



TECHNOLOGY IN MOTION

INSTINCT by MACO

SYSTEM FOLDER – ALIPLAST STAR90
PIVOT DOOR – IN FRAME

instinct^o
by MACO



maco.eu/instinct

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Important information

To assemble and install the INSTINCT by MACO system, you need the following documents:

- › Operating and maintenance instructions
- › System folder for the corresponding door profile
- › Assembly instructions

Operating and maintenance instructions

The operating and maintenance instructions contain important information on project planning, installation, commissioning, operation and maintenance of the INSTINCT by MACO system. This document must be handed over to the client/end user in the course of delivery.

System folder

The system folder contains profile-specific information on the milling and drilling patterns as well as information and notes on cable installation in the profile. In addition, please also note the fabrication guidelines of the profile manufacturer!

Assembly instructions

The assembly instructions contain profile-independent information for correct assembly of the INSTINCT by MACO system. These instructions include the work steps in the factory and the work steps on the construction site.

Profile details and matching components

PROFILE SYSTEM

Installation of the closures:	In the frame profile
Opening direction:	Opens inwards
Tested sash profile:	GT425+GT445 / GT425
Tested frame profile:	GT415 / GT415+GT445

MATCHING COMPONENTS

Matching closures:	Housing shape C - Part No. 501_3_
Matching closure covers:	Part No. 50213_
Recommended screw type(s):	DIN 7982 CT or similar long side: - 2 pieces each 4.8 x 25 (top & bottom) - 1 piece each 4,8 x 50 (above hook) - 1 piece each 4.2 x 60 (through hook) short side: - 2 pieces each 4.8 x 25 (top & bottom) - 1 piece each 4.8 x 25 (above hook) - 1 piece each 4.2 x 35 (through hooks)
Matching striker plates:	Aluminium - 20 mm wide - Part No. 503311
Matching striker plate covers:	Part No. 504311
Recommended screw type(s):	DIN 7982 CT or similar 4,2 x 22
Recommended cover profile (profile manufacturer):	No cover profile required

MINIMUM SASH WIDTH

Minimum width per side:	≥ 300 mm
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Basic design and tolerances

Basic setting of the locking cam:	9 mm
Basic design of the rebate gap:	16 mm
Minimum rebate gap:	≥ 14 mm
Maximum rebate gap:	≤ 18 mm

IMPORTANT:

Compatibility assessment applies to door hinges with standard turning curves. If the turning curve deviates, the basic setting of the locking cam may have to be adjusted.

Reducing the minimum rebate gap (by tightening the locking cam screw) is:

☐ Possible ☒ Not possible

IMPORTANT:

The maximum rebate gap is reduced by tightening the locking cam screw.

Increasing the minimum rebate gap (by loosening the locking cam screw) is:

☒ Possible ☐ Not possible

IMPORTANT:

The minimum rebate gap is increased by loosening the locking cam screw.

DESIGN & TOLERANCES

MINIMUM REBATE GAP

MAXIMUM REBATE GAP

Recommended positioning

DIN L

RECOMMENDED CONFIGURATION

In the minimum configuration, 3 closures are recommended.
From a door height of 2500 mm, 4 closures are recommended.
An additional horizontal closure is optional.

EXAMPLE DISTANCES*

Door height	Qty	L1	L2
2000	3	240	760
2100	3	240	810
2200	3	240	860
2300	3	240	910
2400	3	240	960
2500	4	240	673
2600	4	240	706
2700	4	240	740
2800	4	240	773

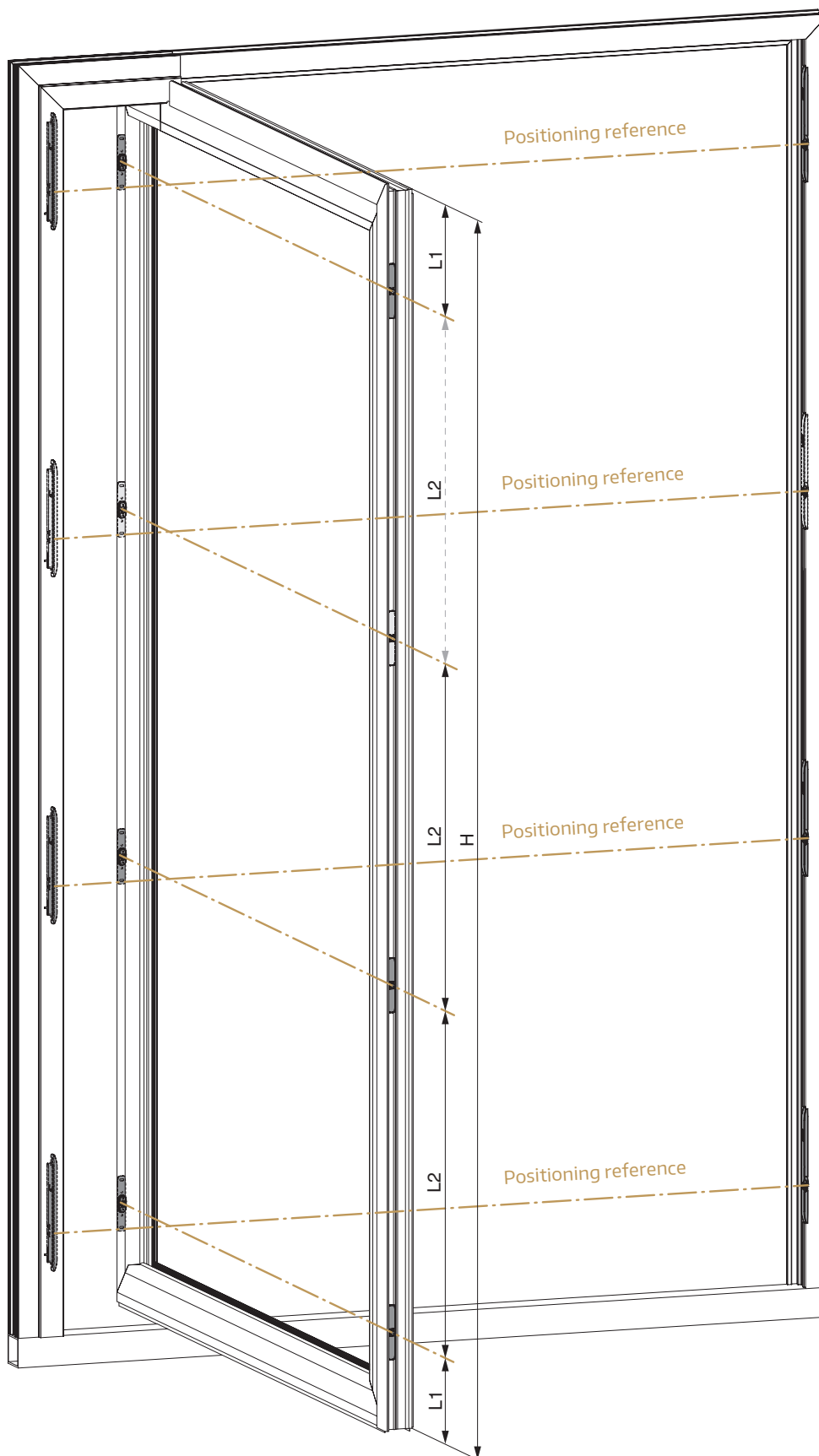
*Figures in mm.
Table valid for DIN L and DIN R.
The values in this table are examples and serve as guidance for the installation of the INSTINCT closures.

Calculation for L2 with 3 Closures:

$$\frac{\text{Door height} - (2 \times L1)}{2}$$

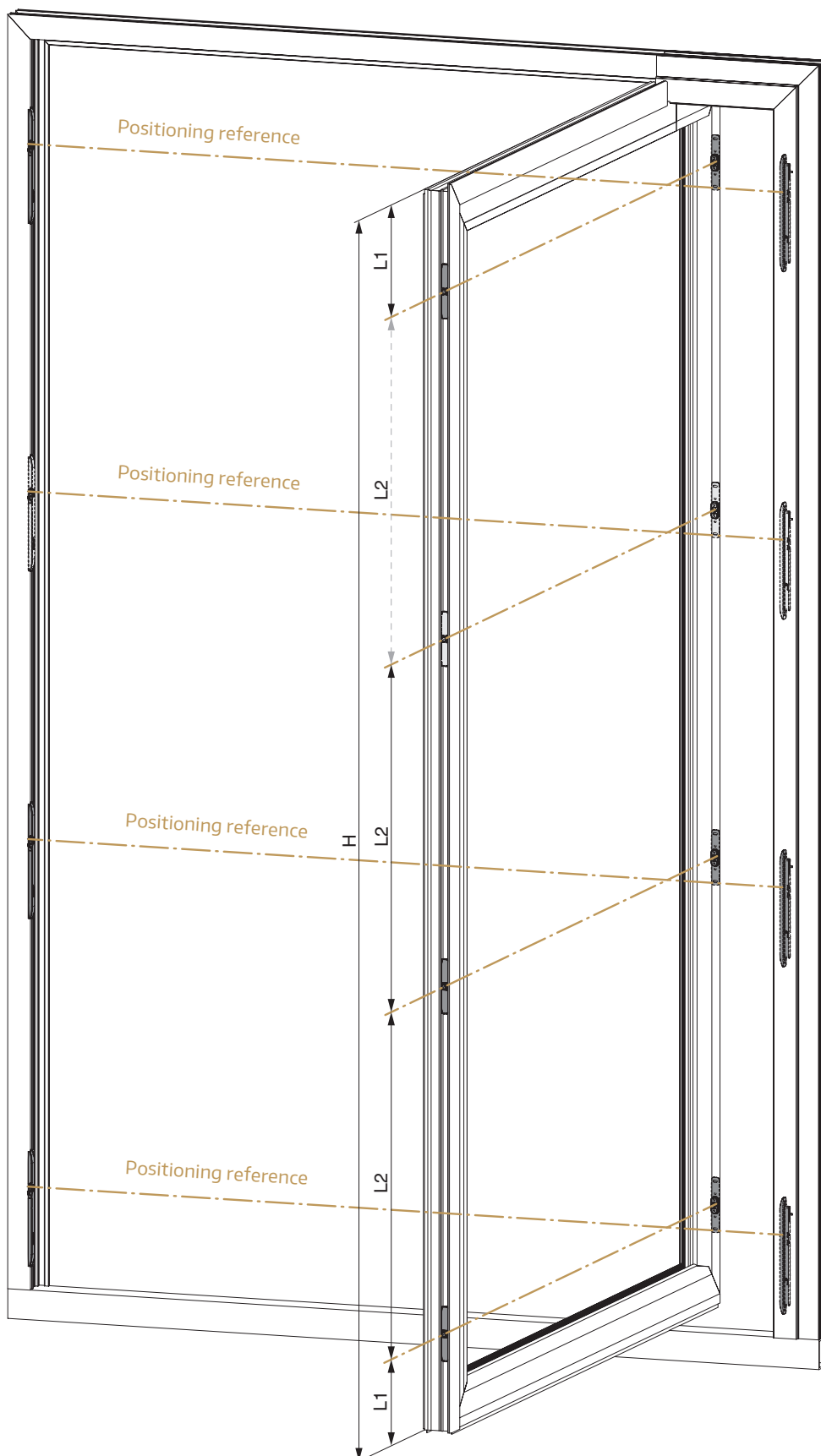
Calculation for L2 with 4 Closures:

