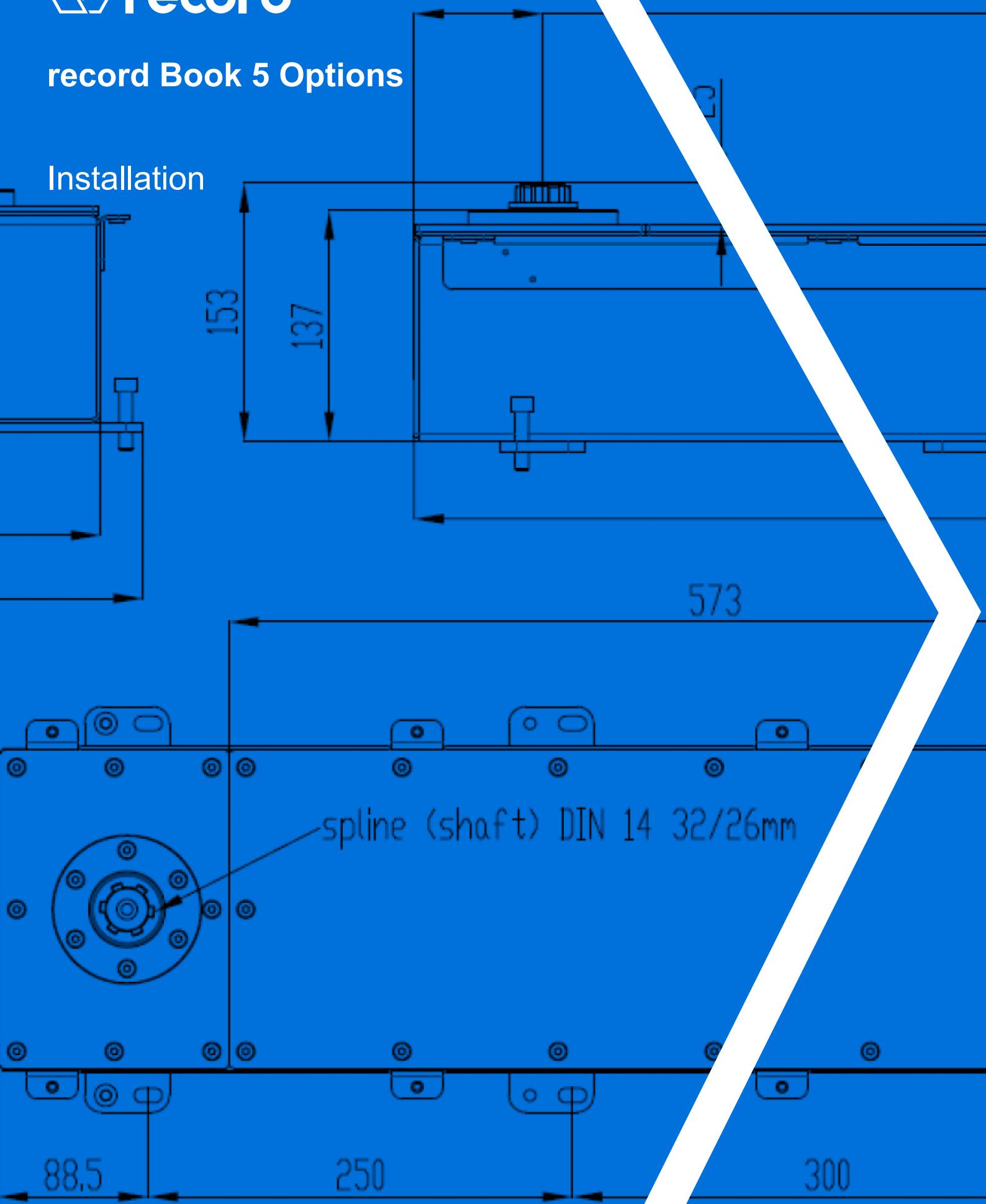




record Book 5 Options

Installation



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Publication date: 24/08/2023

Translation of the original manual

Subject to technical modifications
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Installation IoT Gateway 2.0

New Option..... 100

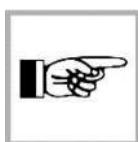
1 General information

1.1 Purpose and use of the instructions



NOTICE

After the work on the system has been completed, the test book and the operating instructions must be handed over to the operator.



NOTICE

A replacement of the instructions is available from the supplier or on the website.

These instructions are an integral part of the system and enable the efficient and safe handling of the system.

Although only the male form has been chosen for reasons of better legibility, the information refers to members of both sexes.

The instructions must be read and understood before starting any work. The basic requirement for safe working is to follow the safety instructions and the handling instructions. In addition, the local regulations and safety rules apply.

The instructions can be handed over in extracts to instructed personnel who are familiar with the work on the system.

The illustrations are for basic understanding and may differ from the actual presentation. Specific representations are contained in the drawings.

1.2 Copyright

The copyright for these instructions remains with:

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The instructions may not be reproduced, distributed, or used for the purpose of competition without the written consent of agtatec ag.

Infringements shall result in the obligation to pay damages.

1.3 Abbreviations

You can scan the QR code or use the link to open the abbreviation directory directly.

Abbreviations record

[https://www.record.ch/de/Share/view/
kchrsDrVjwTGRArCaTV](https://www.record.ch/de/Share/view/kchrsDrVjwTGRArCaTV)



2 Locking

2 Locking

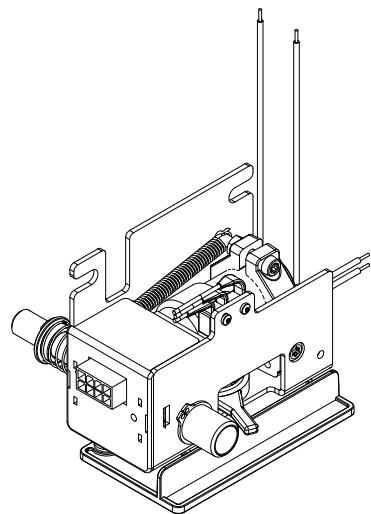
2.1 VRR 20 motor driven

2.1.1 Mounting of standard locking with drive height of 108 mm / 150 mm

MS Bolt lock VRR 20

102-020808415

With connection cable

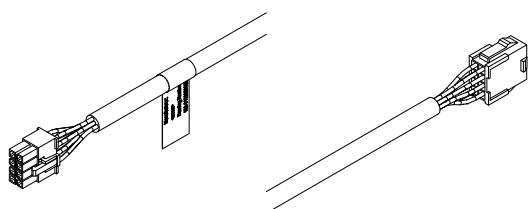


Extension cord VRR 1100 mm

102-016085000

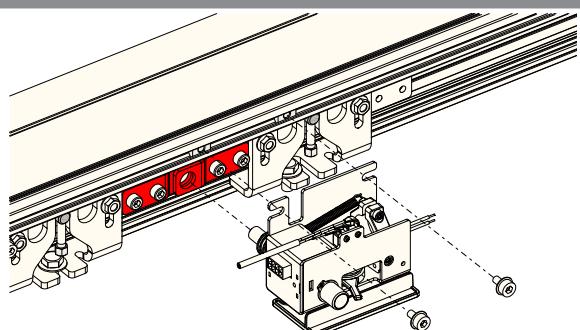
Additionally required extension cable for:

- E-STA / E-TSA
- D-STA / D-TSA – A > 2400 mm

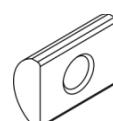


Installation

Mount the locking device and check correct engagement of the locking bolt in the lugs.



102-020109289

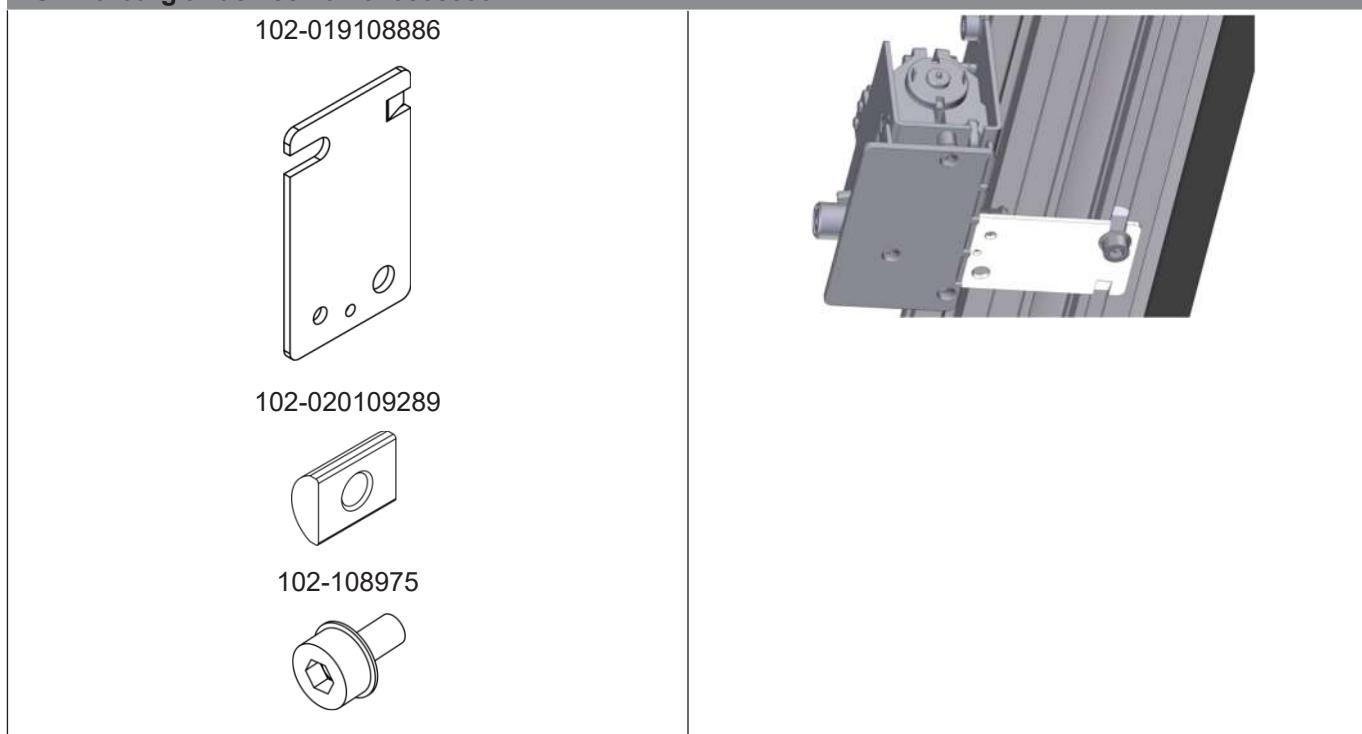


102-108975



2.1.2 Anti-burglar device

MS Anti burglar device 102-020808999



2.1.3 Manual unlocking device



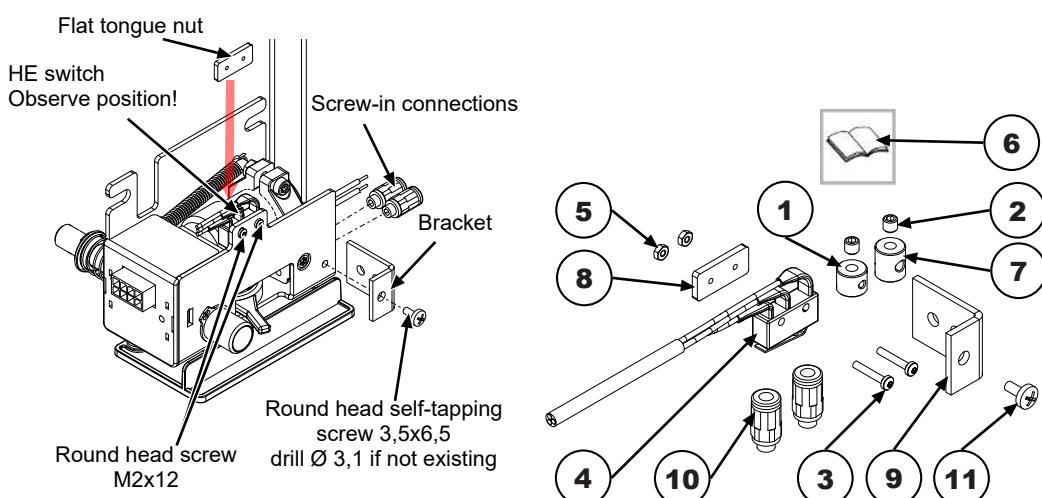
CAUTION

Trouble-free emergency actuation not guaranteed!

In case of an incorrect installation, trouble-free emergency actuation cannot be guaranteed!

- Observe the guide of the Bowden cable.
- No pressure or tension should be exerted on the locking device by the Bowden cable sheath!
- Take special care that the motor does not lift off the locking bolt.

Basic set HE 102-020808513



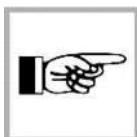
Item	Qty.	Article No.	Description
1	1	102-020109302	Rope termination
2	2	102-109738	Socket set screw with flat point DIN913 VP M 4x4
3	2	102-117877	Hexalobular socket pan head screw ISO 14583 VP M 2x12

2 Locking

Basic set HE 102-020808513			
4	1	102-020808414	HE switch
5	2	102-080691	Hex nut DIN934 VP M2 x 0.8d
6	1	102-020109965	Instructions HE Basis-Set
7	1	102-020110040	Rope termination
8	1	102-020110237	Counterholder
9	1	102-020110638	Bracket
10	2	102-031509	Threaded connection D=4 M5
11	1	102-031140	Phillips cross recessed pan head tapping screw DIN7981 VP 3.5x6.5

Bowden cable	
102-032136	Steel rope INOX Ø 1.5 mm
102-032167	Cable grommet

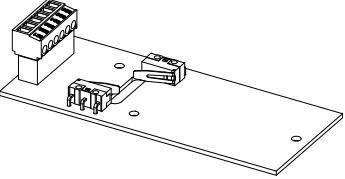
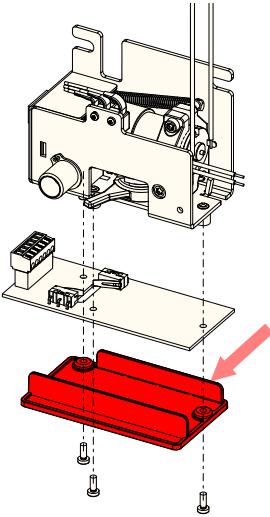
2.1.4 Monitoring door leaf and locking device



NOTICE

The add-ons listed below are used exclusively for external monitoring of the door by a security or building management system.

The terminal block 102-020110056 is always required.

MS external locking device surveillance	
102-020808670	
Assembly	 <ul style="list-style-type: none"> – Break off strap on anti-burglary device BEFORE assembling. – On the right-hand picture, the strap has already been removed.
321: VAK – NC (normally closed / Ruhekontakt) 322: VAK – NO (normally open / Arbeitskontakt) 232: VAK – Common / gemeinsam 324: VOK – NC (normally closed / Ruhekontakt) 325: VOK – NO (normally open / Arbeitskontakt) 326: VOK – Common / gemeinsam	

2.2 VRR 16 bi-stable

2.2.1 Standard locking device with drive height of 200 mm



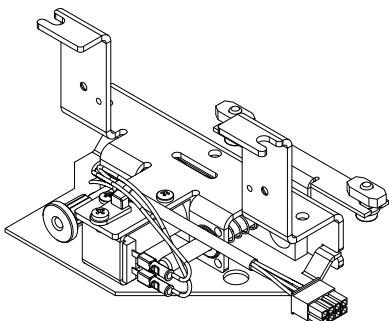
NOTICE

With a drive height of 200 mm the following locking devices can be used:

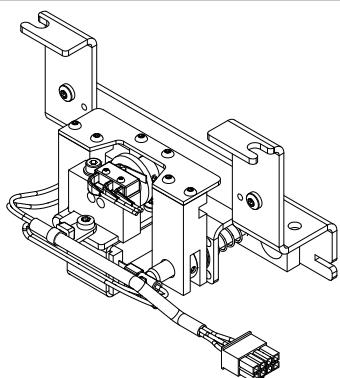
- a) VRR 16 102-016097000 **without** connection possibility for HE
- b) VRR HE Special 102-016079000 **with** connection possibility for HE

VRR 16

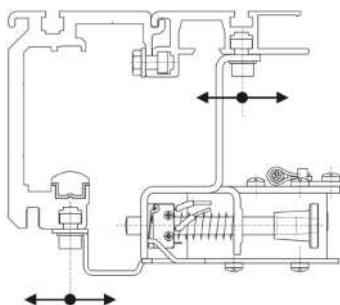
102-016097000 Locking device VRR 16



102-016079000 Locking device VRR 16 HE Special



Fix locking device (if provided) along track support profile P1302 with two additional screws M6x10 mm and slot nuts.

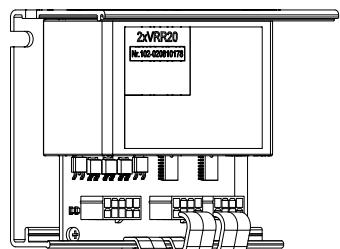


2.3 Extension module 2xVRR 20

102-020810178 Extension module 2x VRR 20

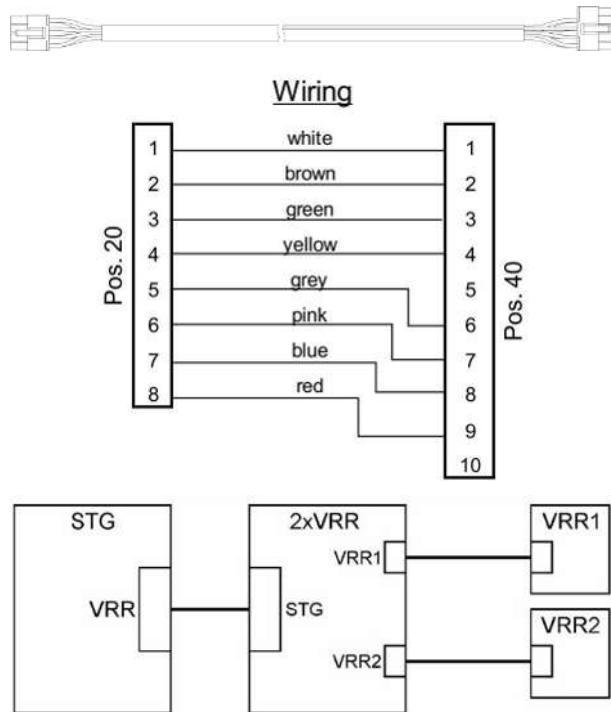
The 2xVRR module is used when two locking devices must be connected to a STA 20 or STA 20 DUO control. (e.g. with FBO)

VRR1 and VRR2 can also be different locking systems, they are adjusted with the DIP switch of the 2xVRR.



2 Locking

2.3.1 Cabling 2xVRR 20



2.3.2 Commissioning 2xVRR 20

Drive without current

- install locking devices and 2xVRR module and wire them
- set S1 and S2 to 2xVRR module according to locking device connected

Verriegelung Typ / Locking type / Type de verrouillage	DIP-Switch 1	DIP-Switch 2	DIP-Switch 3	DIP-Switch 4
Ohne Verriegelung / Without locking device / Sans verrouillage	0	0	0	0
Bistabil / Bistable	1	0	0	0
Motorisch / Motor-powered / Motorisé	0	1	0	0
Aktivdichtung oben / Active seal at the top / Joint actif en haut	1	1	0	0
Magnet / Aimant	0	0	1	0
Fail Safe	1	0	1	0
Fail Secure	0	1	1	0
MPV 20	1	1	1	0
Bistabil KTA20 / Bistable KTA20	0	0	0	0

Switch on drive

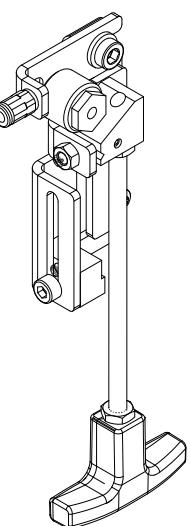
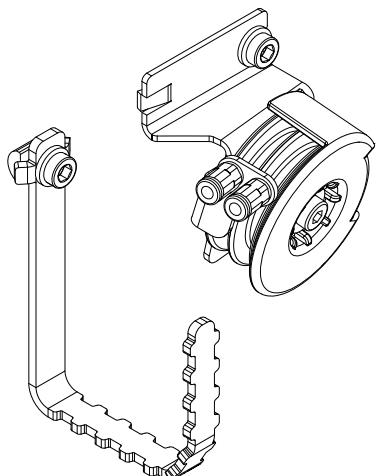
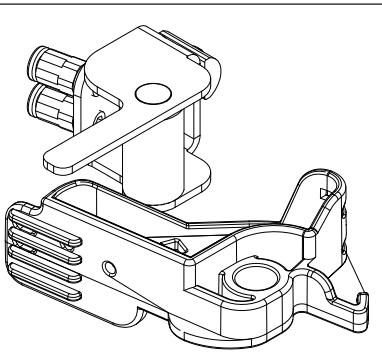
Parameterising the „locking type“

The configuration „locking type“ must be set on „double“ using the FPC 902 or the BDE-D, provided that the control has not recognised it.

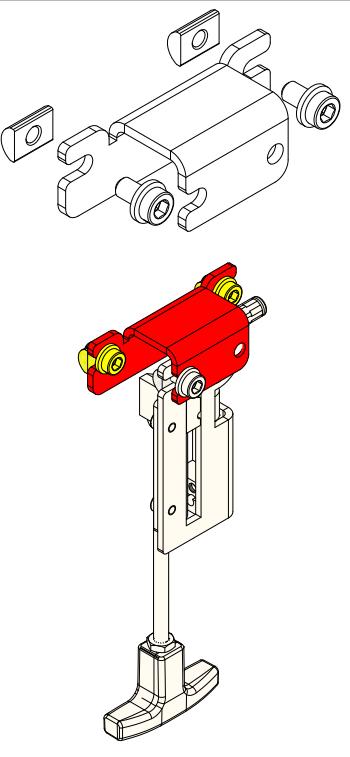
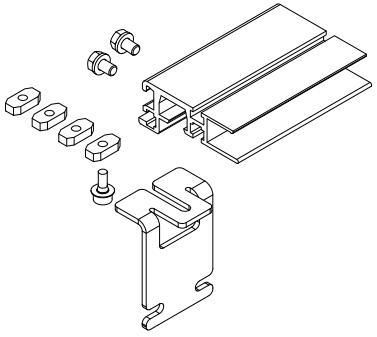
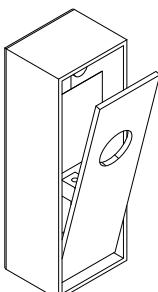
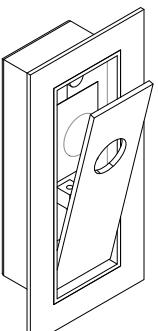
LOCKING DEVICE		D	M	Without	Motor-powered	Bistable	MPV 20	MPV 16	Magnet
L▶ Locking type				Fail Secure	Fail Safe	Double			

2.4 Manual release

2.4.1 Overview of inside / outside manual unlocking devices

Article No.	Illustration	Description
102-020808864		MS for manual unlocking inside (HEI)
	NOTICE:	<ul style="list-style-type: none"> – Additional MS 102-020810336 required for drive height 200 – Mounting in casing bottom view – Recommended in combination with CO48 – Regulation: 15 – 45 mm – Extension: 102-016075008 – Not for E-STA left
102-020815920		<p>VRR 20 Deflection For VRR 20 bolt locking For the deflection of the wire ropes when the HEI is mounted on the left side. This means there is less friction loss in the Bowden cable.</p>
102-172816174		<p>Unlocking device set 20-2 For Multipoint locking device MPV 20-2 Can be used for left or right outgoing Bowden cable.</p> <ul style="list-style-type: none"> – As deflection of the Bowden cable, if HEI is mounted on the left side. – To reduce the tractive force with HEI by approx. 30%.

2 Locking

Article No.	Illustration	Description
102-020811073		<p>Set Adapter HEI left</p> <p>With this adapter, the HEI can be mounted rotated so that the Bowden cable comes off the right side.</p> <p>The adapter is used when the HEI on the left is used.</p>
102-020810336		<p>MS holder for HEI 20-200</p> <p>NOTICE:</p> <ul style="list-style-type: none"> – Required for attachment with operator height 200
102-014102000		<p>Manual unlocking (HE) - surface mounted box</p>
102-014103000		<p>Manual unlocking (HE) - flush mounted box</p>

Article No.	Illustration	Description
102-014101001		Manual unlocking (HE) embedded case
102-020808757		Manual unlocking (HE) EXIT operating element
NOTICE:	– Not to be used with MPV 20	
102-016077000		HEA-HVA in cover plate for euro-lock cylinder
NOTICE:	– MS for euro-lock cylinder without lock-cylinder – With VRR 20 and MPV 20 manual locking not possible	
102-016078000		HEA-HVA in cover plate for CH-cylinder
NOTICE:	– MS for CH-cylinder without lock-cylinder – With VRR 20 and MPV 20 manual locking impossible	
102-032136		Manual unlocking (HE)
102-032167		Bowden cable + cover 50 m Rolle

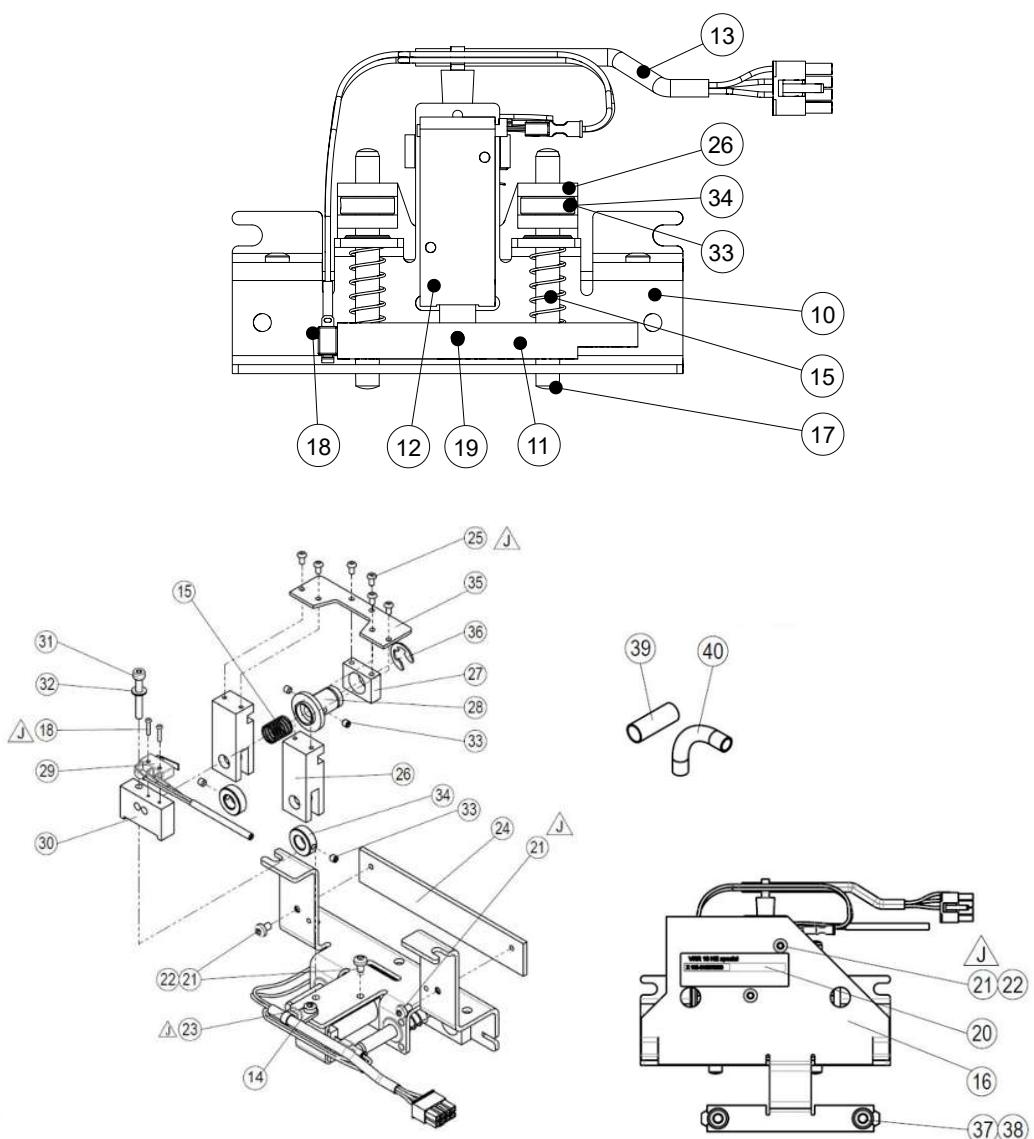
2 Locking

Article No.	Illustration	Description
102-020808513		<p>Manual unlocking (HE) Basic set with surveillance switch and 3-pin changeover contact</p> <p>NOTICE:</p> <ul style="list-style-type: none"> – Includes cord end for Bowden cable – Extension for connection of two HE

2.4.2 Installation of HEI / HEA

VRR HE Special 102-016079000

Manual release inside / manual release outside



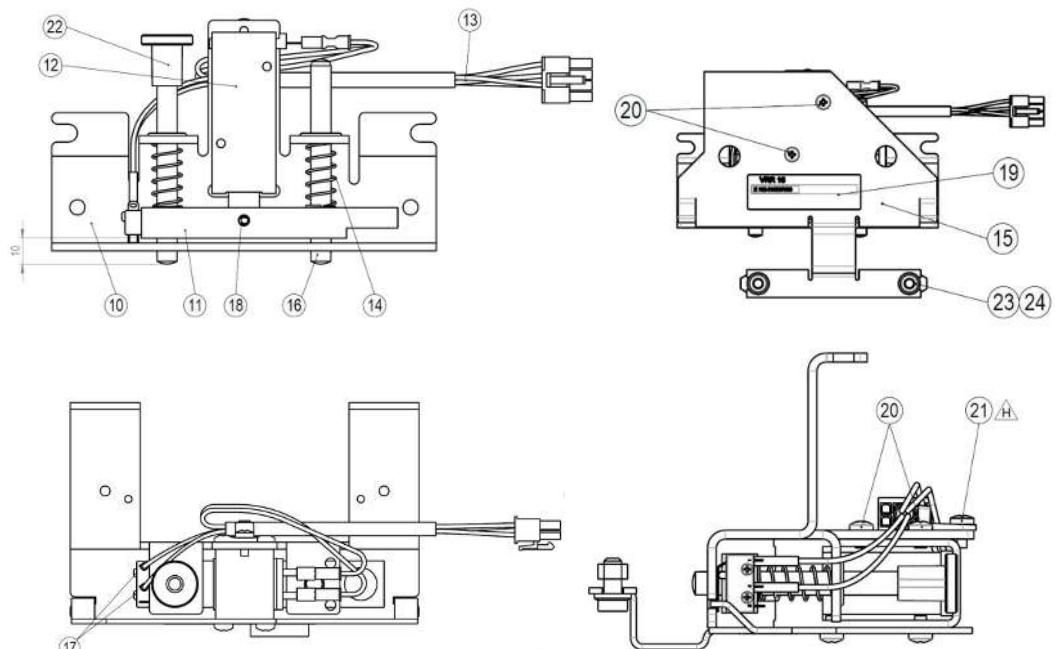
Item	Qty.	Article No.	Description
10	1	102-016080001	Base sheet
11	1	102-016080009	Cross beam
12	1	102-013080008	Holding magnet
13	1	102-016098000	Cable VRR without magnetic switch
14	1	102-052097	Cable tie hole=5 L=170 B=4

VRR HE Special 102-016079000			
15	3	102-031167	Compression spring 0.8x12.0x36.0
16	1	102-016080002	Cover sheet
17	2	102-016080016	Cylindrical pin spec.
18	4	102-117891	Hexalobular socket button head screw ISO7380 VP M2x10
19	1	102-031077	Spiral pin heavy duty hardened DIN7344 4x18
20	1	102-016079008	Type plate VRR 16 HE special
21	5	102-117890	Hexalobular socket pan head screw Tuflok ISO14583 VP TU M4x6
22	0.1	102-051562	Adhesive Three Bond 1324
23	1	102-108970	Hexalobular pan head thread forming screw DIN7500C VP M4x8
24	1	102-016079014	Stop
25	6	102-110339	Hex socket button head cap screw ISO7380-1 A2 M3x6
26	2	102-016079011	Connecting clamp
27	1	102-016079003	Holder
28	1	102-016079015	Shaft
29	1	102-020808414	HE switch
30	1	102-016079012	Holder
31	1	102-080009	Socket head cap screw fully threaded DIN912 VP M4x30
32	1	102-080735	Flat washer without chamfer regular type DIN125A MS M4
33	4	102-080200	Socket set screw with flat point DIN913 SW M4x4
34	2	102-016079013	Clamping ring
35	1	102-016079010	Holding plate
36	1	102-031061	Circlips for shafts As DIN6799 SW 9
37	2	102-080025	Flange socket head screw BN1392 VP M6x12
38	2	102-011020008	Turn-lock fastener
39	1	102-016076006	Brass sleeve
40	1	102-016076008	Pipe
41	1	102-053016	Plastic bag 75x90mm

2 Locking

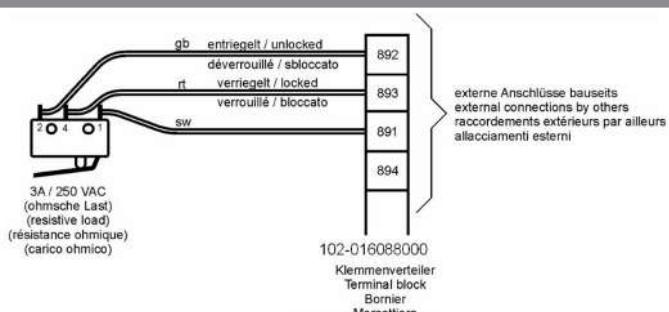
2.4.3 VRR 16 surveillance

102-016097000 Locking device VRR 16



Item	Qty.	Article No.	Description
10	1	102-016080001	Base sheet
11	1	102-016080009	Cross beam
12	1	102-013080008	Holding magnet
13	1	102-016098000	Cable VRR without magnetic switch
14	2	102-031167	Compression spring 0.8x12.0x36.0
15	1	102-016080002	Cover sheet
16	2	102-016080016	Cylindrical pin spec.
17	2	102-080344	Phillips cross recessed cheese head machine screw SN213307 VP M2x10
18	1	102-031077	Spiral pin heavy duty hardened DIN7344 4x18
19	1	102-016097001	Type plate VRR 16
20	4	102-031132	Phillips cross recessed pan head machine screw Tuflok DIN7985A VP TU M4x6
21	1	102-108681	Thread forming screw Pozidriv pan head DIN7500C VP M4x8
22	1	102-013420005	Pull button
23	2	102-080025	Flange socket head screw BN1392 VP M6x12
24	2	102-011020008	Turn-lock fastener

Wiring



2.5 Multipoint locking MPV 20-2

2.5.1 Operating principle of MPV 20-2



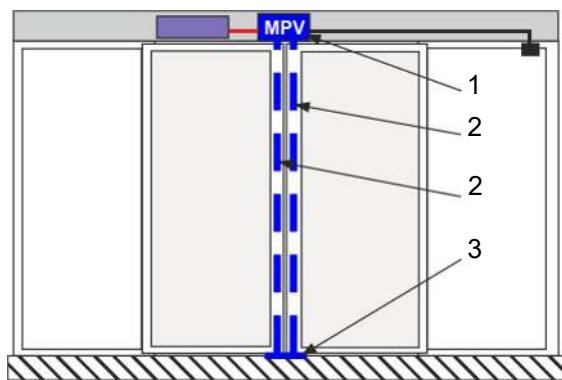
NOTICE

The MPV multi-point locking device can **only be used** with the **STM 20/22 and STM 20/22 RED/DUO** control module, in combination with the **32 and 30 (TOS)** profile systems **and 38 (TC3)!** The MPV multi-point locking device must not be operated in combination with CO48!

