150 kg
Montage dans le vantail





W75TB - 0002 DWG DXF

S 1

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

L = Left opening
R = Right opening

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

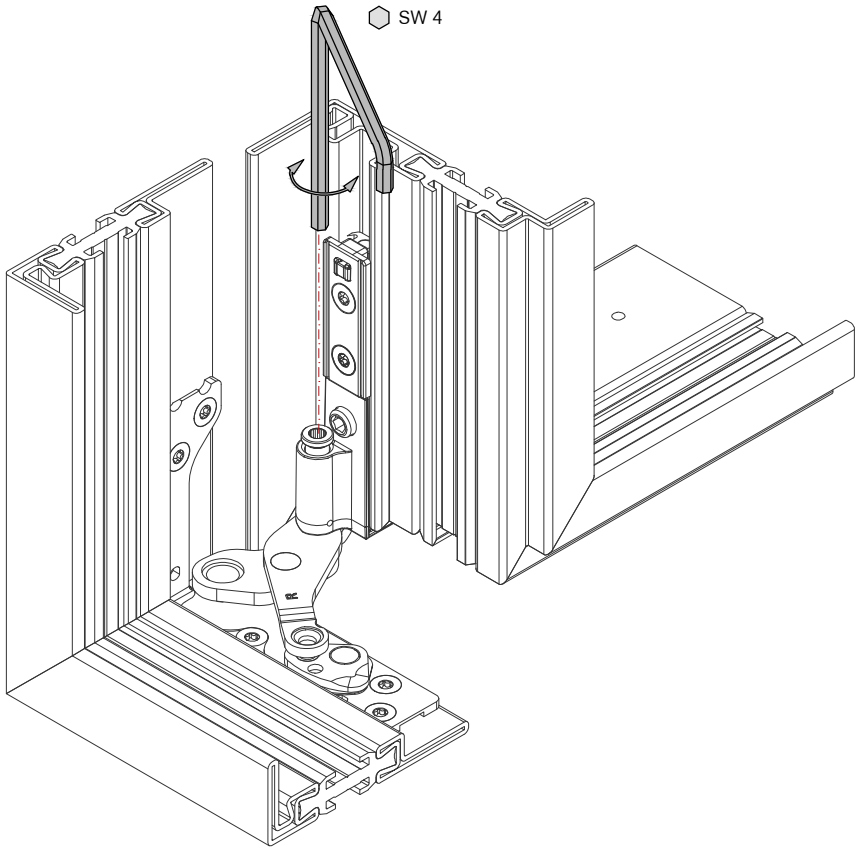
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

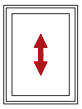
L = Ouverture gauche
R = Ouverture droite

Height adjustment

Höheneinstellung

Réglage de la hauteur

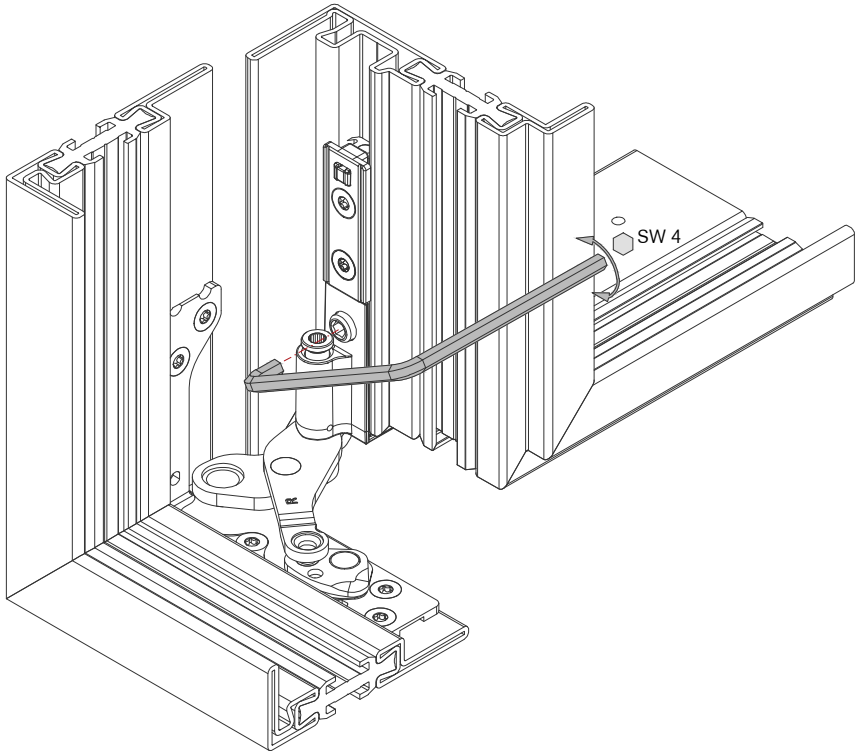


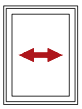


Side adjustment

Seiteneinstellung

Réglage latéral





Adjustment range -1/+2 mm with SW 4

L = Left opening
R = Right opening

Einstellbereich -1/+2 mm mit SW 4

L = DIN links
R = DIN rechts

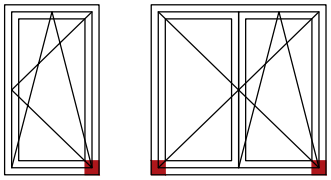
Plage de réglage -1/+2 mm avec SW 4

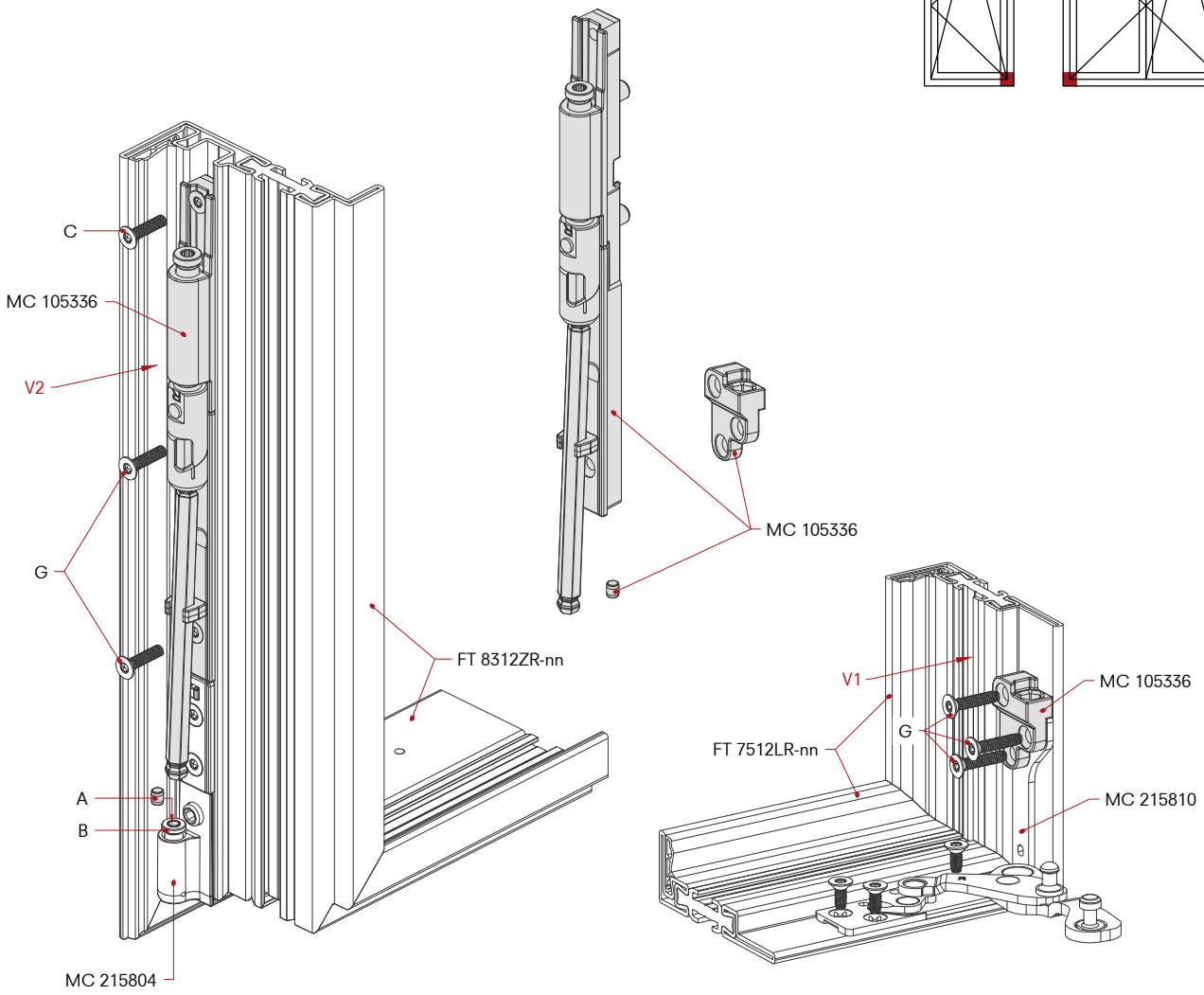
L = Ouverture gauche
R = Ouverture droite

Load transfer MULTI POWER
MC 105336 R
MC 105339 L
Leaf weight ≤ 180 kg
Installation frame and leaf

Lastabtragung MULTI POWER
MC 105336 R
MC 105339 L
Flügelgewicht ≤ 180 kg
Einbau Rahmen und Flügel

Reprise de charge MULTI POWER
MC 105336 R
MC 105339 L
Poids du vantail ≤ 180 kg
Montage cadre et vantail





W75TB - 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 M4x20

L = Left opening
R = Right opening

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Plombe in die Höhenstellschraube des Ecklagerbandes komplett eindrücken
B) Die Höhenstellschraube muss sich in "Neutralstellung" befinden (Auslieferungszustand)
C) Bohrdurchmesser Ø3.3 mm
D) Bohrdurchmesser Ø7 mm
E) Überstehende Bolzen (MC 105336 / MC 105339 Ø7 mm) kürzen
F) Schraube kürzen
G) Senkkopfschraube M4x20

L = DIN links
R = DIN rechts

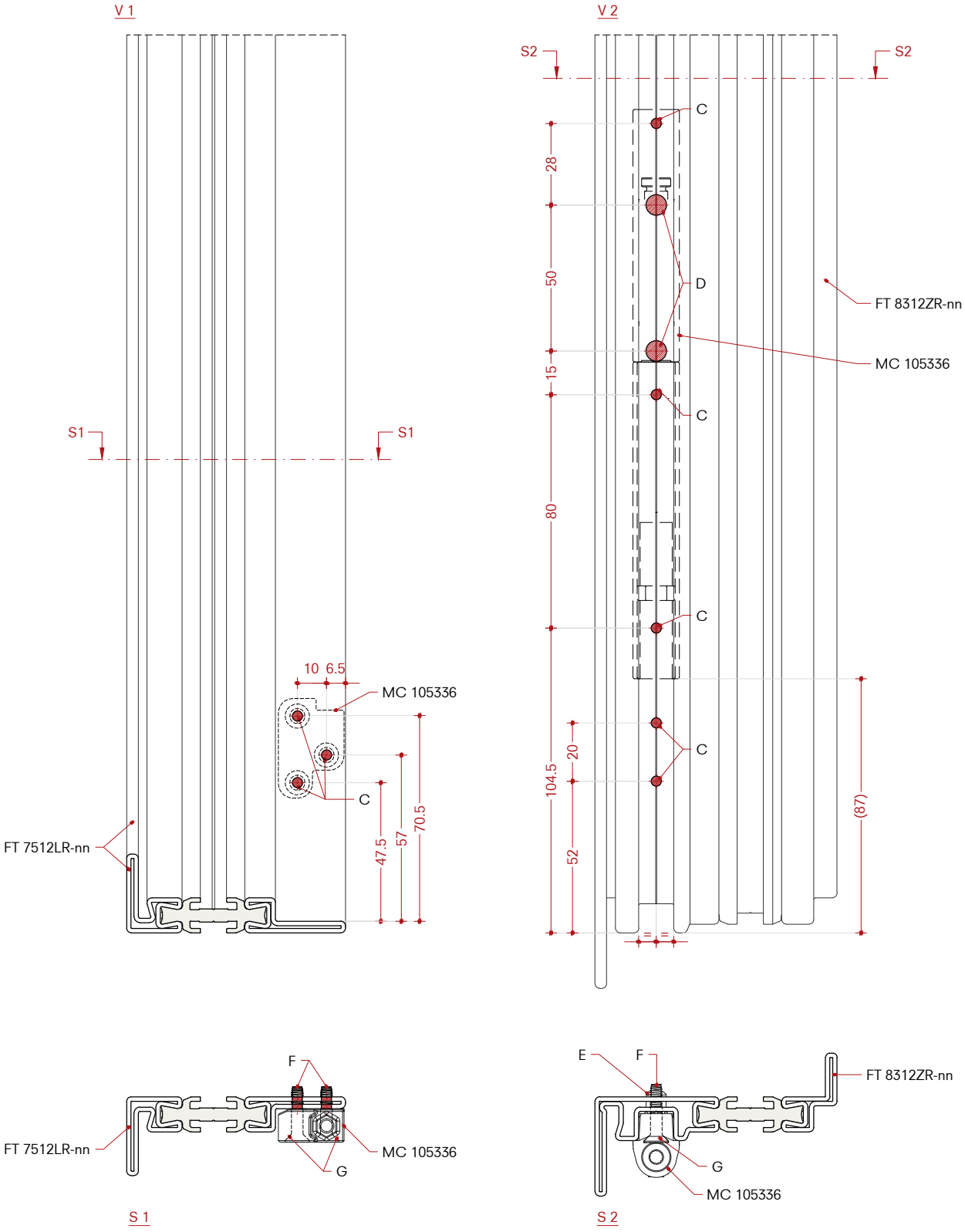
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Enfoncer complètement le plomb dans la vis de réglage en hauteur de la fiche d'angle
B) La vis de réglage en hauteur doit se trouver en position "neutre" (position de livraison)
C) Trou Ø3.3 mm
D) Trou Ø7 mm
E) Raccourcir les boulons qui dépassent (MC 105336 / MC 105339 Ø7 mm)
F) Couper la vis
G) Vis à tête fraisée M4x20

L = Ouverture gauche
R = Ouverture droite

Frame
Rahmen
Dormant

Leaf
Flügel
Ouvrant

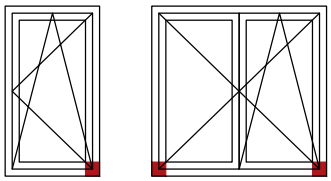


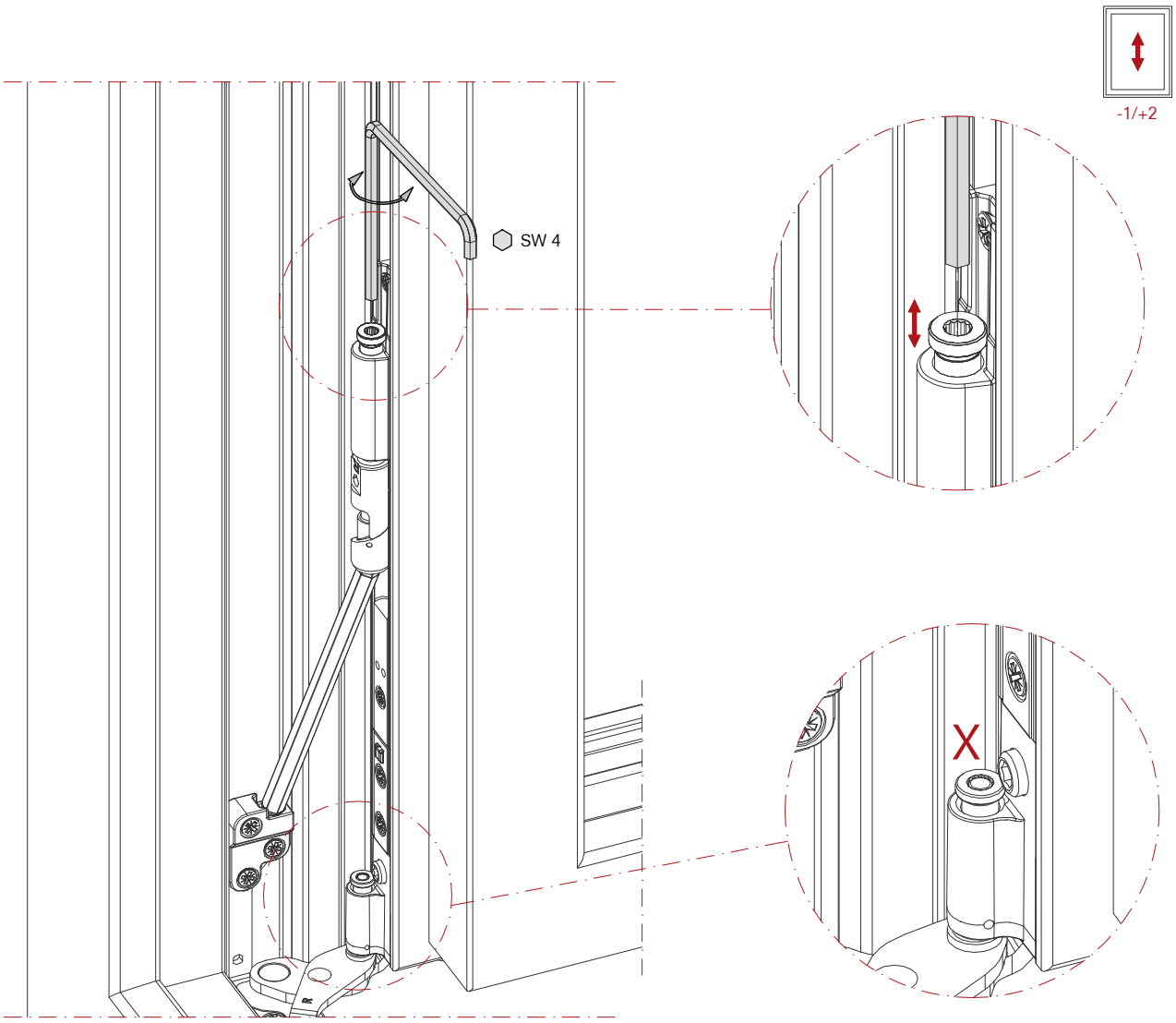
W75TB - 0003 DWG DXF

Height adjustment

Höheneinstellung

Réglage de la hauteur





⬡ Adjustment range -1/+2 mm with SW 4

X = No adjustment allowed here

L = Left opening
R = Right opening

⬡ Einstellbereich -1/+2 mm mit SW 4

X = Hier keine Verstellung zulässig

L = DIN links
R = DIN rechts

⬡ Plage de réglage -1/+2 mm avec SW 4

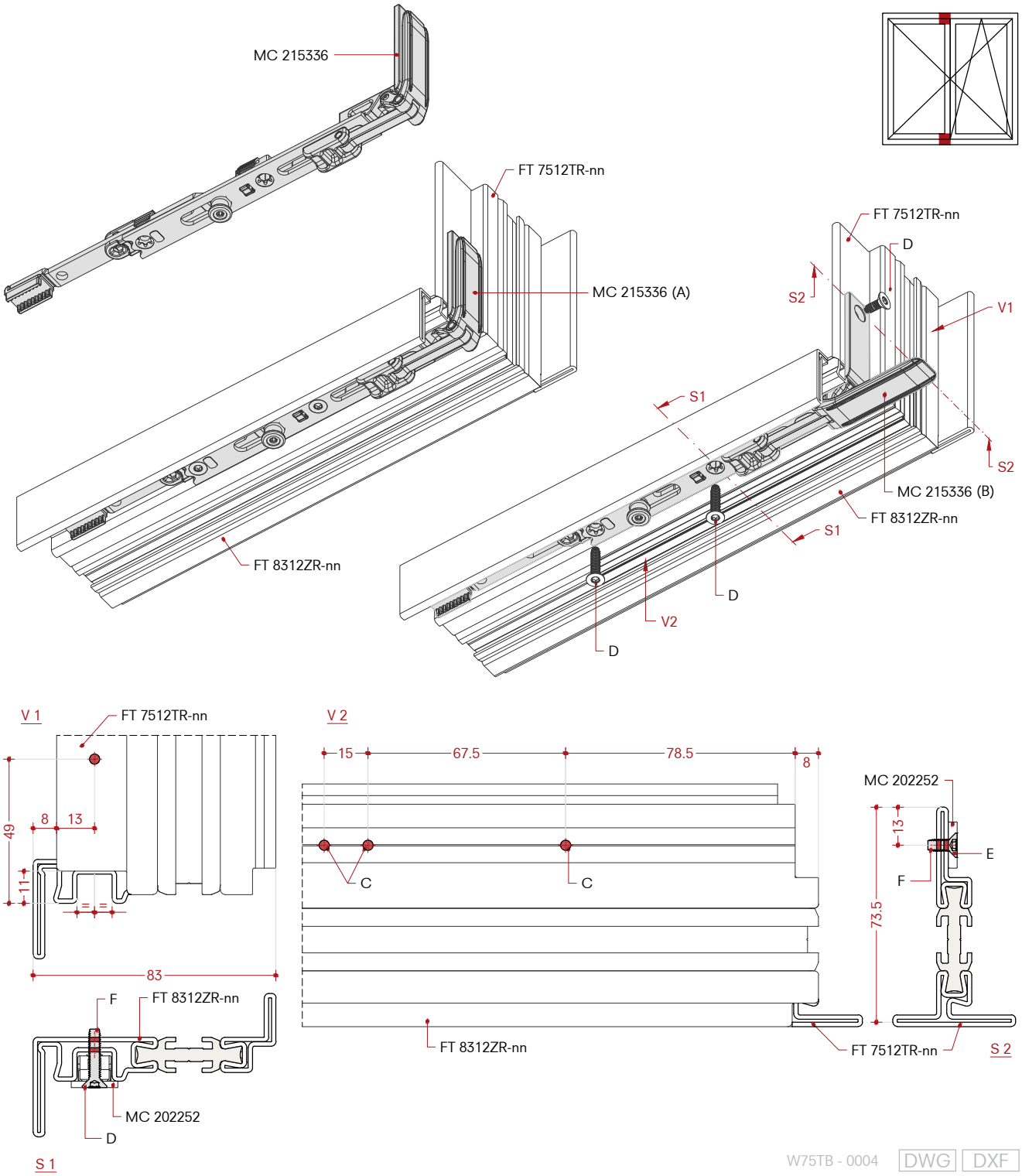
X = Aucun ajustement autorisé ici

L = Ouverture gauche
R = Ouverture droite

Extendable french casement lock
MC 215336
Installation on 2nd leaf

Stulpflügelverschluss verlängerbar
MC 215336
Einbau im Stulpflügel

Verrouillage de semi-fixe rallongeable
MC 215336
Montage sur semi-fixe



W75TB - 0004 DWG DXF

Drawing represents below - installation above mirror-inverted

A) Illustration: Leaf in turning position
B) Illustration: Leaf in closed position
C) Hole Ø3.3 mm
D) Countersunk screw M4x20
E) Countersunk screw M4x10
F) Cut the screw

Dargestellt Einbau unten - Einbau oben spiegelbildlich

A) Darstellung: Flügel in Dreh-Stellung
B) Darstellung: Flügel in Geschlossen-Stellung
C) Bohrdurchmesser Ø3.3 mm
D) Senkkopfschraube M4x20
E) Senkkopfschraube M4x10
F) Schraube kürzen

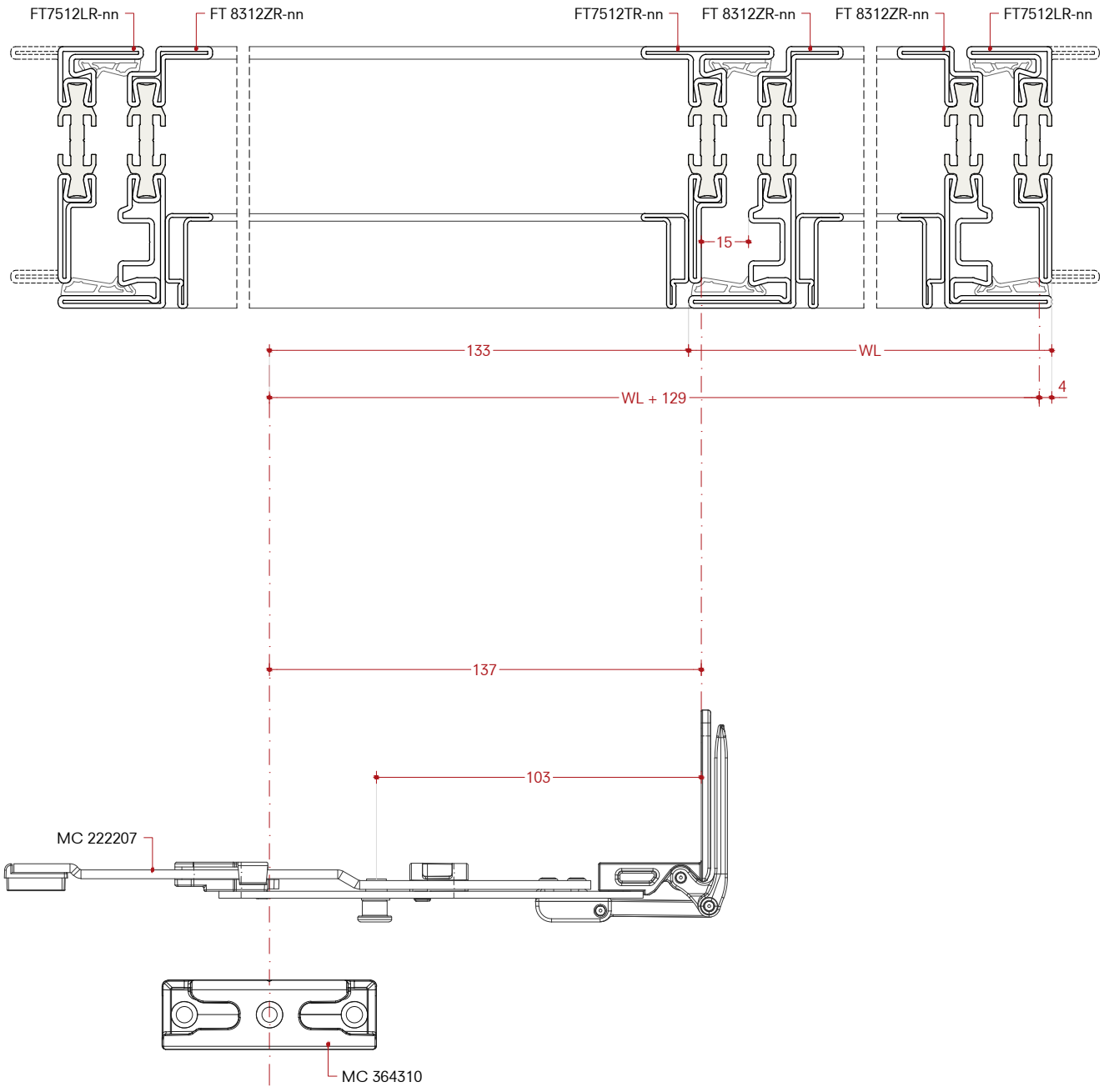
Installation illustrée en dessous - installation au-dessus du miroir inversé

A) Visualiser : Vantail en position ouvrir
B) Visualiser : Vanatil en position fermée
C) Trou Ø3.3 mm
D) Vis à tête fraisée M4x20
E) Vis à tête fraisée M4x10
F) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

WL = Länge Flügel

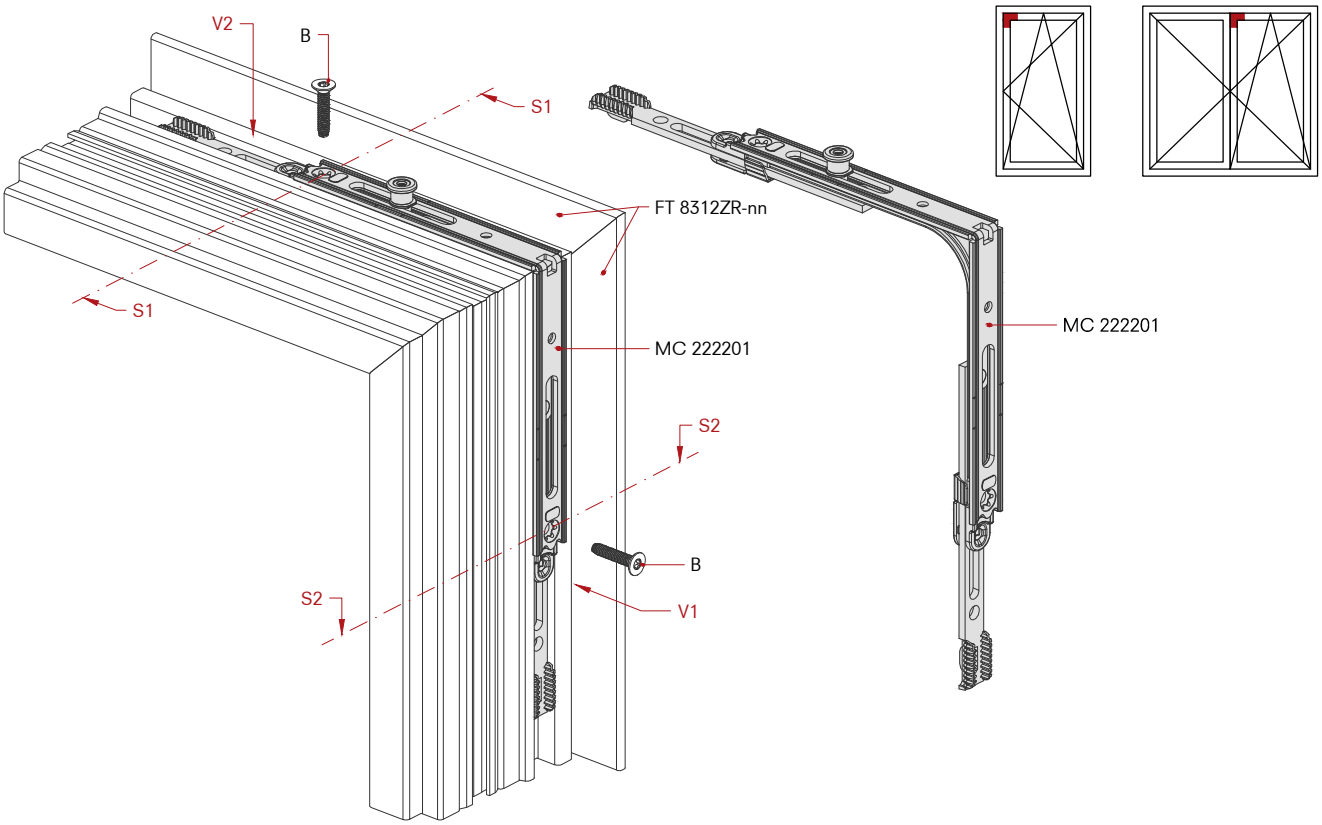
Montré ouverture droite
(ouverture gauche inversé en miroir)

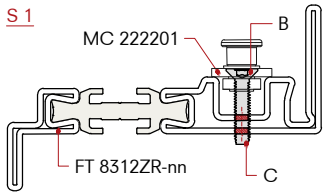
WL = Largeur ouvrant

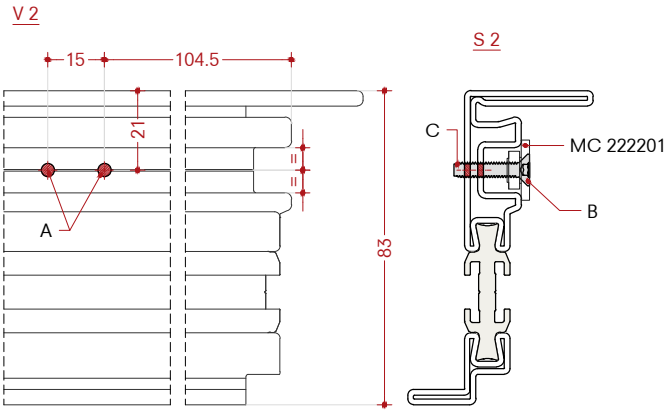
Corner element standard with 1 locking cam
MC 222201

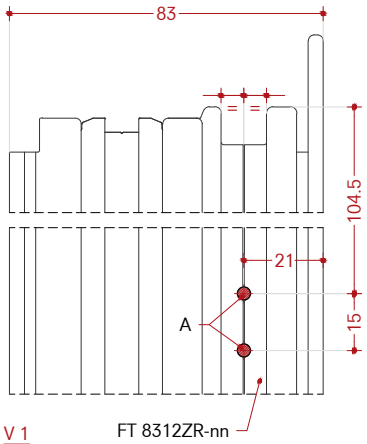
Eckumlenkung Standard mit 1 Verriegelungszapfen
MC 222201

Renvoi d'angle standard avec 1 galet de verrouillage
MC 222201









W75TB - 0005 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

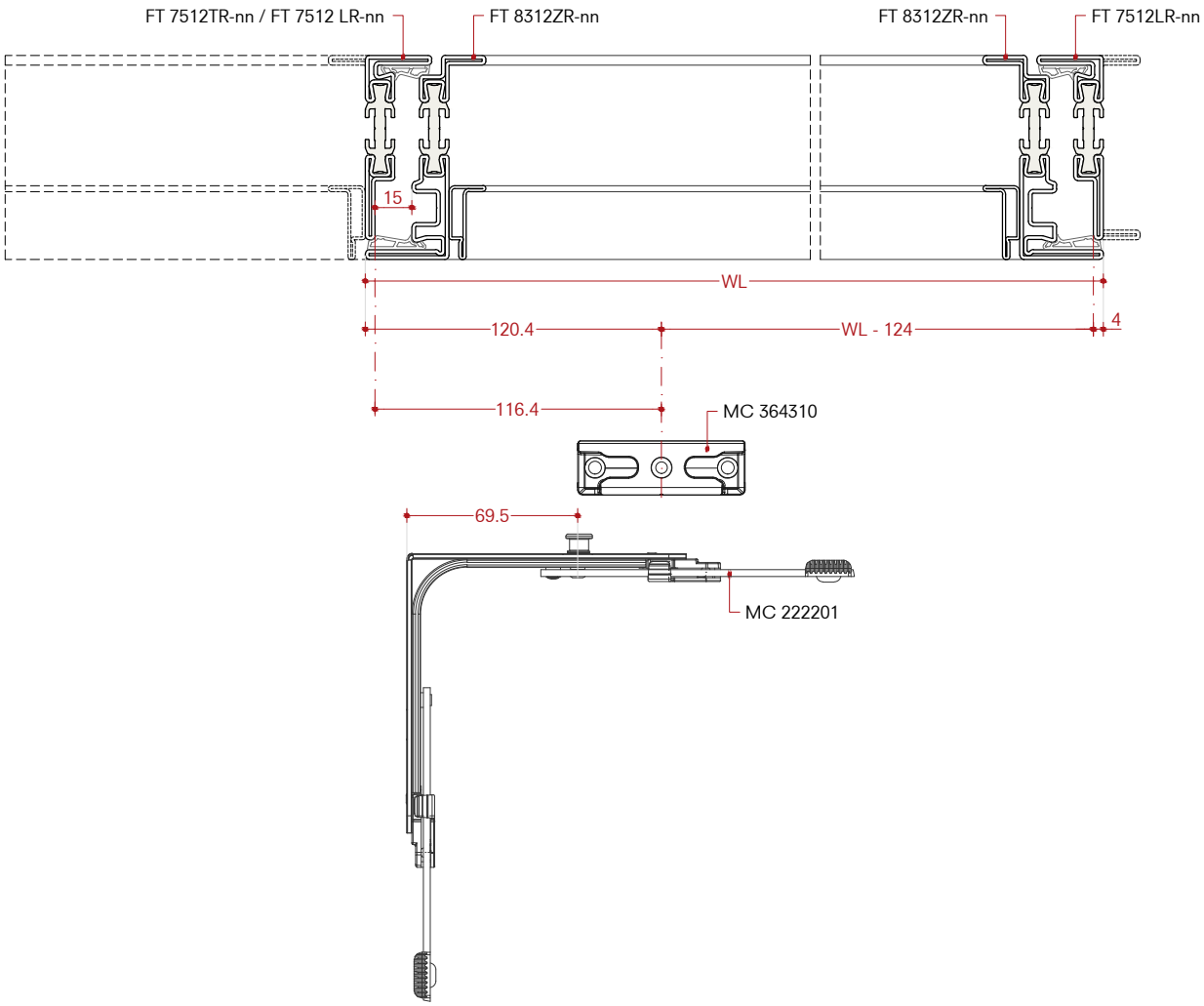
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

WL = Länge Flügel

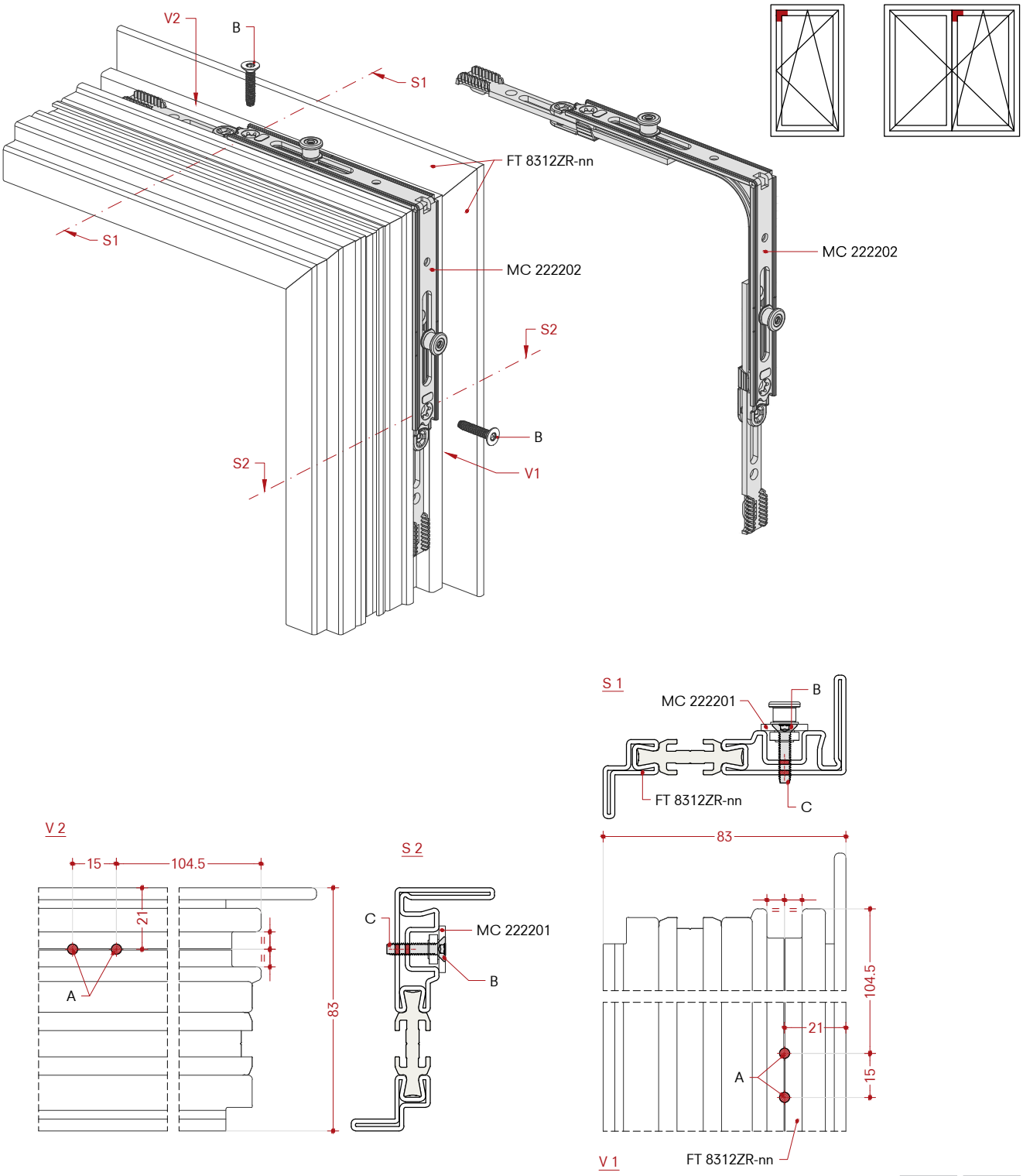
Montré ouverture droite
(ouverture gauche inversé en miroir)

WL = Largeur ouvrant

Corner element standard with 2 locking cams
MC 222202

Eckumlenkung Standard mit 2 Verriegelungszapfen
MC 222202

Renvoi d'angle standard avec 2 galets de verrouillage
MC 222202



W75TB - 0006 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
D) Support aluminum in house production
(installation on 2nd leaf)

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
D) Unterlage Aluminium in Eigenfertigung
(Einbau im Stulpflügel)

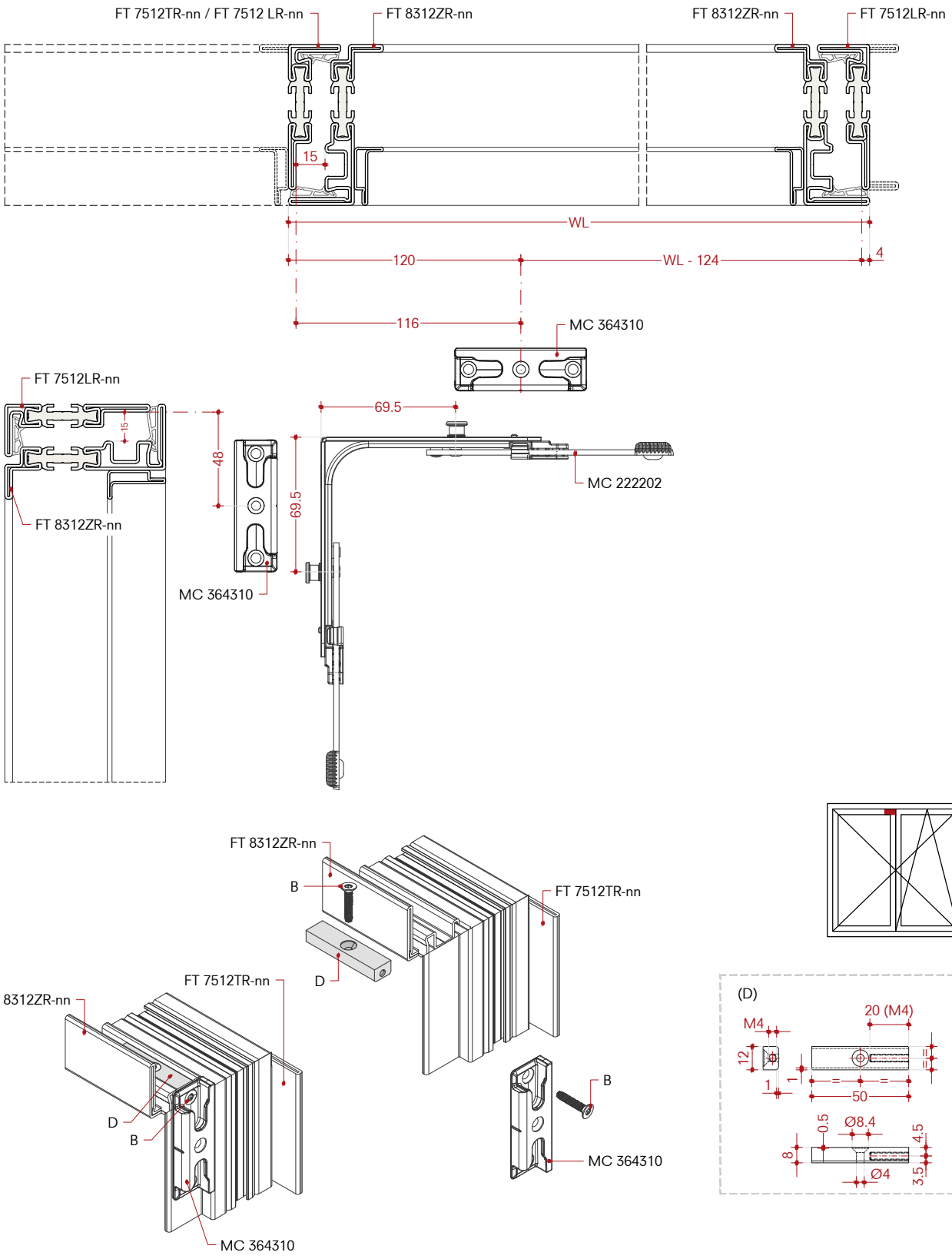
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
D) Soutien à la production interne d'aluminium
(montage sur semi fixe vantail)

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

WL = Länge Flügel

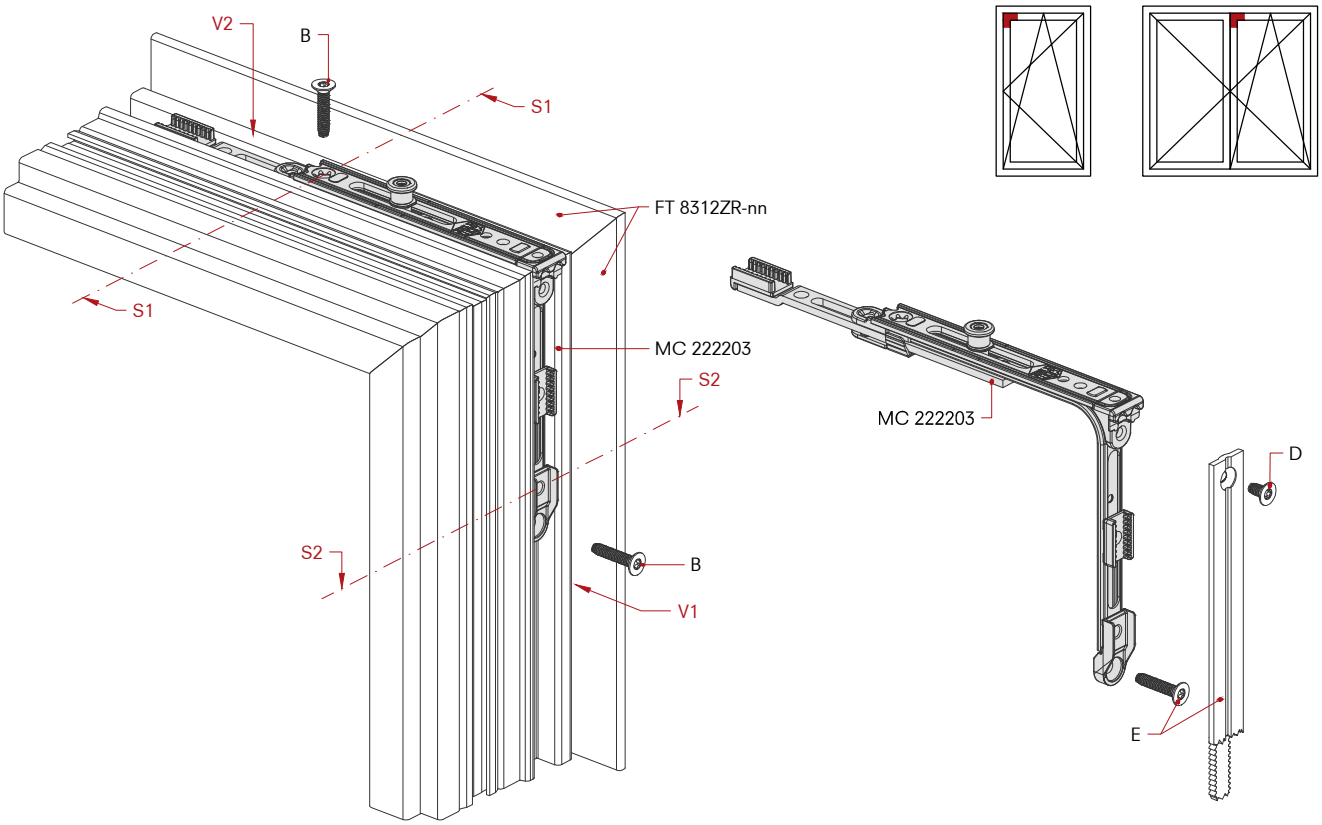
Montré ouverture droite
(ouverture gauche inversé en miroir)

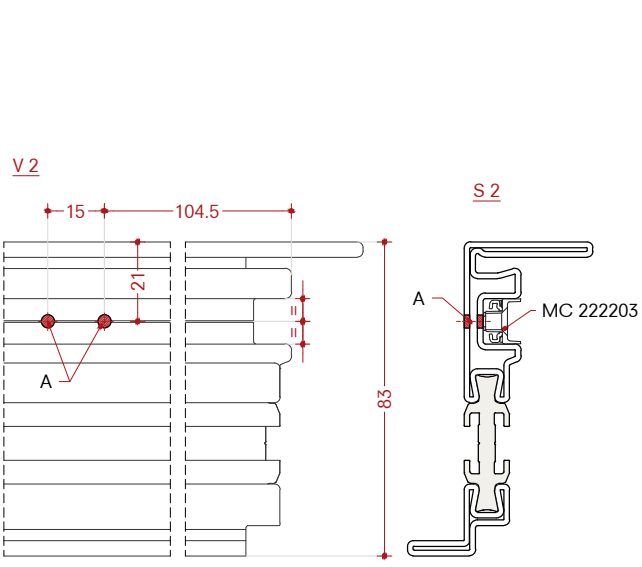
WL = Largeur ouvrant

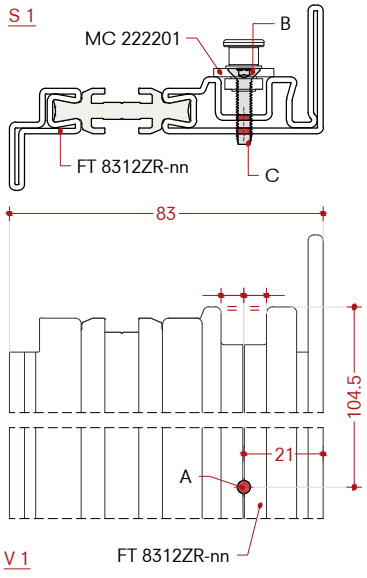
Corner element short with 1 locking cams
MC 222203

Eckumlenkung kurz mit 1 Verriegelungszapfen
MC 222203

Renvoi d'angle court avec 1 galet de verrouillage
MC 222203







W75TB - 0007 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
D) Countersunk head screw M4x8 included
E) Please note: fasten groove base before support block

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
D) Senkkopfschraube beigepackt M4x8
E) Bitte beachten: Nutgrundverschraubung vor Stützbockverschraubung durchführen

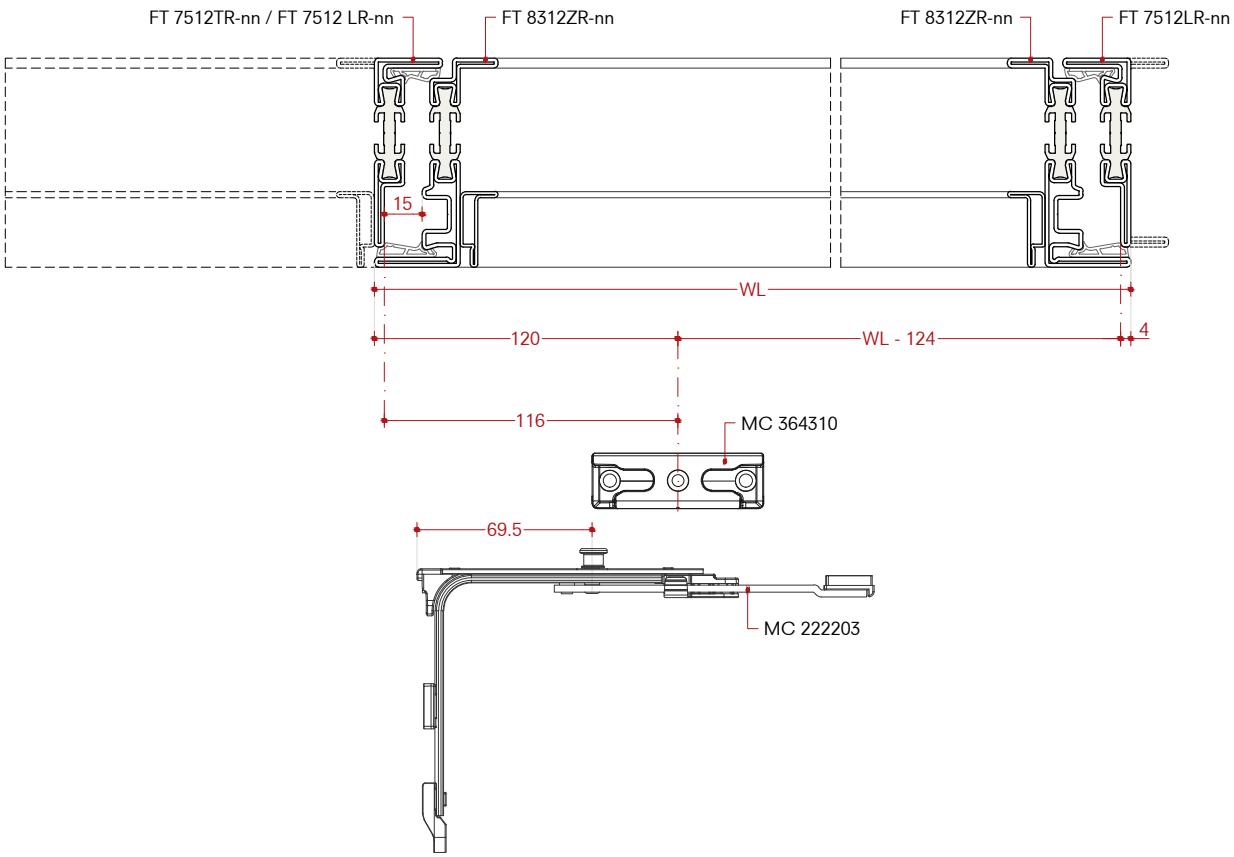
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
D) Vis à tête fraisée jointe M4x8
E) Attention: effectuer d'abord le vissage de fond de gorge avec de vis-ser la butée de soutien

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

WL = Länge Flügel

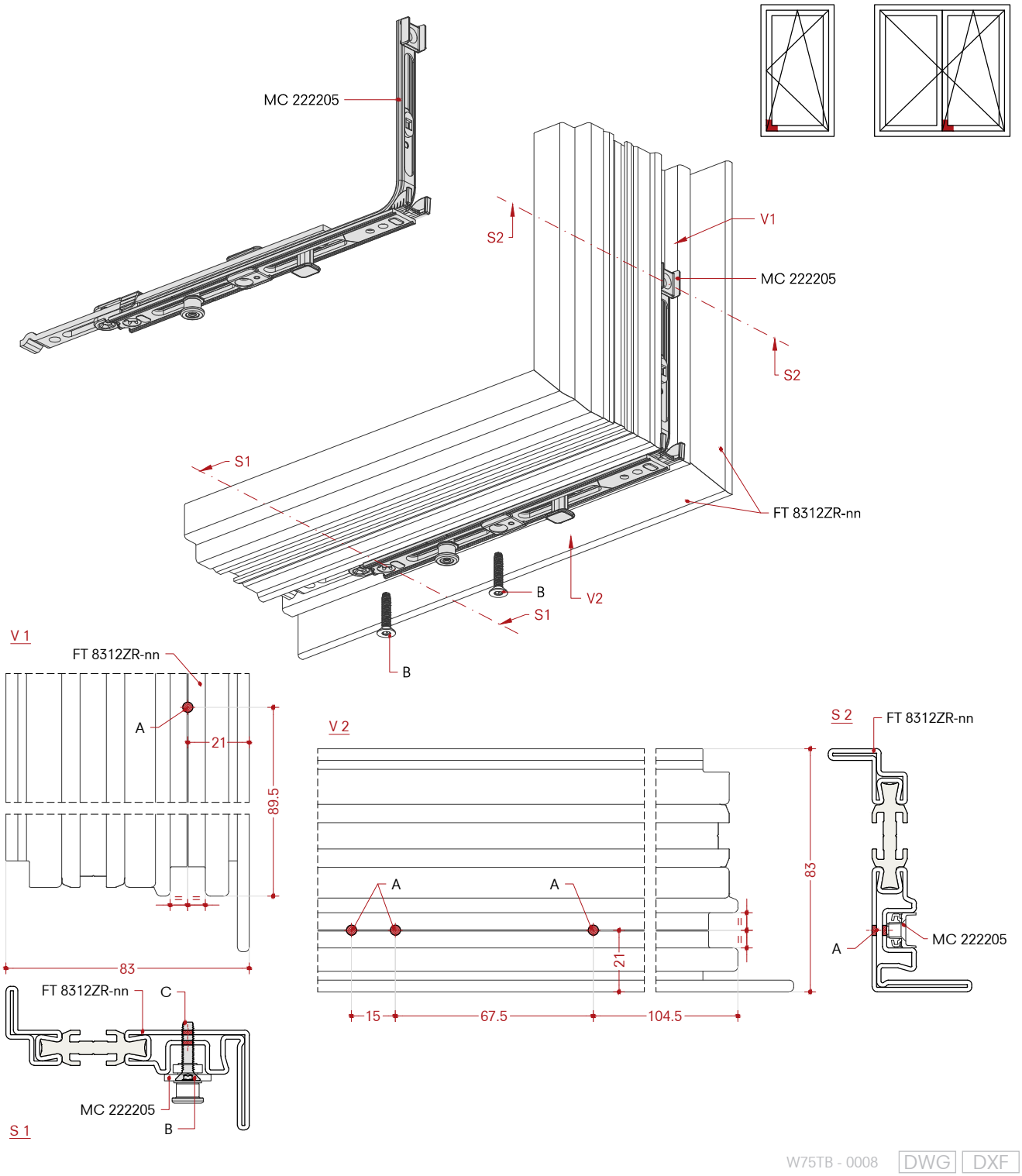
Montré ouverture droite
(ouverture gauche inversé en miroir)

WL = Largeur ouvrant

Corner element horizontally extendable for fixed drive gear with 1 locking cam
MC 222205

Eckumlenkung waagrecht verlängerbar für fixes Getriebe mit 1 Verriegelungszapfen
MC 222205

Renvoi d'angle horizontal rallongeable pour crémone fixe avec 1 galet de verrouillage
MC 222205



W75TB - 0008 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

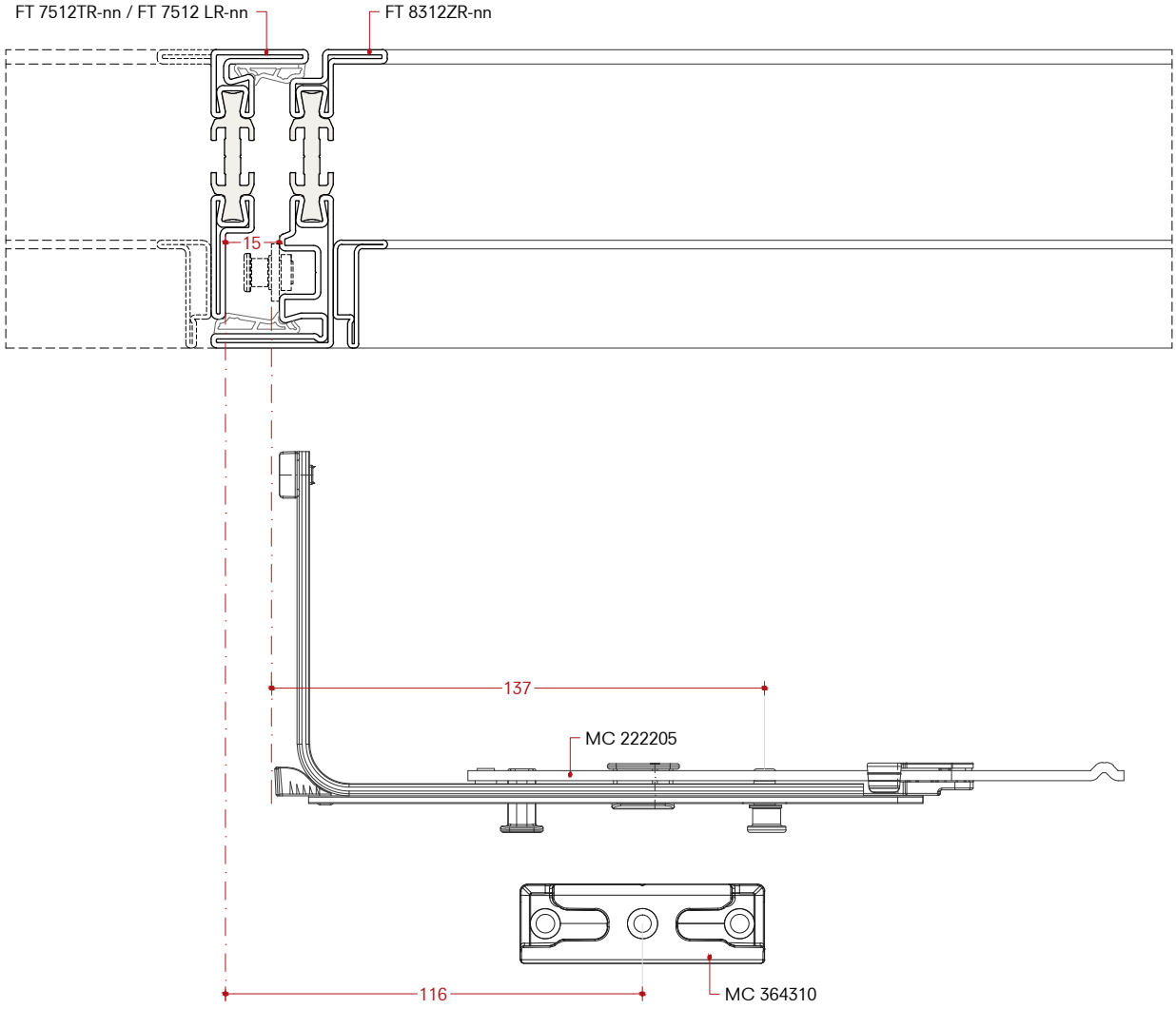
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