$$\frac{\text{Door height} - (2 \times L1)}{3}$$



Recommended positioning

DIN R



RECOMMENDED CABLE LENGTHS*

L2	Cable length	Item number
$L2 \leq 400$	600	509006
$L2 \leq 500$	700	509007
$L2 \leq 600$	800	509008
$L2 \leq 700$	900	509009
$L2 \leq 800$	1000	509010
$L2 > 800$	1100	509011

*Figures in mm

The required cable lengths may differ depending on the position of the cable routing.

For the integration of the INSTINCT Bluetooth module or the INSTINCT interface, system cables with a length of 200 (Part No. 509002), 300 (Part No. 509003) or 500 mm (Part No. 509005) are available. A system cable with a length of 2500 mm (Part No. 509025) or the system cable connector (Part No. 509000) is also available to connect the closures on both sides.

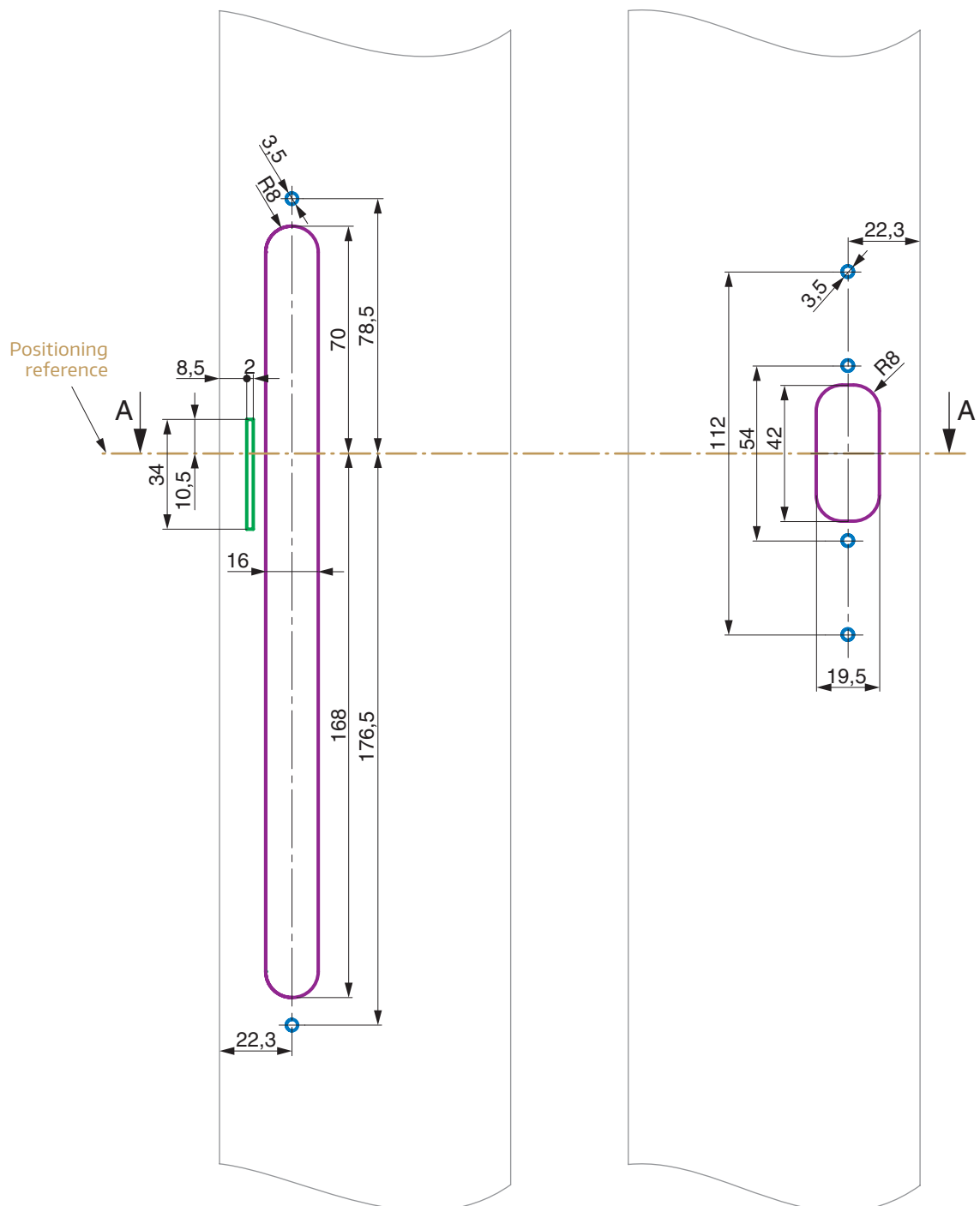
The detailed cabling scheme can be found on page 18.

Milling pattern top view – long side

DIN R, M 1:2

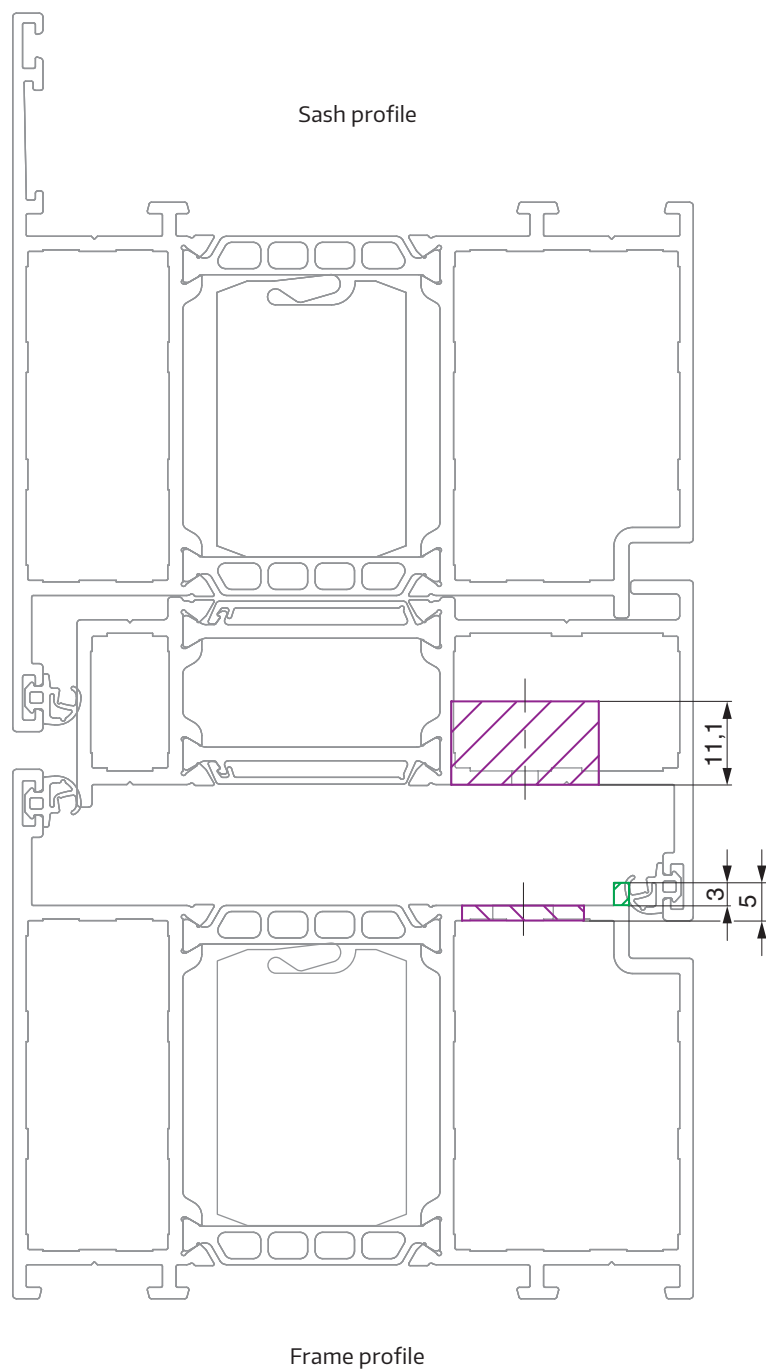
Frame profile
(simplified illustration)

