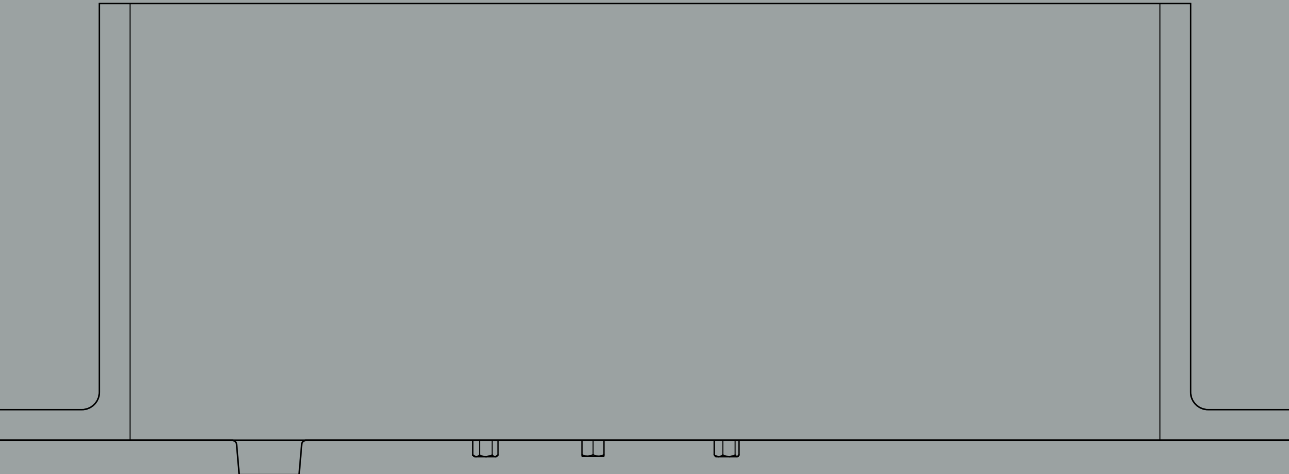


System M+
Technical documentation
Functionalities and specifics



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Overview	3
Components	4
Functions	5
Bottom pivots	7
Variants	8
Top pivots	11
Installation inside the door	12
Installation in the head jamb	14
Ceiling plates and Receiver	15
Ceiling plates	16
Receiver	17
Floor plates	19
Installation on the floor	20
Sunk into the sill	21
Technical checklist	23
Top and bottom gap	24
Side gaps	25
System M+/M weight classes table	26
Milling and components	27
System M+ 70 mm Class A to E	28
System M+ 70 mm Class F and G	30
System M+ 40 mm Class A to E	32
System M+ 40 mm Class F and G	34
Top pivot 70 mm Class B	36
Top pivot 70 mm Class G	37
Top pivot 40 mm Class B	38
Top pivot 40 mm Class G	39
Top pivot Reversed	40

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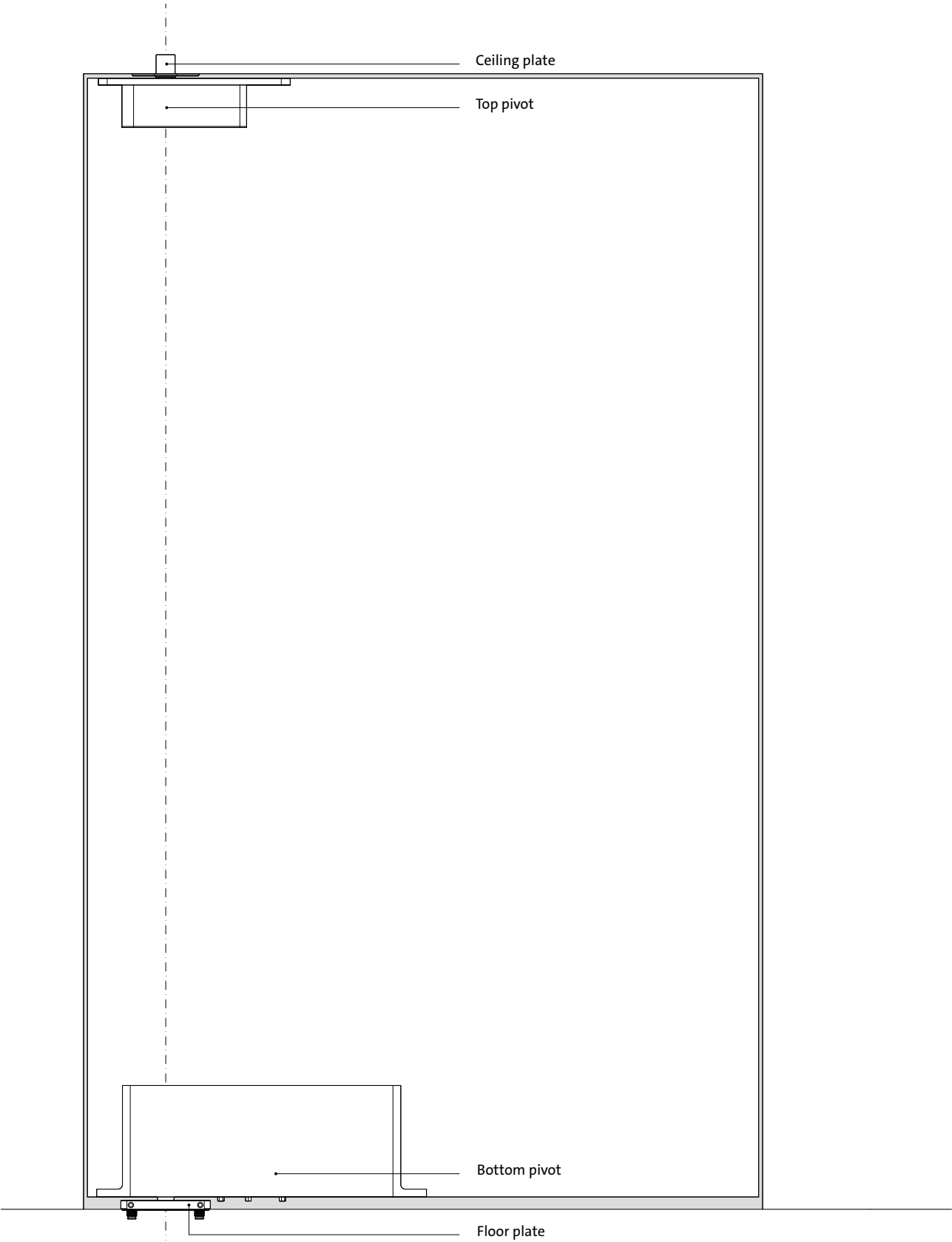


Overview

System M+ is an adjustable, self-closing pivot hinge. It provides Latch Control to ensure proper latching, guaranteed control over the movement of doors from 20 kg to 500 kg, and extra adjustability for the movement of the door.

Components

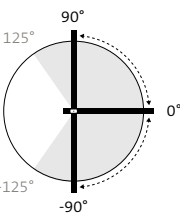
Our systems always consist of the following components:



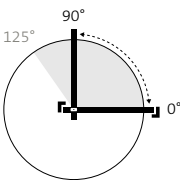
Functions

Rotation	Double-acting: 180° Single-acting: 90°
Hold positions	Double-acting: 90°, -90° and 0° Single-acting: 90° and 0°
Free swing	No
Self-closing	Double-acting: from 125° and -125° to 0° Single-acting: from 125° to 0°

Rotation



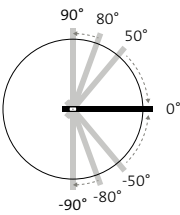
Double-acting
Double-acting means that the pivot door can be opened towards both sides, with a hold position at 90° at either side.



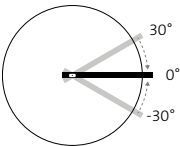
Single-acting
Single-acting means that the pivot door can only be opened towards a single side. This is enforced by an external stop such as the door frame.

Movement

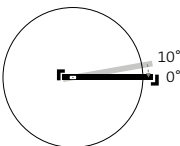
Thanks to Damper Control, 30° Speed Control, and Latch Control, System M+'s movement is fully adjustable.



Damper Control
Hydraulic back-check (opening damping) for wall-protection, and soft-close for a smooth closing movement.



30° Speed Control
Ensures the door always closes gently, returning to its 0° position smoothly after opening.



Latch Control
Accelerates the door shortly before closed position to ensure proper latching.

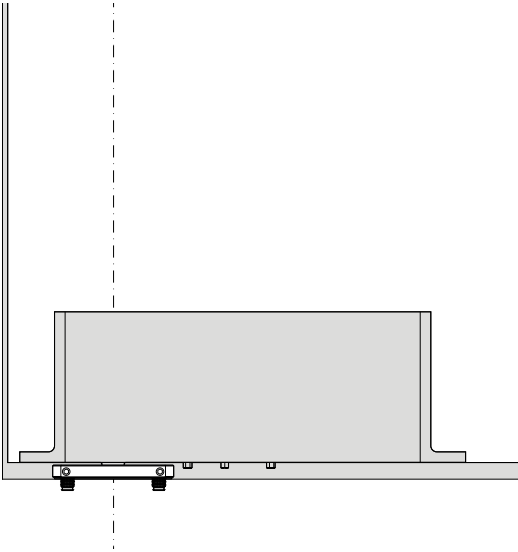
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Bottom pivots

It all hinges on the bottom pivot. Our bottom pivots are easily applicable to the side as well as to the middle of the door.