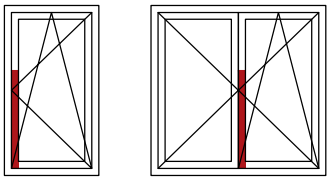
Dargestellt DIN rechts - DIN links spiegelbildlich

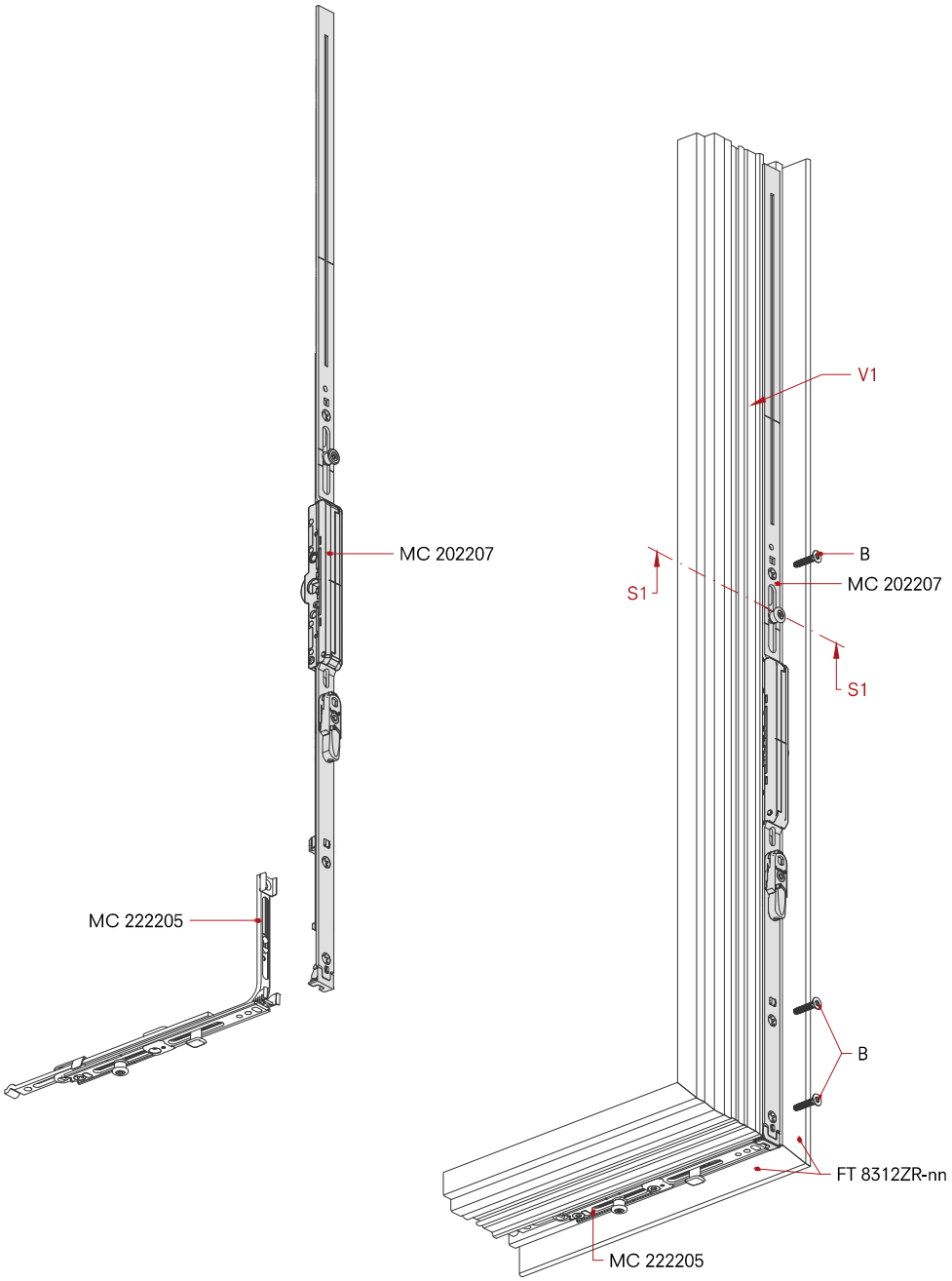
Montré ouverture droite
(ouverture gauche inversé en miroir)

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

DK Getriebe
Dornmass 6.5 mm
Griffhöhe fix
MC 202206 - MC 202207
MC 202208 - MC 202209
MC 202216 - MC 202737
MC 202738 - MC 207305

Crémone OB
Entrée verrouiller 6.5 mm
Hauteur de poignée fixe
MC 202206 - MC 202207
MC 202208 - MC 202209
MC 202216 - MC 202737
MC 202738 - MC 207305





W75TB - 0009 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

X = Position screw connection drive gear

Dargestellt DIN rechts - DIN links spiegelbildlich

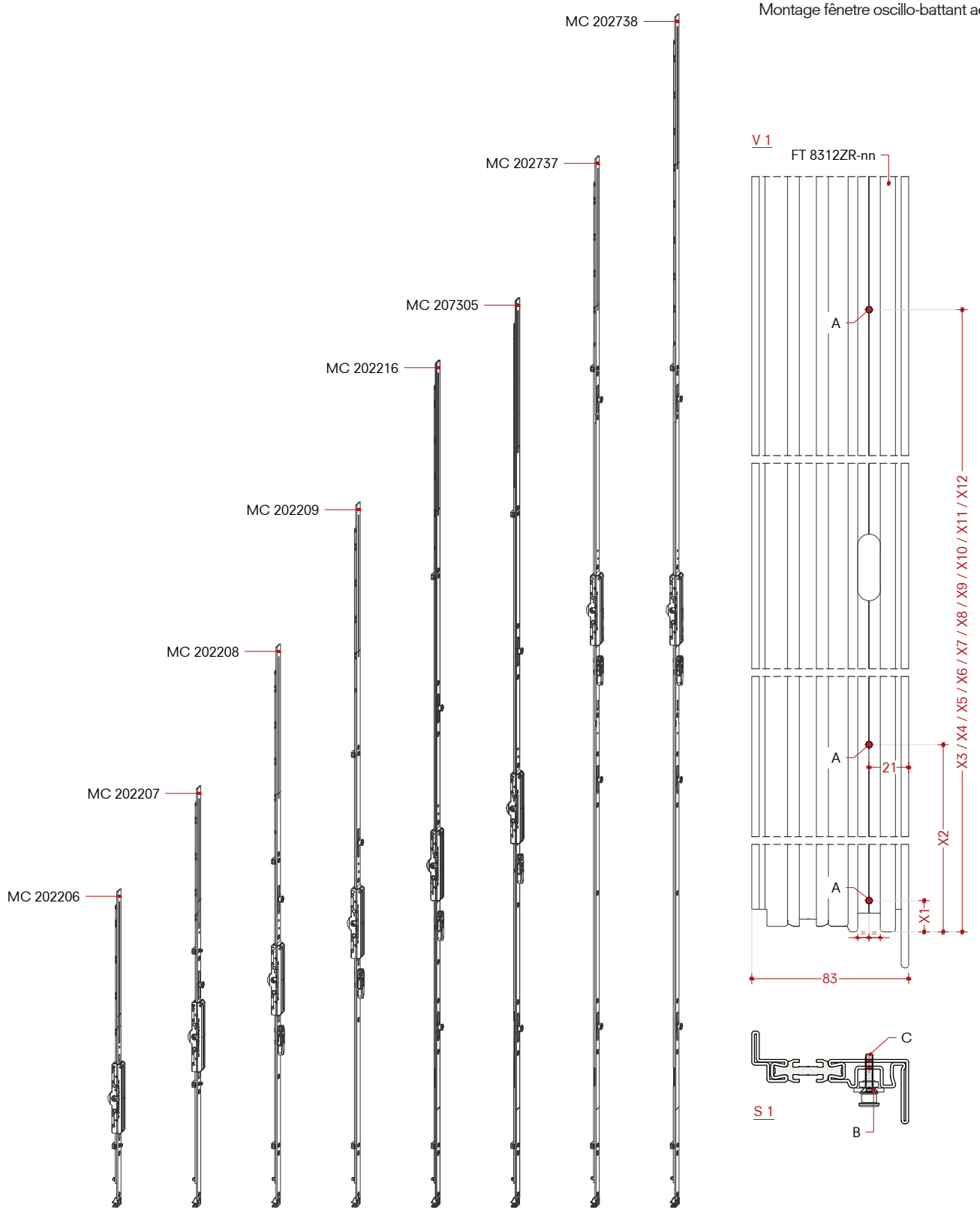
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

X = Lage Verschraubung Getriebe

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

X = Position du raccord à vis pour crémone

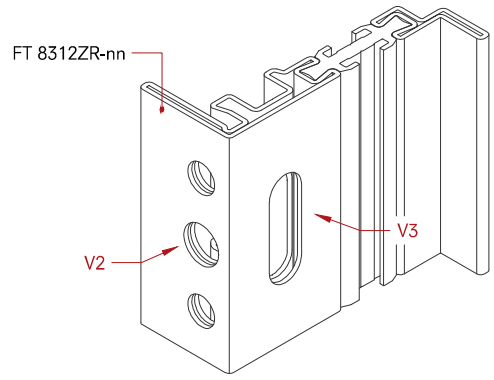


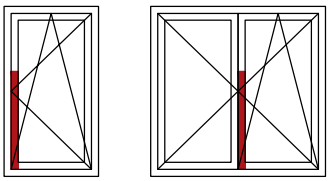
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
MC 202206	16.5	89.5	-	-	-	-	-	-	-	-	-	-
MC 202207	16.5	89.5	427	-	-	-	-	-	-	-	-	-
MC 202208	16.5	89.5	226.5	472	615	-	-	-	-	-	-	-
MC 202209	16.5	89.5	326.5	572	683	866.5	-	-	-	-	-	-
MC 202216	16.5	89.5	268	358	426.5	672	828	918	1117	-	-	-
MC 207305	16.5	89.5	268	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

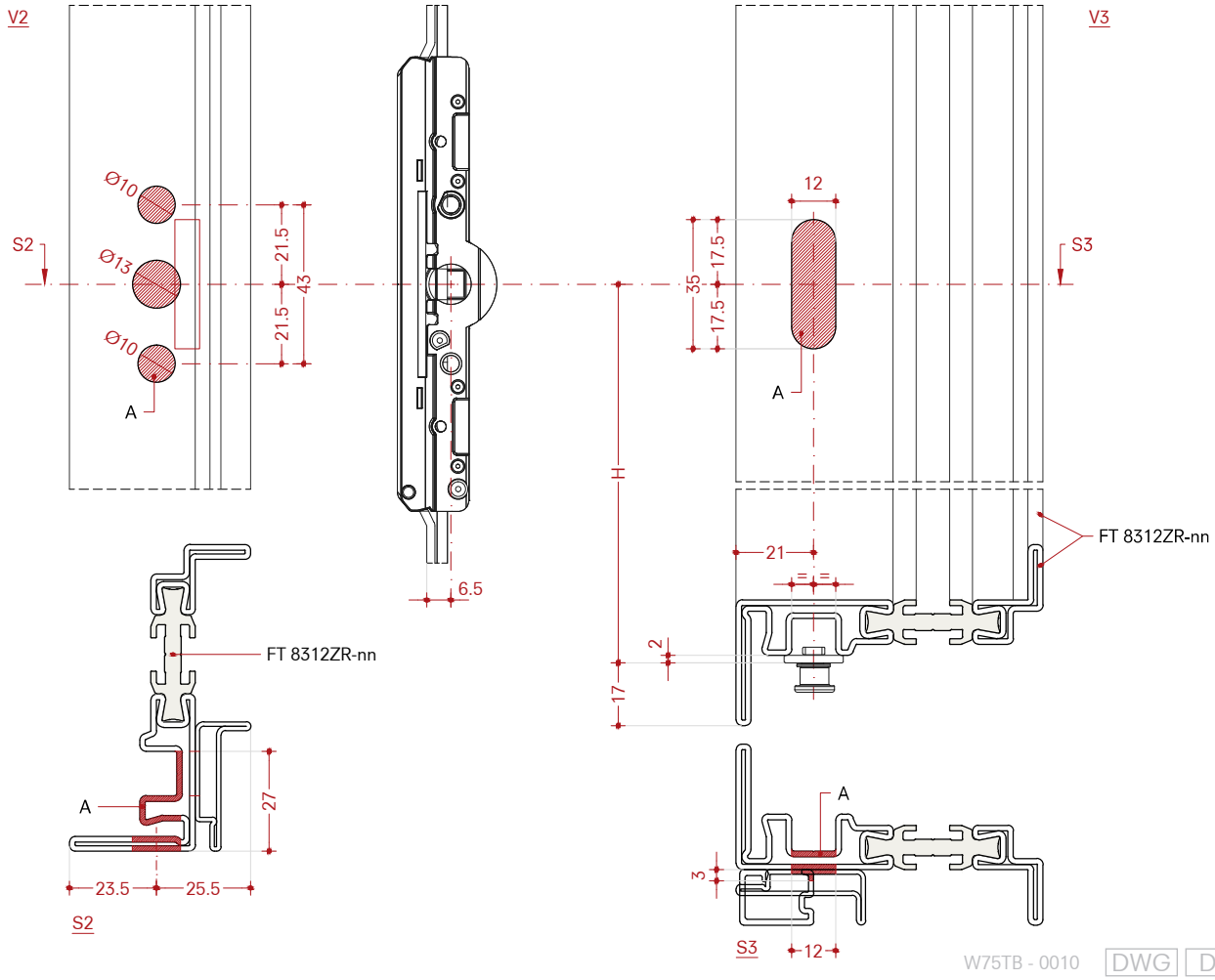
Handle position
Tilt&Turn window
Hardware 6.5 mm backset
Fixed handle height

Griffposition
Dreh-Kippfenster
Dornmaß Getriebe 6.5 mm
Griffhöhe fix

Position de la poignée
fenêtre inclinable et pivotante
Entrée verrouiller 6.5 mm
Hauteur de poignée fixe







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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Profil ausklinken
H) Griffhöhe fix H ≥ 1/3 Flügelhöhe
L) Länge Getriebe
T) Maximale Kürzung Getriebe
Z) Lage Verriegelungszapfen

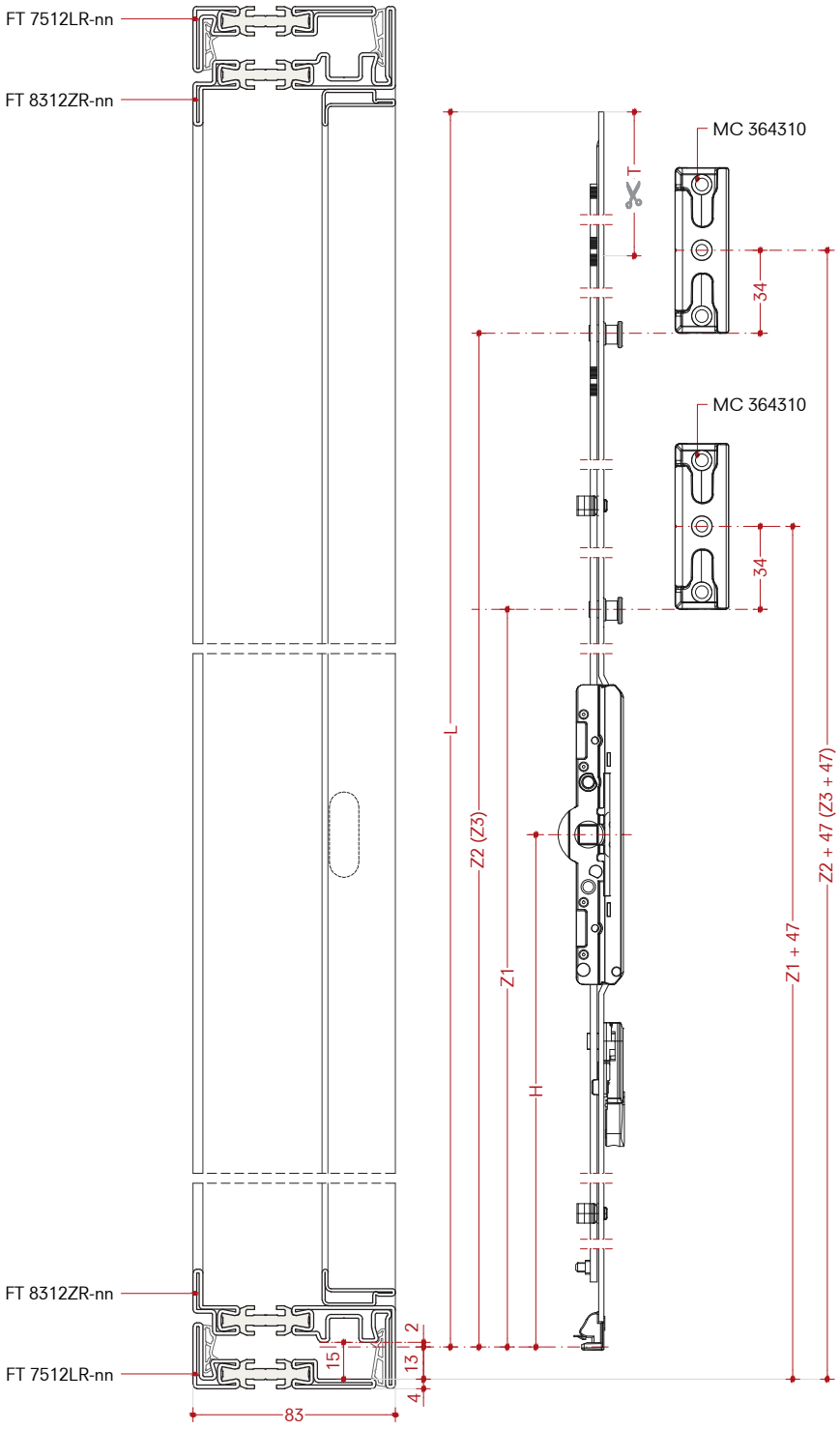
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Pièce à enlever
H) Hauteur de poignée fixe
H ≥ 1/3 de la hauteur ouvrant
L) Longueur du crémone
T) Réduction maximale du crémone
Z) Position de galet de verrouillage

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche

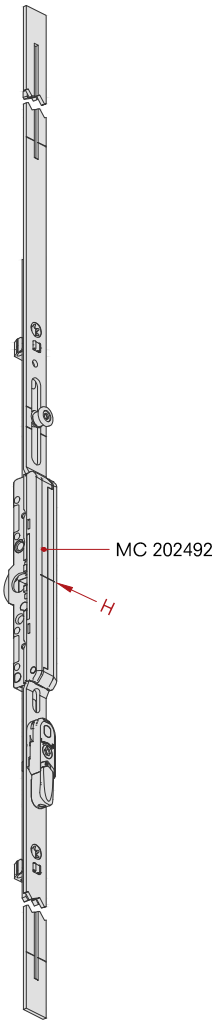


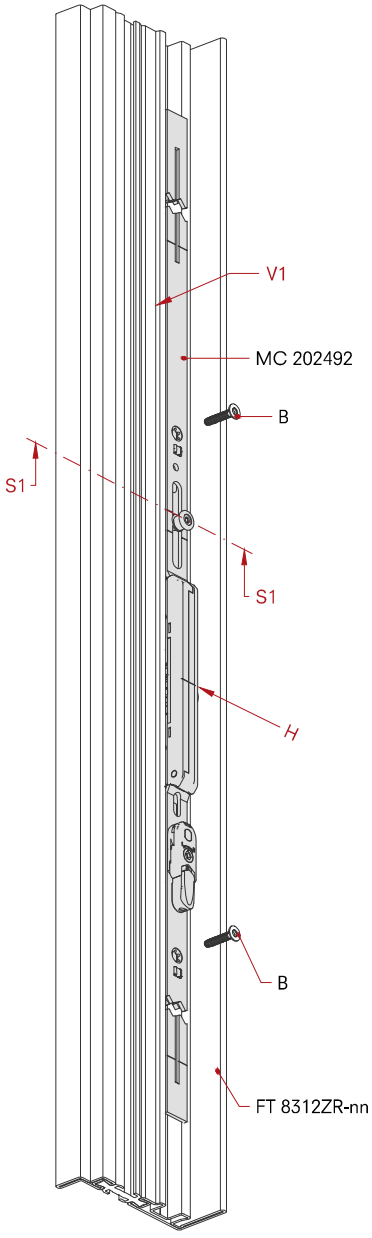
	H	L	T	Z1	Z2	Z3
MC 202206	190	555	220	-	-	-
MC 202207	300	736.5	190.5	395	-	-
MC 202208	400	986.5	260.5	540	-	-
MC 202209	500	1236.5	260.5	640	-	-
MC 202216	600	1486.5	260.5	315	875	-
MC 207305	700	1596.5	260.5	315	975	-
MC 202737	1050	1846.5	260.5	315	750	1420
MC 202738	1050	2096.5	260.5	315	750	1420

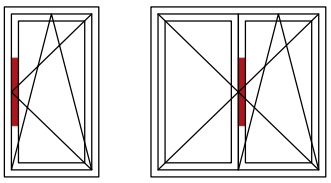
Tilt&Turn drive gear
Backset 6.5 mm
Variable handle height
MC 202491 - MC 202492
MC 202494 - MC 202205

DK Getriebe
Dornmass 6.5 mm
Griffhöhe variabel
MC 202491 - MC 202492
MC 202494 - MC 202205

Crémone OB
Entrée verrouiller 6.5 mm
Hauteur de poignée variable
MC 202491 - MC 202492
MC 202494 - MC 202205







W75TB - 0011 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
H) Variable handle height H ≥ 1/3 leaf height
T) Maximum cut drive gear

X = Position screw connection drive gear

Dargestellt DIN rechts - DIN links spiegelbildlich

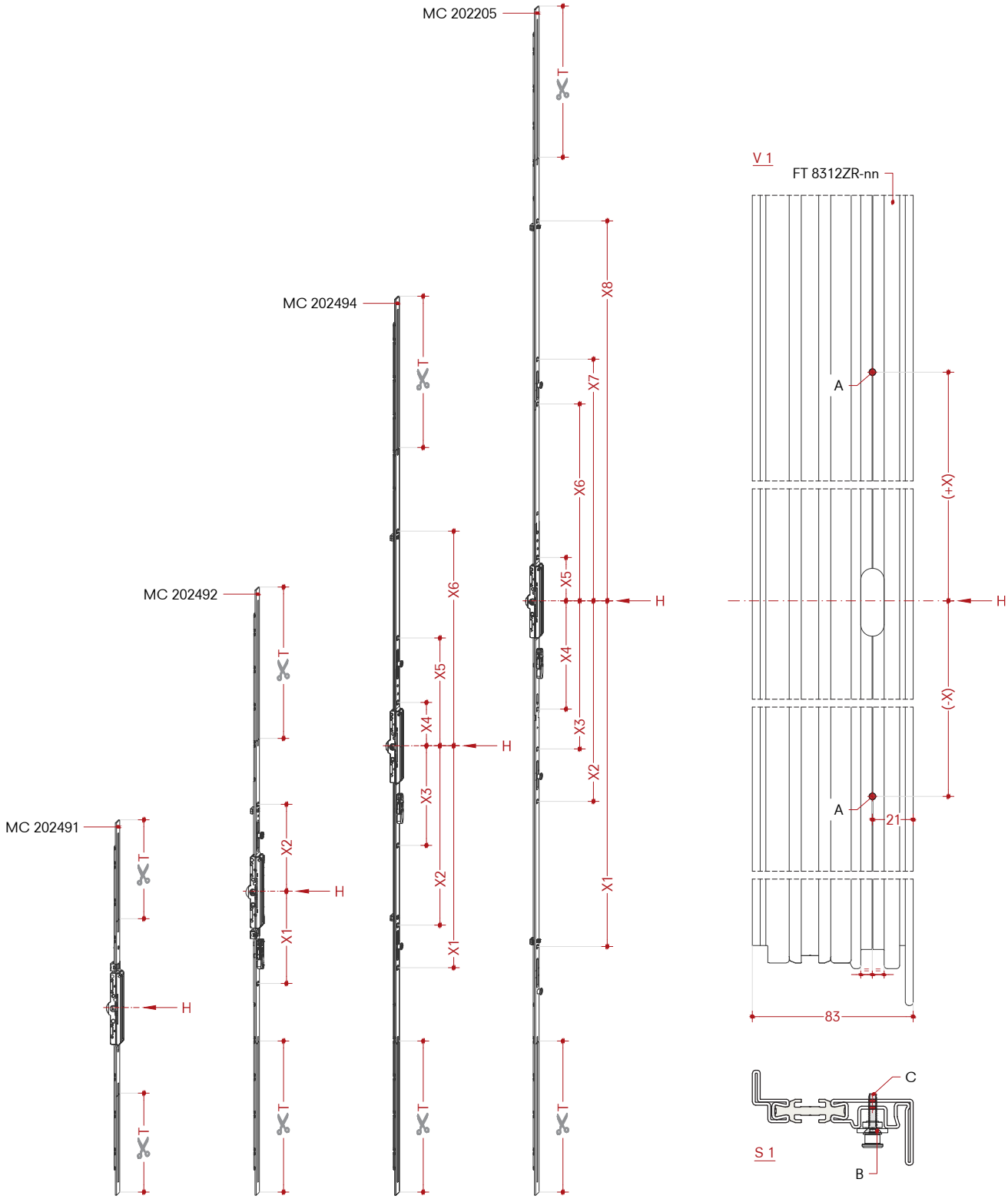
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
H) Griffhöhe variabel H ≥ 1/3 Flügelhöhe
T) Maximale Kürzung Getriebe

X = Lage Verschraubung Getriebe

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
H) Hauteur de poignée variable
H ≥ 1/3 de la hauteur ouvrant
T) Réduction maximale du crémone

X = Position du raccord à vis pour crémone



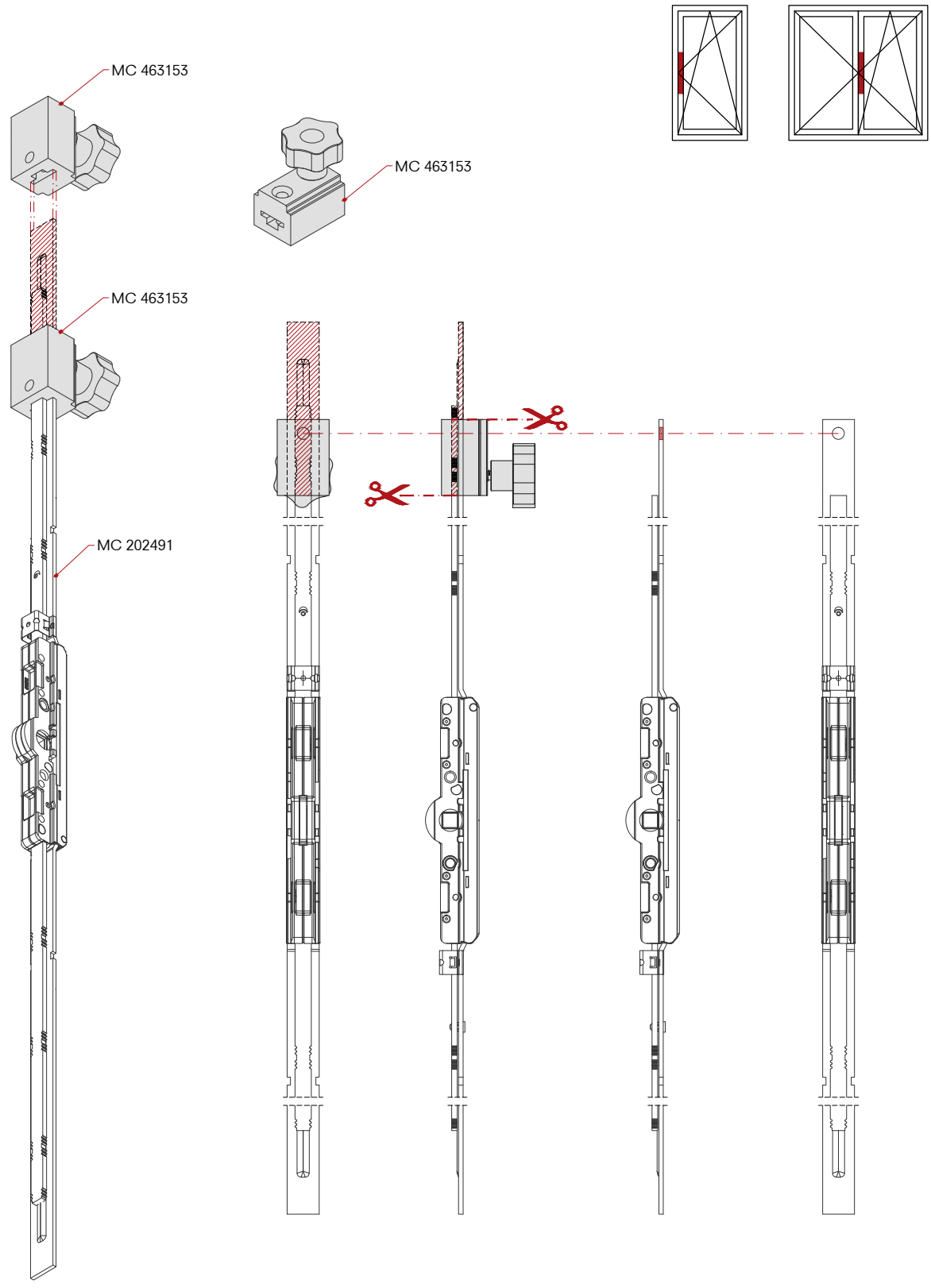
	T	X1	X2	X3	X4	X5	X6	X7	X8
MC 202491	170	-	-	-	-	-	-	-	-
MC 202492	260	-158.5	149	-	-	-	-	-	-
MC 202494	260	-381.5	-308.5	-171.5	74	185	368.5	-	-
MC 202205	260	-595	-345	-255	-186.5	74	338	415	653

Templates for Tilt&Turn fittings

MC 463153

Beilagen für Dreh-Kippfenster Beschläge
MC 463153

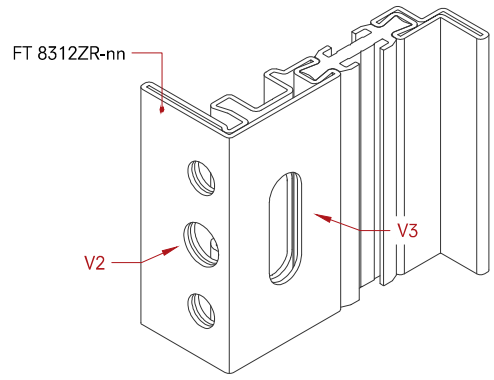
Gabarit pour ferrures de fênetre oscillo-battant
MC 463153

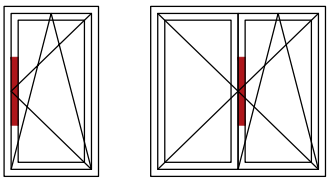


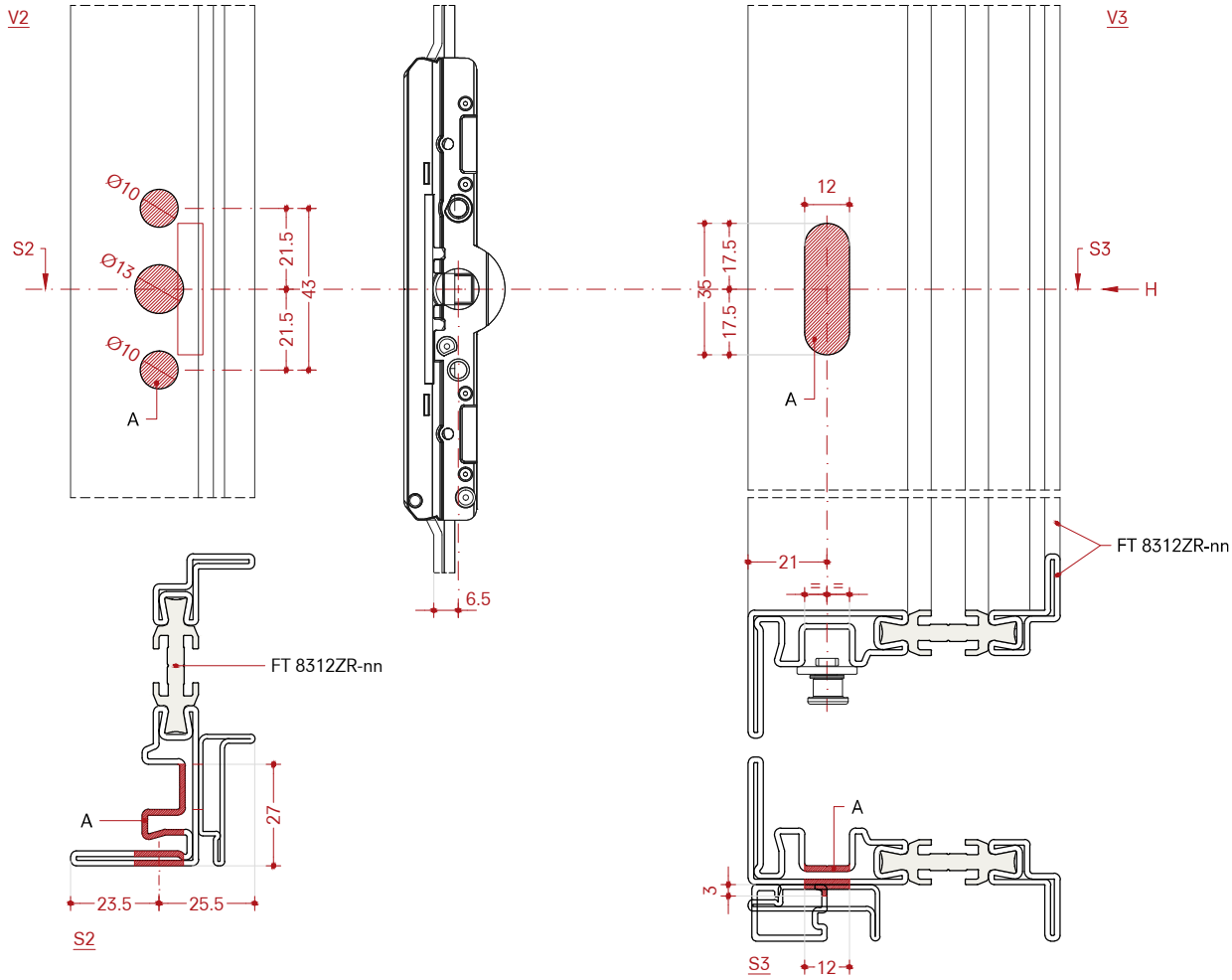
Handle position
Tilt&Turn window
Hardware 6.5 mm backset
Variable handle height

Griffposition
Dreh-Kippfenster
Dornmaß Getriebe 6.5 mm
Griffhöhe variabe

Position de la poignée
fenêtre inclinable et pivotante
Entrée verrouiller 6.5 mm
Hauteur de poignée variable







W75TB - 0012 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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Profil ausklinken
H) Griffhöhe variabel H ≥ 1/3 Flügelhöhe
L) Länge Getriebe
Z) Lage Verriegelungszapfen

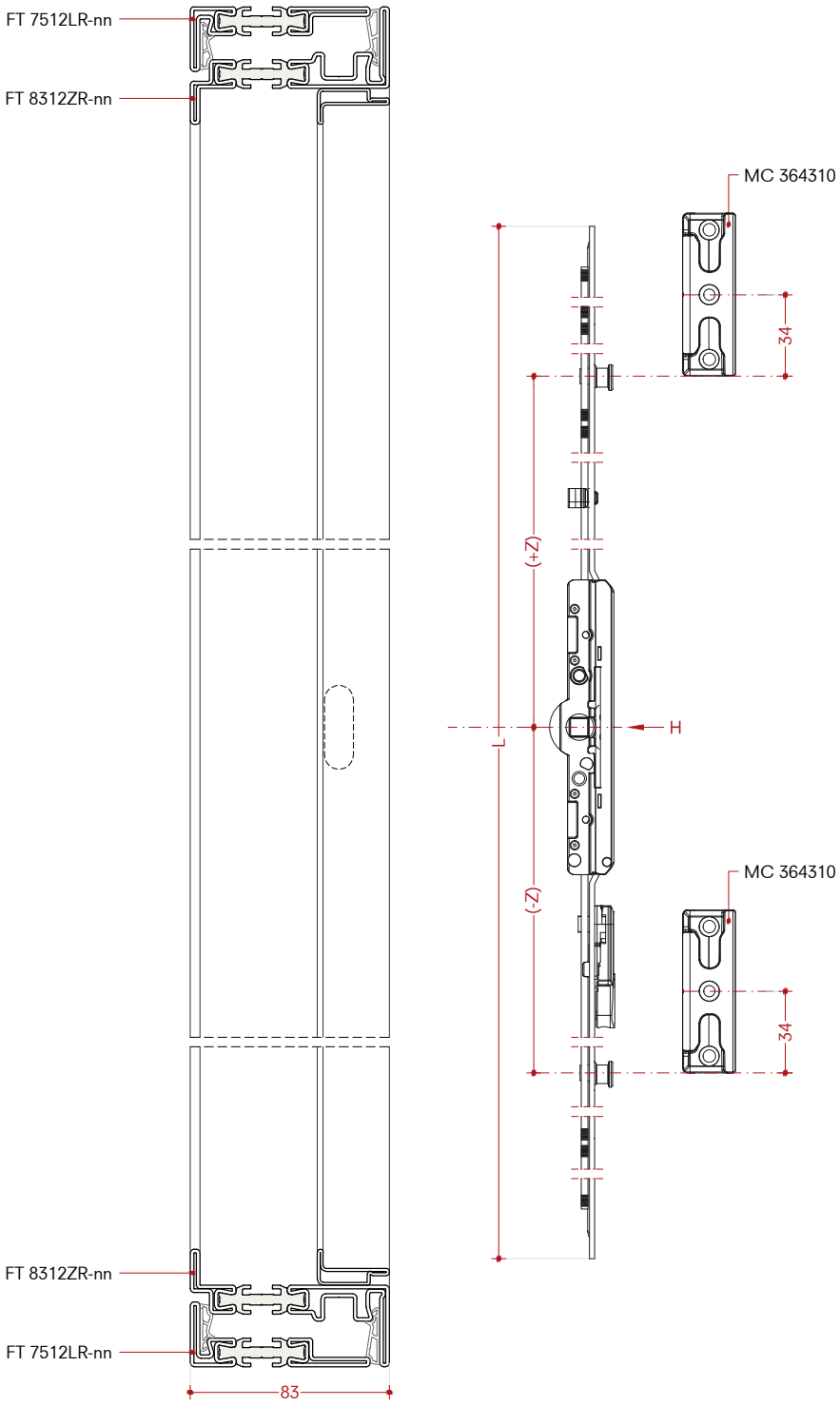
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Pièce à enlever
H) Hauteur de poignée variable
H ≥ 1/3 de la hauteur ouvrant
L) Longueur du crémone
Z) Position de galet de verrouillage

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche

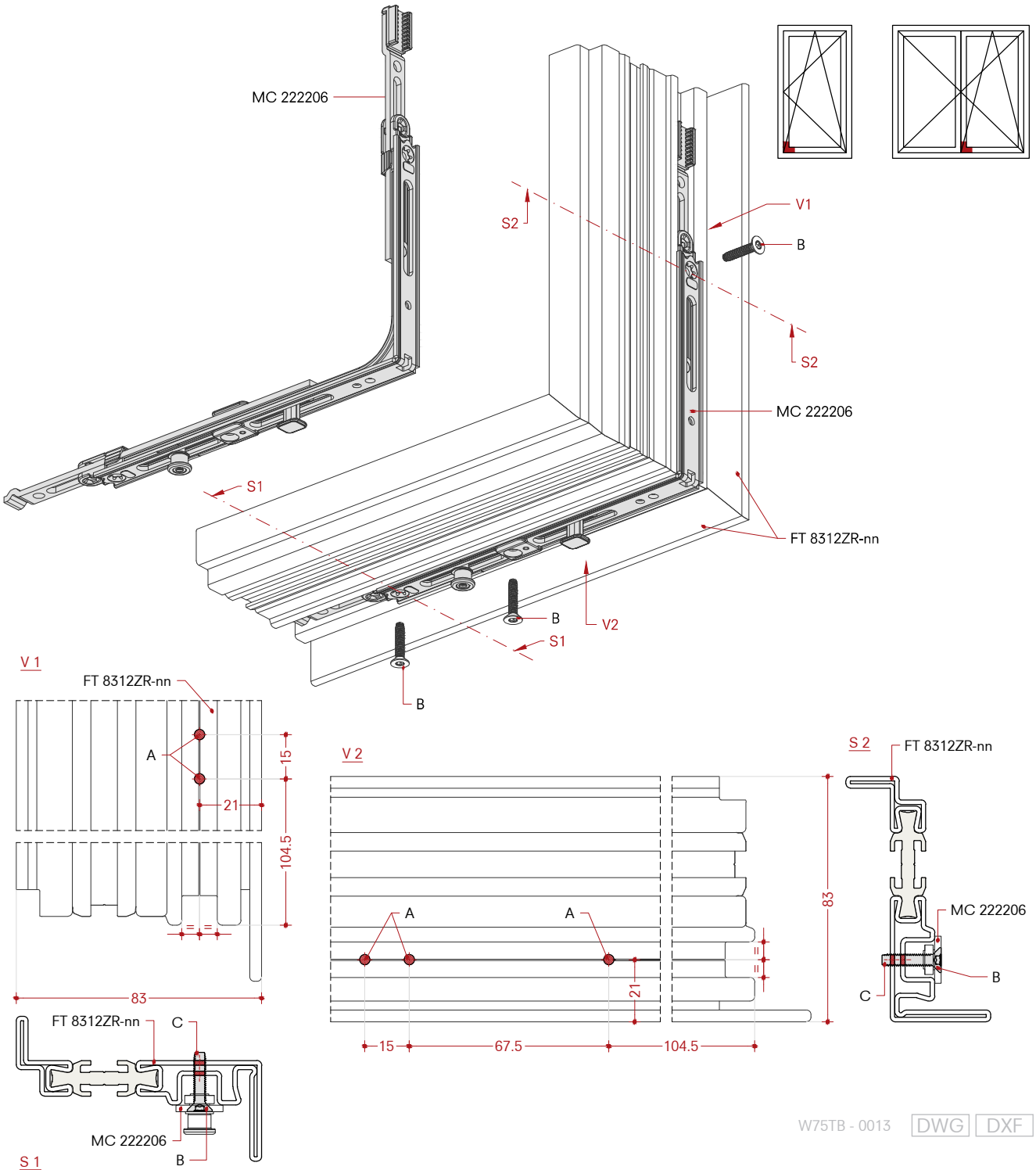


	L	Z1	Z2	Z3
MC 202491	640	-	-	-
MC 202492	1040	95	-	-
MC 202494	1540	-343	140	-
MC 202205	2040	-640	-300	370

Corner element horizontally extendable for variable drive gear with 1 locking cam
MC 222206

Eckumlenkung waagrecht verlängerbar für variable Getriebe mit 1 Verriegelungszapfen
MC 222206

Renvoi d'angle horizontal rallongeable pour crémone variable avec 1 galet de verrouillage
MC 222206



Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

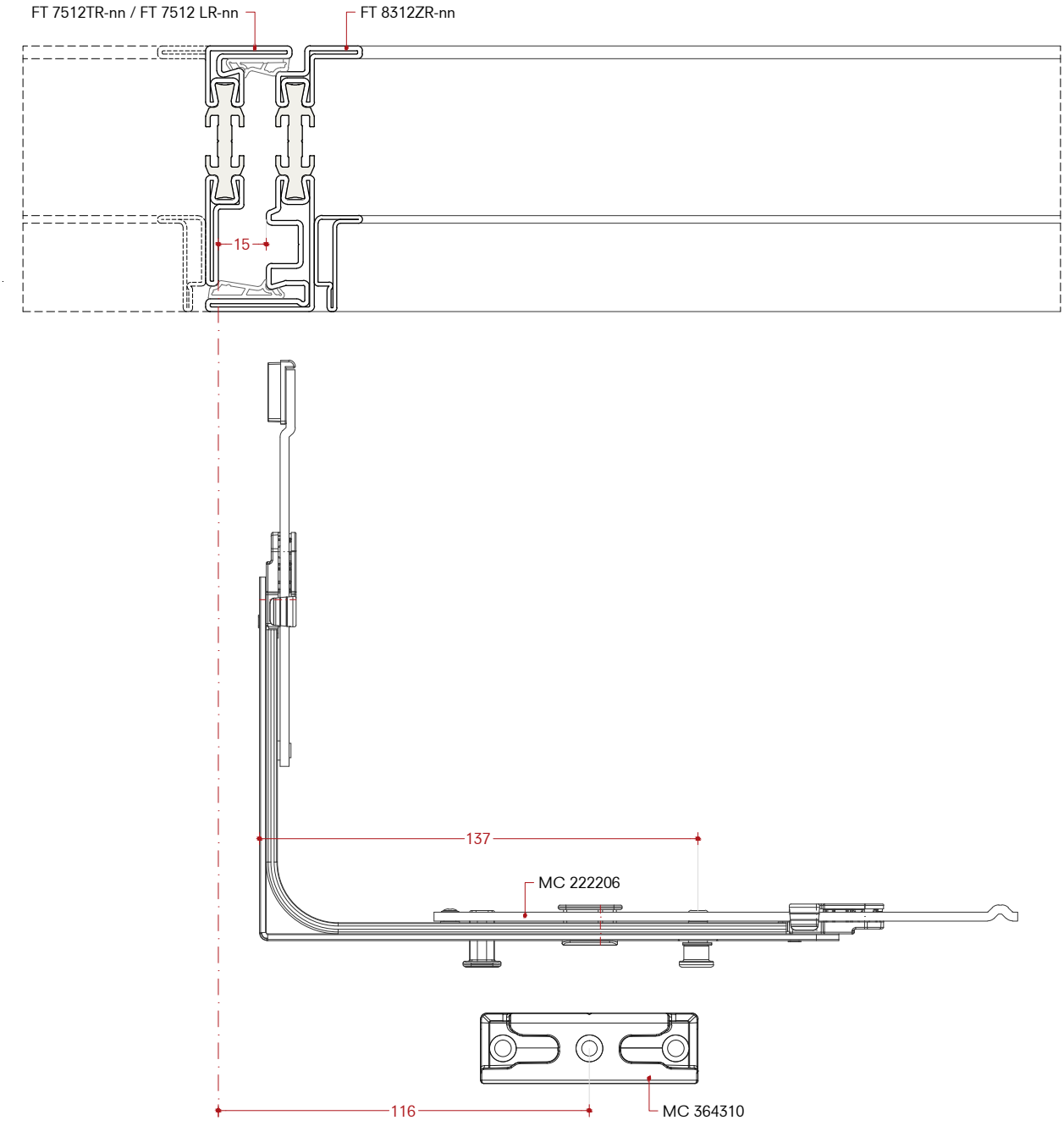
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

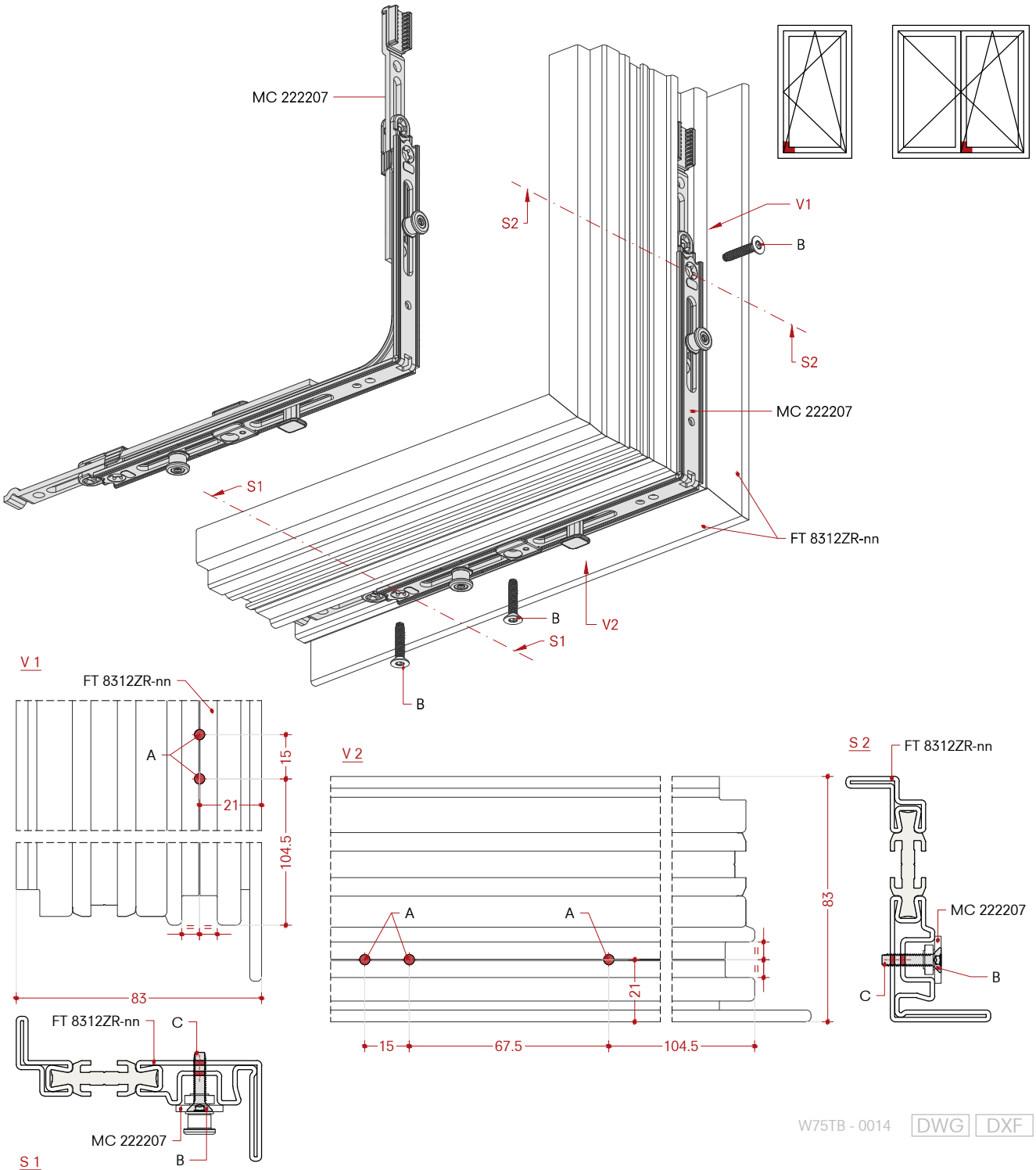
Dargestellt DIN rechts - DIN links spiegelbildlich

Montré ouverture droite
(ouverture gauche inversé en miroir)

Corner element horizontally extendable for variable drive gear with 2 locking cams
MC 222207

Eckumlenkung waagrecht verlängerbar für variable Getriebe mit 2 Verriegelungszapfen
MC 222207

Renvoi d'angle horizontal rallongeable pour crémone variable avec 2 galets de verrouillage
MC 222207



Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

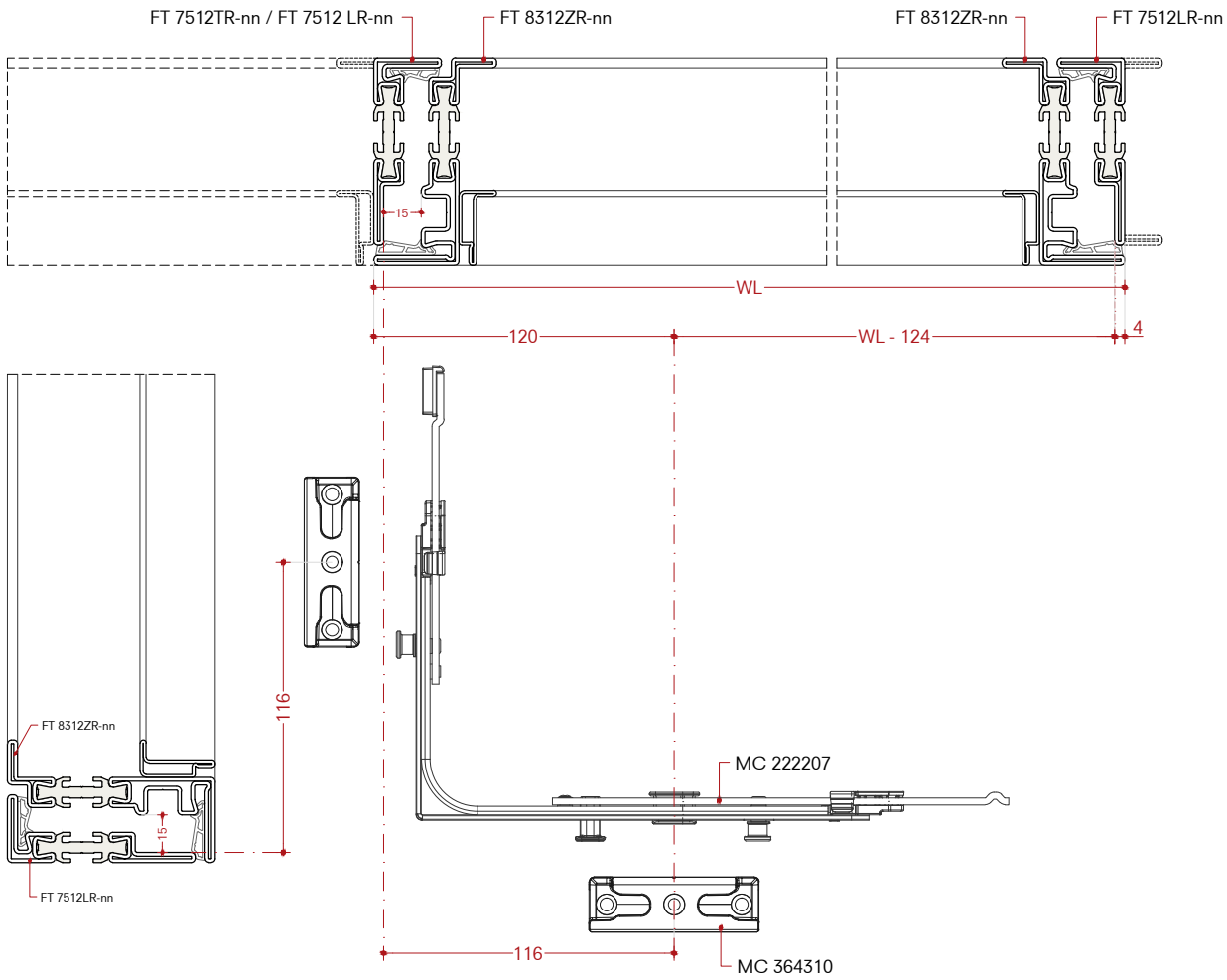
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

WL = Länge Flügel

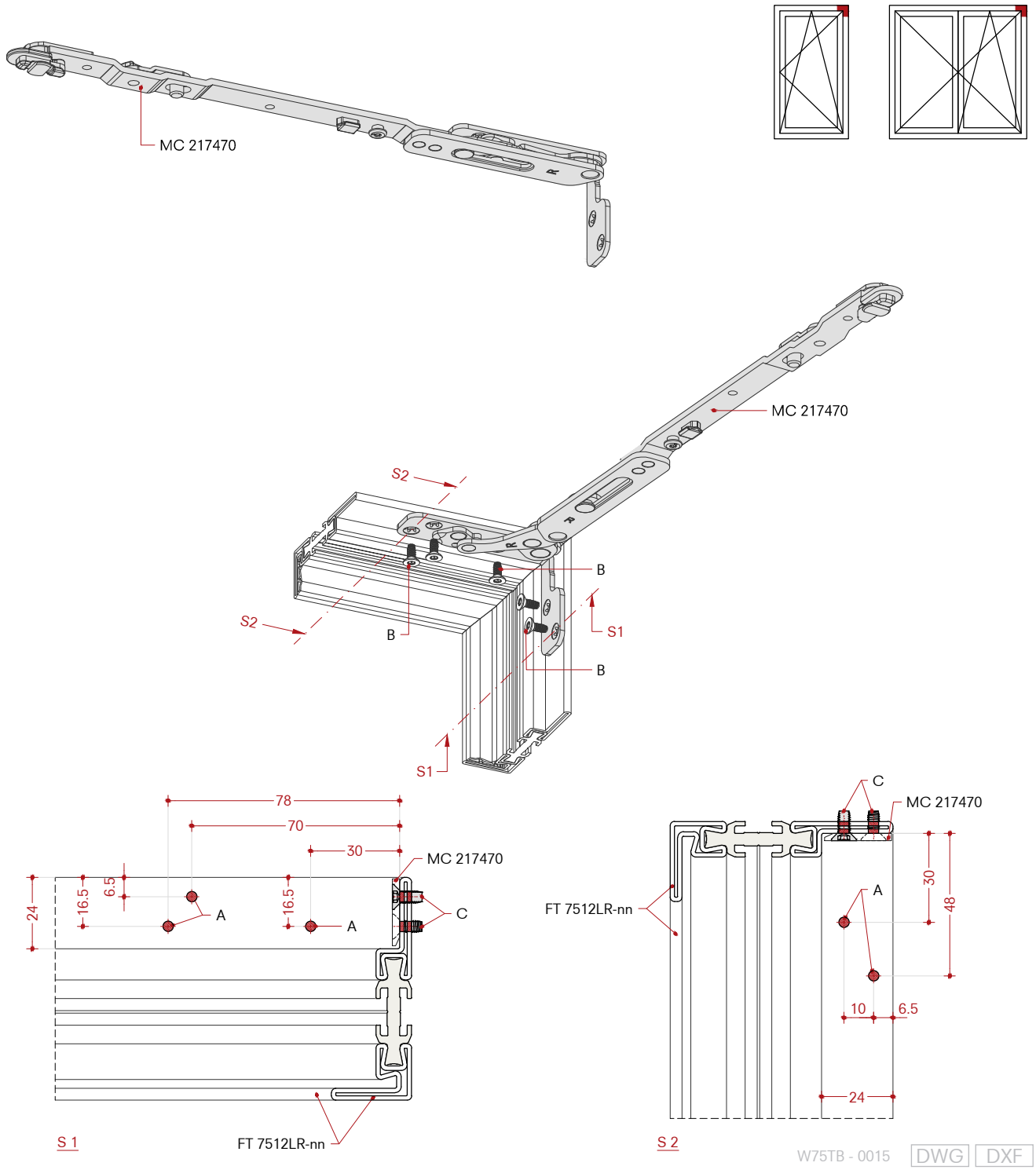
Montré ouverture droite
(ouverture gauche inversé en miroir)

WL = Largeur ouvrant

Tilt&Turn scissor stay arm with bearing
Sash rebate width ≤ 800 mm
MC 217470 R
MC 217471 L

DK Scherenarm mit Lager
Flügelfalzbreite ≤ 800 mm
MC 217470 R
MC 217471 L

Bras de compas OB avec palier
Largeur fond de feuillure ≤ 800 mm
MC 217470 R
MC 217471 L



W75TB - 0015 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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x10
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x10
C) Couper la vis