Sash profile
(simplified illustration)



Milling pattern cross-section A-A – long side

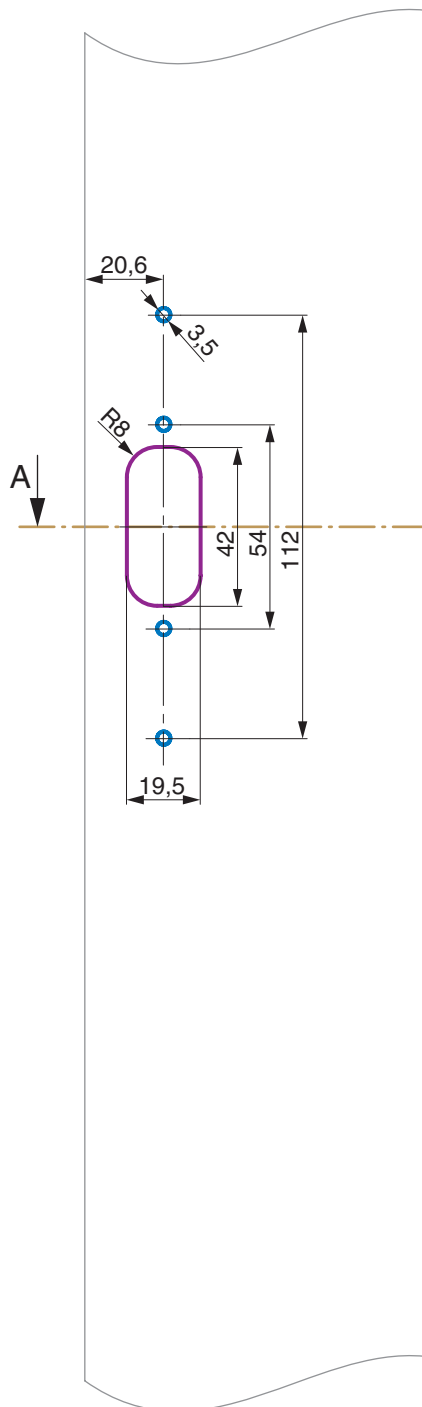
DIN R, M 1:1



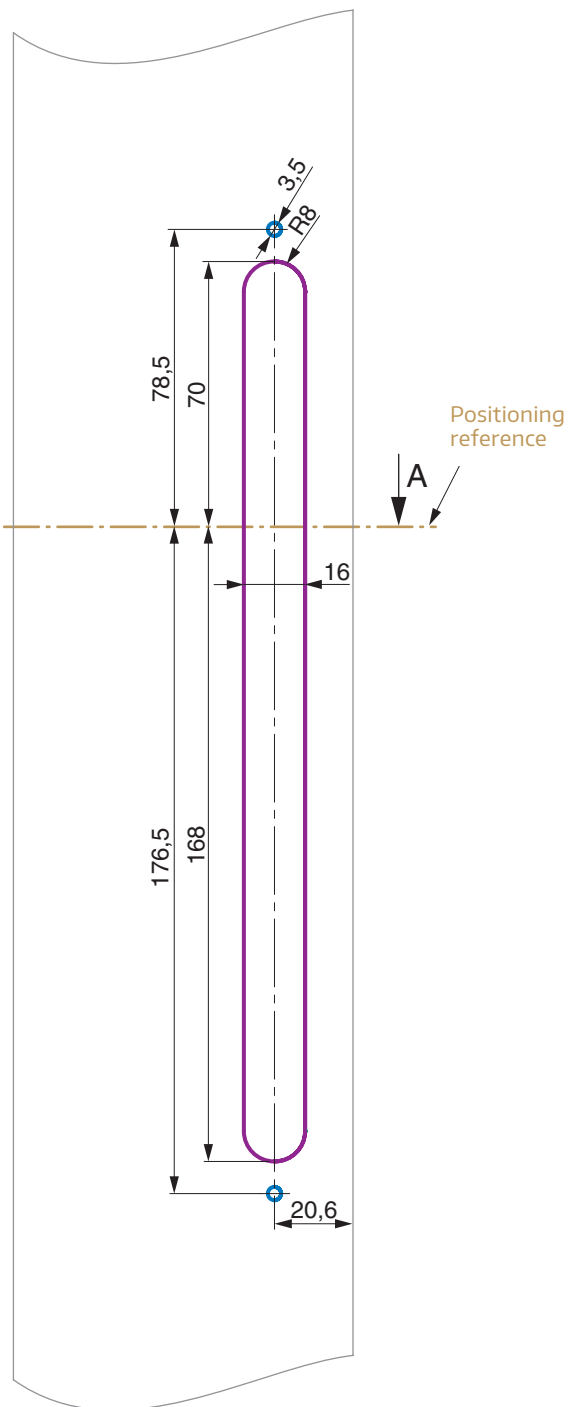
Milling pattern top view – short side

DIN R, M 1:2

Sash profile
(simplified illustration)

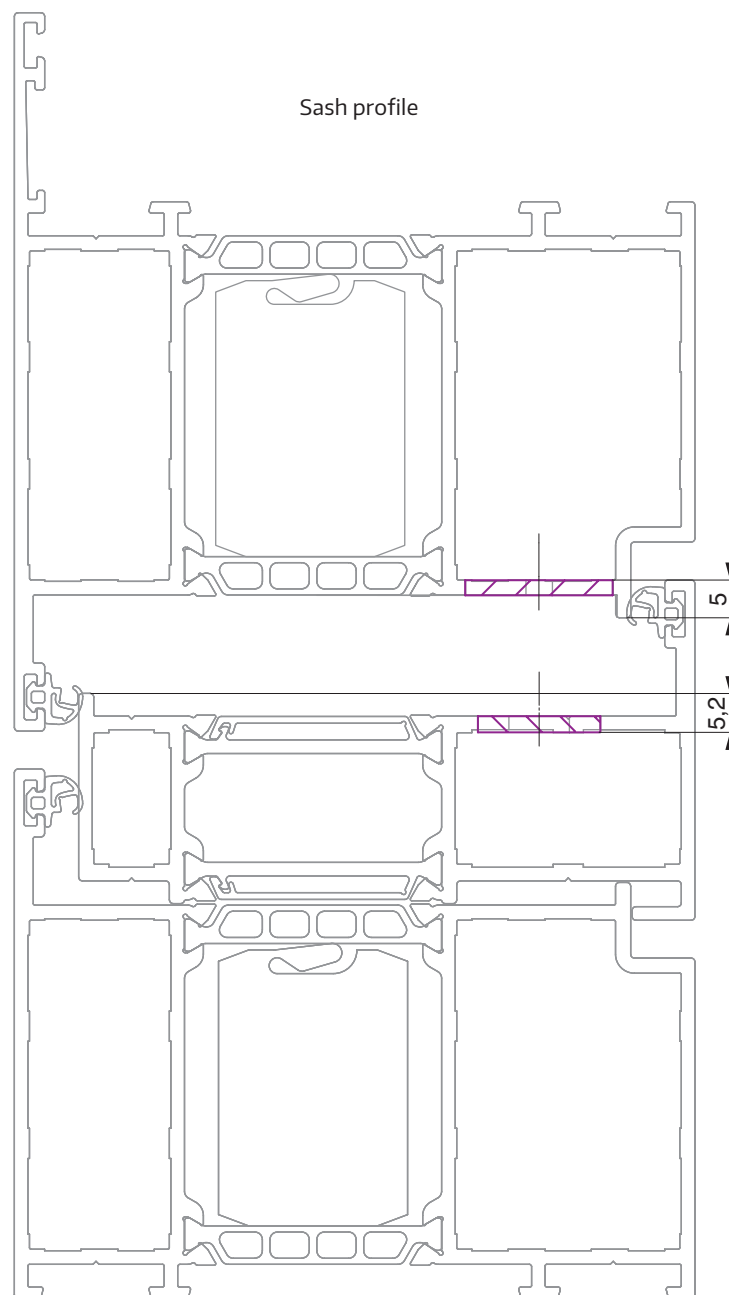


Frame profile
(simplified illustration)