Variants



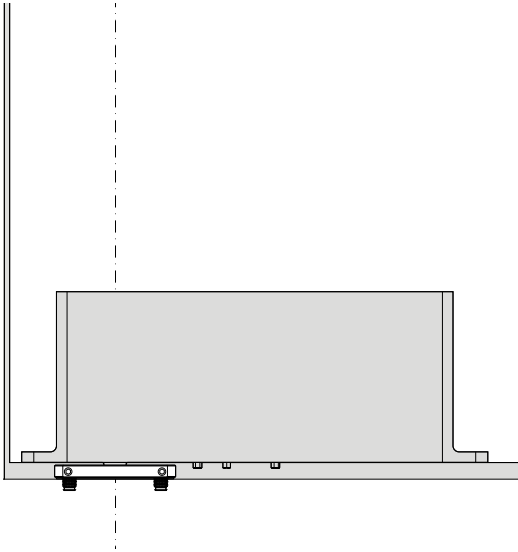
System M+ 70 mm Class A to E

294.8 × 32 × 99.6 mm

Placement	Side placement
Pivot point	Pivot point from 70 mm to middle placement
Cover plates	No
Door weight*	Class A: 20 - 119 kg Class B: up to 159 kg Class C: up to 209 kg Class D: up to 279 kg Class E: up to 349 kg

Compatible with

Top pivots	Top pivot 70 mm Class B (Class A and B) Top pivot 70 mm Class G (Class C, D and E) Top pivot Reversed (all classes)
Floor plates	Floor plate squared Floor plate round Floor plate Flush rounded Floor plate Flush squared



System M+ 70 mm Class F and G

308.2 × 42 × 112.7 mm

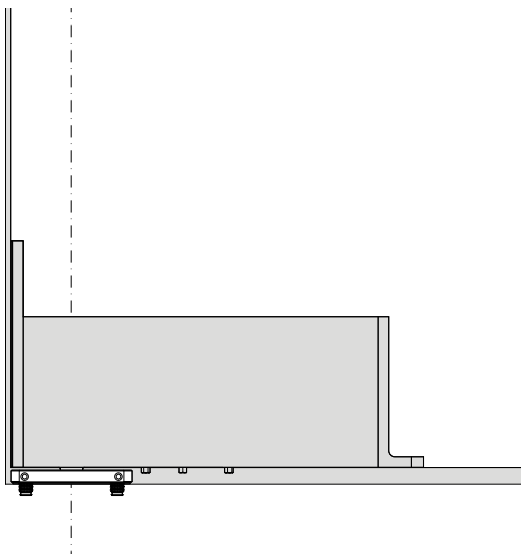
Placement	Side placement
Pivot point	Pivot point from 70 mm to middle placement
Cover plates	No
Door weight*	Class F: up to 429 kg Class G: up to 500 kg

Compatible with

Top pivots	Top pivot 70 mm Class G Top pivot Reversed
Floor plates	Floor plate squared Floor plate round Floor plate Flush rounded Floor plate Flush squared

* Depending on door width, see System M+/M weight classes table.

Find out more about [top pivots](#) or [floor plates](#).

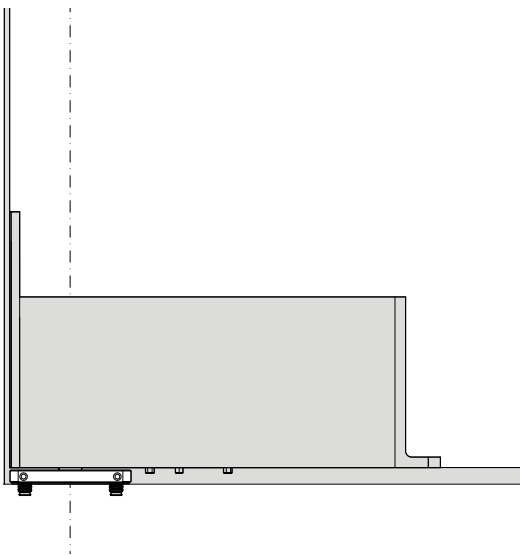


System M+ 40 mm Class A to E

272.7 × 32 × 149.6 mm

Placement	Side placement
Pivot point	Fixed pivot point at 40 mm
Cover plates	Stainless steel Black
Door weight*	Class A: 20 - 119 kg Class B: up to 159 kg Class C: up to 209 kg Class D: up to 279 kg Class E: up to 349 kg

Compatible with	
Top pivots	Top pivot 40 mm Class B (Class A and B) Top pivot 40 mm Class G (Class C, D and E)
Floor plates	Floor plate squared Floor plate round Floor plate Flush rounded Floor plate Flush squared



System M+ 40 mm Class F and G

284.7 × 42 × 169 mm

Placement	Side placement
Pivot point	Fixed pivot point at 40 mm
Cover plates	Stainless steel Black
Door weight*	Class F: up to 429 kg Class G: up to 500 kg

Compatible with	
Top pivots	Top pivot 40 mm Class G
Floor plates	Floor plate squared Floor plate round Floor plate Flush rounded Floor plate Flush squared

* Depending on door width, see System M+/M weight classes table.

Find out more about [top pivots](#) or [floor plates](#).

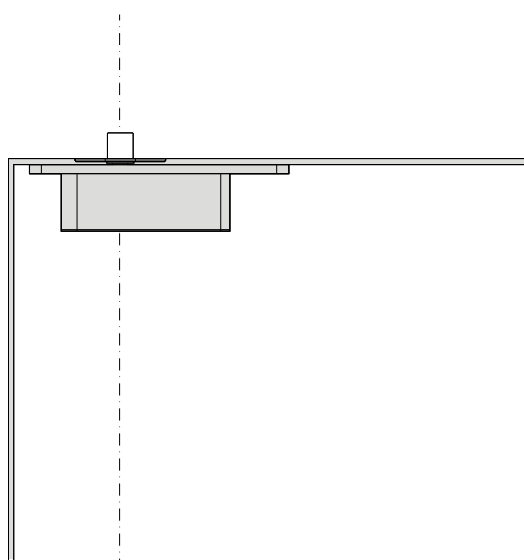
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Top pivots

The top pivot anchors the pivot door between the floor and the ceiling.

Installation inside the door



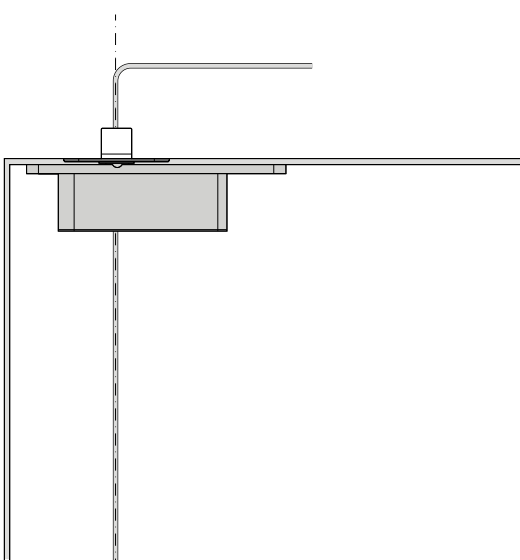
Top pivot 70 mm Class B

171.5 × 32 × 44 mm

Placement	Side placement
Pin diameter	Ø10 mm
Pivot point	Pivot point from 70 mm
Adjustment	From the side of the door: 5 mm to the left and 5 mm to the right
Cable grommet	No
Cover plates	No

Compatible with

Bottom pivots	System M+ 70 mm Class A and B
Ceiling plates	Ceiling plate Class B



Top pivot 70 mm Class G

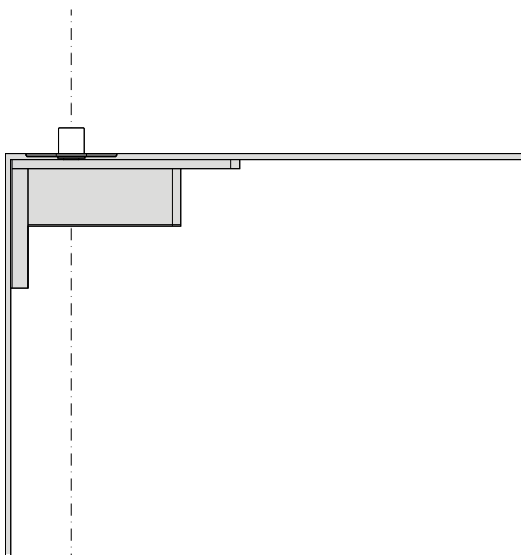
171.5 × 32 × 44 mm

Placement	Side placement
Pin diameter	Ø15 mm
Pivot point	Pivot point from 70 mm
Adjustment	From the side of the door: 5 mm to the left and 5 mm to the right
Cable grommet	Yes, Ø7.5 mm cable entry
Cover plates	No

Compatible with

Bottom pivots	System M+ 70 mm Class C to G
Ceiling plates	Ceiling plate Class G

Find out more about [ceiling plates](#).