L = Ouverture gauche
R = Ouverture droite

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Seiteneinstellung

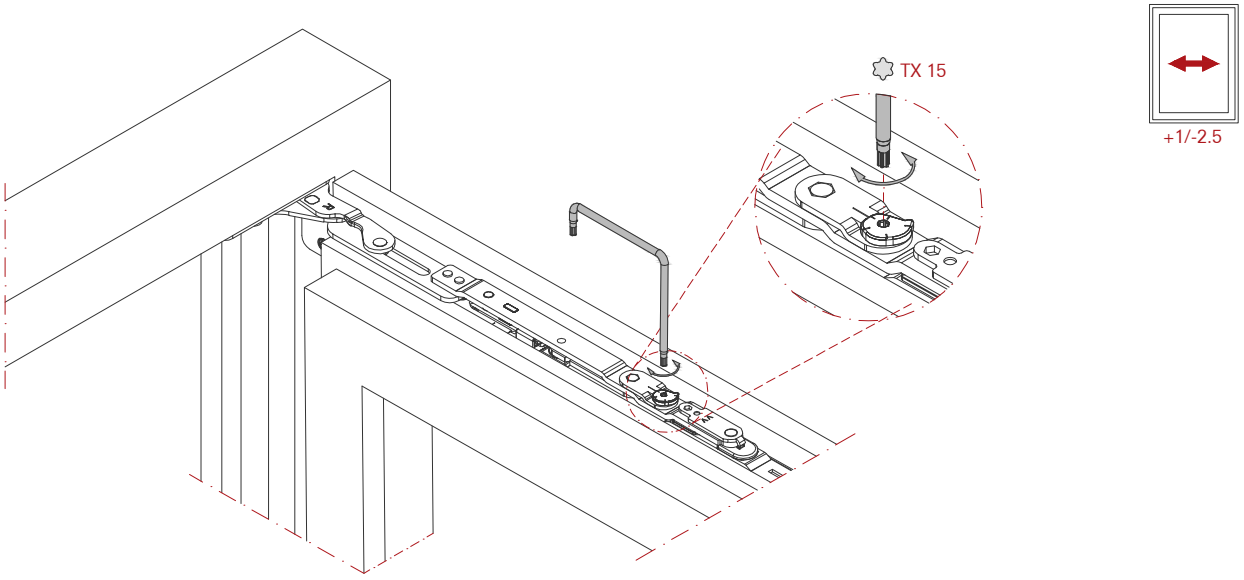
Einstellbereich +1/-2.5 mm mit TX 15

L = DIN links
R = DIN rechts

Réglage latéral

Plage de réglage +1/-2.5 mm avec TX 15

L = Ouverture gauche
R = Ouverture droite



Pressure adjustment

Adjustment range ±0.7 mm with TX 15

L = Left opening
R = Right opening

Anpressdruck Einstellung

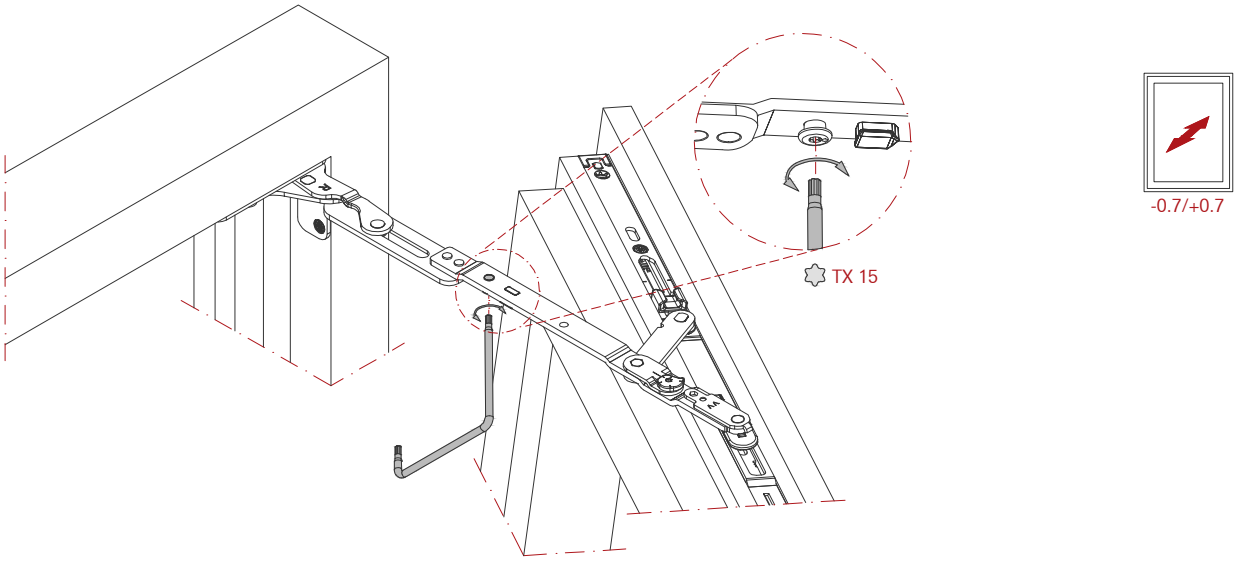
Einstellbereich ±0.7 mm mit TX 15

L = DIN links
R = DIN rechts

Réglage de la pression de contact

Plage de réglage ±0.7 mm avec TX 15

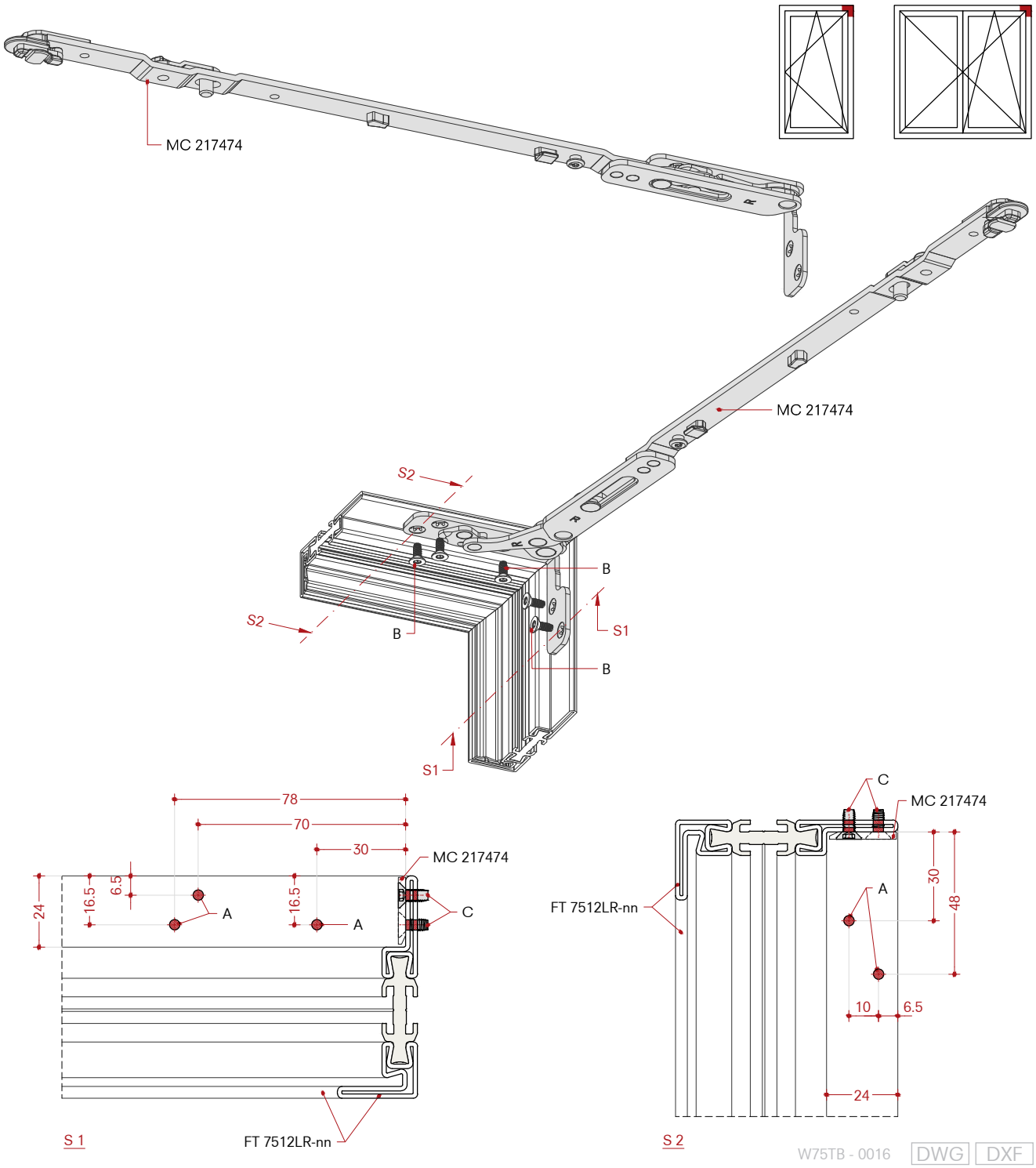
L = Ouverture gauche
R = Ouverture droite



Tilt&Turn scissor stay arm with bearing
Sash rebate width > 800 mm
MC 217474 R
MC 217475 L

DK Scherenarm mit Lager
Flügelfalzbreite > 800 mm
MC 217474 R
MC 217475 L

Bras de compas OB avec palier
Largeur fond de feuillure > 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
C) Cut the screw

L = Left opening
R = Right opening

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x10
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x10
C) Couper la vis

L = Ouverture gauche
R = Ouverture droite

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Seiteneinstellung

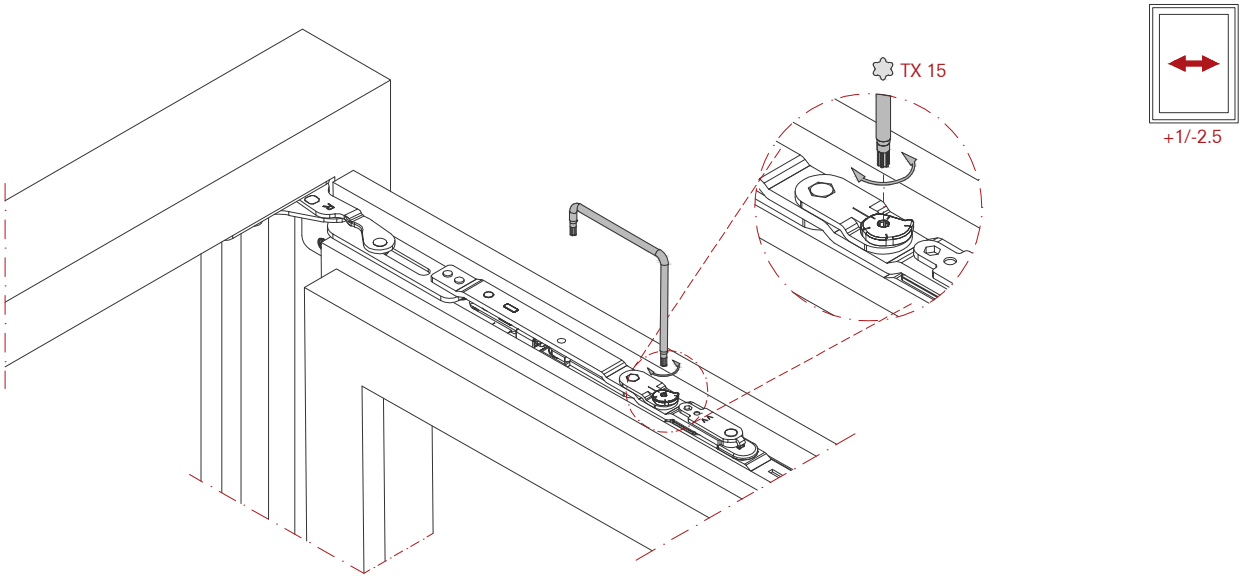
Einstellbereich +1/-2.5 mm mit TX 15

L = DIN links
R = DIN rechts

Réglage latéral

Plage de réglage +1/-2.5 mm avec TX 15

L = Ouverture gauche
R = Ouverture droite



Pressure adjustment

Adjustment range ±0.7 mm with TX 15

L = Left opening
R = Right opening

Anpressdruck Einstellung

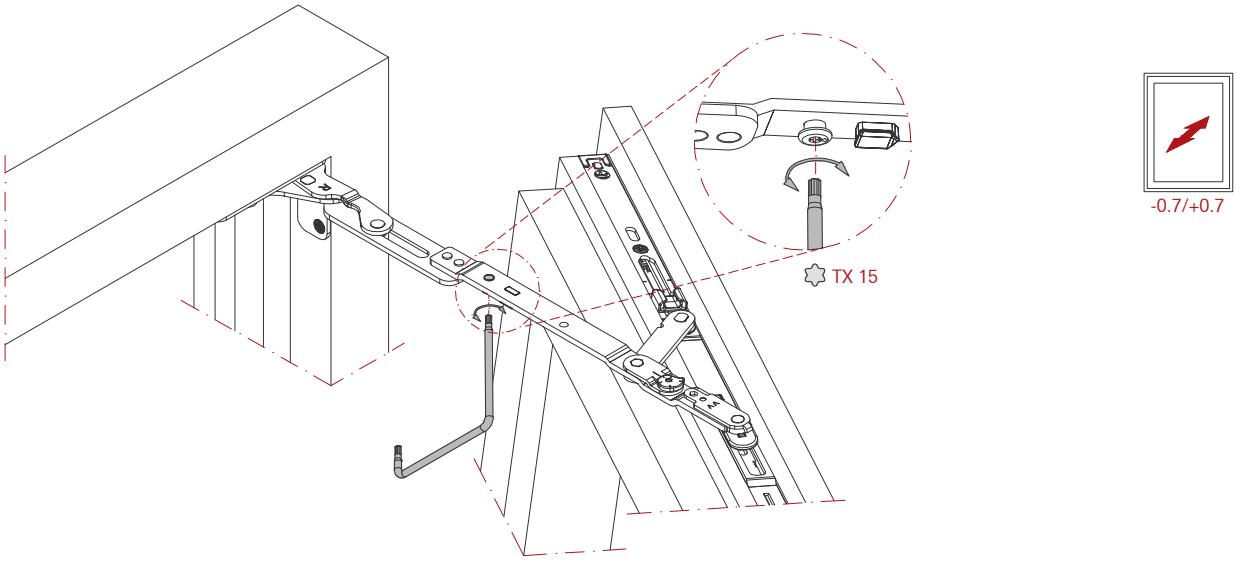
Einstellbereich ±0.7 mm mit TX 15

L = DIN links
R = DIN rechts

Réglage de la pression de contact

Plage de réglage ±0.7 mm avec TX 15

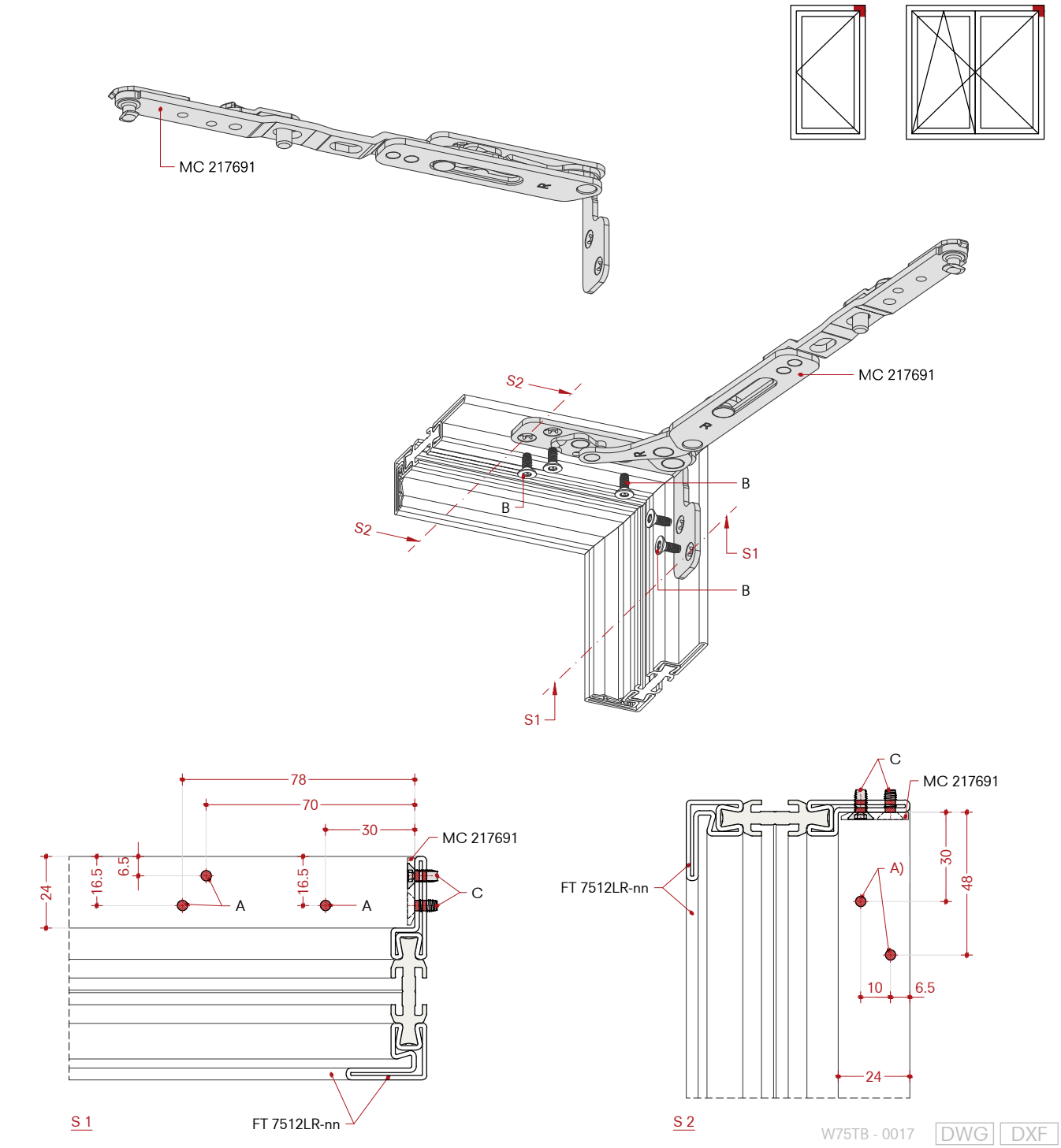
L = Ouverture gauche
R = Ouverture droite



Turn-only hinge arm with hinge
MC 217691 R
MC 217692 L

Drehbandarm mit Lager
MC 217691 R
MC 217692 L

Bras de compas OF avec palier
MC 217691 R
MC 217692 L



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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x10
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x10
C) Couper la vis

L = Ouverture gauche
R = Ouverture droite

Side adjustment

Adjustment range +1/-2.5 mm with TX 15

L = Left opening
R = Right opening

Seiteneinstellung

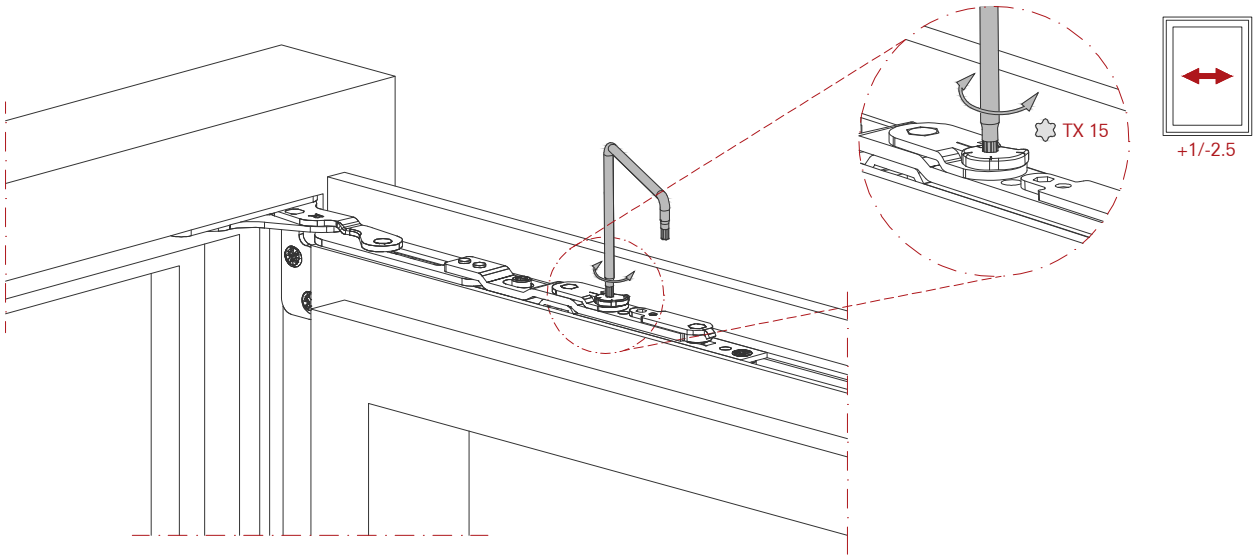
Einstellbereich +1/-2.5 mm mit TX 15

L = DIN links
R = DIN rechts

Réglage latéral

Plage de réglage +1/-2.5 mm avec TX 15

L = Ouverture gauche
R = Ouverture droite



Pressure adjustment

Adjustment range +1 mm with SW 4

L = Left opening
R = Right opening

Anpressdruck Einstellung

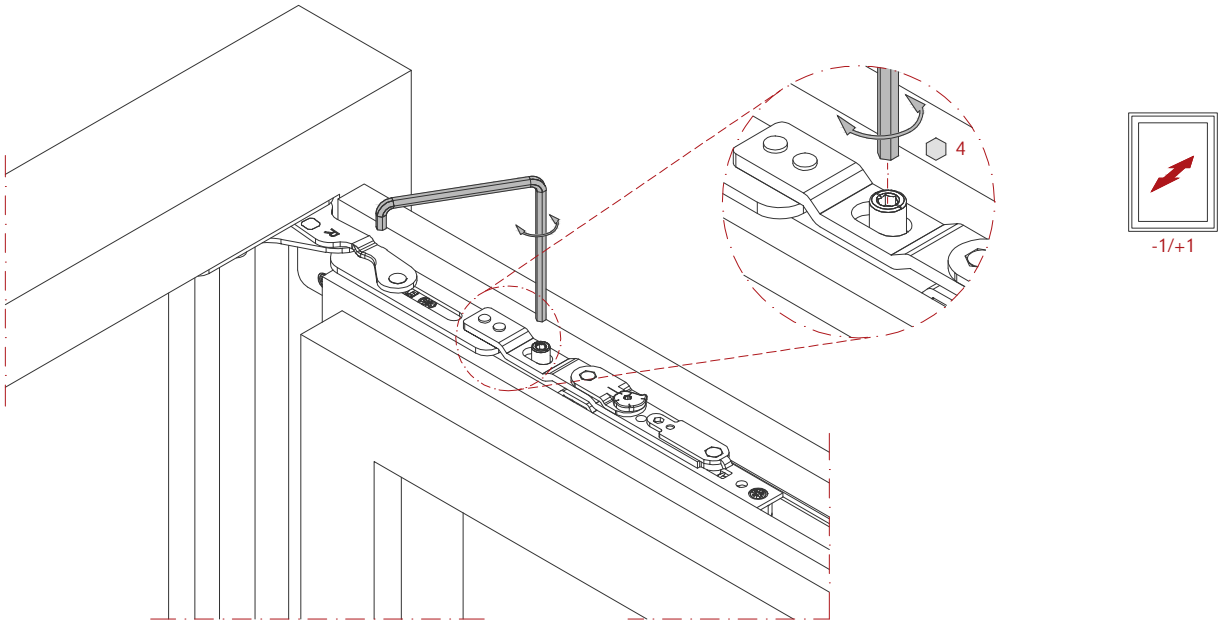
Einstellbereich +1 mm mit SW 4

L = DIN links
R = DIN rechts

Réglage de la pression de contact

Plage de réglage +1 mm avec SW 4

L = Ouverture gauche
R = Ouverture droite

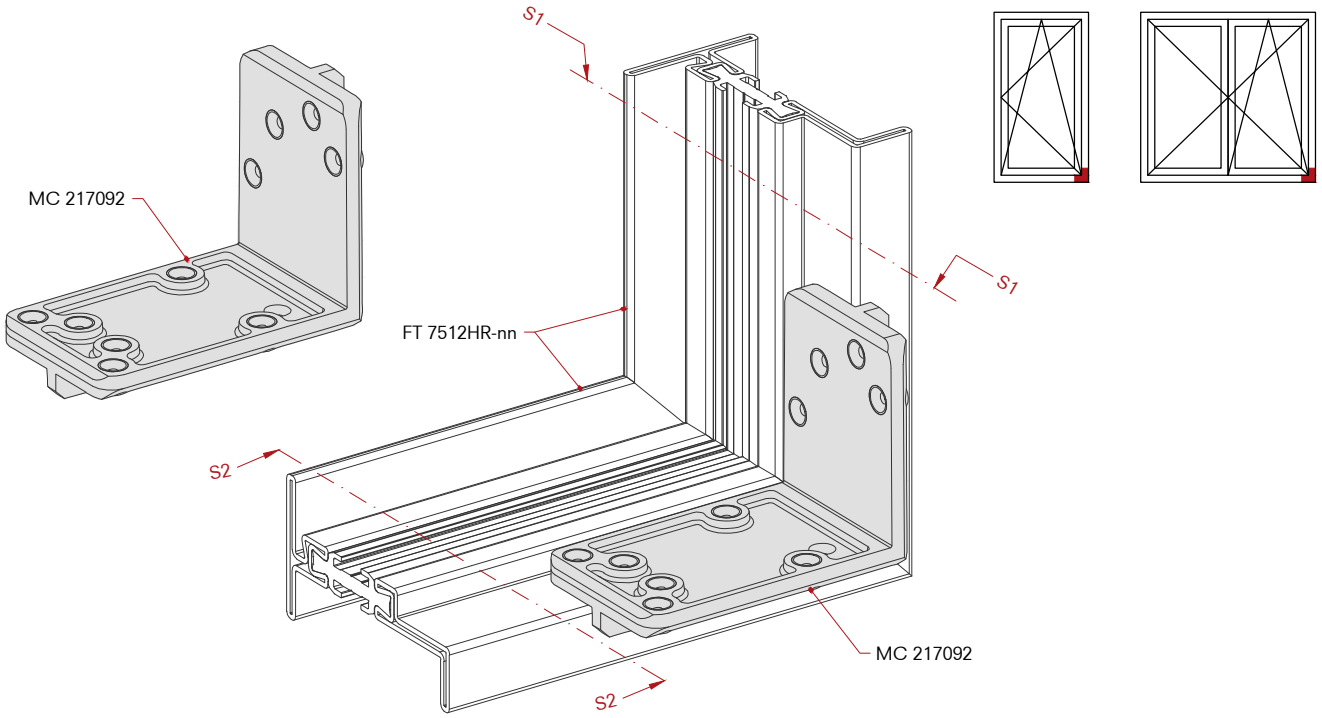


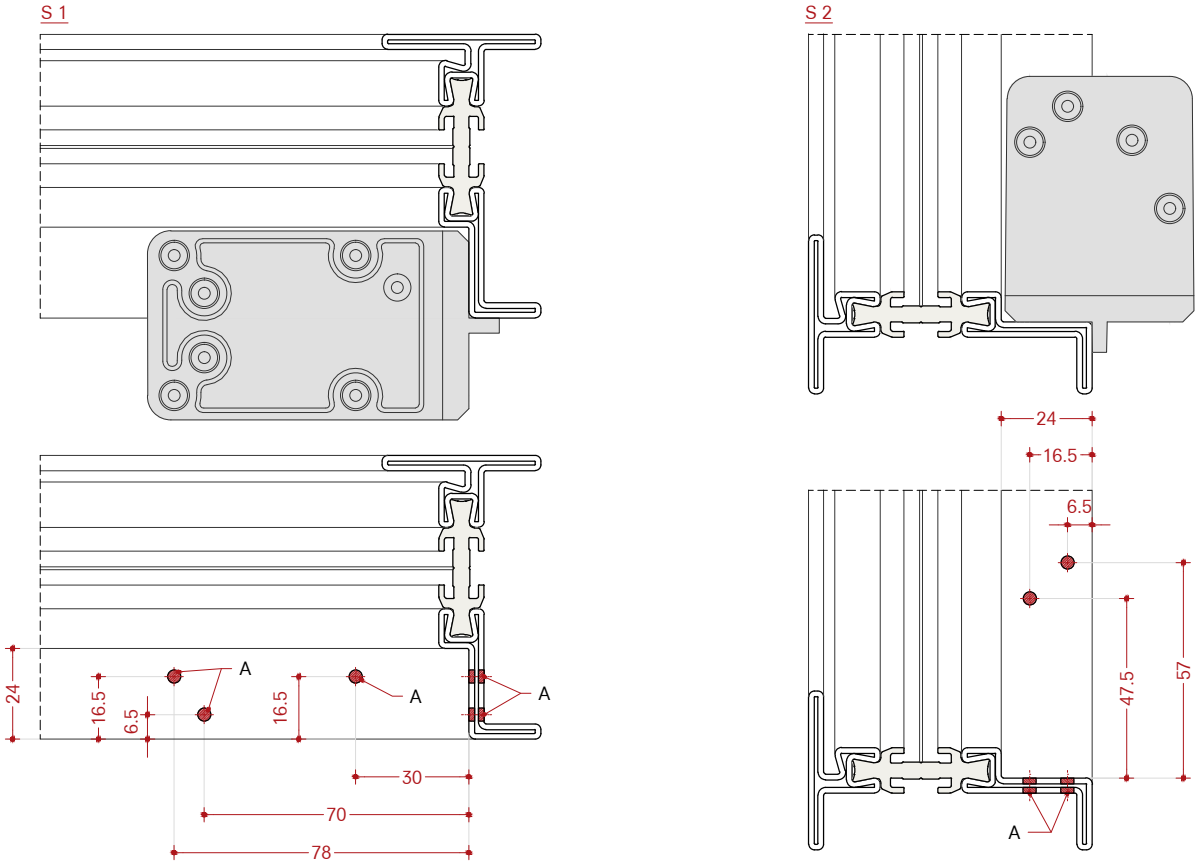
Templates for Tilt&Turn fittings

MC 217092
Bottom angle

Beilagen für Dreh-Kippfenster Beschläge
MC 217092
Unterer Winkel

Gabarit pour ferrures de fênetre oscillo-battant
MC 217092
Angle inférieur





Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.5 mm

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.5 mm

Montré ouverture droite
(ouverture gauche inversé en miroir)

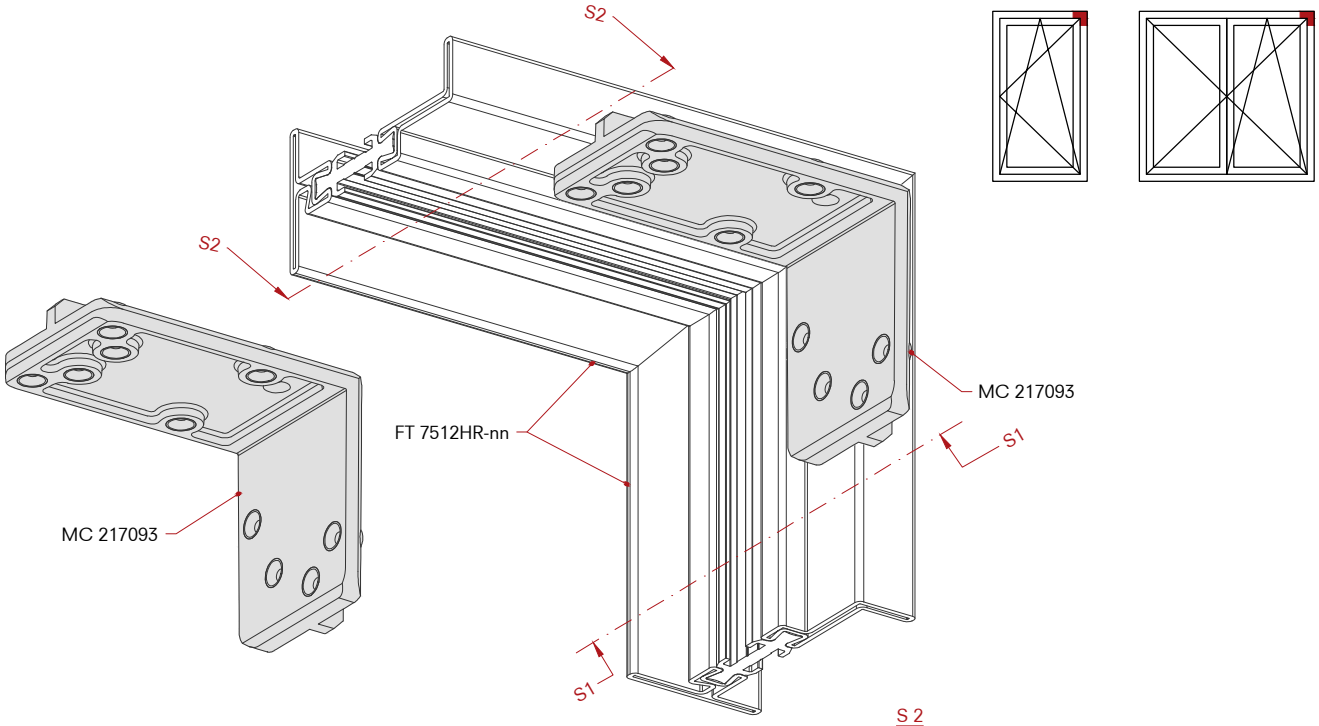
A) Trou Ø3.5 mm

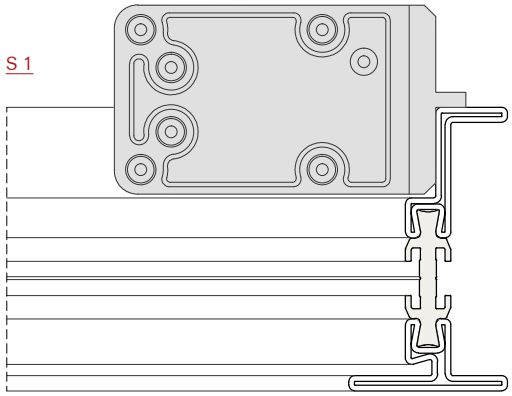
Templates for Tilt&Turn fittings

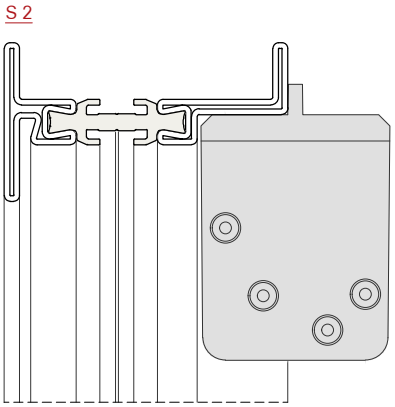
MC 217093
Top angle

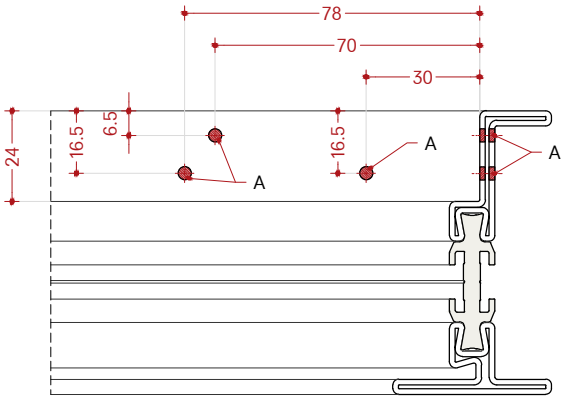
Beilagen für Dreh-Kippfenster Beschläge
MC 217093
Spitzenwinkel

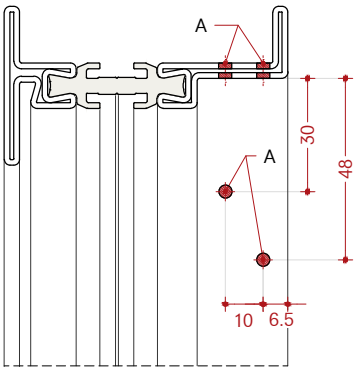
Gabarit pour ferrures de fênetre oscillo-battant
MC 217093
Angle supérieur











Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.5 mm

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.5 mm

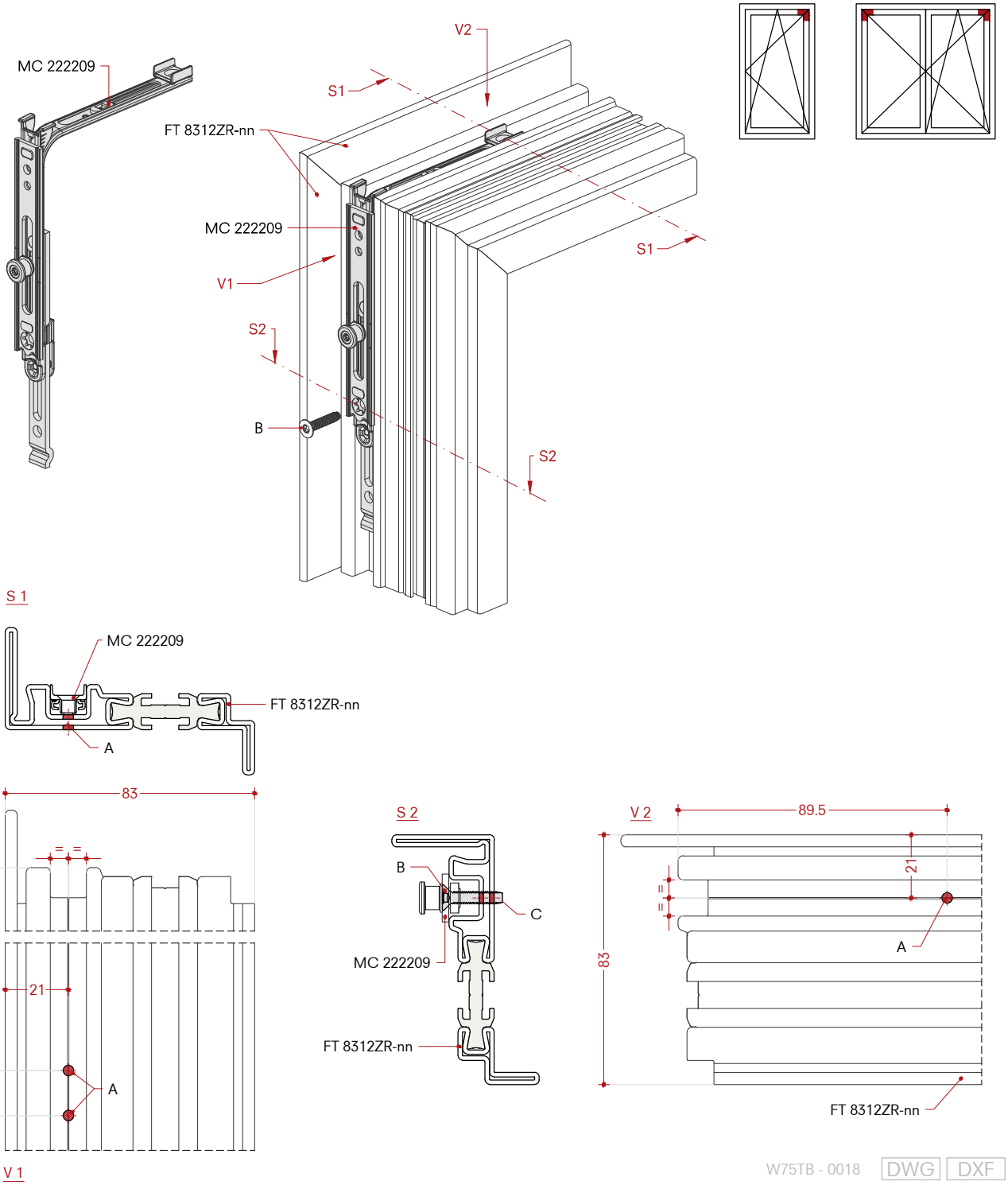
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.5 mm

Corner element vertically extendable with 1 locking cam
MC 222209

Eckumlenkung senkrecht verlängerbar mit 1 Verriegelungszapfen
MC 222209

Renvoi d'angle vertical rallongeable avec 1 galet de verrouillage
MC 222209



W75TB - 0018 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

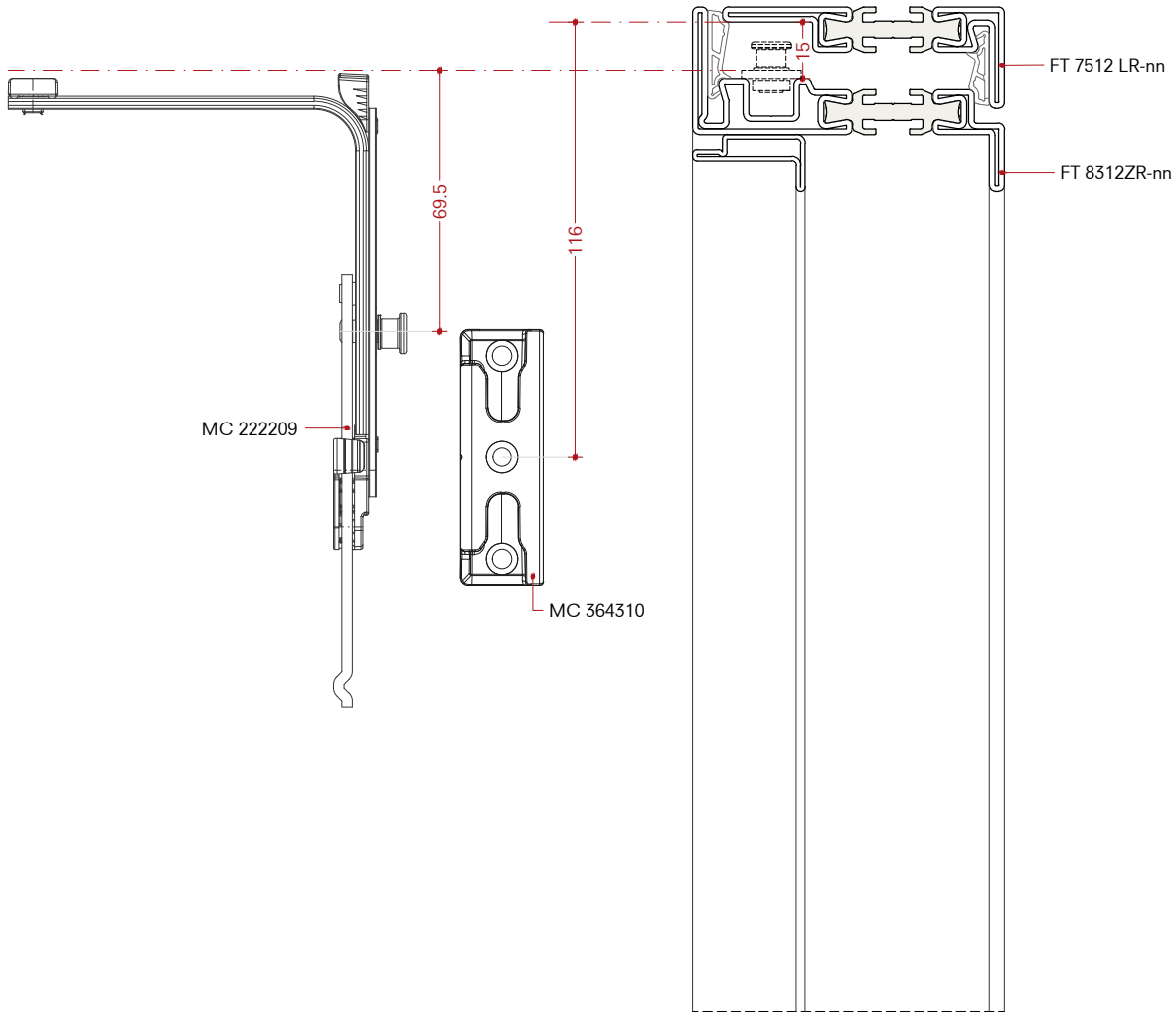
Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

Positioning striker plate

Positionierung Schließteils

Positionnement de la gâche



Drawing represents right opening
(left opening is the mirror image)

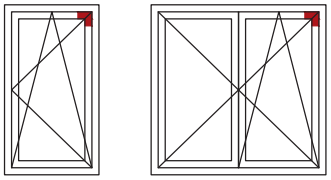
Dargestellt DIN rechts - DIN links spiegelbildlich

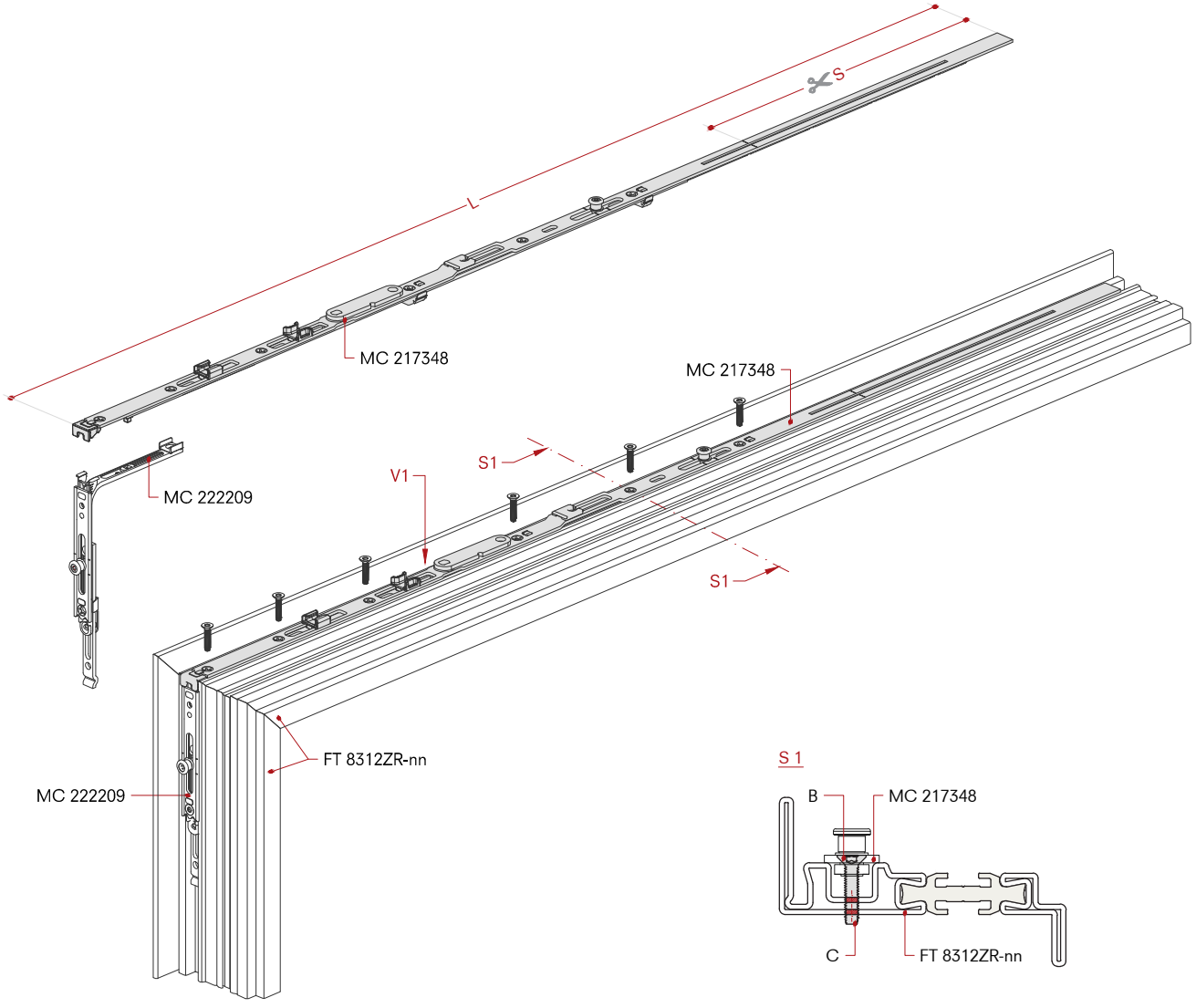
Montré ouverture droite
(ouverture gauche inversé en miroir)

Tilt&Turn/tilt-first scissor stay
MC 217346 - MC 217347
MC 217348 - MC 217349

DK/KD Scherenstulpe
MC 217346 - MC 217347
MC 217348 - MC 217349

Têtière de compas OB/OB inversé
MC 217346 - MC 217347
MC 217348 - MC 217349





W75TB - 0019 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

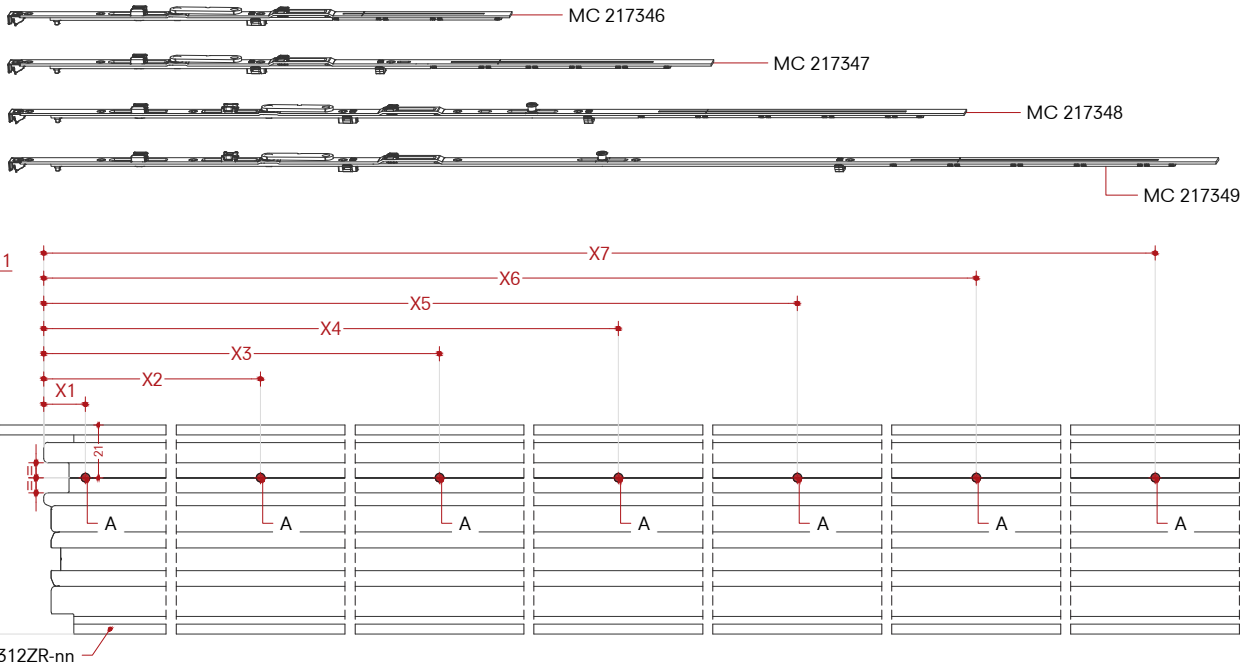
A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
L) Length scissor stay
T) Maximum cut scissor stay
X) Position screw connection scissor stay
Z) Position locking cam

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
L) Länge Scherenstulpe
T) Maximale Kürzung Scherenstulpe
X) Lage Verschraubung Scherenstulpe
Z) Lage Verriegelungszapfen

Montré ouverture droite
(ouverture gauche inversé en miroir)

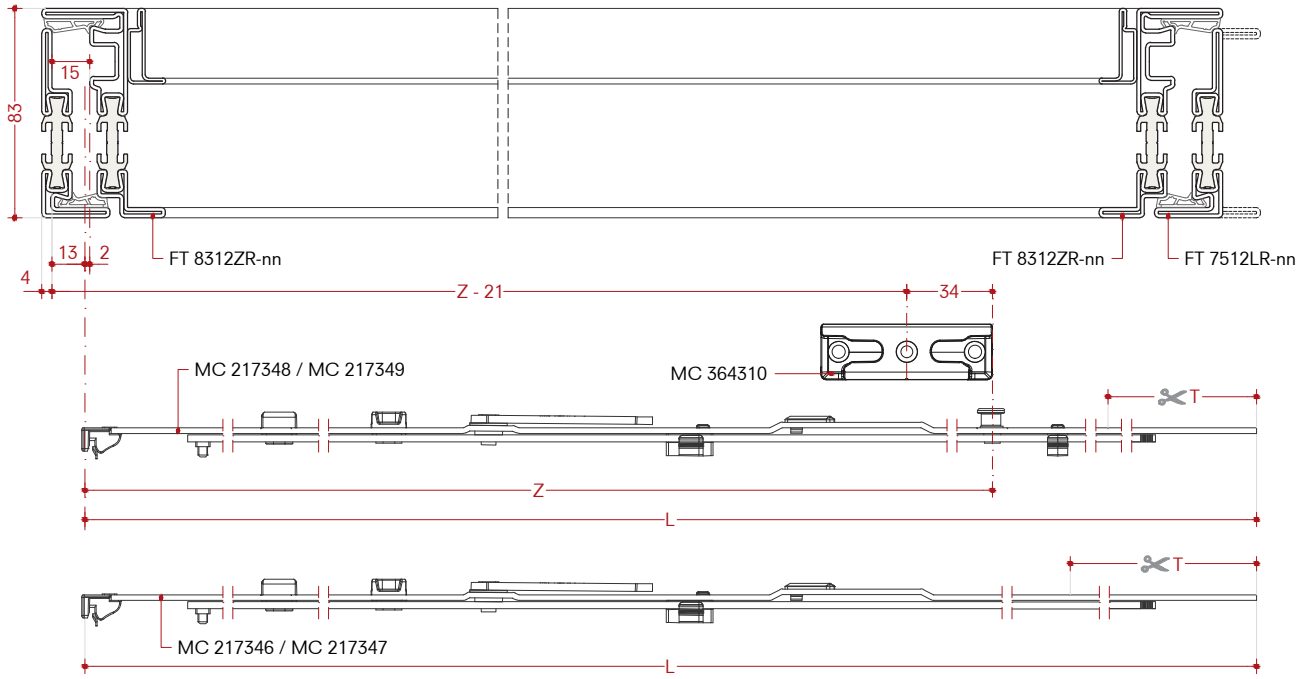
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
L) Longueur du têtière de compas
T) Réduction maximale du têtière de compas
X) Position du raccord à vis pour têtière de compas
Z) Position de galet de verrouillage



Positioning striker plate
(only for MC 217348 / MC 217349)

Positionierung Schließteils
(nur bei MC 217348 / MC 217349)

Positionnement de la gâche
(que pour MC 217348 / MC 217349)

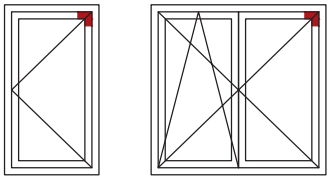


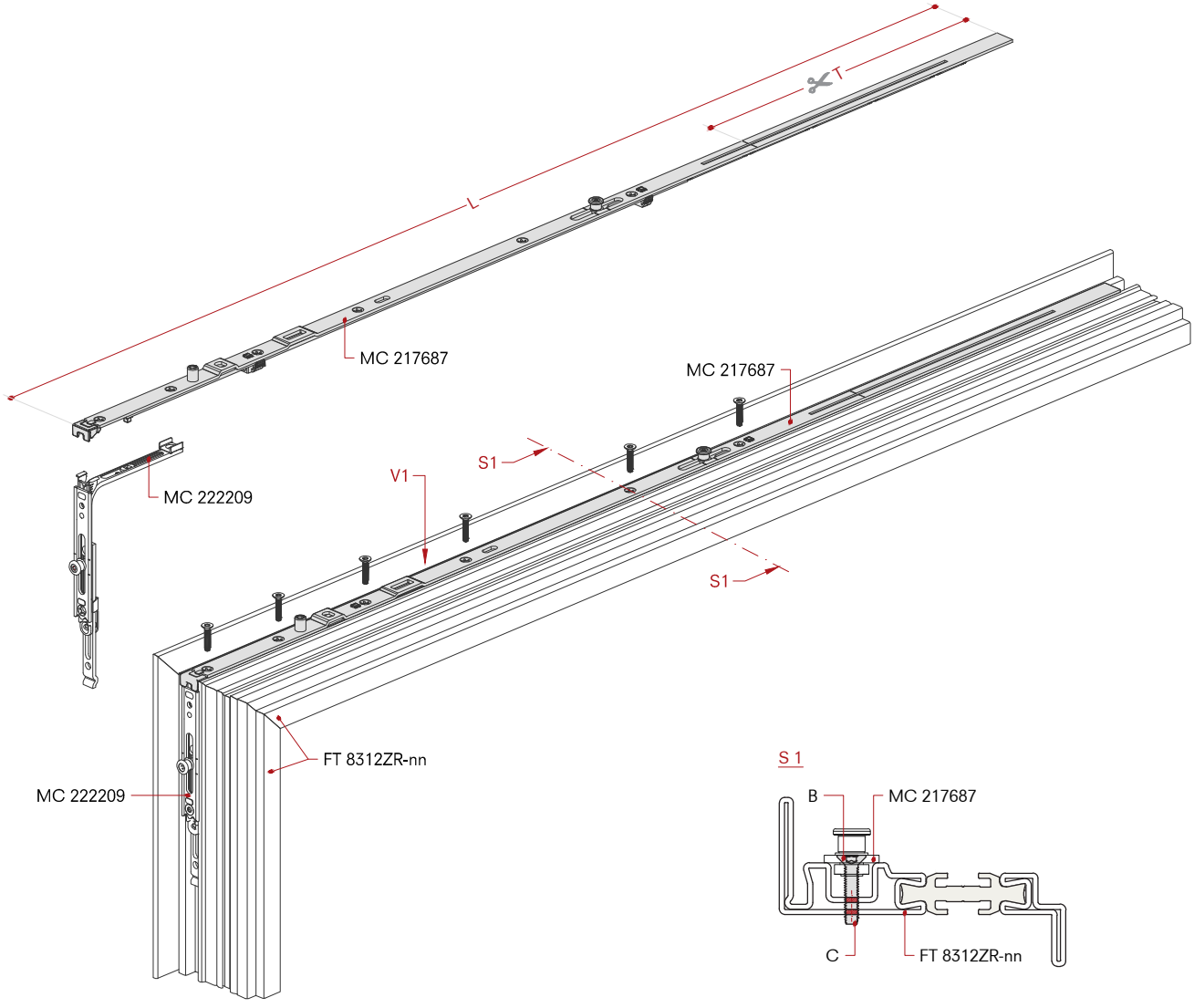
	L	T	X1	X2	X3	X4	X5	X6	X7	Z
MC 217346	497	147	16.5	89.5	247	-	-	-	-	-
MC 217347	697	212	16.5	89.5	247	281	377	-	-	-
MC 217348	947	262	16.5	89.5	182	281	450	562	-	528
MC 217349	1197	262	16.5	89.5	182	281	450	621	827	587