Functions

Locking / Unlocking	System-controlled
Manual unlocking	Manual button, 2 Bowden cables
Manual locking	Open-end wrench 13 mm needed
Emergency stop switch for manual unlocking	Must be connected to the STM
External locking device surveillance	Available as option

Operating principle

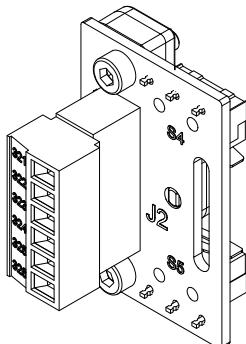


1	102-172813029	Multipoint lock cpl. MPV 20-2	
2	102-172808675	MS Linkage for systems with door leaf guides	
3	102-172110379	MS Perforated plate STA/TSA	

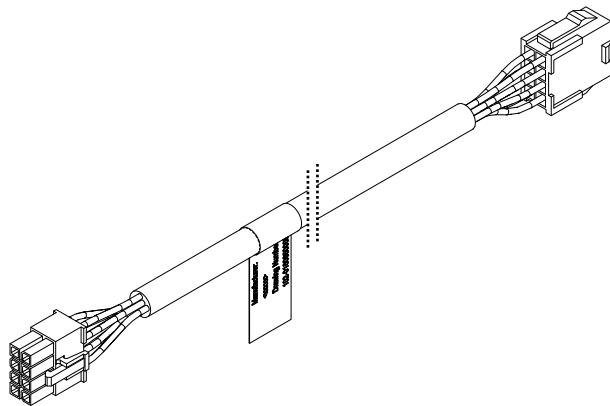
2 Locking

Options

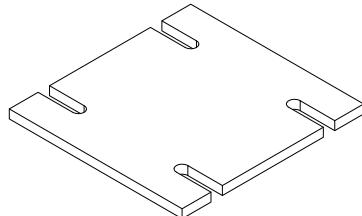
102-172814465	External monitoring to MPV 20-2
---------------	---------------------------------



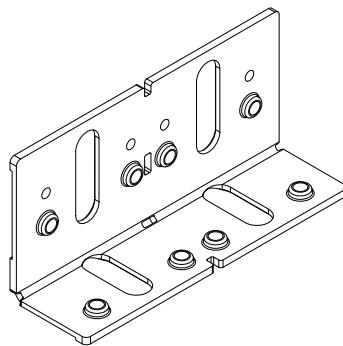
102-016085000	Extension cable VRR 1100 mm
---------------	-----------------------------



102-016200006	Reinforcement plate
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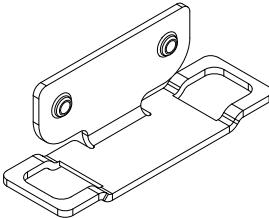
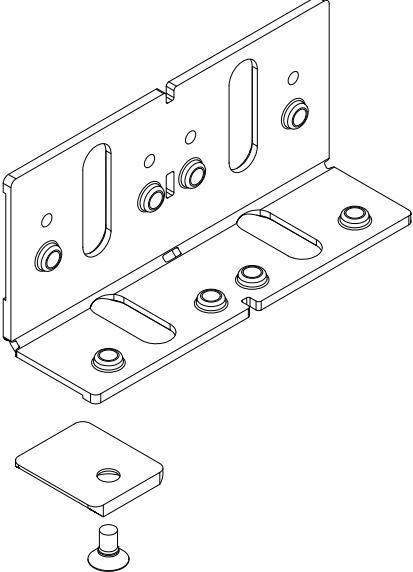
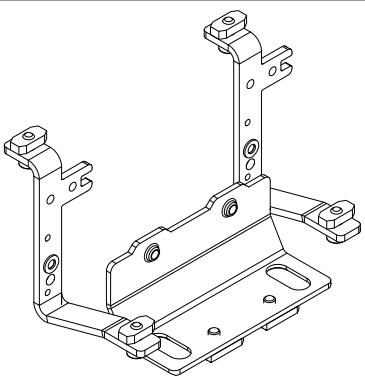
102-172808726	MS conversion H108/H150	E-STA-L/R 32 mm E-TSA-L/R 32 mm
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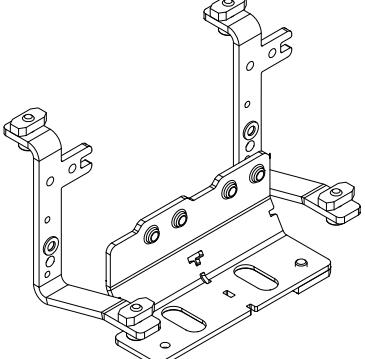
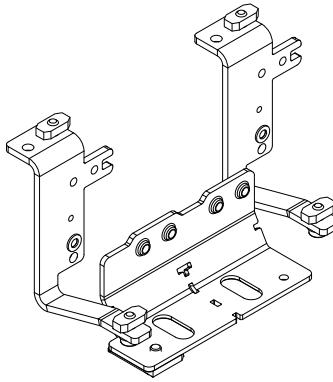
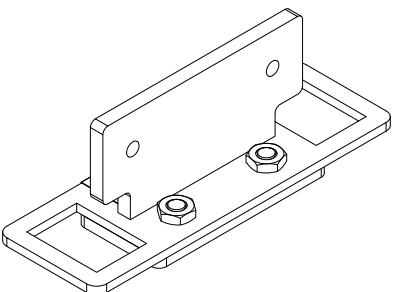
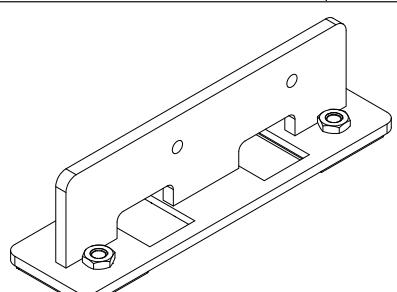
Options

102-172808913	MS add-on 20-200 MPV D-STA	D-STA 32 mm D-TSA 32 mm D-STA Safecord RC2 32 mm
102-172808914	MS add-on 20-200 MPV E-STA-L	E-STA-L 32 mm E-TSA-L 32 mm E-STA-L 32 mm Safecord
102-172808915	MS add-on 20-200 MPV E-STA-R	E-STA-R 32 mm E-TSA-R 32 mm E-STA-R 32 mm Safecord

2 Locking

Options		
102-172114110	Bar MPV D-STA TC	D-STA 150 THERMCORD / TC+ D-TSA 150 THERMCORD / TC+ D-STA 150 THERMCORD 3 D-TSA 150 THERMCORD 3
		
102-172816216	MS conversion H150 E-STA-L-R-TC3	E-STA-R/L 150 THERMCORD / TC+ E-TSA-R/L 150 THERMCORD / TC+ E-STA-R/L 150 THERMCORD 3 E-TSA-R/L 150 THERMCORD 3
		
102-020816201	MS add-on TC3 H200 MPV	D-STA 200 THERMCORD / TC+ D-TSA 200 THERMCORD / TC+ D-STA/TSA 200 THERMCORD 3
		

Options

102-020816199	MS add-on TC3 H200 MPV	E-STA-R THERMCORD / TC+ E-TSA-R THERMCORD / TC+ E-STA-R 200 THERMCORD 3 E-TSA-R 200 THERMCORD 3
		
102-020816200	MS add-on TC3 H200 MPV	E-STA-L THERMCORD / TC+ E-TSA-L THERMCORD / TC+ E-STA-L 200 THERMCORD 3 E-TSA-L 200 THERMCORD 3
		
102-376814551	Latch MPV TC RC2 D-STA 150	D-STA THERMCORD RC2 H150
		
102-376814552	Latch MPV TC RC2 E-STA 150	E-STA-L/R THERMCORD RC2 H150
		

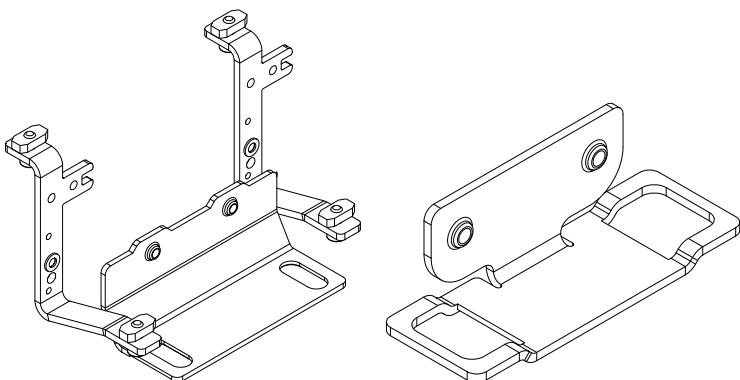
2 Locking

Options

102-172808913
+102-172126311

MS add-on 20-200 MPV D-STA
Latch MPV D-STA 200 TC RC2

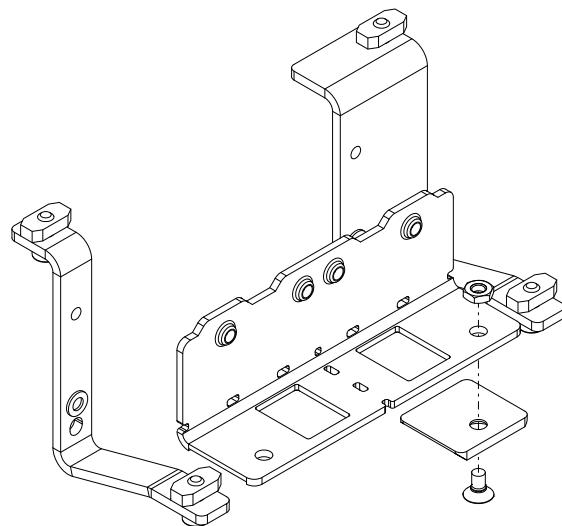
D-STA THERMCORD RC2 H200



102-172816218

MS add-on H200 MPV E-STA-R RC2

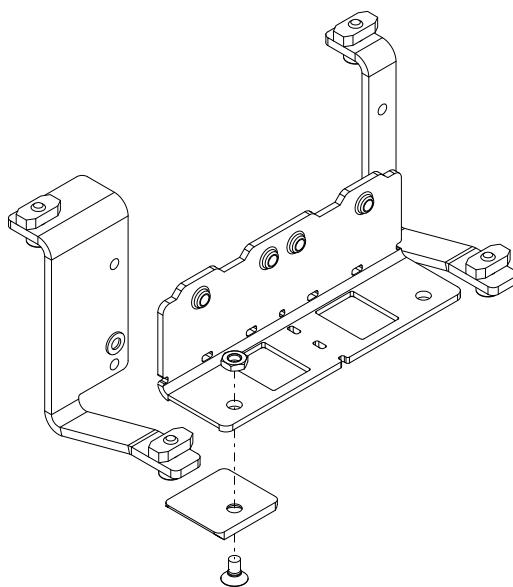
E-STA-R THERMCORD RC2 H200



102-172816217

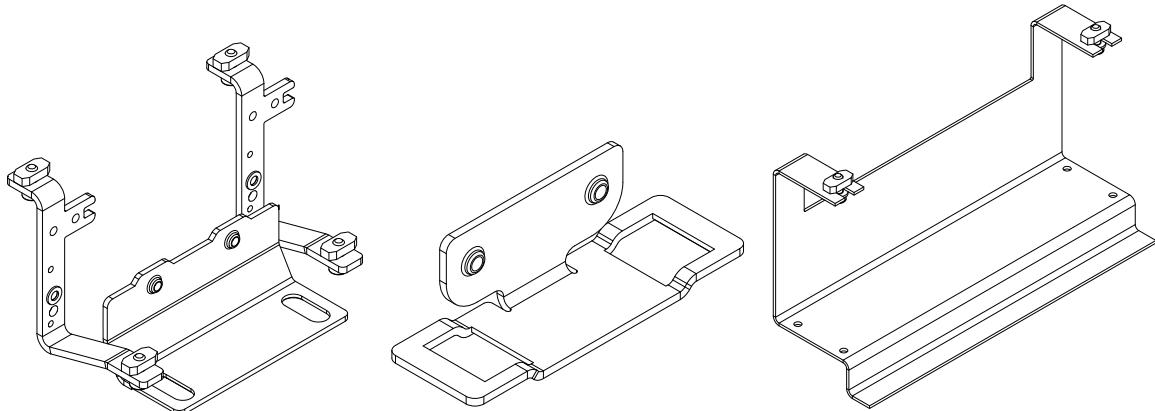
MS add-on H200 MPV E-STA-L RC2

E-STA-L THERMCORD RC2 H200



Options

102-172808913	MS add-on 20-200 MPV D-STA Bar MPV D-STA TC RC3 Set cover MPV TC TC3	D-STA THERMCORD RC3 H200
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**2.5.2 Technical Data****Technical Data**

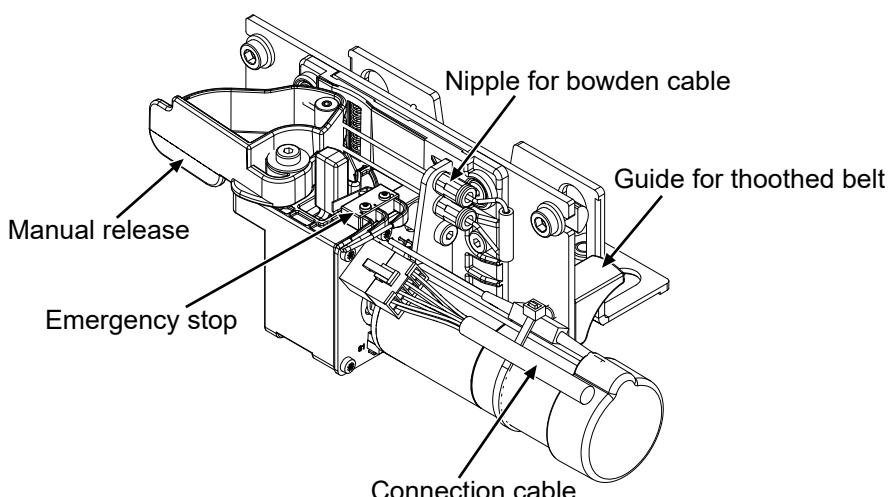
Dimensions (B x T x H)	217 x 84 x 80 mm
Dimensions with latch	217 x 121 x 80 mm
Closing path	12 mm / 30 mm
Closing force	250 N
Nominal voltage	24 VDC
Rated power consumption	5 W

2.5.3 Multipoint locking device MPV 20-2 in detail**NOTICE**

Emergency stop must be connected to the STM.

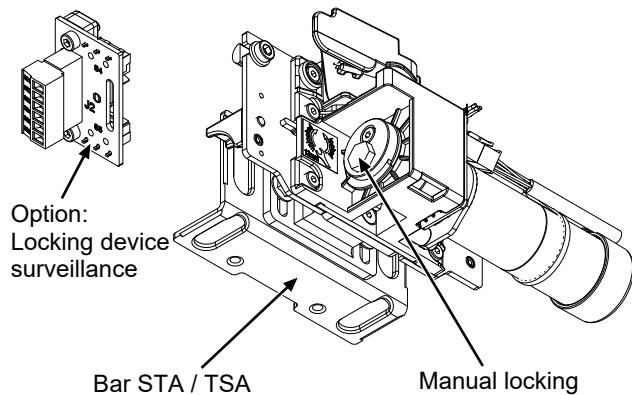
Multipoint locking device MPV 20-2 / 102-172813029

incl. Connecting cable MPV - STG / 102-171009000



2 Locking

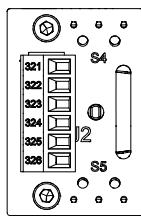
Multipoint locking device MPV 20-2 / 102-172813029
incl. Connecting cable MPV - STG / 102-171009000



Additionally required extension cable for: 102-016085000

- E-STA / E-TSA
- D-STA / D-TSA – A > 2400 mm

Settings External locking device surveillance



321:	VOK – NC	normally closed / Ruhekontakt
322:	VOK – NO	normally open / Arbeitskontakt
323:	VOK	Common / gemeinsam
324:	VA&K – NC	normally closed / Ruhekontakt
325:	VA&K – NO	normally open / Arbeitskontakt
326:	VA&K	Common / gemeinsam

2.5.4 Application on D-STA and D-TSA with door leaf guides



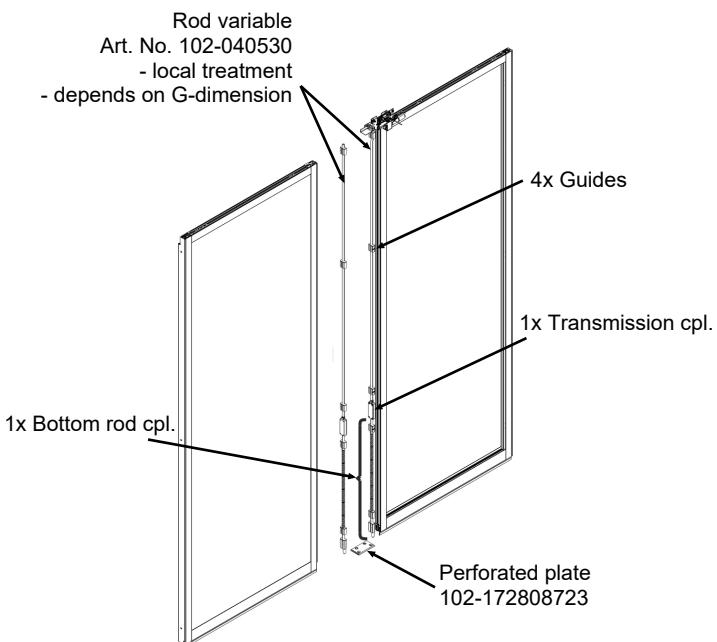
NOTICE

Thanks to asymmetrical bolt arrangement, the full door opening can be used.

Mounting set 102-172808675

(in-built into door frame, delivered on site)

Contents of delivery:



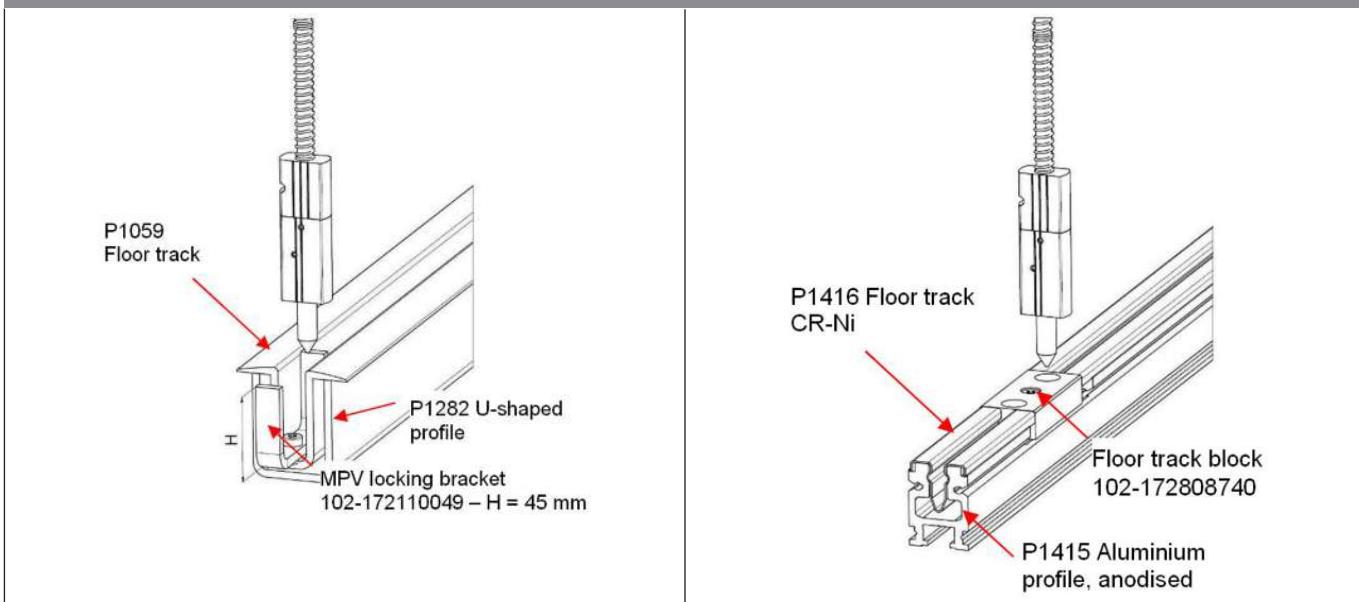
2.5.5 Rods for continuous floor guide (sword guide)



NOTICE

MPV U-shaped locking bracket 102-172110048 – H = 25 mm is used together with the CNS floor track, Type A-1, B-1, C-1 and D-1.

MS rod MPV 20 / 102-172808675



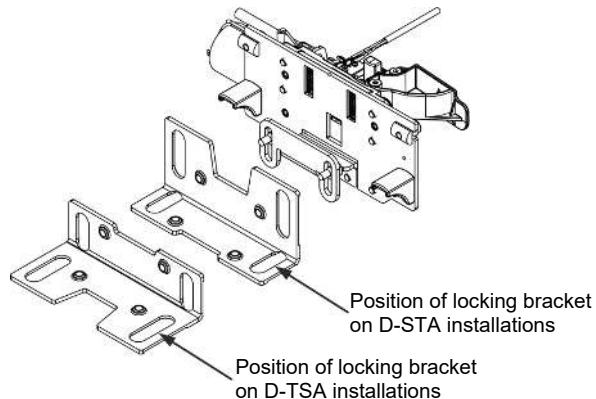
2 Locking

2.5.6 MPV 20-2 - retrofitting STA into TSA



NOTICE

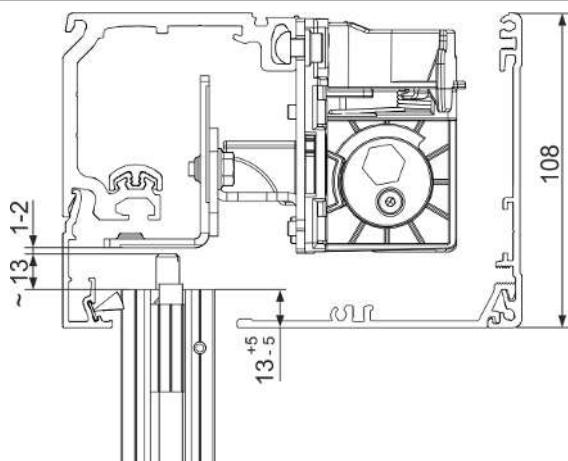
The same elements are used in the event of a two door leaf STA or TSA. The only difference consists in the position of the locking bracket (see picture below).



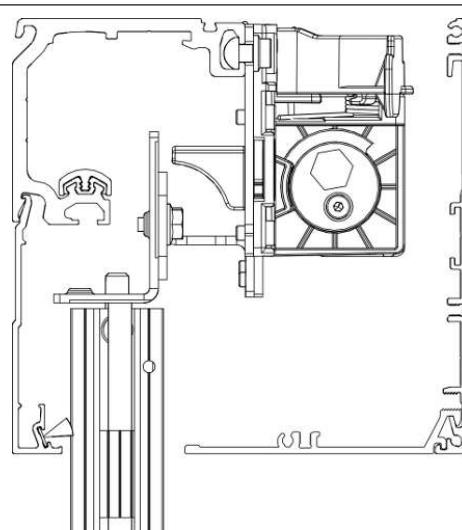
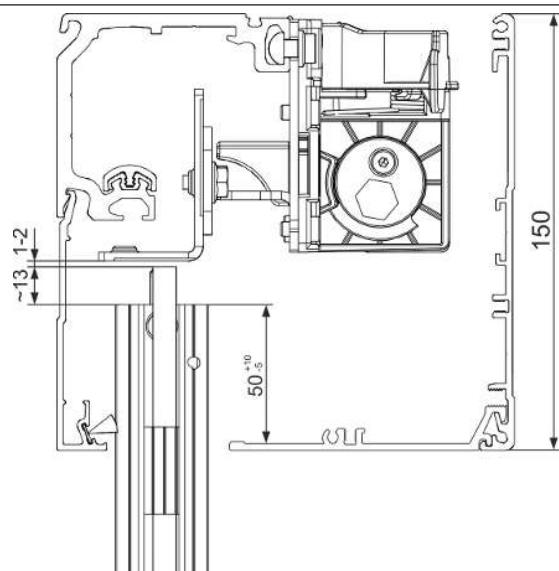
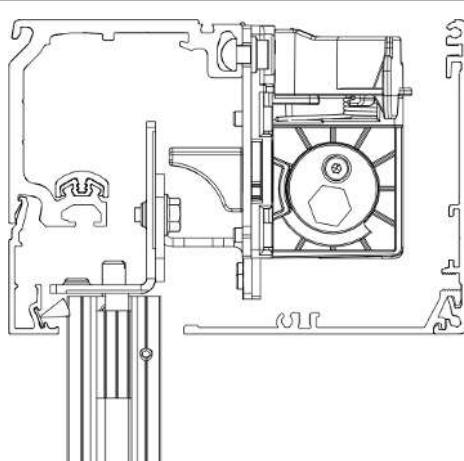
2.5.7 Installation and commissioning of MPV 20-2

Mounting situations – operator heights 108 mm, 150 mm, 200 mm

Position – unlocked

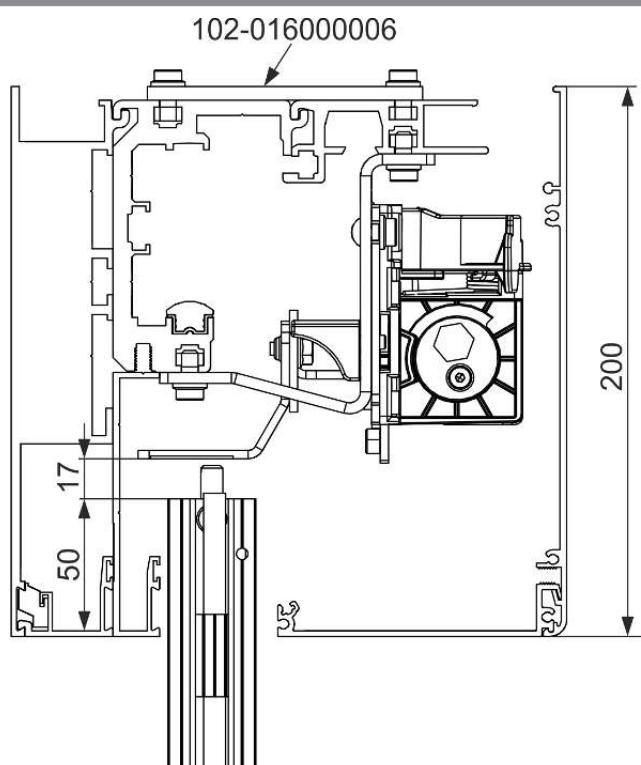


Position – locked

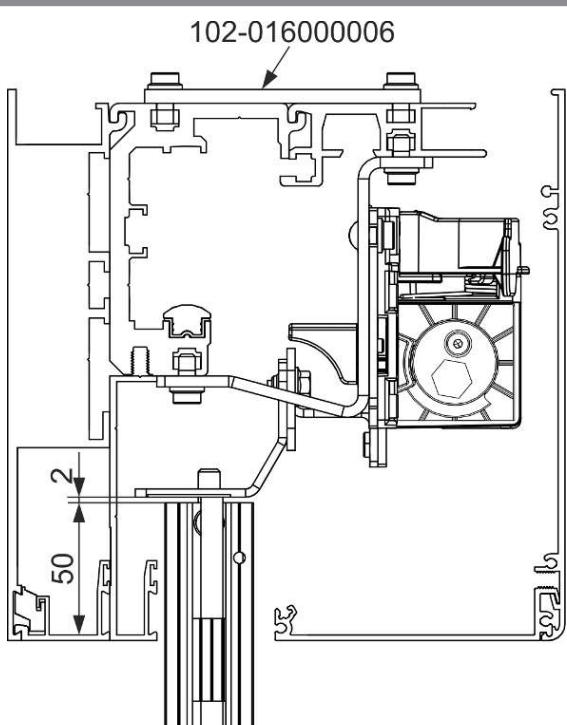


Mounting situations – operator heights 108 mm, 150 mm, 200 mm

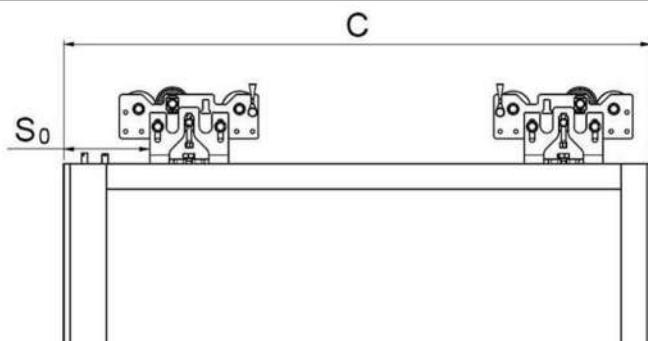
Position – unlocked



Position – locked



Correct position of carriages



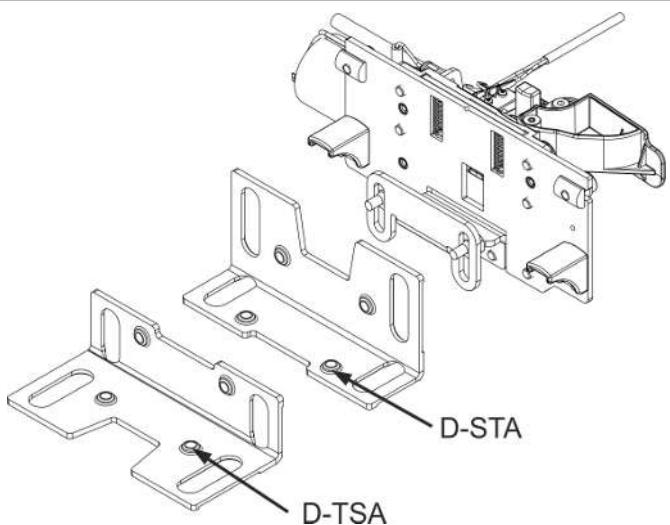
Door type	Drive height	Comments	S_o / mm	„C“ min. / mm	
				STA	TSA
D-STA / D-TSA	108 / 150 mm	Without cut-out	70	390	390
E-STA / E-TSA	108 / 150 mm	Without cut-out	140	830	460
E-STA / E-TSA	108 / 150 mm	With cut-out *)	80	830	400
D-STA / D-TSA	200 mm	Without cut-out	120	440	440
D-STA / D-TSA	200 mm	With cut-out *)	100	420	420
E-STA / E-TSA	200 mm	Without cut-out	210	830	530
E-STA / E-TSA	200 mm	With cut-out *)	120	830	440

*) In case of narrow space conditions, MPV must be reworked - see following chapter!

2 Locking

Adjustment and commissioning of MPV

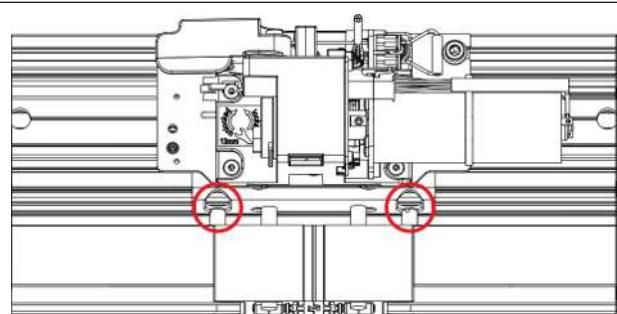
TSA installations – turn locking bracket.



On **single-leaf installations** (E-STA and TSA) the MPV must be re-fitted before being installed.

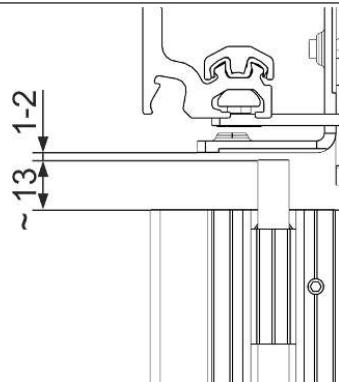
Adjust MPV on the side to the upper locking bolt.

Fix MPV to support profile.

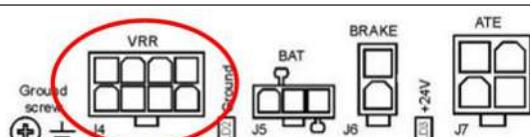


Adjust locking bracket.

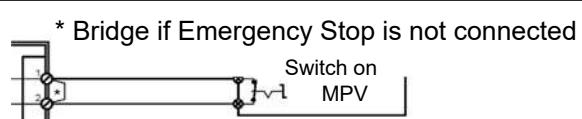
Clearance of 1 – 2 mm to transmission piston.



Plug in connecting cable (102-171009000) into STM 20/22 or STM 20/22 DUO.

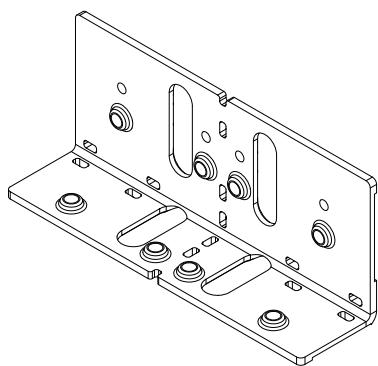


Wire switch of manual unlocking device (on MPV) to emergency stop (in STM).



2.5.8 Fitting MPV 20-2 on single-leaf installations E-STA and E-TSA

Locking bracket E-STA / TSA



102-172110292

Necessary if overlength is not enough.

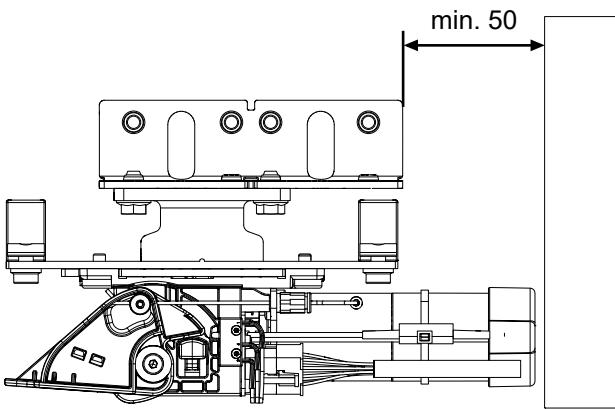


NOTICE

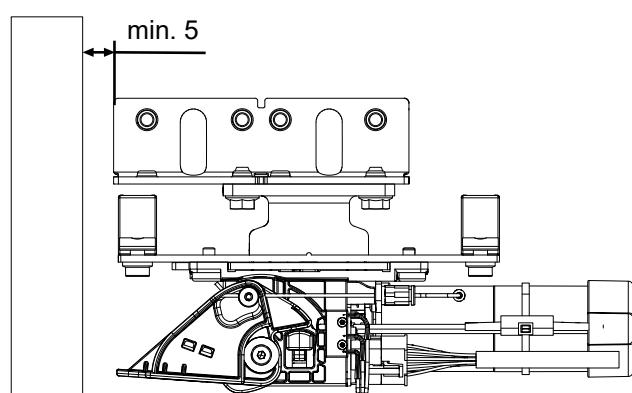
- a) In case of narrow space conditions in operator casing, the locking bracket can be reworked according to the information below.
- b) Assembly: identical to the one described in the previous chapter.