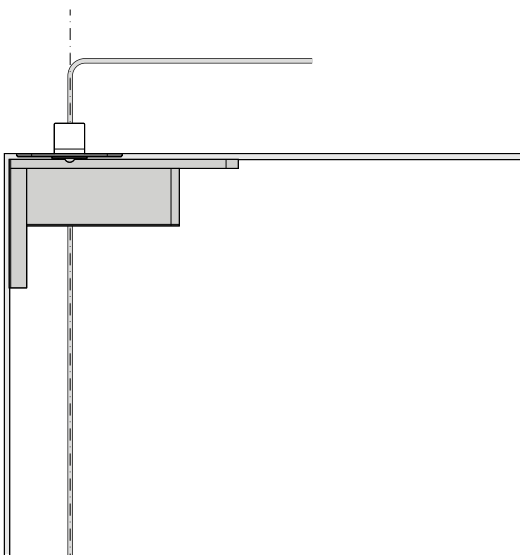


Top pivot 40 mm Class B

151.5 × 32 × 85 mm

Placement	Side placement
Pin diameter	Ø10 mm
Pivot point	Fixed pivot point at 40 mm
Adjustment	From the side of the door: 5 mm to the left and 5 mm to the right
Cable grommet	No
Cover plates	Stainless steel Black

Compatible with	
Bottom pivots	System M+ 40 mm Class A and B
Ceiling plates	Ceiling plate Class B



Top pivot 40 mm Class G

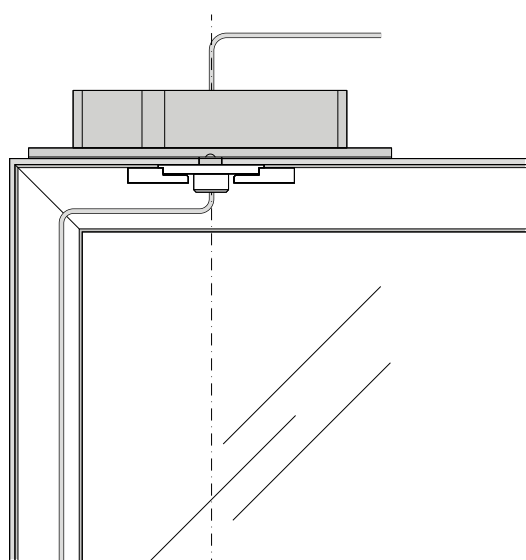
151.5 × 32 × 85 mm

Placement	Side placement
Pin diameter	Ø15 mm
Pivot point	Fixed pivot point at 40 mm
Adjustment	From the side of the door: 5 mm to the left and 5 mm to the right
Cable grommet	Yes, Ø7.5 mm cable entry
Cover plates	Stainless steel Black

Compatible with	
Bottom pivots	System M+ 40 mm Class C to G
Ceiling plates	Ceiling plate Class G

Find out more about [ceiling plates](#).

Installation in the head jamb



Top pivot Reversed

240 × 32 × 45 mm

Placement	Side placement
Pin diameter	Ø15 mm
Pivot point	Pivot point from 130 mm
Adjustment	From inside the door opening: 5 mm to the left and 5 mm to the right
Cable grommet	Yes, Ø7.5 mm cable entry
Cover plates	Stainless steel Black White

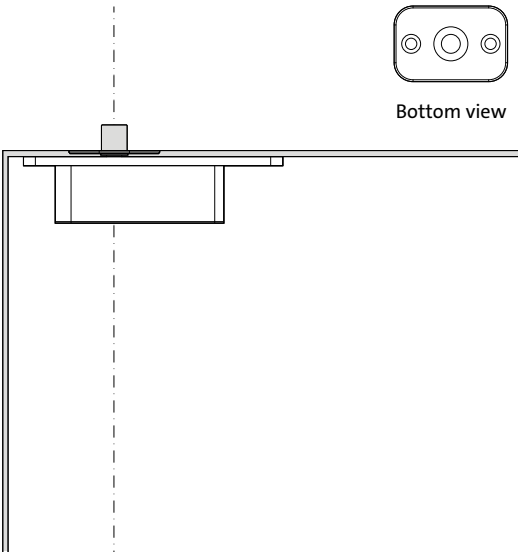
Compatible with	
Bottom pivots	System M+ 70 mm (all classes)
Ceiling plates	Receiver

Find out more about [ceiling plates](#) or [Receiver](#).

Ceiling plates and Receiver

Our ceiling plates and Receiver pair with the top pivots. The ceiling plates can be combined with all our top pivots, except for the Receiver. The top pivot Reversed pairs best with the Receiver to mount in the door.

Ceiling plates

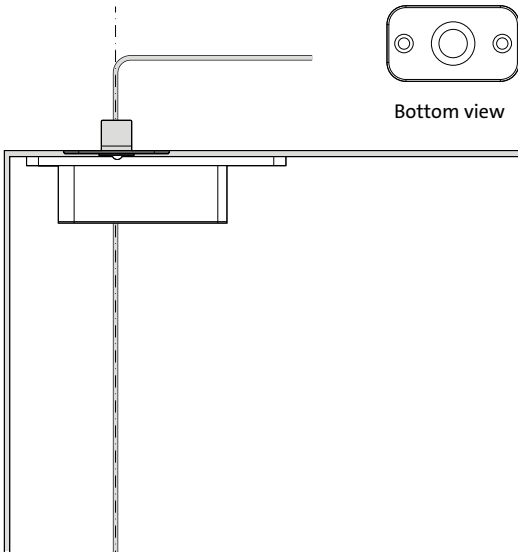


Ceiling plate Class B

60 × 40 × 20 mm

Colours	Stainless steel
	Black
Pin diameter	Ø10 mm

Compatible with	
Top pivots	Top pivot 70 mm Class B
	Top pivot 40 mm Class B



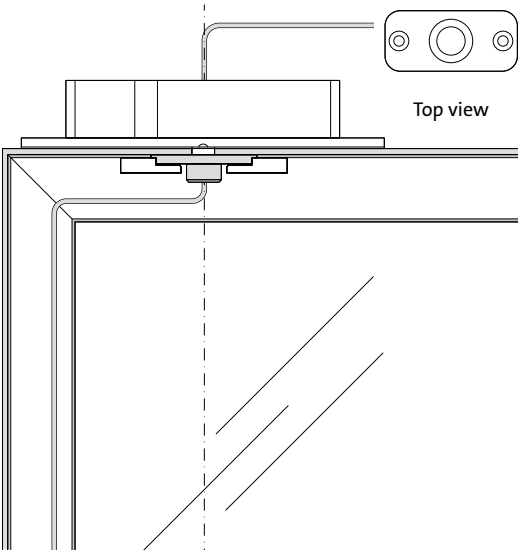
Ceiling plate Class G

70 × 40 × 23 mm

Colours	Stainless steel
	Black
Pin diameter	Ø15 mm

Compatible with	
Top pivots	Top pivot 70 mm Class G
	Top pivot Reversed

Receiver



Receiver
70 × 32 × 18 mm

Colours	Stainless steel
Pin diameter	Ø15 mm

Compatible with	
Top pivots	Top pivot Reversed
Accessories	Adapters

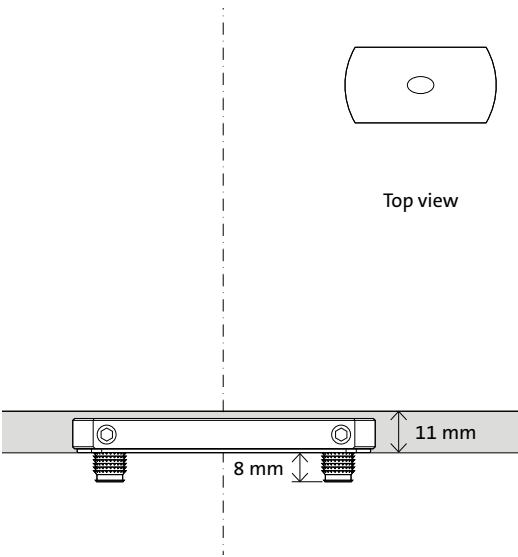
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Floor plates

Our floor plates support the door at the bottom. They are either surface mounted with only short pins anchoring into the floor or recessed in the sill. Their compact design makes installation a lot easier, and they combine perfectly with pre-installed underfloor heating.

Installation on the floor

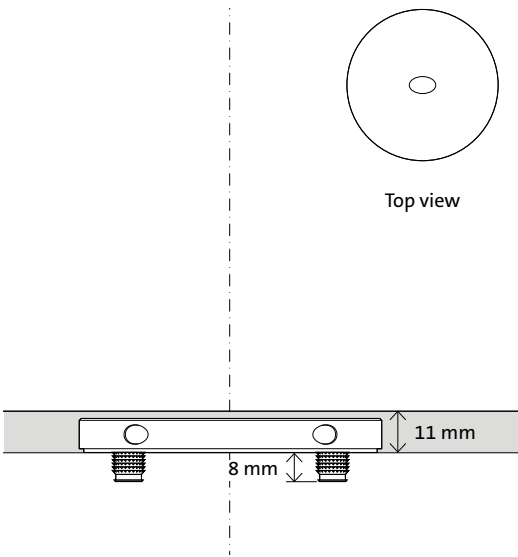


Floor plate squared

80 × 40 × 9 mm

This floor plate features radial adjustment possibilities.