Turn-only hinge faceplates croppable
MC 217685 - MC 217686
MC 217687 - MC 217688

Drehbandstulpe ablängbar
MC 217685 - MC 217686
MC 217687 - MC 217688

Têtière de compas OF recoupable
MC 217685 - MC 217686
MC 217687 - MC 217688





W75TB - 0020 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

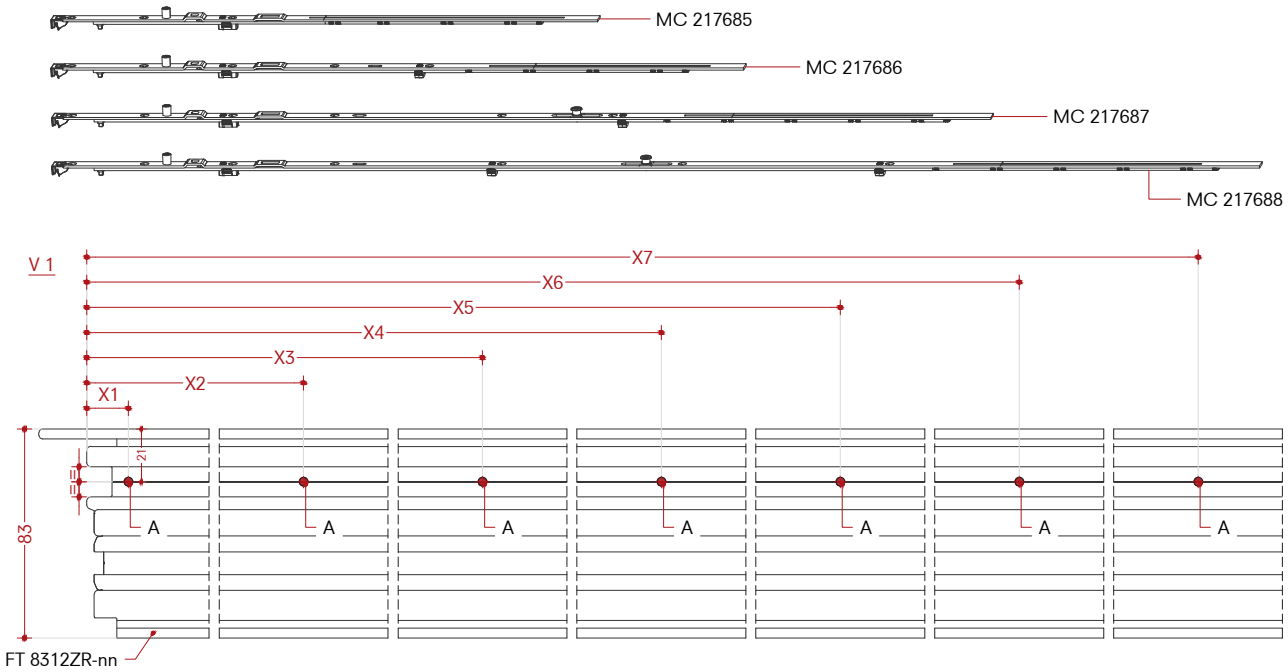
A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
L) Length turn-only hinge
T) Maximum cut turn-only hinge
X) Position screw connection turn-only hinge
Z) Position locking cam

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
L) Länge Drehbandstulpe
T) Maximale Kürzung Drehbandstulpe
X) Lage Verschraubung Drehbandstulpe
Z) Lage Verriegelungszapfen

Montré ouverture droite
(ouverture gauche inversé en miroir)

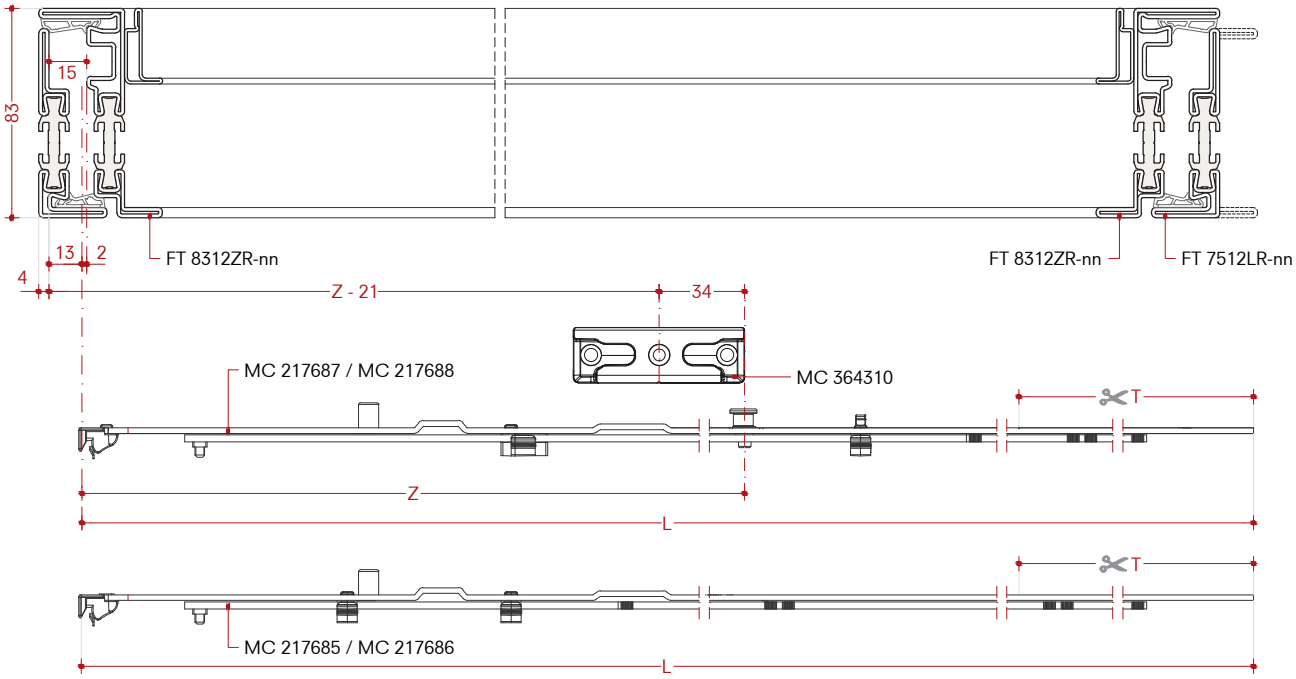
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
L) Longueur du têtière de compas OF
T) Réduction maximale du têtière de compas OF
X) Position du raccord à vis pour têtière de compas
Z) Position de galet de verrouillage



Positioning striker plate
(only for MC 217687 / MC 217688)

Positionierung Schließteils
(nur bei MC 217687 / MC 217688)

Positionnement de la gâche
(que pour MC 217687 / MC 217688)

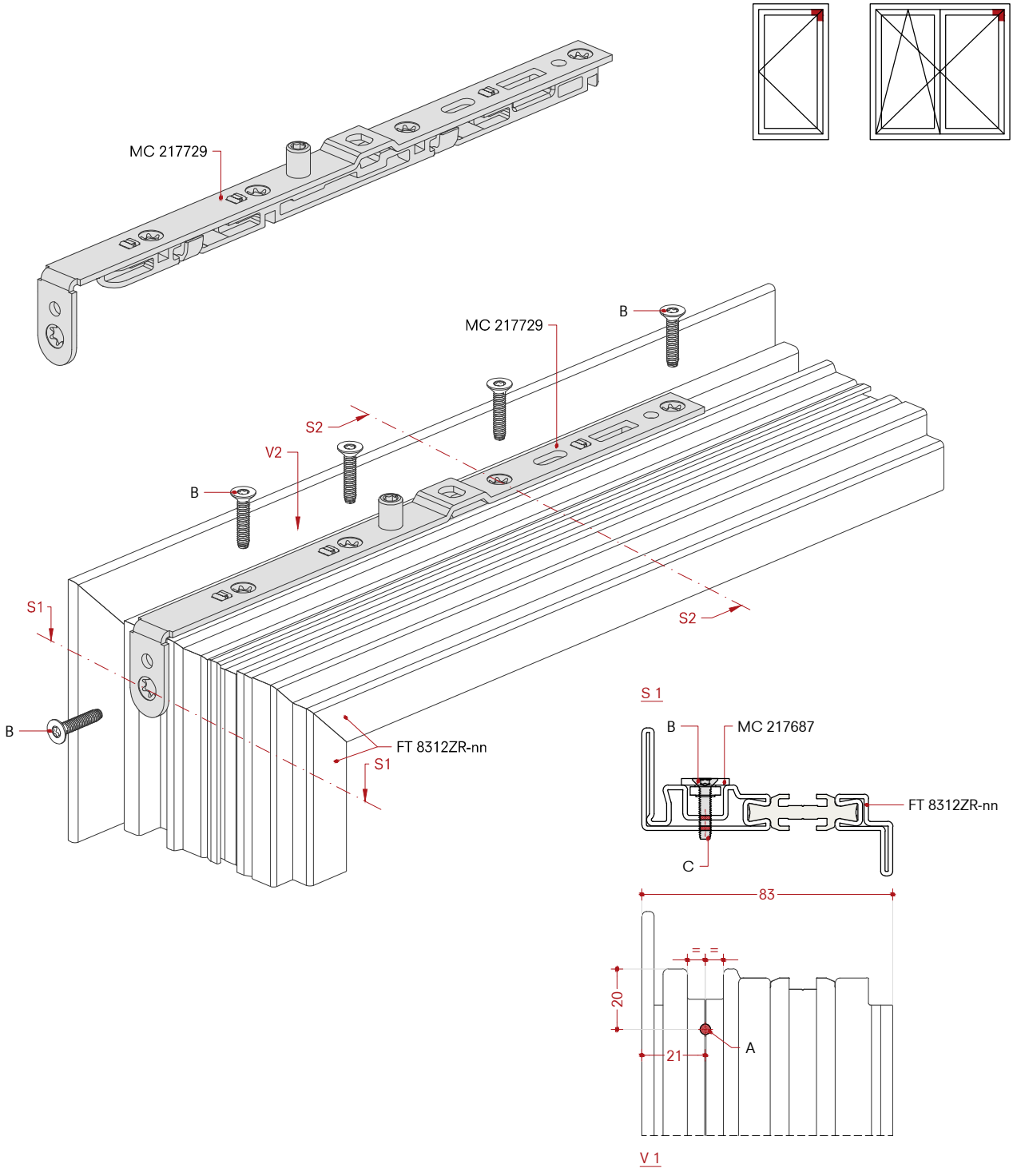


	L	T	X1	X2	X3	X4	X5	X6	X7	Z
MC 217685	548	262	16.5	89.5	178.5	-	-	-	-	-
MC 217686	697	212	16.5	89.5	178.5	281	377	-	-	-
MC 217687	948	262	16.5	89.5	178.5	281	450	562	-	528
MC 217688	1198	262	16.5	89.5	178.5	281	450	621	827	587

Turn-only and tilt-only faceplate
MC 217729

Dreh- und Kippbandstulp fix
MC 217729

Têtière OF et soufflet fixe
MC 217729



W75TB - 0021 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

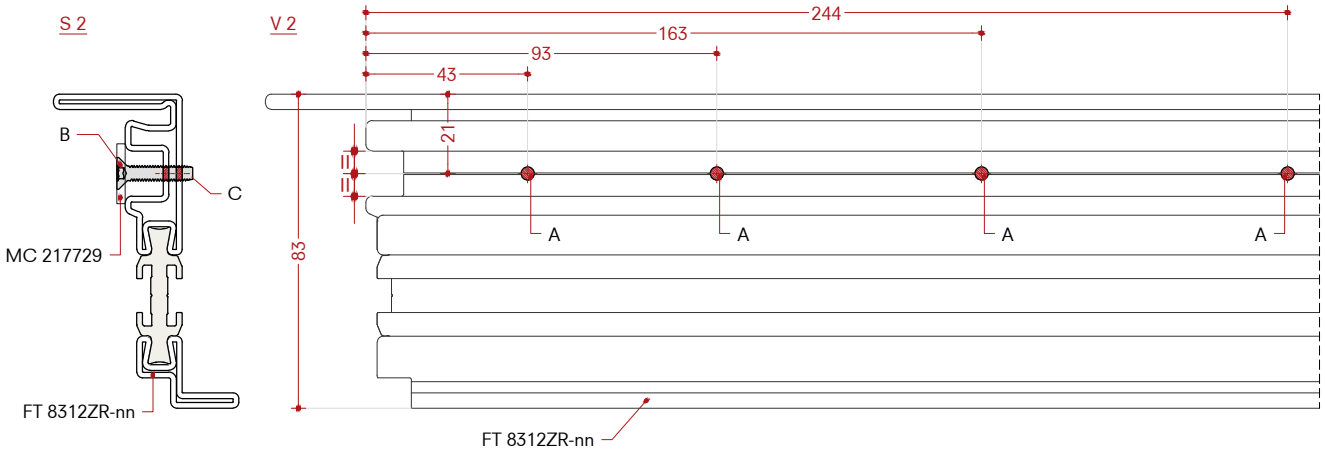
A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

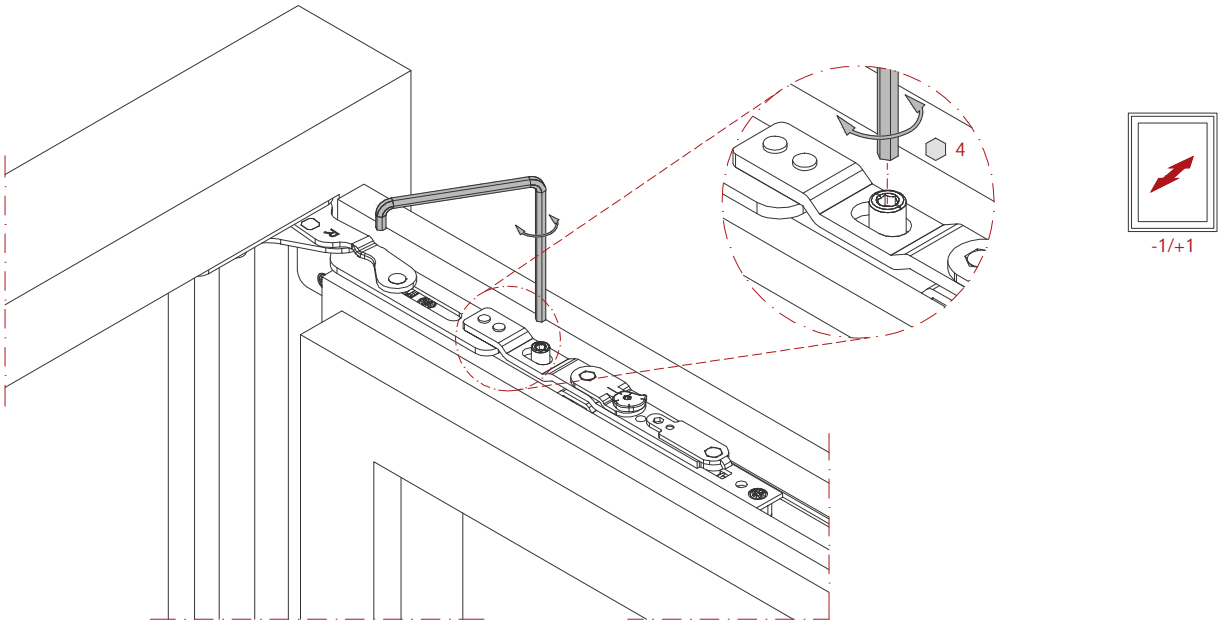
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis



Pressure adjustment **Anpressdruck Einstellung** **Réglage de la pression de contact**

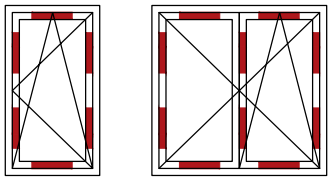


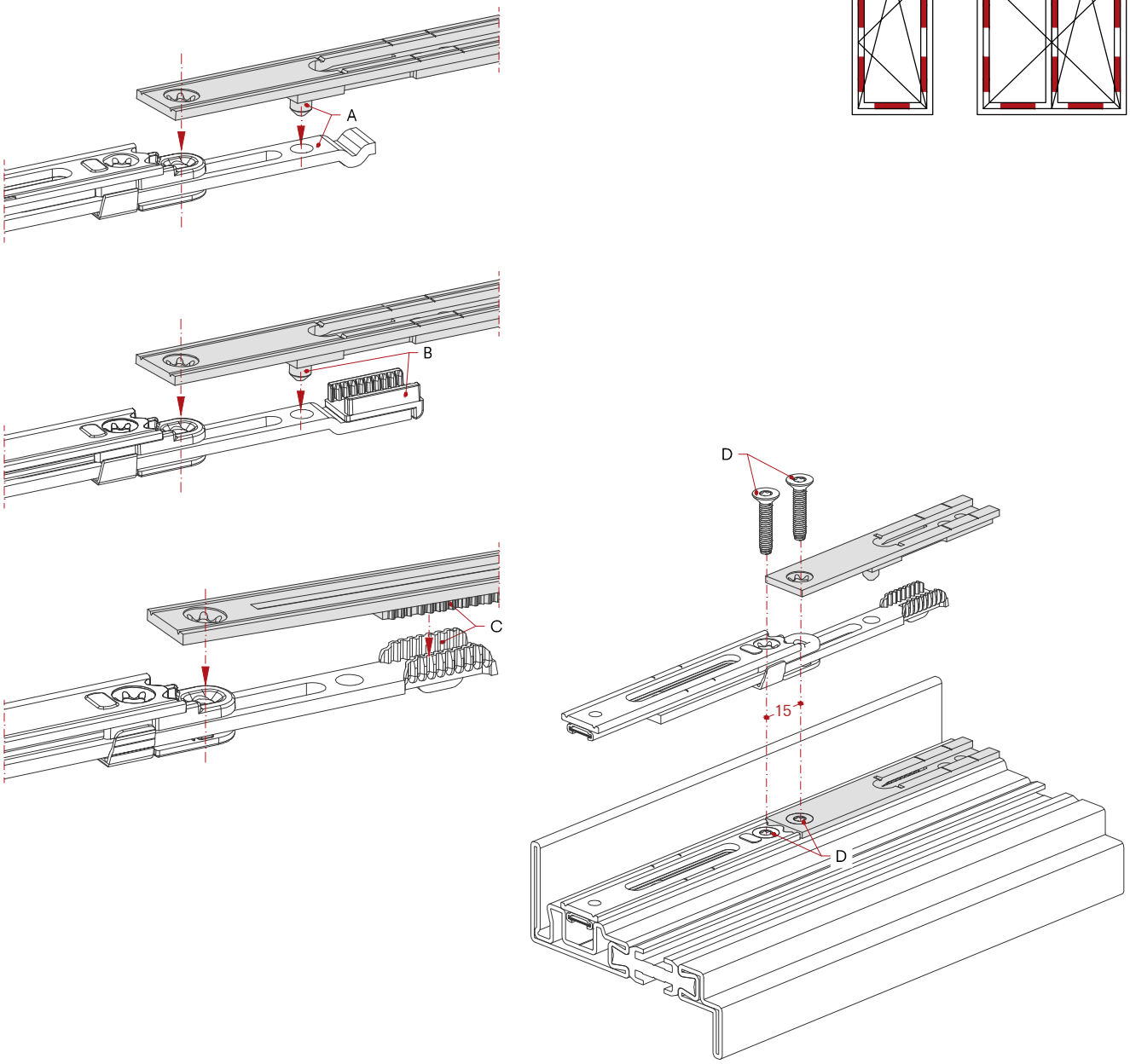
Adjustment range +1 mm with SW 4 Einstellbereich +1 mm mit SW 4 Plage de réglage +1 mm avec SW 4

Faceplate extensions extendable
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 201841
MC 206630

Stulpverlängerungen verlängerbar
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 201841
MC 206630

Prolongateurs rallongeables
MC 201750
MC 201753
MC 201754 (*)
MC 201840
MC 201841
MC 206630





W75TB - 0022 DWG DXF

(*) Faceplate extension MC 201754 can only be used vertically

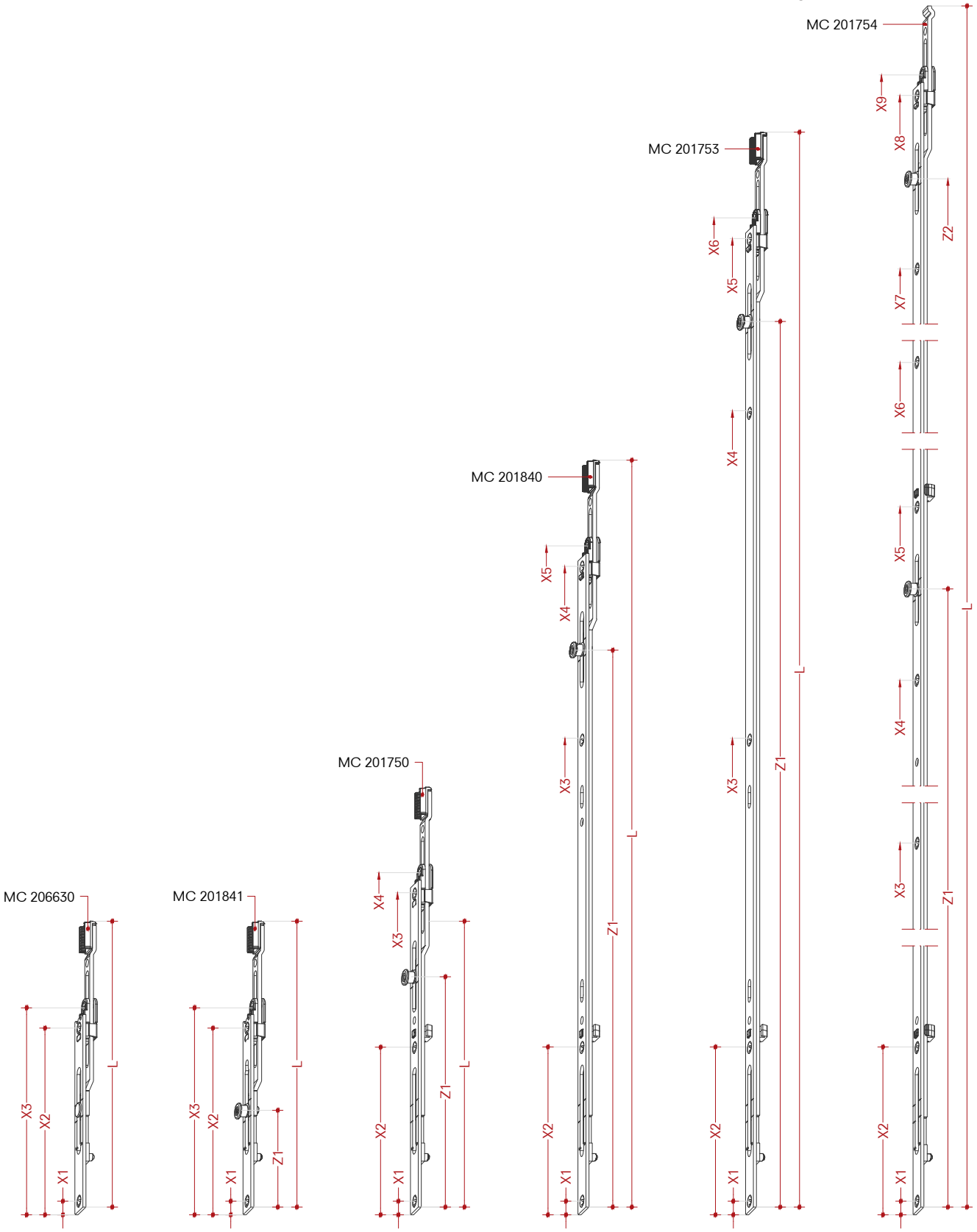
A) Coupling with hole-pin connection
B) Coupling with hole-pin connection with serrated carrier
C) Coupling with serrated carrier connection
D) Countersunk screw M4x20
L) Length faceplate extension
X) Position screw connection faceplate extension
Z) Position locking cam

(*) Stulpverlängerung MC 201754 nur vertikal einsetzbar

A) Kopplung mit einer Loch-Stift-Verbindung
B) Kopplung mit einer Loch-Stift-Verbindung mit Zahnkasten
C) Kopplung mit einer Zahnkastenverbindung
D) Senkkopfschraube M4x20
L) Länge Stulpverlängerung
X) Lage Verschraubung Stulpverlängerung
Z) Lage Verriegelungszapfen

(*) La verrouilleur rallongeable MC 201754 ne peut être utilisée que verticalement

A) Assembleur avec liaison par plot et trou
B) Assembleur avec liaison par plot et trou avec coffre cranté
C) Assembleur avec liaison par coffre cranté
D) Vis à tête fraisée M4x20
L) Longueur du prolongateur
X) Position du raccord à vis pour prolongateur
Z) Position de galet de verrouillage

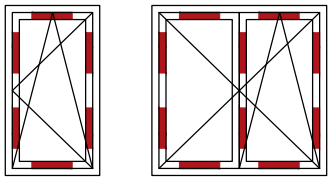


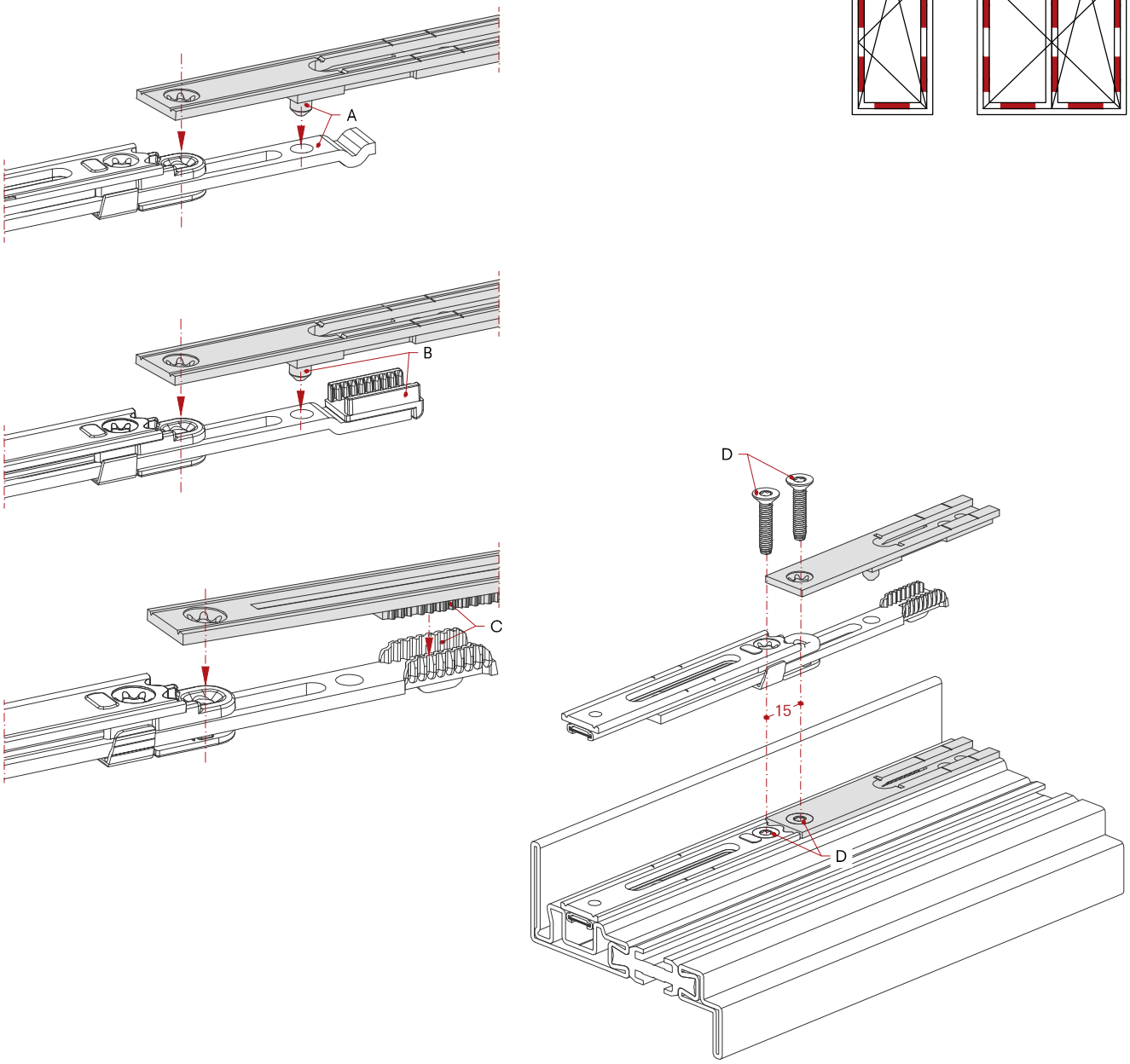
	L	X1	X2	X3	X4	X5	X6	X7	X8	X9	Z1	Z2
MC 206630	138.5	7	131.5	146.5	-	-	-	-	-	-	-	-
MC 201841	138.5	7	131.5	146.5	-	-	-	-	-	-	72	-
MC 201750	235	7	117.5	228	243	-	-	-	-	-	168.5	-
MC 201840	470	7	117.5	338.5	463	478	-	-	-	-	403.5	-
MC 201753	705	7	117.5	338.5	573.5	698	713	-	-	-	638.5	-
MC 201754 (*)	1410	7	117.5	338.5	573.5	698	1044	1279	1403	1408	638.5	1344

Faceplate extensions croppable
MC 203697
MC 203698
MC 203699 (*)

Stulpverlängerungen ablängbar
MC 203697
MC 203698
MC 203699 (*)

Prolongateurs recoupable
MC 203697
MC 203698
MC 203699 (*)





W75TB - 0023 DWG DXF

(*) Faceplate extension MC 203699 can only be used vertically

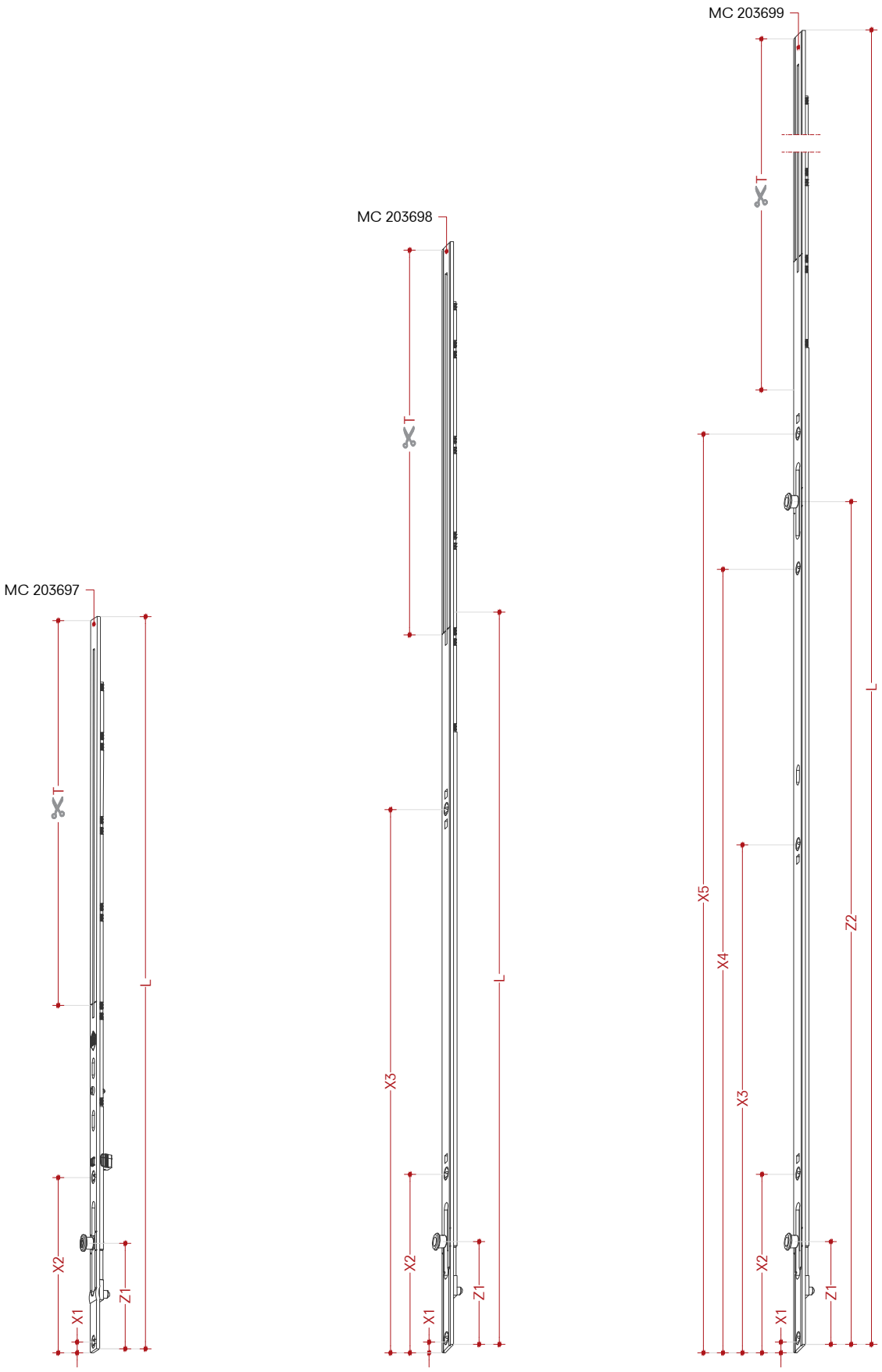
A) Coupling with hole-pin connection
B) Coupling with hole-pin connection with serrated carrier
C) Coupling with serrated carrier connection
D) Countersunk screw M4x20
L) Length faceplate extension
T) Maximum cut faceplate extension
X) Position screw connection faceplate extension
Z) Position locking cam

(*) Stulpverlängerung MC 203699 nur vertikal einsetzbar

A) Kopplung mit einer Loch-Stift-Verbindung
B) Kopplung mit einer Loch-Stift-Verbindung mit Zahnkasten
C) Kopplung mit einer Zahnkastenverbindung
D) Senkkopfschraube M4x20
L) Länge Stulpverlängerung
T) Maximale Kürzung Stulpverlängerung
X) Lage Verschraubung Stulpverlängerung
Z) Lage Verriegelungszapfen

(*) La verrouilleur rallongeable MC 203699 ne peut être utilisée que verticalement

A) Assembleur avec liaison par plot et trou
B) Assembleur avec liaison par plot et trou avec coffre cranté
C) Assembleur avec liaison par coffre cranté
D) Vis à tête fraisée M4x20
L) Longueur du prolongateur
T) Réduction maximale de la prolongateur
X) Position du raccord à vis pour prolongateur
Z) Position de galet de verrouillage

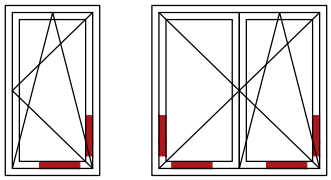


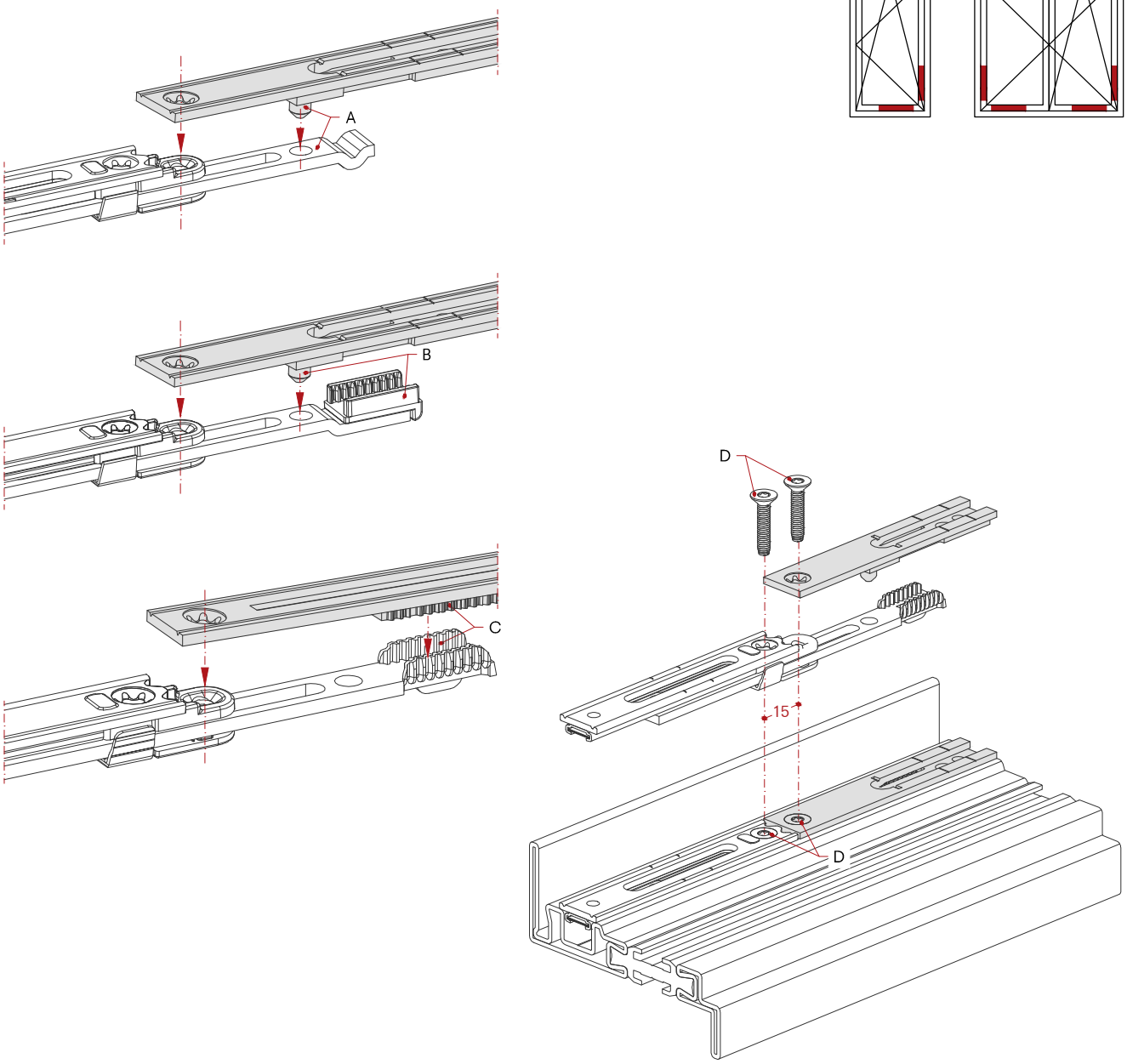
	L	X1	X2	X3	X4	X5	T	Z1	Z2
MC 203697	497	7	117	-	-	-	260	72	-
MC 203698	747	7	117	367	-	-	260	72	-
MC 203699 (*)	997	7	117	337	527	617	260	72	572

Faceplate extensions fixed
MC 210496
MC 201751
MC 201752

Stulpverlängerungen fix
MC 210496
MC 201751
MC 201752

Prolongateur fixe
MC 210496
MC 201751
MC 201752



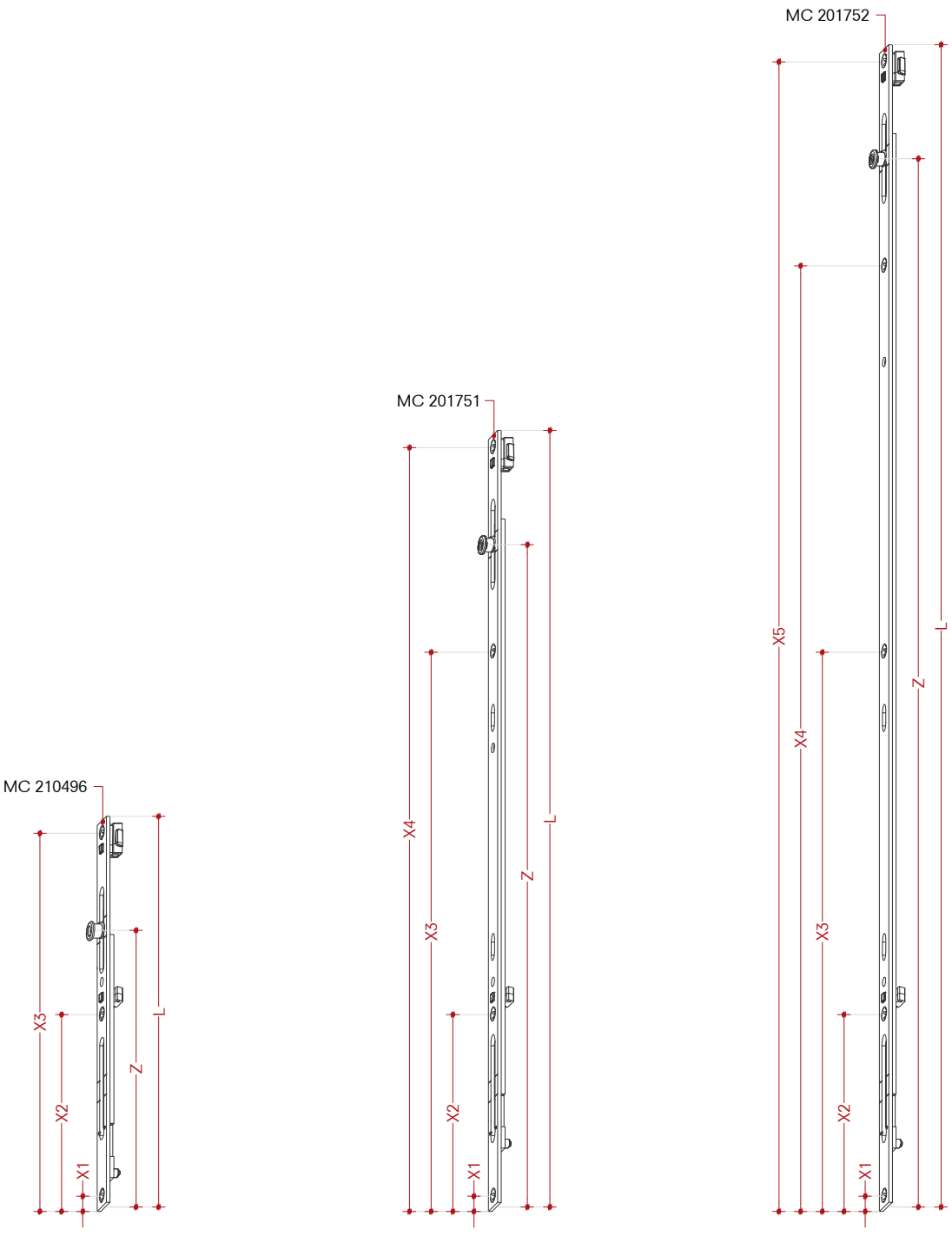


W75TB - 0024 DWG DXF

A) Coupling with hole-pin connection
B) Coupling with hole-pin connection with serrated carrier
C) Coupling with serrated carrier connection
D) Countersunk screw M4x20
L) Length faceplate extension
X) Position screw connection faceplate extension
Z) Position locking cam

A) Kopplung mit einer Loch-Stift-Verbindung
B) Kopplung mit einer Loch-Stift-Verbindung mit Zahnkasten
C) Kopplung mit einer Zahnkastenverbindung
D) Senkkopfschraube M4x20
L) Länge Stulpverlängerung
X) Lage Verschraubung Stulpverlängerung
Z) Lage Verriegelungszapfen

A) Assembleur avec liaison par plot et trou
B) Assembleur avec liaison par plot et trou avec coffre cranté
C) Assembleur avec liaison par coffre cranté
D) Vis à tête fraisée M4x20
L) Longueur du prolongateur
X) Position du raccord à vis pour prolongateur
Z) Position de galet de verrouillage

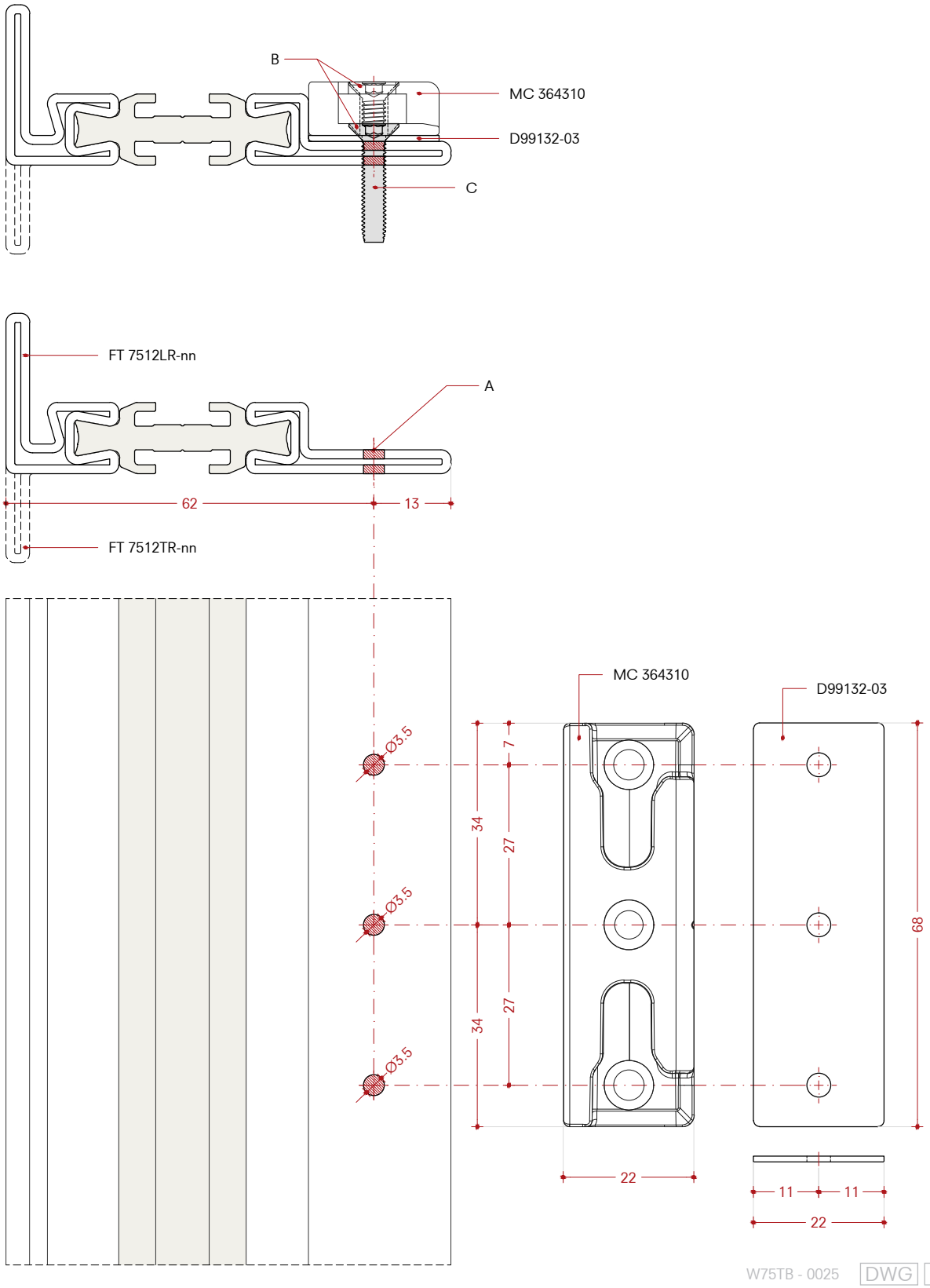


	L	X1	X2	X3	X4	X5	Z
MC 210496	235	7	117.5	228	-	-	168.5
MC 201751	470	7	117.5	338.5	463	-	403.5
MC 201752	705	7	117.5	338.5	573.5	698	638.5

Striker plate position
MC 364310

Position Schließstück
MC 364310

Position de la gâche
MC 364310



W75TB - 0025 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x20 (3 pieces each)
C) Cut the screw

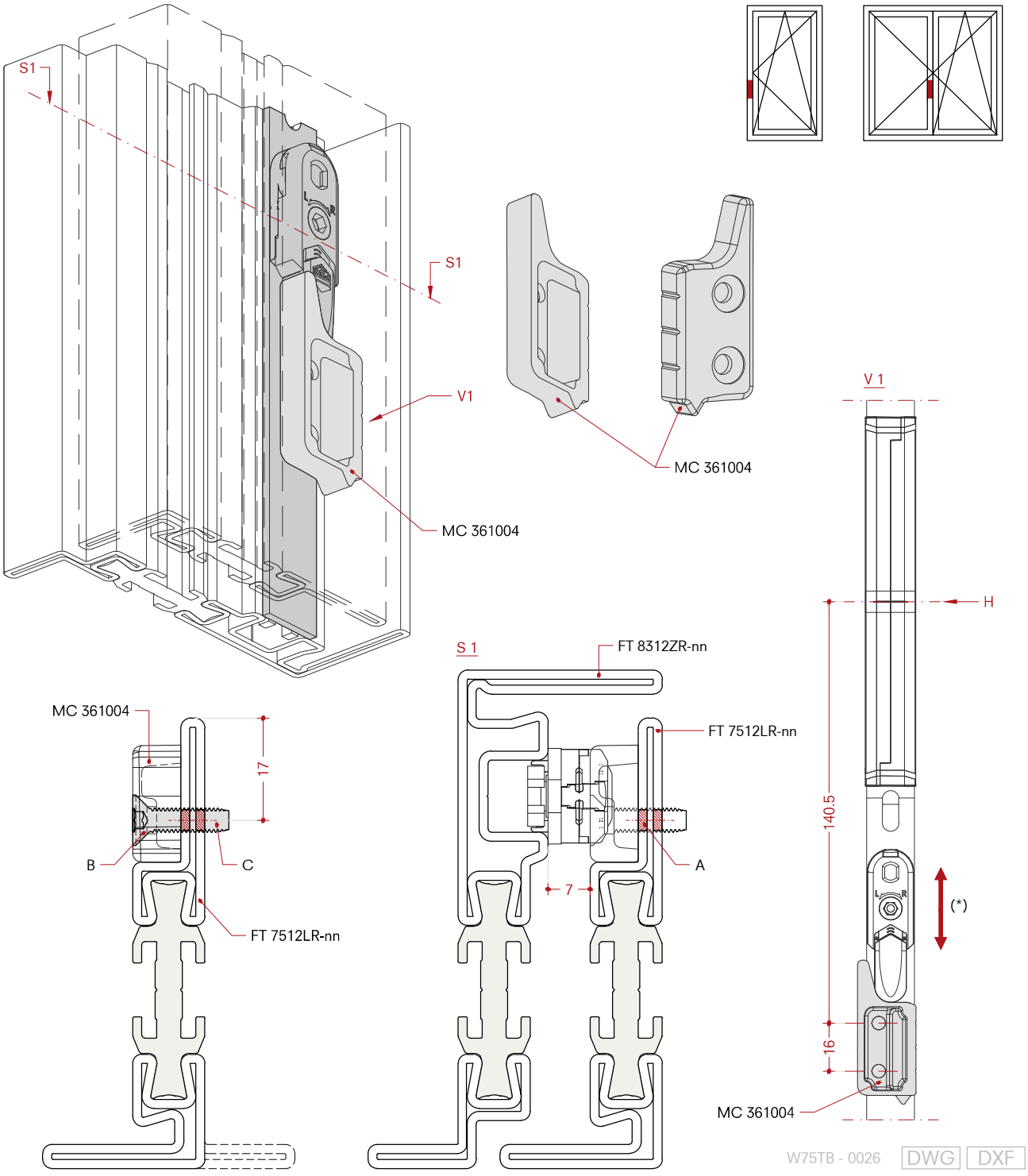
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20 (jeweils 3 Stück)
C) Schraube kürzen

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20 (3 morceaux chacun)
C) Couper la vis

Sash lifter
MC 361004 R
MC 361005 L

Flügelheber
MC 361004 R
MC 361005 L

Gâche rehausse
MC 361004 R
MC 361005 L



Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x16
C) Cut the screw
H) Handle height
(*) Adjustable

L = Left opening
R = Right opening

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x16
C) Schraube kürzen
H) Griffhöhe
(*) Einstellbar

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

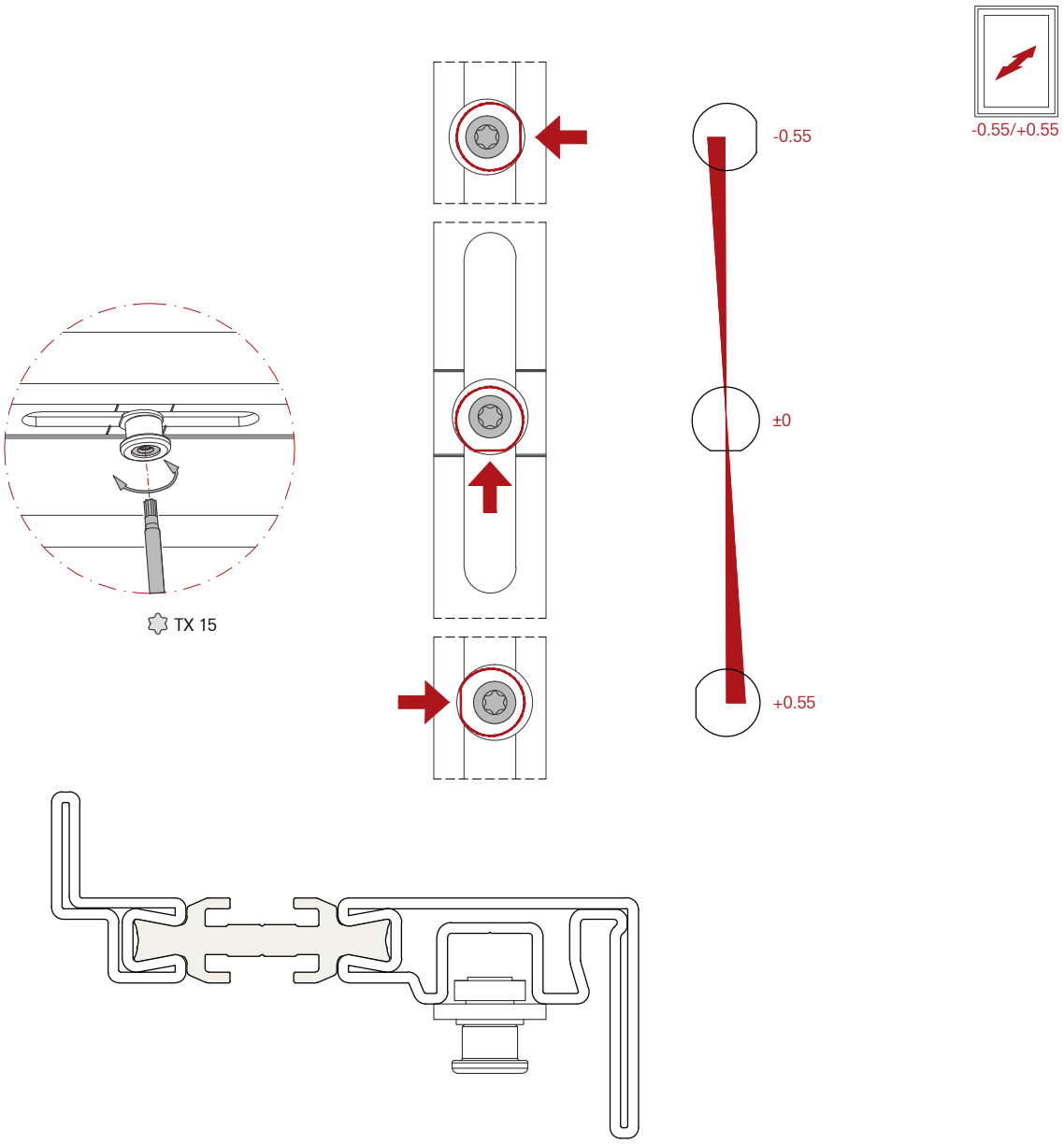
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x16
C) Couper la vis
H) Hauteur de poignée
(*) Ajustable

L = Ouverture gauche
R = Ouverture droite

Pressure adjustment

Anpressdruck Einstellung

Réglage de la pression de contact



Adjustment range ± 0.5 mm with TX 15

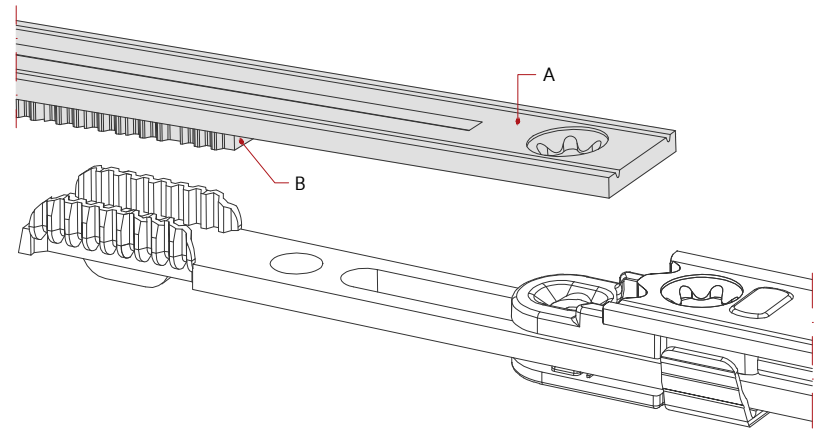
Einstellbereich ± 0.5 mm mit TX 15

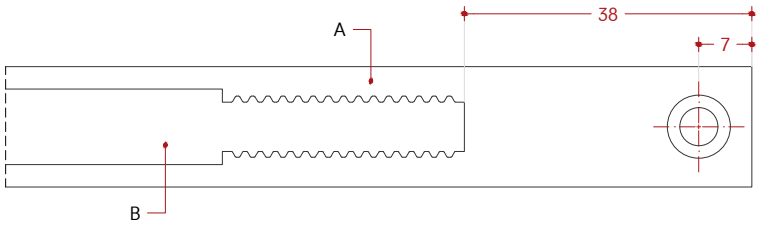
Plage de réglage ± 0.5 mm avec TX 15

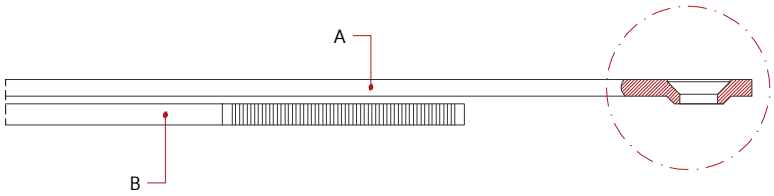
Punch pattern for cut-to-length faceplates

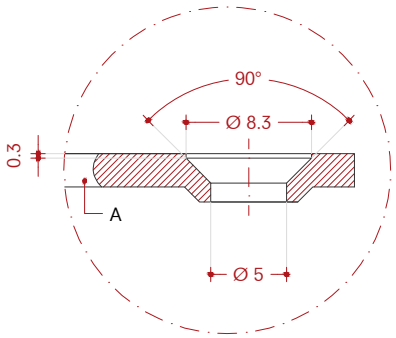
Stanzbild bei ablängbaren Stulpen

Schéma de découpe pour les têtières coupées à longueur









NOTE:
We recommend re-treating the cropped edges of fittings with a suitable touch-up paint.

A) Faceplate
B) Drive track

HINWEIS:
Wir empfehlen die Schnittkanten von Beschlagteilen mit geeignetem Ausbesserungslack nachzubehandeln.

A) Stulp
B) Riegel

REMARQUE:
Nous recommandons que les bords coupés des pièces de quincaillerie soient retouchés avec de la peinture de retouche appropriée.