Assembly situation on closing edge

Opening to the left

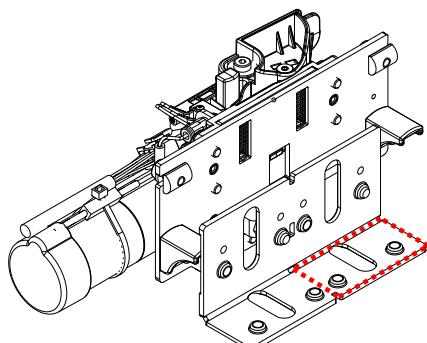


Opening to the right

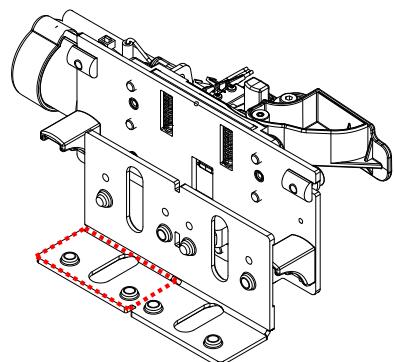


Procedure in case of **narrow** space.

Latch E-STA/E-TSA opening to the left



Latch E-STA/E-TSA opening to the right



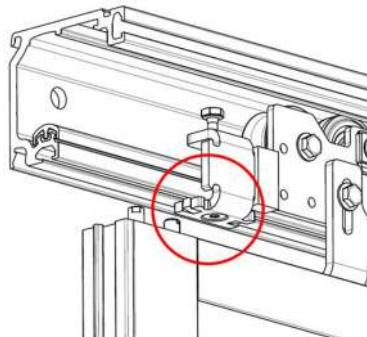
- Remove marked part of the latch.
- Observe position for E-STA or E-TSA!

2 Locking



NOTICE

Replace fixing screw of end stop by countersunk head screw M6x12!

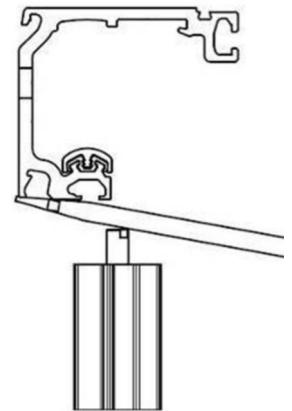


Define position of perforated plate or MPV U-shaped locking bracket.

- The door being closed, press MPV rod downwards.
- Use clear marks on the floor.
- Position perforated plate and fix it.

Alternative

Place the door on "Locked" via BDE-D – Marks on the floor are clearly visible.



2.5.9 Commissioning of MPV 20-2

Steps of commissioning	
Program MPV via BDE-D or FPC	
MPV is detected	
Lock the door via BDE-D	<ul style="list-style-type: none">– Stroke of the locking device must be approx. 11 mm– Door locked with upper locking bolt– Door locked with lower rod tips
Unlock the door via BDE-D	<ul style="list-style-type: none">– Upper locking bolts are released– Lower rod tips are released– Automatic door functions are ok
Check the manual unlocking device	<ul style="list-style-type: none">– Operate manual unlocking device– Check: upper locking bolts as well as lower rod tips must unlock within 1 sec.!– System switches to emergency stop (check at BDE-D)– Automatic system reset after resetting the manual unlocking device

2.6 Retrofitting instructions for MPV 20-2 single leaf 200 mm

2.6.1 MPV 20-2 left and right opening



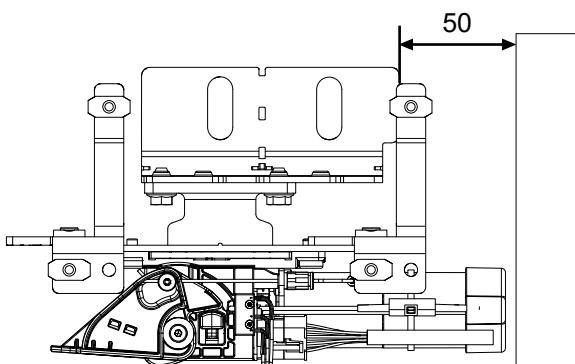
NOTICE

For the use of the MPV left opening, the following mounting kit is required: MS 102-172808914.

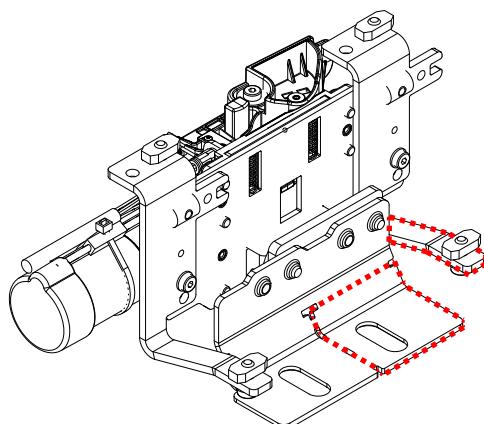
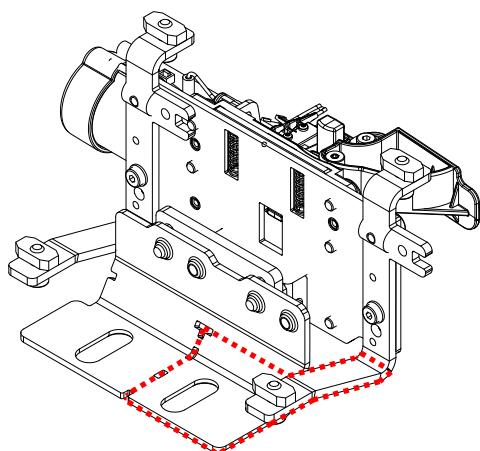
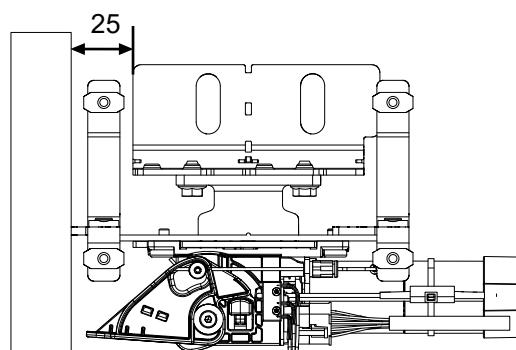
For the use of the MPV right opening the following mounting kit is required: MS 102-172808915.

Installation situation at the closing edge

Left opening

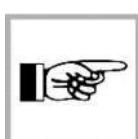


Right opening



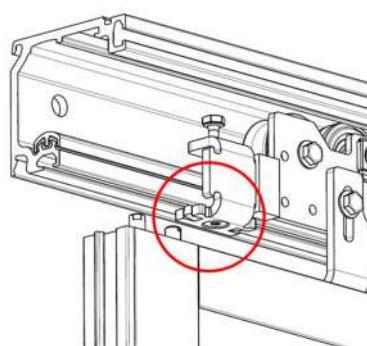
- If space is tight: remove the cross-hatched part of the latch.

- Observe position for E-STA or E-TSA!



NOTICE

Replace fixing screw of end stop by countersunk head screw M6x12!



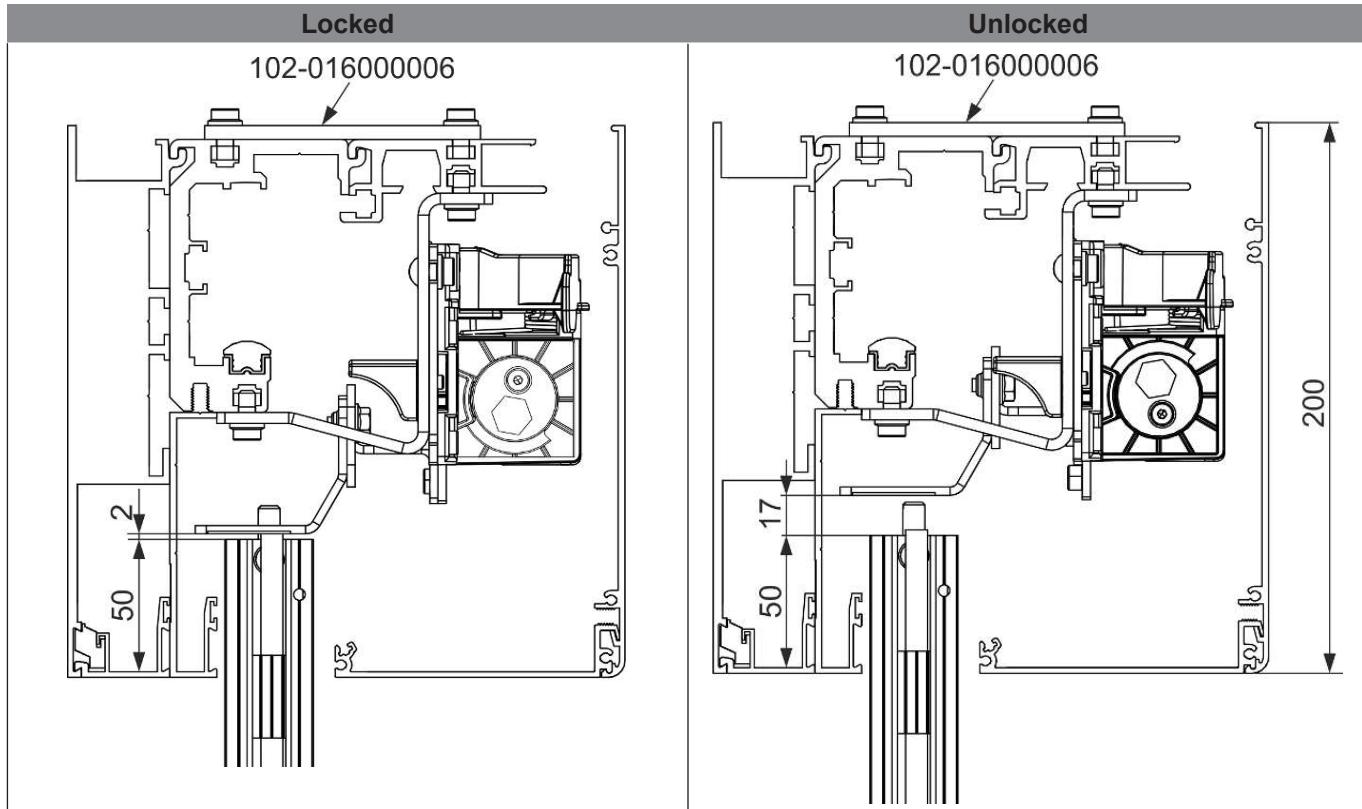
2 Locking

2.6.2 MPV 20-2 locked and unlocked



NOTICE

Make sure that the reinforcement plate 102-016200006 is installed!



2.7 Door leaf surveillance

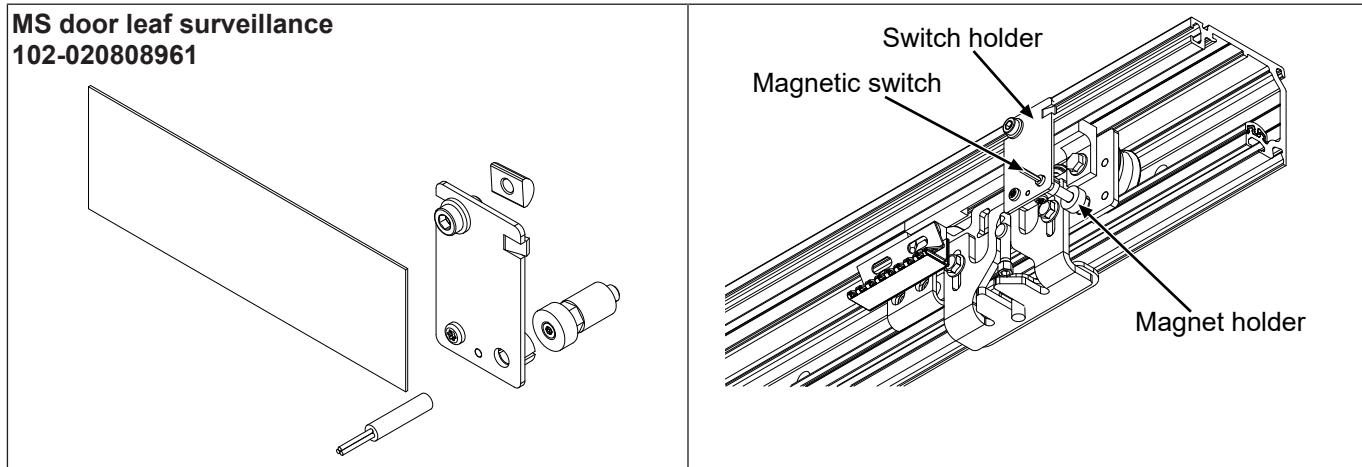
2.7.1 Drive height 108 mm / 150 mm



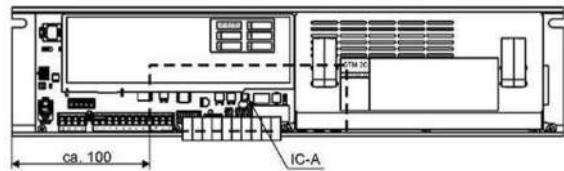
NOTICE

- Stick metal sheet shield (contained in MS) on rear face of STM.
- Details according to instructions 102-020110141.
- The temperature of the pieces to stick on must be > 10°C.

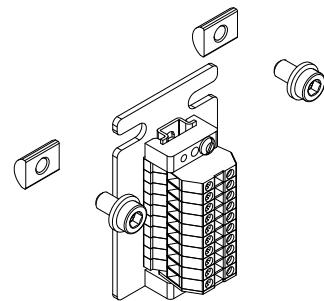
MS door leaf surveillance
102-020808961



Position of metal sheet shield on rear face of STM.



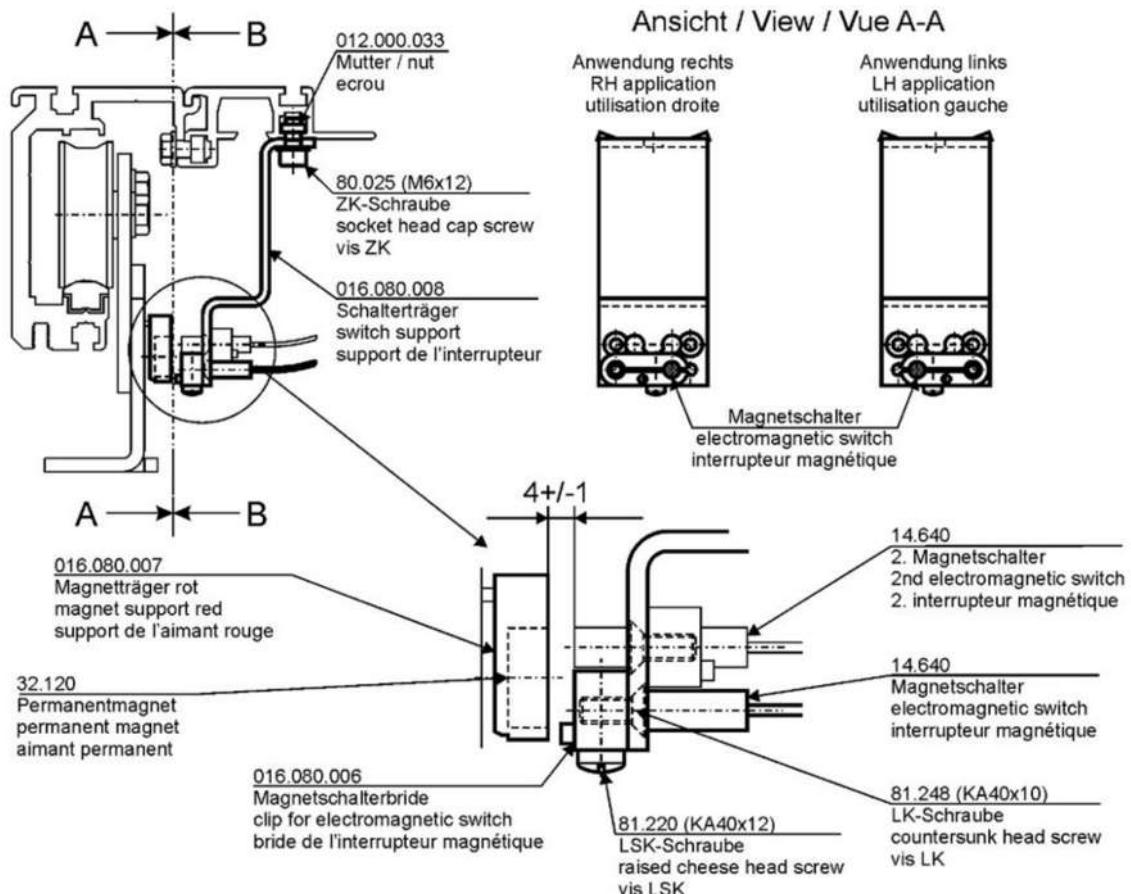
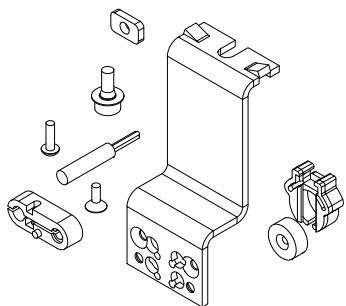
MS terminal series
102-020808730
(interface with external management system)



2.7.2 Drive height 200 mm

MS door leaf surveillance 20-200

102-016082000



2 Locking

2.8 Floor lock for system 20 door leaf

2.8.1 Floor lock variants



NOTICE

Using the 2 screws on the bottom part, the lock can be altered from the right to the left.

Floor locking with round bolt 102-111106	
Floor locking with flat bolt 102-111107	

2.8.2 Stainless steel lock plates and floor bushing

Floor bushing for round bolt 	Lock plate for round bolt 	Lock plate for flat bolt
Drilling-Ø = 20 mm Drilling depth = 29 mm 102-111108	I x b x d = 110 x 26 x 1.5 [mm] 102-111109	I x b x d = 110 x 26 x 1.5 [mm] 102-111110

2.8.3 Covers



NOTICE

Covers for door leaves lockable from the inside can also be used for combinations lockable from the inside and outside.

Only lockable from outside 	Lockable from inside, right 	Lockable from inside, left
Cast aluminium w/o finish 102-111113	Cast aluminium w/o finish 102-111114	Cast aluminium w/o finish 102-111115

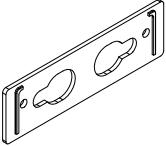
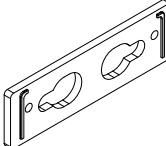
2.8.4 Adapter plates

**NOTICE**

The (basic) length of the cylinder indicates the distance between the outer edge of the door leaf and the middle of the engaging piece (cam) – including the corresponding adapter plate between door leaf and lock.

**NOTICE**

- a) 20 mm travel with one only key rotation → transmission inside the floor lock.
- b) The position of the lock plate on the floor depends on the selected adapter plate and on the profile system. On door installations without a floor track, it should be positioned in a way that one would have to press slightly against the door to close or open it from the outside.
- c) If using door leaf guides, a minimum distance to the lock (height setting of the door leaf) must be observed. If necessary, use a longer floor brush.

Lockable from the outside	Lockable from the outside
 Thickness = 3.5 mm Profile system = 20 mm Cylinder length = 35 mm 102-111111	 Thickness = 6.5 mm Profile system = 32 mm Cylinder length = 50 mm 102-111112

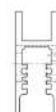
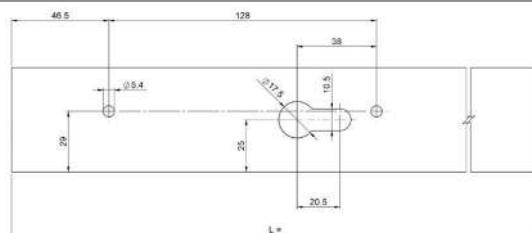
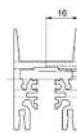
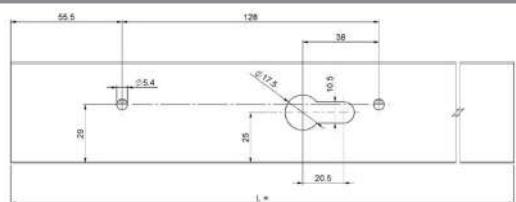
2.8.5 Pedestal rework

**NOTICE**

The cylinder cut-out is only necessary if the door needs to be lockable from the outside.

**NOTICE**

The plastic guiding profile P1608 must be installed during the cylinder cut-out.

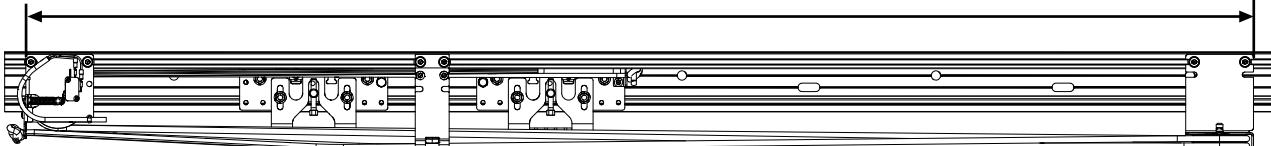
**20 mm profile system****32 mm profile system**

3 Installation of CO48

3 Installation of CO48

3.1 Positioning of deflection unit

STA + E-STA: 2xA-50 / TSA + E-TSA: 1.5xA-50



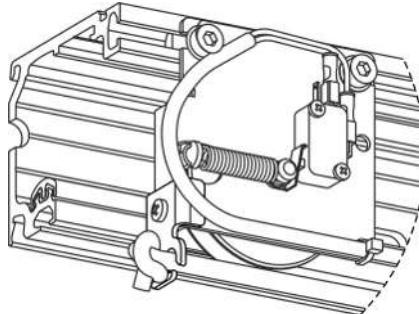
3.2 CO48 – Improvement of the silicone tube length

NOTICE

The silicone tube will no longer be mounted by means of a screw. A knot will be used instead.

Distension [Factor]

Door type	D-STA	E-STA 108	E-STA 150	D-TSA	E-TSA 108	E-TSA 150
Factor	1.75	2.3	3.5	1.35	1.75	2.65



3.2.1 Formula for the whole length for each door type

NOTICE

Tension (max. 4kg / Bowden cable) – to be checked on installation – and adjusted if necessary.

In case of power loss, door has to open safely.

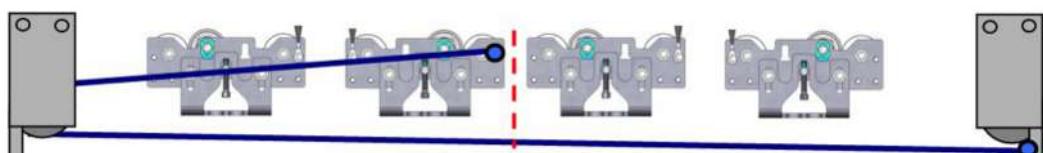
(Factor x A – Deduction) x 2 = Whole length each door type

3.3 D-STA – operator heights 108 and 150 mm

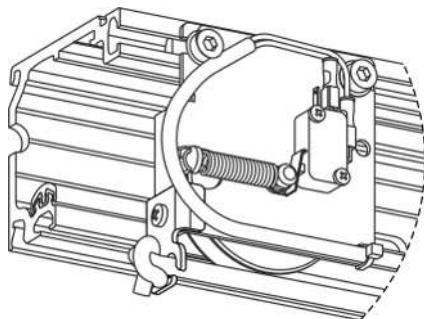
MS CO48 for D-STA and D-TSA	102-020808658
– 2 deflection units (1 left / 1 right)	
– 2 cord holders / fasteners	

Silicone hose for CO48 (100 m)	102-108337
---------------------------------------	-------------------

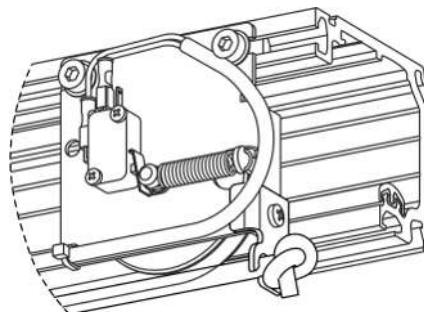
Overview carriage left



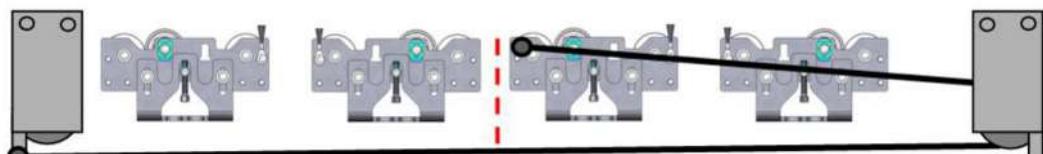
Deflection left



Deflection right

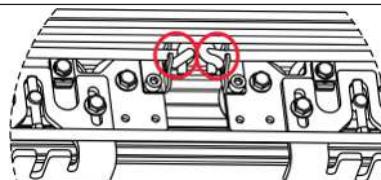


Overview carriage right



Fixation on the carriages

Left



Right



3 Installation of CO48

3.3.1 E-STA – operator height 150 mm

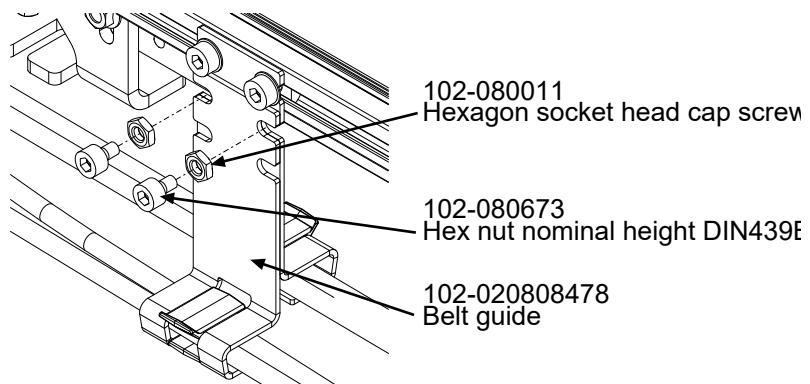
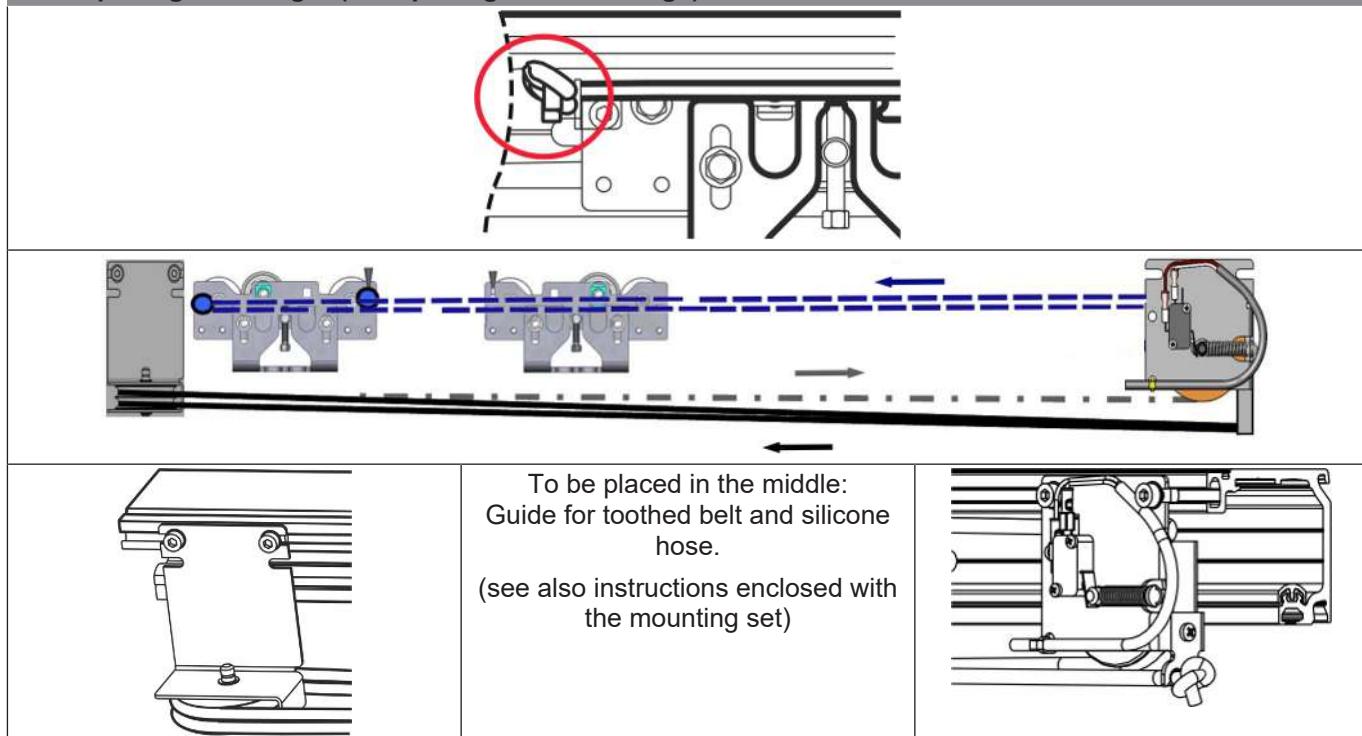


NOTICE

The emergency opening system for single sliding doors shows some differences depending on the operator height – 108 mm or 150 mm! Both systems are presented separately.

MS CO48 E-STA / E-TSA 150 – right	102-020808766
MS CO48 E-STA / E-TSA 150 – left	102-020808767
Each one containing:	
– 2 deflection units (1 left / 1 right) – 2 cord holders + fasteners	
Silicone hose for CO48 (100 m)	102-108337

Door opening to the right (left opening = mirror image)

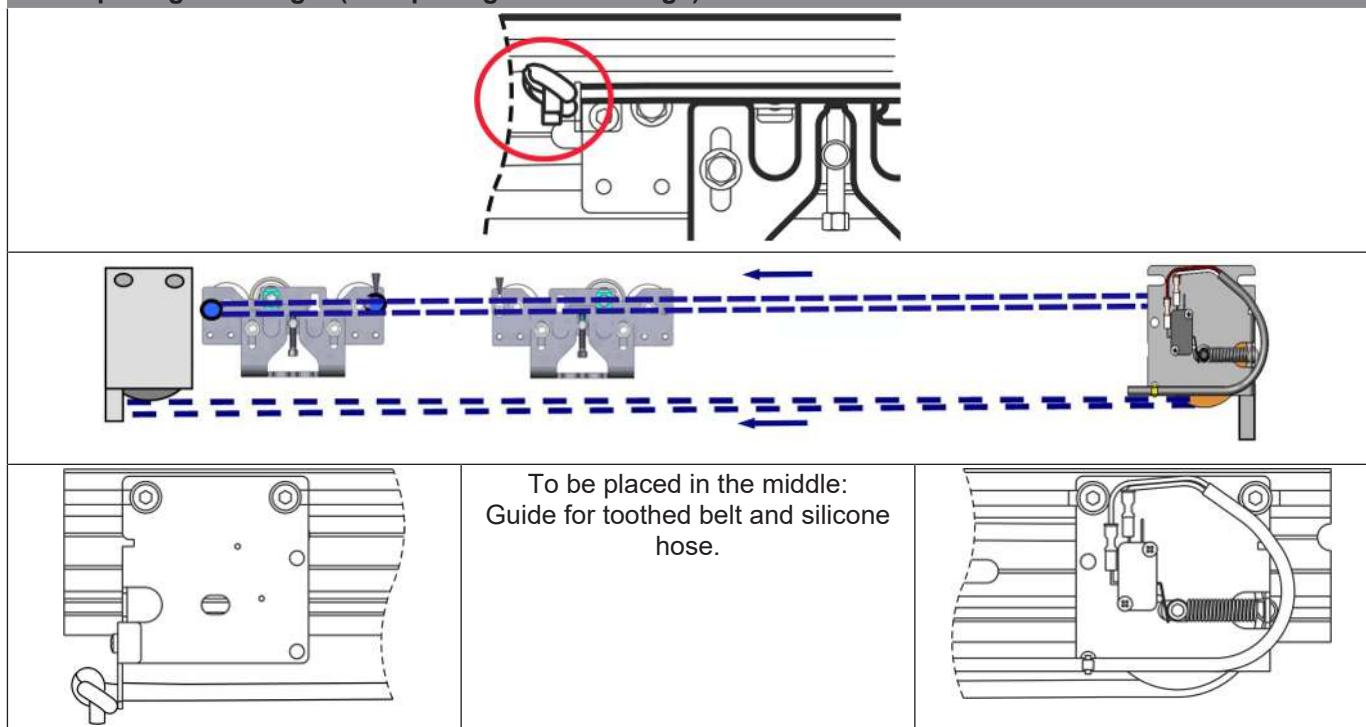


3.3.2 E-STA – operator height 108 mm

**NOTICE**

In the event of heavy doors as well as of doors installed in extreme conditions (e.g. exterior door under wind influence), we recommend using a 150 mm high operator and an emergency opening system as mentioned in previous paragraph.

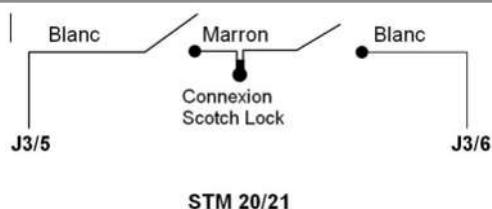
MS CO48 E-STA / E-TSA 108 – right	102-020808696
MS CO48 E-STA / E-TSA 108 – left	102-020808695
Each one containing:	
<ul style="list-style-type: none"> – 2 deflection units (1 left / 1 right) – 2 cord holders + fasteners 	
Silicone hose for CO48 (100 m)	102-108337

Door opening to the right (left opening = mirror image)

3.3.3 Connections on STM 20/21

**NOTICE**

Programming on FPC: CO48 – Sandow direct. Re-plug Jumper JP2 from standard to CO48!