Mounting pins	Two or four 8 mm pins for optimal stability between two floor types. Or two 30 mm pins for mounting on layered floor materials.
Undercut	11 mm
Colours	Stainless steel Black
Radial adjustment	Yes, 2.5° to the left and 2.5° to the right



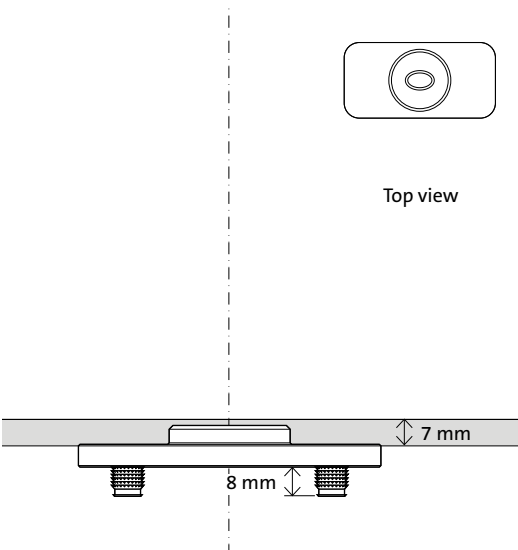
Floor plate round

Ø80 × 9 mm

Especially for aesthetic purposes, we feature the round 80 mm floor plate.

Mounting pins	Four 8 mm pins
Undercut	11 mm
Colours	Stainless steel Black
Radial adjustment	Yes, 2.5° to the left and 2.5° to the right

Sunk into the sill

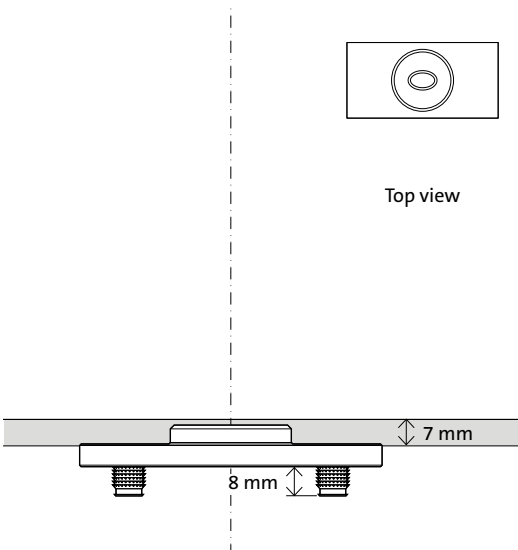


Floor plate Flush rounded

80 × 40 × 11 mm

Floor plate Flush rounded offers the possibility to recess your floorplate in the door frame. If you plan to use drop seals to prevent draught or as a seal for an exterior pivot door, a floor plate Flush is the floor plate you need.

Mounting pins	Four 8 mm pins
Undercut	7 mm
Colours	Stainless steel
Radial adjustment	No



Floor plate Flush squared

80 × 40 × 11 mm

Floor plate Flush squared offers the possibility to recess your floorplate in the door frame. If you plan to use drop seals to prevent draught or as a seal for an exterior pivot door, a floor plate Flush is the floor plate you need.

Mounting pins	Four 8 mm pins
Undercut	7 mm
Colours	Stainless steel
Radial adjustment	No

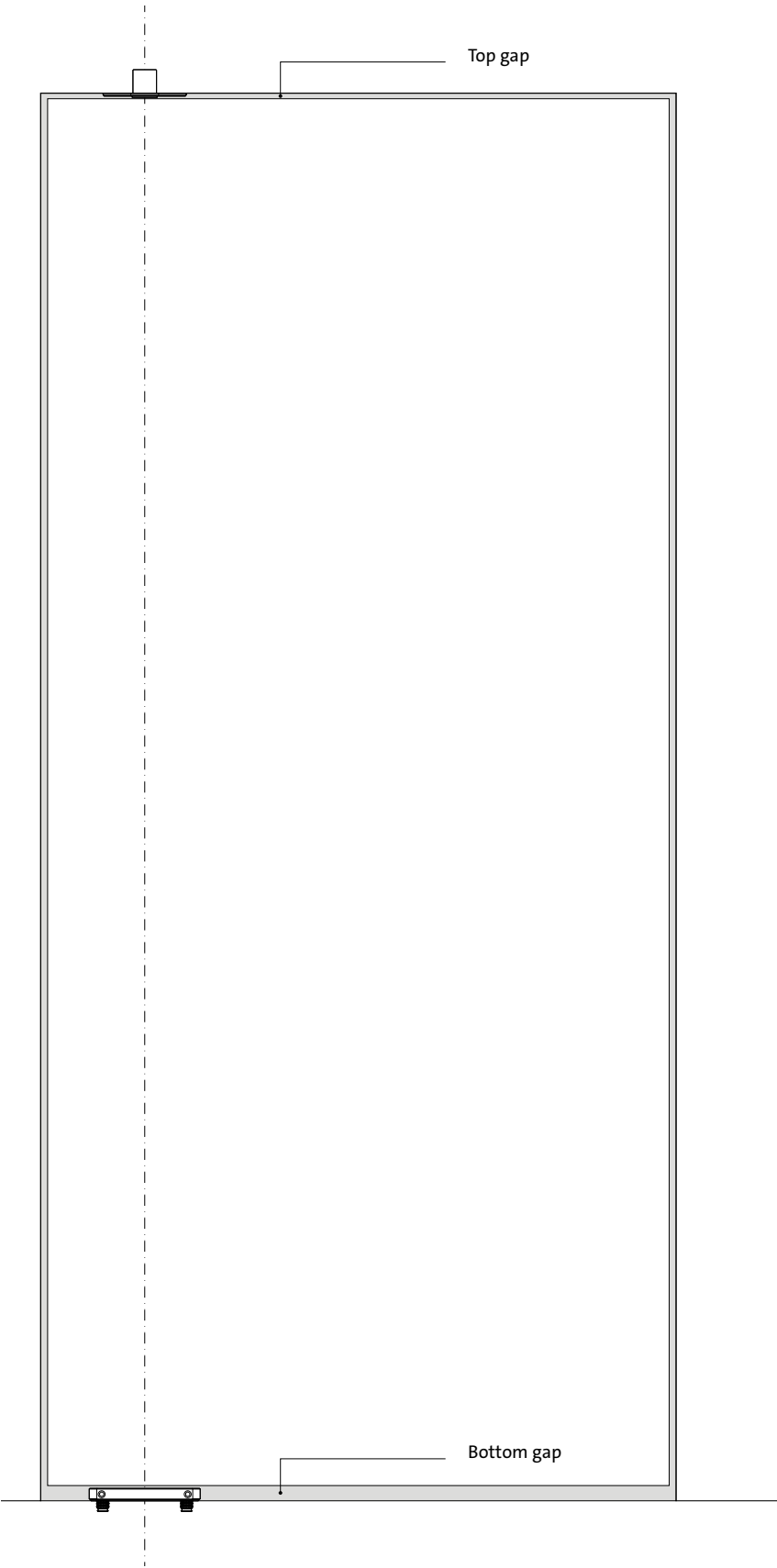
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Technical checklist

To make sure you have every technical specific you need, we have compiled a smart checklist.

Top and bottom gap



Top gap

The distance between ceiling and top of the door should be 4-10 mm*.

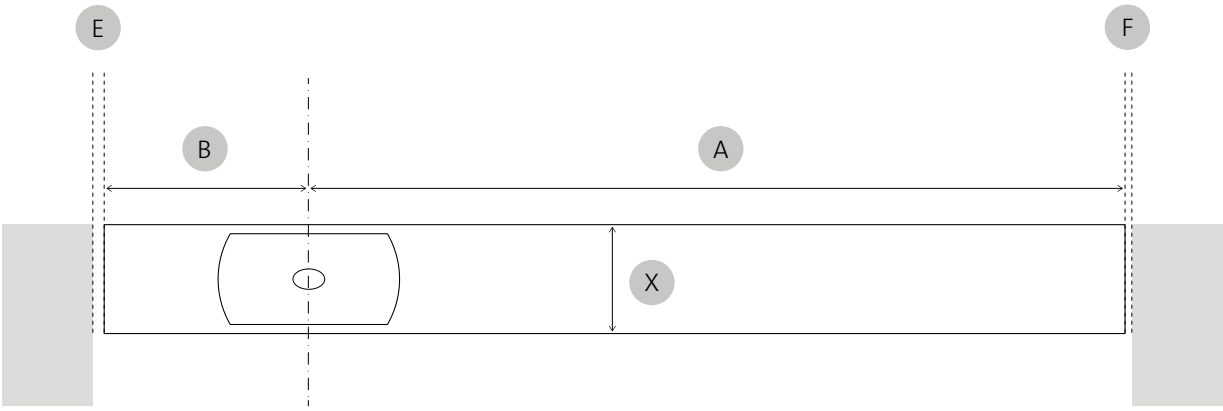
* In all situations, beware of sagging.