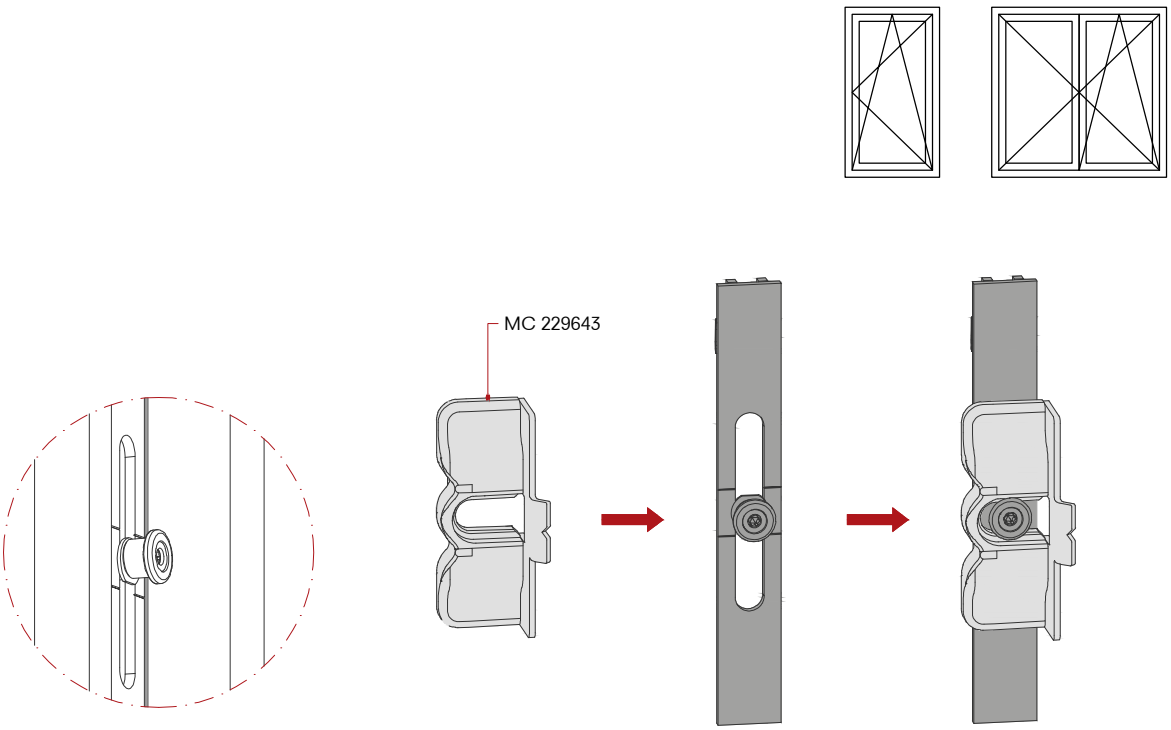
A) Têtière
B) Crémaillère

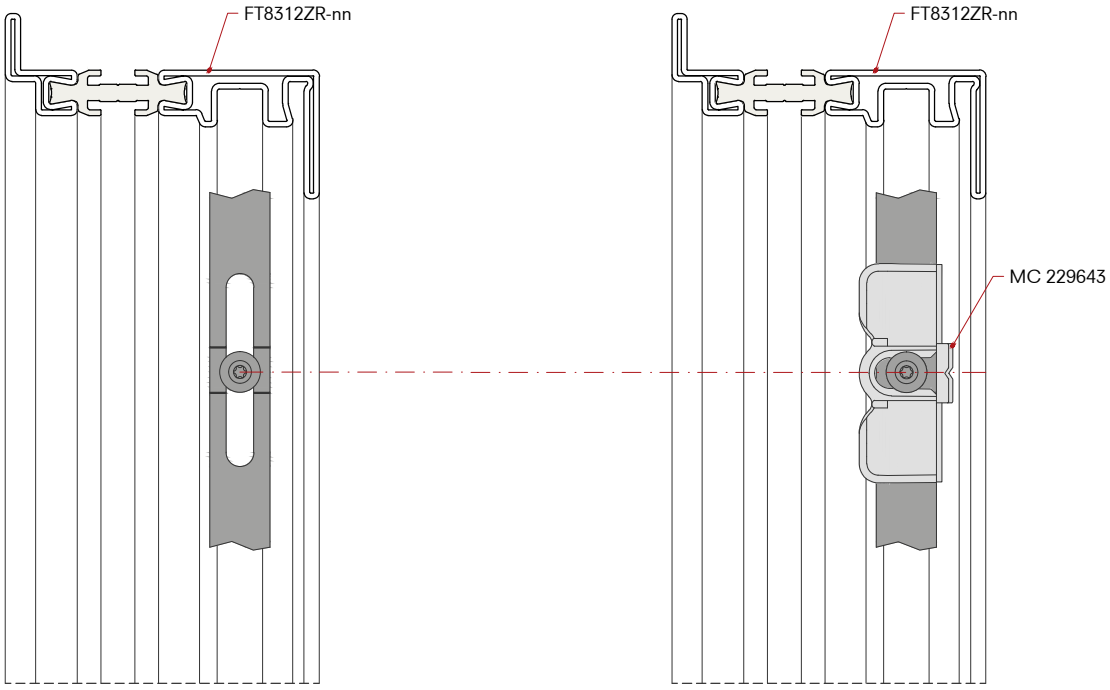
Templates for Tilt&Turn fittings

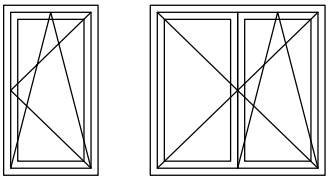
MC 229643

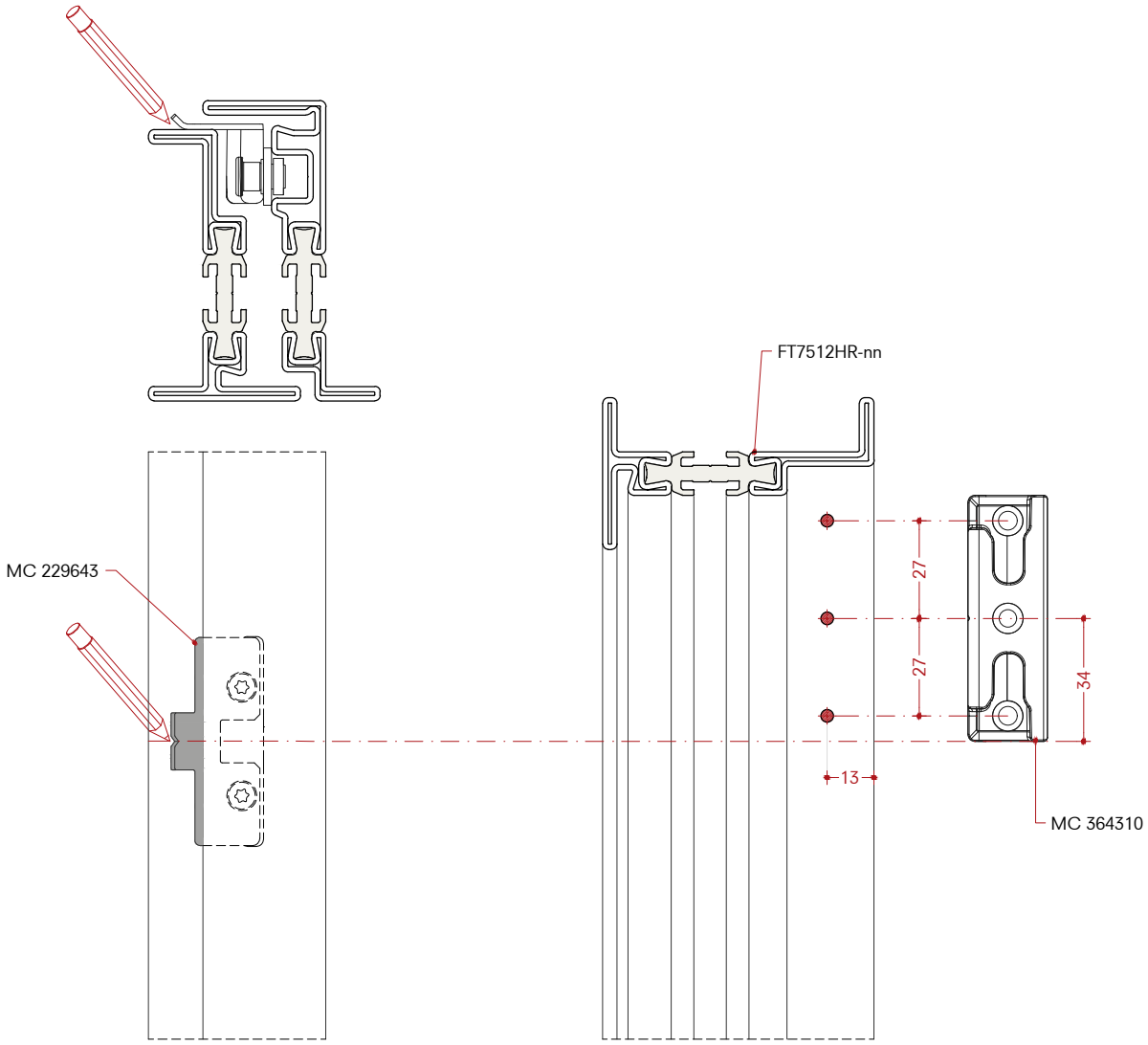
Beilagen für Dreh-Kippfenster Beschläge
MC 229643

Gabarit pour ferrures de fênetre oscillo-battant
MC 229643





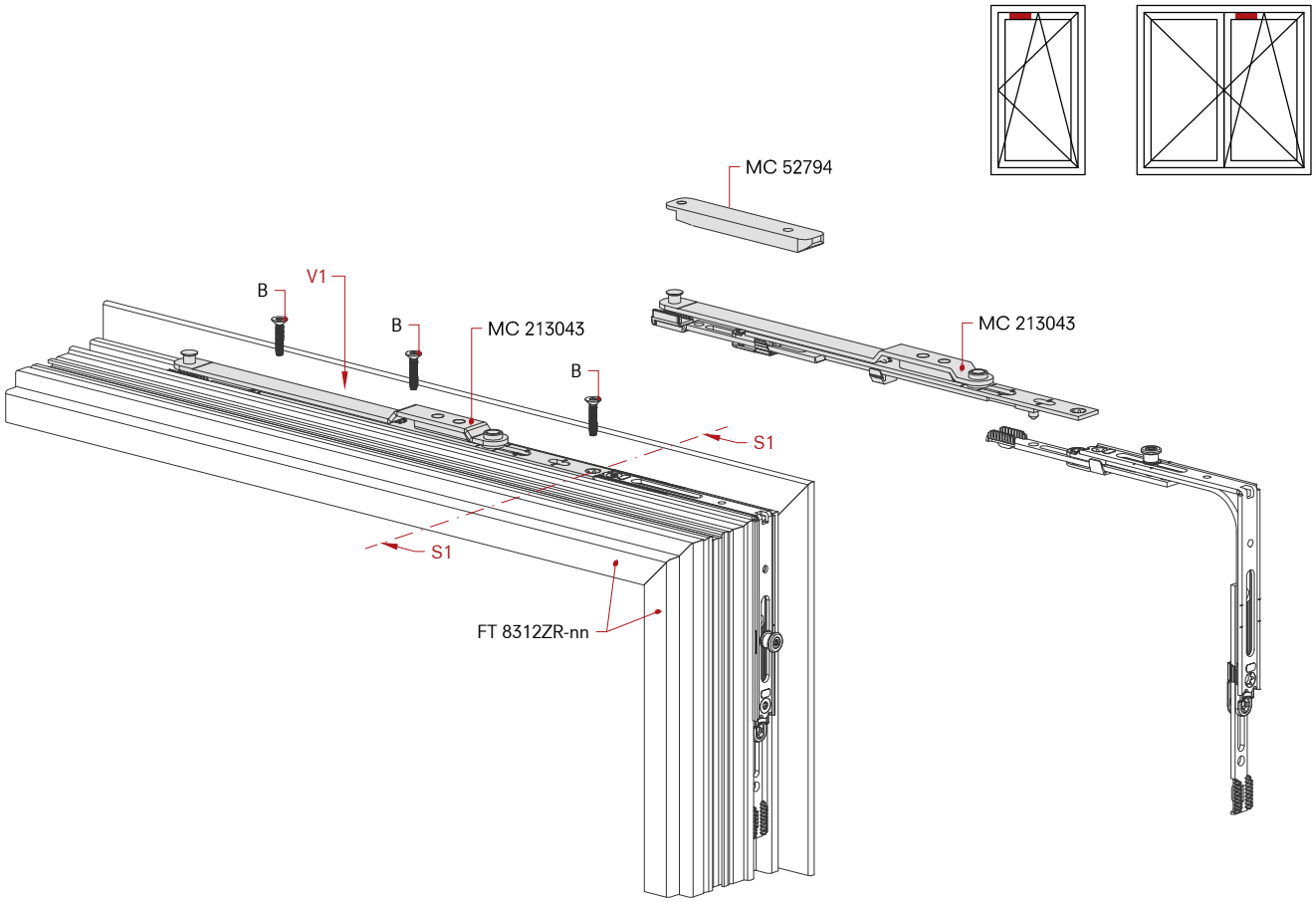


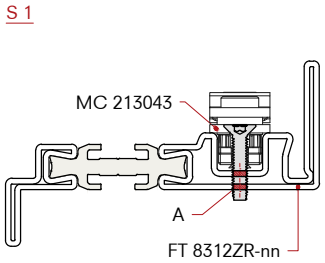

FT7512HR-nn
MC 229643
27
27
34
13
MC 364310

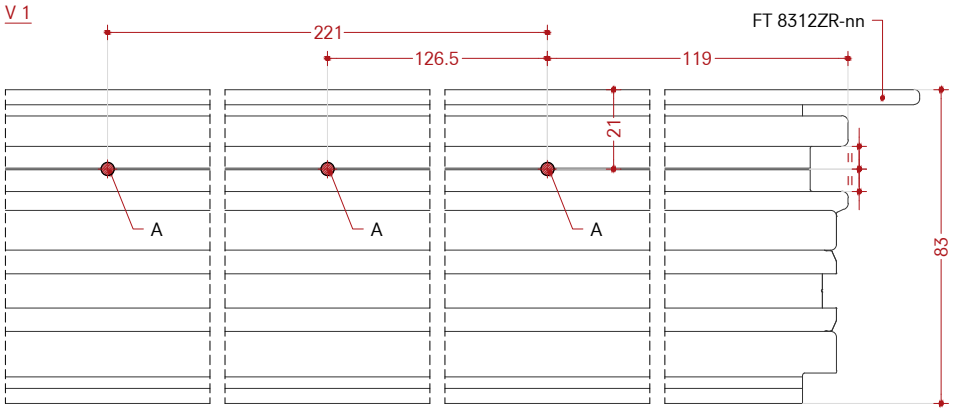
Stabilizing scissor stay without night-vent
MC 213043
and stabilising scissor stay case
MC 52794

Zweitschere ohne Sparlüftung
MC 213043
und Zweitscherengehäuse
MC 52794

Compas additionnel sans fonction entrebâilleur
MC 213043
et gâche pour compas additionnel
MC 52794







W75TB - 0027 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw

WL = Width Leaf

Dargestellt DIN rechts - DIN links spiegelbildlich

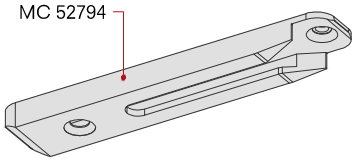
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen

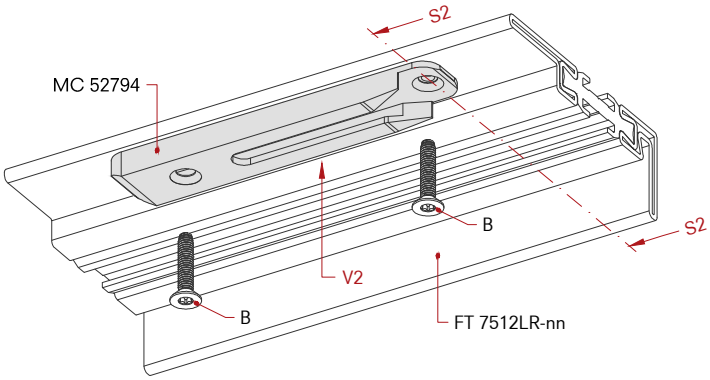
WL = Länge Flügel

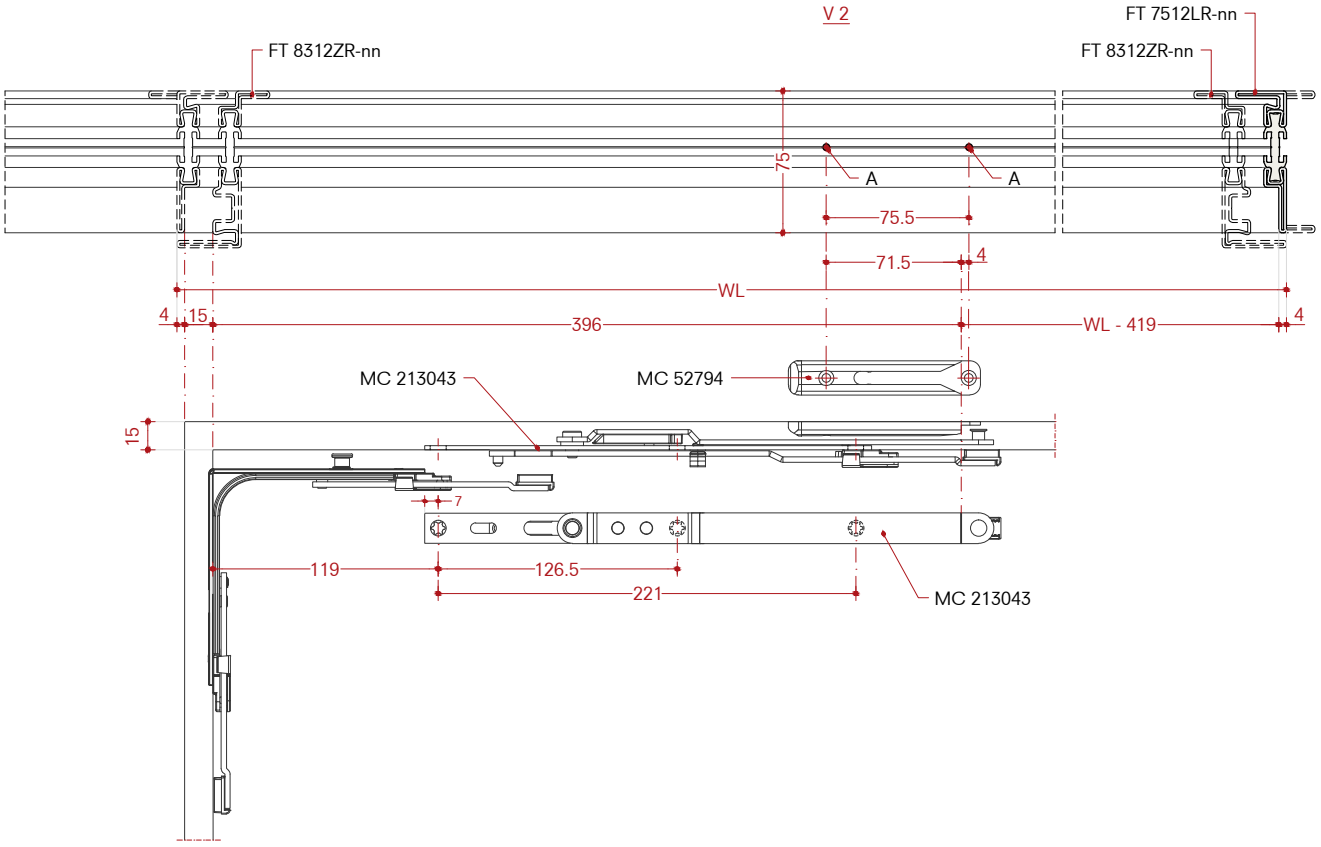
Montré ouverture droite
(ouverture gauche inversé en miroir)

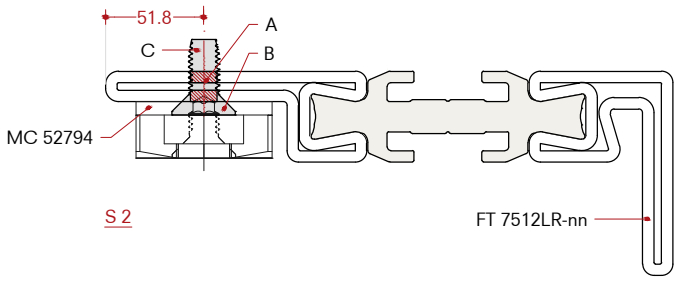
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis

WL = Largeur ouvrant


MC 52794


S2
MC 52794
B
S2
V2
B
FT 7512LR-nn

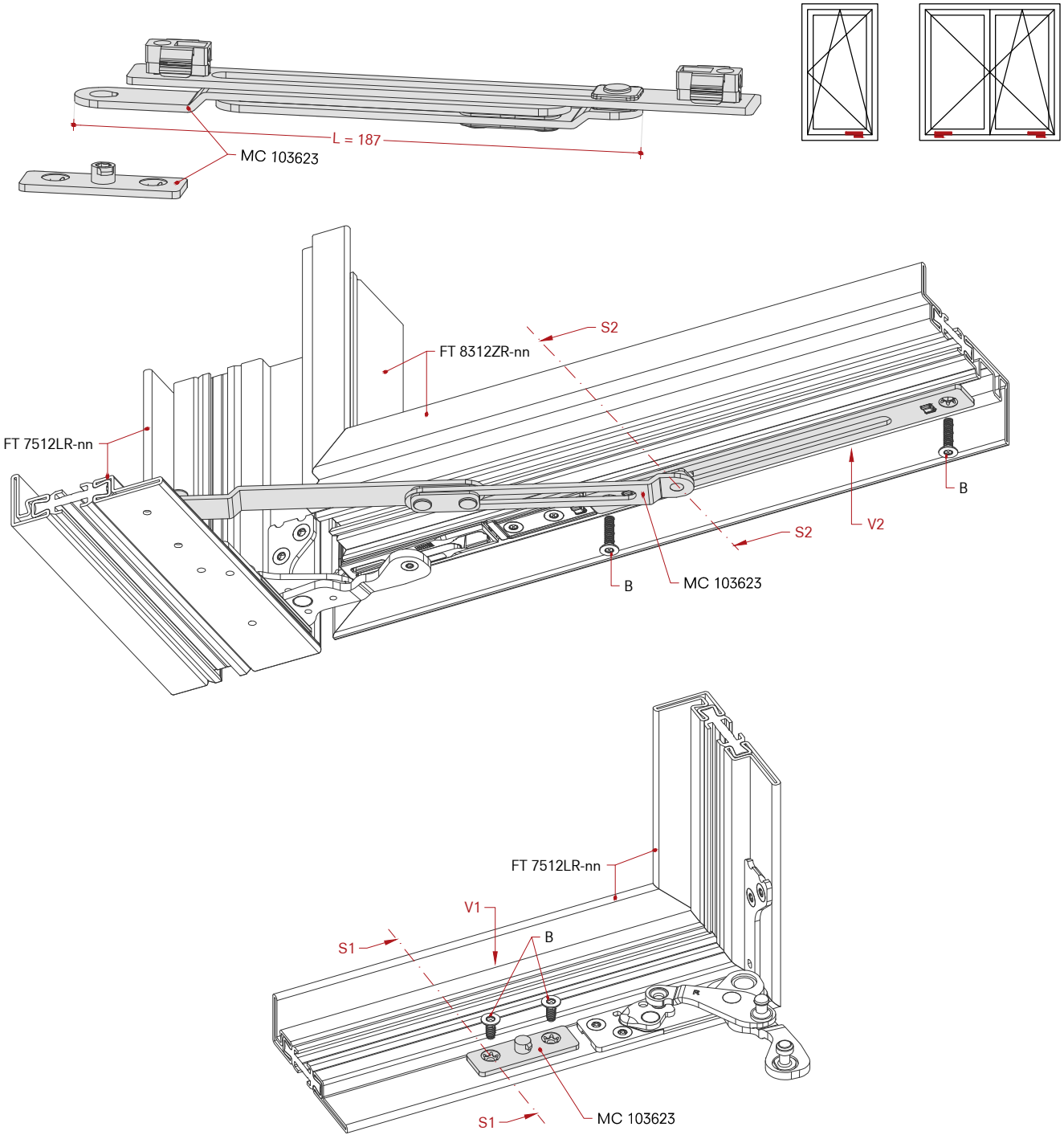

V 2
FT 7512LR-nn
FT 8312ZR-nn
FT 8312ZR-nn
75
A
A
75.5
71.5
4
WL
4
15
396
WL - 419
4
MC 213043
MC 52794
15
7
119
126.5
221
MC 213043


51.8
A
C
B
MC 52794
S 2
FT 7512LR-nn

Opening restrictor
L = 187 mm
MC 103623

Drehbegrenzung
L = 187 mm
MC 103623

Compas de limitation d'ouverture
L = 187 mm
MC 103623



W75TB - 0028 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Countersunk screw M4x10
D) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Senkkopfschraube M4x10
D) Schraube kürzen

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Vis à tête fraisée M4x10
D) Couper la vis

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

Bitte minimale Flügelfalzbreiten beachten:

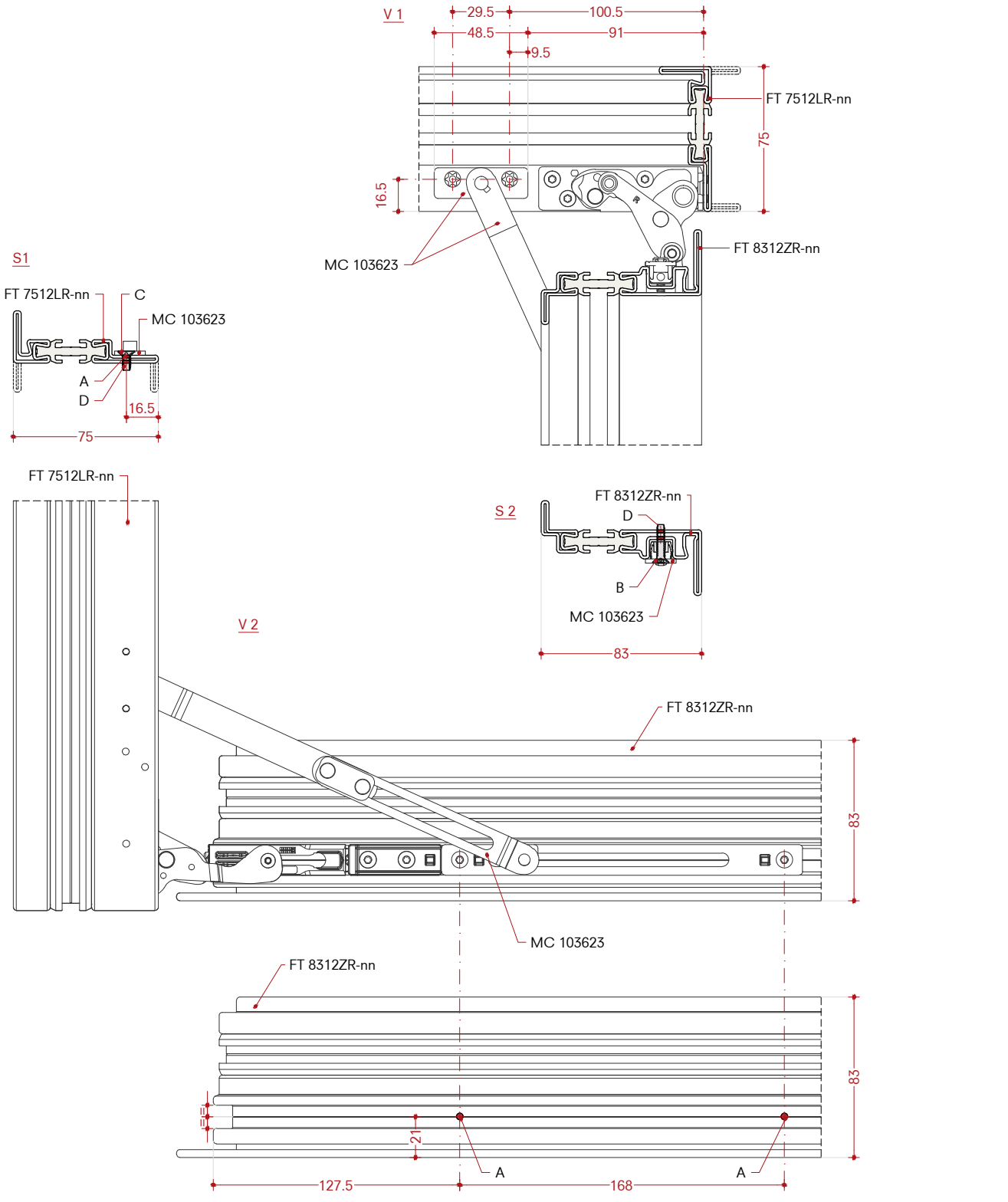
Bei DK- und Dreh-Fenster mit Kippverschluss senkrecht beträgt die Flügelfalzbreite ≥ 490 mm

Bei DK-Fenster mit Kippverschluss waagrecht beträgt die Flügelfalzbreite ≥ 560 mm

Attention aux largeurs minimales des feuillures des ouvrants:

Pour les fenêtres DK et à guillotine avec une serrure verticale à bascule, Largeur fond de feuillure ≥ 490 mm

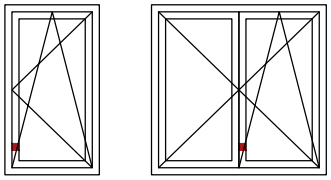
Pour les fenêtres DK avec serrure horizontale à bascule, Largeur fond de feuillure≥ 560 mm

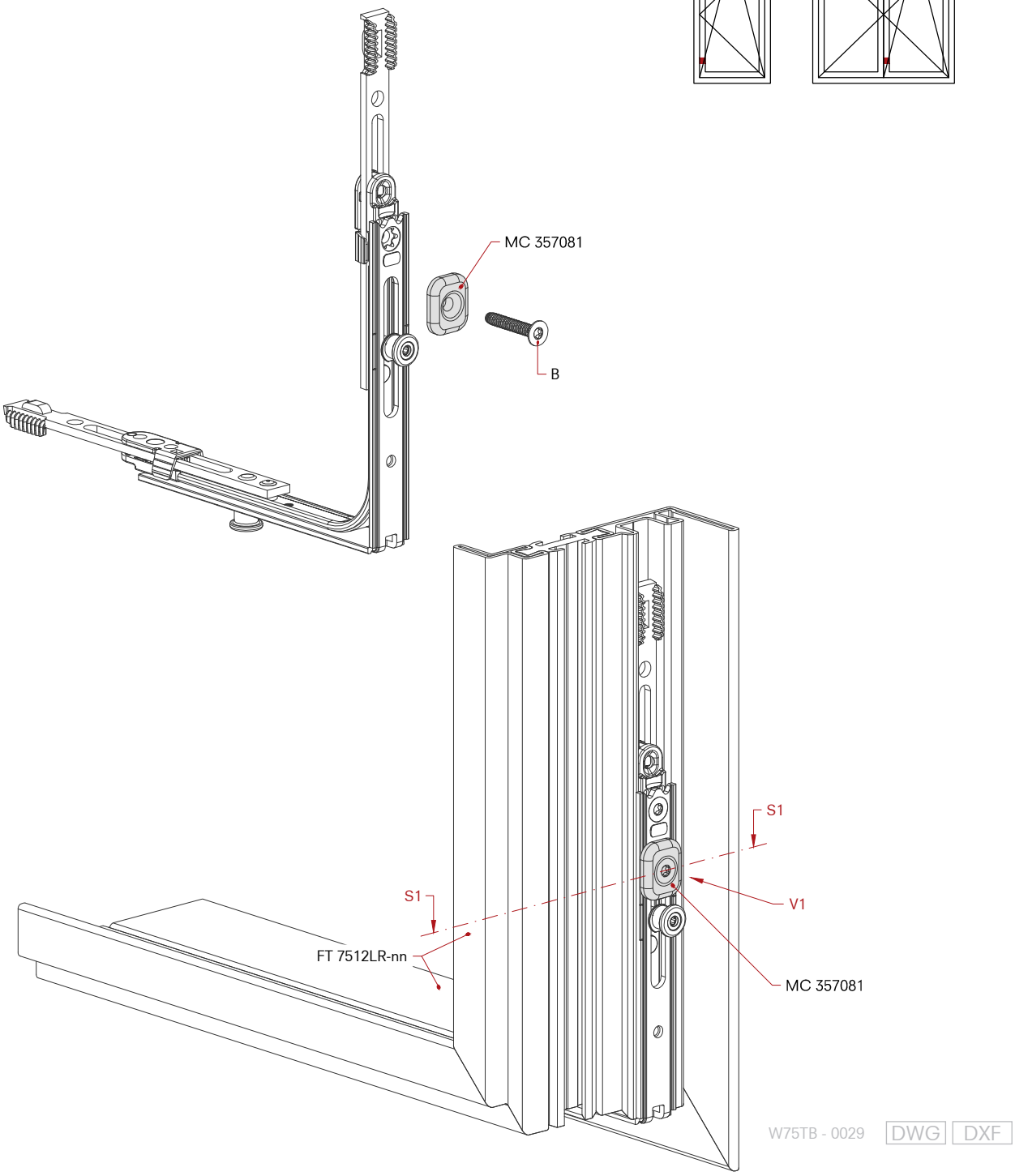


Travel restriction 90°
MC 357081
surface-mounted on corner elements

Hubbegrenzung 90°
MC 357081
aufschraubbar auf Eckumlenkung

Limiteur de course 90°
MC 357081
à visser sur renvois d'angle





Drawing represents right opening
(left opening is the mirror image)

A) Hole Ø3.3 mm
B) Countersunk screw M4x24
C) Cut the screw

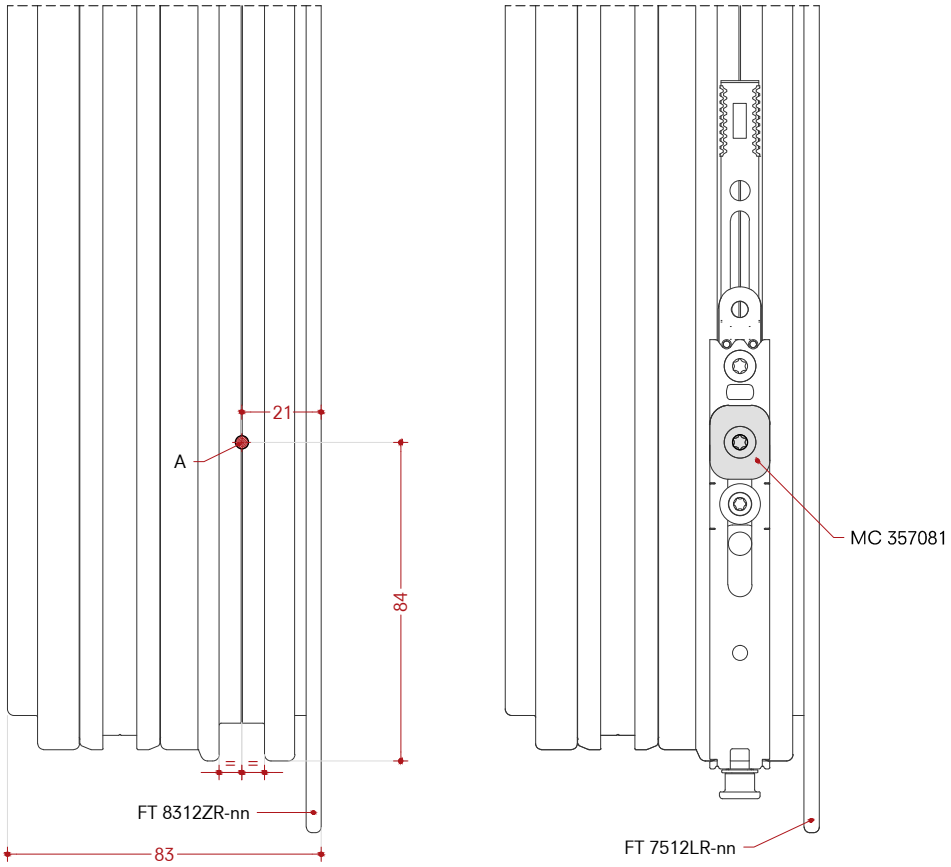
Dargestellt DIN rechts - DIN links spiegelbildlich

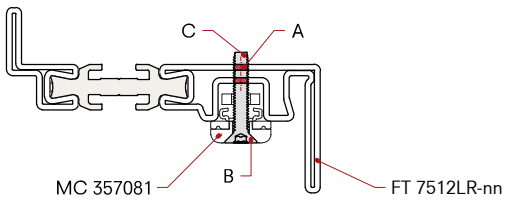
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x24
C) Schraube kürzen

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x24
C) Couper la vis

V 1


21
A
84
FT 8312ZR-nn
83
MC 357081
FT 7512LR-nn

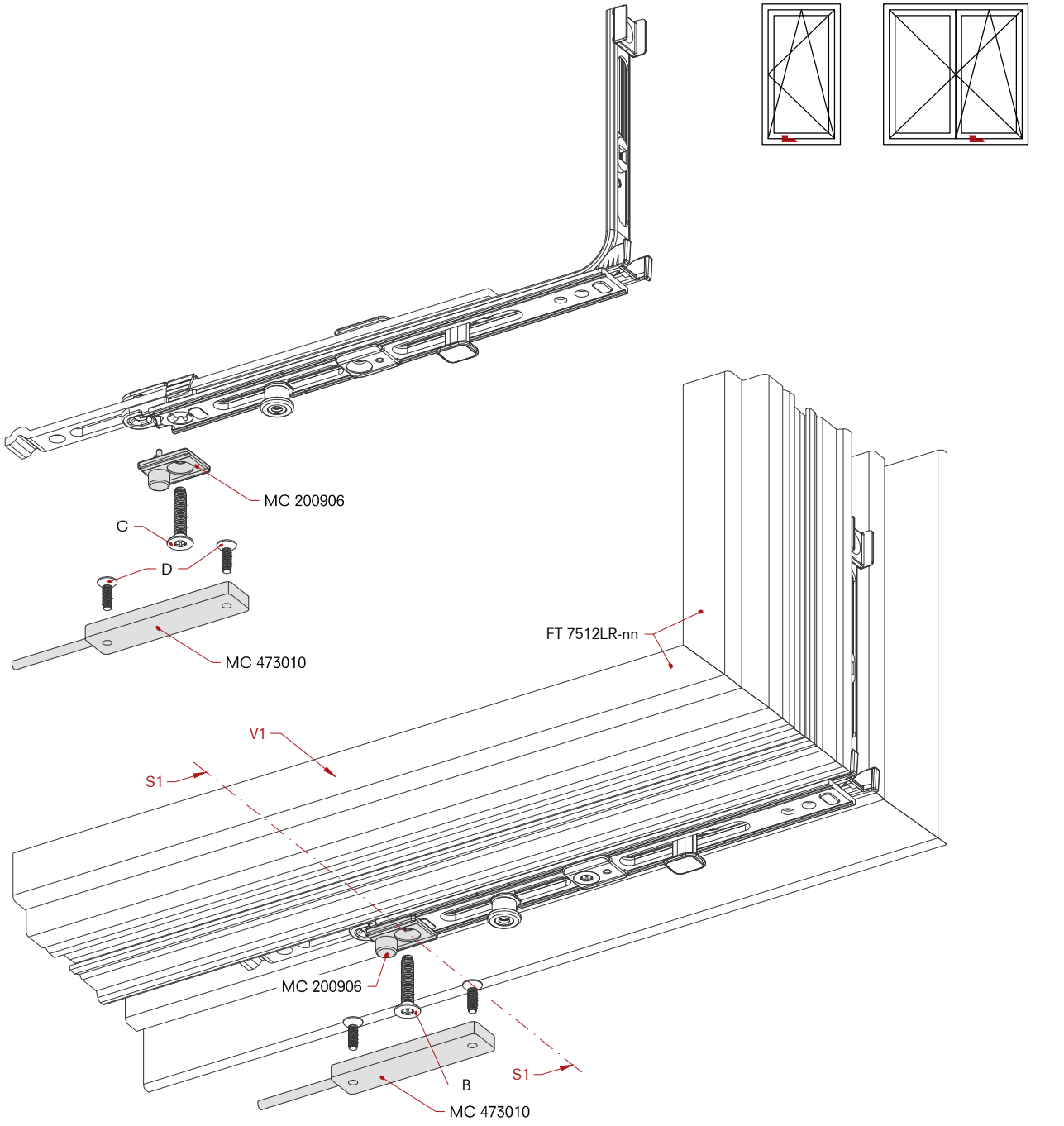

C
A
B
MC 357081
FT 7512LR-nn

S 1

Adaptor with contact sensor KVS
MC 200906
Flat magnet contact safety class 2
MC 473010

Adapter mit Magnetzapfen KVS
MC 200906
Flacher Magnetkontakt Schutzklasse 2
MC 473010

Adaptateur avec contact KVS
MC 200906
Contact magnétique plat classe de protection 2
MC 473010



W75TB - 0030 DWG DXF

Drawing represents right opening
(left opening is the mirror image)

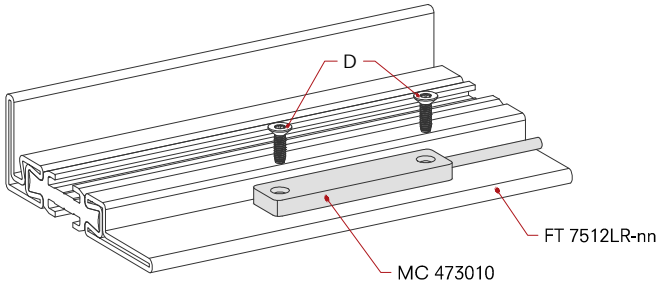
A) Hole Ø3.3 mm
B) Hole Ø2.5 mm
C) Countersunk screw M4x20
D) Countersunk screw M3x10
E) Cut the screw

Dargestellt DIN rechts - DIN links spiegelbildlich

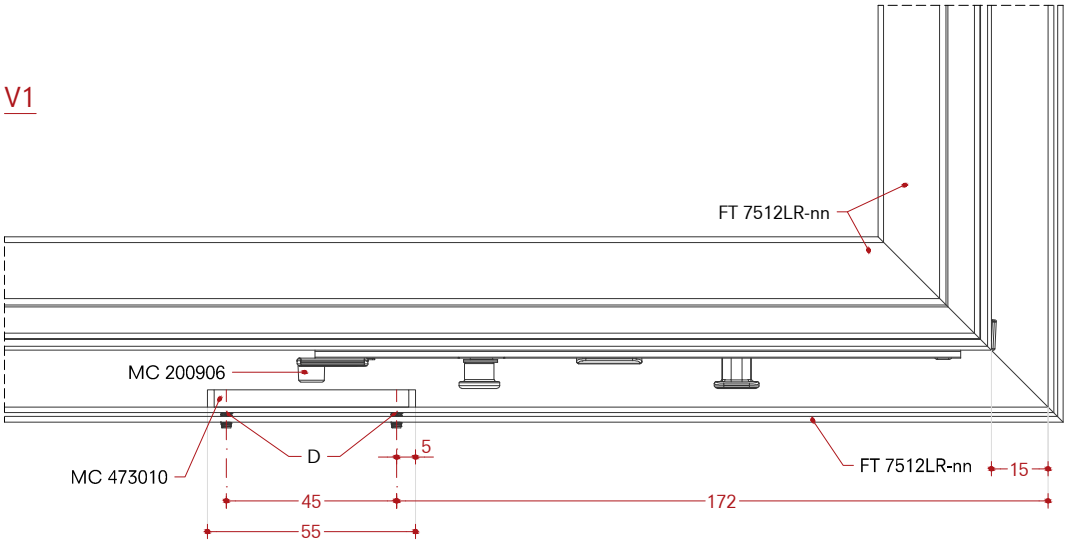
A) Bohrdurchmesser Ø3.3 mm
B) Bohrdurchmesser Ø2.5 mm
C) Senkkopfschraube M4x20
D) Senkkopfschraube M3x10
E) Schraube kürzen

Montré ouverture droite
(ouverture gauche inversé en miroir)

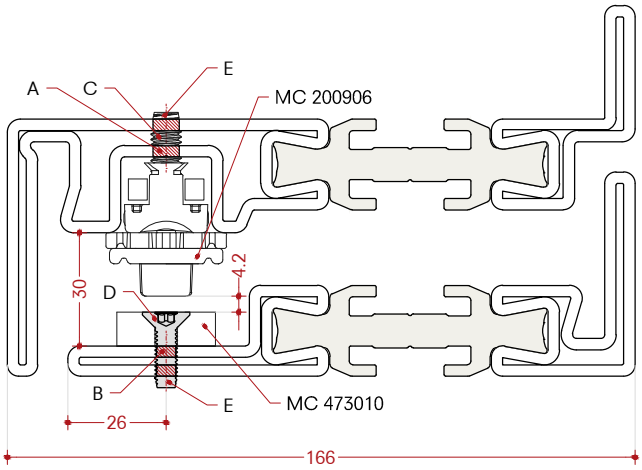
A) Trou Ø3.3 mm
B) Trou Ø2.5 mm
C) Vis à tête fraisée M4x20
D) Vis à tête fraisée M3x10
E) Couper la vis


D
FT 7512LR-nn
MC 473010

V1


FT 7512LR-nn
MC 200906
D
5
MC 473010
FT 7512LR-nn
15
45
172
55

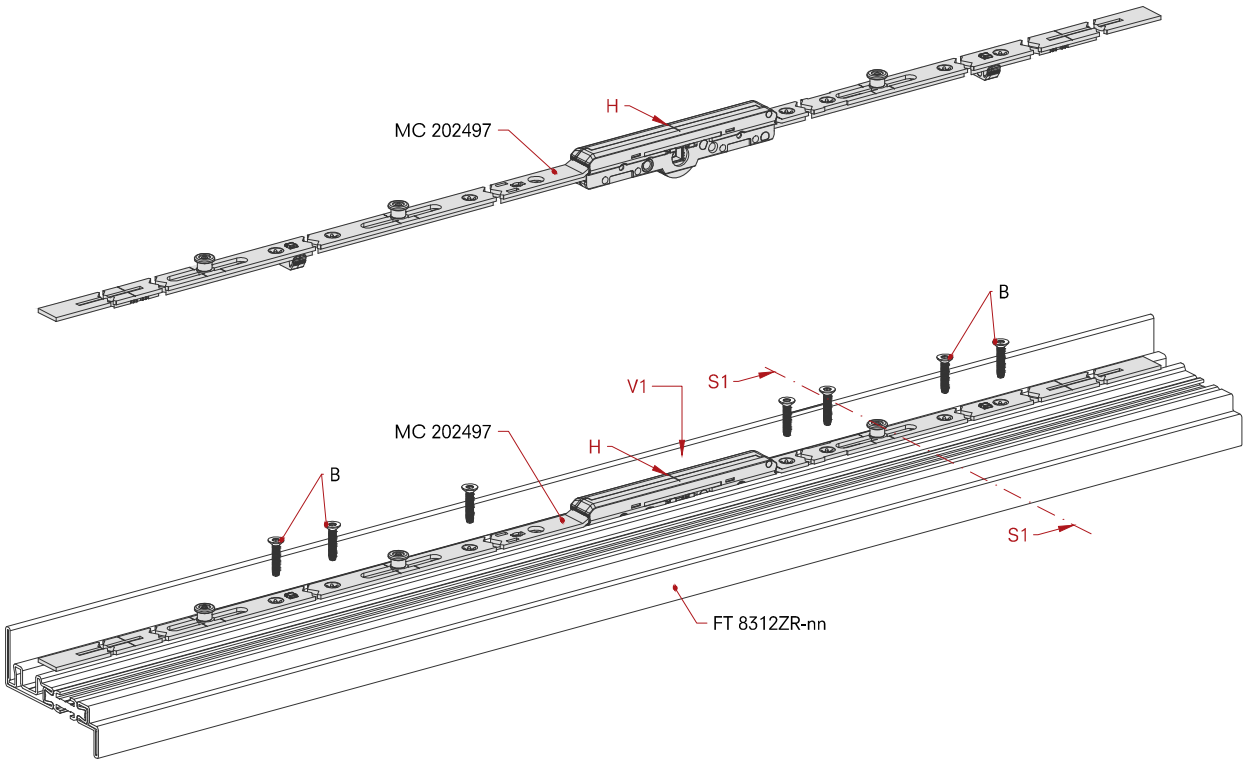
S 1


A
C
E
MC 200906
4.2
30
D
B
E
MC 473010
26
166

Turn-only drive gear variable
Bottom-hung window
Backset 6.5 mm
MC 202497

Drehgetriebe variabel
Kippfenster
Dornmass 6.5 mm
MC 202497

Crémone variable
Fenêtre soufflet
Entrée verrouiller 6.5 mm
MC 202497

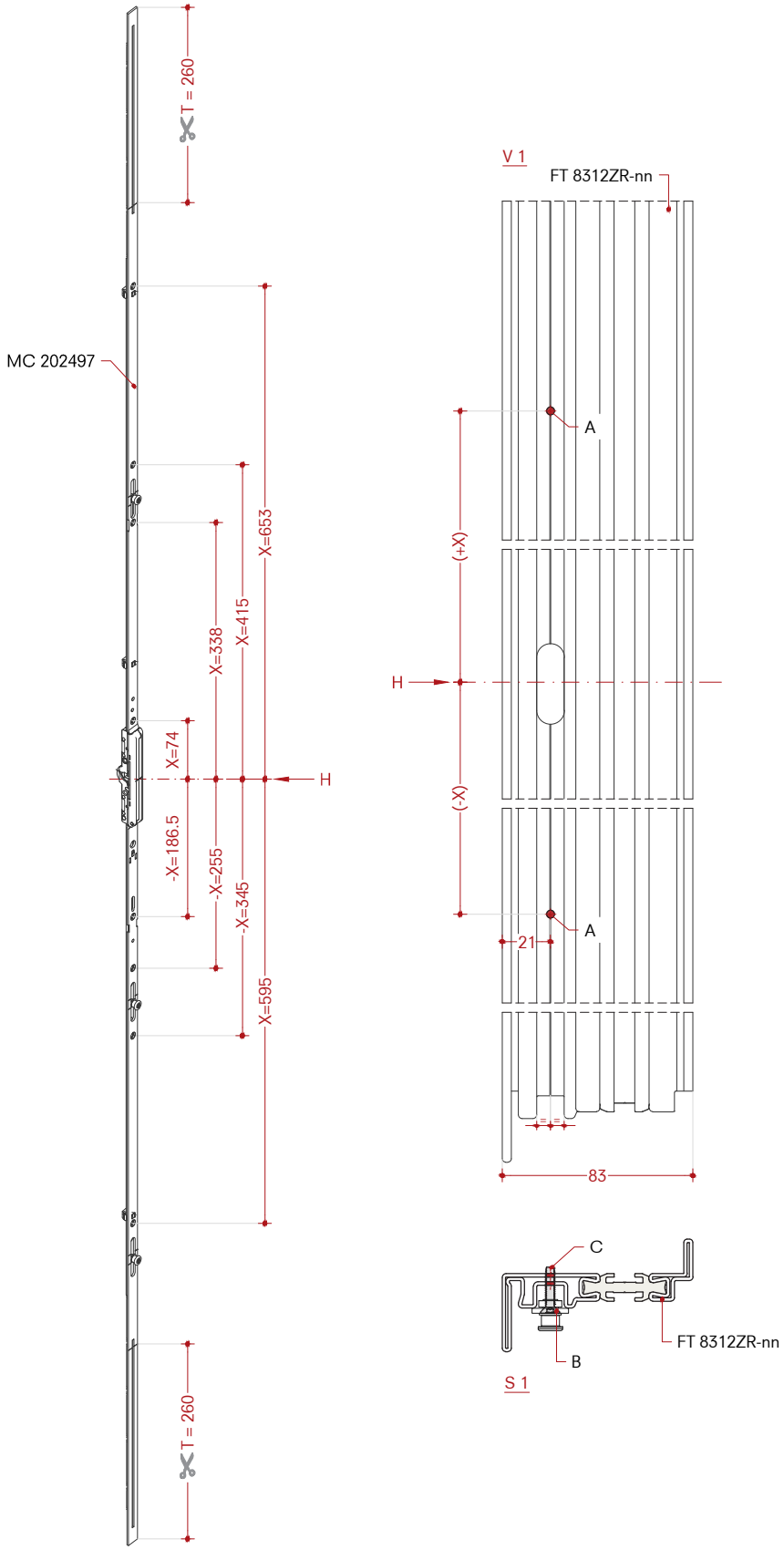


W75TB - 0031 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
H) Handle centre
T) Maximum cut drive gear
X) Position screw connection drive gear

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
H) Griffmitte
T) Maximale Kürzung Getriebe
X) Lage Verschraubung Getriebe

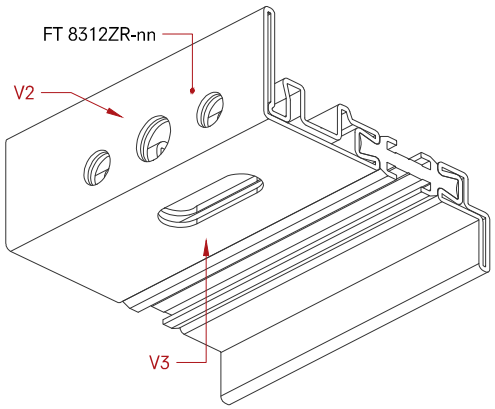
A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
H) Centre de poignée
T) Réduction maximale du crémone
X) Position du raccord à vis pour crémone

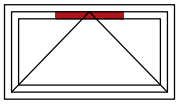

T = 260
MC 202497
X=653
X=415
X=338
X=74
H
-X=186.5
-X=255
-X=345
X=595
T = 260
V 1
FT 8312ZR-nn
A
(+X)
H
(-X)
A
21
83
C
B
FT 8312ZR-nn
S 1

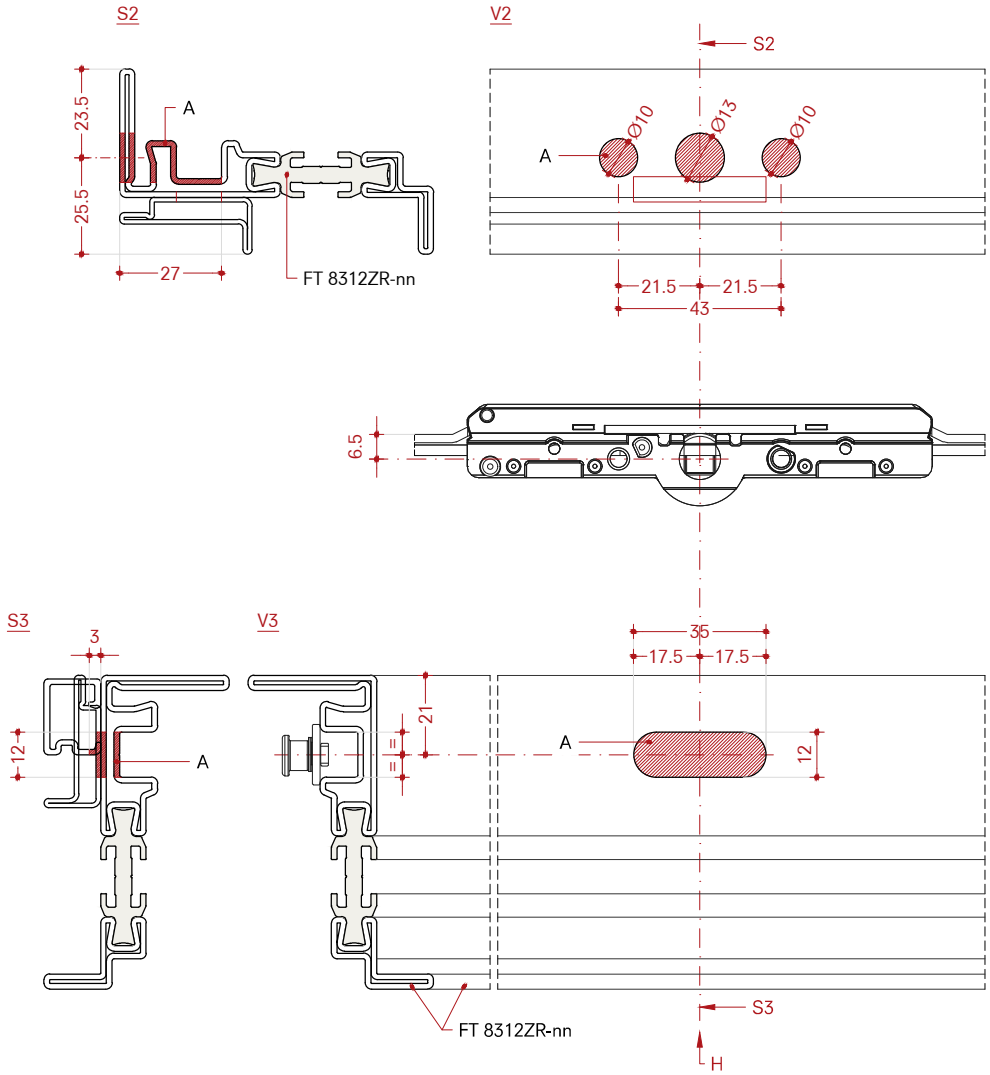
Handle position
Bottom-hung window
Hardware 6.5 mm backset
Drive gear variable

Griffposition
Kippfenster
Dornmaß Getriebe 6.5 mm
Getriebe variabel

Position de la poignée
Fenêtre soufflet
Entrée verrouiller 6.5 mm
Crémone variable





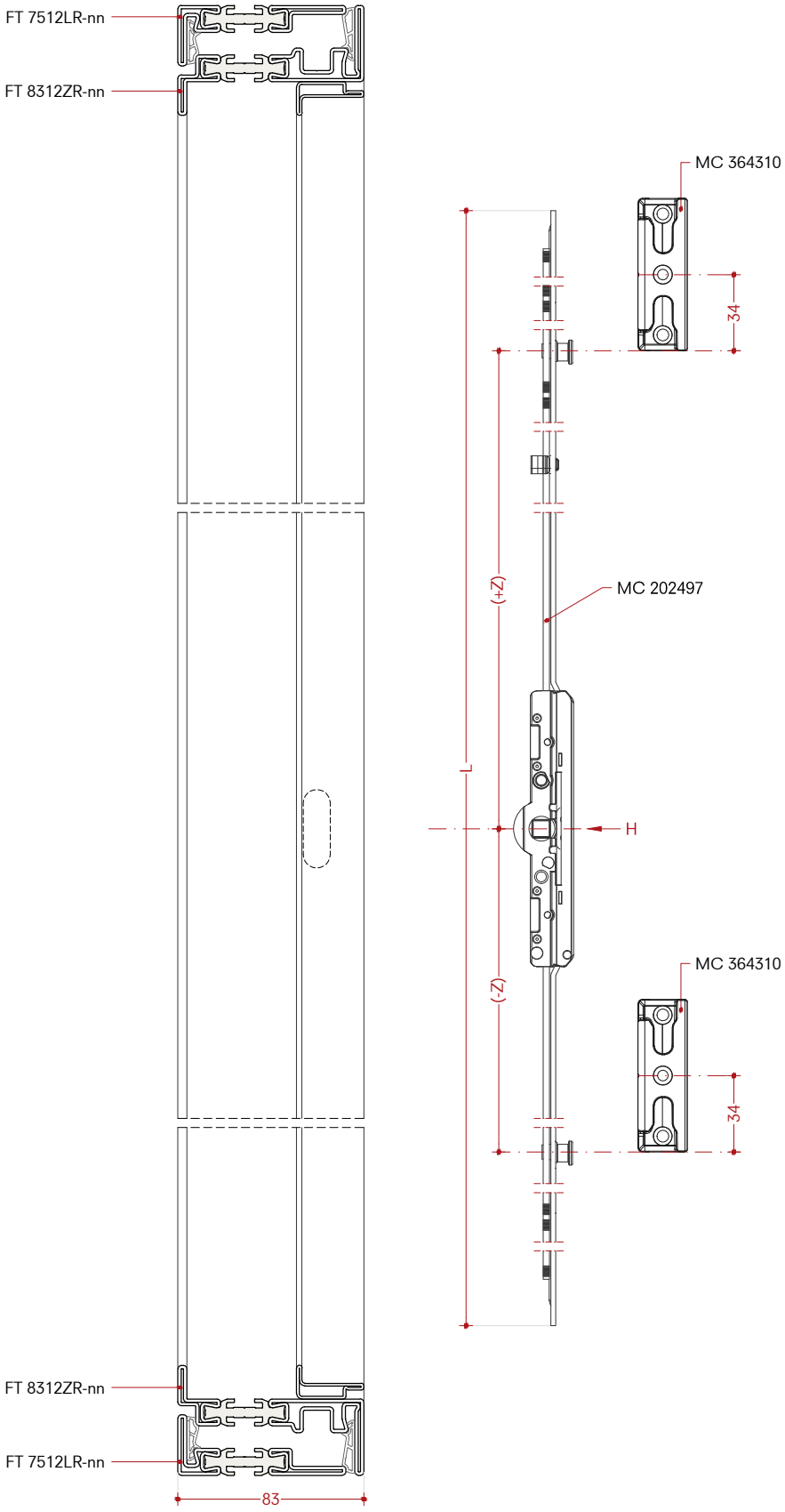


W75TB - 0032 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Profil ausklinken
H) Griffhöhemitte
L) Länge Getriebe
Z) Lage Verriegelungszapfen

A) Pièce à enlever
H) Centre de poignée
L) Longueur du crémone
Z) Position de galet de verrouillage