STM 20/21

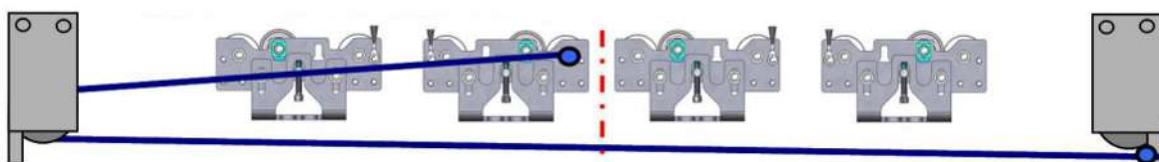
3 Installation of CO48

3.4 Installation of CO48 for telescopic doors

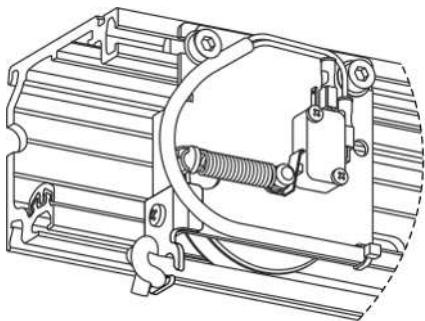
3.4.1 D-TSA – operator heights 108 and 150 mm

MS CO48 for D-STA and D-TSA – 2 deflection units (1 left / 1 right) – 2 cord holders / fasteners	102-020808658
Silicone hose for CO48 (100 m)	102-108337

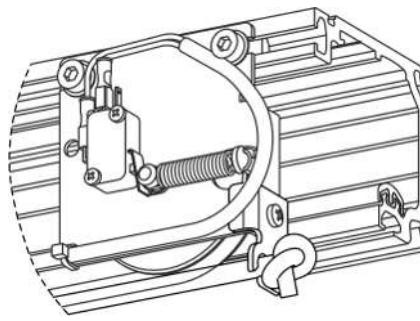
Overview carriage left



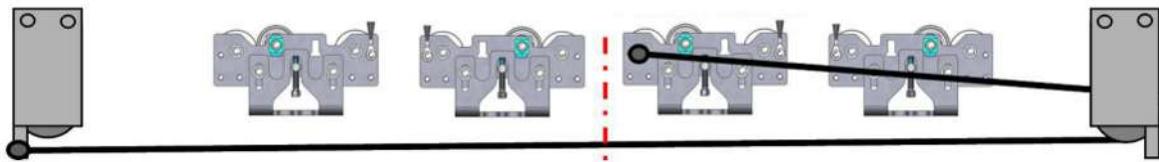
Deflection left



Deflection right



Overview carriage right



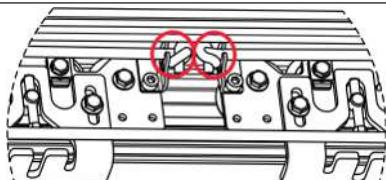
Fixing to carriages (fast running plane)

Left



Right

Right

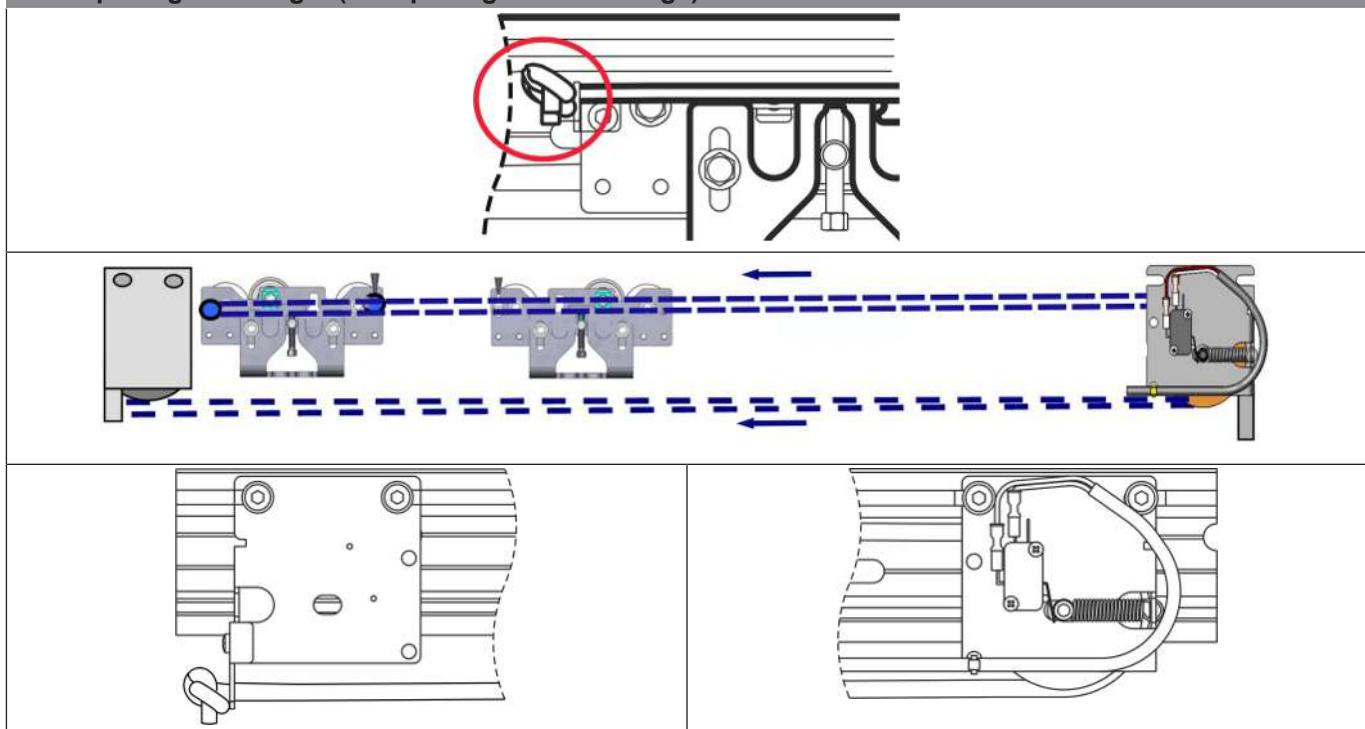


3.4.2 E-TSA – operator height 108 mm

**NOTICE**

In the event of heavy doors as well as of doors installed in extreme conditions (e.g. exterior door under wind influence), we recommend using a 150 mm high operator and an emergency opening system as mentioned in previous paragraph.

MS CO48 E-STA / E-TSA 108 – right	102-020808696
MS CO48 E-STA / E-TSA 108 – left	102-020808695
Each one containing:	
<ul style="list-style-type: none"> – 2 deflection units (1 left / 1 right) – 2 cord holders + fasteners 	
Silicone hose for CO48 (100 m)	102-108337

Door opening to the right (left opening = mirror image)

3 Installation of CO48

3.4.3 E-TSA – operator height 150 mm

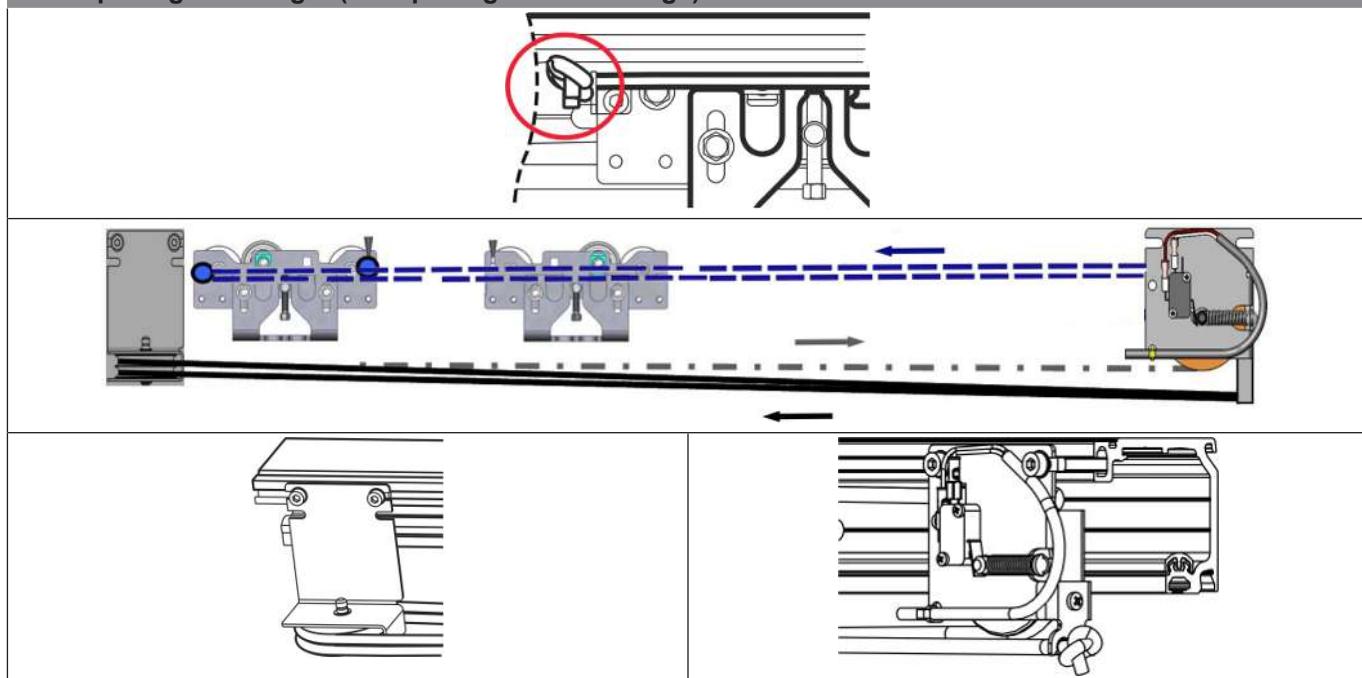


NOTICE

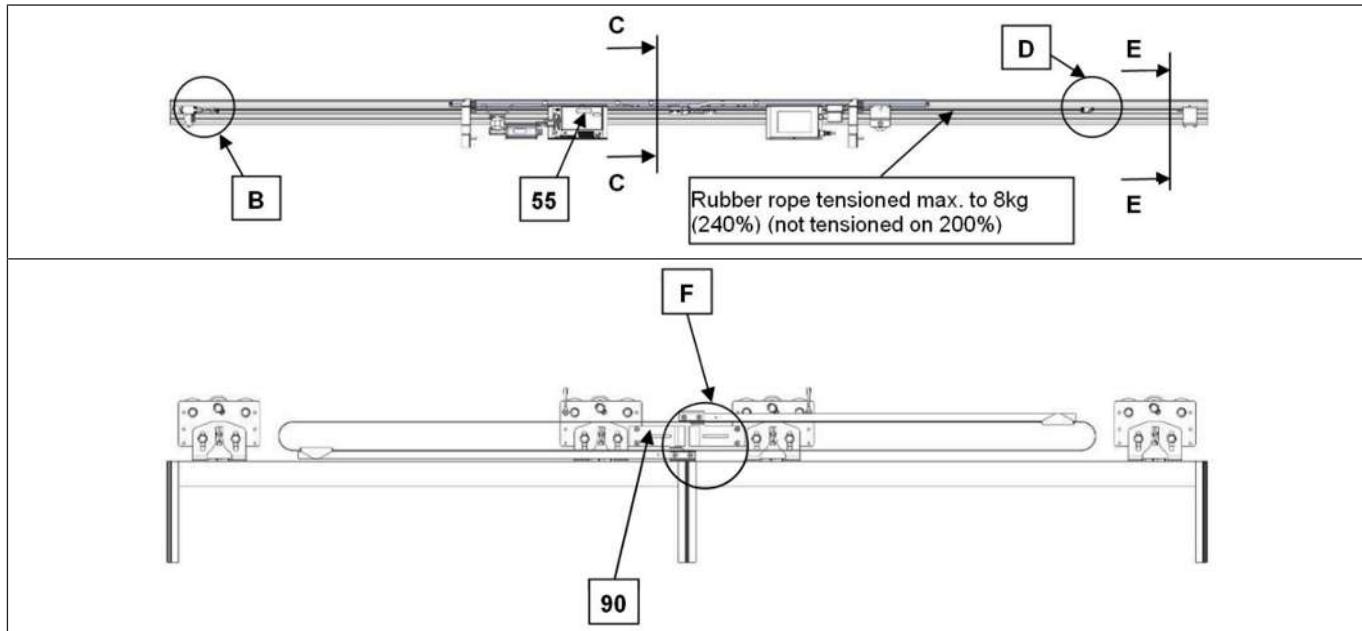
The emergency opening system for single sliding doors shows some differences depending on the operator height – 108 mm or 150 mm! Both systems are presented separately.

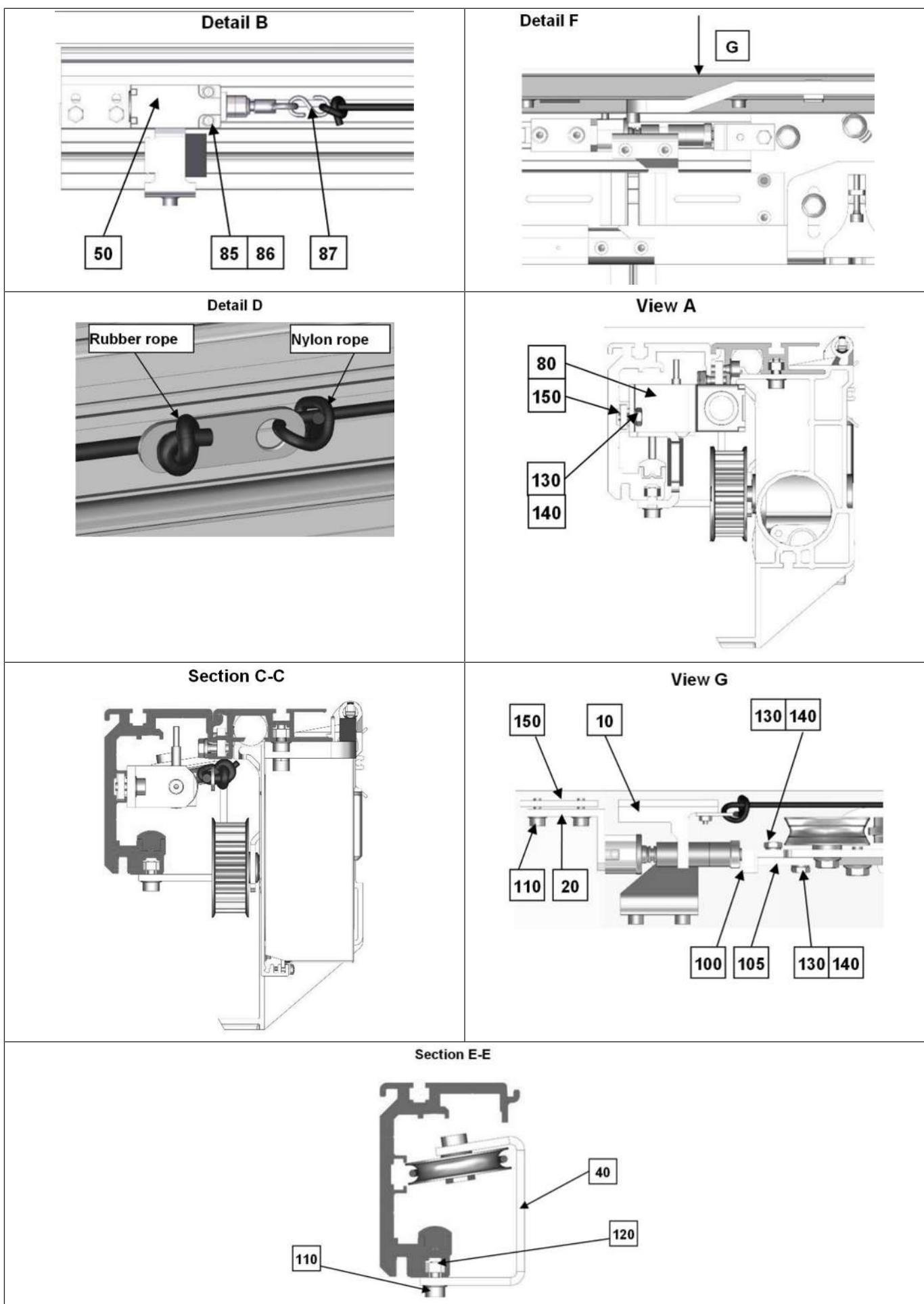
MS CO48 E-STA / E-TSA 150 – right	102-020808766
MS CO48 E-STA / E-TSA 150 – left	102-020808767
Each one containing:	
– 2 deflection units (1 left / 1 right)	
– 2 cord holders + fasteners	
Silicone hose for CO48 (100 m)	102-108337

Door opening to the right (left opening = mirror image)



3.5 Installation of CO48 with drive height 200 mm

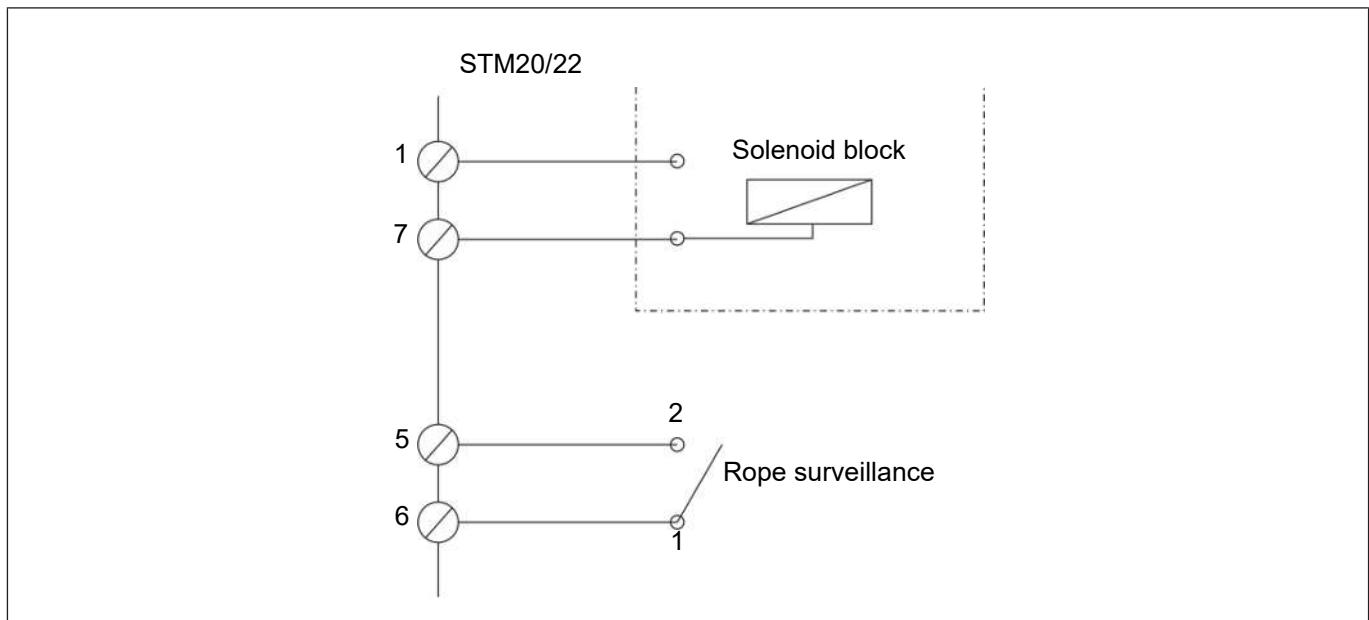




3 Installation of CO48

Parts list		
Item	Article No.	Description
10	102-016455000	Sliding bed cpl.
20	102-016458000	Solenoid block
40	102-016457000	Rope pulley
50	102-014635	Bowden switch 380V 10A 1U
55	102-016512000	ZLP CO48
80	102-016456001	Rope surveillance support
85	102-080302	Pan head screw DIN84A VP M4x25
86	102-080714	Washer DIN125A VP M4
87	102-031503	S-Hook length 30 mm
88	102-016450005	Connecting plate
90	102-016450001	Connecting part long
100	102-016450002	Cushion
105	102-016450006	Cushion extension
110	102-080025	Pan head screw I-6kt BN1392 VP M6x12
120	102-011020008	Screw coupling
130	102-080600	Hex head bolt DIN933 VP M6x10
140	102-080823	Washer BN792 MV M6
150	102-395007002	Groove plate A

3.5.1 Wiring schematic



3.6

Installation – Free-wheel device CO48

An emergency opening causes the door leaves to slide open due to the on-board mechanical power storage device (Silicone hose) and opens the escape route according to CO48. The optional free-wheel device facilitates this opening of the door leaves by disconnecting the motors.

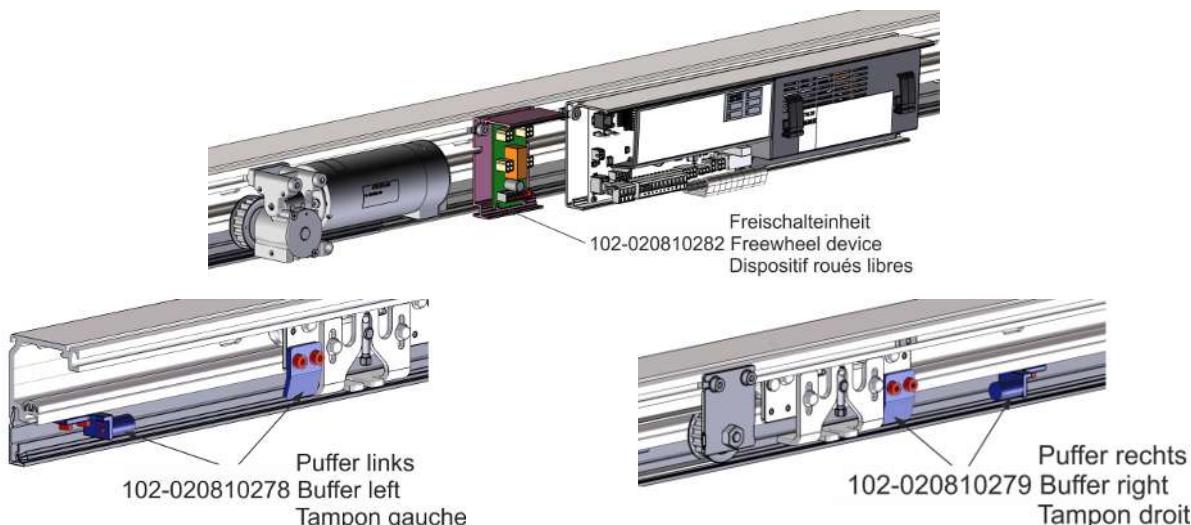


CAUTION

Damage to door leaves!

The door leaves can accelerate strongly by the pre-tensioned power storage device (silicon hose) and get damaged by strongly impact with the buffers on the end stops.

- a) Use the free-wheel device only if no CO48-compliant emergency opening is guaranteed.
- b) Do not use the free-wheel device on light door leaves, or doors with little friction.
- c) The free-wheel device can only be used together with end stops with reinforced buffers and steel stops correctly fitted to the carriages.



3.6.1

Installation

The current standard end stops are replaced by the new end stops with reinforced buffer.

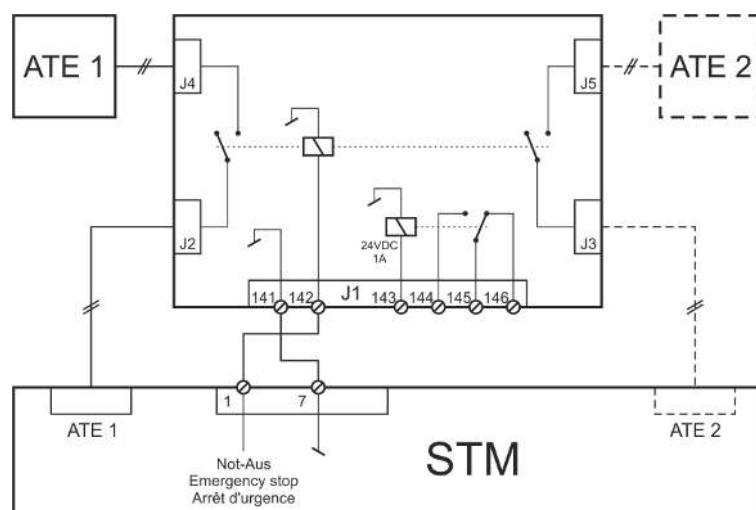
Left:	102-020810278
Right:	102-020810279

The end stops are attached to the carriages.

3.6.2

Cabling

Connection configuration for free-wheel device



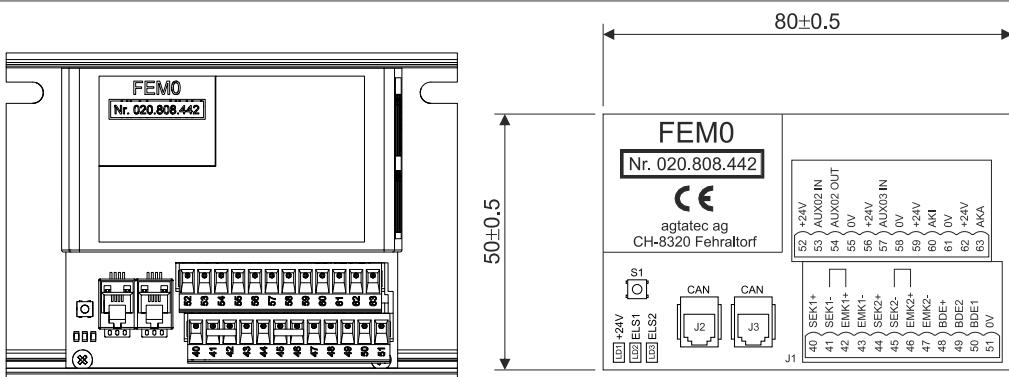
4 Extended functions module

4 Extended functions module

4.1 FEM0

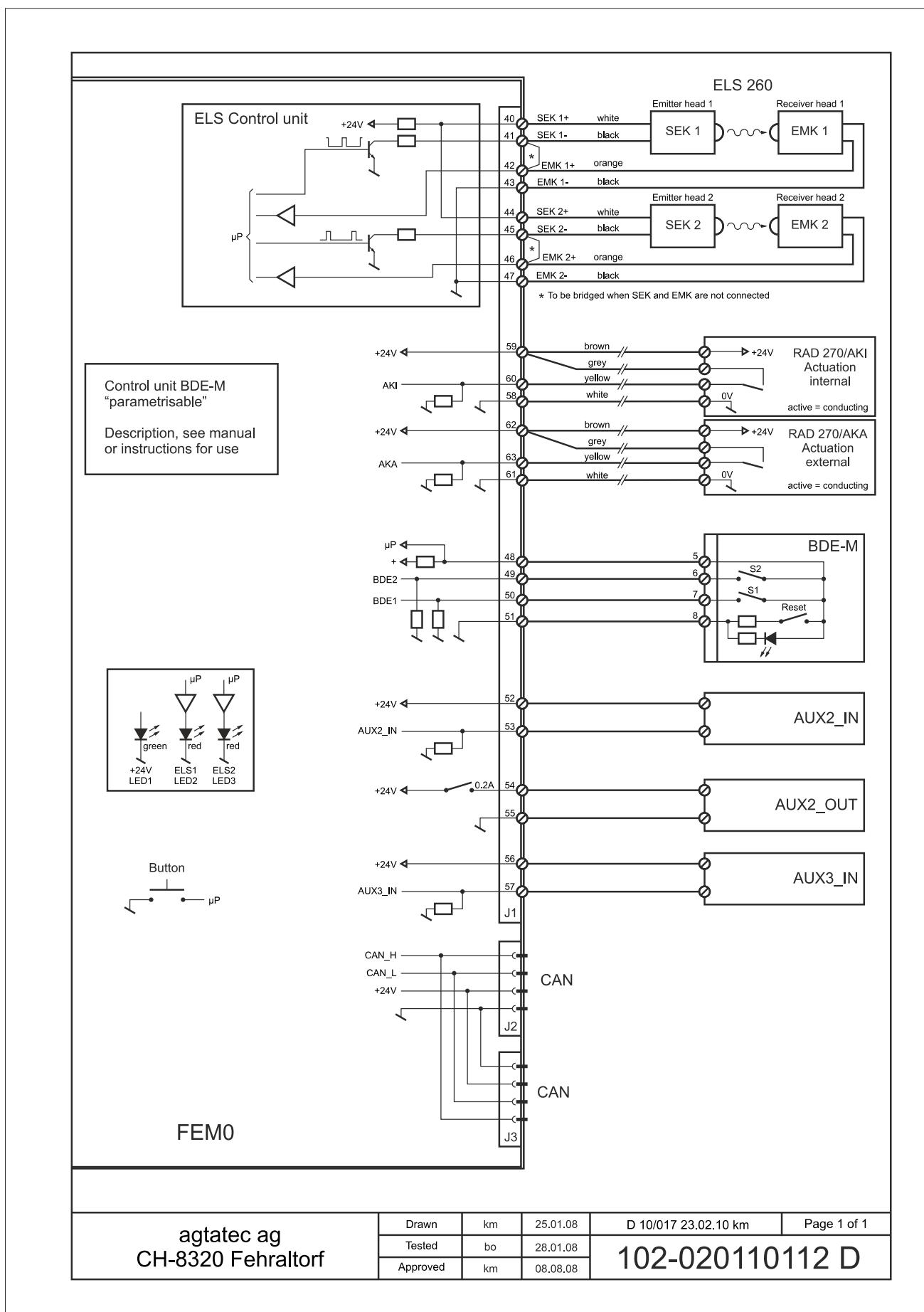
4.1.1 Type plate, connections and controlling elements FEM0

FEM0



FEM0 Extended functions module	Function / connections
S1 – blue function key	2 pulses → calibrating ELS
LED 1 – green	+ 24 V
LED 2 – red	Interruption ELS 1
LED 3 – red	Interruption ELS 2
Connector J1	Connections of conventional sensors according to wiring diagram 102-020110112
Connectors J2 and J3	CAN-Bus connections: Both connectors must always be connected

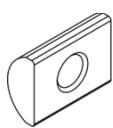
4.1.2 Wiring diagram FEM0



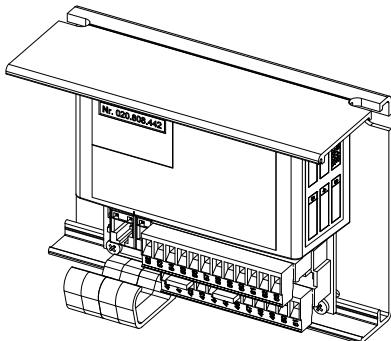
4 Extended functions module

Install FEM0

102-020109289



102-108975



Connection for:

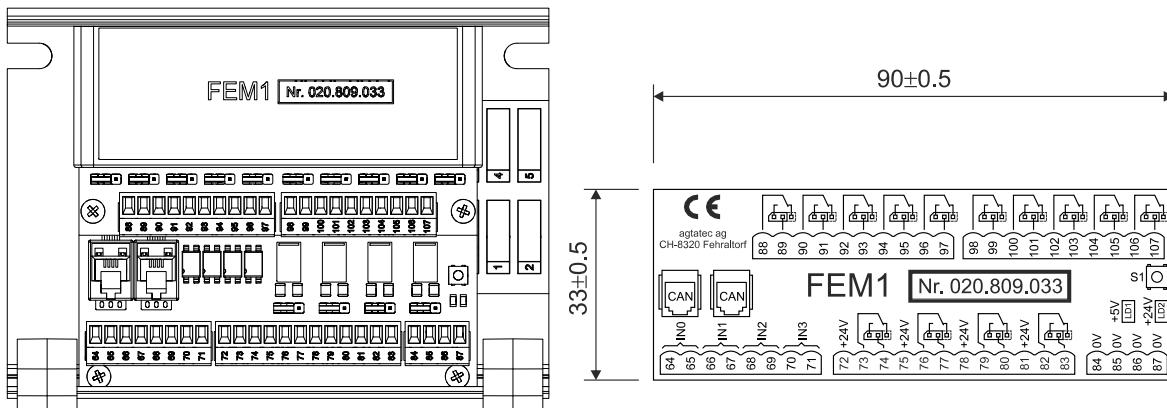
- Third party products (Sensors)
- Additional INPUT/OUTPUT
- Additional photocells ELS
- Mechanical BDE

4.2 FEM1

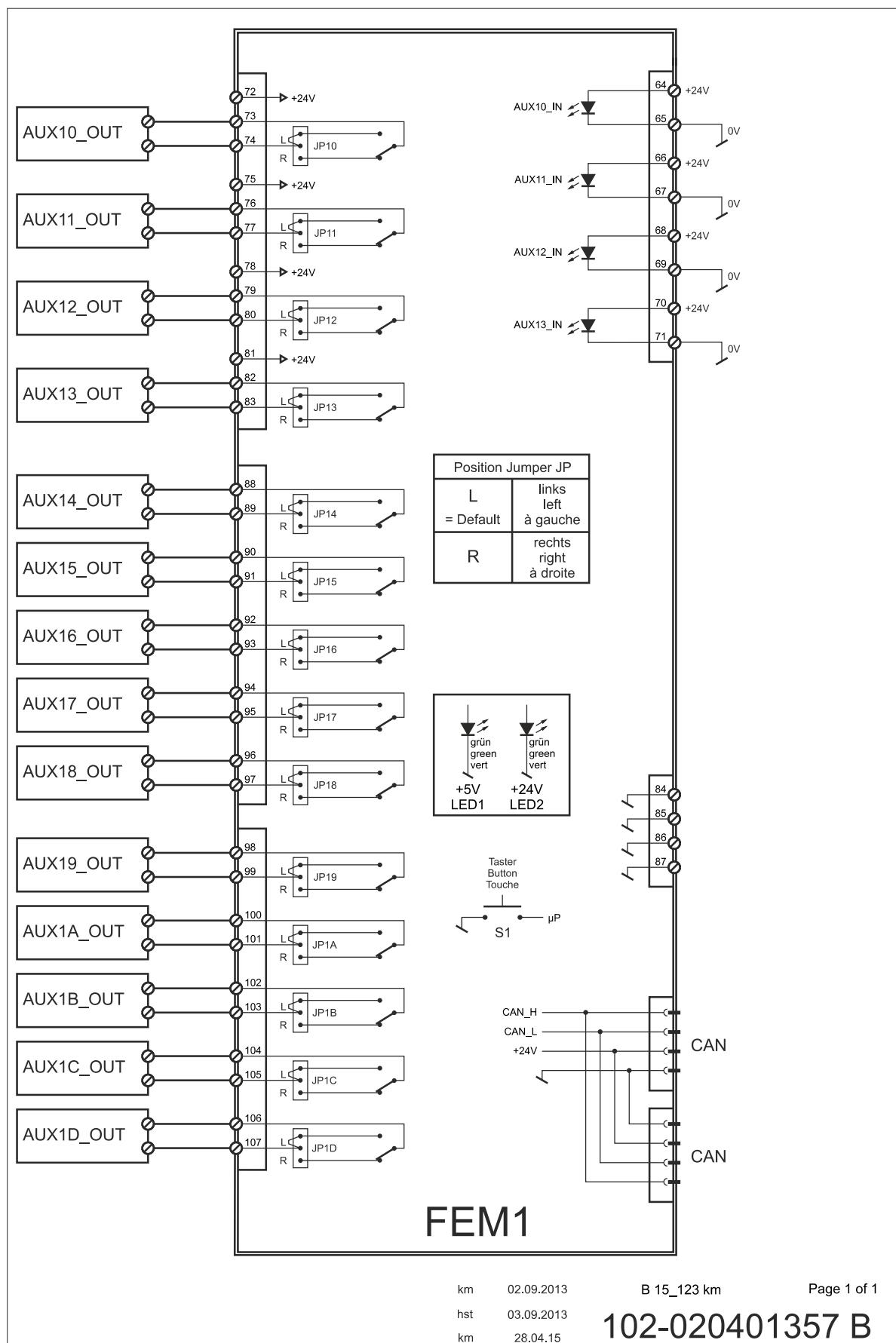
4.2.1 Type plate, connections and controlling elements FEM1

FEM1

102-020809033



4.2.2 Wiring diagram FEM1

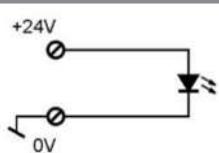


4 Extended functions module

4.2.3 Potential-free inputs (4)

4 potential-free inputs

Principal:



Terminal connections:

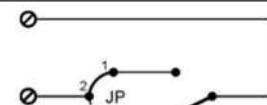
+24V:	64/66/68/70
0V:	65/67/69/71

4.2.4 Relay outputs (14)

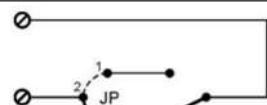
14 relay outputs

Principal:

Closing function:



Opening function:



Terminal connections:

73/76/79/82 88/90/92/94//96/98/100 102/104/106 74/77/80/83/89/91/93/95/97 /99/101 103/105/107
--

- Relay with two-way contact 24V / 1A
- Function (opening/closing contact) with selectable jumper

4.3 Interlock control

4.3.1 Interlock mode

NOTICE

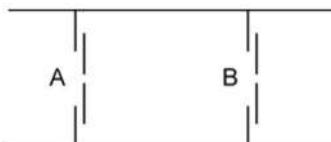
An interlock function is not possible with a RED door system.

NOTICE

If more than 2 drive units are operated as an interlock function, a superordinate control system is necessary.

If one door is open, it blocks the other door via the SAA output until it is closed again.

The trigger signal of the second door is stored and, if present, the traffic light will signal to the user that he has been detected. However, the door must wait to open because another door is open.