Bottom gap

The opening between the bottom of the door and the floor depends on the floor plates that are used.

Floor plate squared	11 mm
Floor plate round	11 mm
Floor plate Flush rounded	7 mm
Floor plate Flush squared	7 mm

Side gaps



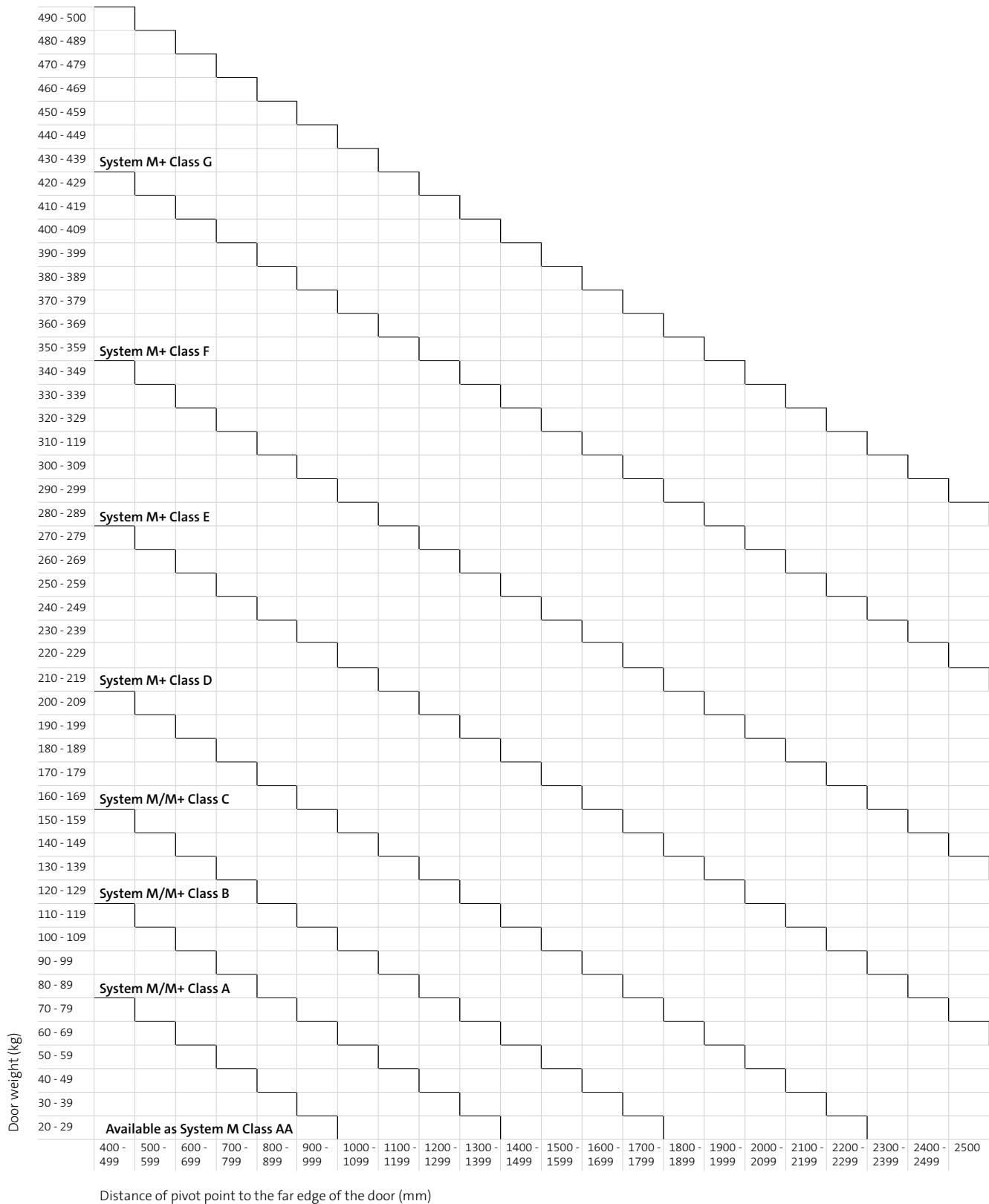
- X Door thickness
- B Distance of pivot point to the near edge of the door
- A Distance of pivot point to the far edge of the door
- E Minimum gap left
- F Minimum gap right

The minimum gap at the side of the door depends on the thickness and the width of the door in relation to the position of the pivot point.

The outcome on left and right will be different. The calculation is made based on the radius of the door when turning. The smaller the radius (the pivoting side) and the thicker the door, the bigger the required gap between door and wall or frame.

Calculate the required gap dimensions with our Gap Calculator: www.fritsjurgens.com/gap-calculator.

System M+/M weight classes table



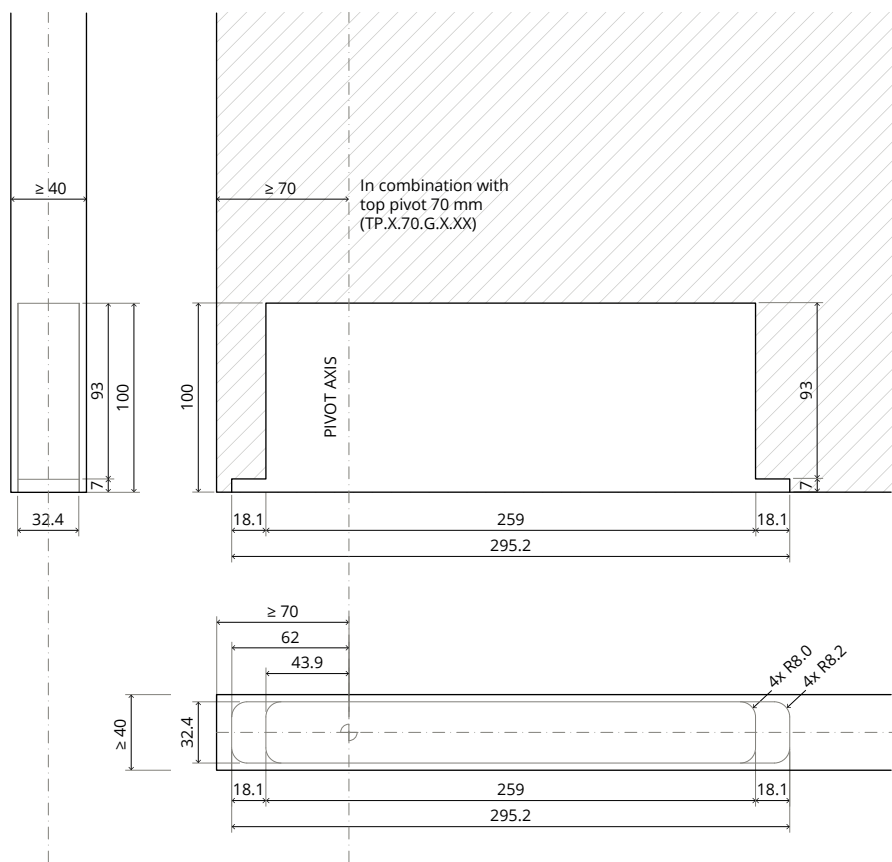
Milling and components

We tried to keep our milling procedure as simple as our designs. By following the step-by-step instructions, preparing a door to fit our components should be easy as one two three. Keep in mind that the space for milling is always larger than the system itself.