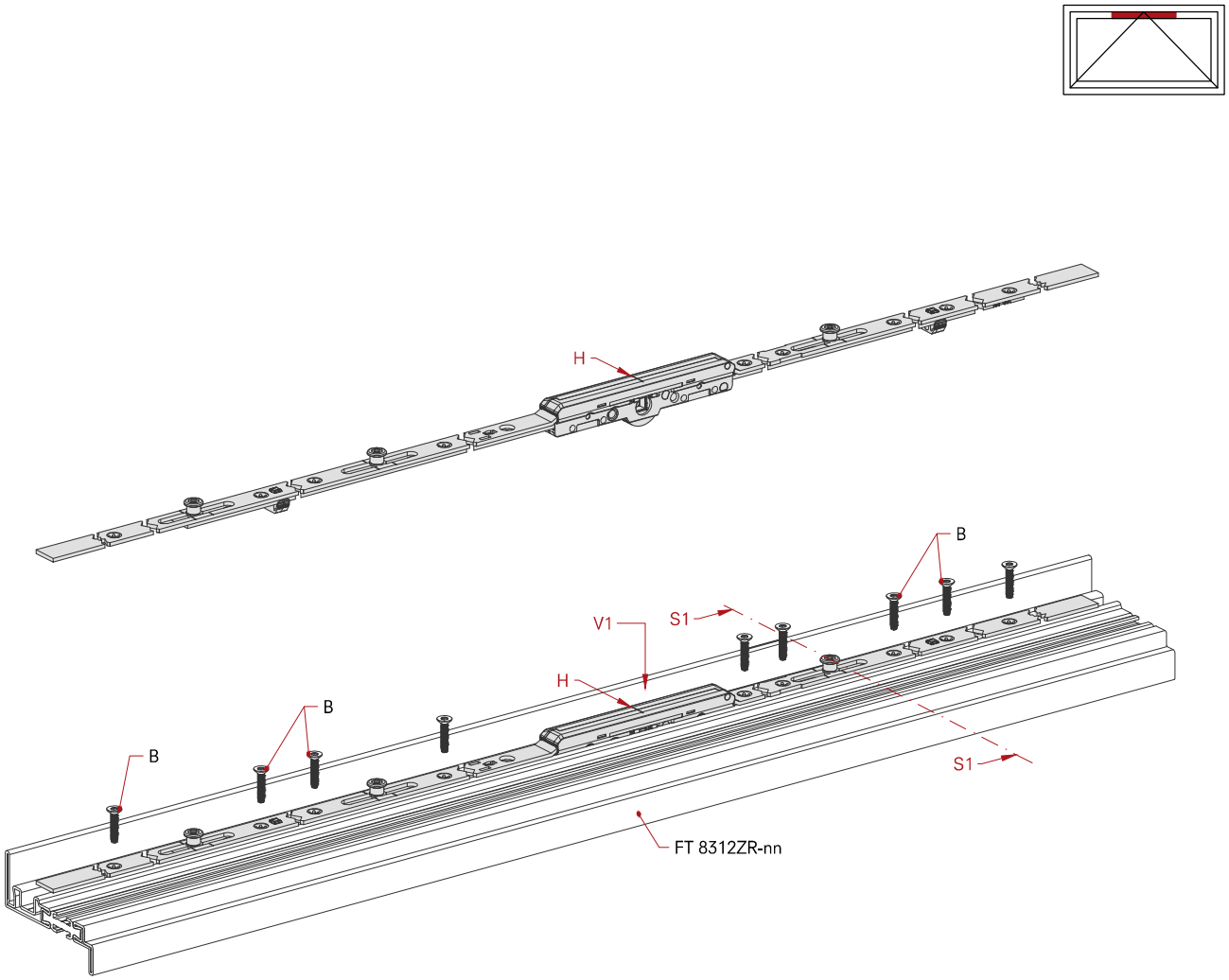


	L	Z1	Z2	Z3
MC 202497	2040	-640	-300	370

Espagnolette - centred handle
Bottom-hung window
Backset 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327

Kantenverschluss mittig
Kippfenster
Dornmass 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327

Crémone-verrou milieu
Fenêtre soufflet
Entrée verrouiller 6.5 mm
MC 208323 - MC 208324
MC 208325 - MC 208326
MC 208327

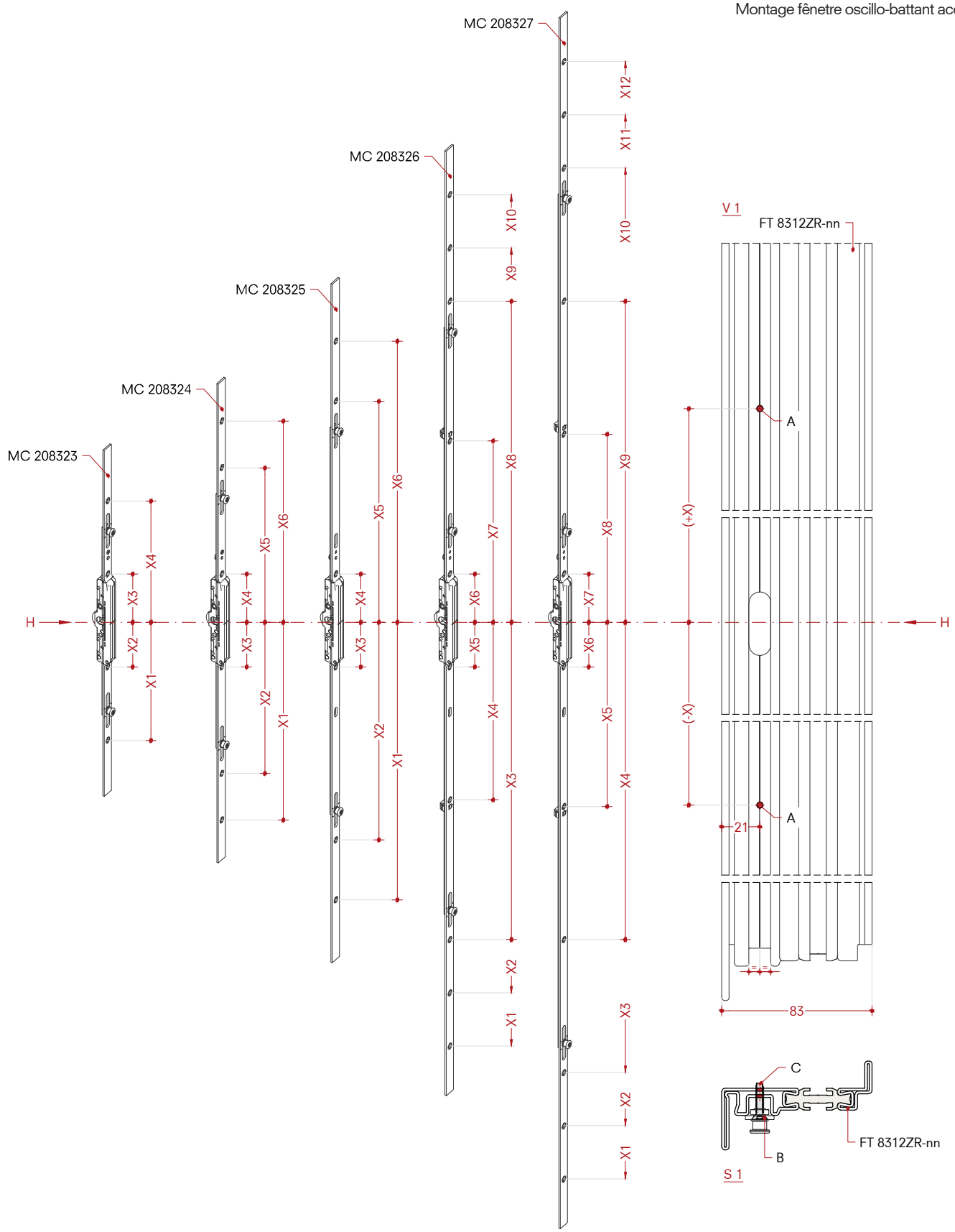


W75TB - 0033 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x20
C) Cut the screw
H) Handle centre
X) Position screw connection drive gear

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x20
C) Schraube kürzen
H) Griffmitte
X) Lage Verschraubung Getriebe

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x20
C) Couper la vis
H) Centre de poignée
X) Position du raccord à vis pour crémone

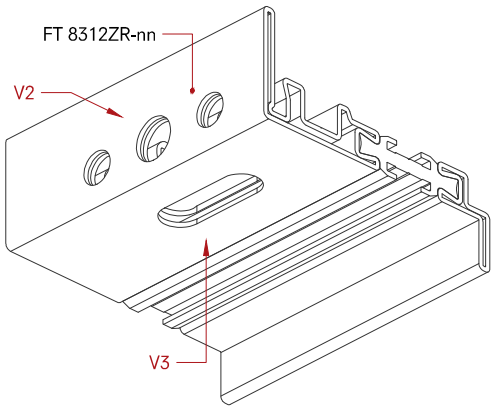


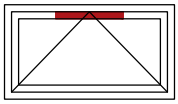
	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
MC 208323	-180	-70	70	180	-	-	-	-	-	-	-	-
MC 208324	-300	-230	-70	70	230	300	-	-	-	-	-	-
MC 208325	-420	-330	-70	70	330	420	-	-	-	-	-	-
MC 208326	-640	-560	-480	-270	-70	70	270	480	560	640	-	-
MC 208327	-840	-760	-680	-480	-280	-70	70	280	480	680	760	840

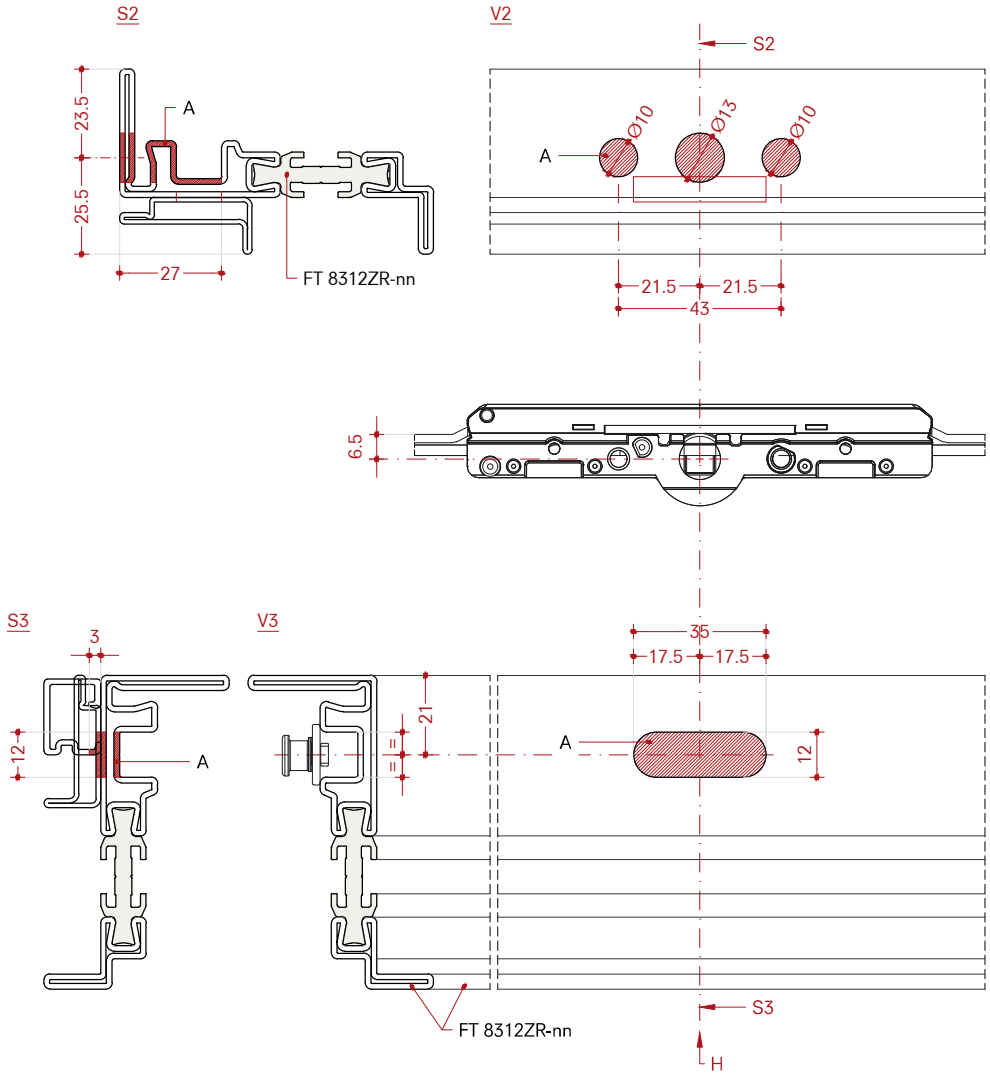
Handle position
Bottom-hung window
Hardware 6.5 mm backset
Drive gear fixed

Griffposition
Kippfenster
Dornmaß Getriebe 6.5 mm
Getriebelänge fix

Position de la poignée
Fenêtre soufflet
Entrée verrouiller 6.5 mm
Crémone fixe





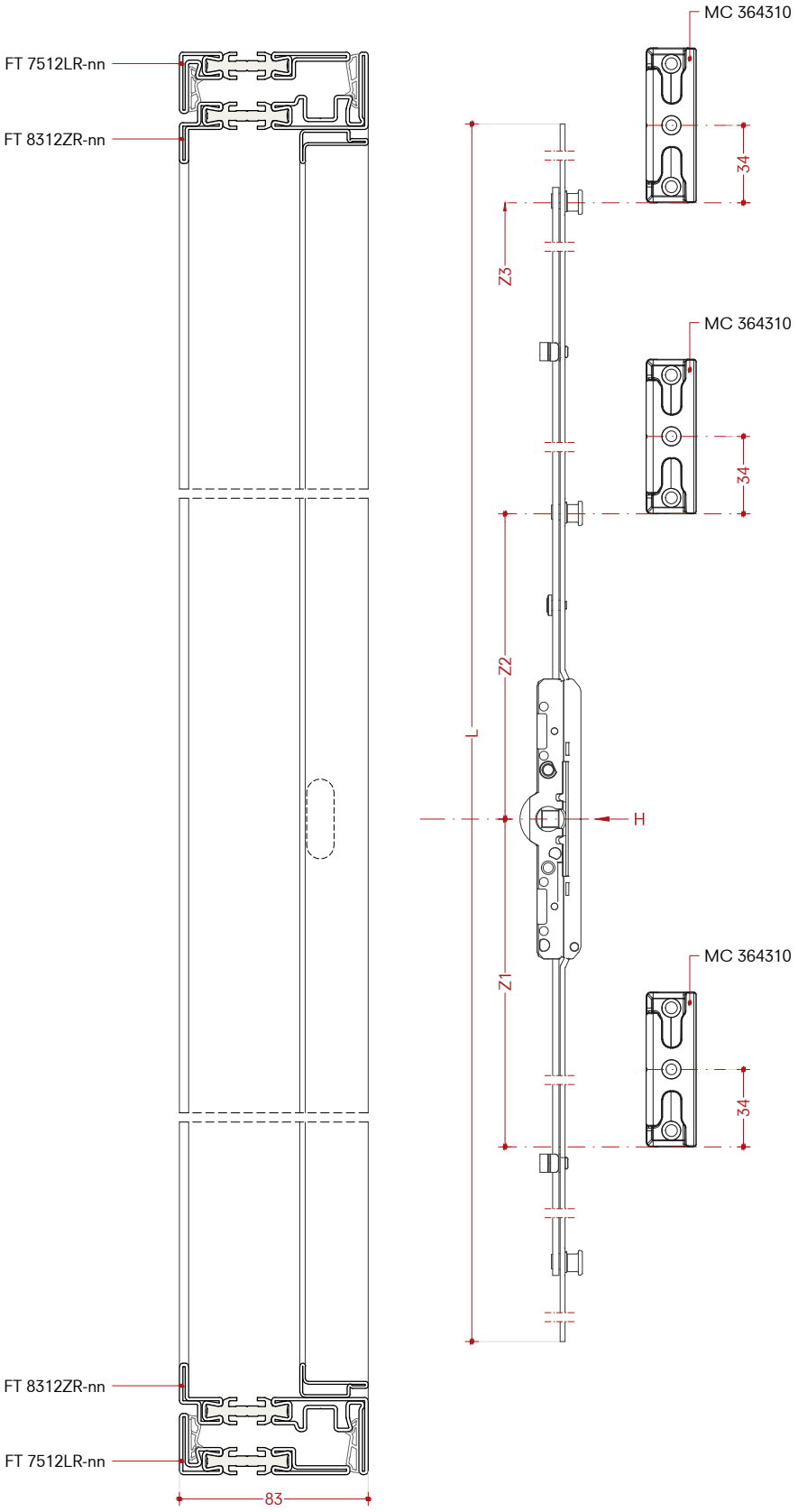


W75TB - 0034 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Profil ausklinken
H) Griffhöhemitte
L) Länge Getriebe
Z) Lage Verriegelungszapfen

A) Pièce à enlever
H) Centre de poignée
L) Longueur du crémone
Z) Position de galet de verrouillage

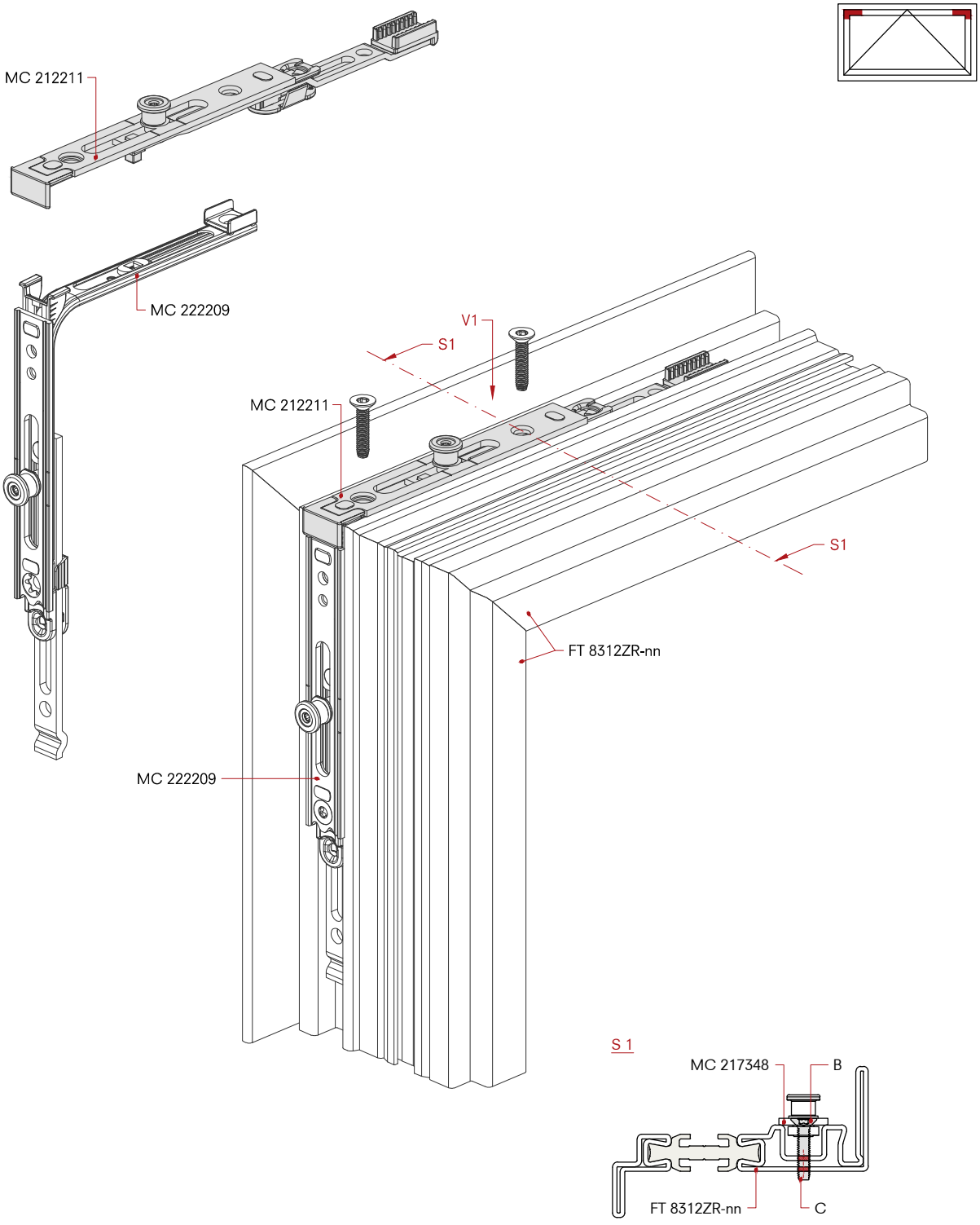


	L	Z1	Z2	Z3
MC 208323	520	-135	135	-
MC 208324	720	-185	185	-
MC 208325	1020	-285	285	-
MC 208326	1420	-435	135	435
MC 208327	1820	-635	135	635

End piece top 180°
with 1 locking cam
Bottom-hung window
MC 212211

Endverschluss oben 180°
mit 1 Verriegelungszapfen
Kippfenster
MC 212211

Embout haut 180°
avec 1 galet de verrouillage
Fenêtre soufflet
MC 212211

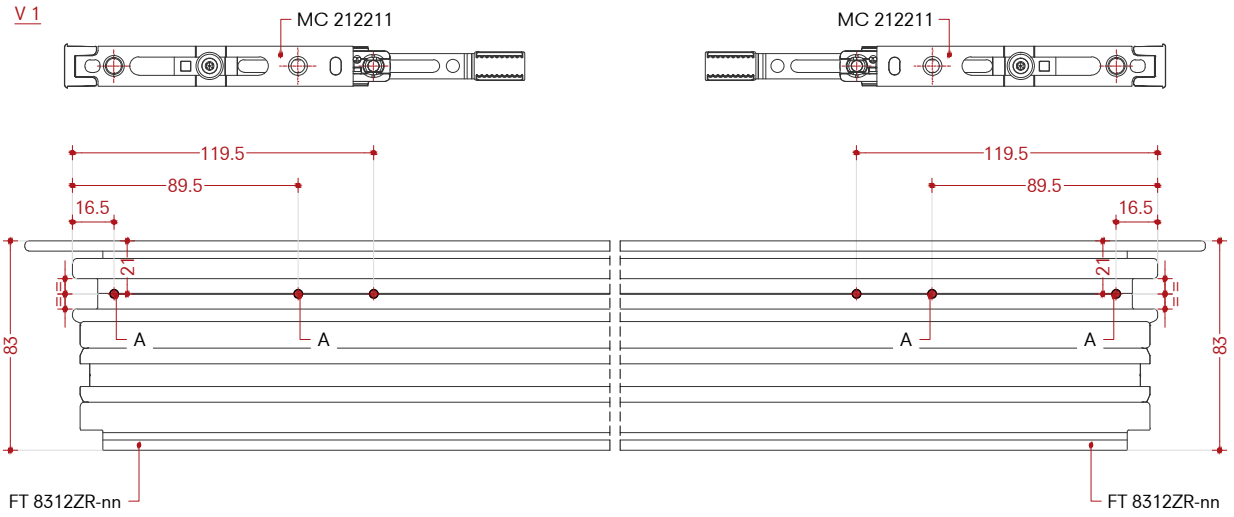


W75TB - 0035 DWG DXF

A) Cut off profile
H) Handle centre
L) Length drive gear
Z) Position locking cam

A) Profil ausklinken
H) Griffhöhemitte
L) Länge Getriebe
Z) Lage Verriegelungszapfen

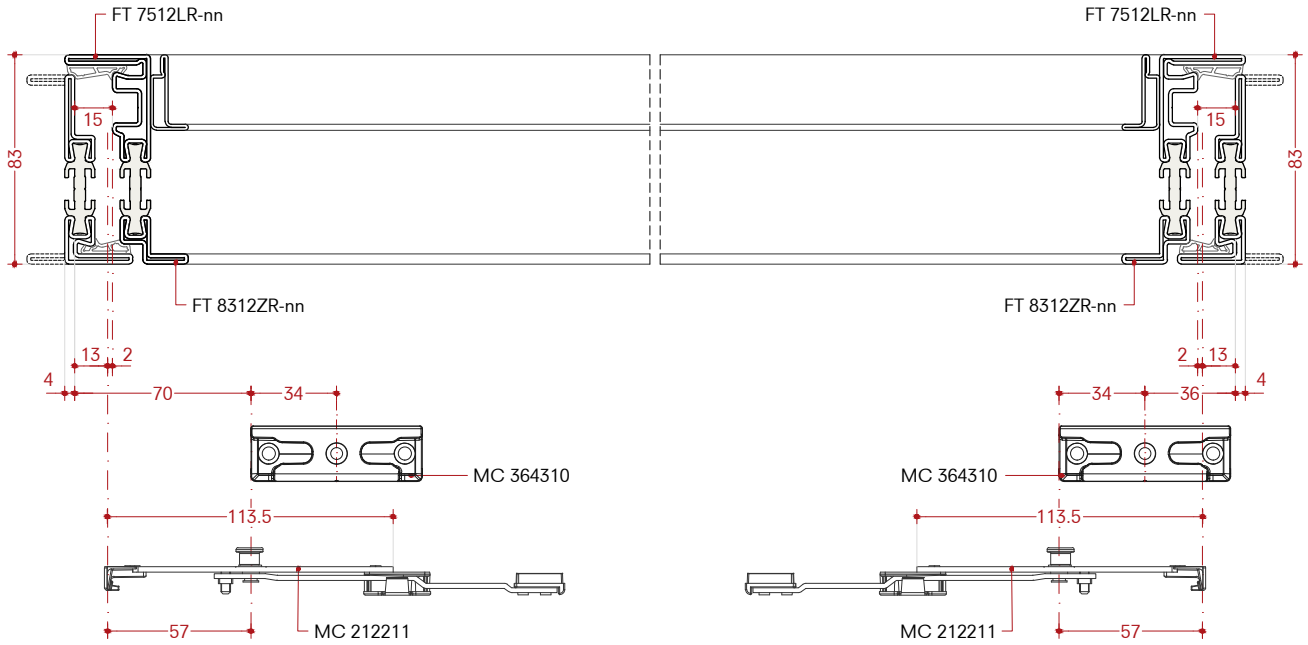
A) Pièce à enlever
H) Centre de poignée
L) Longueur du crémone
Z) Position de galet de verrouillage



Positioning striker plate
(only for MC 217348 / MC 217349)

Positionierung Schließteils
(nur bei MC 217348 / MC 217349)

Positionnement de la gâche
(que pour MC 217348 / MC 217349)



Tilt-only hinge arm with hinge
MC 217723 R
MC 217724 L

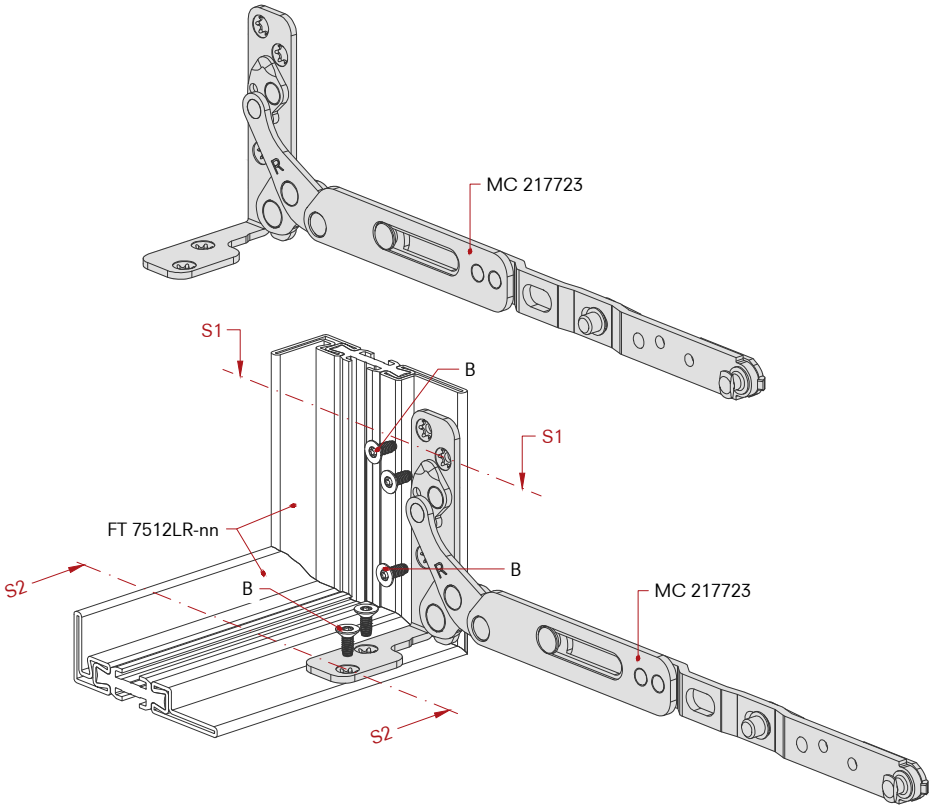
Leaf weight ≤ 80 kg
Leaf size ≤ 1.9 m²

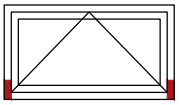
Kippbandarm mit Lager
MC 217723 R
MC 217724 L

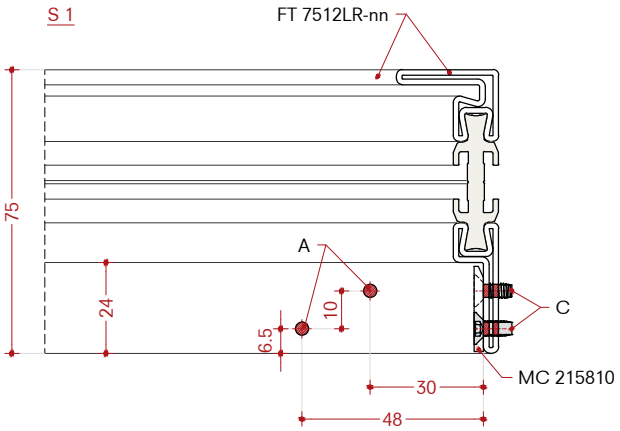
Flügelgewicht ≤ 80 kg
Flügelgröße ≤ 1.9 m²

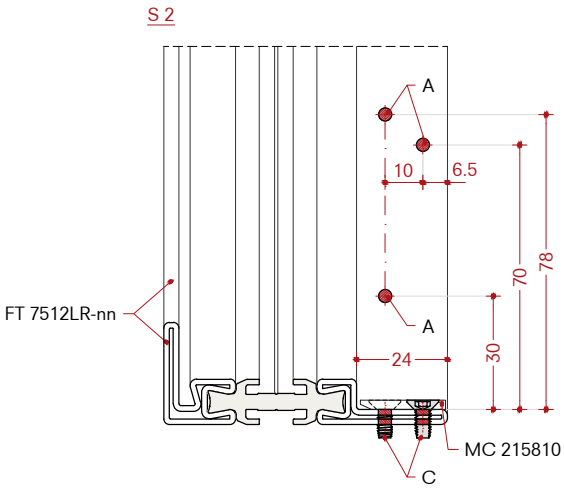
Bras de soufflet avec palier
MC 217723 R
MC 217724 L

Poids du vantail ≤ 80 kg
Taille du vantail ≤ 1.9 m²









W75TB - 0036 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

Dargestellt DIN rechts - DIN links spiegelbildlich

A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x10
C) Schraube kürzen

L = DIN links
R = DIN rechts

Montré ouverture droite
(ouverture gauche inversé en miroir)

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x10
C) Couper la vis

L = Ouverture gauche
R = Ouverture droite

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).

Bitte beachten:

- Einbau von Fang- und Putzschere berücksichtigen.
- Das maximale Flügelgewicht darf nicht überschritten werden.
- Die Verschraubung der Lagerteile muss den Anforderungen der Richtlinie TBDK (Gütegemeinschaft Schlösser und Beschläge - www.schlossindustrie.de) entsprechen.

Attention:

- Tenir compte de la mise en œuvre du compas de reprise et nettoyage.
- Le poids maximal de l'ouvrant ne doit pas être dépassé.
- Le vissage des pièces de rotation doit être conforme aux exigences de la directive TBDK (Groupement Qualité serrures et ferrures - www.schlossindustrie.de).

Height adjustment

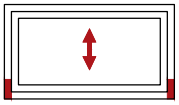
Adjustment range +1/-2.5 mm with SW 4

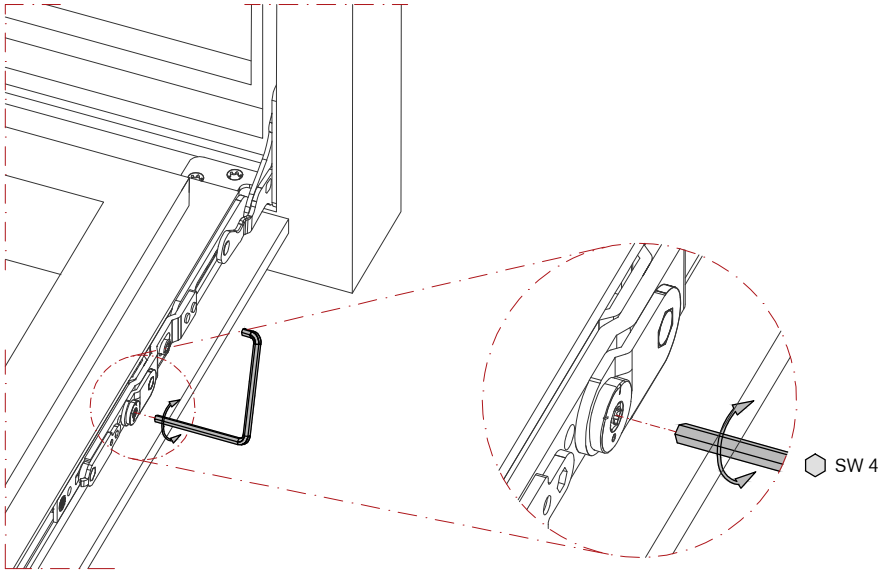
Höheneinstellung

Einstellbereich +1/-2.5 mm mit SW 4

Réglage de la hauteur

Plage de réglage +1/-2.5 mm avec SW 4





Pressure adjustment

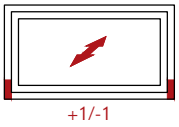
Adjustment range +1 mm with SW 4

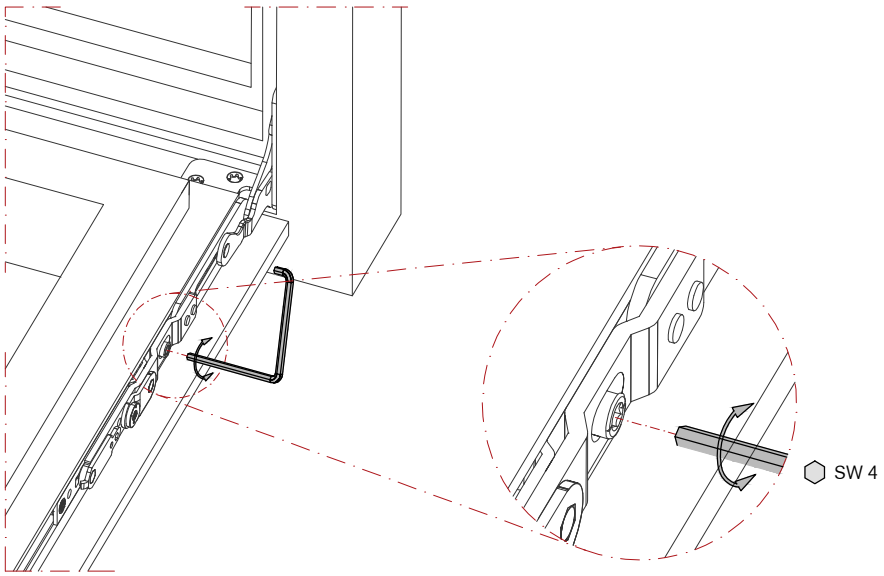
Anpressdruck Einstellung

Einstellbereich +1 mm mit SW 4

Réglage de la pression de contact

Plage de réglage +1 mm avec SW 4

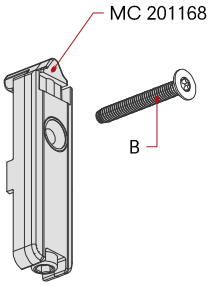


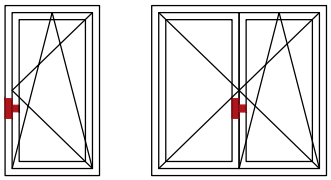


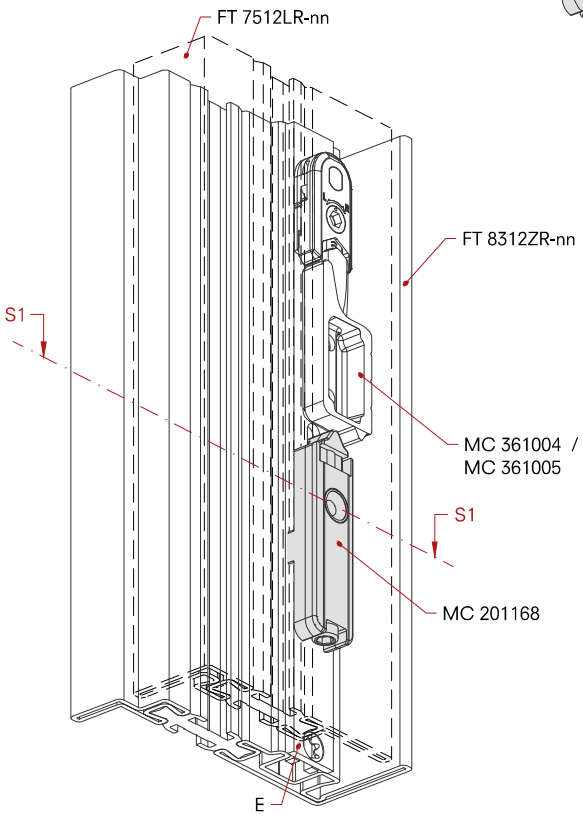
Door catch
MC 201168
Installed on faceplate

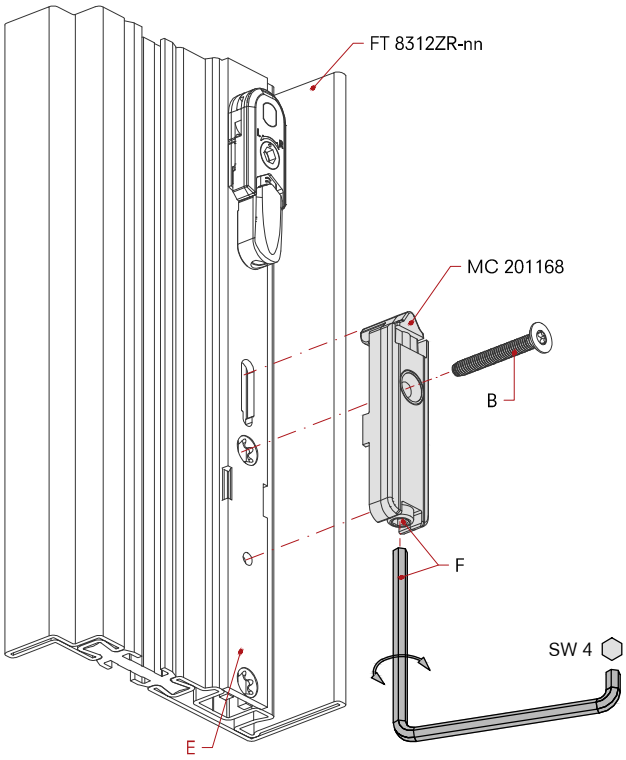
Türschnapper
MC 201168
Einbau auf Stulp

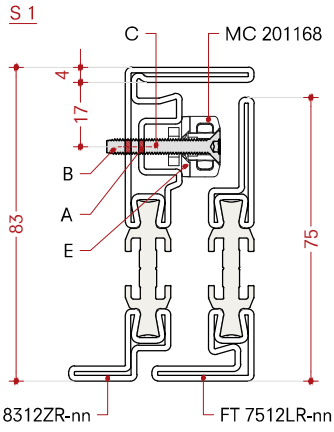
Houssette de porte
MC 201168
Montage sur têtière











W75TB - 0037 DWG DXF

A) Hole Ø3.3 mm
B) Countersunk screw M4x30
C) Cut the screw
E) Faceplate
F) Height adjustment ±2 mm with SW 4

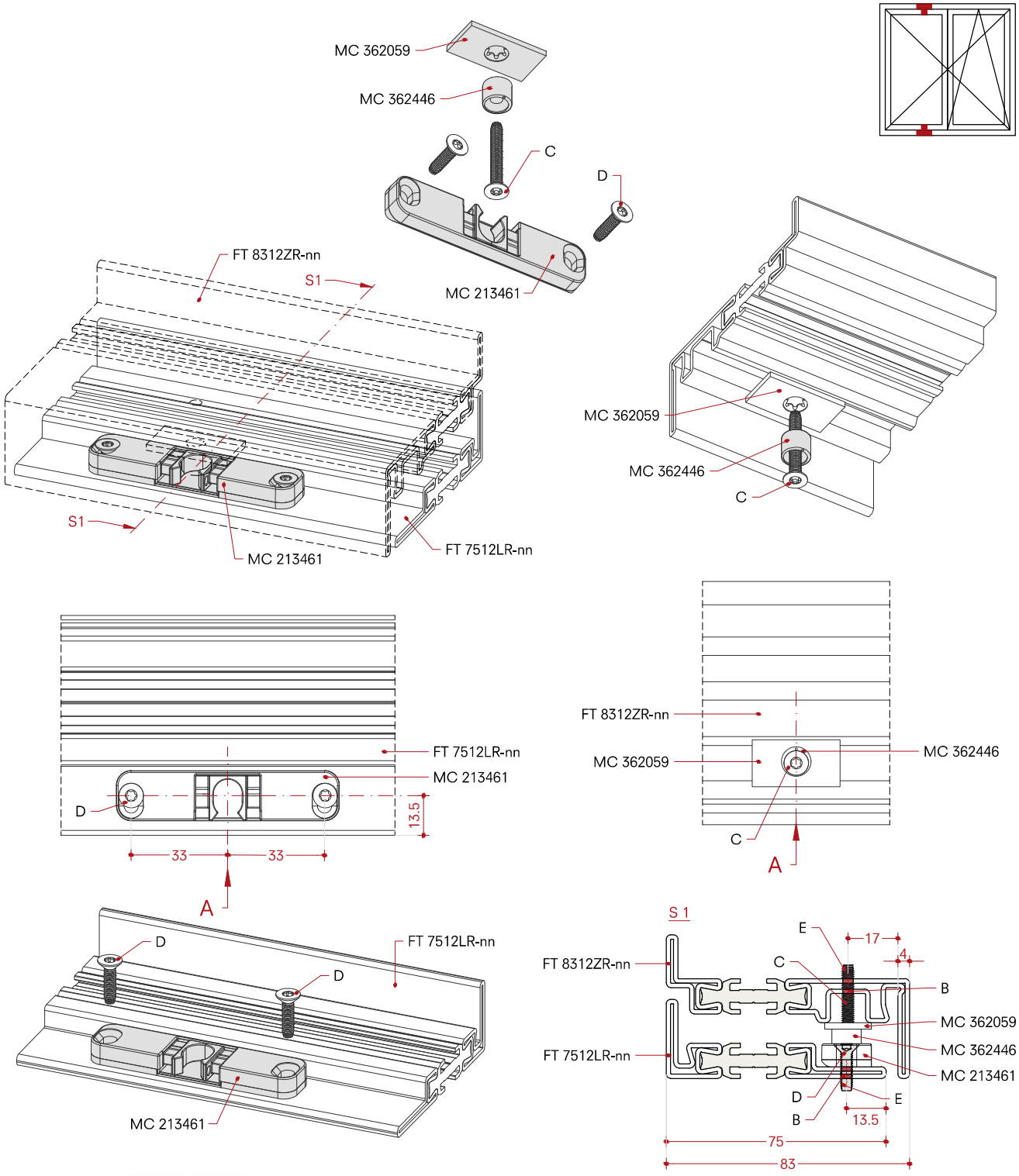
A) Bohrdurchmesser Ø3.3 mm
B) Senkkopfschraube M4x30
C) Schraube kürzen
E) Stulp
F) Höheneinstelung ±2 mm mit SW 4

A) Trou Ø3.3 mm
B) Vis à tête fraisée M4x30
C) Couper la vis
E) Têtière
F) Réglage de la hauteur ±2 mm avec SW 4

Bullet catch
MC 213461
with Bullet-catch roll MC 362446
and packer for bullet catch for
Eurogroove MC 362059

Schnapper
MC 213461
mit Schnapperrolle MC 362446
und Unterlage zur Schnapperrolle für
Beschlagsnut MC 362059

Houssette
MC 213461
avec Plot de houssette MC 362446
et Cale pour plot de houssette pour
rainure à ferrage MC 362059



W75TB - 0038 DWG DXF

A) Centre Bullet catch
B) Hole Ø3.3 mm
C) Countersunk screw M4x30
D) Countersunk screw M4x16
E) Cut the screw

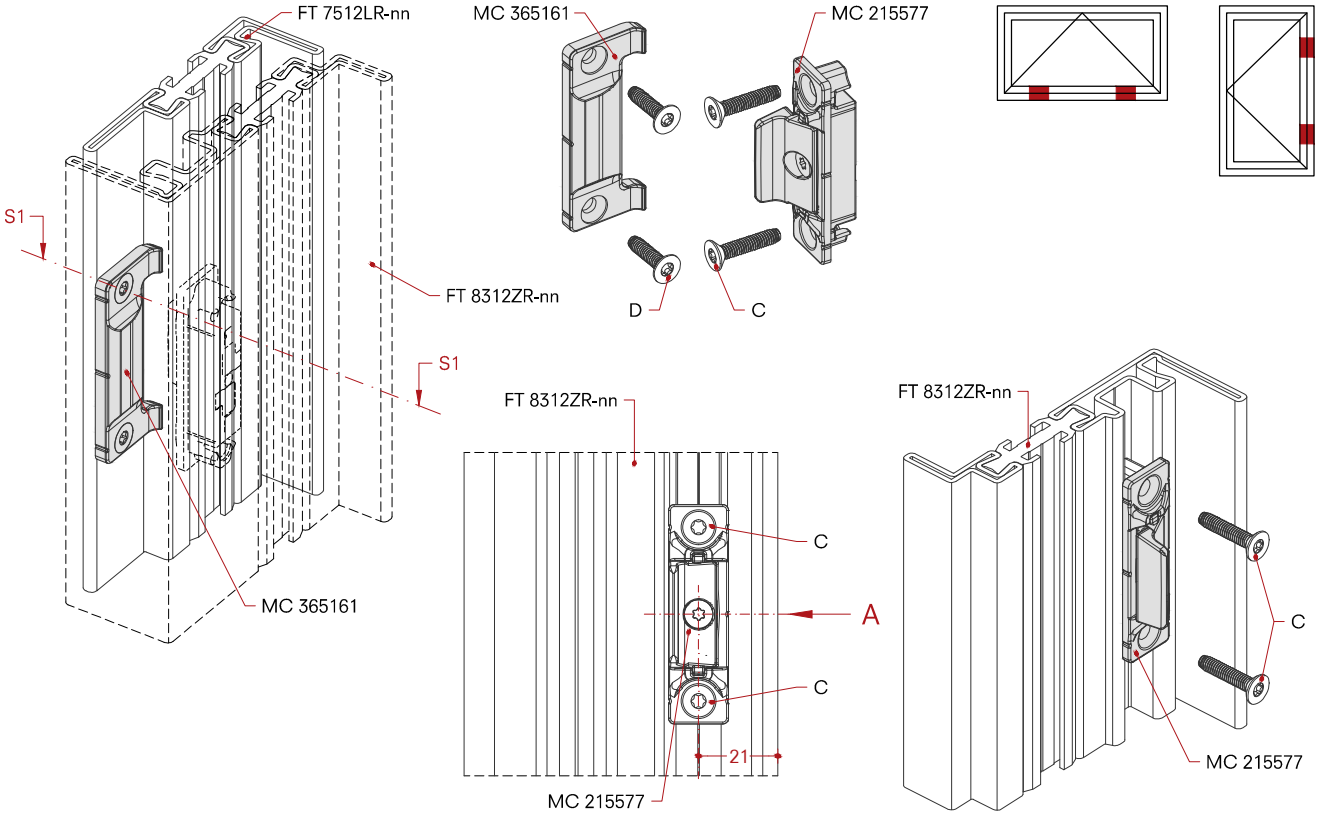
A) Achse Schnapper
B) Bohrdurchmesser Ø3.3 mm
C) Senkkopfschraube M4x30
D) Senkkopfschraube M4x16
E) Schraube kürzen

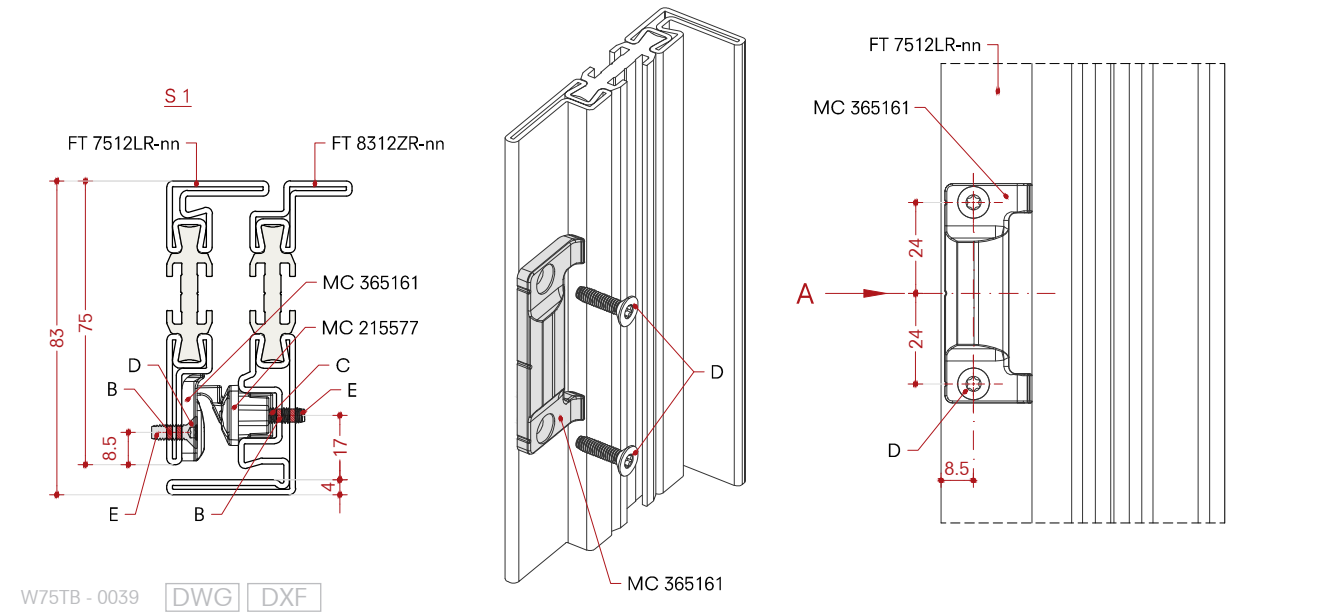
A) Houssette central
B) Trou Ø3.3 mm
C) Vis à tête fraisée M4x30
D) Vis à tête fraisée M4x16
E) Couper la vis

Concealed compression lock
Frame component MC 365161
and sash component with lateral adjustment MC 215577

Anpressverschluss verdeckt
Rahmenteil MC 365161
und Flügelteil mit Seiteneinstellung MC 215577

Fiche médiane sous recouvrement
Pièce dormant MC 365161
et partie ouvrant avec réglage latéral MC 215577





W75TB - 0039 DWG DXF

A) Centre compression lock
B) Hole Ø3.3 mm
C) Countersunk screw M4x20
D) Countersunk screw M4x12
E) Cut the screw

A) Achse Anpressverschluss
B) Bohrdurchmesser Ø3.3 mm
C) Senkkopfschraube M4x20
D) Senkkopfschraube M4x12
E) Schraube kürzen

A) Fiche médiane central
B) Trou Ø3.3 mm
C) Vis à tête fraisée M4x20
D) Vis à tête fraisée M4x12
E) Couper la vis

Please note:

It is necessary to set a spacer block in the area of the compression device (distance piece glazing).

Bitte beachten:

Im Bereich des Anpressverschlusses ist eine Verklotzung nötig (Distanzklotz Verglasung).

Attention:

Un calage est nécessaire au droit de la fiche médiane (Cale de distance vitrage).

Pressure adjustment

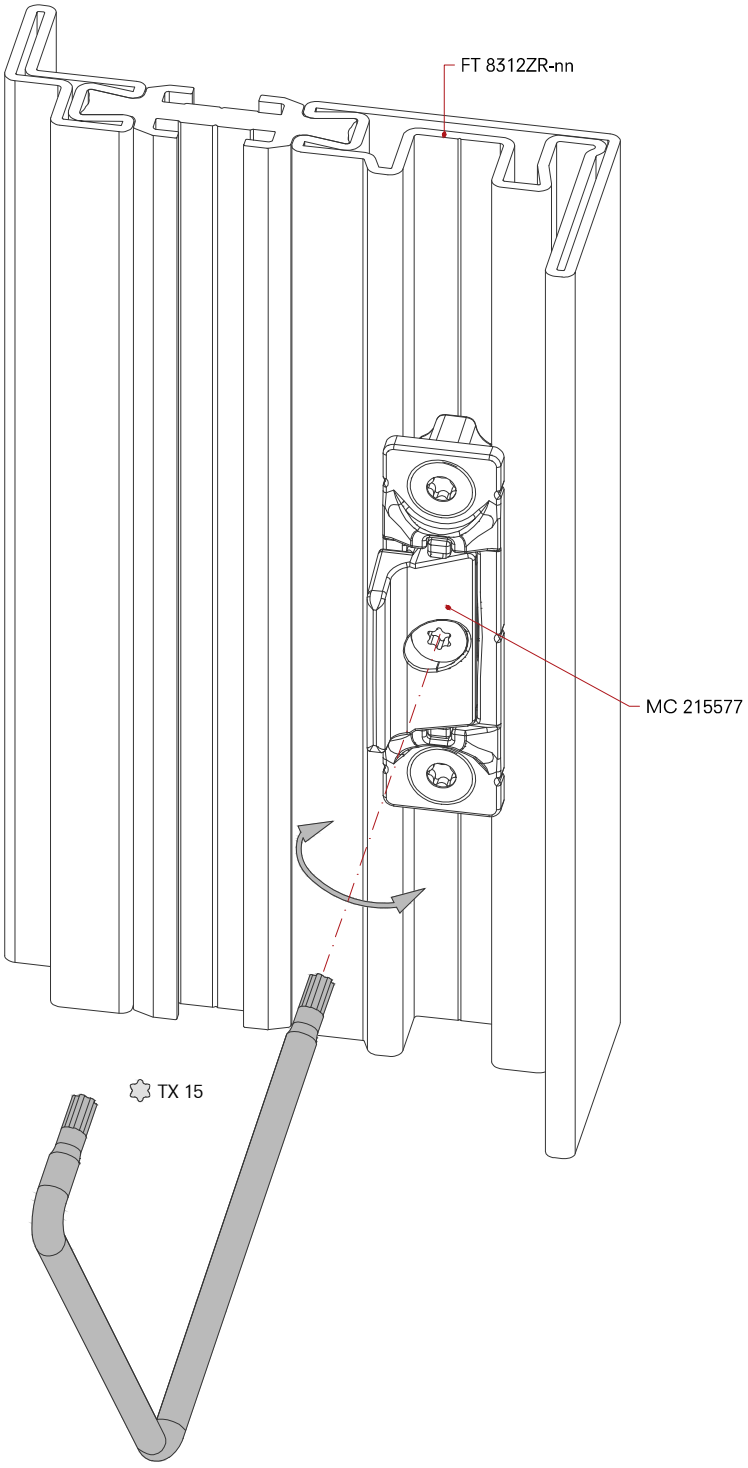
Air gap 10-14 mm adjustable

Anpressdruck Einstellung

Falzluft 10-14 mm einstellbar

Réglage de la pression de contact

Jeu en feuillure réglable de 10 à 14 mm



Adjustment range ± 2 mm with TX 15

Einstellbereich ± 2 mm mit TX 15

Plage de réglage ± 2 mm avec TX 15

Pivot window installation

Montage Schwing- und Wendefenster

Montage système de pivot

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:1 - 1:2

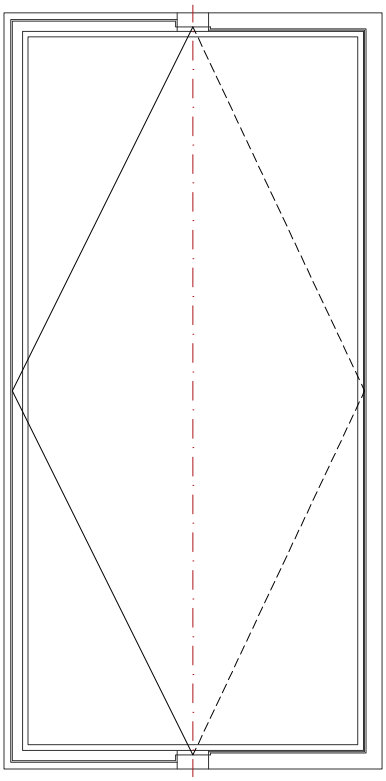
Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:1 - 1:2

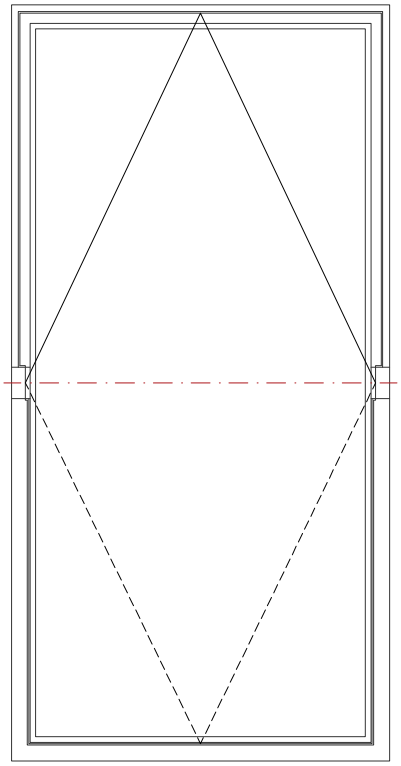
Load capacity pivot hinge
C99327-05 - C99327-12

Tragfähigkeit
C99327-05 - C99327-12

Capacité maximale paumelle
C99327-05 - C99327-12



Vertical pivot - max weight 300 kg

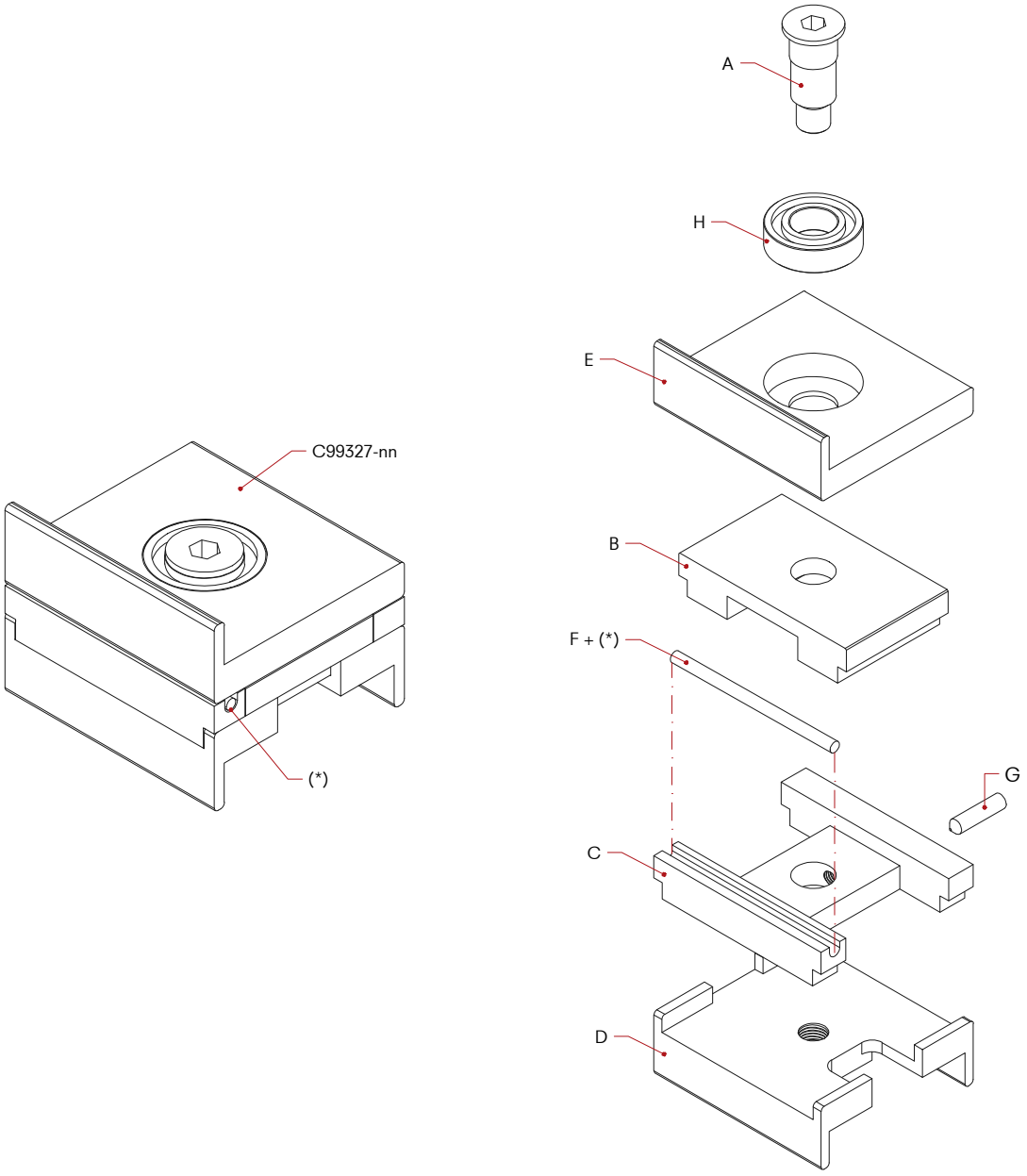


Orizontal pivot - max weight 200 kg

Installation
C99327-05 - C99327-12

Einbau
C99327-05 - C99327-12

Schéma de montage
C99327-05 - C99327-12



A) Pin
B) Skate
C) Shoe holder
D) Frame part
E) Leaf part
F) Gasket
G) M6x25 mm ISO4027
H) Bearing 6003SRS