4.3.2 Configuration

FEM 1

FEM Type	M	Basic	Interlock	Pharmacy
----------	---	-------	-----------	----------

DOOR SYSTEM

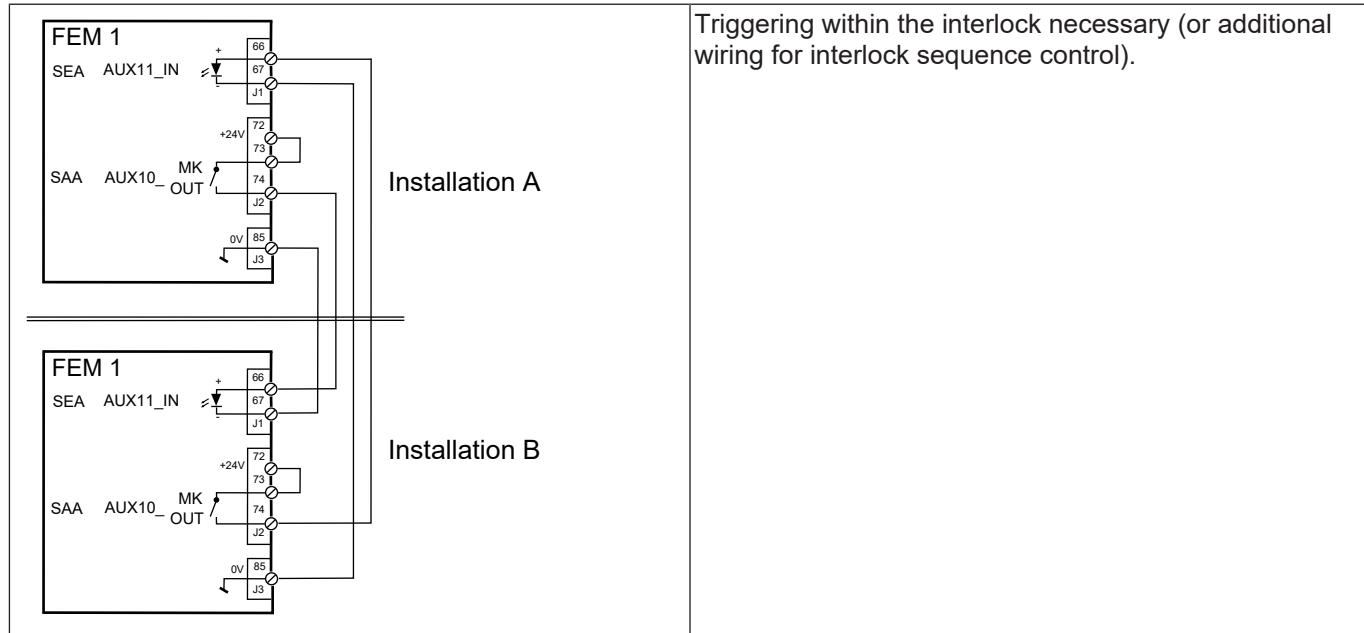
Interlock (with FEM 1)	D	M	Inactive	All operation modes	Only one-way Locked
------------------------	---	---	----------	---------------------	---------------------

4.3.3 Wire interlock controller

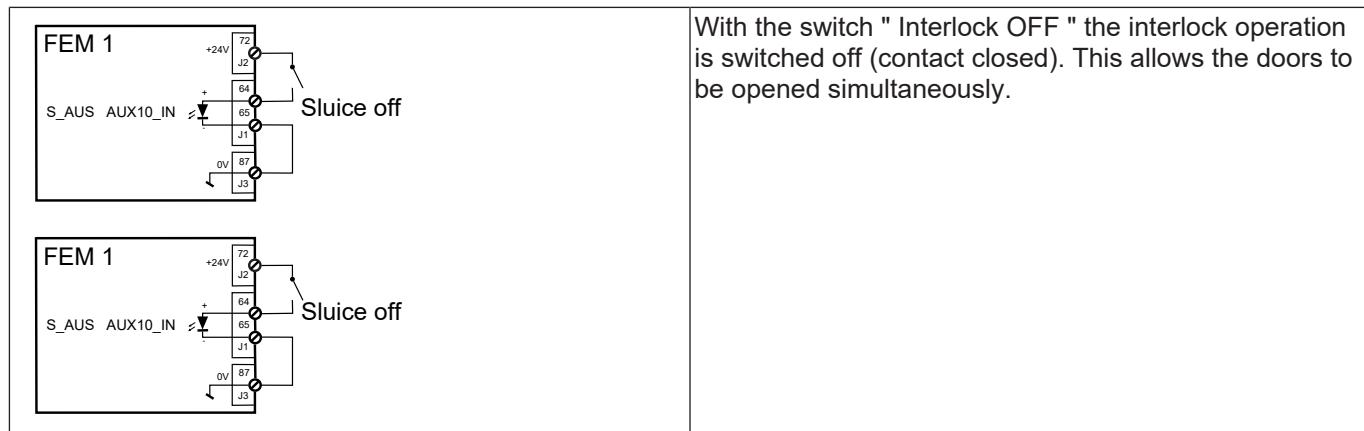


NOTICE

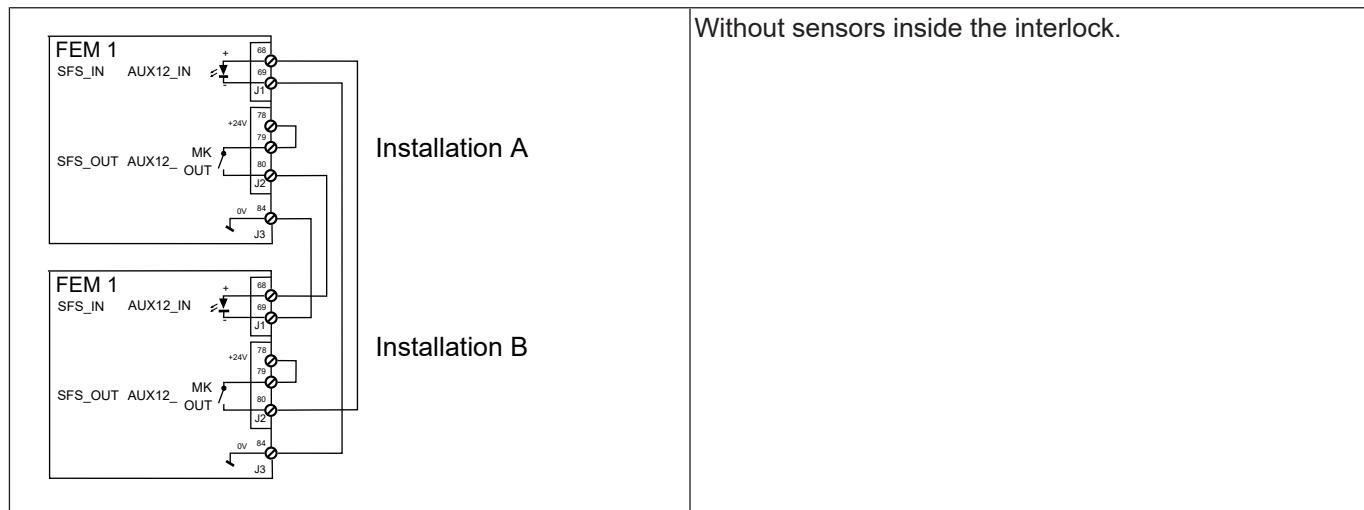
The basic wiring of the interlock controller is always necessary. Additional functions require additional wiring.



4.3.4 Deactivation of the interlock mode

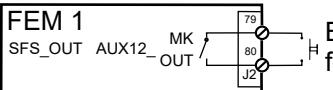
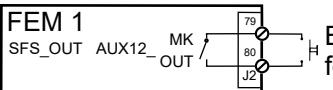


4.3.5 Interlock sequence control

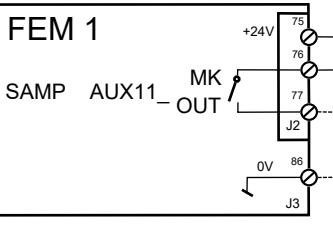
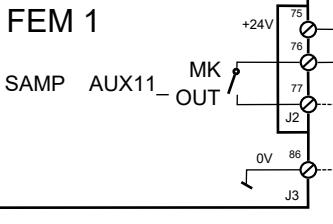


4 Extended functions module

4.3.6 Options

 <p>FEM 1 SFS_OUT AUX12_OUT MK J2</p> <p>79 80 81 J2</p> <p>Button opens door for layout B</p>	Button inside the interlock.
 <p>FEM 1 SFS_OUT AUX12_OUT MK J2</p> <p>79 80 81 J2</p> <p>Button opens door for layout A</p>	

4.3.7 Lamp

 <p>FEM 1 SAMP AUX11_OUT MK J2</p> <p>+24V 75 76 77 J2 0V 86 J3</p> <p>Installation A</p>	The traffic light consists of a visual or acoustic signal that indicates whether the interlock is occupied.
 <p>FEM 1 SAMP AUX11_OUT MK J2</p> <p>+24V 75 76 77 J2 0V 86 J3</p> <p>Installation B</p>	

4.4 Pharmacy control APS 20

4.4.1 General description



NOTICE

Only for 108 / 150 mm drive height.

No RED application with the pharmacy locking bar!

The pharmacy control is an additional locking device in the area of the carriages. The extended locking bolt mechanically prevents the door leaves from being opened beyond a predefined extent.

Article No.	Material required
102-020810490	MS Pharmacy control APS 20 incl. connection cable and fasteners
102-020809040	MS FEM1
102-019808015	Locking device VRR 19 (as APS extra locking)
102-016094000	Yellow pharmacy switch (to activate the APS function)
102-016093000	Red pharmacy switch (to open and close the door in the APS function)
102-020808670 or 102-020808589	External locking surveillance VRR 20 or External locking surveillance MPV 20-2 depending on which locking device has been installed
	Connection cable for both pharmacy switches (same cable type as for BDE-D connection: 2 x 2 x 0,4) Cable for jumpers, connections on FEM1

4.4.2 Functioning



NOTICE

No motion or safety sensors are active! The door moves at reduced speed.



NOTICE

The BDE-D is disabled (message “BDE-D no priority” appears as soon as a key is pressed).

User instructions

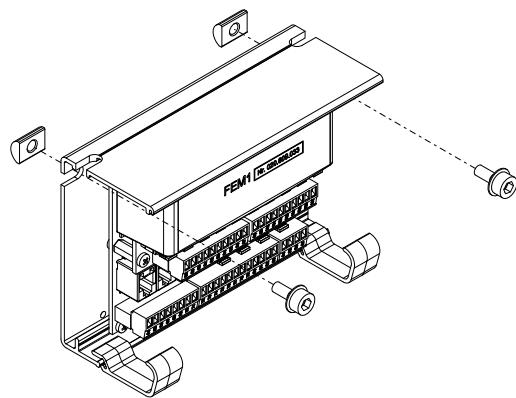
1	Lock the door (operating mode “Locked”).
2	Press the yellow push button. <ul style="list-style-type: none"> – The yellow lamp indicates that the APS function is enabled. – The additional locking device travels into the locked position (mechanical stop for APS opening).
3	The door can be opened and closed with the red push button.

4.4.3 Installation APS

<ul style="list-style-type: none"> – Fix the mechanical stop, consisting of a connecting clamp (102-020109355) and 2 fixing screws M6x8 (102-080023), onto the right rear carriage. 	
<ul style="list-style-type: none"> – Position roughly the extra locking device VRR 19 (desired opening width + 10...20 mm) Range acc. to configuration [0...40] = 0...18 cm. 	<ul style="list-style-type: none"> – Depending on door type and layout of the drive components, the extra locking device and the mechanical stop can be placed somewhere else.
<ul style="list-style-type: none"> – Mount pharmacy control APS 20. 	

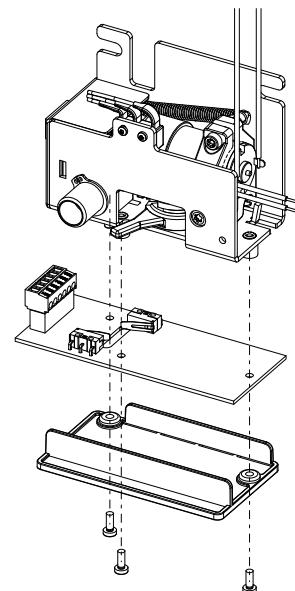
4 Extended functions module

- Install FEM 1 (take length of connection cables into account).

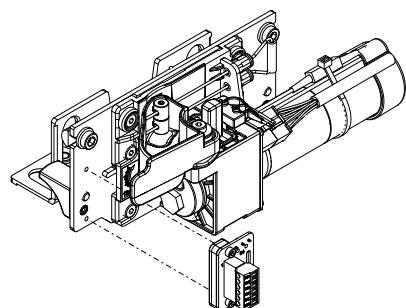


- Mount external locking device surveillance for VRR 20 or MPV 20.

VRR 20

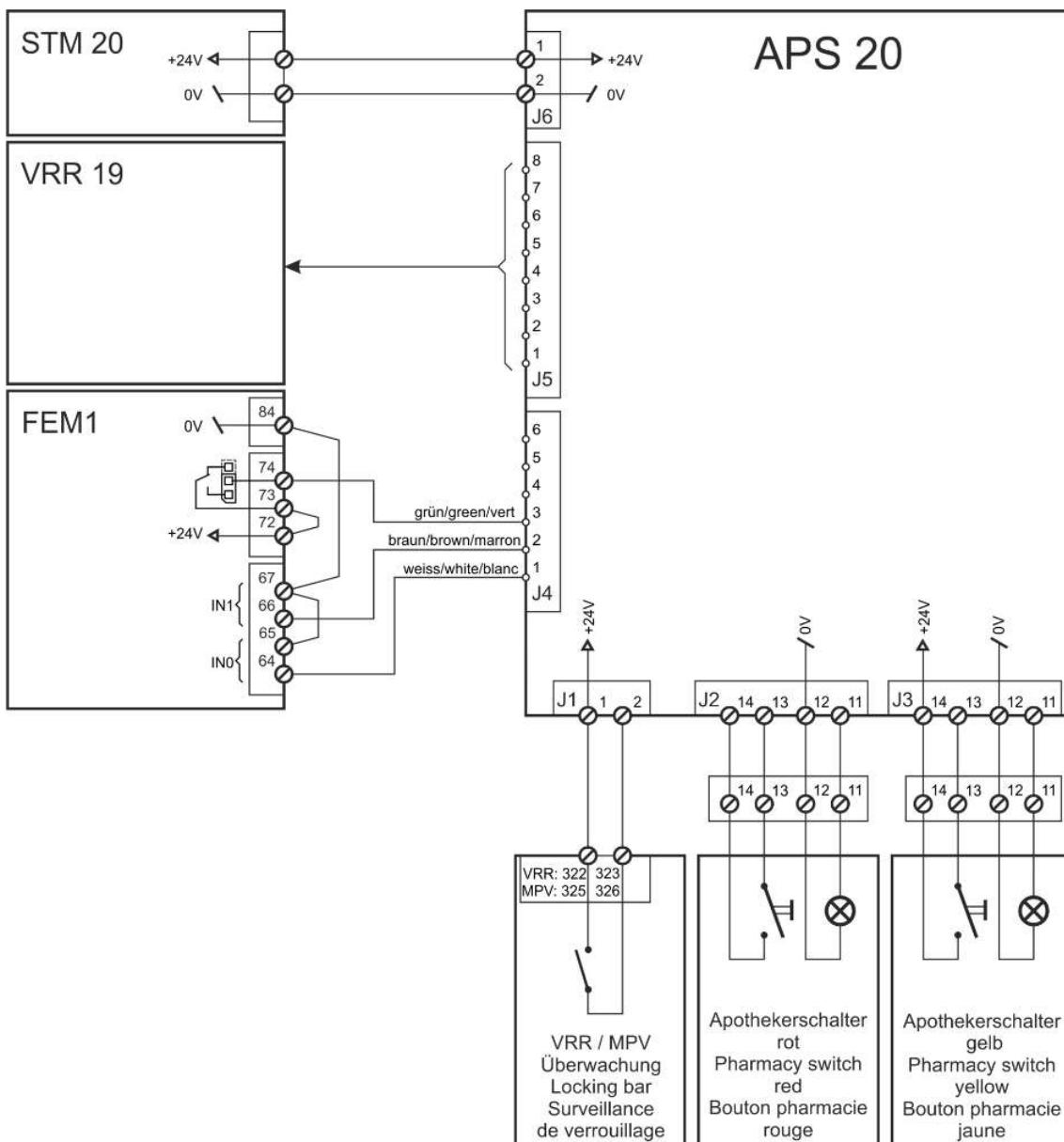


MPV 20-2



4.4.4 Wiring

- Wire/install both pharmacy switches (red and green) to the intended place (if necessary double in-built box).



4.4.5 Commissioning Requirements

NOTICE

 Bring the locking bar of additional locking device (VRR 19) into the „not locked“ position. To shift the bar, lift lightly the motor from the shaft.

- Door parameter have been learned.
- Door leaf (DST or EST) has properly been configured.
- Wiring has correctly been performed.

Configuration of the APS

PARAMETER FEM 1		Parameter value (factory settings printed bold)						
Description	D	M	1	2	3	4	5	6
FEM 1								
↳ FEM type	M	Basic*		Interlock	Pharmacy	I/O-Set 1		
↳ APS open position	D	M	35	(Speedo)				

4 Extended functions module

Configuration of the APS	
FEM-Type =	Pharmacy
(AUX10_IN =	APS Bar
AUX11_IN =	Open APS
AUX10_OUT =	APS (Lamp)
APS Open position =	Range according to configuration [0...40] = 0...18 cm

Configuration procedure	
1	Lock the door (operating mode locked).
2	Activate APS function with yellow pushbutton.
3	Open the door with red pushbutton.
4	If necessary, change the APS open position (default = 35) → Reposition the mechanical stop (additional locking device) if necessary. The opening width should be set the way that the door stops just before the mechanical stop.
5	Close the door with the red pushbutton and open it again → now it moves to the new position.

4.4.6 Problem handling

If the door is hindered and is unable to close while the APS function is active, it carries out more closing attempts and registers the new position as the closed position after the fourth try.

- The bolt of the VRR 20 drives into the “locked” position, but cannot lock as the locking strap is not in the correct position.
- No error message is displayed.



NOTICE

In this status, the APS function may not be disabled, as the door is not locked and the opening width stop is not in use.

Nothing can prevent the door being opened by force!

If the obstacle is removed, the door closes automatically until it is locked by the bolt of the VRR 20. Then, carry out an APS opening and closing with the red push button.

Result: The correct function is ensured again.



NOTICE

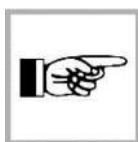
If an APS opening occurs while the door is at a wrong “closed” position, the door may slide until the mechanical stop, as the opening width is calculated from the new starting point.

A power failure while the APS function is active, generates an undefined status as soon as the control is switched into sleep mode.

- After the mains voltage is available again, the door must be closed manually.
- As soon as the door is closed, it is reset to the original state before the power failure.

5 Battery / Accumulator

5.1 Installation on product line 20 and 21



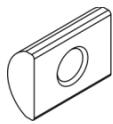
NOTICE

Only use batteries as described in the table below.

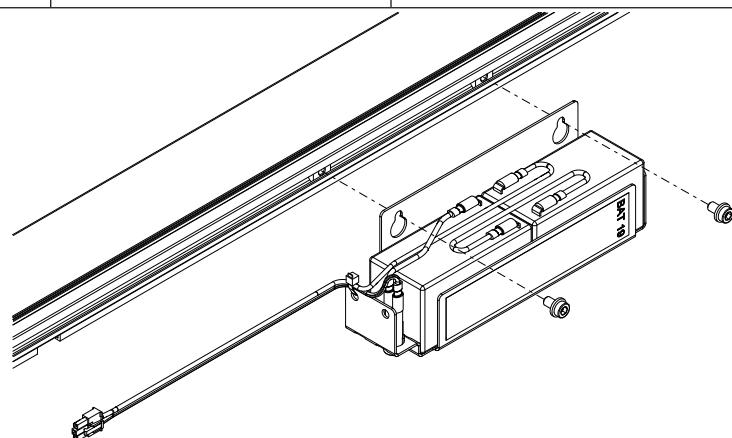
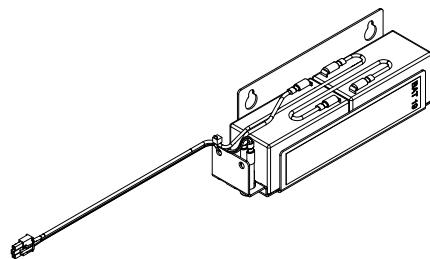
Article No.	Description	Usage
102-019808034	NiCd accu	Only for STM 21 to be used for emergency movement
102-019808036	Lead-acid accu	STM 20 22 DUO: without additional printed circuit board, to be used for emergency movement STM 21: with additional p.c.b. ZLP-BAT 21 for emergency movement
102-019808181	Lead-acid accu RED 19	Use only for drive set 21 RED
102-020808835	Lead-acid accu RED 20	Use only for drive set 20 RED
102-016540000	Lead-acid accu	Only for drive height 200 mm Adapter 102-019808145 required
102-016557000	Lead-acid accu RED-B16N	Only for drive height 200 mm Plug for direct connection to STM

Install battery

102-020109289



102-108975



5 Battery / Accumulator

5.2 Installation on Product line 20-200 and 22



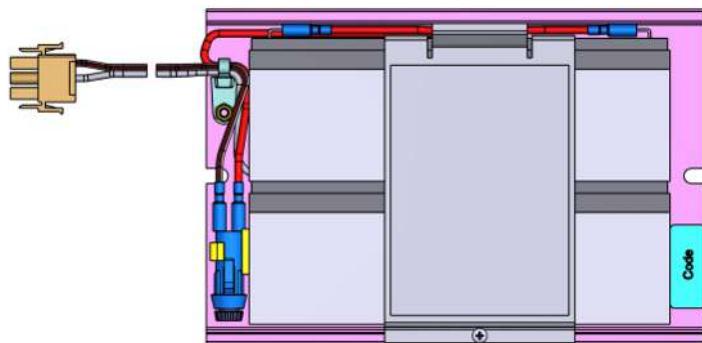
NOTICE

Options can be installed directly on site.

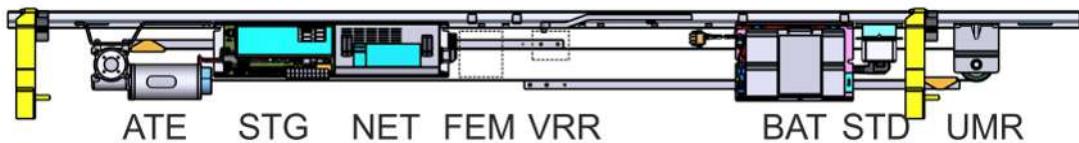
5.2.1 Installation of battery/accumulator

Lead-acid accu for cladding height 200 mm

102-016540000

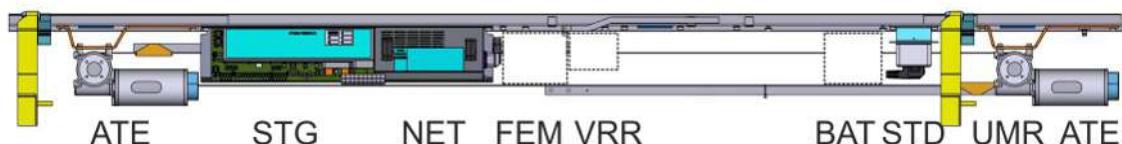
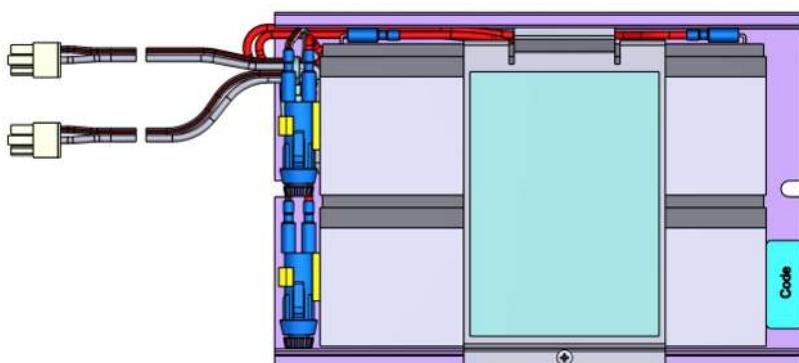


102-020808910



Lead-acid accu RED for cladding height 200 mm

102-016557000



6 Operator casing 108 / 150 mm

6.1 Preparing casing profiles



NOTICE

For reasons of space, it is not possible to install a RIC 290 in the inner casing with a casing height of 108 mm.



NOTICE

Make sure that no metal dust gets into the drive during drilling.

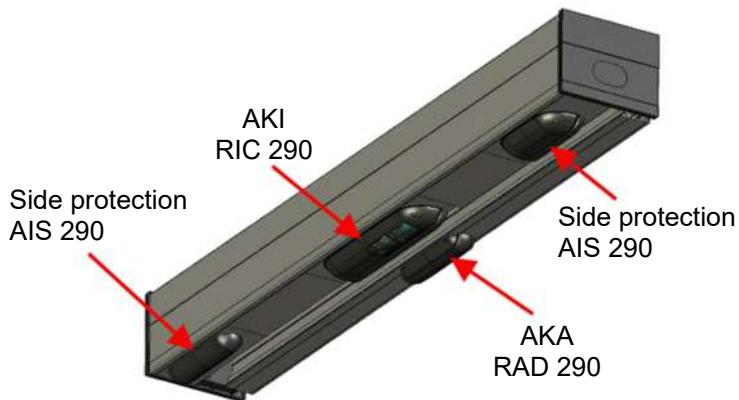


NOTICE

Prepare necessary cut-outs / drill holes at the factory.

The appropriate templates are delivered together with the sensors.

Example: Sensor line 290 (if available)



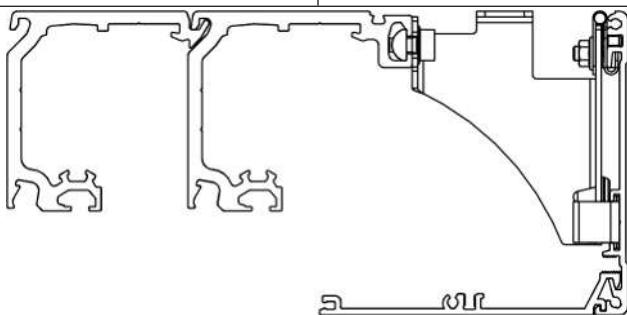
6.2 Swing-up casing STA 108 / 150 mm

MS casing brackets / holding bar	102-020808471
Additional material needed for casings longer than: $F = 2900 \text{ mm}$	102-020809004
1x MS casing brackets / holding bar +12	

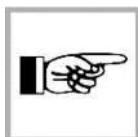
6 Operator casing 108 / 150 mm

6.3 Swing-up casing TSA 108 / 150 mm

MS casing brackets / holding bar +12	102-020809004
Additional material needed for casings longer than: $F = 2900 \text{ mm}$	102-020809004
1x casing brackets / holding bar +12	



6.3.1 Side cover for telescopes systems



NOTICE

For the single side caps, the logos have to be ordered separately.

Type of side caps	Door type	Mounting set
108 x 222 mm, plastic (standard), without cladding	TSA	102-020808953
108 x 259 mm, plastic (standard), with cladding	TSA	102-020808954
150 x 222 mm, plastic (standard), without cladding	TSA	102-020808957
150 x 259 mm, plastic (standard), with cladding	TSA	102-020808958

Type of side caps	Door type	Single side caps
108 x 222 mm, plastic (with Logo), without cladding	TSA	102-020110817
108 x 222 mm, Alu raw (without Logo), without cladding	TSA	102-020110825
108 x 259 mm, plastic (with Logo), with cladding	TSA	102-020110818
108 x 259 mm, Alu raw (without Logo), with cladding	TSA	102-020110826
150 x 222 mm, plastic (with Logo), without cladding	TSA	102-020110821
150 x 222 mm, Alu raw (without Logo), without cladding	TSA	102-020110829
150 x 259 mm, plastic (with Logo), with cladding	TSA	102-020110822
150 x 259 mm, Alu raw (without Logo), with cladding	TSA	102-020110830

6.4 Swing-down casing 108 / 150 mm

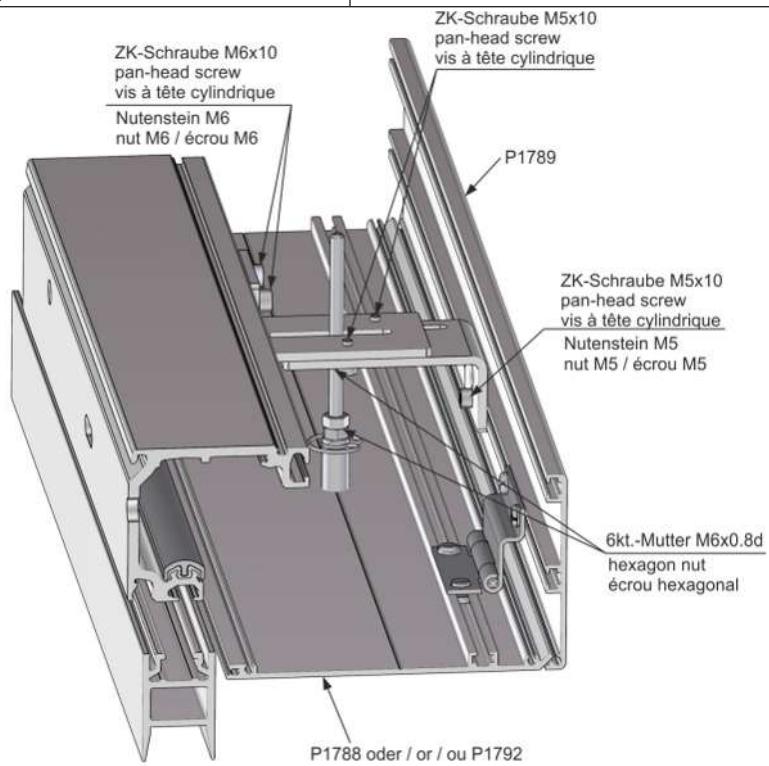
NOTICE

Same installation for profile system 32.

With profile system 32 use the same profile P1788.

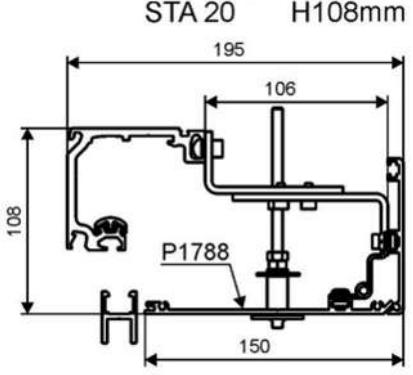
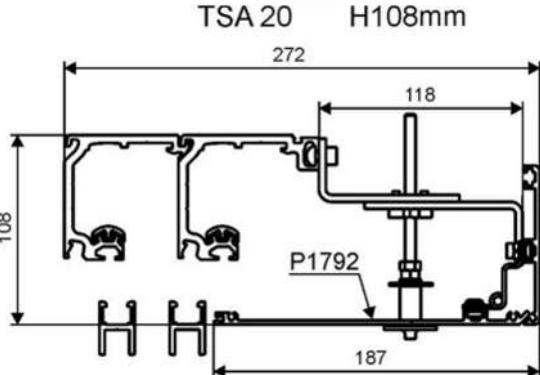
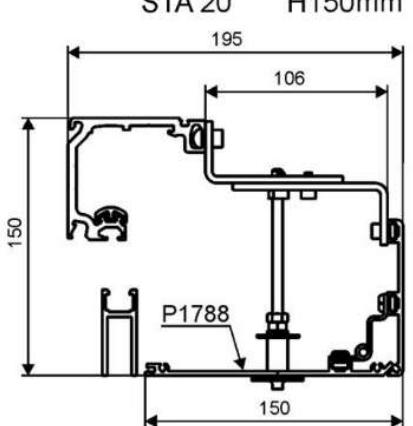
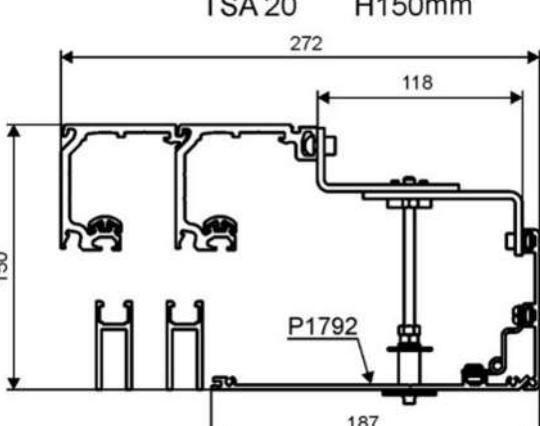
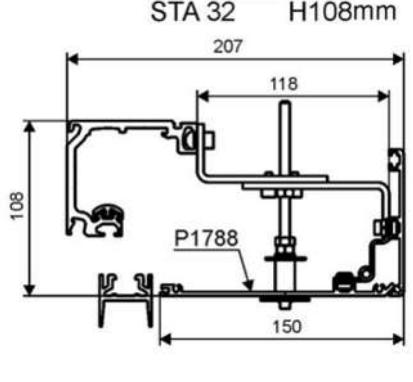
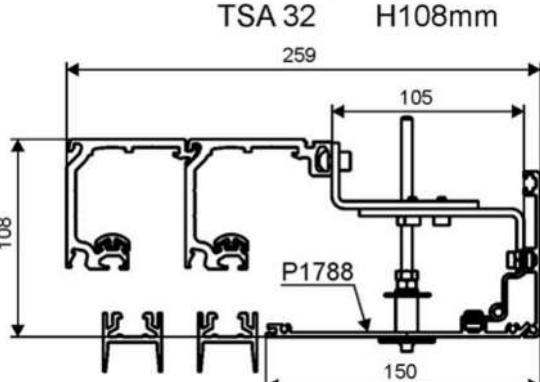
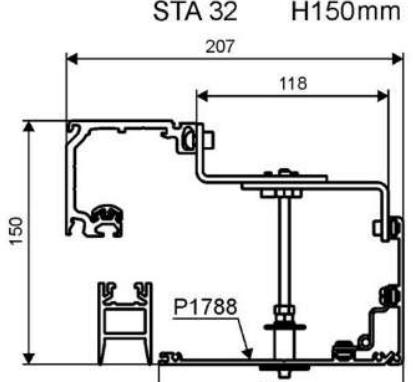
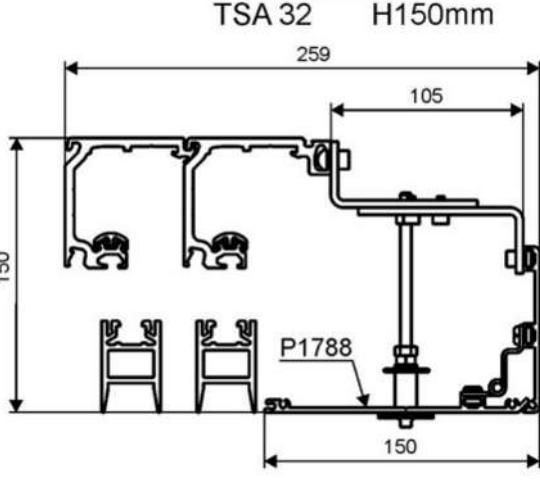
With cladding height 150 mm use top fixing groove.