Milling pattern cross-section A-A – short side

DIN R, M 1:1



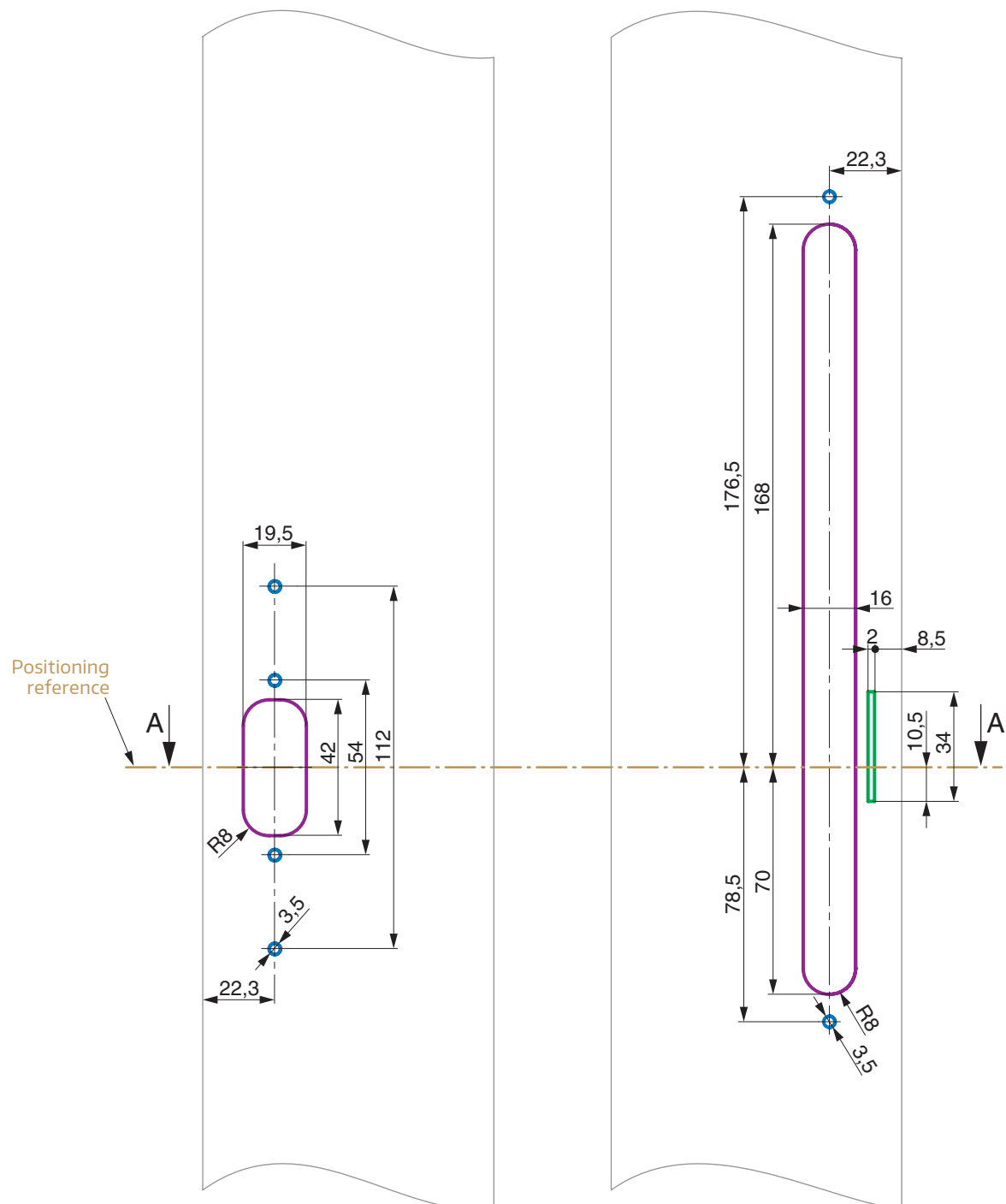
Frame profile

Milling pattern top view – long side

DIN L, M 1:2

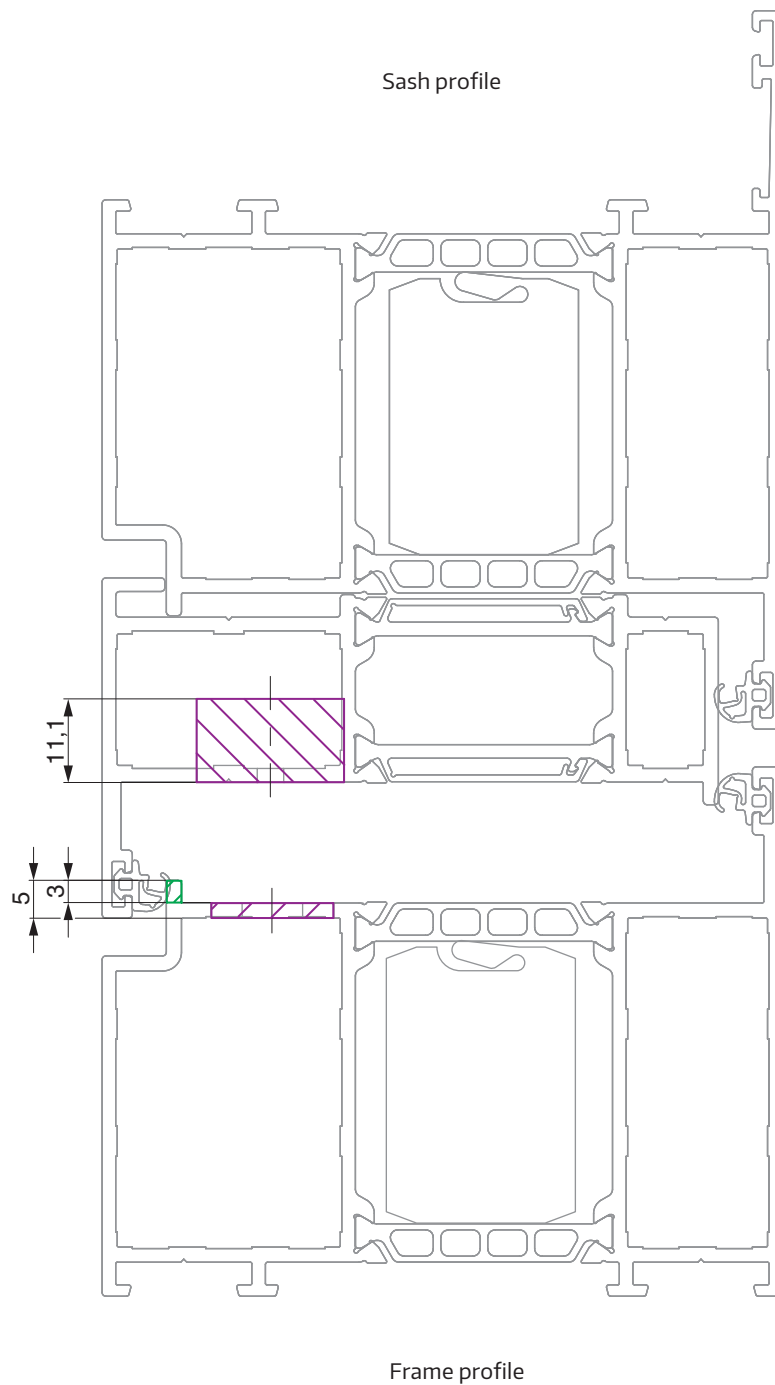
Sash profile
(simplified illustration)

Frame profile
(simplified illustration)