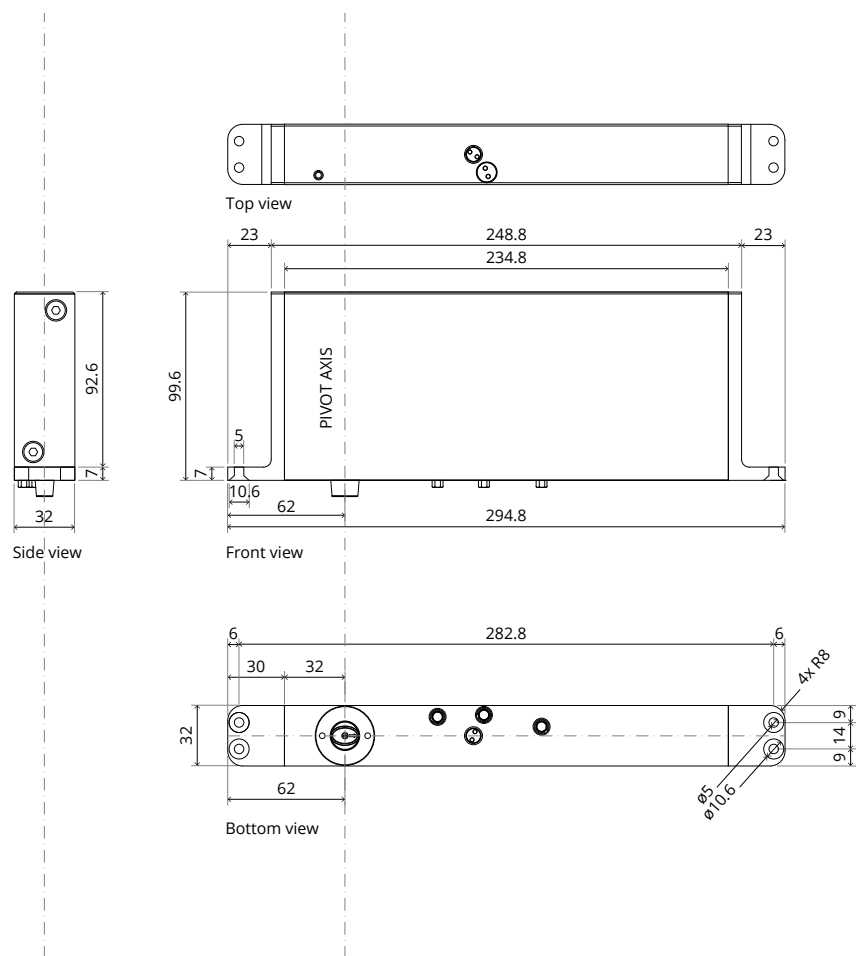
System M+ 70 mm Class A to E

Milling - preparing the door

Pivot point = minimally 70 mm



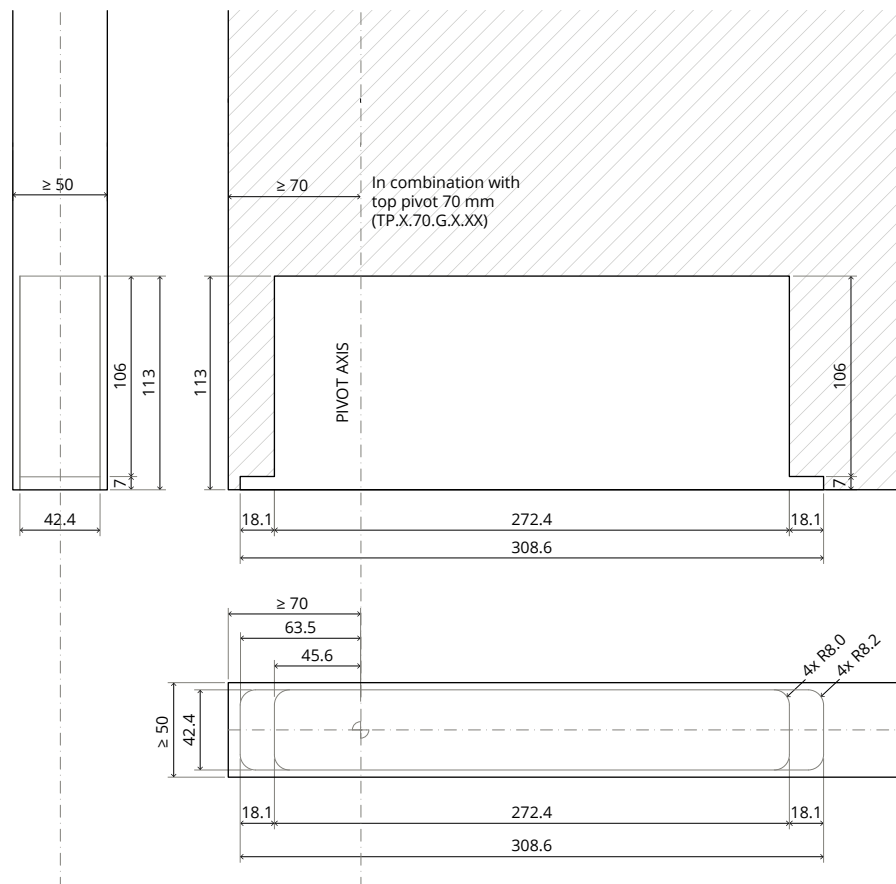
Components



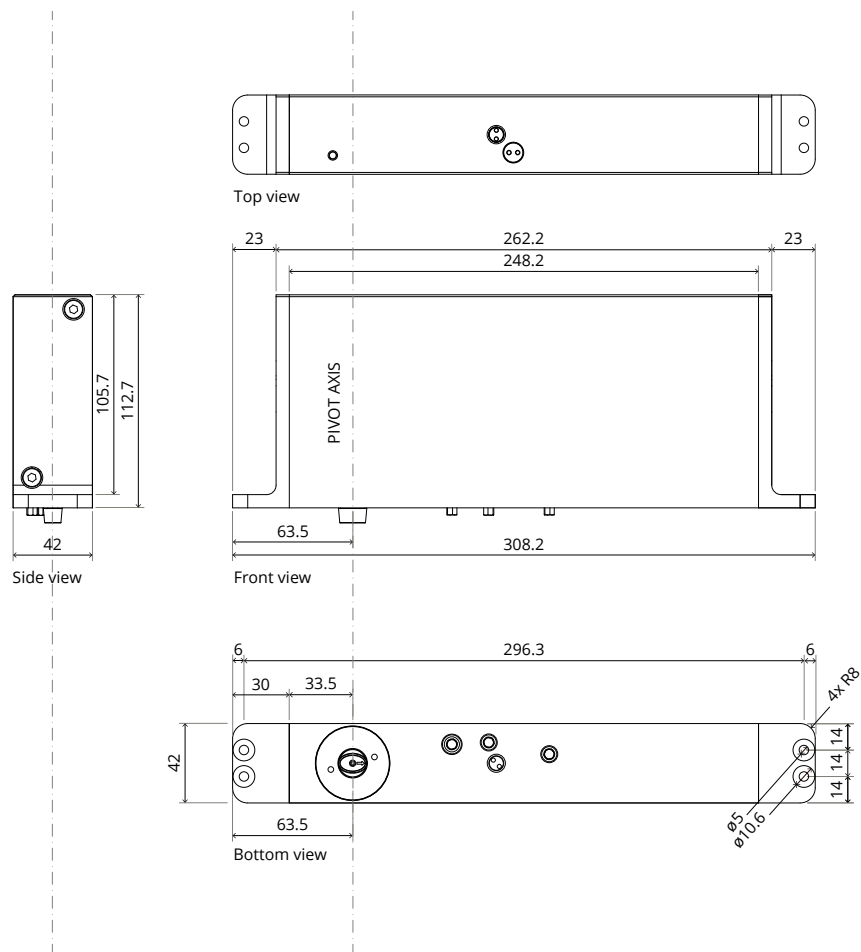
System M+ 70 mm Class F and G

Milling - preparing the door

Pivot point = minimally 70 mm