MS swing-down casing	102-020808510
Additional material needed for casings longer than: F = 2900 mm	102-020808510
1x MS swing-down casing	
Additional material needed for casings longer than: F = 5000 mm	102-020808510
2x MS swing-down casing	



MS Side plate H108 cpl.	MS Side plate H150 cpl.
102-020808659	102-020808660
102-020110242	102-020110244
Seitenplatte KV H108 kpl. Seitenplatte KV H150 kpl.	102-020808659 + 102-020110242 102-020808660 + 102-020110244
Side cap KV H108 cpl. Side cap KV H150 cpl.	102-020808659 + 102-020110242 102-020808660 + 102-020110244
Plaque latérale KV H108 cpl. Plaque latérale KV H150 cpl.	102-020808659 + 102-020110242 102-020808660 + 102-020110244

6 Operator casing 108 / 150 mm

 <p>STA 20 H108mm 195 108 106 P1788 150</p>	 <p>TSA 20 H108mm 272 108 118 P1792 187</p>
 <p>STA 20 H150mm 195 150 106 P1788 150</p>	 <p>TSA 20 H150mm 272 150 118 P1792 187</p>
 <p>STA 32 H108mm 207 108 118 P1788 150</p>	 <p>TSA 32 H108mm 259 108 105 P1788 150</p>
 <p>STA 32 H150mm 207 150 118 P1788 150</p>	 <p>TSA 32 H150mm 259 150 105 P1788 150</p>

6.5 Lockable casing 108 / 150 mm

NOTICE

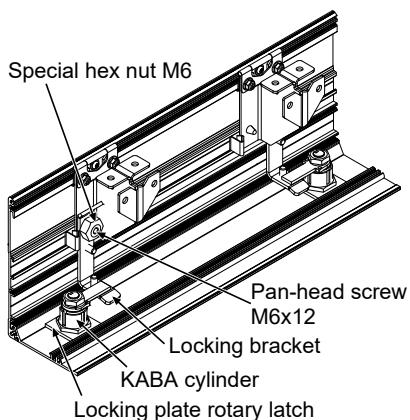


Detailed information about correct positioning and necessary preparation works are included in the mounting kits.

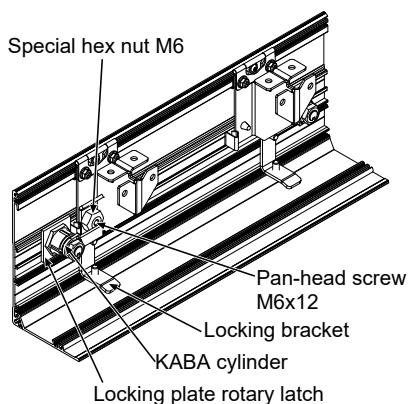
6.5.1 Basic installation - Drive heights 108 / 150 mm

MS lockable casing 150	102-020808778
MS lockable casing 108	102-020808777

Vertical installation



Horizontal installation



6.5.2 Basic installation for swing-down casing

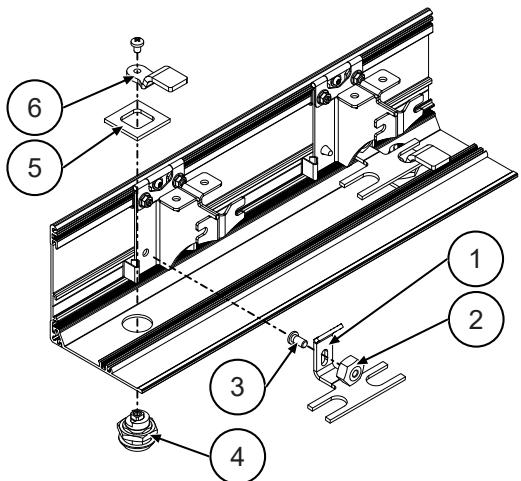
MS lockable swing-down casing	102-020808793
Casing horizontal P1788 or P1792	

6 Operator casing 108 / 150 mm

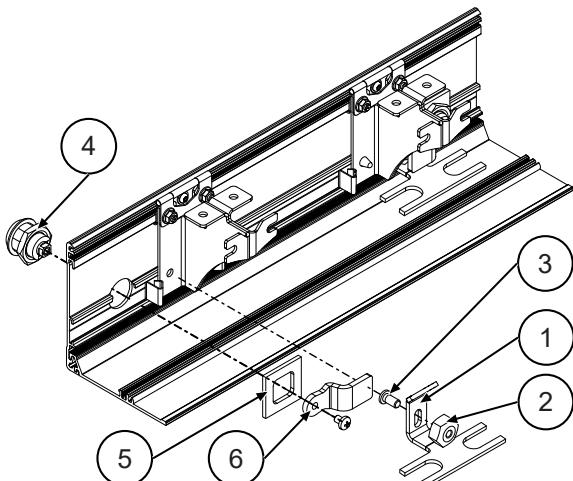
6.6 MS Lockable casing Type 2 108 / 150 mm

MS Lockable casing Type 2 / 108 mm / 102-020810695

Vertical installation



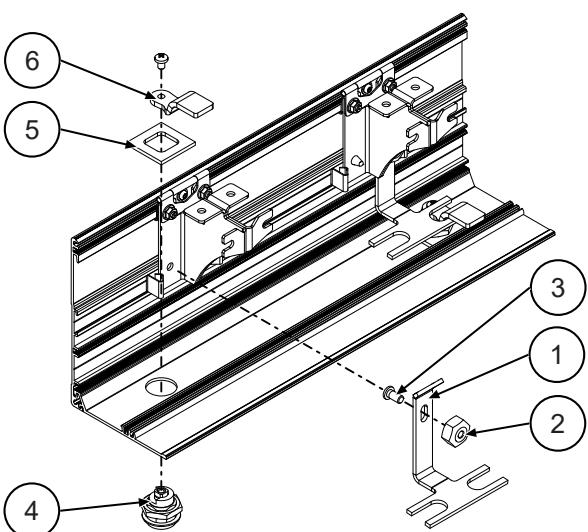
Horizontal installation



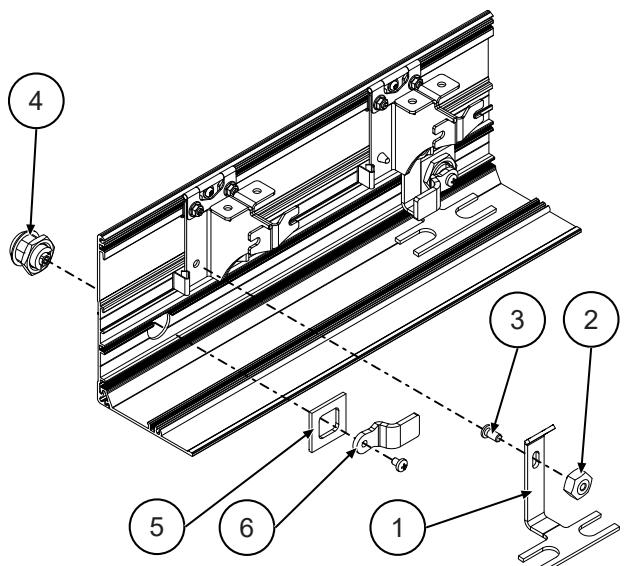
Item	Article No.	Description
1	102-020114796	Locking sheet 108
2	102-020110435	Hex nut M6
3	102-080110	SKT HD BN20698 DAC M6x12
4	102-114809	Turning lock
5	102-020128078	Locking plate rotary latch
6	102-114808	Locking sheet for turning lock

MS Lockable casing Type 2 / 150 mm / 102-020810696

Vertical installation

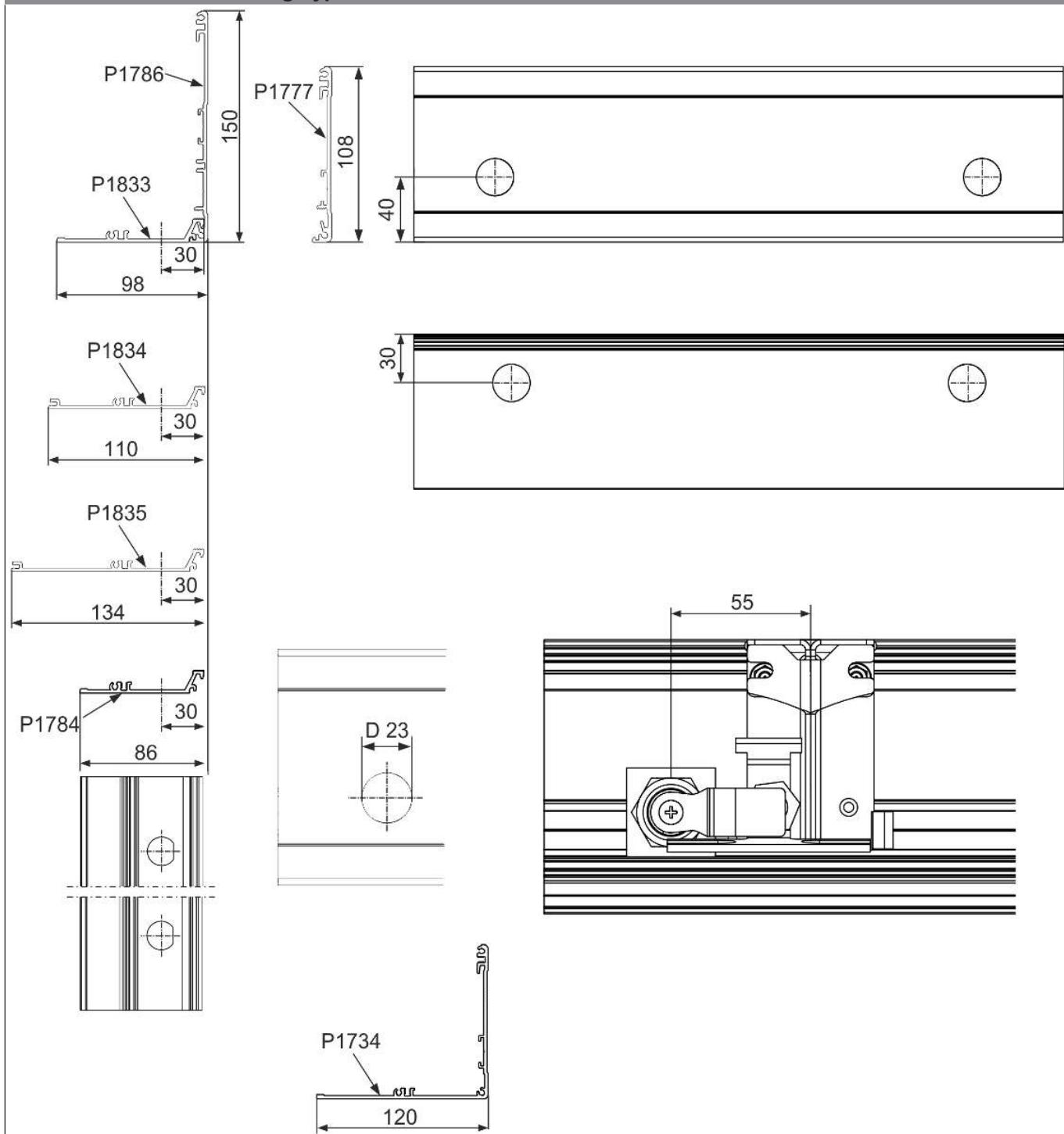


Horizontal installation



Item	Article No.	Description
1	102-020114797	Locking sheet 150
2	102-020110435	Hex nut M6
3	102-080110	SKT HD BN20698 DAC M6x12
4	102-114809	Turning lock
5	102-020128078	Locking plate Rotary latch
6	102-114808	Locking sheet for turning lock

Dimensions Lockable casing Type 2 108 / 150 mm



6 Operator casing 108 / 150 mm

6.7 Installing operator casing for drive height 108 / 150 mm



CAUTION

Falling down of the casing.

Head injury and material damage are the consequences.

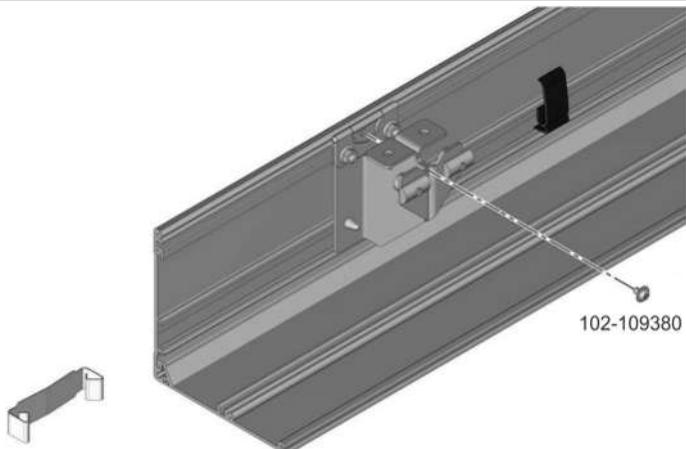
- Fix the casing to the hinges with screws (102-109380)



NOTICE

For casing lengths $L \geq 4.0$ m → 4 hinges needed.
(MS 102-020808960)

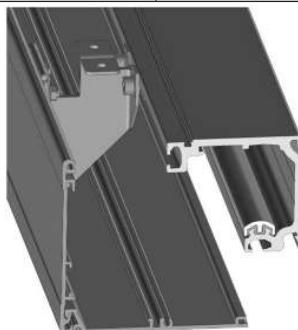
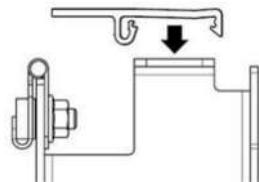
Fixing principle – casing illustrated in closed position



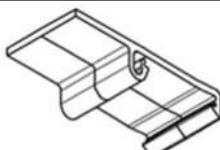
Casing brackets D-STA / E-STA

Fix casing brackets left and right of the track support profile

Slide in or clip on attachment aid clip onto the casing bracket



Clip assembly aid 102-020110135



NOTICE

Attachment aid clips 102-020110135 prevent the casing from slipping out backwards while opening, as long as fixing bolts 102-109380 are not yet firmly screwed in.
Additionally, they hold cables in place.

6.7.1 Side cover for drive height 108 / 150 mm

**NOTICE**

For single caps, the logos have to be ordered separately.

**NOTICE**

Prepare attachment holes and cable routing before mounting the casing.

Operator casings are delivered in overlength - adapt if necessary to the conditions on site.

Type of side caps	Door type	Mounting set
108 x 157 mm, plastic (standard), without cladding	STA	102-020808951
108 x 194 mm, plastic (standard), with cladding	STA	102-020808952
150 x 157 mm, plastic (standard), without cladding	STA	102-020808955
150 x 194 mm, plastic (standard), with cladding	STA	102-020808956

Type of side caps	Door type	Single side caps
108 x 157 mm, plastic (with logo), without cladding	STA	102-020110815
108 x 157 mm, alu raw (without logo), without cladding	STA	102-020110823
108 x 194 mm, plastic (with logo), with cladding	STA	102-020110816
108 x 194 mm, alu raw (without logo), with cladding	STA	102-020110824
150 x 157 mm, plastic (with logo), without cladding	STA	102-020110819
150 x 157 mm, alu raw (without logo), without cladding	STA	102-020110827
150 x 194 mm, plastic (with logo), with cladding	STA	102-020110820
150 x 194 mm, alu raw (without logo), with cladding	STA	102-020110828

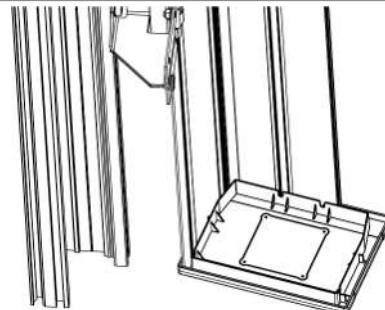
Side caps

If applicable, screw side caps onto casing. According to circumstances, this step can take place before mounting the casing.

Casing edge is covered by side cap.

Position casing onto the cladding.

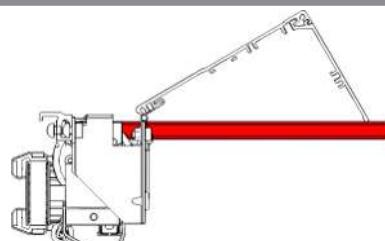
Close casing and check for alignment.



6.8 Installation of holding bar on the casing

Holding bar

The holding bar for the operator casing is contained in MS 102-020809004 Casing brackets / holding bar.



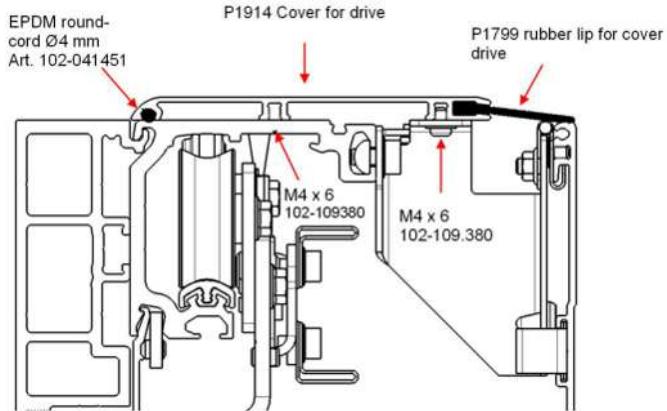
6 Operator casing 108 / 150 mm

6.9 Upper casing



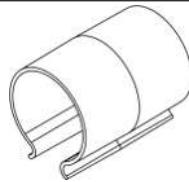
NOTICE

It is recommended, to provide the upper casing over the whole length of the drive.



6.10 Document-holder

Position the document-holder at the most appropriate place (free spot in the operator with minimum length of 22 to 30 cm).



7 Operator casing 200 mm

7.1 Preparing casing profiles



NOTICE

Make sure that no metal dust gets into the drive during drilling.

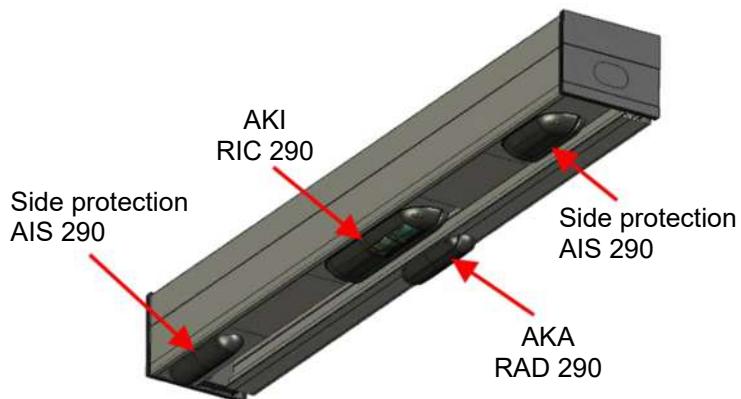


NOTICE

Prepare necessary cut-outs / drill holes at the factory.

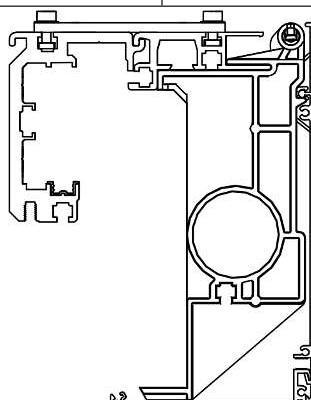
The appropriate templates are delivered together with the sensors.

Example: Sensors 290 (if available)



7.2 Swing-up casing STA 200 mm

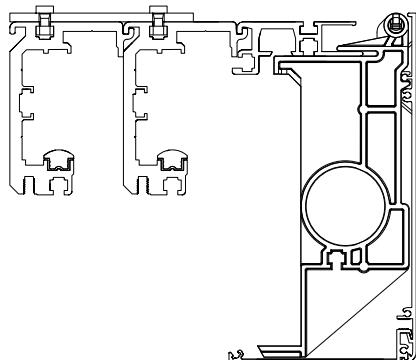
MS casing brackets / holding bar	102-020808471
Additional material needed for casings longer than: $F = 2900 \text{ mm}$	102-016007000
2x MS casing brackets	



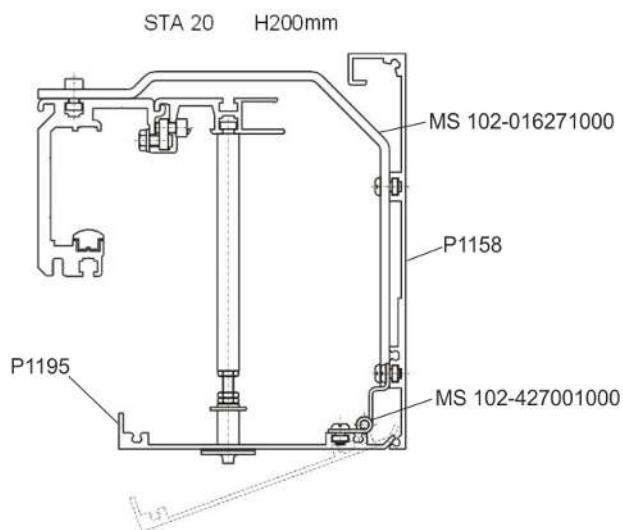
7 Operator casing 200 mm

7.3 Swing-up casing TSA 200 mm

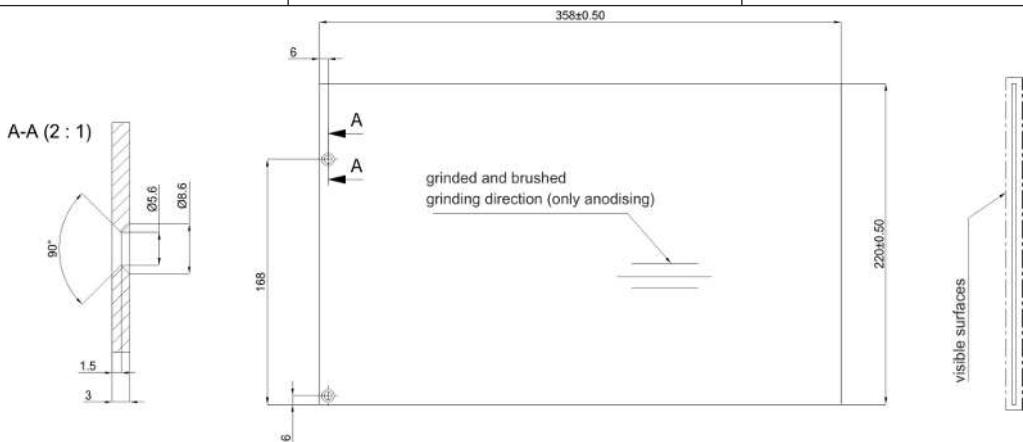
MS casing brackets / holding bar	102-020809004
Additional material needed for casings longer than: $F = 2900 \text{ mm}$	102-016007000
2x MS casing brackets	



7.4 Swing-down casing 200 mm

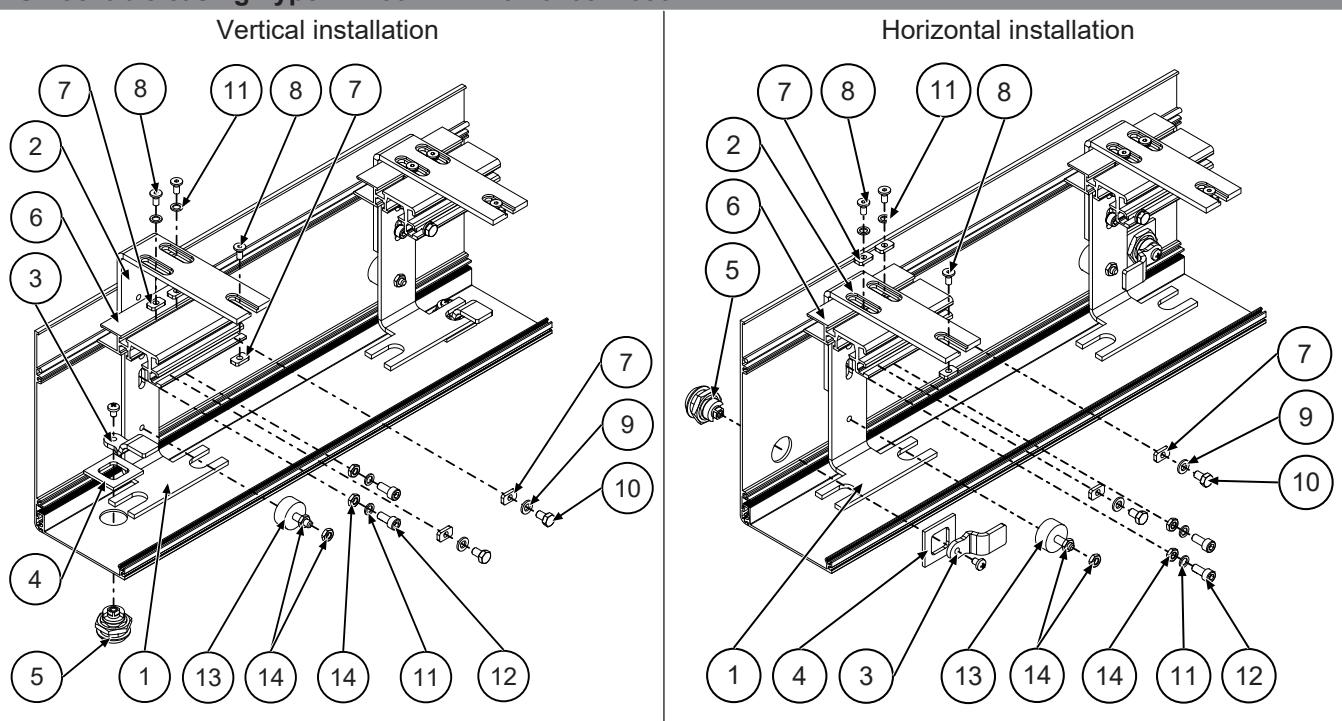


Side panel	358 x 220 mm	102-016220014
Variant	L = without cover	L = with cover
STA	177 mm	212 mm
TSA 4	242 mm	277 mm
TSA 6	323 mm	358 mm



7.5 MS Lockable casing Type 2 200 mm

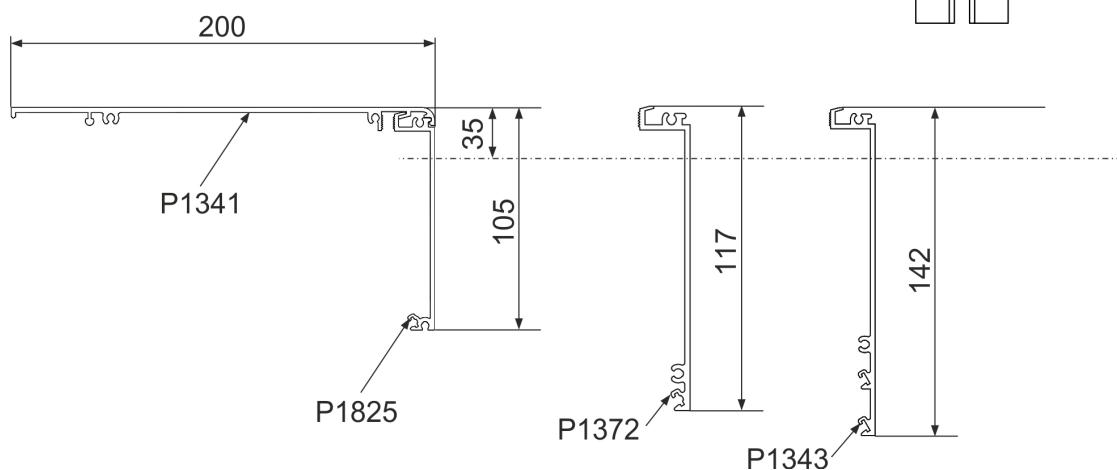
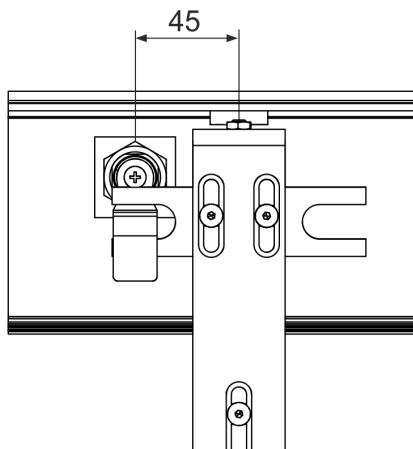
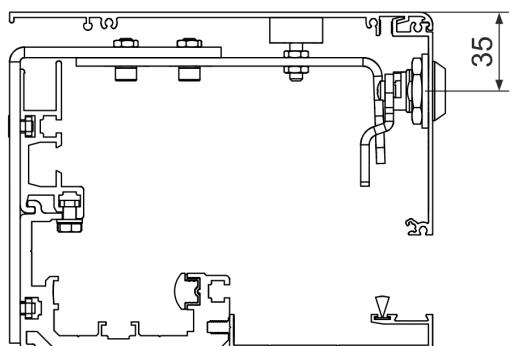
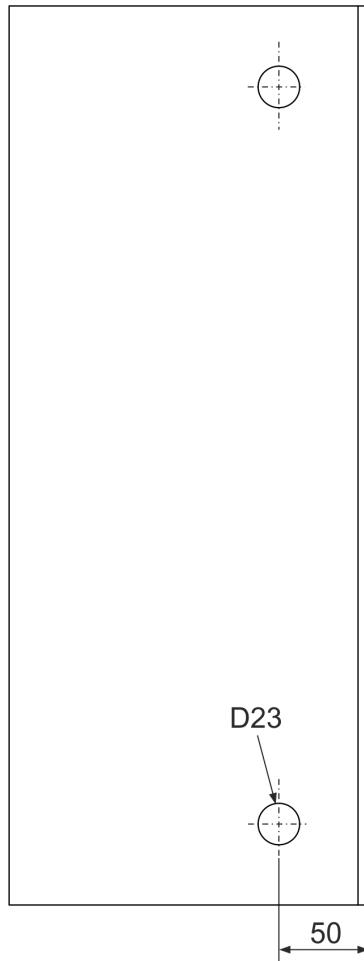
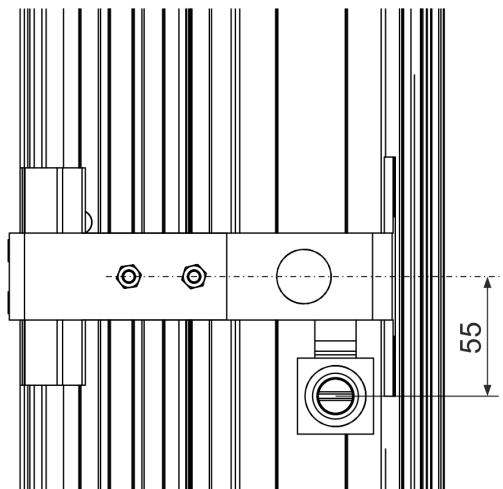
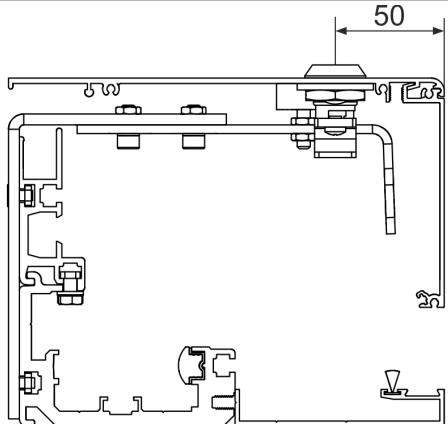
MS Lockable casing Type 2 / 200 mm / 102-020811030



Item	Article No.	Description
1	102-020114990	Locking sheet 200
2	102-016008002	Reinforcement bracket
3	102-114808	Locking sheet for turning lock
4	102-020128078	Locking plate rotary latch
5	102-114809	Turning lock
6	102-016000027	Module support 100 P1303
7	102-012000033	Nut
8	102-080113	SKT HD SV M6x10
9	102-080720	FLAT WASH ISO7089 VP M6
10	102-080600	HEX HD ISO4017 VP M6x10
11	102-080823	Ribbed lock washer BN792 MV M6
12	102-080026	SKT HD ISO4762 VP M6x14
13	102-032141	Round buffer
14	102-080673	HEX NUT ISO4035 VP M6x0.5d
15	102-020115019	Instructions Lockable casing Typ2 200

7 Operator casing 200 mm

Dimensions Lockable casing Type 2 200 mm



7.6 Installing operator casing for drive height 200 mm



NOTICE

If the F dimension is > 3.5 m two more multi-carriers are required to support the casing (total of 4).

MS 102-016007000



7.6.1 Install casing

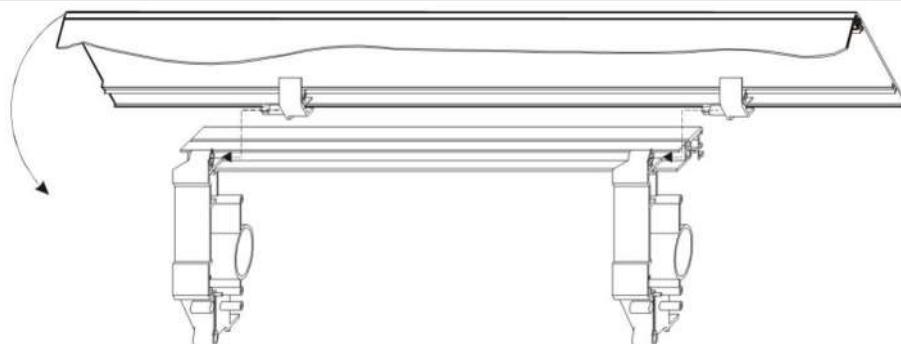
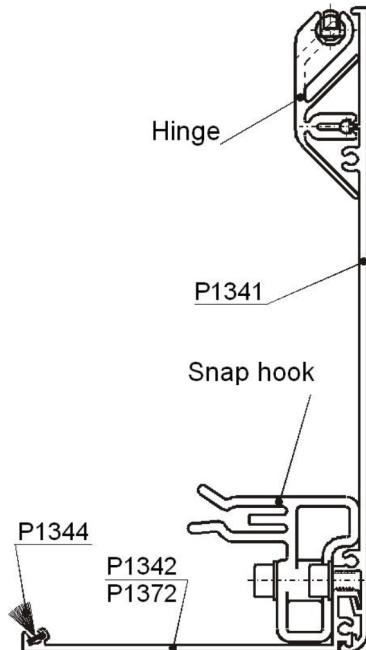
Installation of the casing

Cut casing to length, screw together, insert snap hook and brush seal P1344.

Insert white hinge part in casing P1341.

Slide in casing and snap.

Align casing.



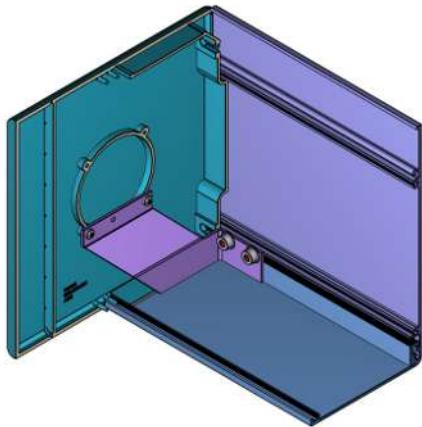
If applicable, install side caps.

Close casing and check for correct position.

7 Operator casing 200 mm

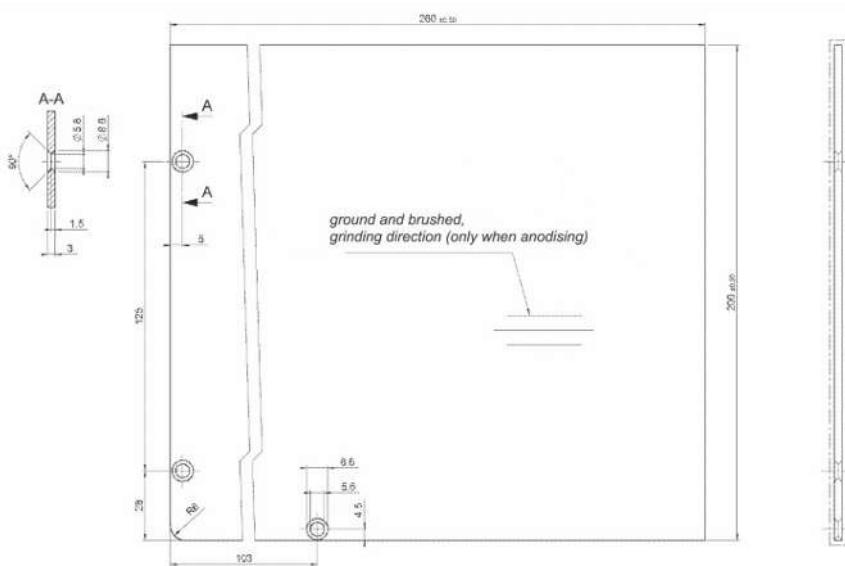
7.6.2 Side cover for drive height 200 mm

Type of side cover	Door type	Mounting set
200 x 194 mm, plastic (standard)	STA	102-020808971
200 x 259 mm, plastic (standard)	TSA	102-020808972



7.6.3 Side panel

Side plate	260 x 200 mm	102-016004005
Variant	L = without cover	L = with cover
STA	159 mm	194 mm
TSA 4	224 mm	260 mm



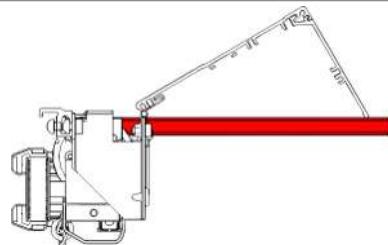
Side plate	340 x 200 mm	102-016220013
Variant	L = without cover	L = with cover
TSA 6 20	295	330
TSA 3 30	305	340

The technical drawing shows a side view of the operator casing. Key dimensions include a total width of 340 max., a height of 200+0.50, and a thickness of 103 mm. A callout labeled 'A-A (2 : 1)' provides a detailed view of a corner, showing a radius of 1.5 and a grinding direction indicated by a line with arrows. Another callout shows a vertical section with a width of 8.6 and a height of 5.6. Labels 'grinded and brushed' and 'visible surfaces' are present.