(*) Seal before assembly

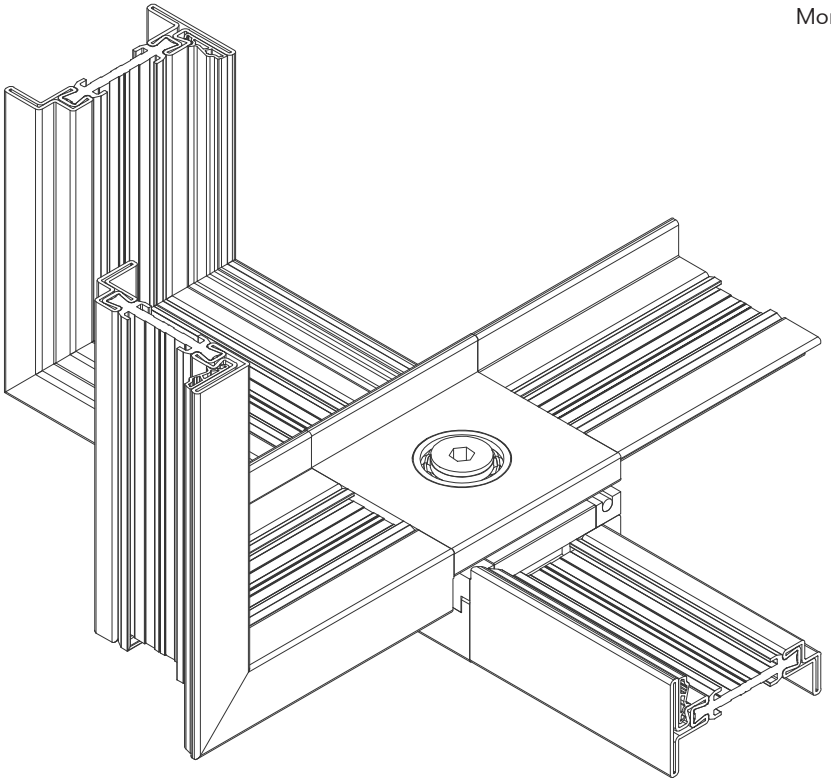
A) Stift
B) Gleitschuh
C) Schuhhalter
D) Rahmenteil
E) Flügelteil
F) Dichtung
G) M6x25 mm ISO4027
H) Lager 6003SRS

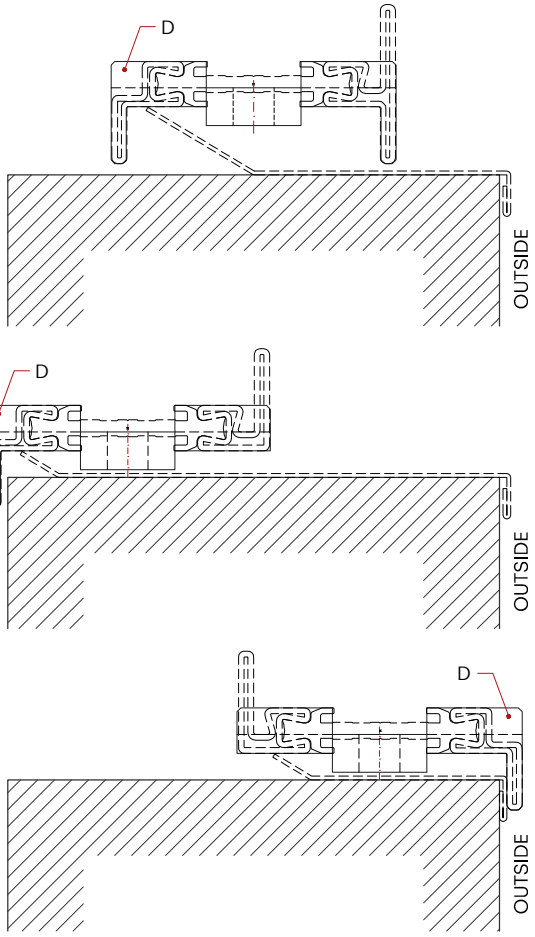
(*) Abdichten vor Montage

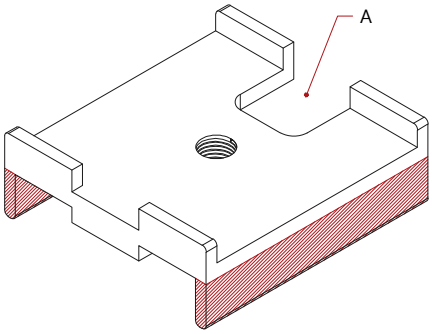
A) Épingler
B) Patin
C) Porte-patin
D) Partie du dormant
E) Partie du ouvrant
F) Joint
G) M6x25 mm ISO4027
H) Palier 6003SRS

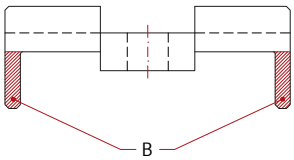
(*) Sceller avant assemblage

5.9 Pivot window installation
Montage Schwing- und Wendefenster
Montage système de pivot









A) Weld this slot always on the open-in side
B) Remove this part for different frame profile
D) Hinge, frame part

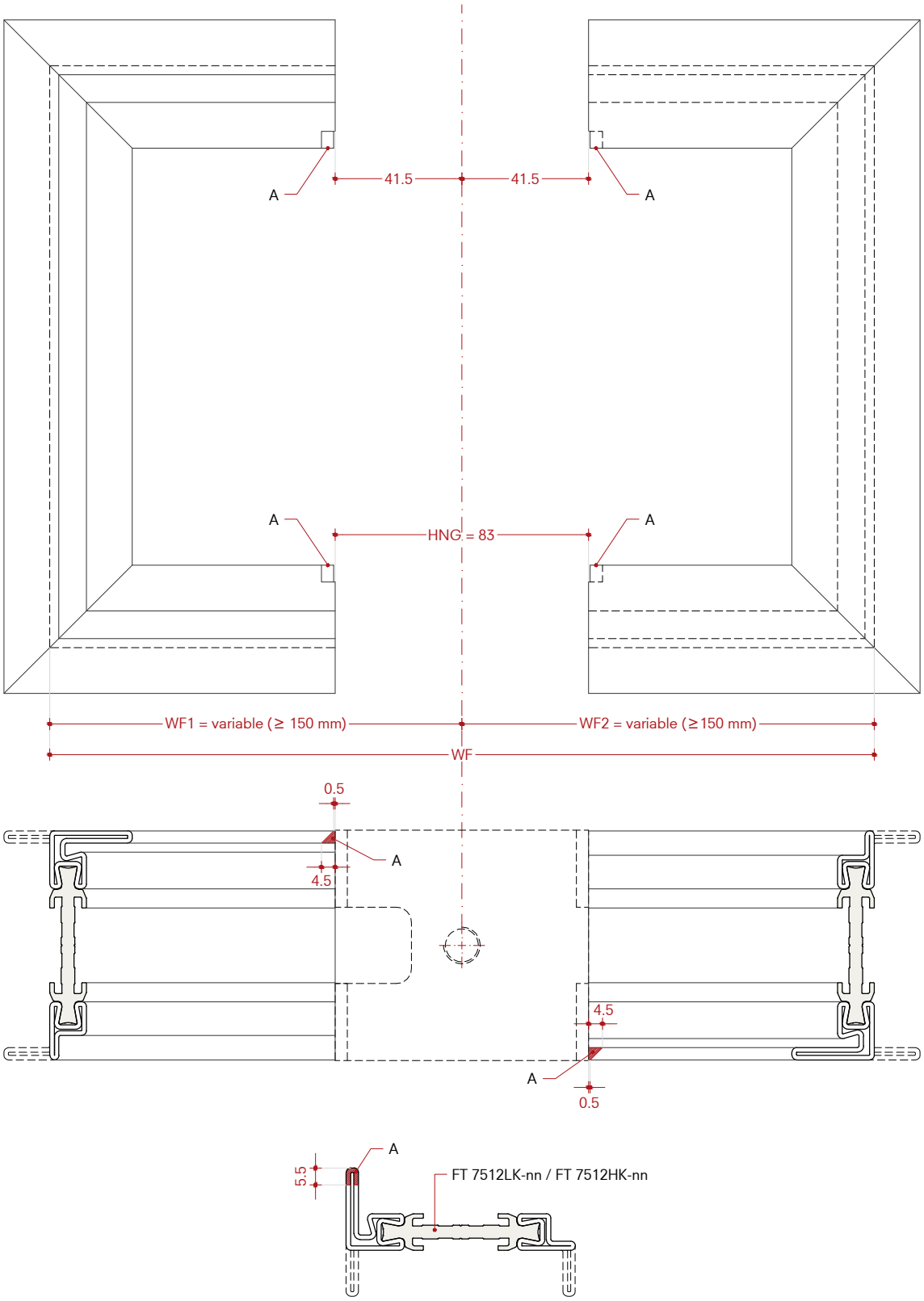
A) Offene Seite immer zur Flügelinnenseite anschweißen
B) Entfernen Sie diesen Teil
D) Band, Rahmenteil

A) Soudez cette fente toujours du côté ouvert
B) Retirez cette pièce pour un profil de cadre différent
D) Paumelle, partie du dormant

Frame profile processing
FT 7512LK-nn / FT 7512HK-nn

Profilbearbeitung Rahmen
FT 7512LK-nn / FT 7512HK-nn

Usinages de profilé dormant
FT 7512LK-nn / FT 7512HK-nn



WF = Frame Width
HNG = Hinge Length

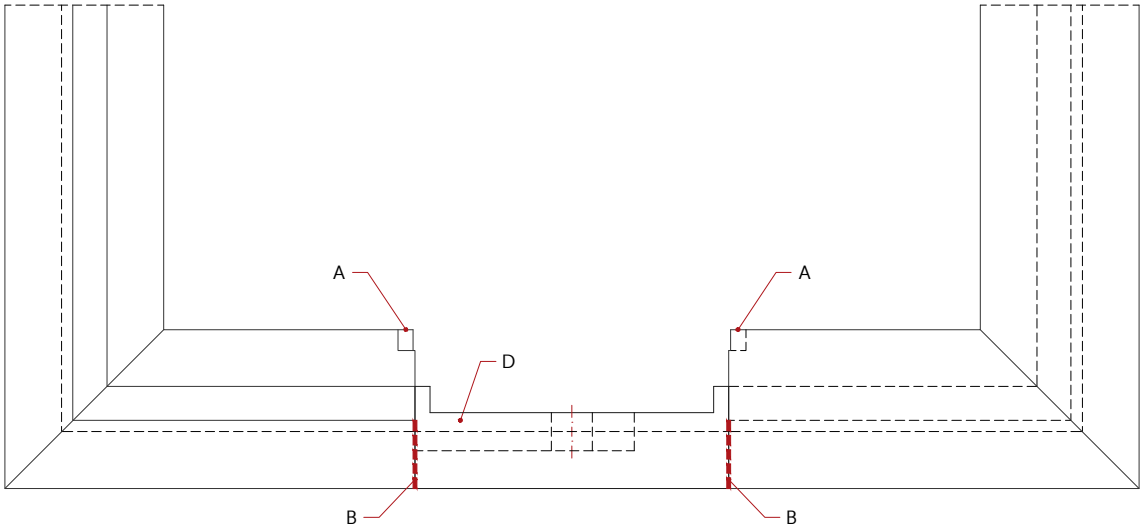
A) Cut-off profile

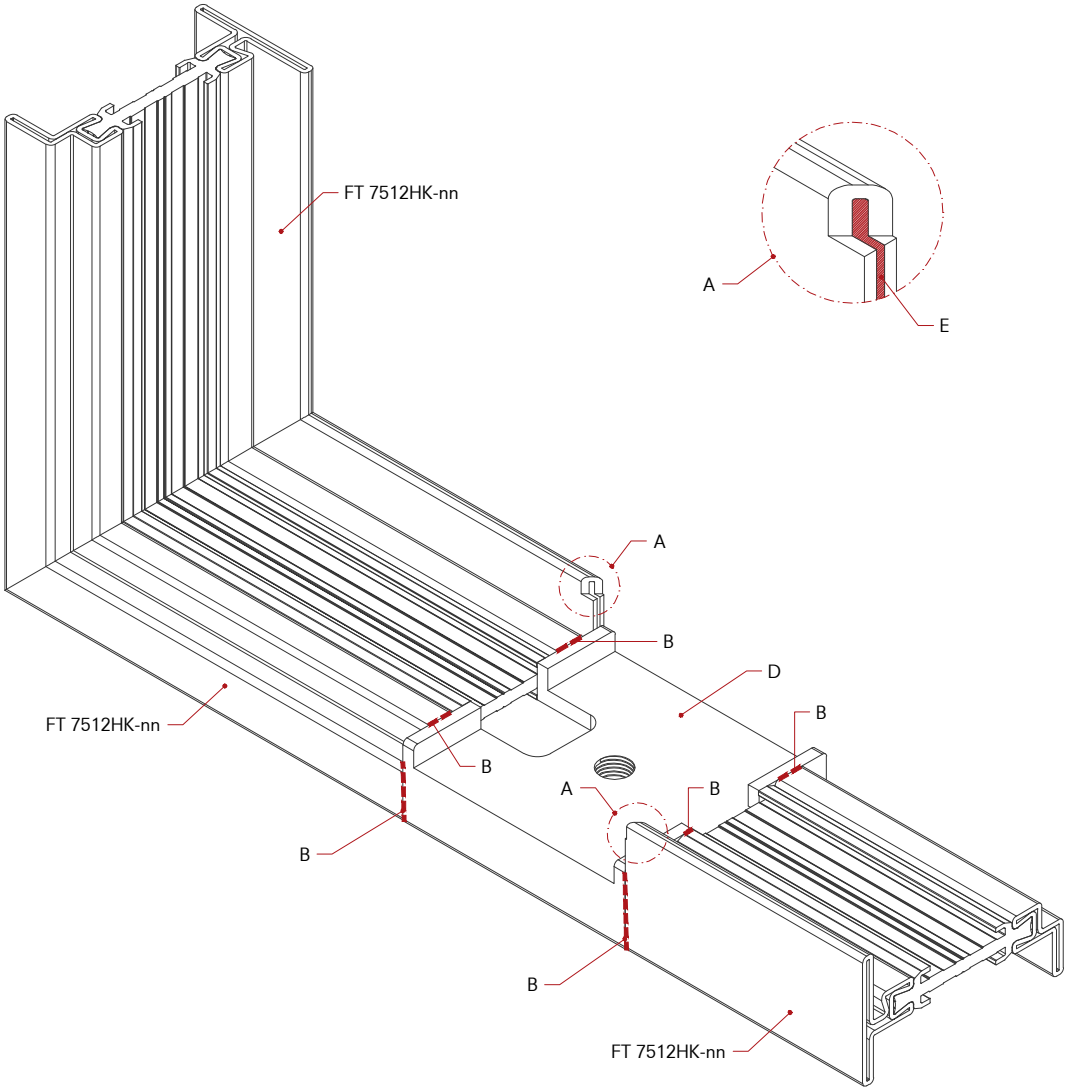
WF = Länge Rahmen
HNG = Länge Band

A) Profil ausklinken

WF = Largeur dormant
HNG = Longueur paumelle

A) Pièce à enlever

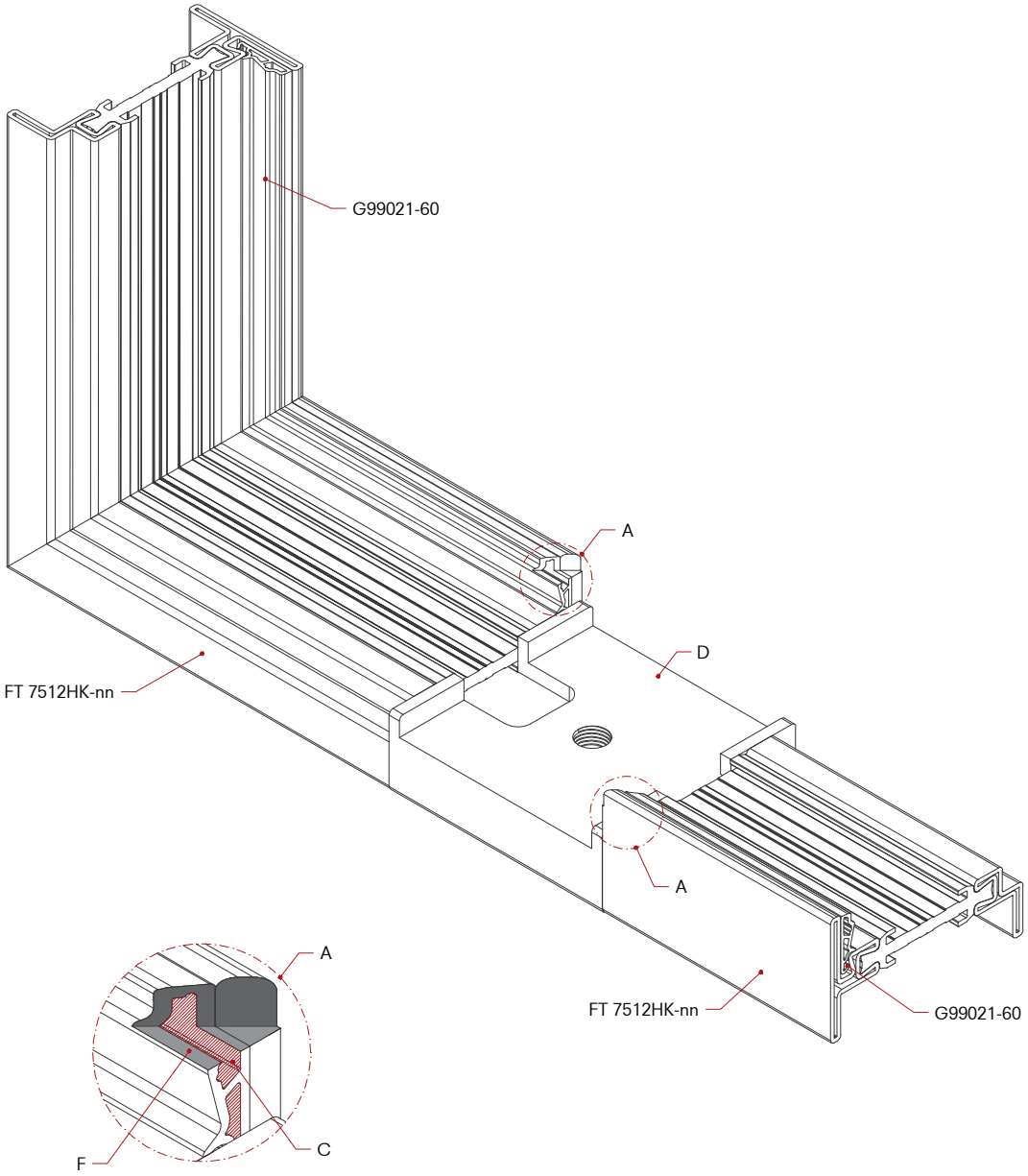




A) Cut-off profile
B) Welding
D) Hinge, frame part
E) Sealant

A) Profil ausklinken
B) Schweissen
D) Band, Rahmenteil
E) Dichtstoff

A) Pièce à enlever
B) Souder
D) Paumelle, partie du dormant
E) Silicon



C) Sealant
D) Hinge, frame part
F) Cut out the gasket G99021-60 in line with the profile

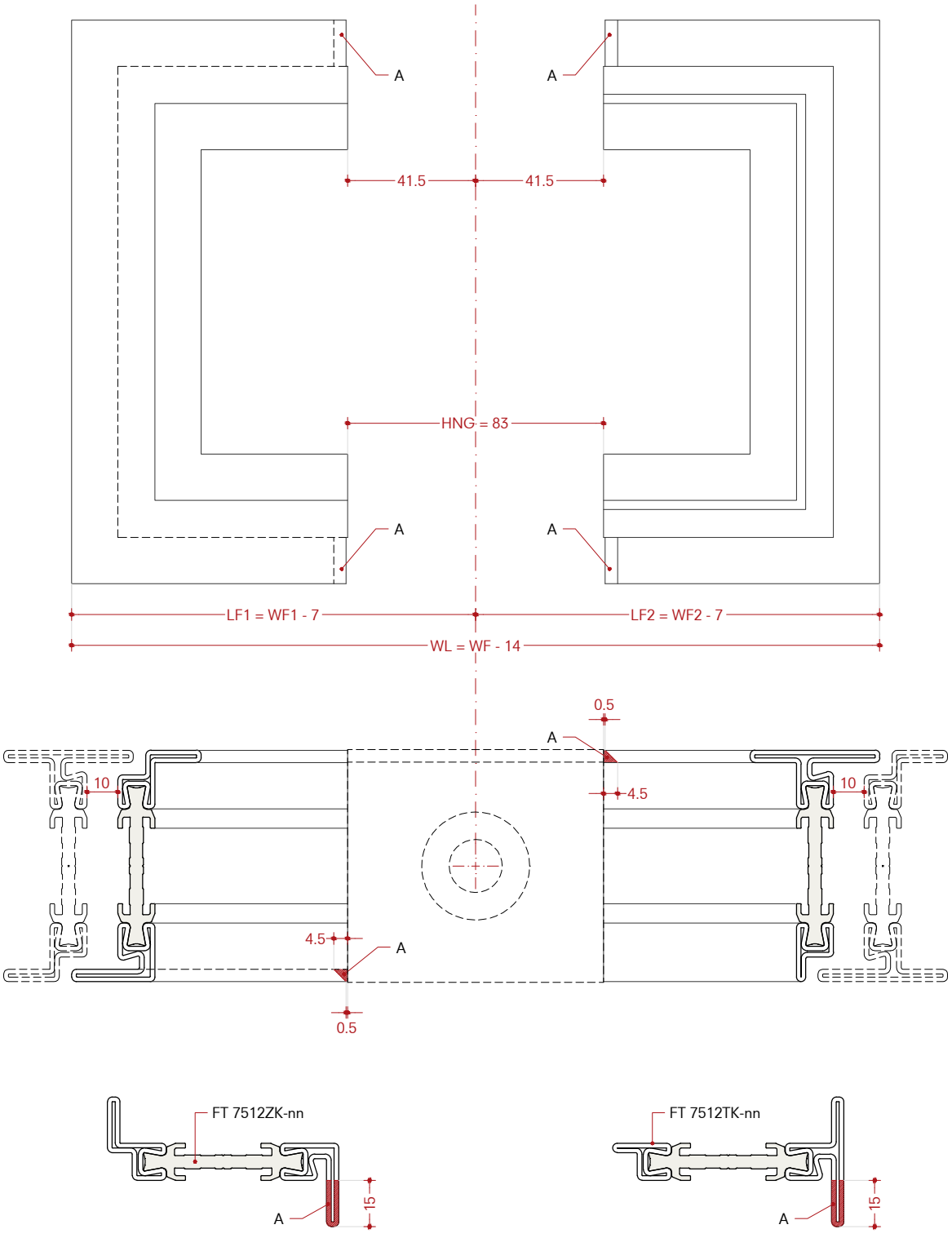
C) Dichtstoff
D) Band, Rahmenteil
F) Die Dichtung G99021-60 als Profil ausschneiden

C) Silicon
D) Paumelle, partie du dormant
F) Découpez le joint G99021-60 comme profilé

Leaf profile processing
FT 7512ZK-nn / FT 7512TK-nn

Profilbearbeitung Flügel
FT 7512ZK-nn / FT 7512TK-nn

Usinages de profilé ouvrant
FT 7512ZK-nn / FT 7512TK-nn



WF = Frame Width
HNG = Hinge Length

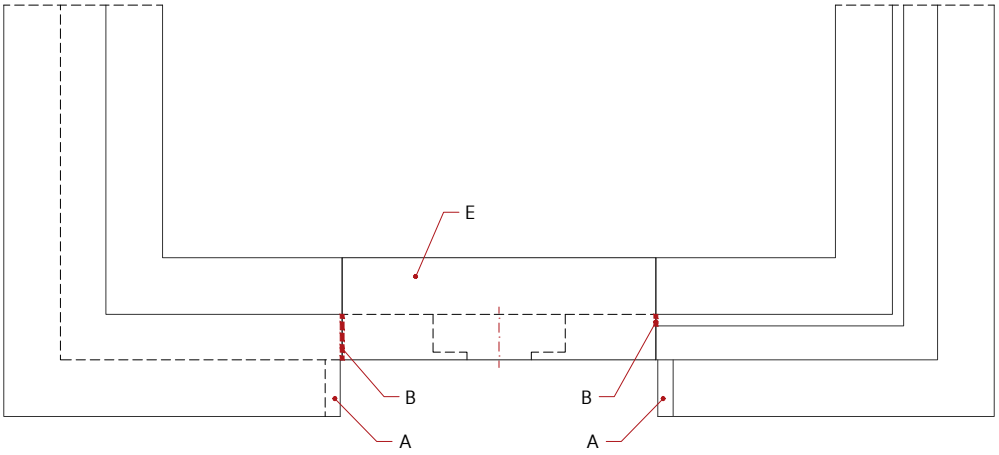
A) Cut-off profile

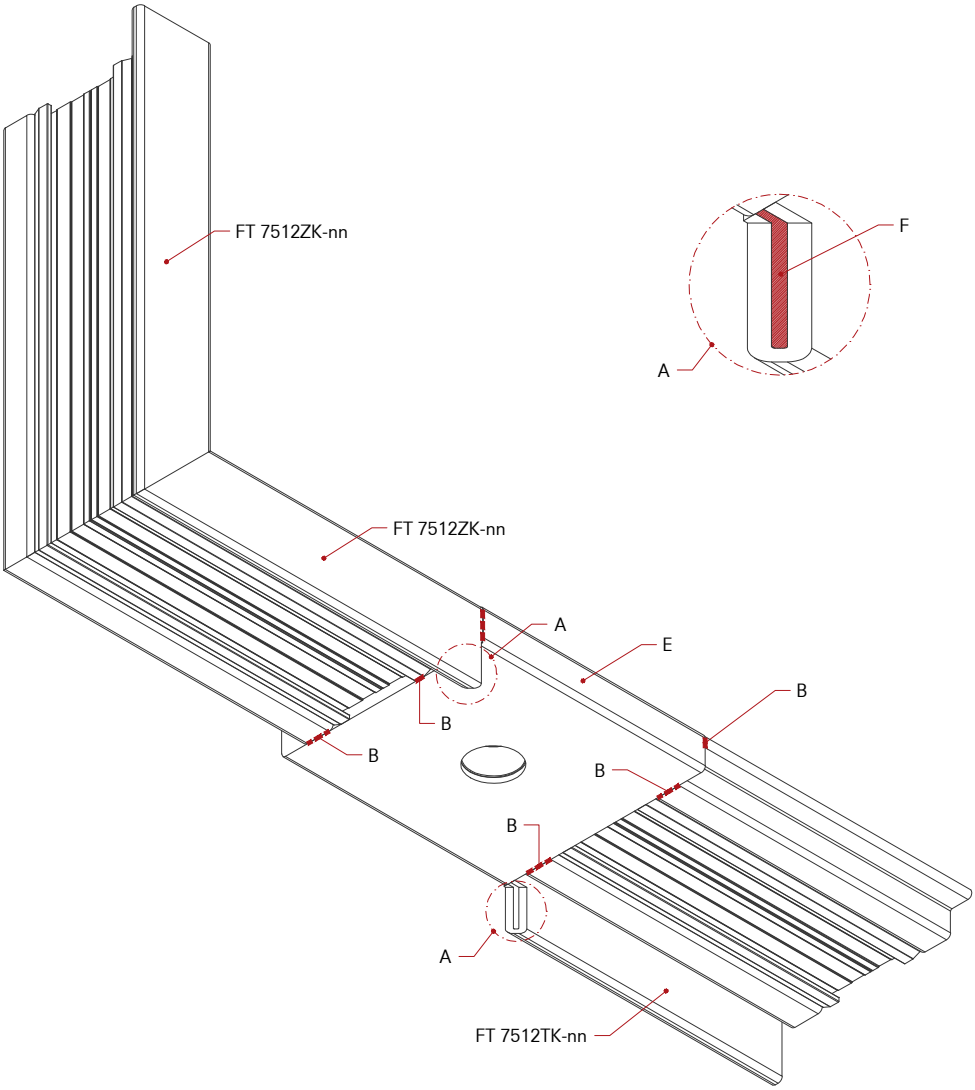
WF = Länge Rahmen
HNG = Länge Band

A) Profil ausklinken

WF = Largeur dormant
HNG = Longueur paumelle

A) Pièce à enlever

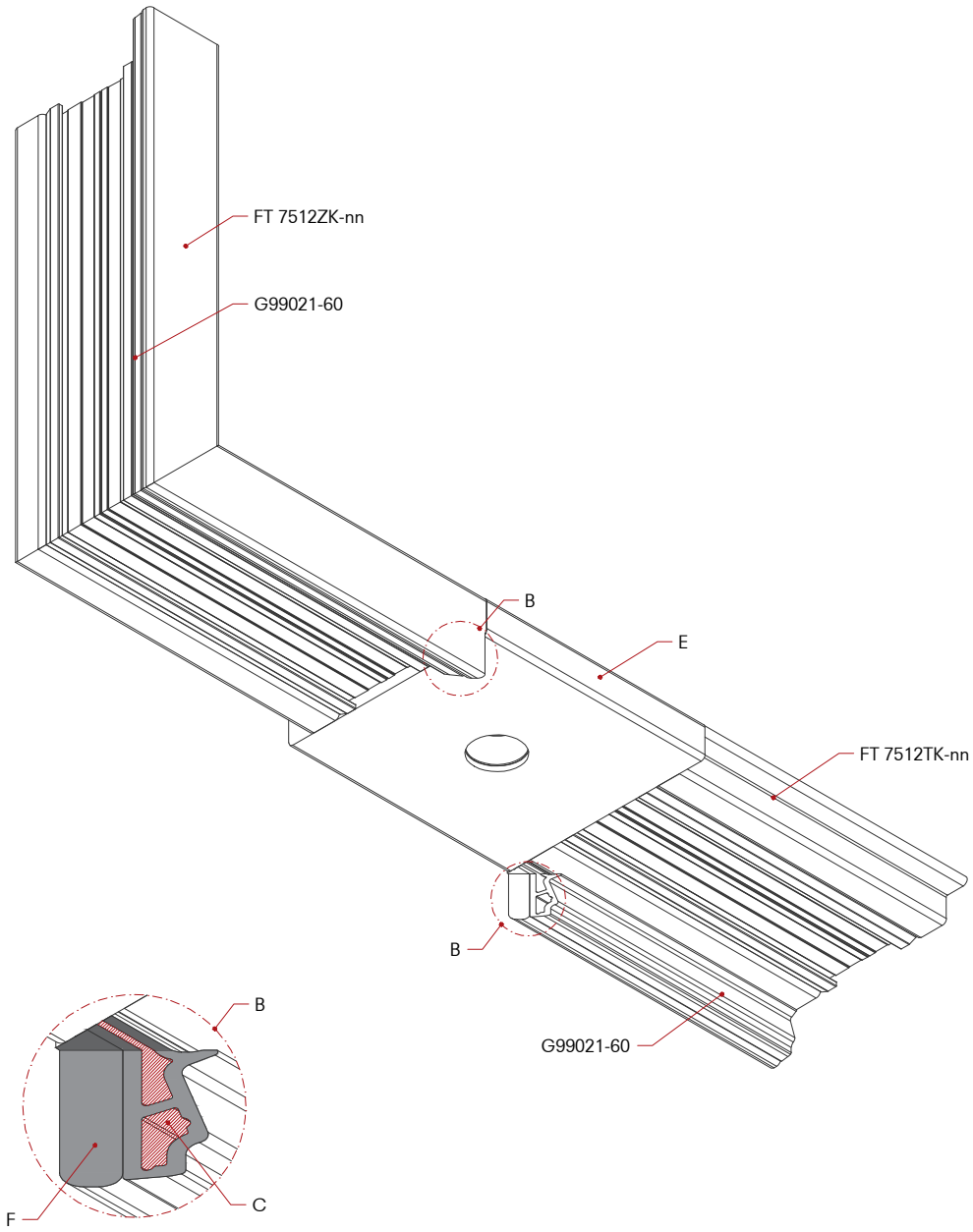




A) Cut-off profile
B) Welding
E) Hinge, leaf part
F) Sealant

A) Profil ausklinken
B) Schweissen
E) Band, Flügelteil
F) Dichtstoff

A) Pièce à enlever
B) Souder
E) Paumelle, partie du ouvrant
F) Silicon



C) Sealant
E) Hinge, leaf part
F) Cut out the gasket G99021-60 in line with the profile

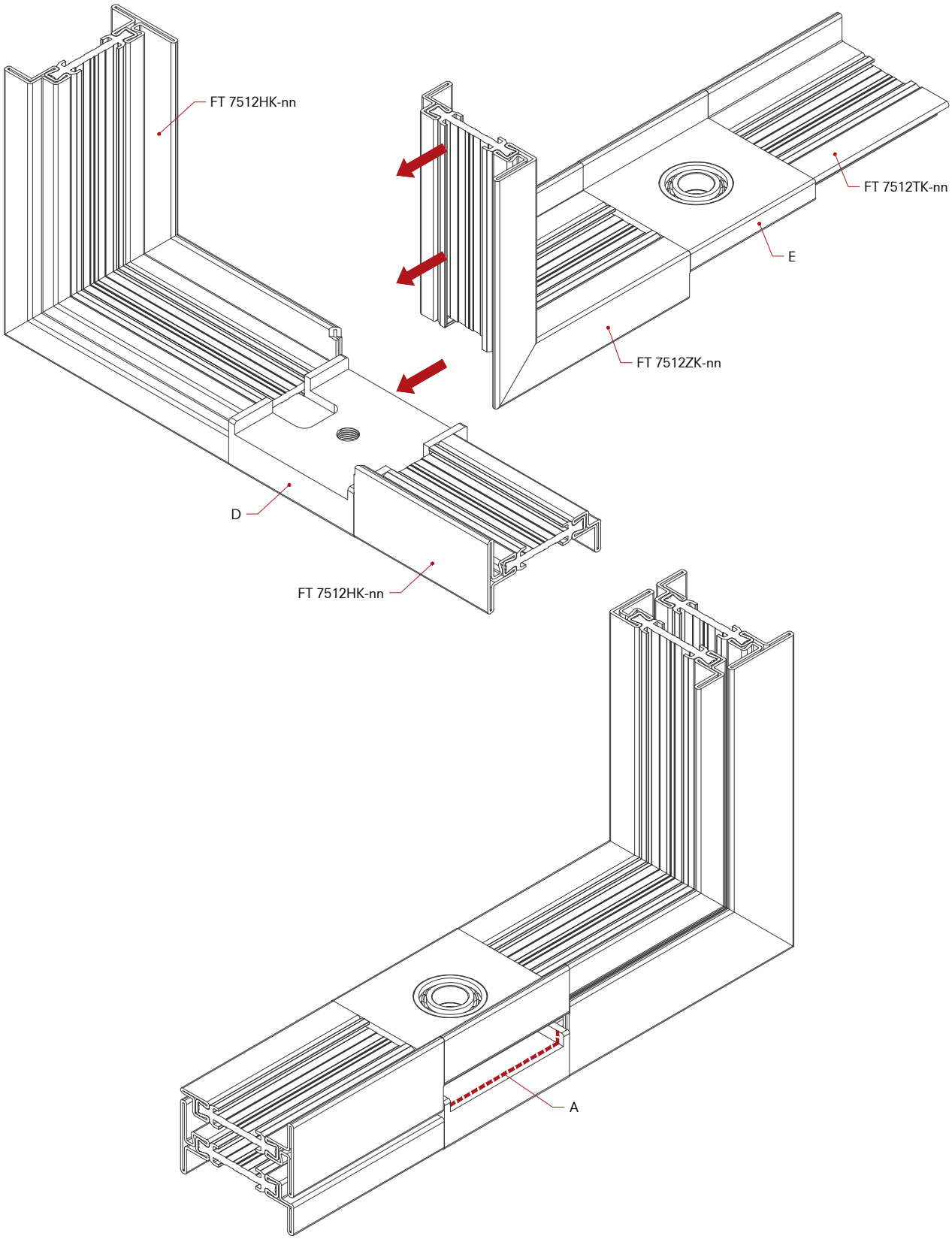
C) Dichtstoff
E) Band, Flügelteil
F) Die Dichtung G99021-60 als Profil ausschneiden

C) Silicon
E) Paumelle, partie du ouvrant
F) Découpez le joint G99021-60 comme profilé

Door leaf assembly

Einbau Türflügel

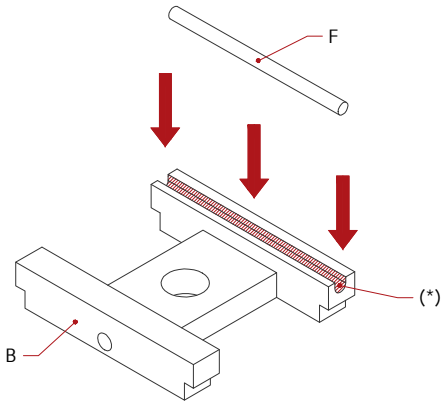
Assemblage de vantail de porte

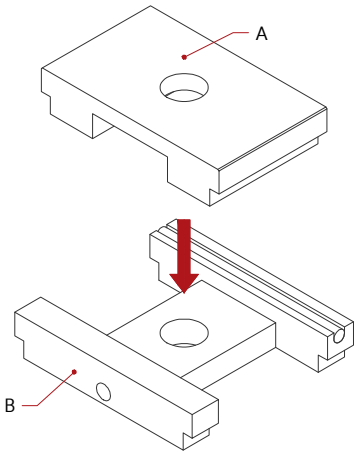


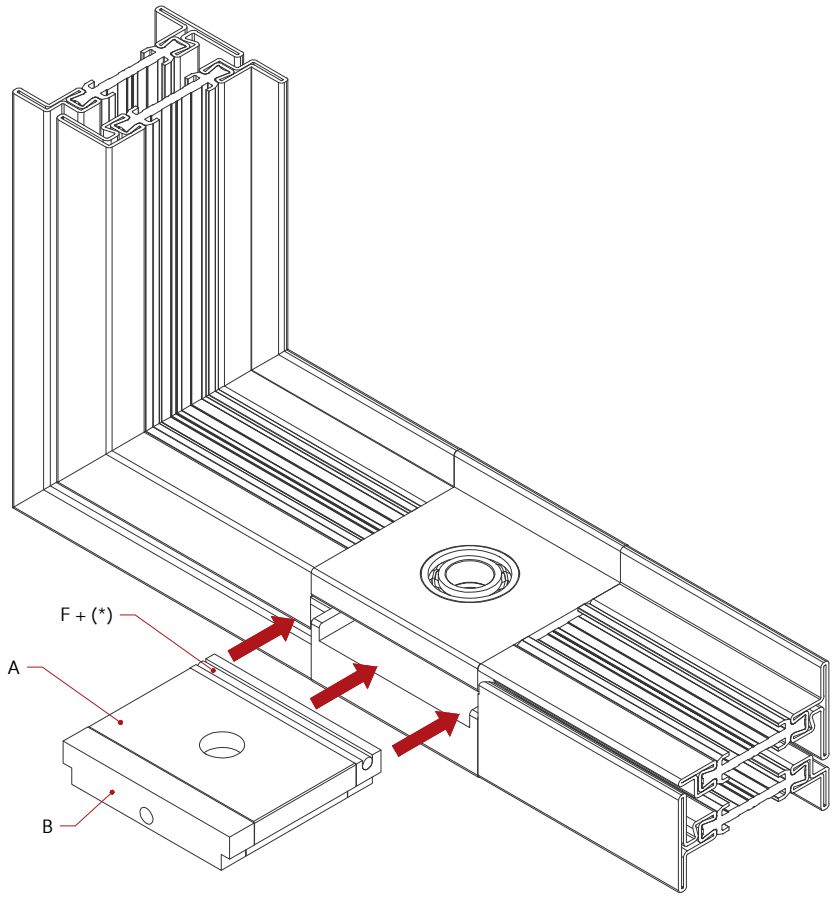
A) Sealant
D) Hinge, frame part
E) Hinge, leaf part

A) Dichtstoff
D) Band, Rahmenteil
E) Band, Flügelteil

A) Silicon
D) Paumelle, partie du dormant
E) Paumelle, partie du ouvrant







A) Skate
B) Shoe holder
F) Gasket

(*) Seal and bond with silicone before assembly

A) Gleitschuh
B) Schuhhalter
F) Dichtung

(*) Abdichten vor Montage

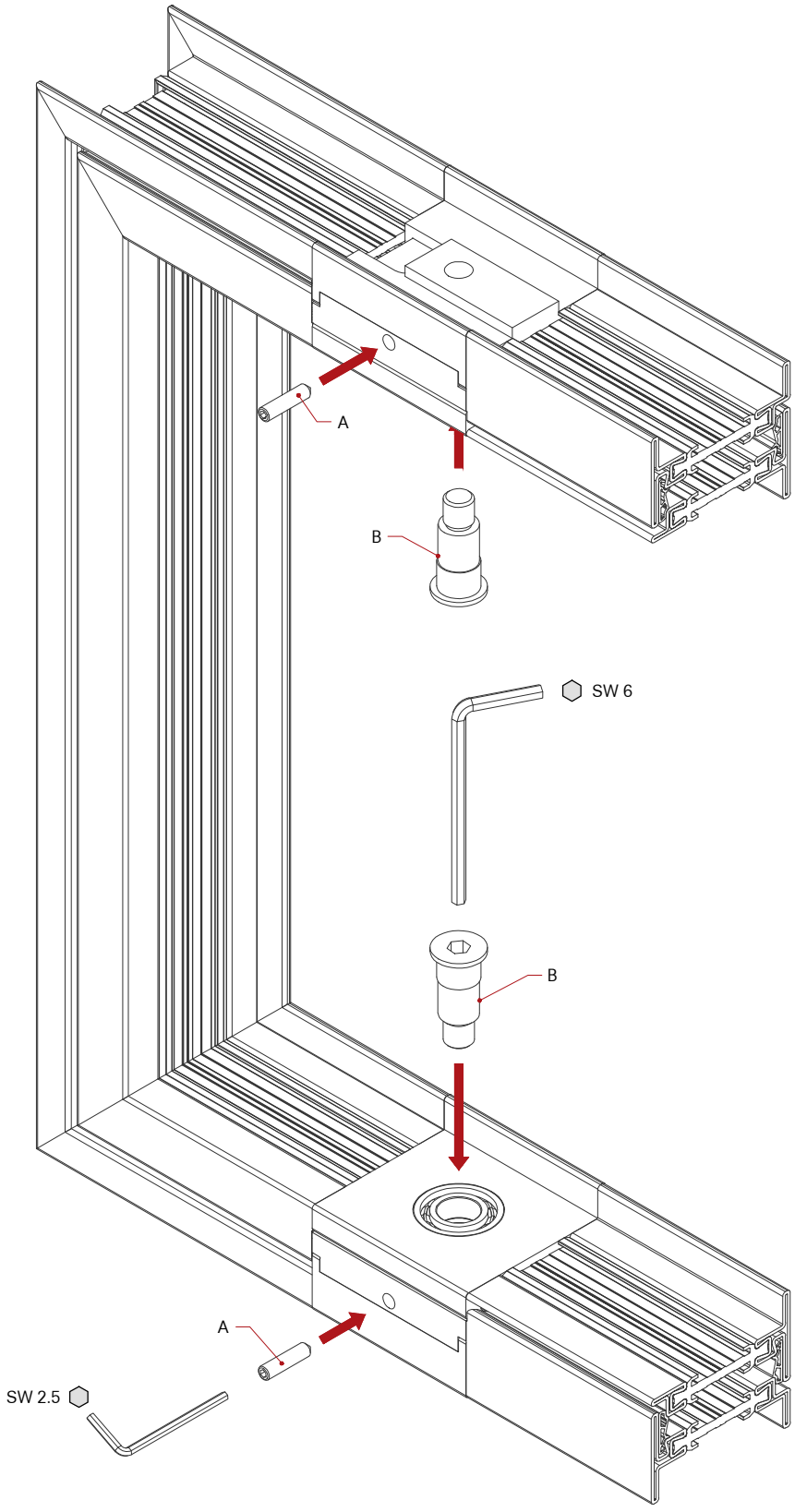
A) Patin
B) Porte-patin
F) Joint

(*) Sceller et coller avec du silicone avant l'assemblage

Assembling
C99327-05 - C99327-12

Montage
C99327-05 - C99327-12

Schéma de montage
C99327-05 - C99327-12



A) M6x25 mm ISO4027
B) Pin

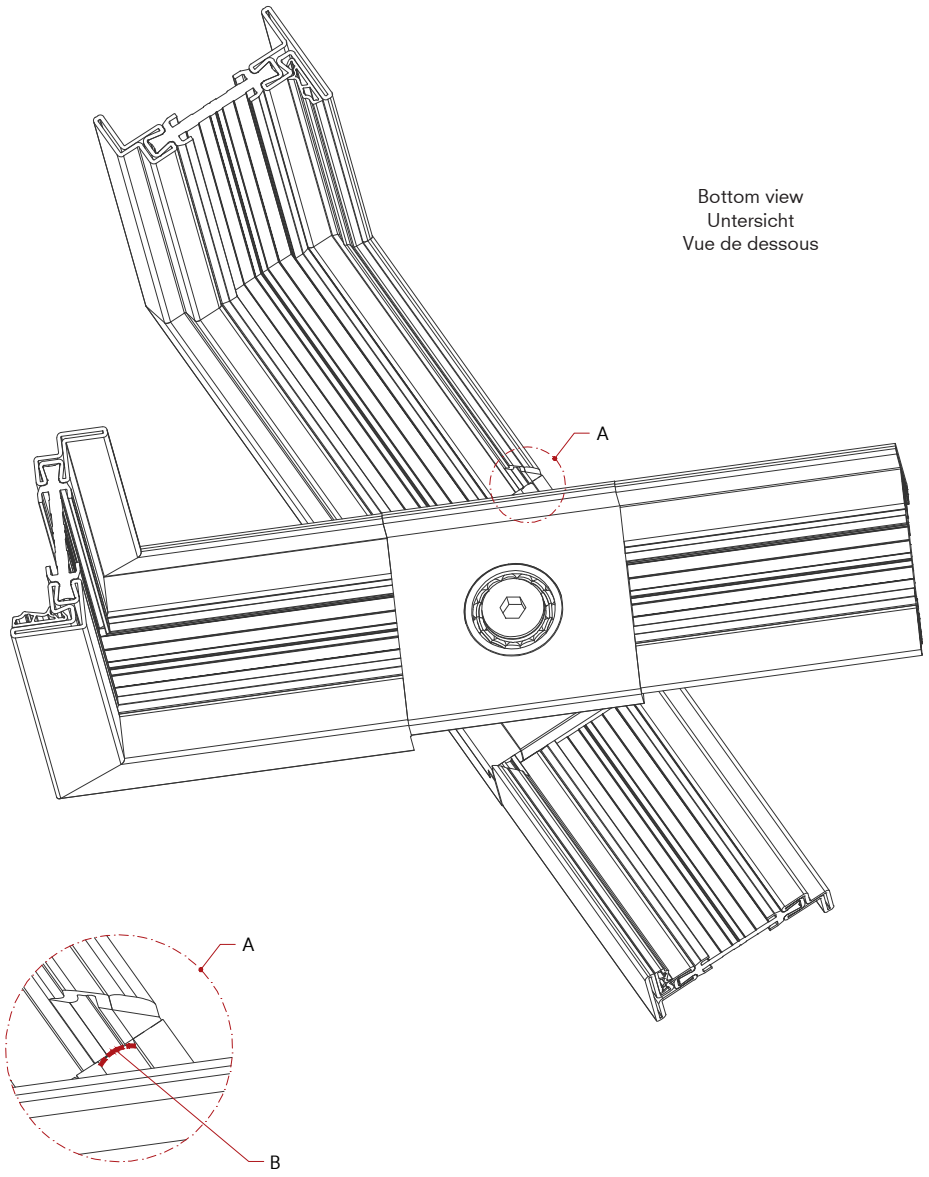
A) M6x25 mm ISO4027
B) Stift

A) M6x25 mm ISO4027
B) Épingler

Assembling
C99327-05 - C99327-12

Montage
C99327-05 - C99327-12

Schéma de montage
C99327-05 - C99327-12



B) Seal with silicone between G99021-60 and (round) gasket of C99327-nn hinge

B) Dichtung mit Silikon zwischen G99021-60 und (rund) Scharnierdichtung C99327-nn

B) Joint avec silicone entre G99021-60 et joint (rond) de paumelle C99327-nn

Glazing

Verglasung

Vitrage

5.10

Legend

+ = Fixed
—— = Open in
- - - = Open out
Dimensions in: mm
Scale 1:1 - 1:2

Legende

+ = Fixed
—— = Innen öffnend
- - - = Außen öffnend
Einheit in: mm
Maßstab 1:1 - 1:2

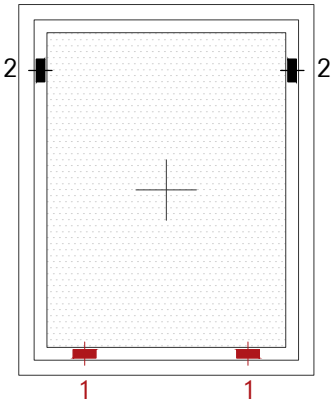
Légende

+ = Fixe
—— = Ouvr. intérieur
- - - = Ouvr. extérieur
Dimensions en: mm
Échelle 1:1 - 1:2

Installation
Glazing

Einbau
Verglasung

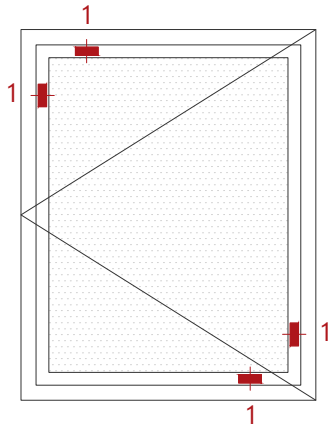
Schéma de montage
Vitrage



Fixed window (Windows and doors)

Festverglasung (Fenster und Türen)

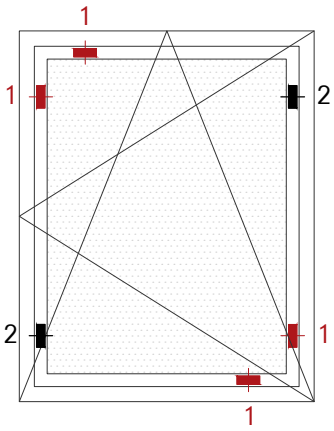
Fenêtre fixe (Menuiserie extérieure)



Single leaf window open in and open out

Einflügliges Fenster nach innen und außen öffnend

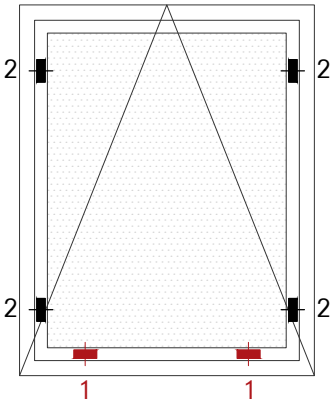
Fenêtre à un vantail ouvrant vers l'intérieur et l'extérieur



Single leaf window

Einflüglige Fenster

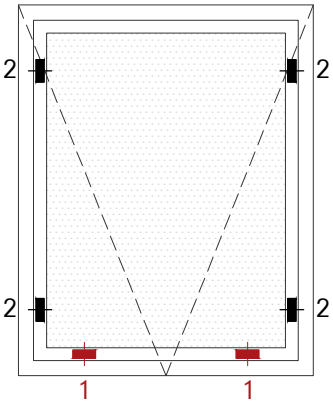
Fenêtre à un vantail



Bottom hung window open in

Kipp-Fenster nach innen öffnend

Fênetre à soufflet ouvrant vers l'intérieur



Top hung projecting window open out

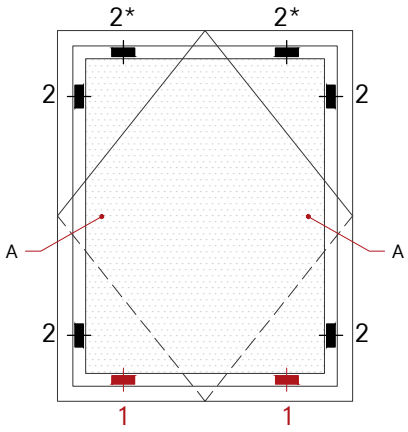
Senkklapp-Fenster nach außen öffnend

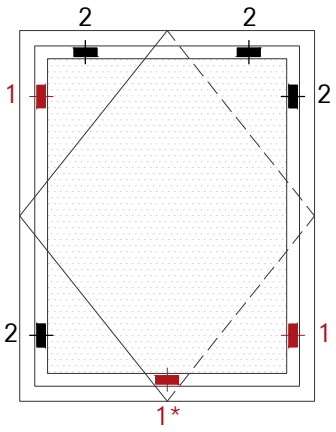
Fênetre à l'italienne ouvrant vers l'extérieur

1) Support shims
2) Distance shims

1) Stützstärken
2) Distanzscheiben

1) Épaisseurs de support
2) Cales de distance

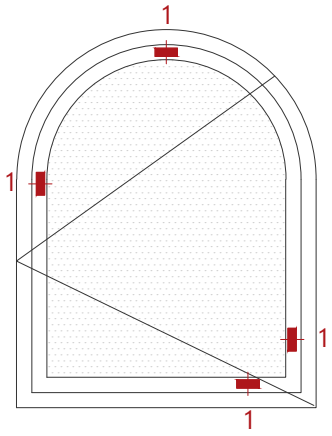




Single leaf pivot window open in and open out

Einflüglige Pendelfenster nach innen und außen öffnend

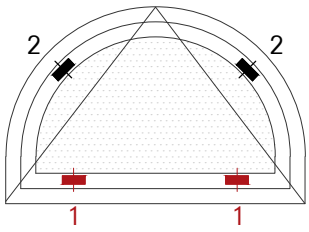
Fênetre pivot à un vantail ouvrant vers l'intérieur et l'extérieur



Single leaf window open in and open out

Einflügliges Fenster nach innen und außen öffnend

Fenêtre à un vantail ouvrant vers l'intérieur et l'extérieur



Open in bottom hung window

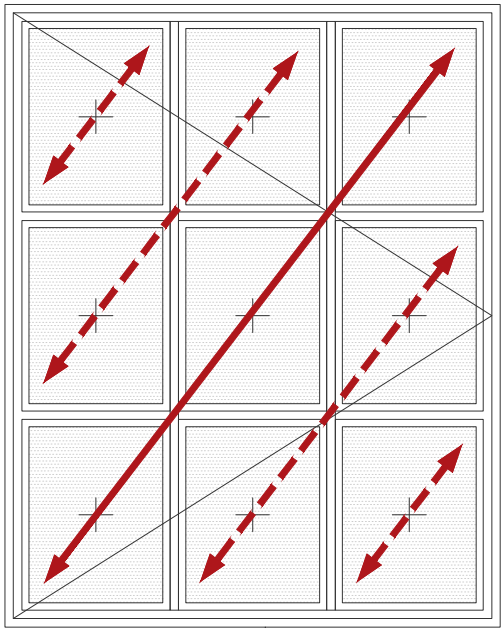
Kipp-Fenster nach innen öffnend

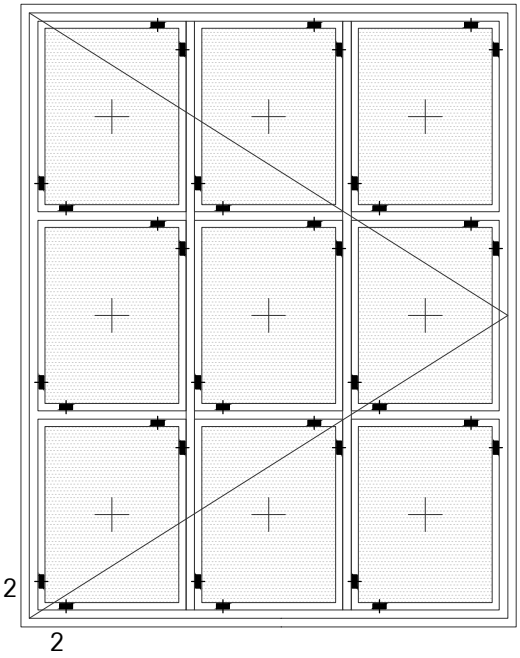
Fênetre à soufflet ouvrant vers l'intérieur

1) Support shims
2) Distance shims
1*) For glazing units over one meter wide, the shims must be above the swivel bearing
2*) In case of swing door, they become support shims
A) In the case of horizontal pivot openings, it is advisable to ask the Ottostumm technical office

1) Stützstärken
2) Distanzscheiben
1*) Bei Verglasungen über einem Meter Breite müssen die Unterlegscheiben über dem Schwenklager liegen
2*) Bei Pendelfenster werden sie zu Auflagestärken
A) Bei horizontalen Schwenköffnungen empfiehlt es sich, das Technische Büro Ottostumm anzufragen

1) Épaisseurs de support
2) Cales de distance
1*) Pour les vitrages de plus d'un mètre de large, les cales doivent être au dessus du palier pivotant
2*) En cas de porte battante, elles deviennent des épaisseurs de support
A) Dans le cas d'ouvertures à pivot horizontal, il est conseillé de s'adresser au bureau technique d'Ottostumm





Single leaf window open in and open out

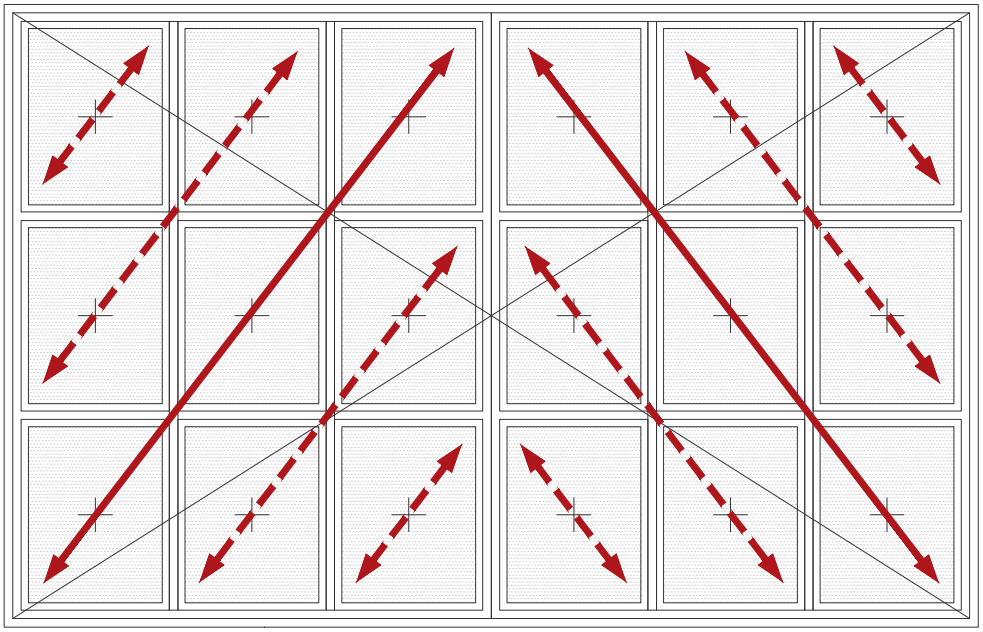
Einflügliges Fenster nach innen und außen öffnend

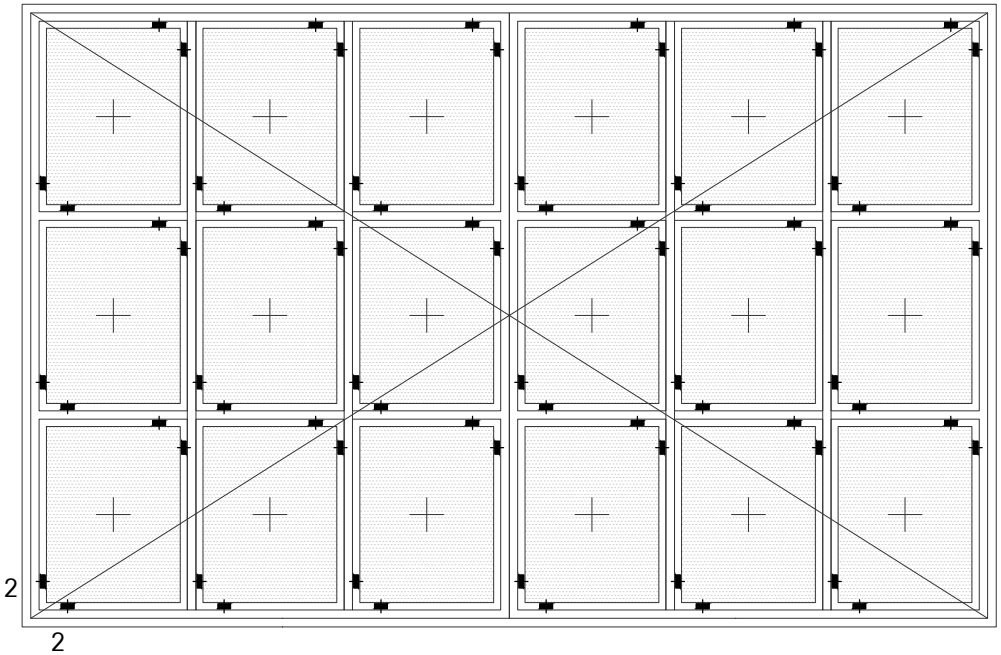
Fenêtre à un vantail ouvrant vers l'intérieur et l'extérieur

2) Distance shims

2) Distanzscheiben

2) Cales de distance





Double leaf window open in and open out

Zweiflügliges Fenster nach innen und außen öffnend

Fenêtre à deux vantaux ouvrant vers l'intérieur et l'extérieur

2) Distance shims

2) Distanzscheiben

2) Cales de distance

Installation
Glazing beads

Einbau
Glashalteleisten

Schéma de montage
Parcloses

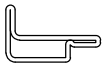
45° cutting of angled glazing beads and welding of the corners on the inside.