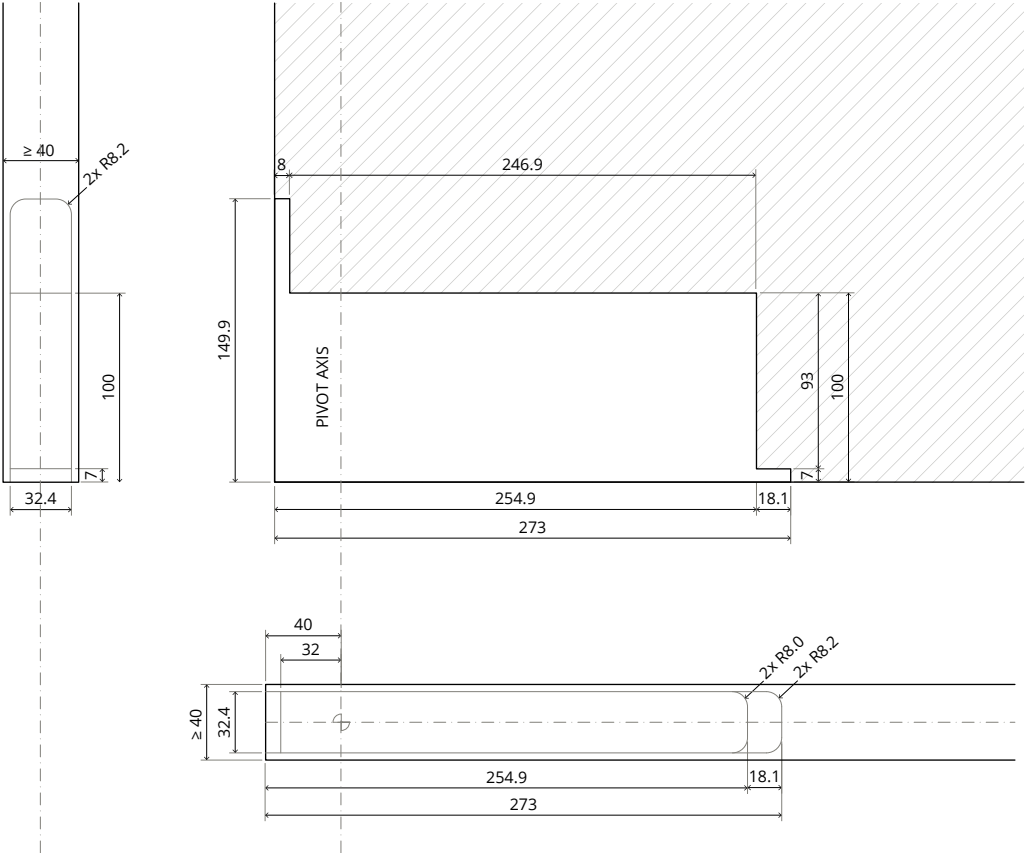
Components



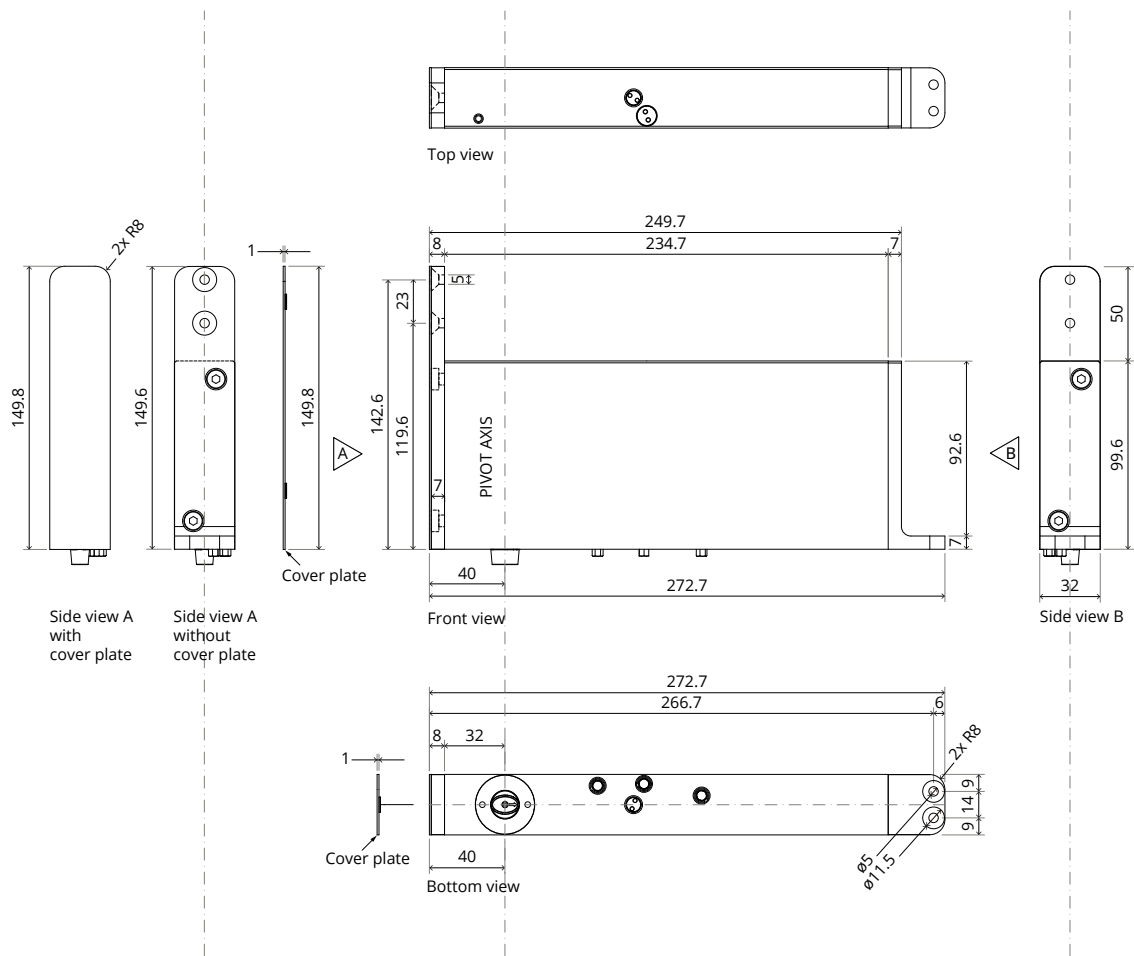
System M+ 40 mm Class A to E

Milling - preparing the door

Pivot point = fixed 40 mm



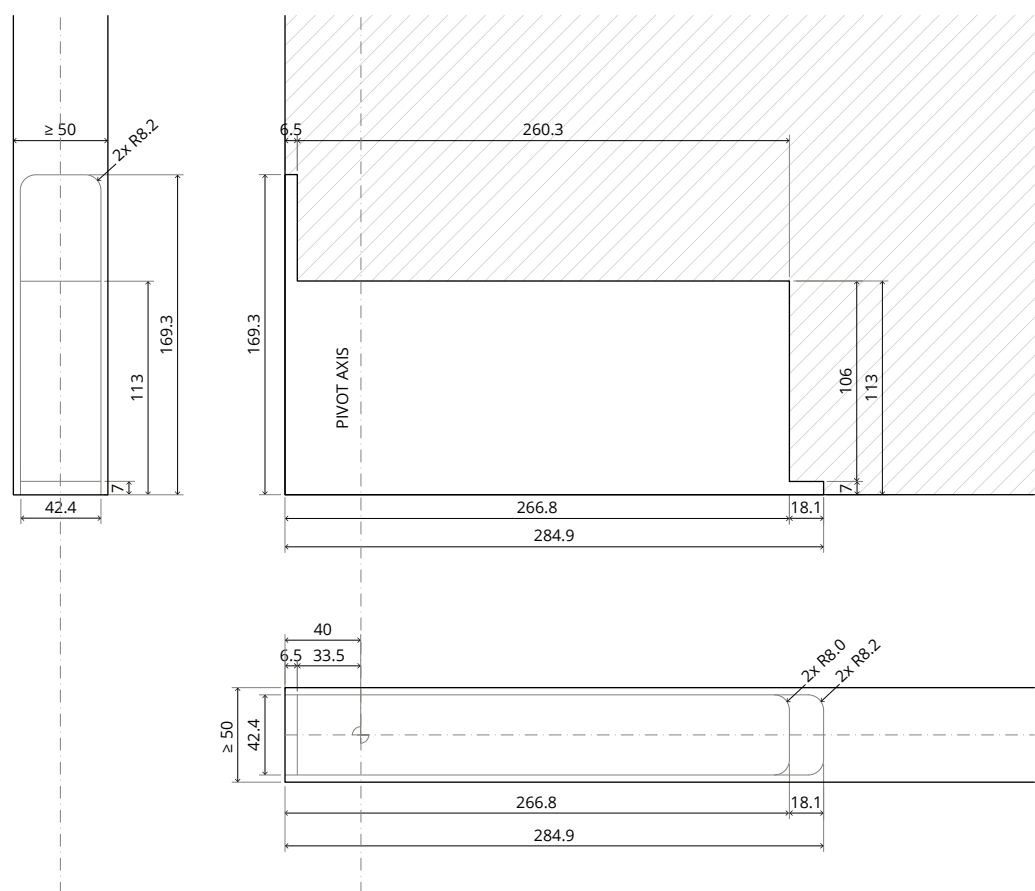
Components



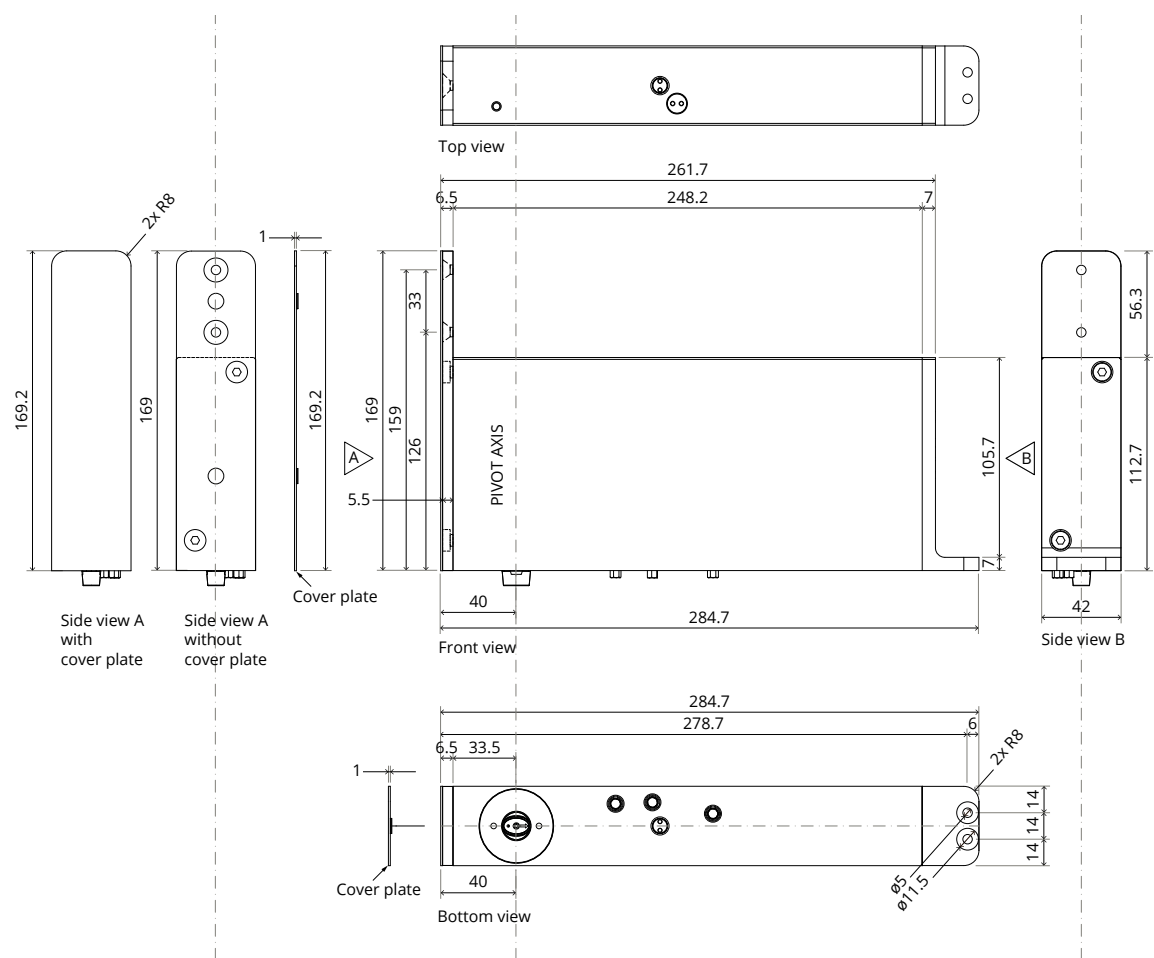
System M+ 40 mm Class F and G

Milling - preparing the door