7.7 Installation of holding bar on the casing

Holding bar

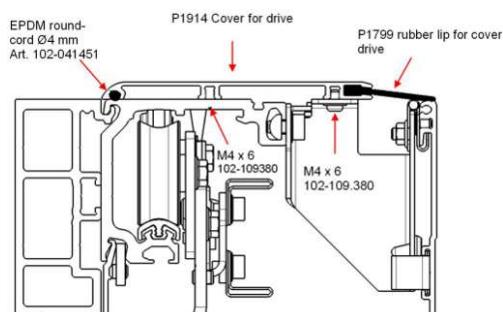
The holding bar for the operator casing is contained in MS 102-020809004 Casing brackets / holding bar.



7.8 Upper casing

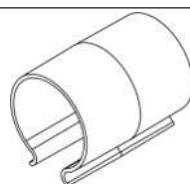
NOTICE

It is recommended, to provide the upper casing over the whole length of the drive.



7.9 Document-holder

Position the document-holder at the most appropriate place (free spot in the operator with minimum length of 22 to 30 cm).



8 Fanlight

8 Fanlight

The basic principle of the fanlight is based on an installation and adaptation on site.

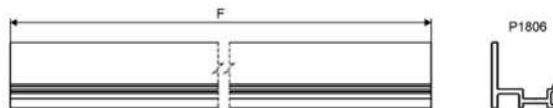


NOTICE

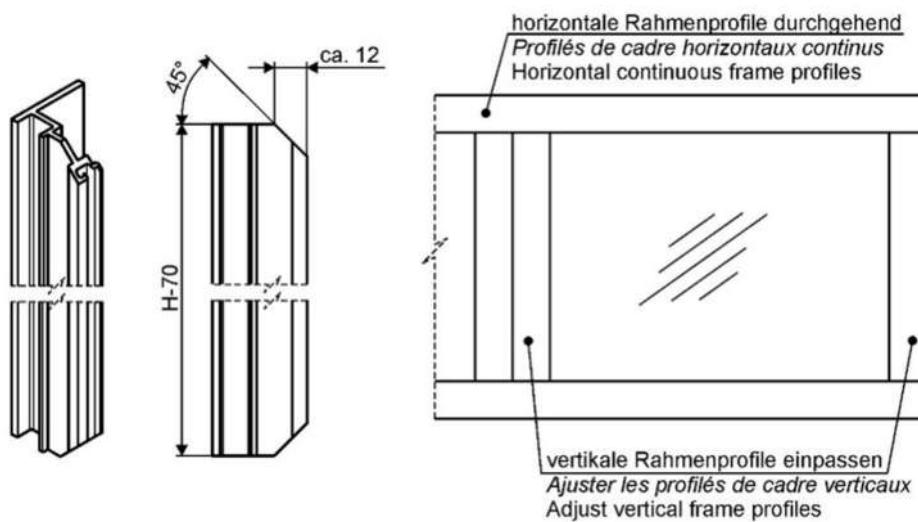
Check the delivered Material and the state of construction before starting the installation!

8.1 Frame profile

Check, measure and if necessary cut the frame profiles according the state of construction.

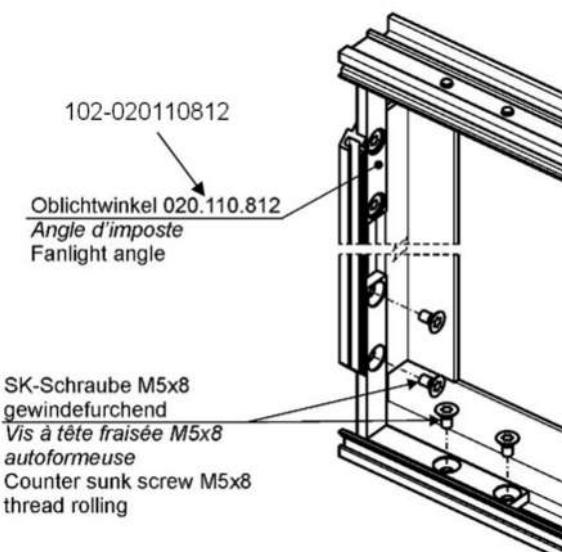


Chamfer all vertical frame profiles on the top and bottom approx. 12x45.



8.2 Corner joints

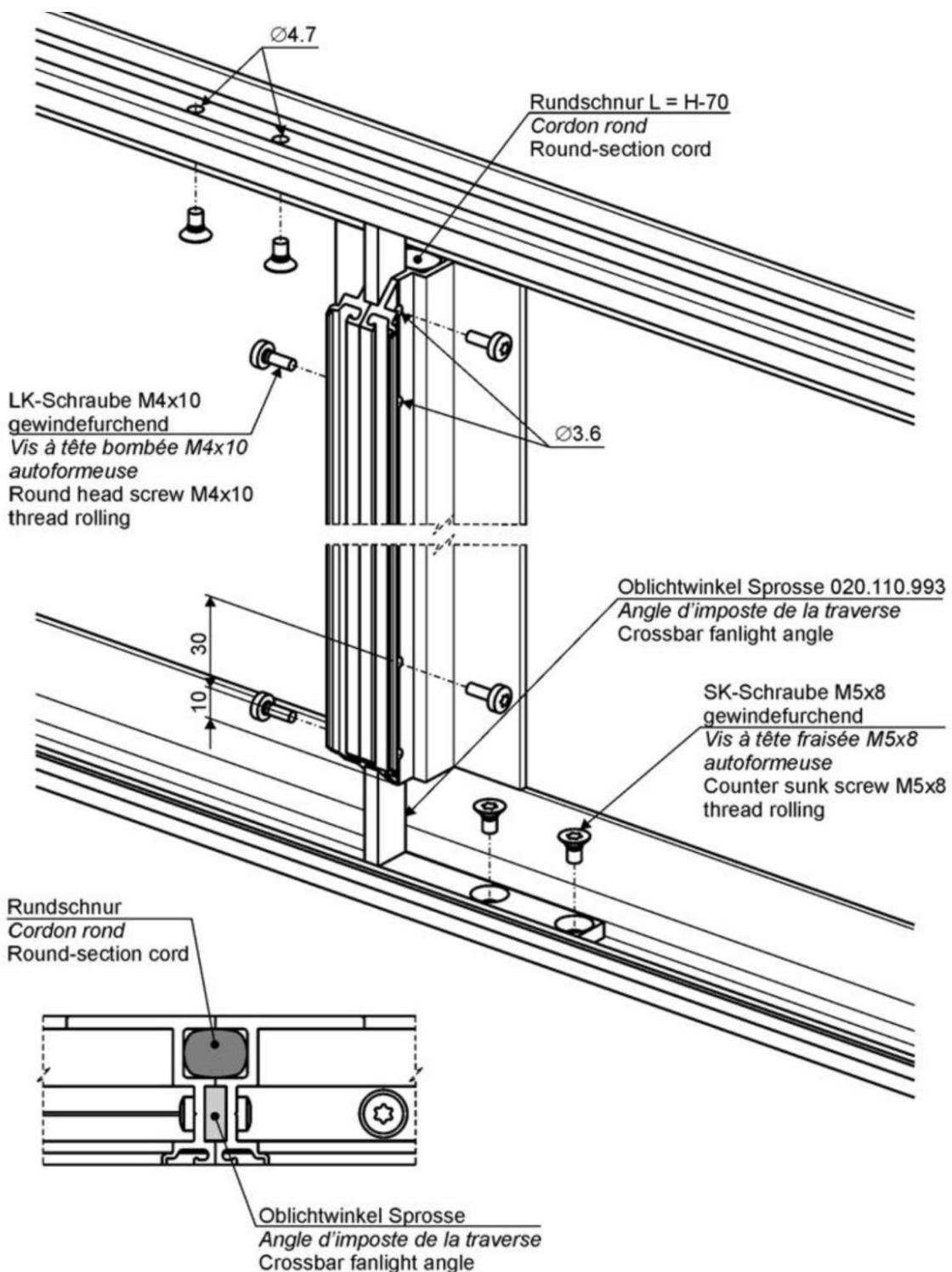
Drill together fanlight angle and profile with Ø 4.7 mm.

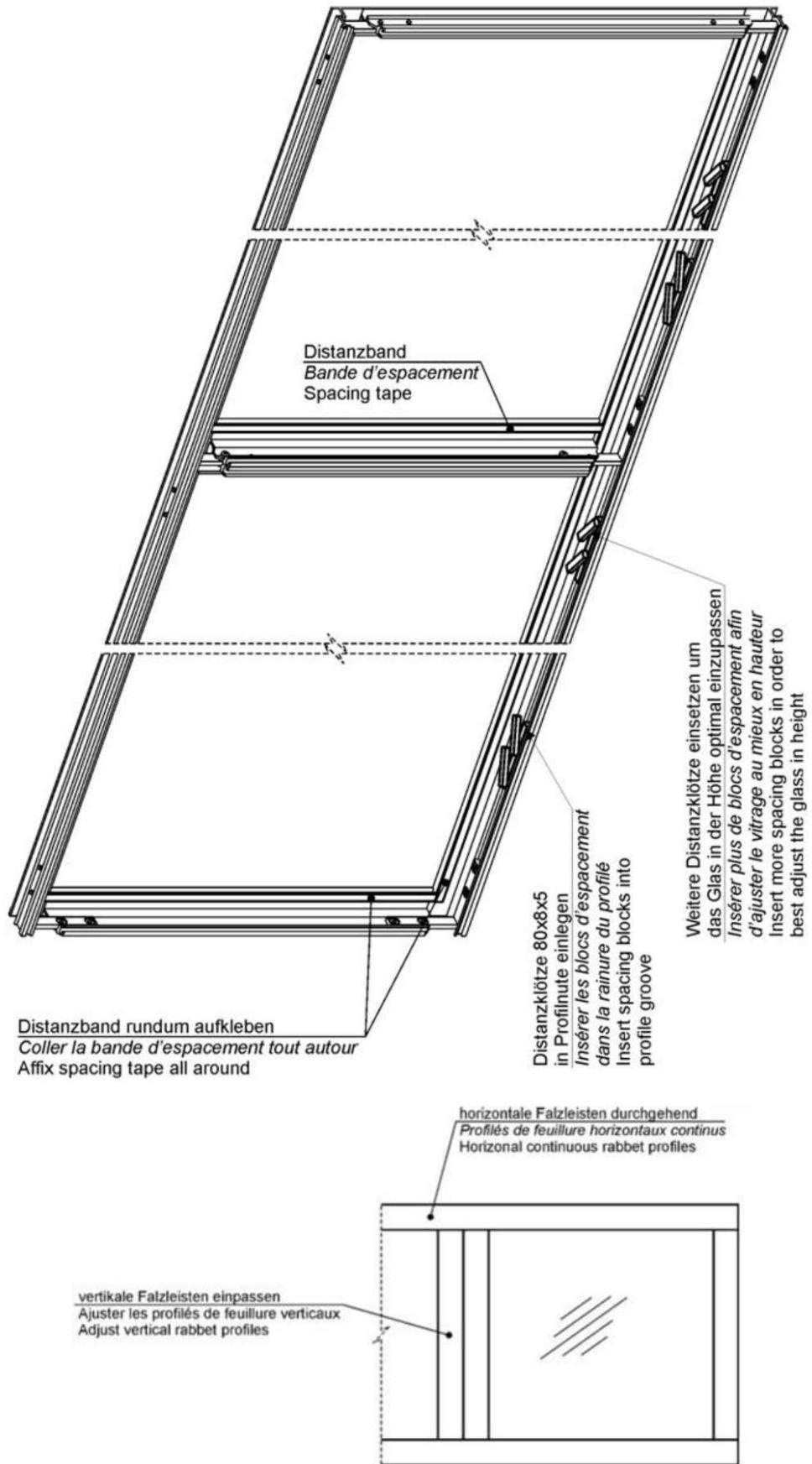


8.3

Installation of cross bar

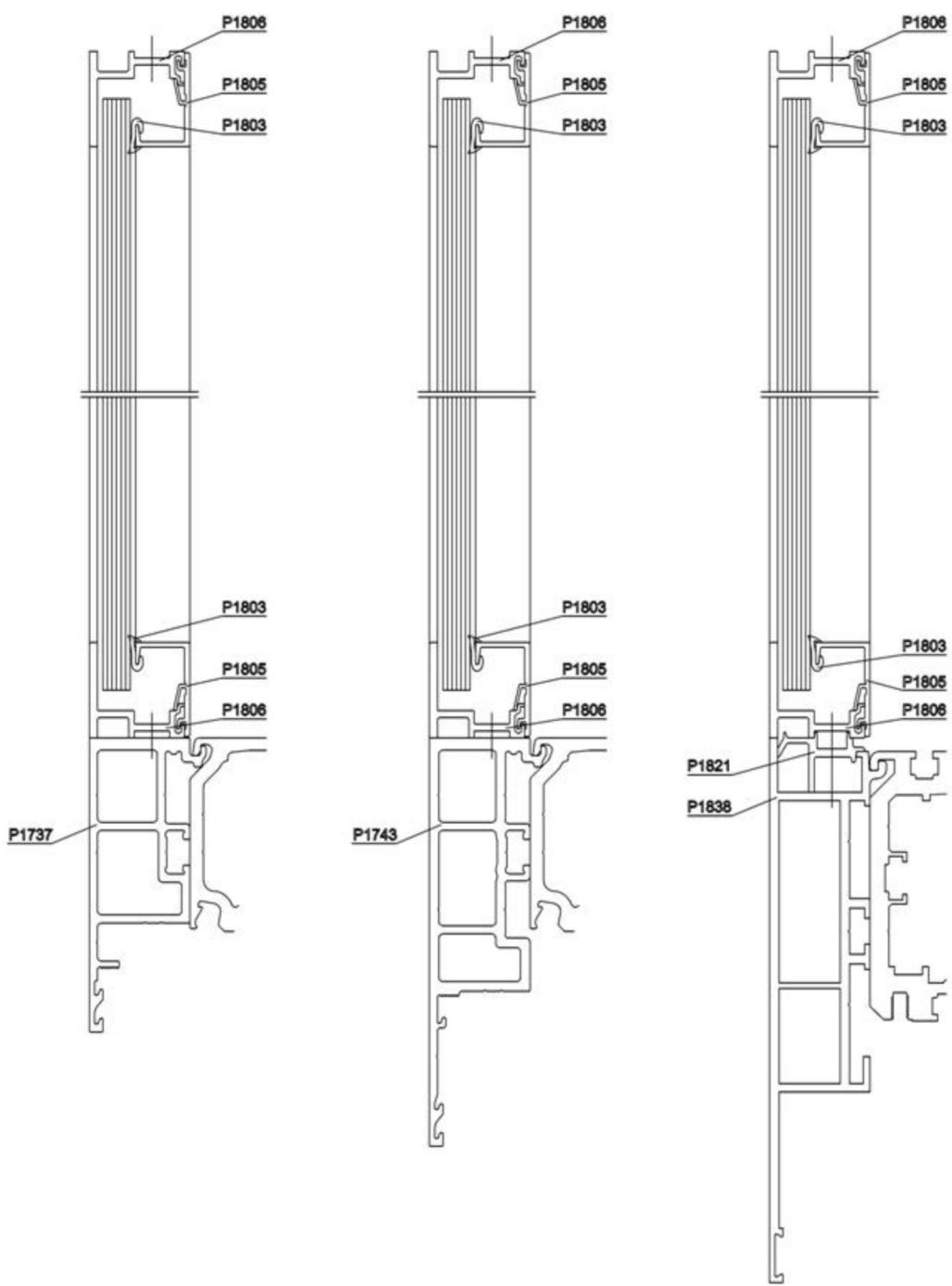
Drill together the crossbar fanlight angle and the frame profile.





Profile system 20 mm

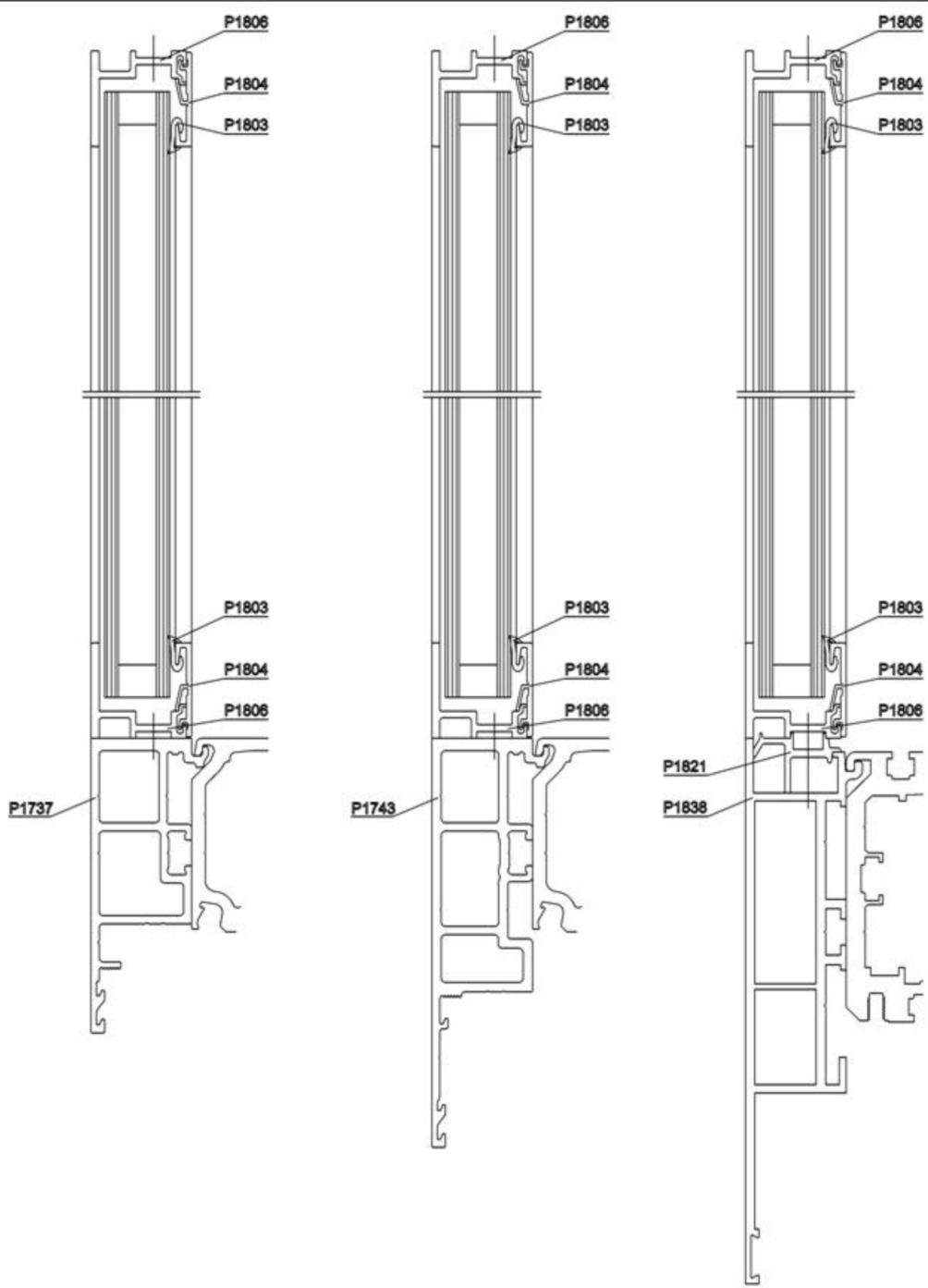
Seal the joints on the outside (horizontal bottom part and vertically) with silicone against rain.



8 Fanlight

Profile system 32 mm

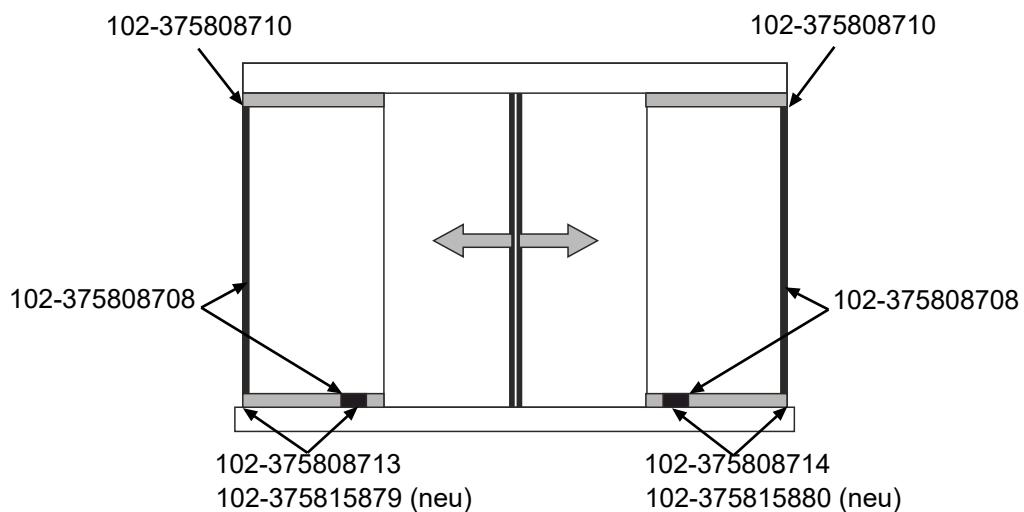
Seal the joints on the outside (horizontal bottom part and vertically) with silicone against rain.



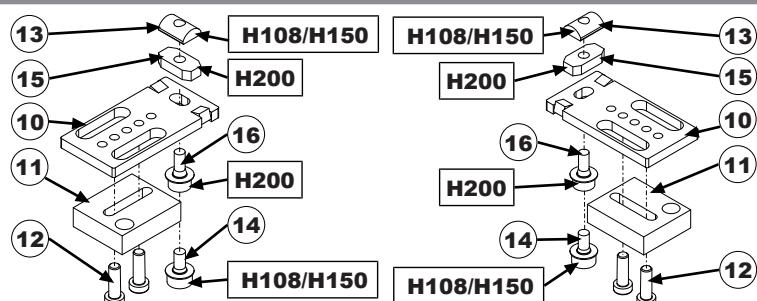
9 Protective screen

9.1 Protective screen for profile systems 20 and 32

9.1.1 Overview of protective leaf components



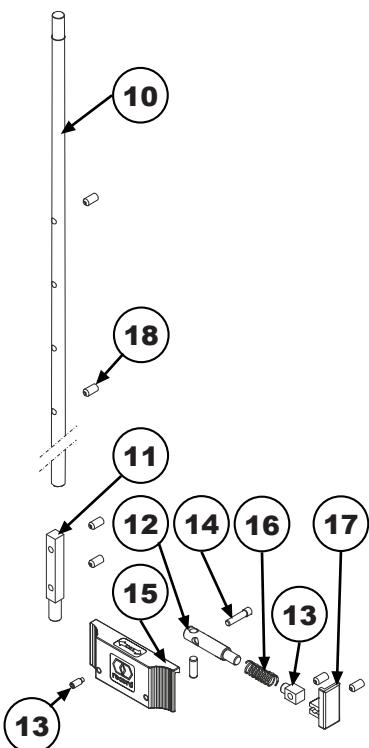
102-375808710 Set wall installation left or right



Item	Qty.	Article No.	Description
10	1	102-020110390	Support protectiv leaf wall mounting
11	1	102-020110389	Bearing part adjustable
12	2	102-031134	Hexagon socket head cap screw with low head DIN7984 SV M5x16
13	1	102-020109289	Slot nut M6
14	1	102-108975	Flange socket head screw BN1392 VP M6x10
15	1	102-011020008	Turn-lock fastener
16	1	102-080025	Flange socket head screw BN1392 VP M6x12

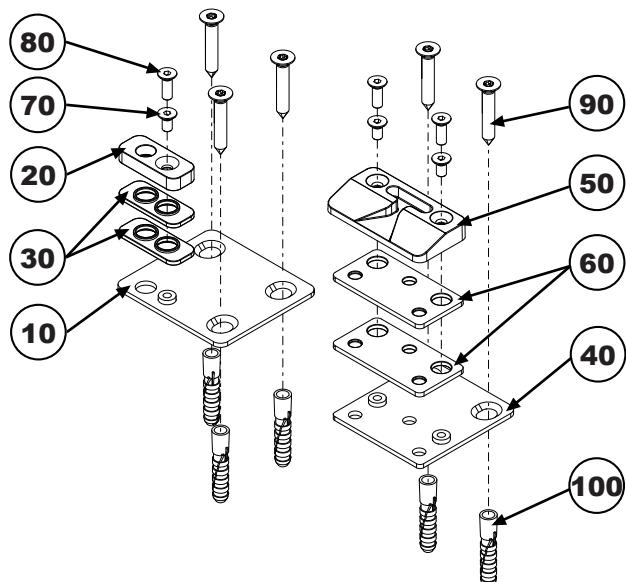
9 Protective screen

102-375808708 MS protective leaf



Item	Qty.	Article No.	Description
10	1	102-375110982	Top axis universal
11	1	102-375109681	Axis below
12	1	102-375808707	Latch preassembled
13	2	102-375109686	Counterholder
14	1	102-375109684	Pin screw
15	1	102-375109679	Slider protective leaf
16	1	102-110282	Pressure spring 0.8x8.8x32.0
17	1	102-375110134	Cover protective leaf left
18	7	102-080245	Socket set screw with cup point DIN916 VP M5x10
19	1	102-114988	Socket set screws with dog point ISO4028 SW M4x10
20	1	102-375110428	Instructions protective leaf left / right

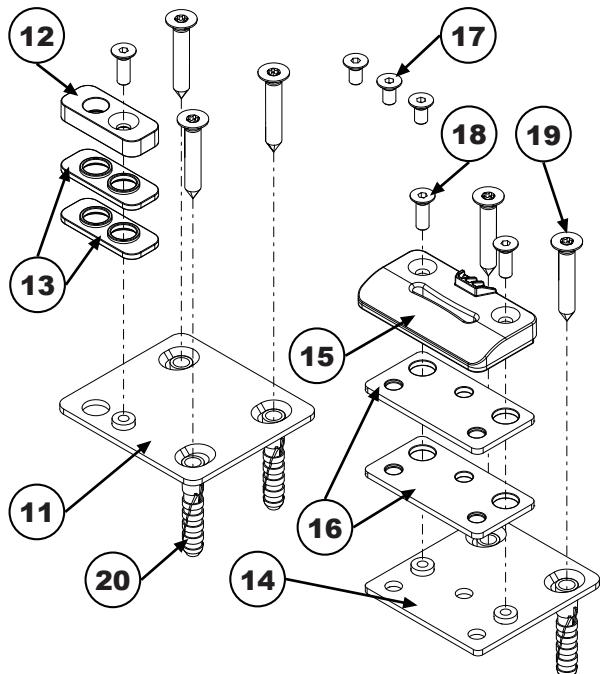
102-375808713 MS universal floor elements left



Item	Qty.	Article No.	Description
10	1	102-375110393	Bearing plate left
20	1	102-375109683	Bearing
30	2	102-375110079	Spacer plate bearing 2mm
40	1	102-375110394	Lock plate
50	1	102-375109677	Lock protective leaf
60	2	102-375110078	Spacer plate lock 2mm
70	3	102-110403	Hexagon socket DIN7991 A2 M4x8 DIN7991 A2 M4x8
80	3	102-110404	Hex socket fl DIN7991 A2 M4x12
90	5	102-110412	Countersunk chipboard screws with hexalobular internal drive BN20224 A2 5x30
100	5	102-081016	Spiral Plug Delta Size 7

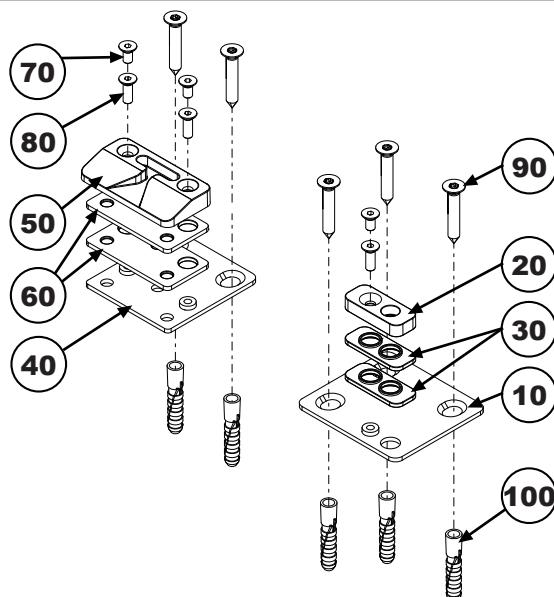
9 Protective screen

102-375815879 MS universal floor elements left (new)



Item	Qty.	Article No.	Description
11	1	102-375110393	Bearing plate left
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-375110394	Lock plate
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110403	Hexagon socket DIN7991 A2 M4x8
18	3	102-110404	Hex socket fl DIN7991 A2 M4x12
19	5	102-110412	Countersunk chipboard screws with hexalobular internal drive BN20224 A2 5x30
20	5	102-081016	Spiral Plug Delta Size 7
21	1	102-375110413	Drilling template bearing plate left 32
22	1	102-375110735	Drilling template lock plate left 32
23	1	102-375110417	Drilling template bearing plate left 20
24	1	102-375110737	Drilling template lock plate left 20

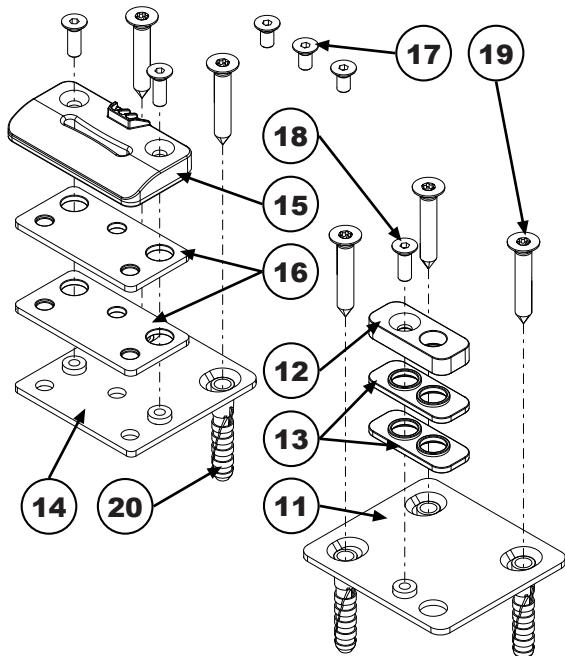
102-375808714 MS universal floor elements right



Item	Qty.	Article No.	Description
10	1	102-375110392	Bearing plate right
20	1	102-375109683	Bearing
30	2	102-375110079	Spacer plate bearing 2mm
40	1	102-375110394	Lock plate
50	1	102-375109677	Lock protective leaf
60	2	102-375110078	Spacer plate lock 2mm
70	3	102-110403	Hexagon socket DIN7991 A2 M4x8
80	3	102-110404	Hex socket fl DIN7991 A2 M4x12
90	5	102-110412	Countersunk chipboard screws with hexalobular internal drive BN50035 A2 D5x30
100	5	102-081016	Spiral Plug Delta Size 7
110	1	102-375110415	Drilling template bearing plate right 32
120	1	102-375110736	Drilling template lock plate right 32
130	1	102-375110419	Drilling template bearing plate right 20
140	1	102-375110738	Drilling template lock plate right 20
150	1	102-110426	Mailing tube D40xL185
160	0	102-053073	TUBULAR FOIL PE 200MM X 600M

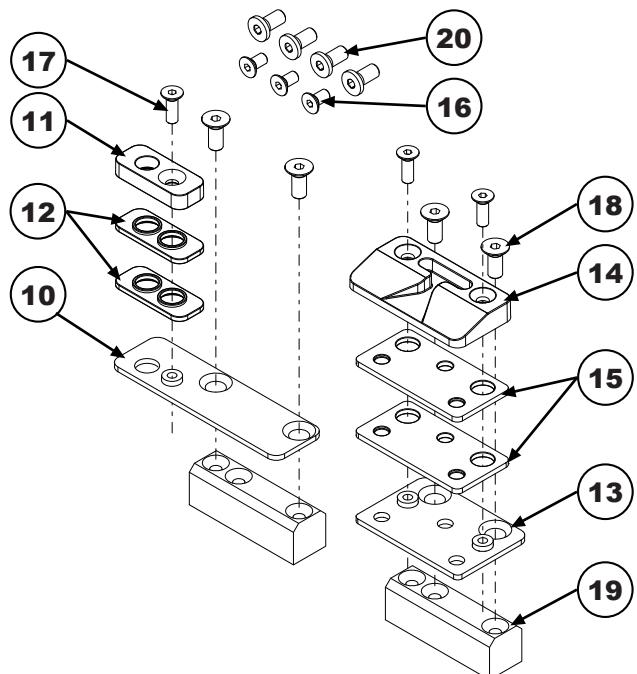
9 Protective screen

102-375815880 MS universal floor elements right (new)



Item	Qty.	Article No.	Description
11	1	102-375110392	Bearing plate right
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-375110394	Lock plate
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110403	Hexagon socket DIN7991 A2 M4x8
18	3	102-110404	Hex socket fl DIN7991 A2 M4x12
19	5	102-110412	Countersunk chipboard screws with hexalobular internal drive BN20224 A2 5x30
20	5	102-081016	Spiral Plug Delta Size 7
21	1	102-375110415	Drilling template bearing plate right 32
22	1	102-375110736	Drilling template lock plate right 32
23	1	102-375110419	Drilling template bearing plate right 20
24	1	102-375110738	Drilling template lock plate right 20

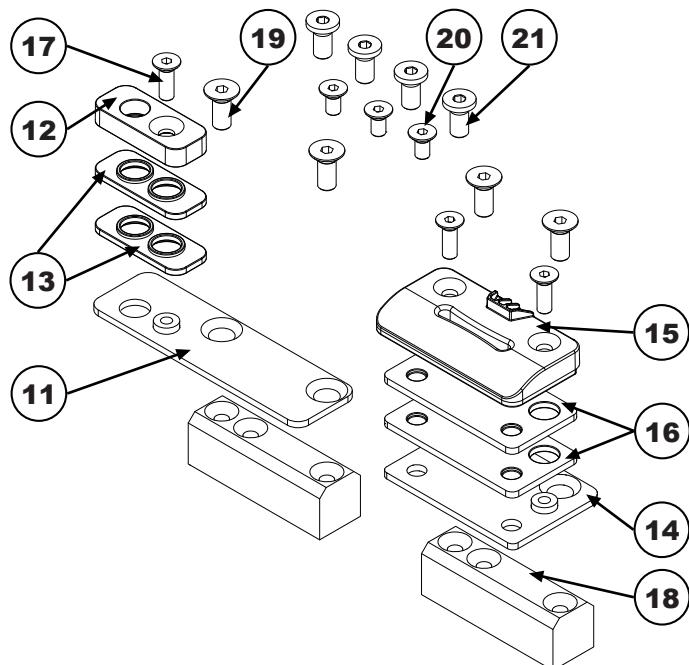
102-375808715 MS set floor elements CH INOX left