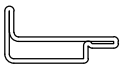
Winkelglashalteleisten auf 45° zugeschnitten und von innen geschweißt.

Découpe 45° des parcloses à souder.

FV 1515E-00

FV 1520E-nn

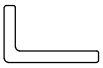

FV 1525E-nn

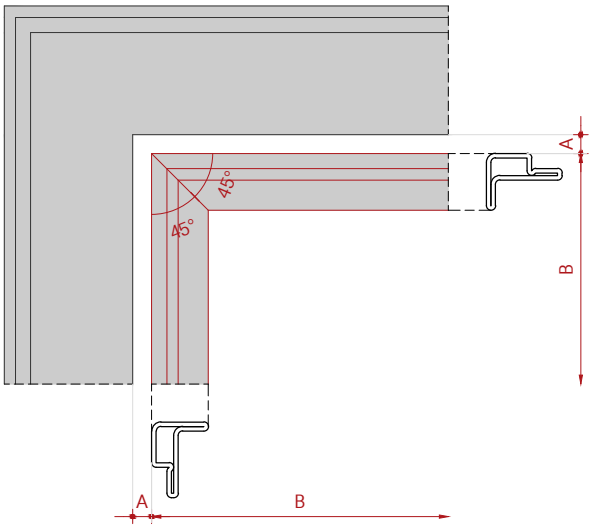

FV 1530E-nn

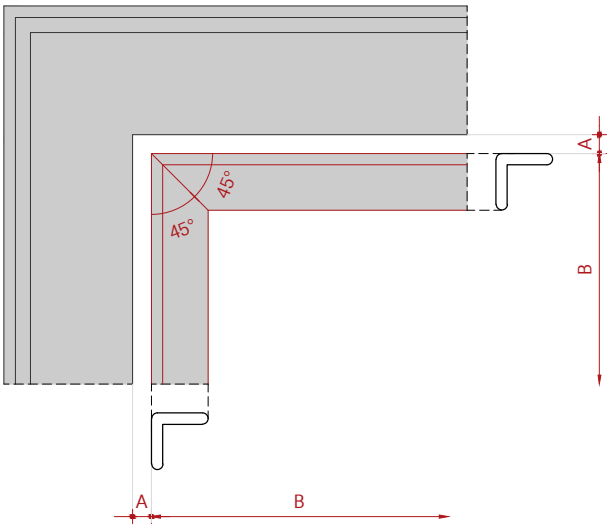
FV 1535E-nn

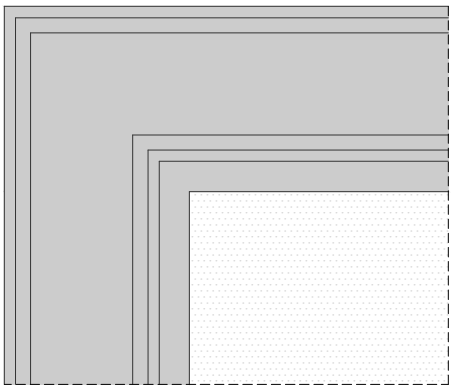
FV 1515A-02

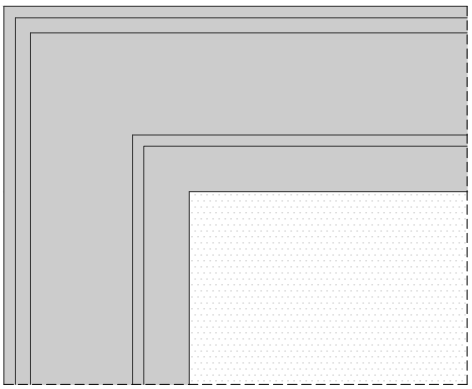
FV 1815A-02


FV 1525A-01









A) Shim between frame and glazing bead 0.5 mm (distance)
B) Cutting length

A) Unterlage zwischen Rahmen und Glashalteleiste 0.5 mm als (Abstand)
B) Zuschnittslänge

A) Cale entre cadre et parclose 0.5 mm (distance)
B) Longueur de coupe

45° cutting of angled glazing beads and welding of the corners on the inside.

Winkelglashalteleisten auf 45° zugeschnitten und von innen geschweißt.

Découpe 45° des parcloses à souder.

FV 1520S-00

FV 1530S-00

FV 1520S-nn

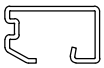
FV 1530S-nn

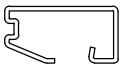
90° cutting of steel and aluminium glazing beads.

Glashgalteleisten aus Stahl und Aluminium auf 90° zugeschnitten.

Découpe 90° des parcloses en acier et aluminium.

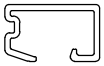
FV 1520R-nn

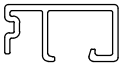

FV 1525R-nn

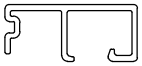

FV 1530R-nn

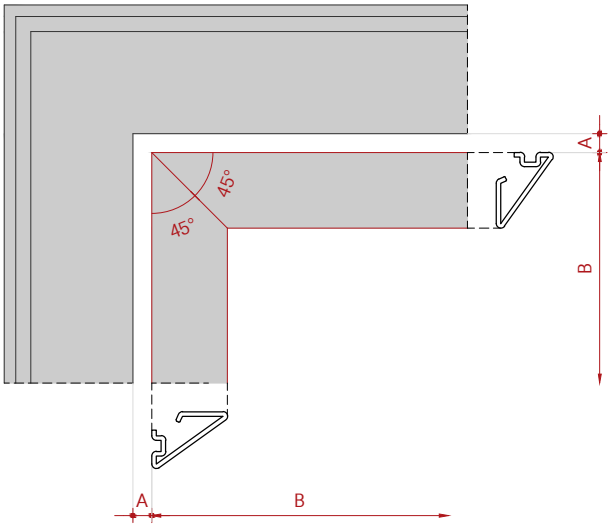
FV 1515R-00

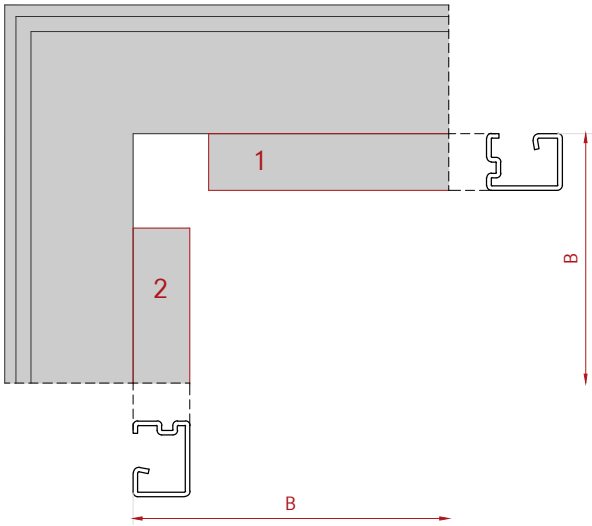
FV 1520R-00

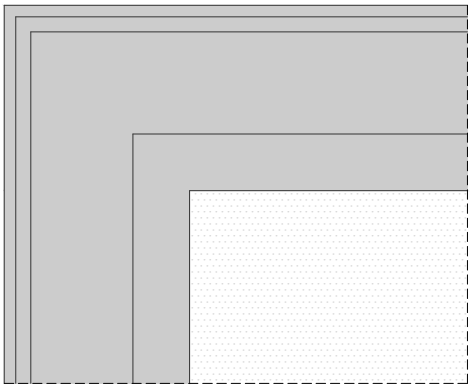

FV 1525R-00

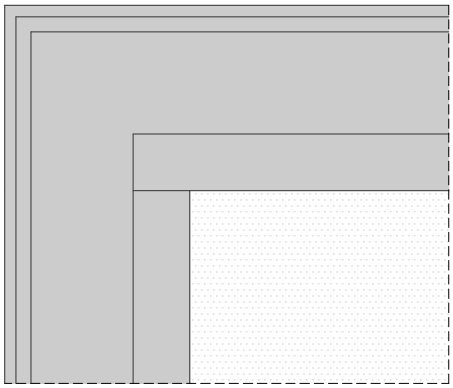

FV 1530R-00


FV 1535R-00









A) Shim between frame and glazing bead 0.5 mm (distance)
B) Cutting length

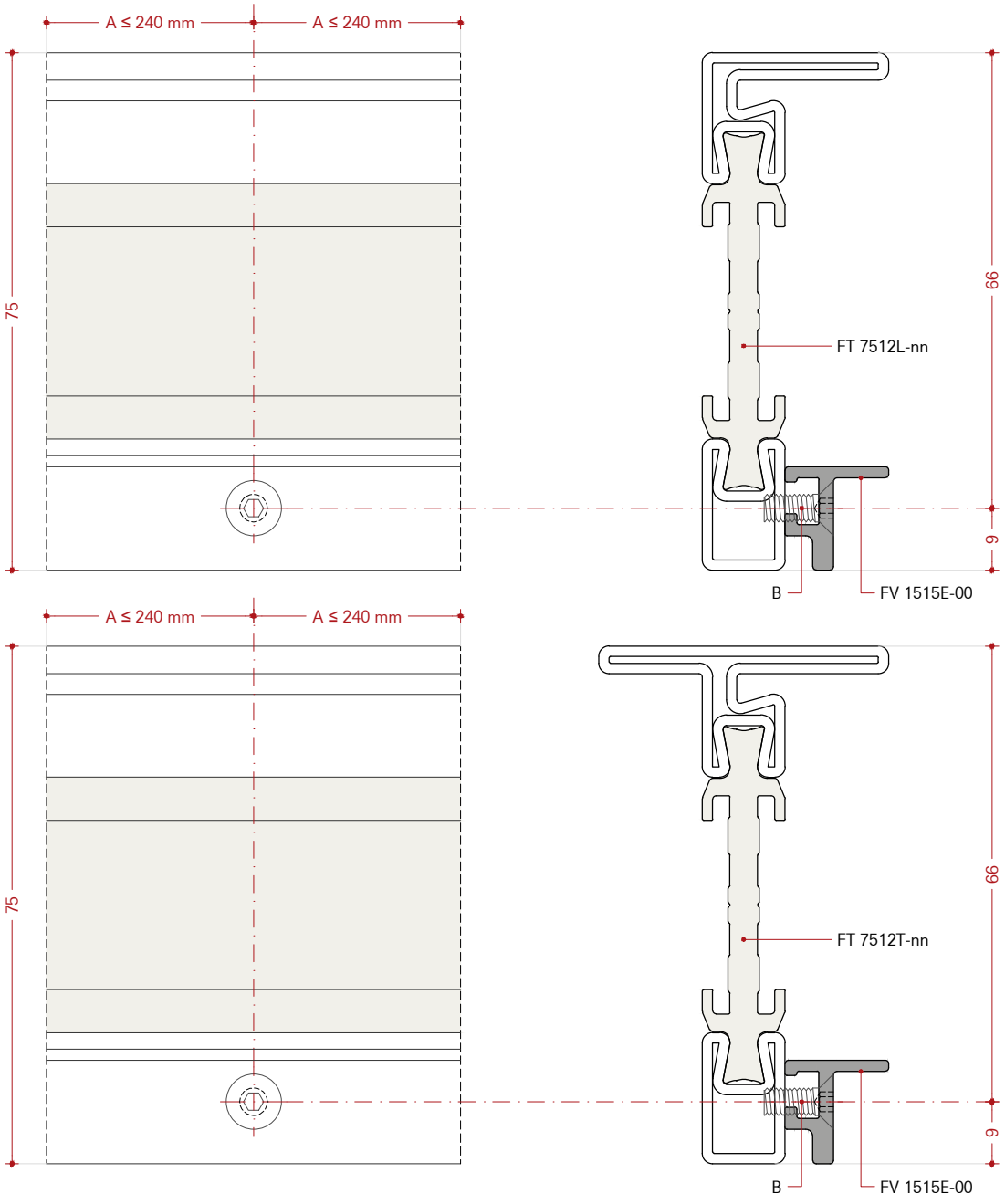
A) Unterlage zwischen Rahmen und Glashalteleiste 0.5 mm als (Abstand)
B) Zuschnittslänge

A) Cale entre cadre et parclose 0.5 mm (distance)
B) Longueur de coupe

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

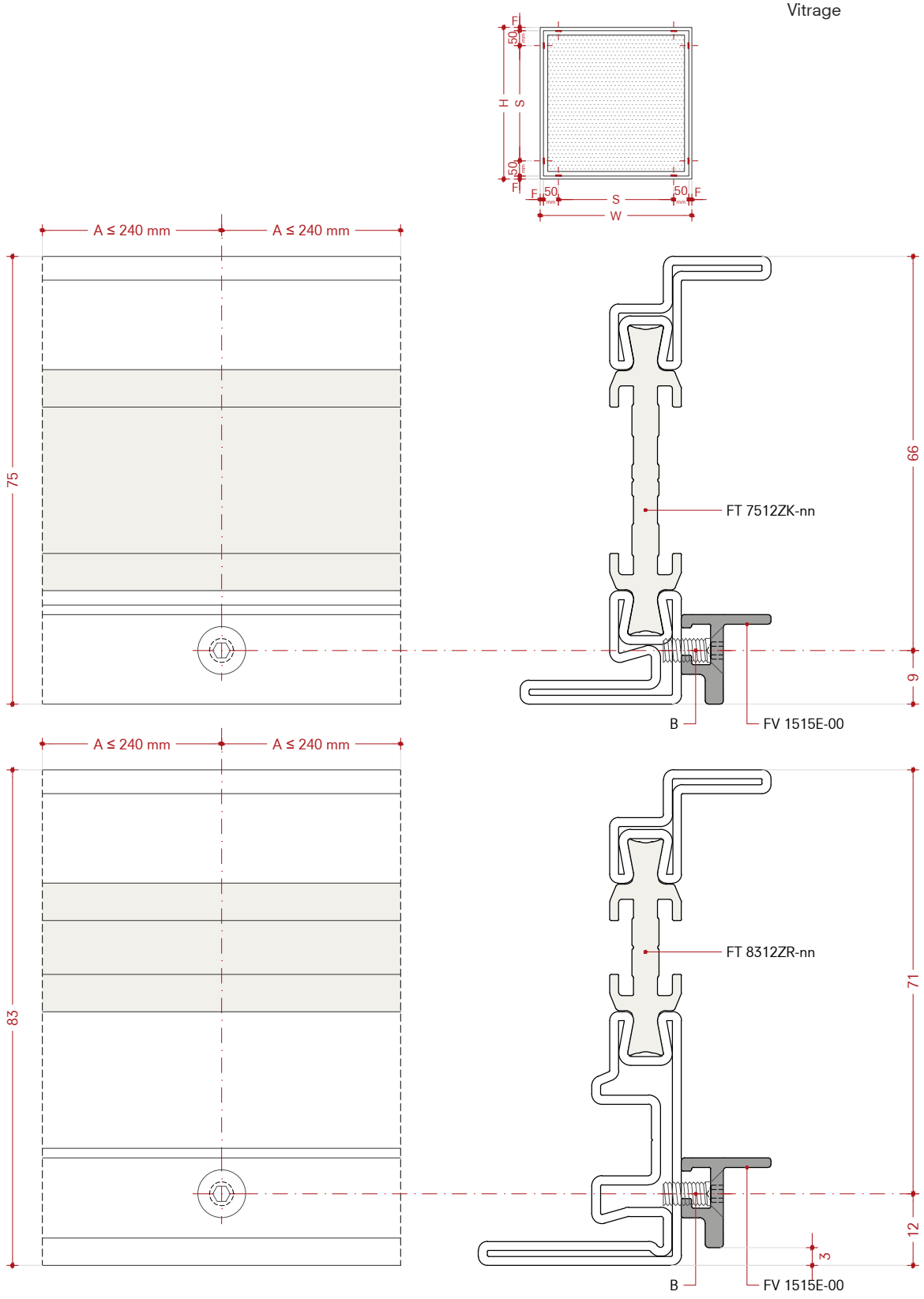
Schéma de montage
Parcloses
Positionnement des parcloses



A) Maximum fixing distance
B) Screws D99880-03

A) Maximaler Befestigungsabstand
B) Schrauben D99880-03

A) Distance maximale de montage
B) Vis D99880-03



A) Maximum fixing distance
B) Screws D99880-03
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

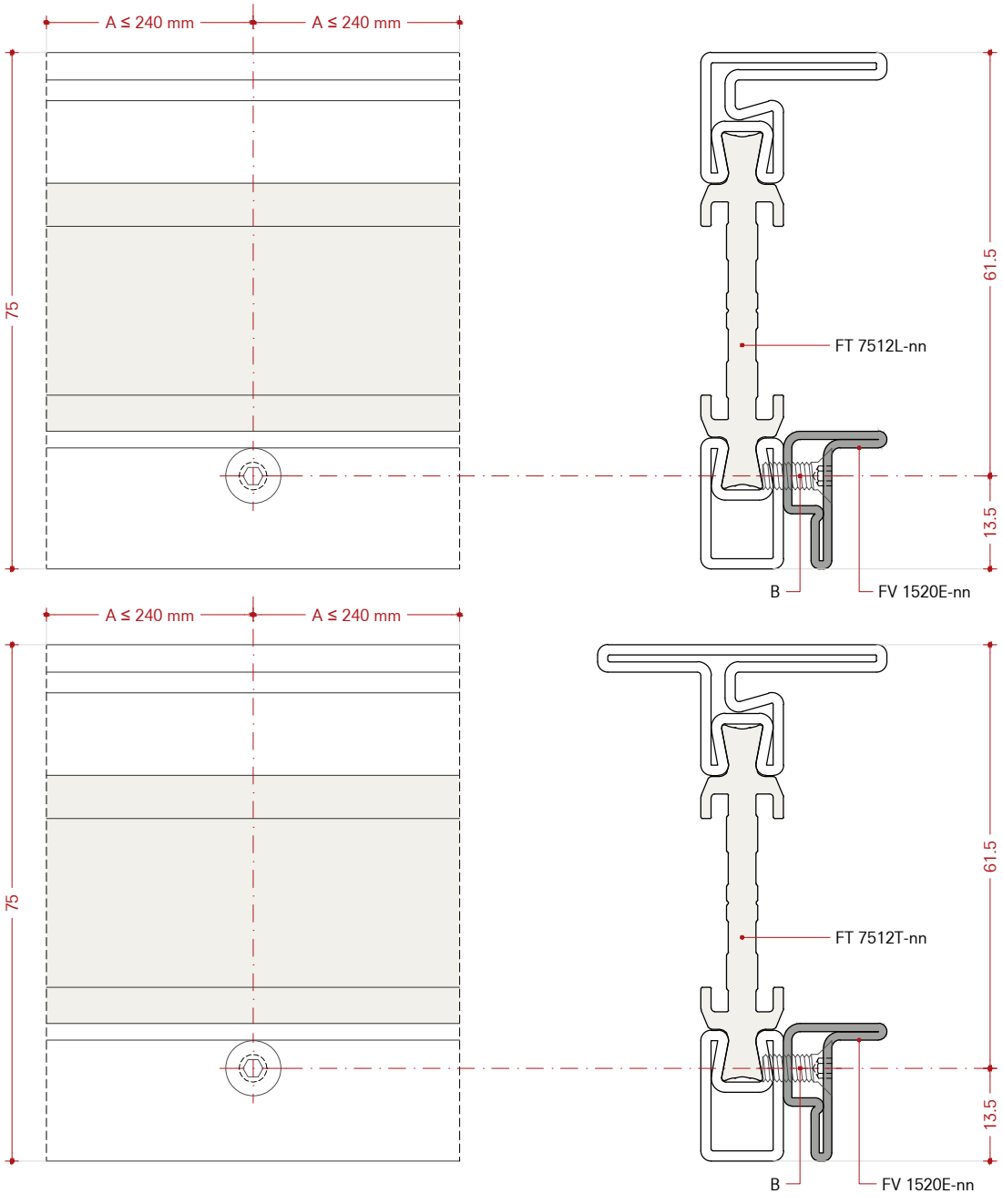
A) Maximaler Befestigungsabstand
B) Schrauben D99880-03
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

A) Distance maximale de montage
B) Vis D99880-03
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

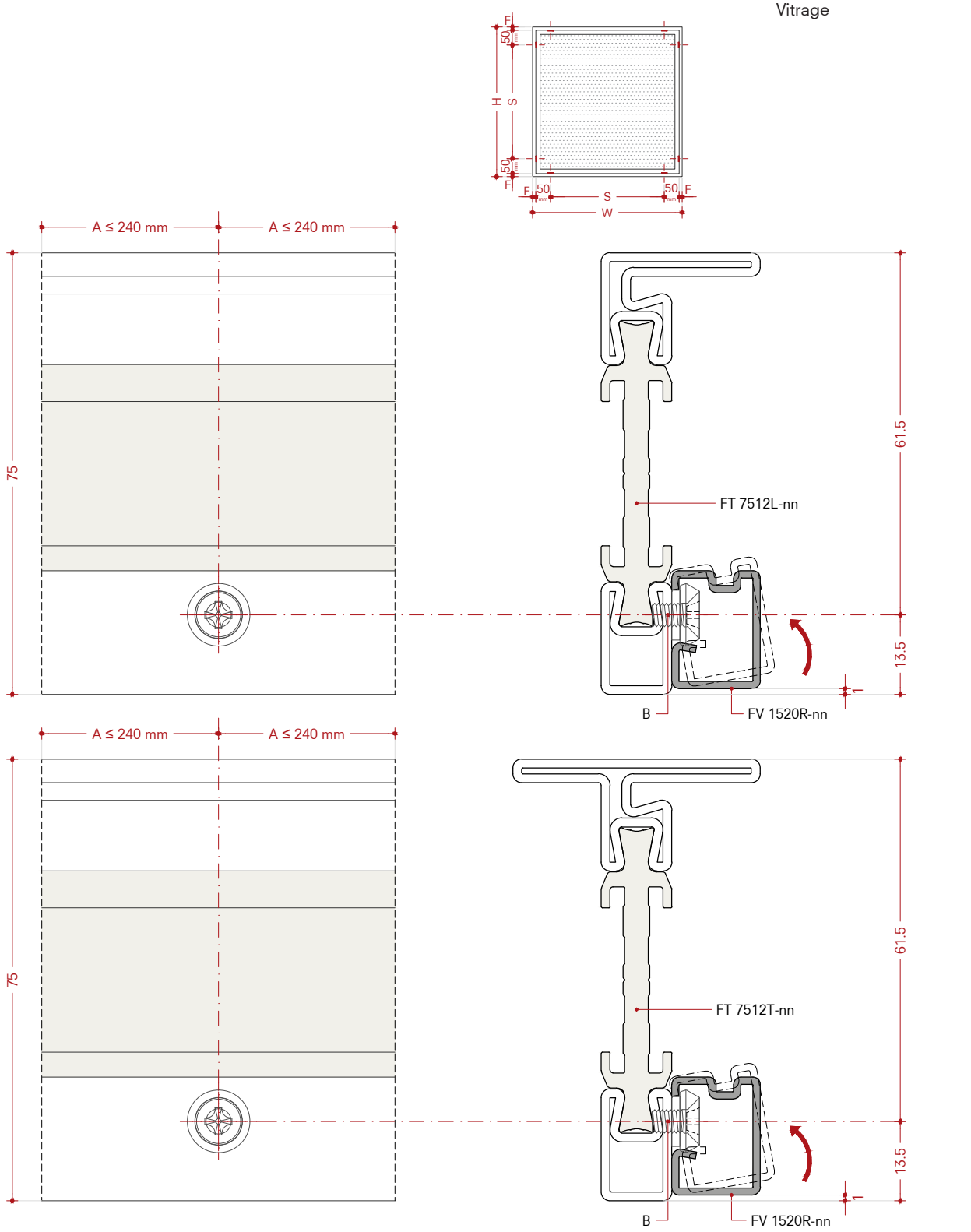
Schéma de montage
Parcloses
Positionnement des parcloses



A) Maximum fixing distance
B) Screws D99880-03

A) Maximaler Befestigungsabstand
B) Schrauben D99880-03

A) Distance maximale de montage
B) Vis D99880-03



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 F99063-03 + D99980-02 (for galvanized and bright steel profiles)
F99063-03 + D99980-03 (for Cor-Ten and stainless steel profiles)
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

HINWEIS:
Wir empfehlen, die Klemmköpfe nach dem Einbau des Glases oben und Rechts zu befestigen.

A) Maximaler Befestigungsabstand
B) Befestigung mit F99063-03 + D99980-02 (für bandverzink und blanker Stahlprofile)
F99063-03 + D99980-03 (für Edelstahl und Cor-Ten Stahlprofile)
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

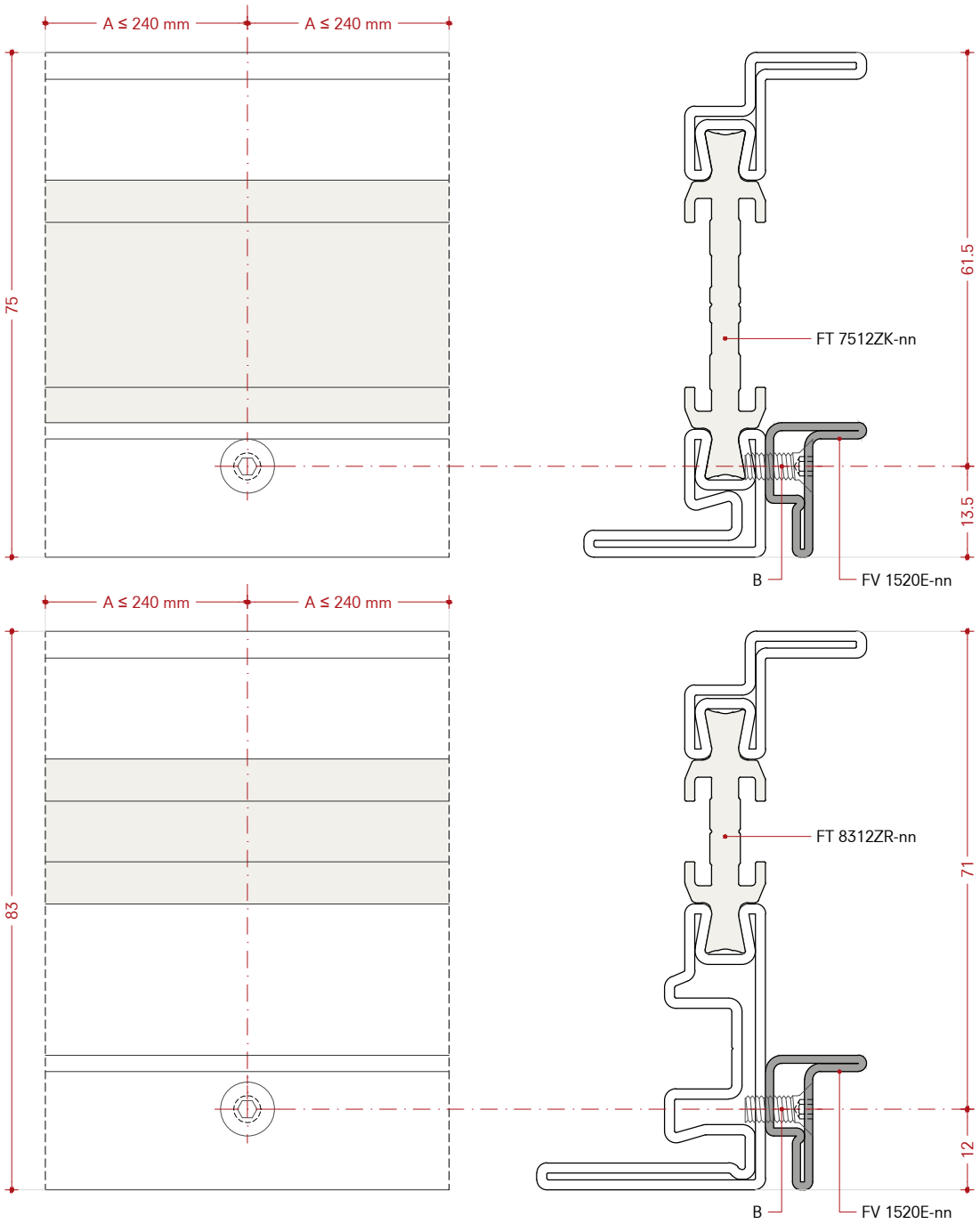
REMARQUE:
Nous suggérons de fixer les bagues en haut et à droite après la pose du verre.

A) Distance maximale de montage
B) Fixation avec F99063-03 +D99980-02 (pour profilés en acier galvanisé et acier décapé)
F99063-03 +D99980-03 (pour profilés en acier Cor-Ten et acier inoxydable)
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

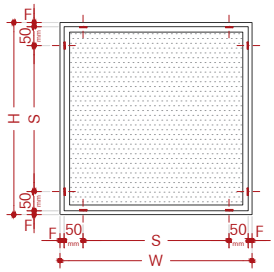
Schéma de montage
Parcloses
Positionnement des parcloses

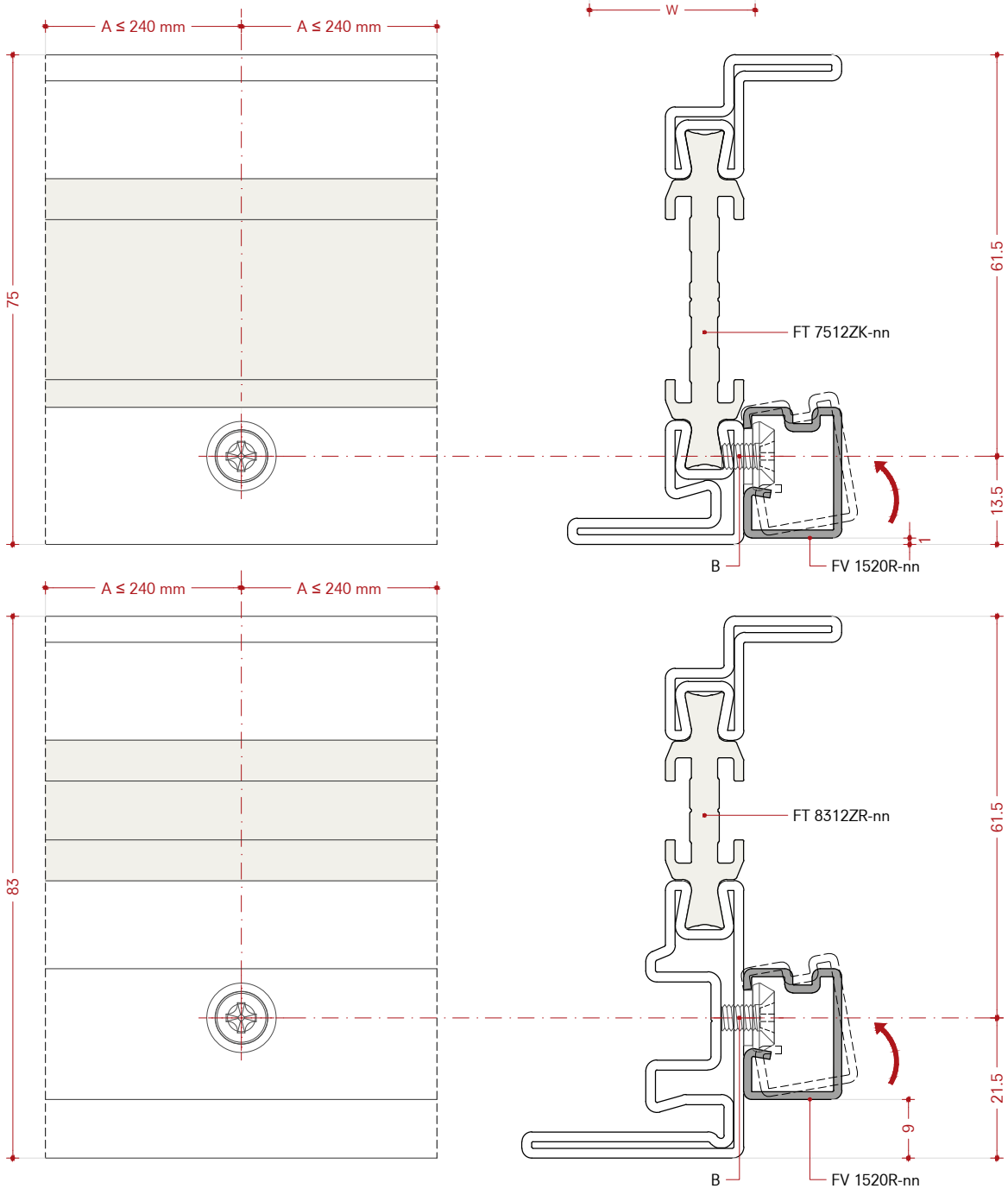


A) Maximum fixing distance
B) Screws D99880-03

A) Maximaler Befestigungsabstand
B) Schrauben D99880-03

A) Distance maximale de montage
B) Vis D99880-03





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 F99063-03 + D99980-02 (for galvanized and bright steel profiles) F99063-03 + D99980-03 (for Cor-Ten and stainless steel profiles)
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

HINWEIS:
Wir empfehlen, die Klemmköpfe nach dem Einbau des Glases oben und Rechts zu befestigen.

A) Maximaler Befestigungsabstand
B) Befestigung mit F99063-03 + D99980-02 (für bandverzink und blanker Stahlprofile) F99063-03 + D99980-03 (für Edelstahl und Cor-Ten Stahlprofile)
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

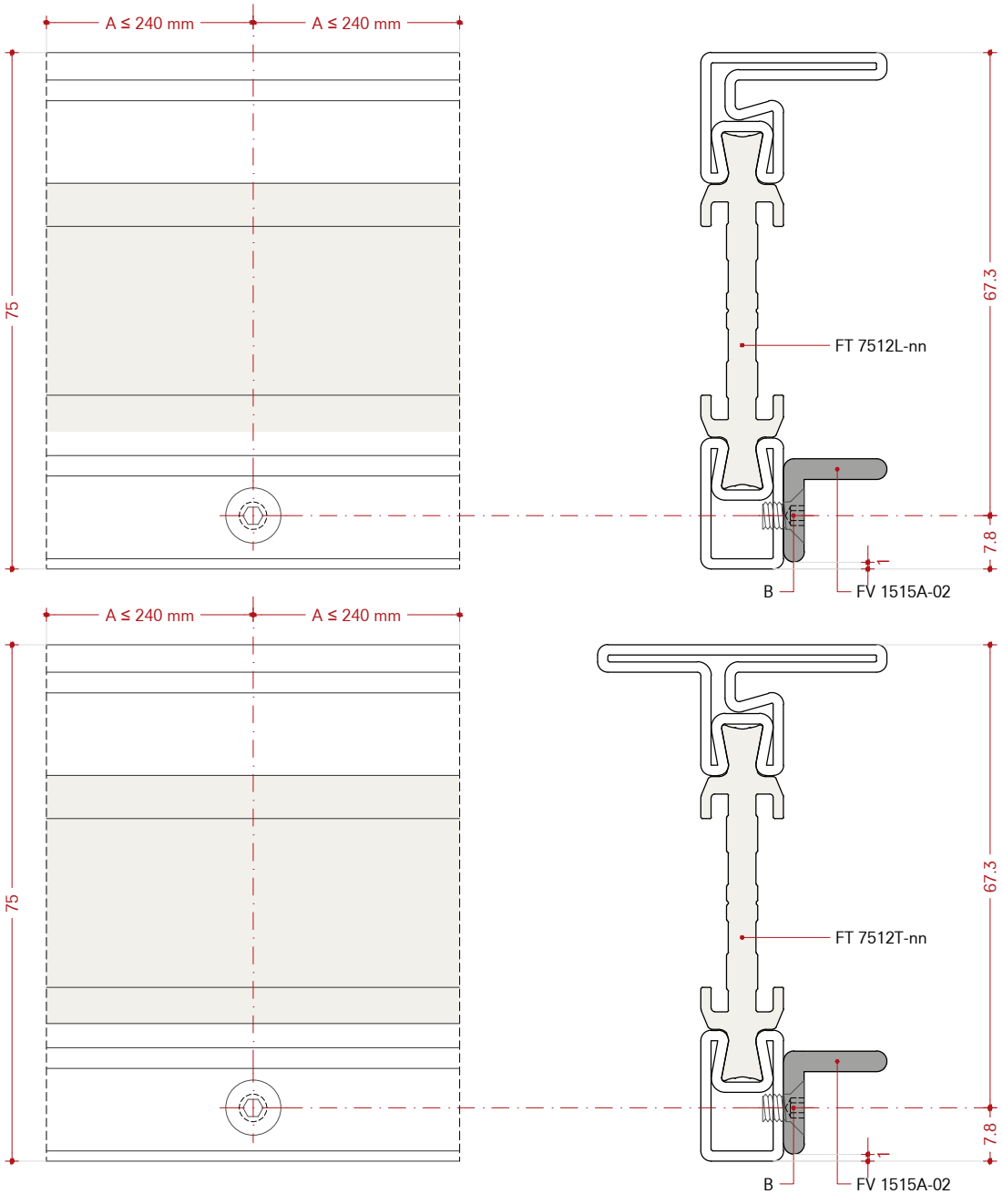
REMARQUE:
Nous suggérons de fixer les bagues en haut et à droite après la pose du verre.

A) Distance maximale de montage
B) Fixation avec F99063-03 +D99980-02 (pour profilés en acier galvanisé et acier décapé) F99063-03 +D99980-03 (pour profilés en acier Cor-Ten et acier inoxydable)
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

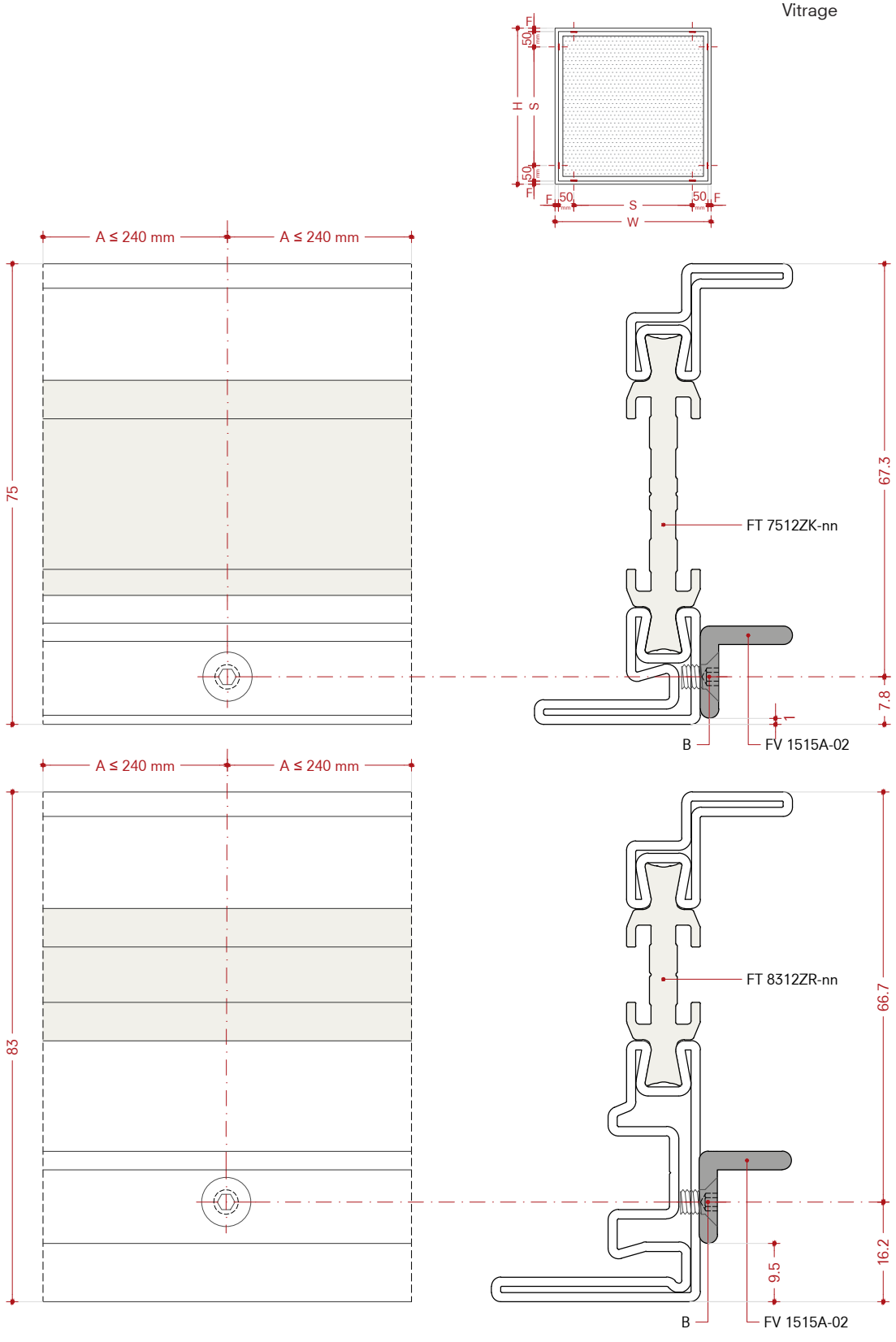
Schéma de montage
Parcloses
Positionnement des parcloses



A) Maximum fixing distance
B) Screws D99867-03

A) Maximaler Befestigungsabstand
B) Schrauben D99867-03

A) Distance maximale de montage
B) Vis D99867-03



A) Maximum fixing distance
B) Screws D99867-03
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

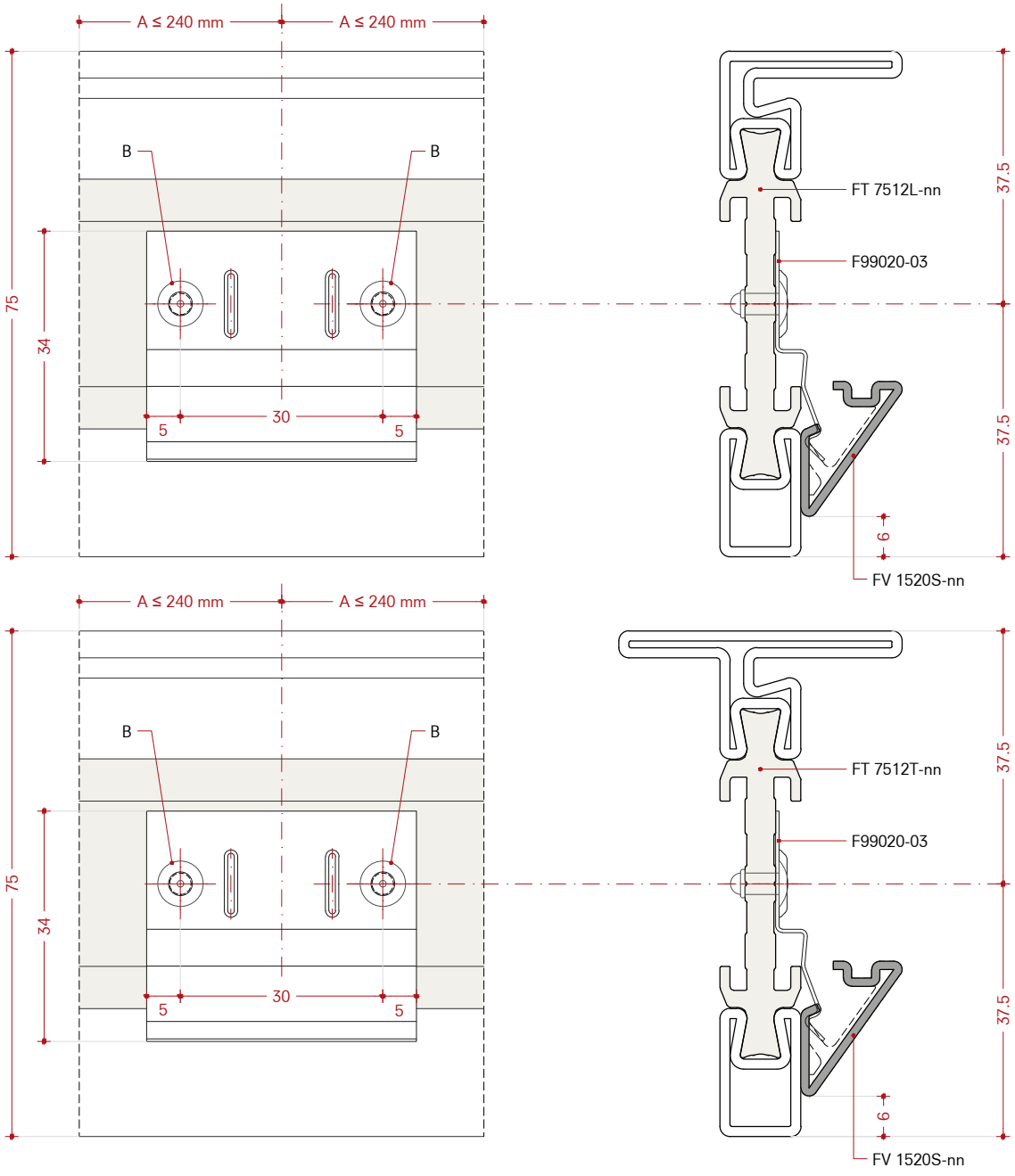
A) Maximaler Befestigungsabstand
B) Schrauben D99867-03
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

A) Distance maximale de montage
B) Vis D99867-03
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

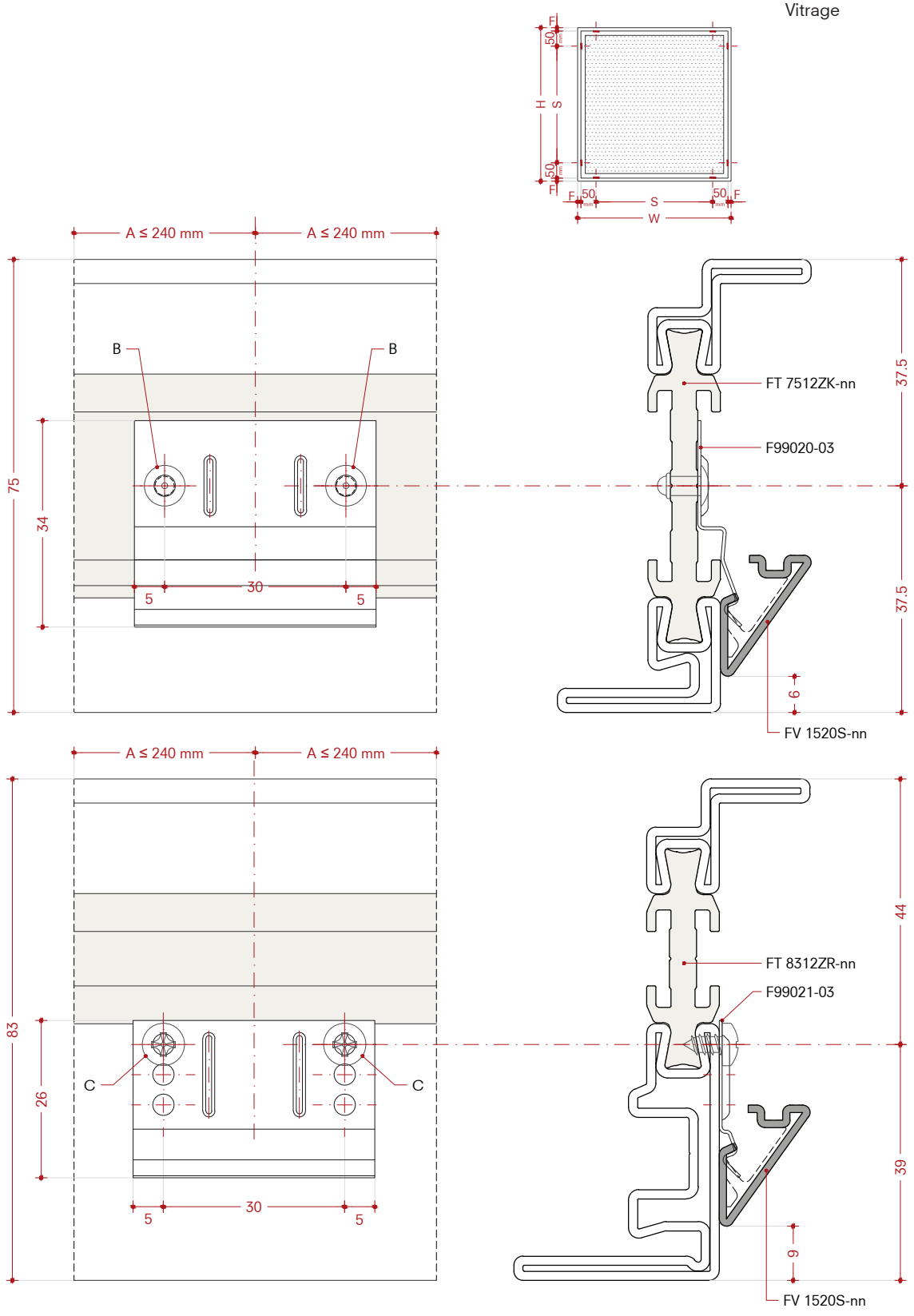
Schéma de montage
Parcloses
Positionnement des parcloses



A) Maximum fixing distance
B) Rivet D99950-03

A) Maximaler Befestigungsabstand
B) Niet D99950-03

A) Distance maximale de montage
B) Rivet D99950-03



A) Maximum fixing distance
B) Rivet D99950-03
C) Fastening with D99801-03 screws
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

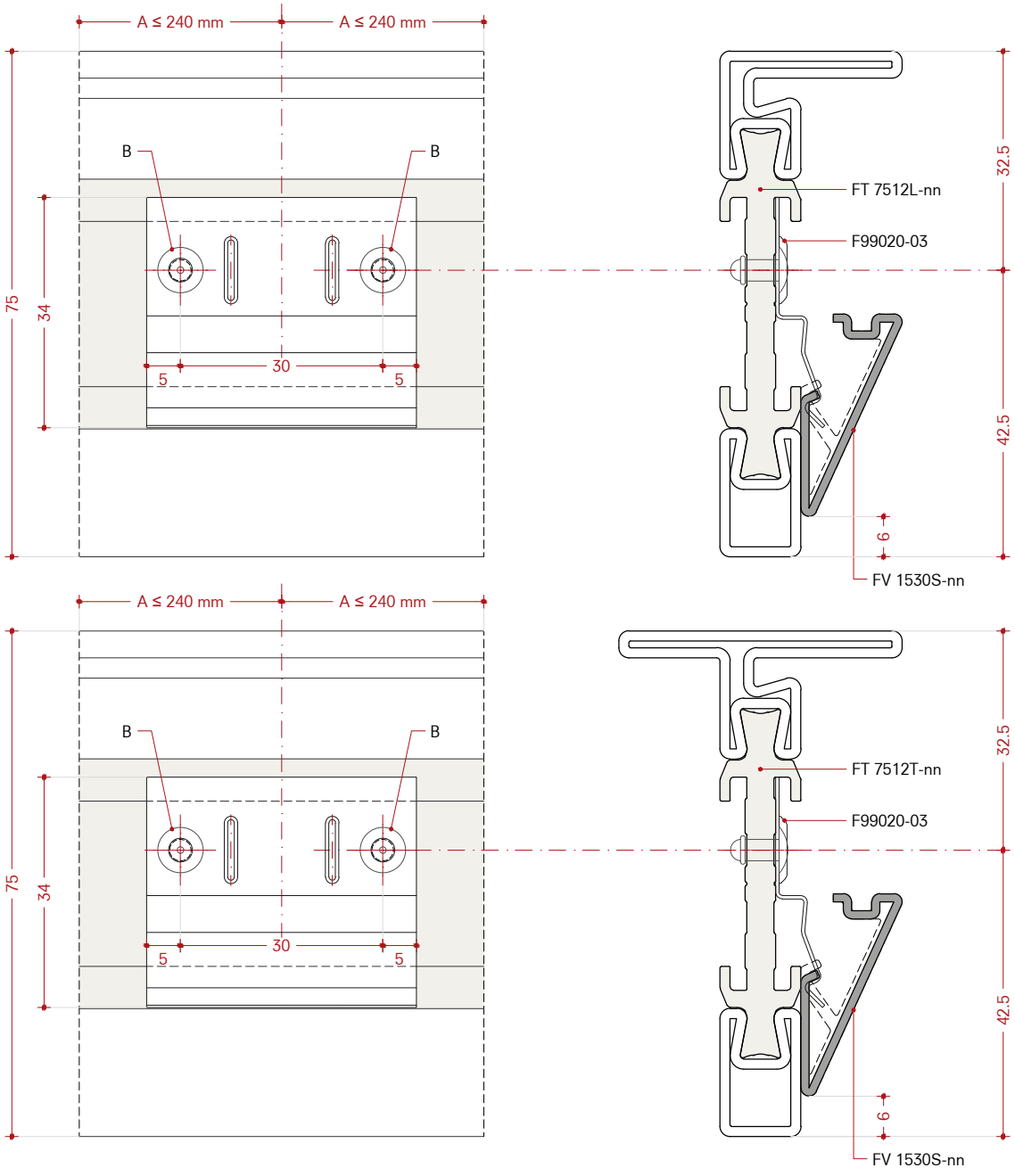
A) Maximaler Befestigungsabstand
B) Niet D99950-03
C) Befestigung mit Schrauben D99801-03
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

A) Distance maximale de montage
B) Rivet D99950-03
C) Fixation avec vis D99801-03
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale

Installation
Glazing beads
Positioning of glazing bead

Einbau
Glashalteleisten
Positionierung glashalteleiste

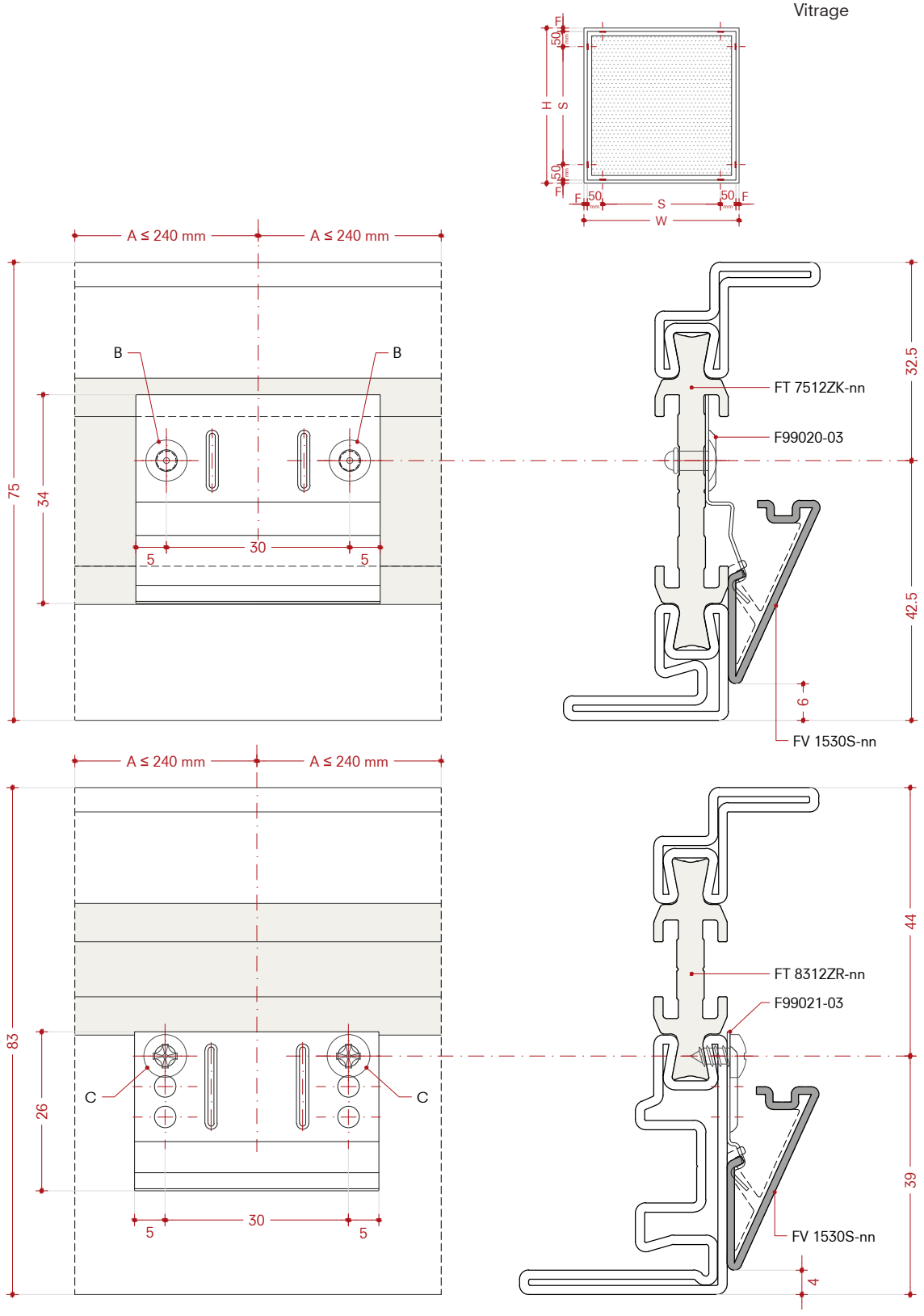
Schéma de montage
Parcloses
Positionnement des parcloses



A) Maximum fixing distance
B) Rivet D99950-03

A) Maximaler Befestigungsabstand
B) Niet D99950-03

A) Distance maximale de montage
B) Rivet D99950-03



A) Maximum fixing distance
B) Rivet D99950-03
C) Fastening with D99801-03 screws
F) Internal profile width
H) Overall height
S) On-centre distance between the outer clips
W) Overall width

A) Maximaler Befestigungsabstand
B) Niet D99950-03
C) Befestigung mit Schrauben D99801-03
F) Profilinnenbreite
H) Gesamthöhe
S) Lichter Abstand zwichen den äussern Klips
W) Gesamtbreite

A) Distance maximale de montage
B) Rivet D99950-03
C) Fixation avec vis D99801-03
F) Profondeur du profilé
H) Hauteur totale
S) Espace de positionnement des clips
W) Largeur totale