Milling pattern cross-section A-A – long side

DIN L, M 1:1

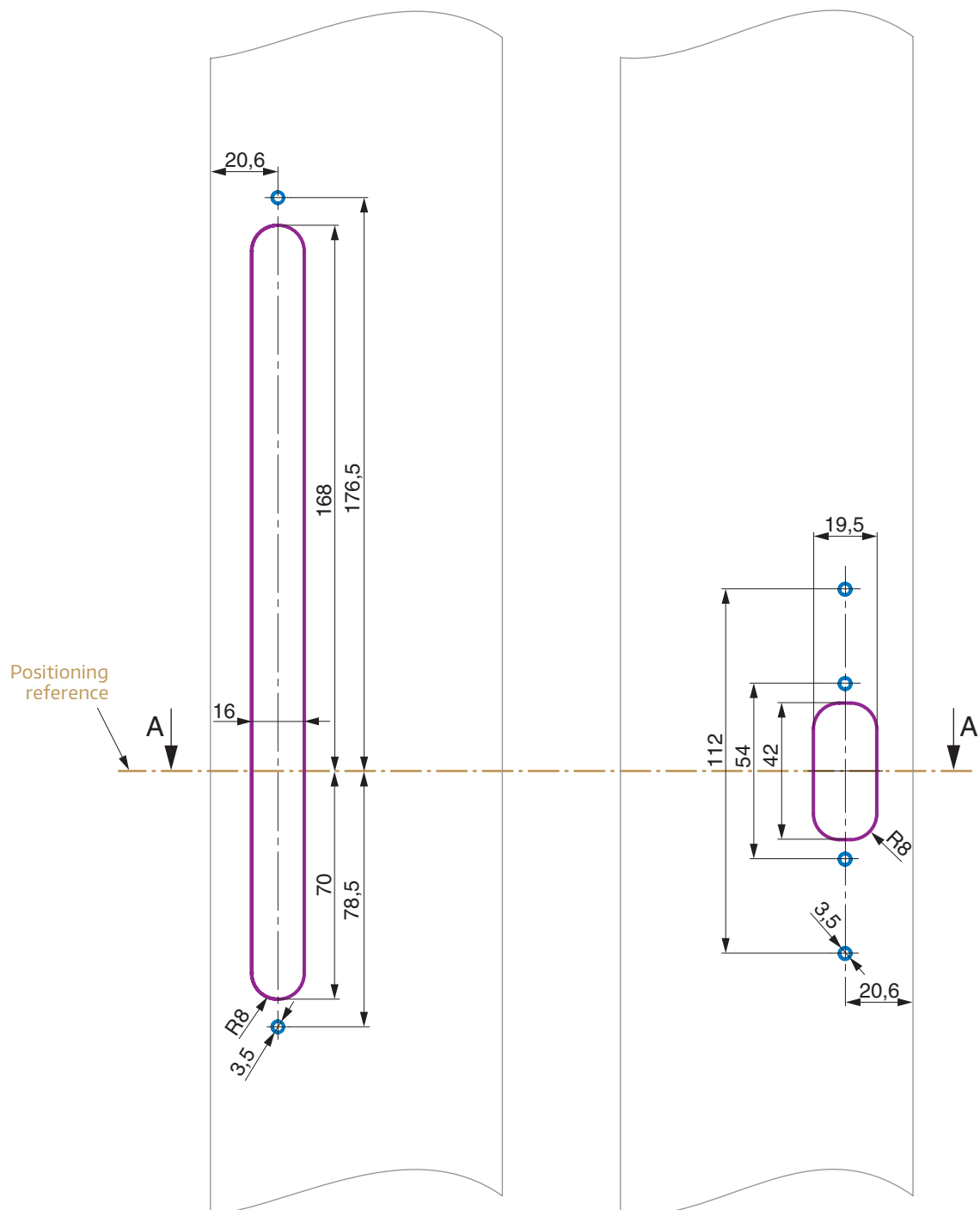


Milling pattern top view – short side

DIN L, M 1:2

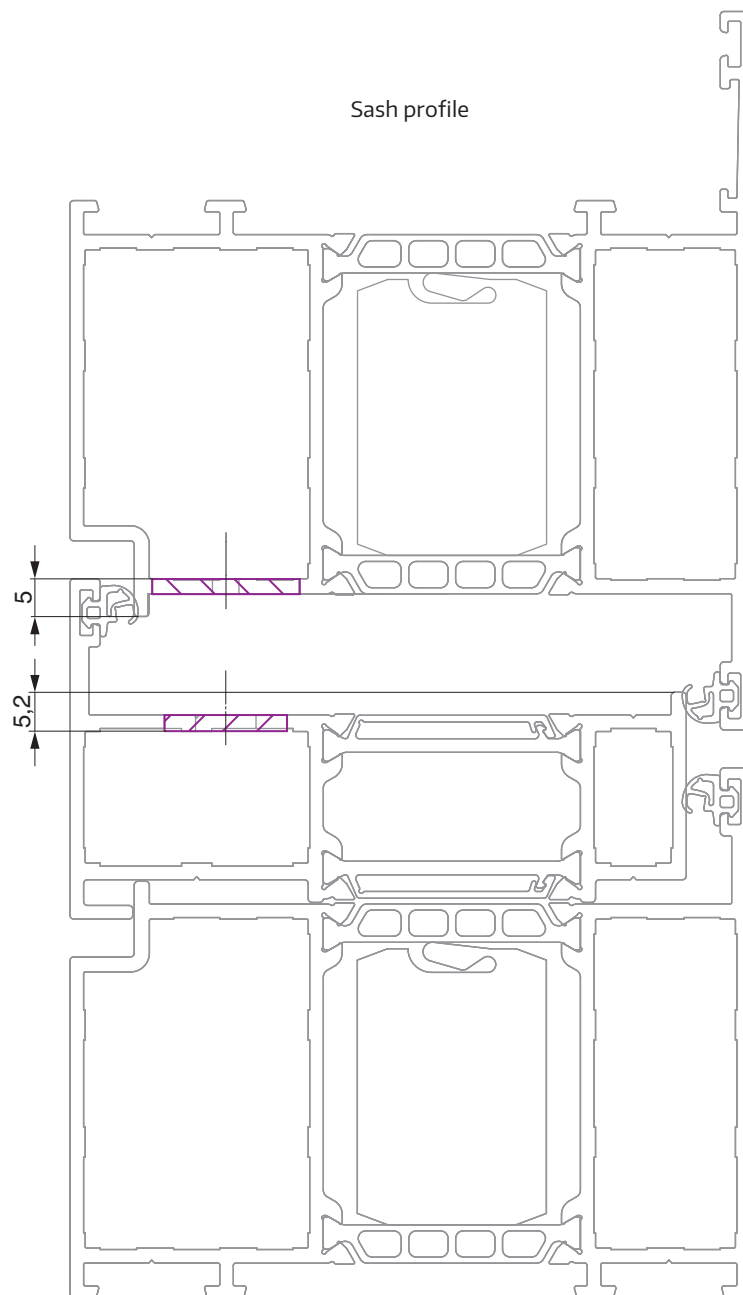
Frame profile
(simplified illustration)

Sash profile
(simplified illustration)



Milling pattern cross-section A-A – short side

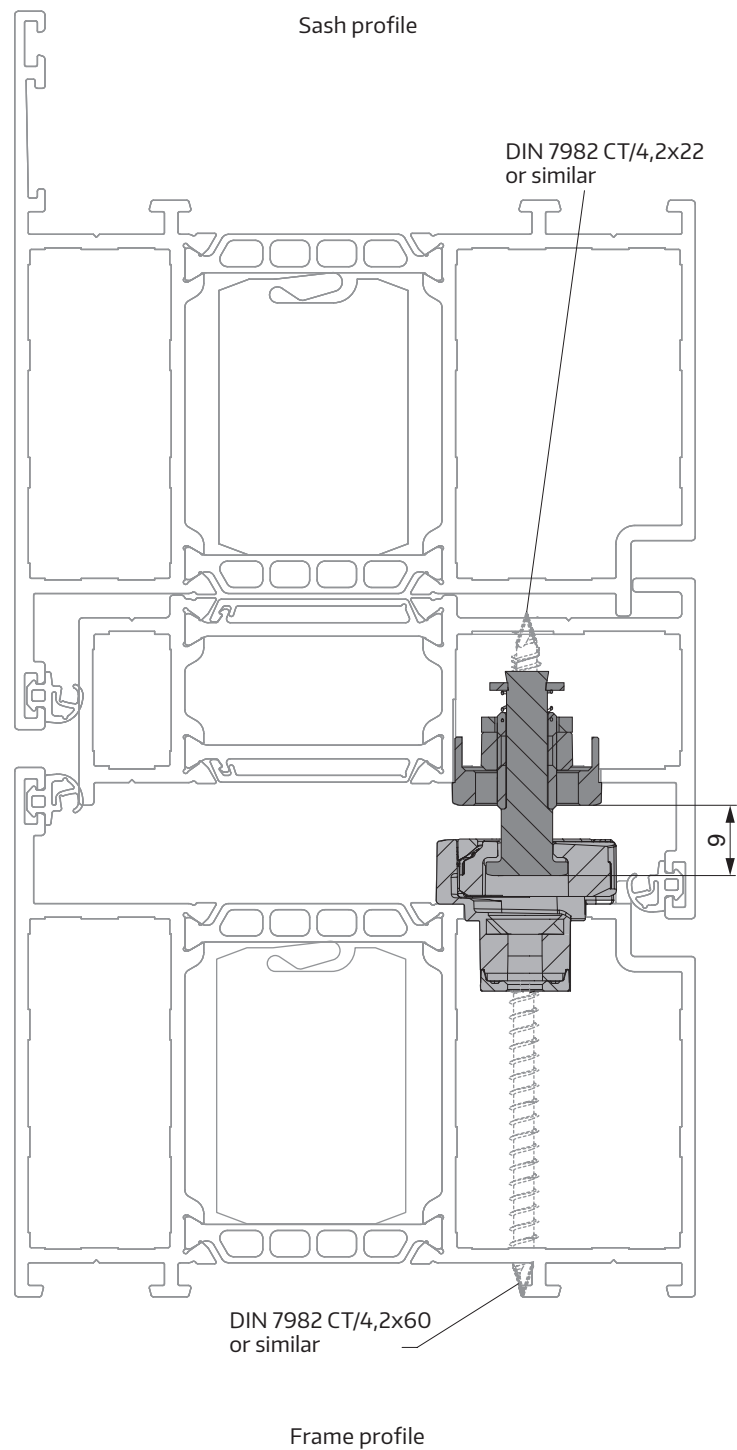
DIN L, M 1:1



Frame profile

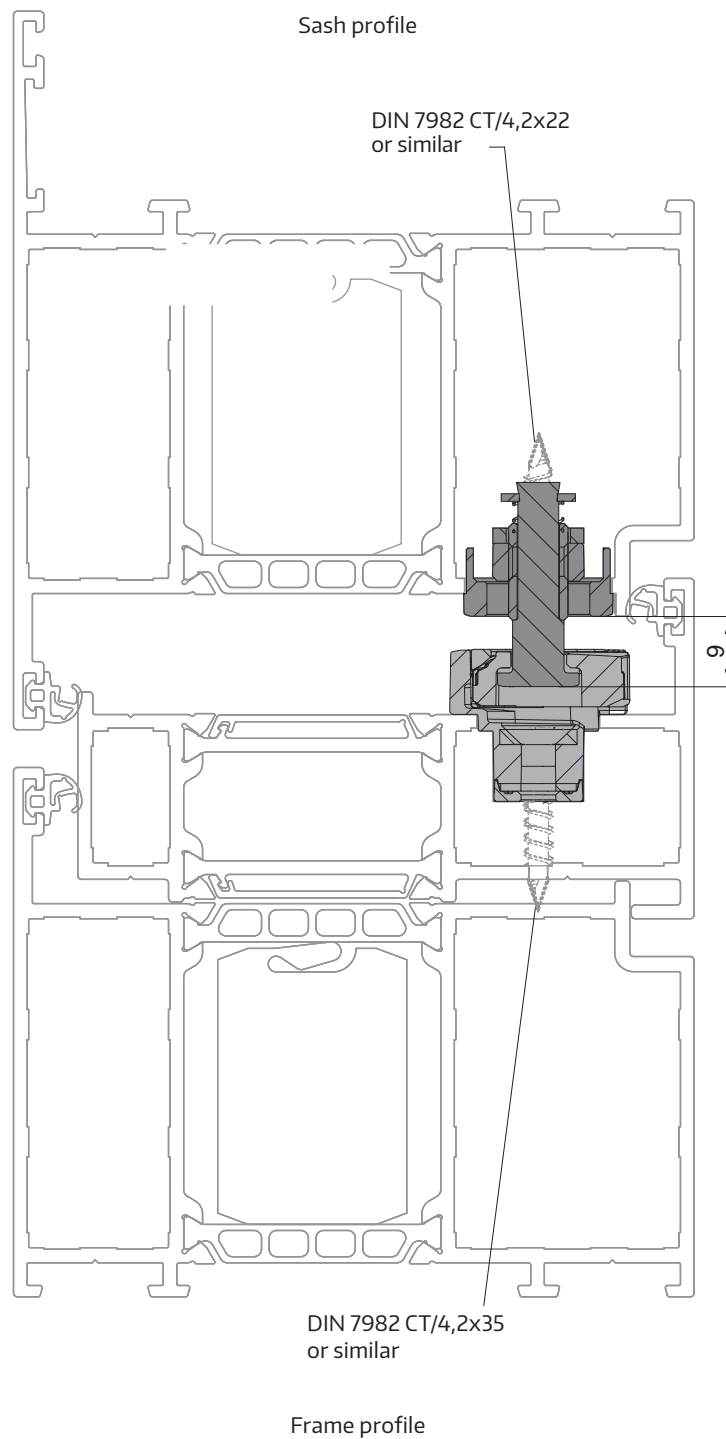
Basic adjustment of the striker plate – long side