Item	Qty.	Article No.	Description
10	1	102-375110395	Bearing plate 32 CH INOX left
11	1	102-375109683	Bearing
12	2	102-375110079	Spacer plate bearing 2mm
13	1	102-375110132	Locking plate 32 CH INOX
14	1	102-375109677	Lock protective leaf
15	2	102-375110078	Spacer plate lock 2mm
16	3	102-110403	Hexagon socket DIN7991 A2 M4x8
17	3	102-110404	Hex socket fl DIN7991 A2 M4x12
18	4	102-110405	Hex socket fl DIN7991 A2 M5x12
19	2	102-375110396	Counterholder
20	4	102-080114	Socket head cap screw with special low head BN1206 VP M5x10

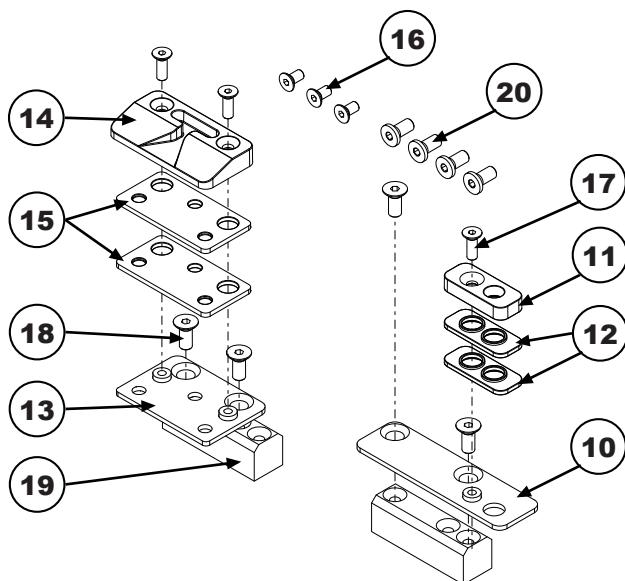
9 Protective screen

102-375815881 MS set floor elements CH INOX left (new)



Item	Qty.	Article No.	Description
11	1	102-375110395	Bearing plate 32 CH INOX left
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-375110132	Locking plate 32 CH INOX
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110404	Hex socket fl DIN7991 A2 M4x12
18	2	102-375110396	Counterholder
19	4	102-110405	Hex socket fl DIN7991 A2 M5x12
20	3	102-110403	Hexagon socket DIN7991 A2 M4x8
21	4	102-080114	Socket head cap screw with special low head BN1206 VP M5x10

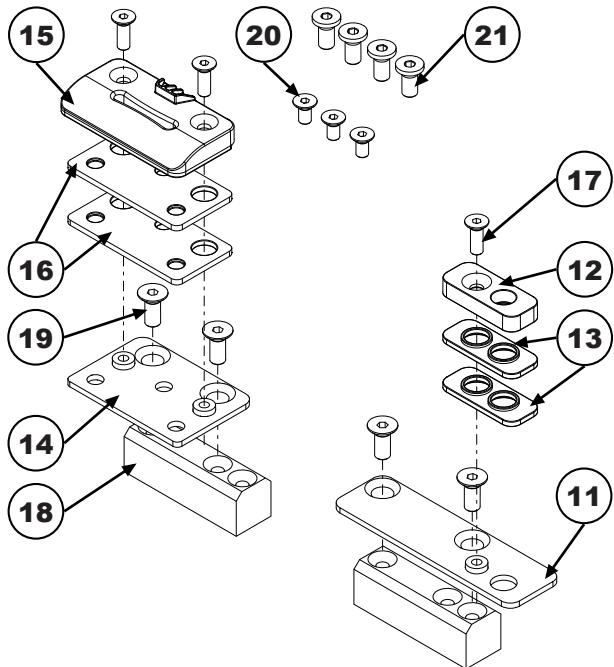
102-375808716 MS set floor elements CH INOX right



Item	Qty.	Article No.	Description
10	1	102-375110131	Support plate 32 CH INOX right
11	1	102-375109683	Bearing
12	2	102-375110079	Spacer plate bearing 2mm
13	1	102-375110132	Locking plate 32 CH INOX
14	1	102-375109677	Lock protective leaf
15	2	102-375110078	Spacer plate lock 2mm
16	3	102-110403	Hexagon socket DIN7991 A2 M4x8
17	3	102-110404	Hex socket fl DIN7991 A2 M4x12
18	4	102-110405	Hex socket fl DIN7991 A2 M5x12
19	2	102-375110396	Counterholder
20	4	102-080114	Socket head cap screw with special low head BN1206 VP M5x10

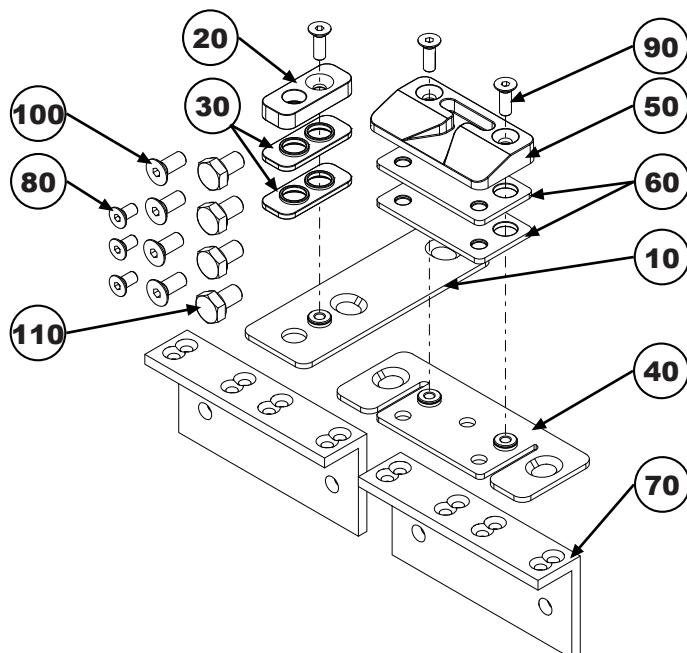
9 Protective screen

102-375815882 MS set floor elements right (new)



Item	Qty.	Article No.	Description
11	1	102-375110131	Support plate 32 CH INOX right
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-375110132	Locking plate 32 CH INOX
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110404	Hex socket fl DIN7991 A2 M4x12
18	2	102-375110396	Counterholder
19	4	102-110405	Hex socket fl DIN7991 A2 M5x12
20	3	102-110403	Hexagon socket DIN7991 A2 M4x8
21	4	102-080114	Socket head cap screw with special low head BN1206 VP M5x10

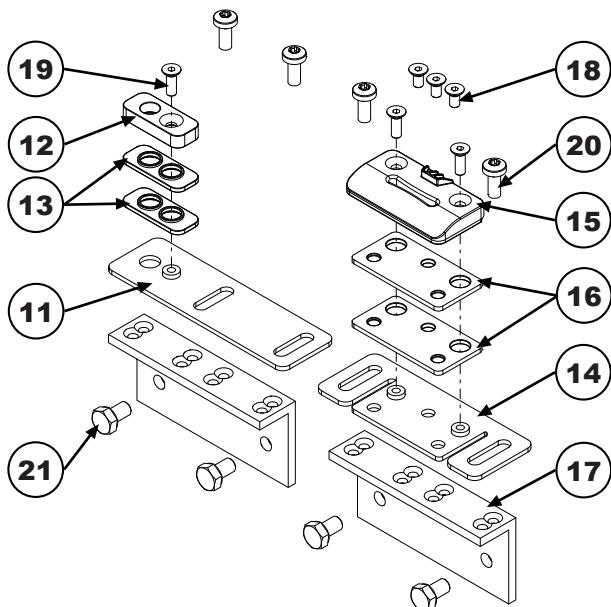
102-375808798 Mounting set floor elements 18er INOX left/right



Item	Qty.	Article No.	Description
10	1	102-375110582	Bearing plate le/ri 18er INOX
20	1	102-375109683	Bearing
30	2	102-375110079	Spacer plate bearing 2mm
40	1	102-375110581	Lock plate left/right 18s INOX
50	1	102-375109677	Lock protective leaf
60	2	102-375110078	Spacer plate lock 2mm
70	2	102-375110583	Base angle left/right 18s INOX
80	3	102-110403	Hexagon socket DIN7991 A2 M4x8
90	3	102-110404	Hex socket fl DIN7991 A2 M4x12
100	4	102-110405	Hex socket fl DIN7991 A2 M5x12
110	4	102-080600	Hex cap screw fully threaded DIN933 VP M6x10
120		102-053073	TUBULAR FOIL PE 200MM X 600M

9 Protective screen

102-375815883 Mounting set floor elements 18er INOX left or right (new)



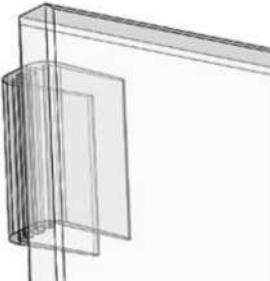
Item	Qty.	Article No.	Description
11	1	102-375126184	Bearing plate le/ri 18er INOX
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-375126185	Locking plate le/ri 18er INOX
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	2	102-375110583	Base angle left/right 18 INOX
18	3	102-110403	Hexagon socket DIN7991 A2 M4x8
19	3	102-110404	Hex socket fl DIN7991 A2 M4x12
20	4	102-126171	Hexalobular socket pan head screw ISO14583 A2 M5x12
21	4	102-080600	Hex cap screw fully threaded DIN933 VP M6x10

9.1.2 Installation procedure

**NOTICE**

Helpful tips about installation variants and adjustment possibilities are mentioned in the detailed instruction sheet which is attached to the mounting set (102-375110428).

Check bearing bolts for correct attachment. Retighten if necessary.

Installation procedure	
Position and fix bearing plate below	Drilling templates Profile system 20 102-375110417 – Floor elements left 102-375110419 – Floor elements right Profile system 32 102-375110413 – Floor elements left 102-375110415 – Floor elements right
Fix bearing above	MS 102-375808710 Bearing wall mounting left/right
Position and align protective screen	
Swivel protective screen onto closed position and set position of locking plate Attach locking plate Observe spacers for height adjustment Adjust lock – bolt must engage perfectly without hindrance!	Drilling templates Profile system 20 102-375110737 – Lock plate left 102-375110738 – Lock plate right Profile system 32 102-375110735 – Lock plate left 102-375110736 – Lock plate right
Place edge protection P1778 (30 mm) on top of the protective screen Prevents sliding leaf from damaging the glass panel Is also available over the whole length of the door leaf	

**NOTICE**

Cut out an approx. 10 mm wide part in the casing underside, so that the casing does not come into contact with the approx. 8 mm wide axle of the protective screen.

9 Protective screen

9.1.3 Self-supporting installation



NOTICE

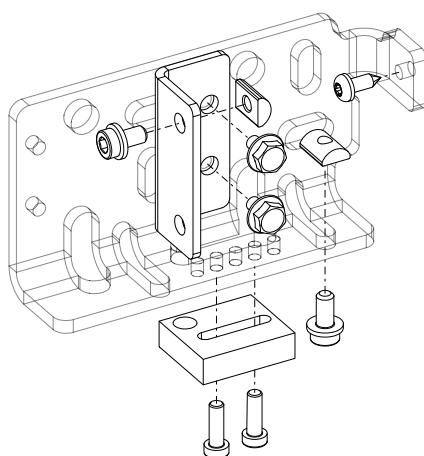
Installation procedure is the same as for a wall installation.

Make sure that the wall is vertical. In case of irregularity, move bearing towards the inside to compensate!

Self-supporting installation

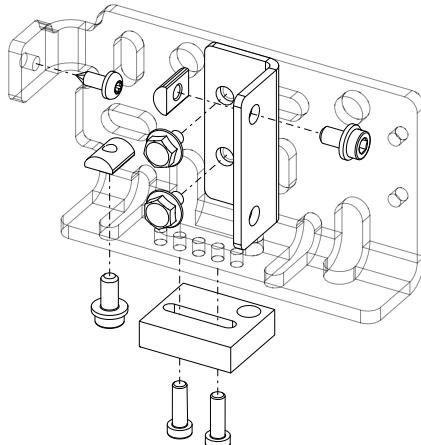
Top bearing – left

MS 102-375808711 with wall bracket



Top bearing – right

MS 102-375808712 with wall bracket



Bearing and lock elements for INOX floor track (Type A1 – H1)

MS floor elements CH INOX left
102-375808715

MS floor elements CH INOX right
102-375808716

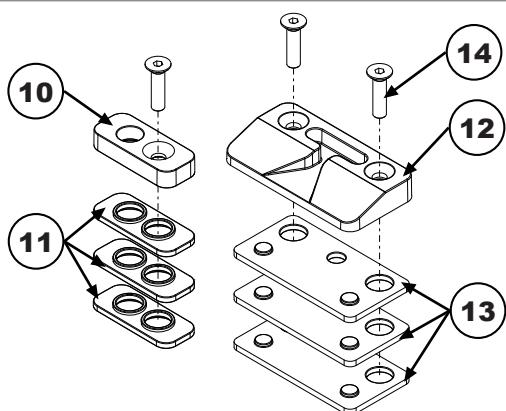
Bearing and lock elements for 18 INOX floor track

MS floor elements 18 INOX le/ri
102-375808798

9.2 Protective screen for profile system 38

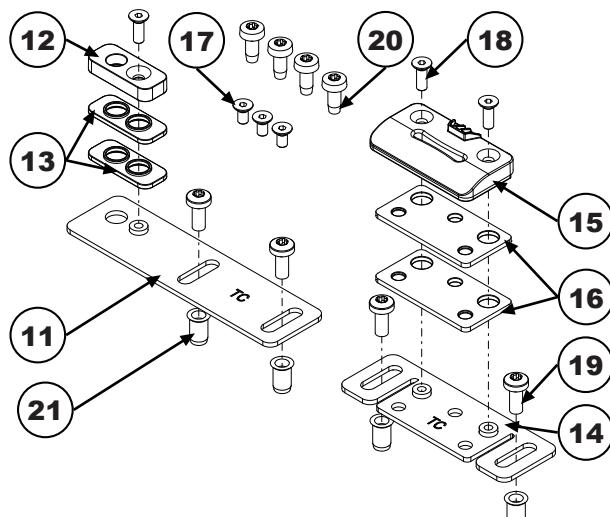
9.2.1 Overview of protective leaf components

102-376811012 Set Floor elements right + left



Item	Qty.	Article No.	Description
10	1	102-375109683	Bearing
11	3	102-375110079	Spacer plate bearing 2mm
12	1	102-375109677	Lock protective leaf
13	3	102-375110078	Spacer plate lock 2mm
14	3	102-080415	Hex socket fl DIN7991 VP M4x16

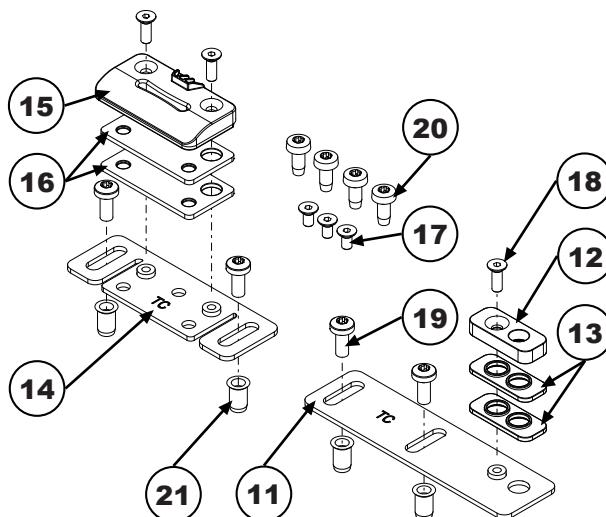
102-376815890 MS set floor elements TC3 left (new)



Item	Qty.	Article No.	Description
11	1	102-376125782	Bearing plate left TC
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-376125779	Locking plate right/left TC
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110403	Hexagon socket DIN7991 A2 M4x8
18	3	102-110404	Hex socket fl DIN7991 A2 M4x12
19	4	102-126171	Hexalobular socket pan head screw ISO14583 A2 M5x12
20	4	102-124832	Hexalobular pan head thread forming screw DIN7500C A2 M5x12
21	4	102-126267	Blind rivet nuts Tubtara A2 M5

9 Protective screen

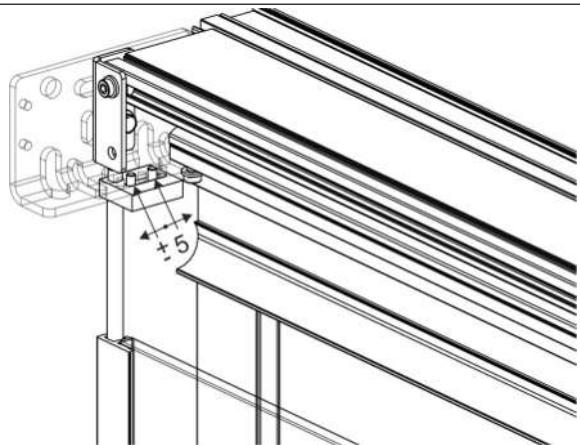
102-376815891 MS set floor elements TC3 right (new)



Item	Qty.	Article No.	Description
11	1	102-376125786	Bearing plate right TC
12	1	102-375109683	Bearing
13	2	102-375110079	Spacer plate bearing 2mm
14	1	102-376125779	Locking plate right/left TC
15	1	102-375123013	Counter piece locking bar
16	2	102-375110078	Spacer plate lock 2mm
17	3	102-110403	SK I-6kt DIN7991 A2 M4x8
18	3	102-110404	Hexagon socket DIN7991 A2 M4x8
19	4	102-126171	Hexalobular socket pan head screw ISO14583 A2 M5x12
20	4	102-124832	Hexalobular pan head thread forming screw DIN7500C A2 M5x12
21	4	102-126267	Blind rivet nuts Tubtara A2 M5

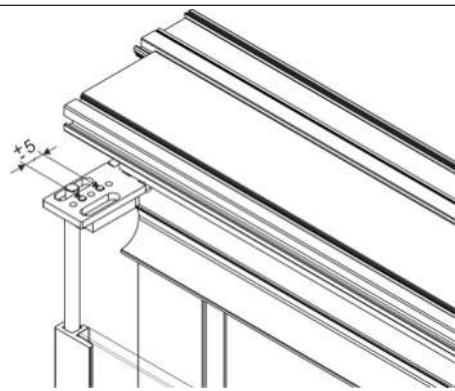
9.2.2 Self supporting installation

Use the specified thread center.



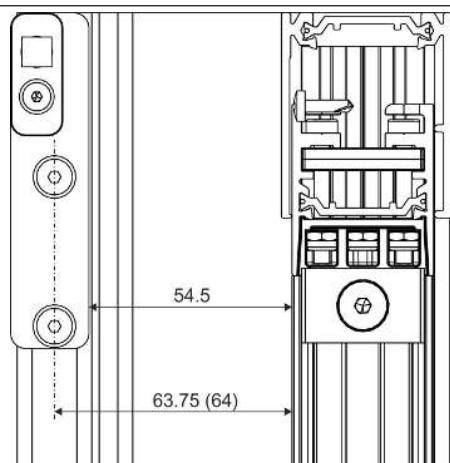
9.2.3 Wall mounting

Use the specified thread center.

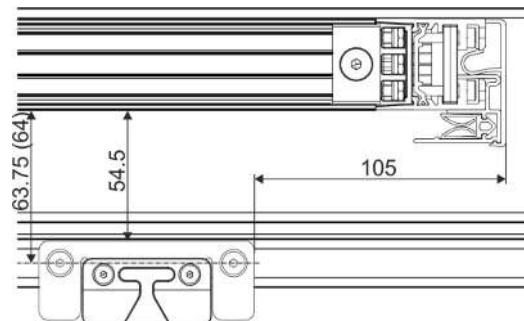
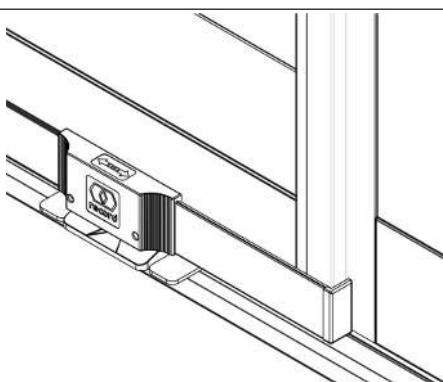


9.2.4 Floor parts and lock

Floor parts



Lock



10 Installation IoT Gateway 2.0

10 Installation IoT Gateway 2.0

10.1 Jumper setting



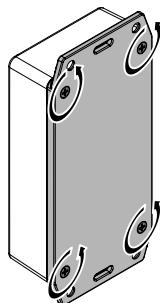
CAUTION

Damage to circuit board!

There is the risk that the circuit board is being damaged if the jumpers are placed incorrectly when powered on.

- Verify that the jumpers are placed correctly.

- Open the IoT Gateway 2.0 by removing the four screws and removing the bottom plate.



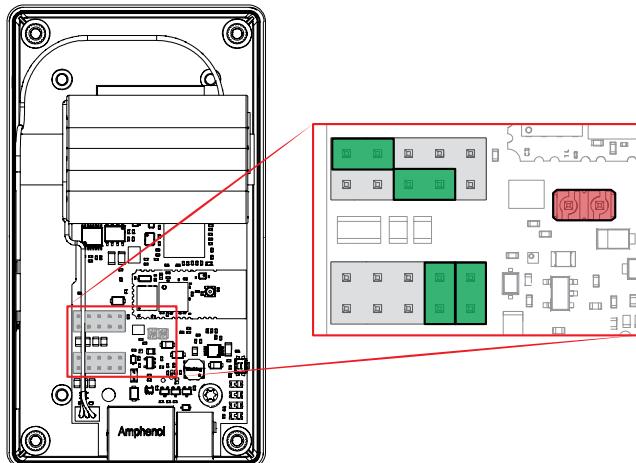
- Place the jumpers according to illustration.



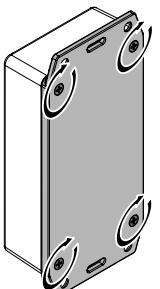
Place jumpers here.



Verify that there is **no** jumper here.



- Attach the bottom plate and fix it with the 4 screws.



10.2 Pairing and configuring IoT Gateway 2.0 with Insight

1. Go to <https://insight.assaabloyentrance.com/login> and login.
2. Click on “Pair equipment”.

The screenshot shows the 'Equipment Overview' section of the Insight platform. On the left is a sidebar with 'Equipment' selected. The main area displays a search bar and a table header with columns for 'Name/ID', 'Model', 'Customer/Location', and 'Address'. A red box highlights the 'Pair Equipment' button in the top right corner of the main area.

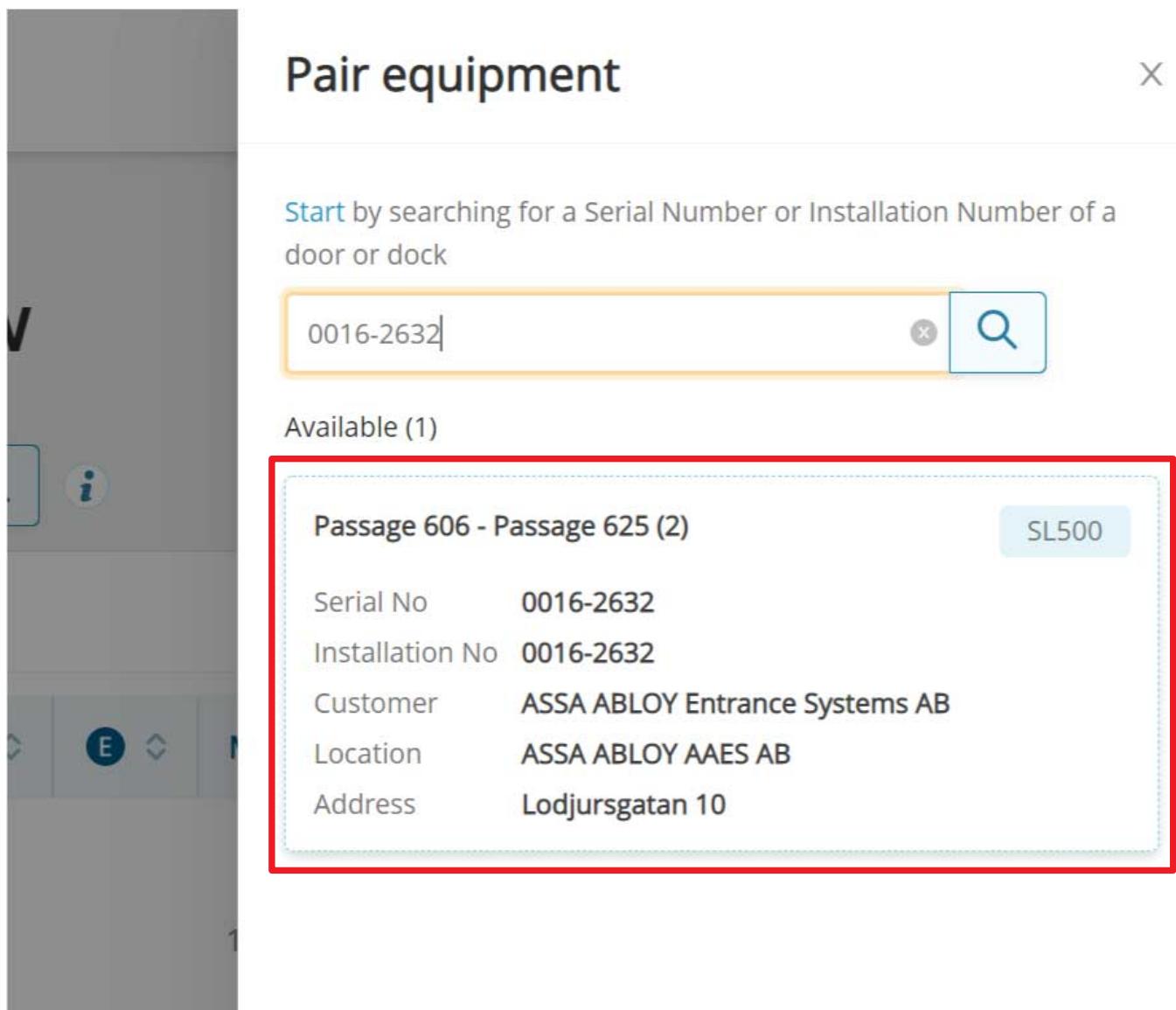
3. Find the serial number of your door on the product label, and enter it into Insight to search for your door.



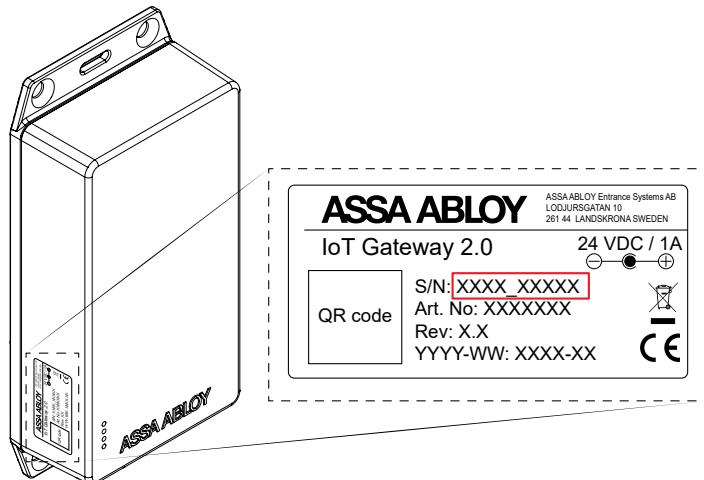
The screenshot shows the 'Equipment Overview' section of the Insight platform. The left sidebar has 'Equipment' selected. The main area shows a search bar with the placeholder 'Start by searching for a Serial Number or Installation Number of a door or dock'. Below the search bar is a text input field with the placeholder 'Type in at least 5 characters' and a magnifying glass icon. A red box highlights the search input field.

10 Installation IoT Gateway 2.0

4. Select your door.



- Enter the serial number of your IoT Gateway 2.0 unit, found on the label on the IoT Gateway 2.0 unit (for example ES01_00000).



Pair equipment

← Back

Passage 606 - Passage 625 (2) SL500

Serial No 0016-2632
Installation No 0016-2632
Customer ASSA ABLOY Entrance Systems AB
Location ASSA ABLOY AAES AB
Address Lodjursgatan 10

Type IoT ID

Pair

The 'Type IoT ID' input field is highlighted with a red border.

10 Installation IoT Gateway 2.0

6. Configure the door.

Pair equipment

Back

Paired

950Landskrona 1042P

Serial No: idnr950
Installation No: idnr950
IoT ID: E801_00000
Control System: 950D-1142
Customer: IoT device test
Location: ASSA ABLOY Entrance Systems
Address: Lodjursgatan 10

Total door cycles at next service: 0

Select physical hardware installed on the equipment (if applicable, the selected hardware will be shown in Operations View):
 Lock
 Vehicle
 Leveler
 Shelter

Enable Remote Features
Caution: Additional safety equipment must be installed on the door before enabling the remote control functions. Please make an ocular inspection to verify that this safety equipment is in place.
Extra safety equipment can be: Photocell
By checking the box below, you are verifying that you have done an ocular inspection and confirmed that the extra safety equipment is installed on the equipment.
The door has the required extra safety equipment. Remote Control will be enabled when the box is checked.
 Accept Enable

Save

7. Door connected.

Insight

User Name: UN
User Role: UN

Equipment Overview

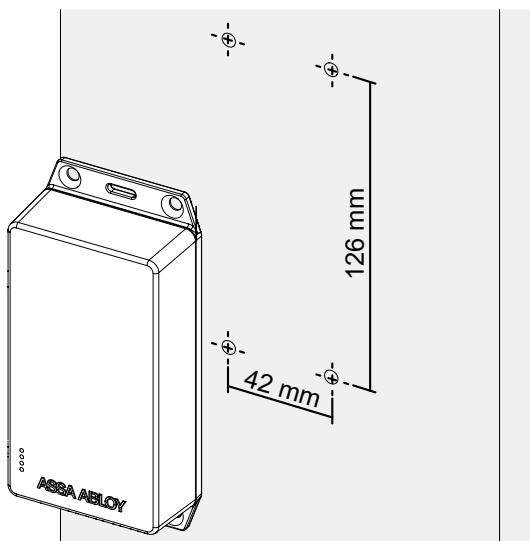
50 of 788 items

Search

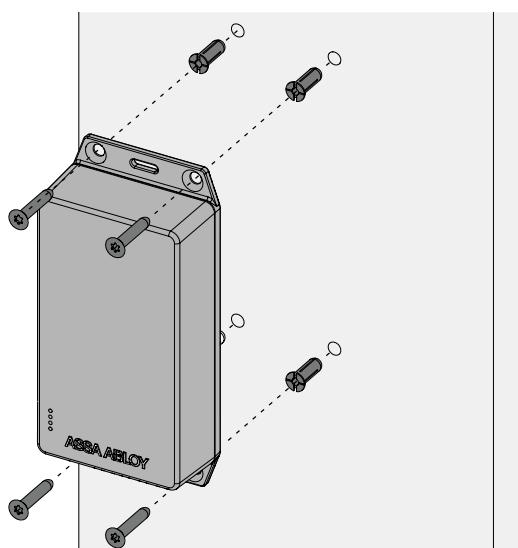
Name/ID	Model	Customer/Location	Address
Name 000-00000 / 000000	Model	Customer name Customer Location	Customer Address
Name 000-00000 / 000000	Model	Customer name Customer Location	Customer Address
Name 000-00000 / 000000	Model	Customer name Customer Location	Customer Address
Name 000-00000 / 000000	Model	Customer name Customer Location	Customer Address

10.3 Fixing

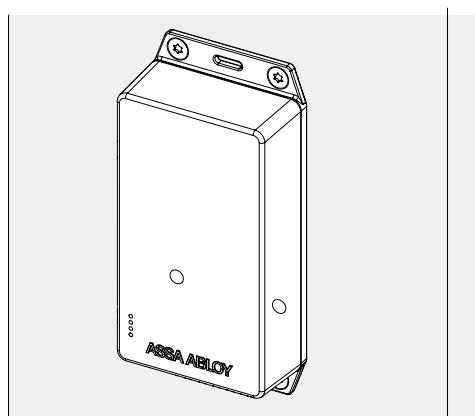
1. Choose an appropriate place with good signal quality to fix the IoT Gateway 2.0 unit on.
2. Prepare the hole pattern where the IoT Gateway 2.0 unit shall be fixed.



3. Fix the IoT Gateway 2.0 unit properly, based on what surface you fix it to.



4. IoT Gateway 2.0 unit fully fixed.



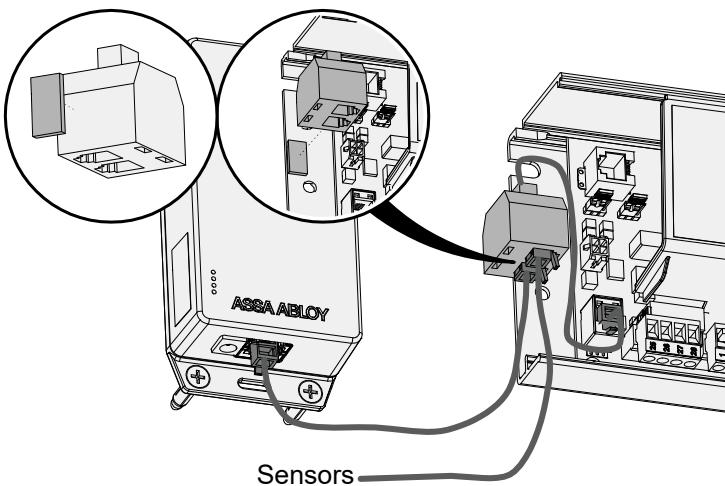
10 Installation IoT Gateway 2.0

10.4 Connection

NOTICE

Make sure to fix the cable securely to the wall.

1. Attach the RJ10 splitter (1704765) to the beam with the dual lock tape.
2. Connect the RJ10 splitter to the control unit at connection point J8
3. Connect the sensor(s) (if applicable) to one of the inputs in the RJ10 splitter.
4. Connect the IoT Gateway 2.0 to a free input in the RJ10 splitter.



10.5 IoT Gateway 2.0 LED indication table

LED	LED description	
Steady green LED	Power to the IoT Gateway 2.0 unit.	
Flashing yellow LED, 0.5 s ON then 0.5 s OFF	Firmware upgrade in progress. Do not remove power to the IoT Gateway 2.0.	
Flashing yellow LED, 1 flash every 5 s	Searching for cellular network.	
Flashing yellow LED, 2 flash every 5 s	Connected to cellular network.	
Flashing yellow LED, 3 flash every 5 s	Not paired to door in Insight. See <i>Pairing and configuring IoT Gateway 2.0 with Insight</i> [▶ 101].	
Steady yellow LED	Everything is OK. Connected to the cloud.	
Flashing red LED, 5 flashes every 1 s	Critical system error	Reboot IoT Gateway 2.0 by removing power from the unit, open casing and disconnecting the battery. Reconnect battery and power on. If error persists, replace IoT Gateway 2.0.
Flashing red LED, 1 flash every 1 s	Battery low, modem turned OFF, no connection to the cloud.	Repeated red flashes over long time – replace IoT Gateway 2.0.
Flashing red LED, 2 flash every 5 s	Battery low, delayed transmission from control system.	
Flashing red LED, 3 flash every 5 s	Battery low, no transmission from control system.	



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