Cross-section A-A, M 1:1



Basic adjustment of the striker plate – short side

Cross-section A-A, M 1:1

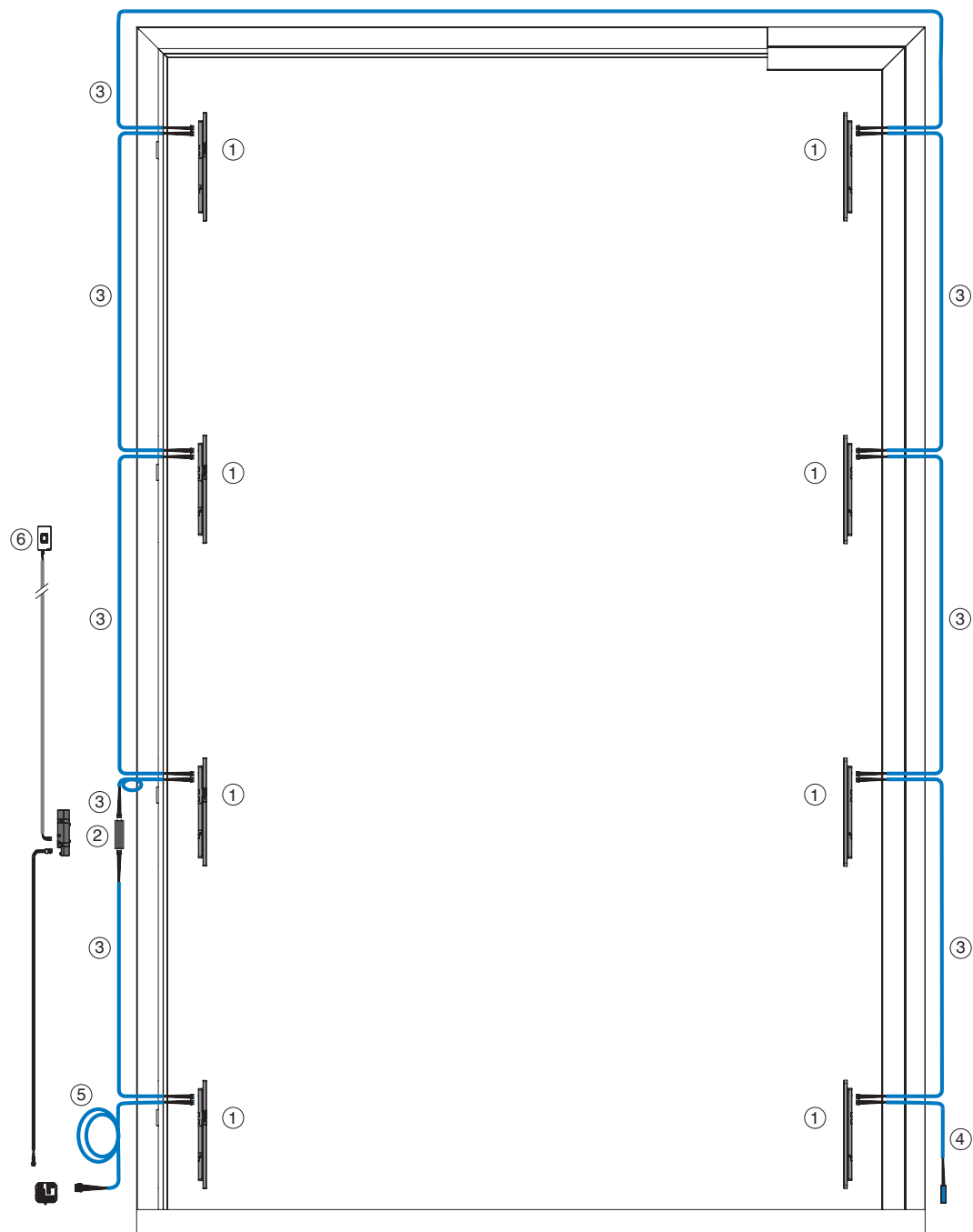


Cabling overview

For vertical closure points

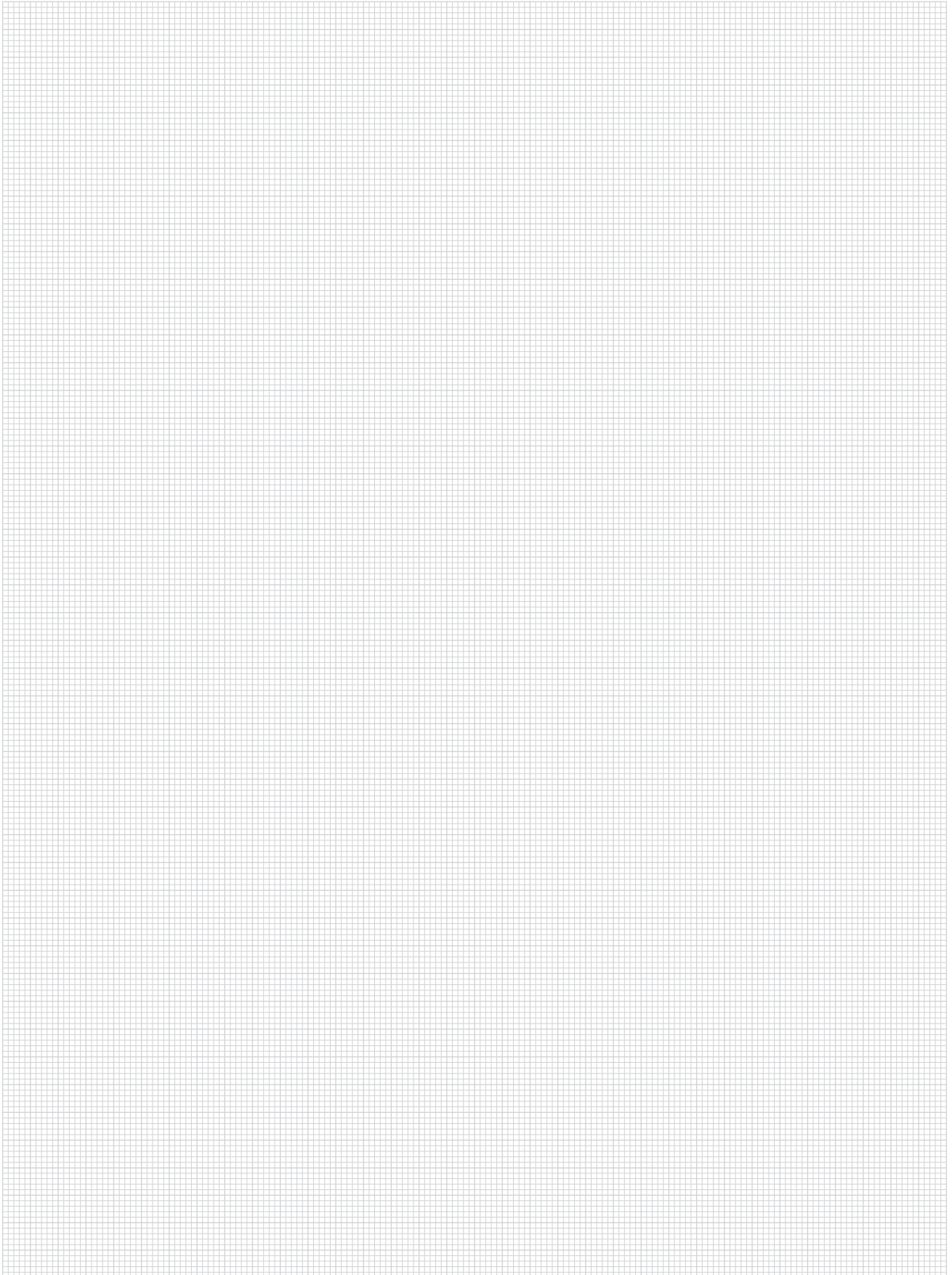
NOTE

The cables are routed through a cable duct in the door frame.



- ① INSTINCT Guard/Guard+
- ② INSTINCT Bluetooth module
- ③ INSTINCT system cable
- ④ INSTINCT terminating cable (with or without acoustic module)
- ⑤ INSTINCT system cable for frame-side mounting 6000 mm
- ⑥ MACO openDoor Touchkey dLine / MACO openDoor Keypad

Notes



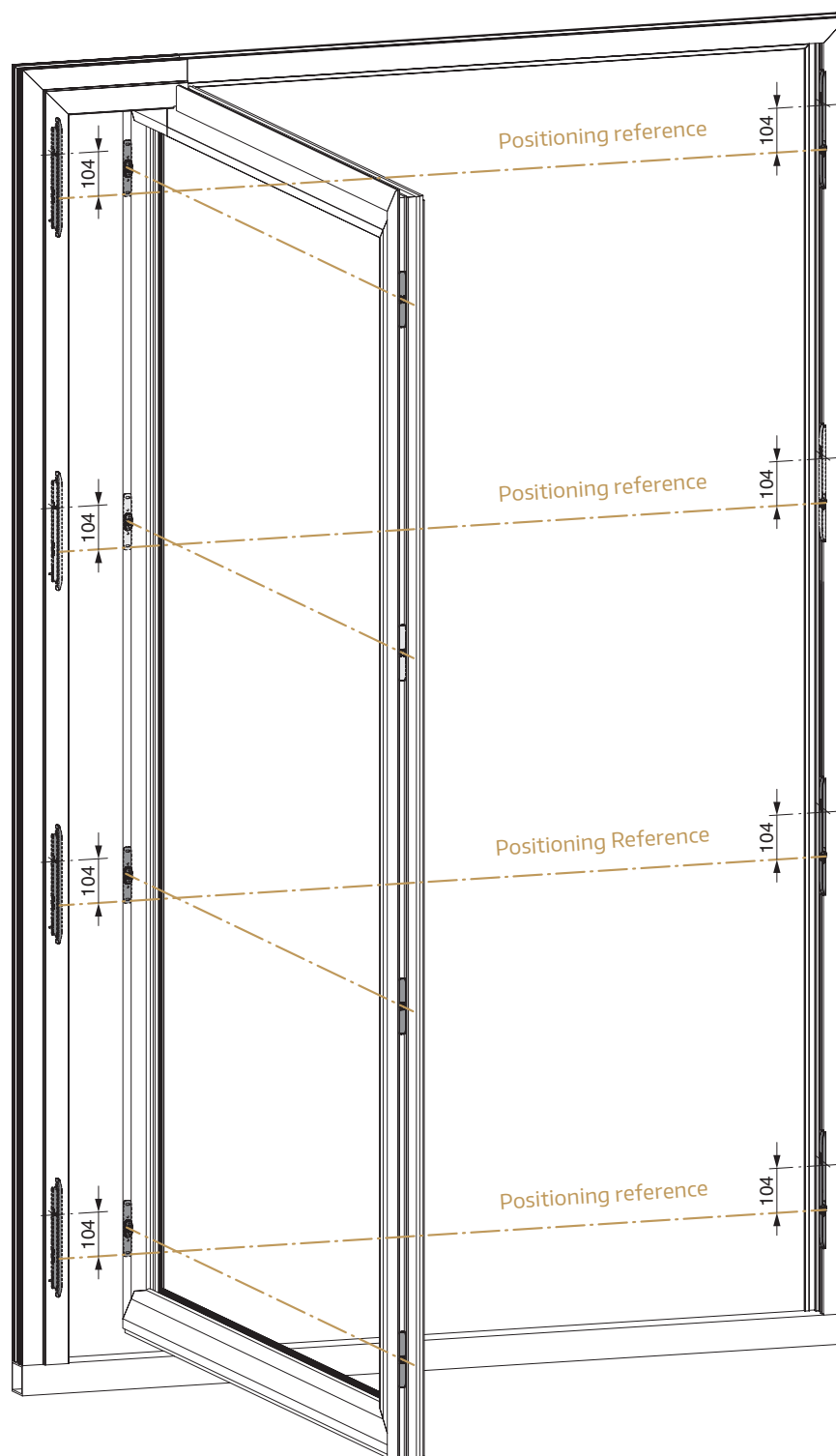
Emergency release positions left

DIN L

NOTE

In the event of a defect, it is possible to mechanically open each individual locking point from the inside via an emergency release.

For this purpose, the unlocking tool (Part No. 509520) as well as an Allen key with ball head (4 mm) is required.

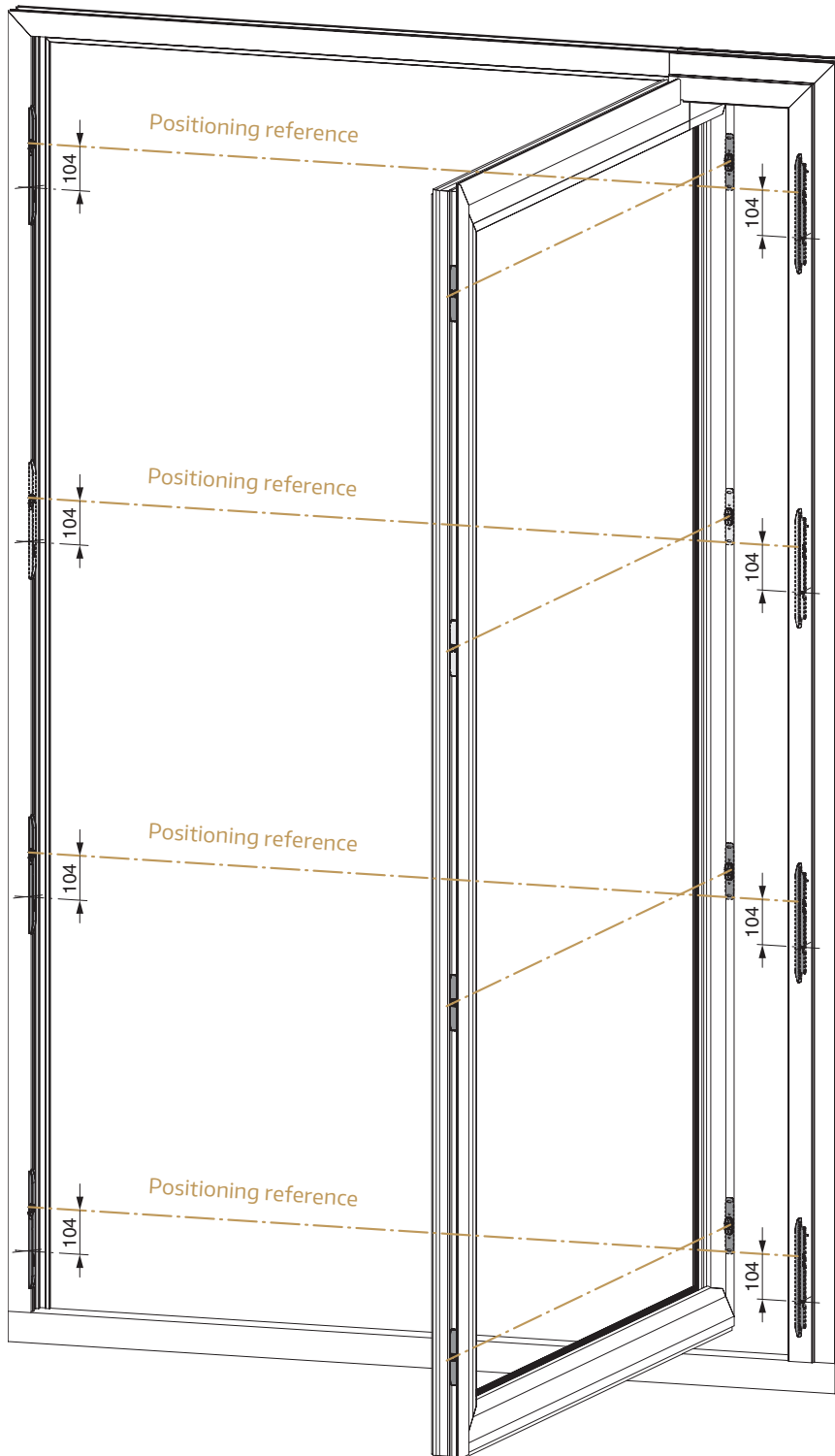


Direction of rotation for emergency release:



Emergency release positions right

DIN L



Direction of rotation for emergency release:



NOTE

In the event of a defect, it is possible to mechanically open each individual locking point from the inside via an emergency release.

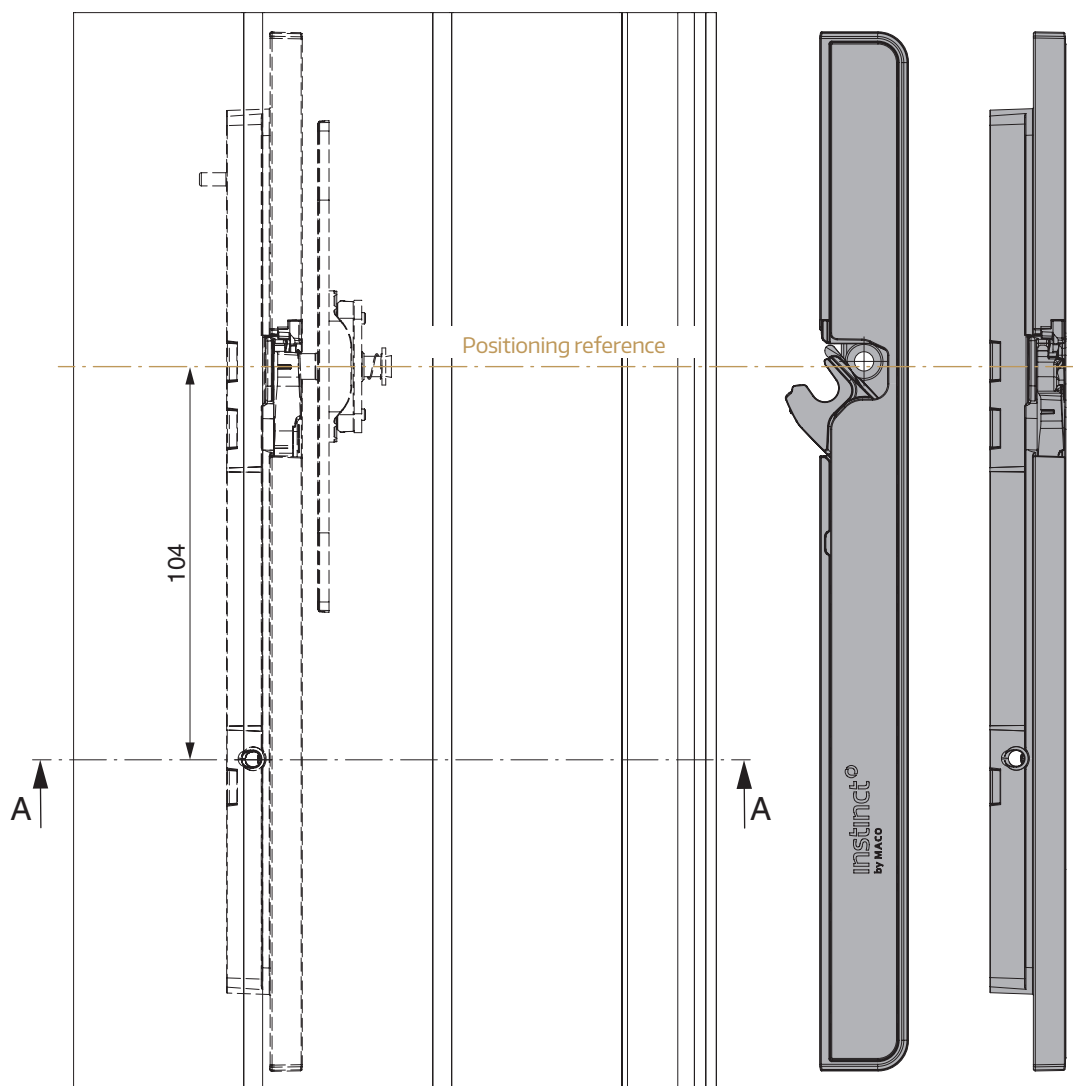
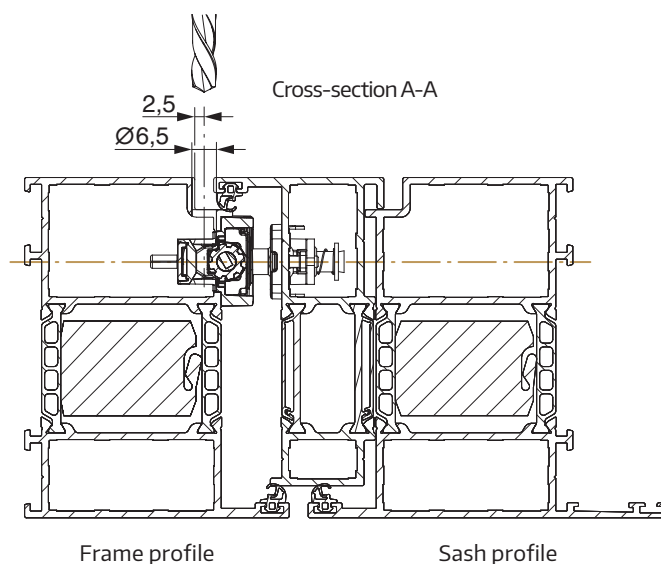
For this purpose, the unlocking tool (Part No. 509520) as well as an Allen key with ball head (4 mm) is required.

Emergency release drill pattern – long side

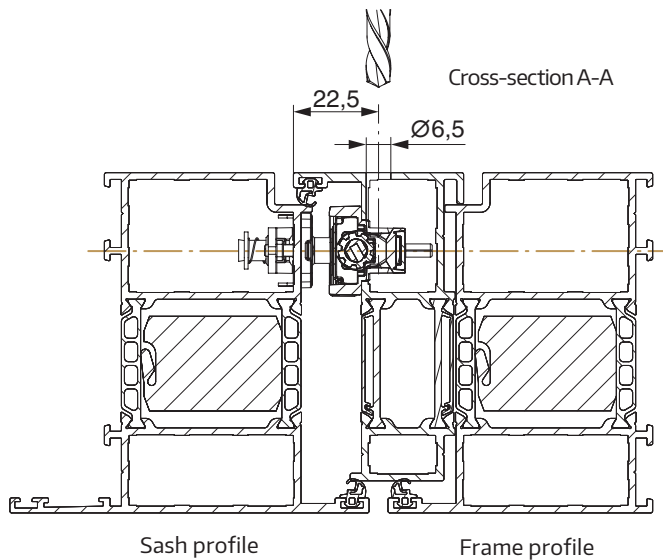
NOTE

In the event of a defect, it is possible to mechanically open each individual locking point from the inside via an emergency release.

For this purpose, the unlocking tool (Part No. 509520) as well as an Allen key with ball head (4 mm) is required.



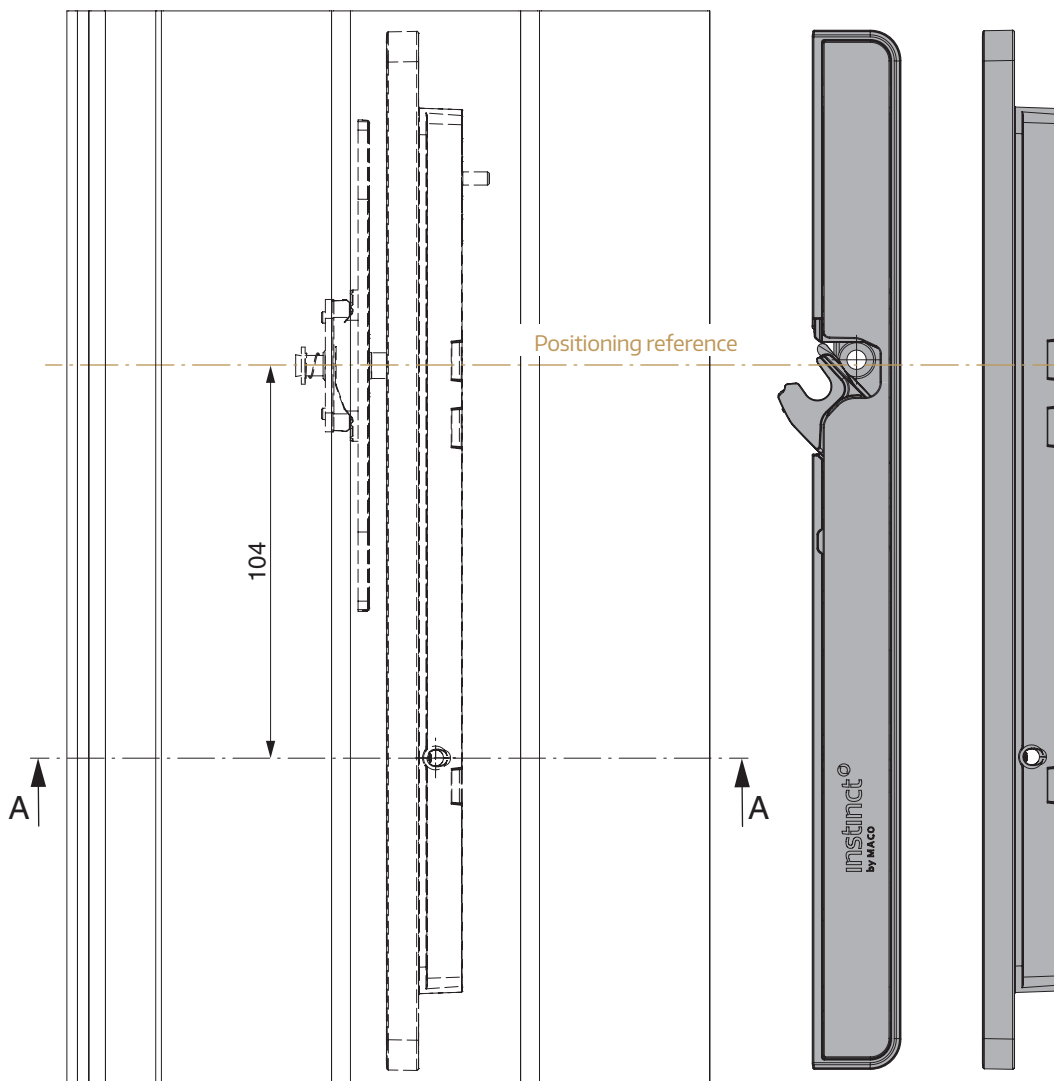
Emergency release drill pattern – short side



NOTE

In the event of a defect, it is possible to mechanically open each individual locking point from the inside via an emergency release.

For this purpose, the unlocking tool (Part No. 509520) as well as an Allen key with ball head (4 mm) is required.



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» If I had asked people
what they wanted,
they would have said
faster horses. «

Henry Ford