Pivot point = fixed 40 mm

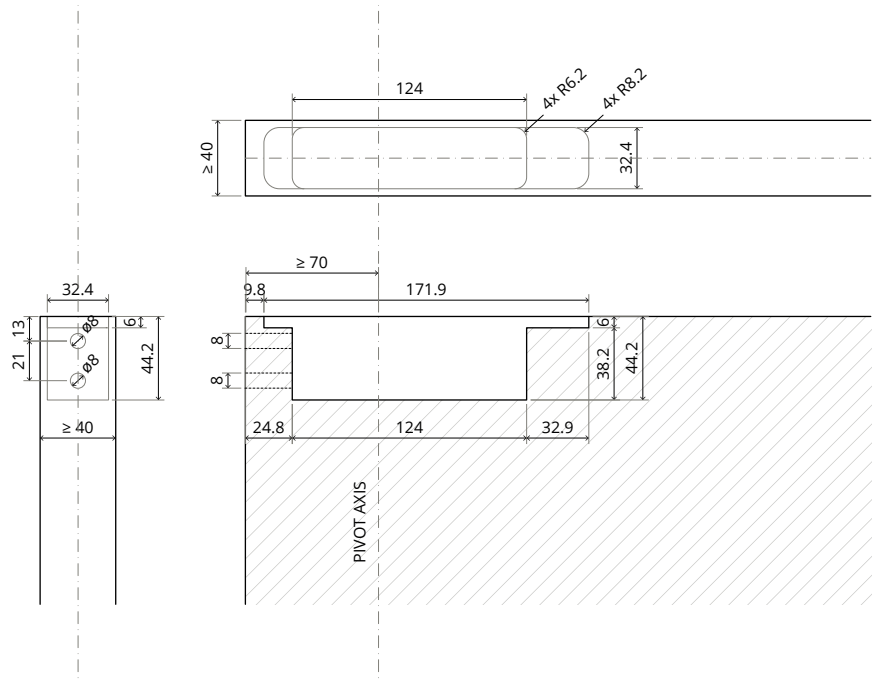


Components

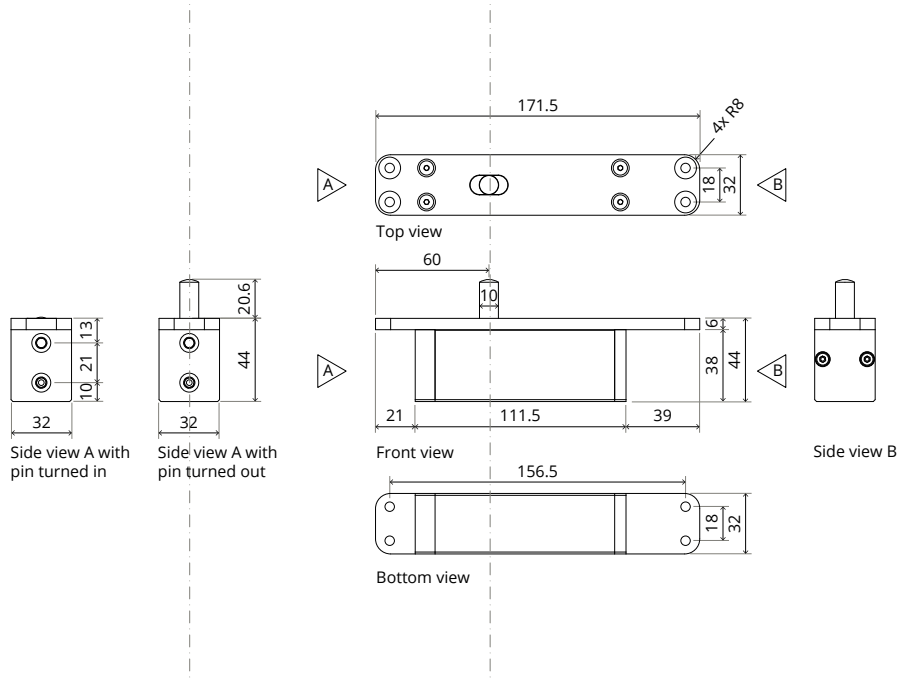


Top pivot 70 mm Class B

Milling - preparing the door

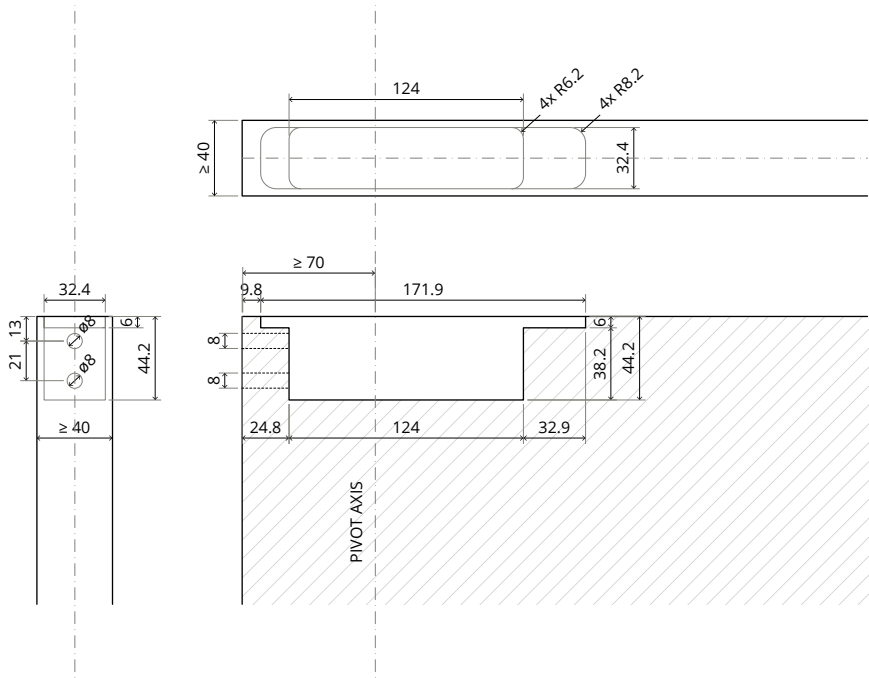


Components

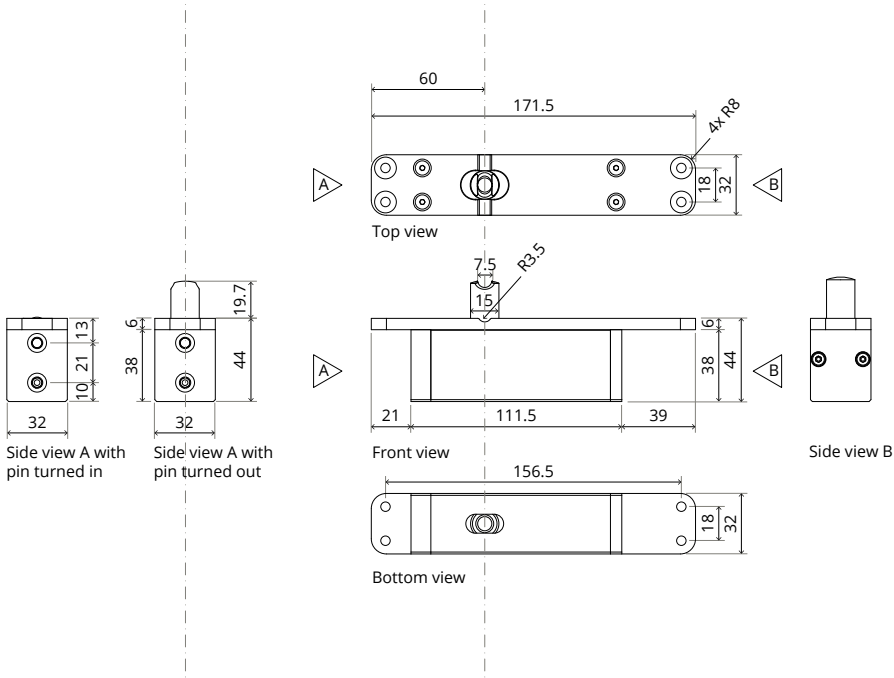


Top pivot 70 mm Class G

Milling - preparing the door

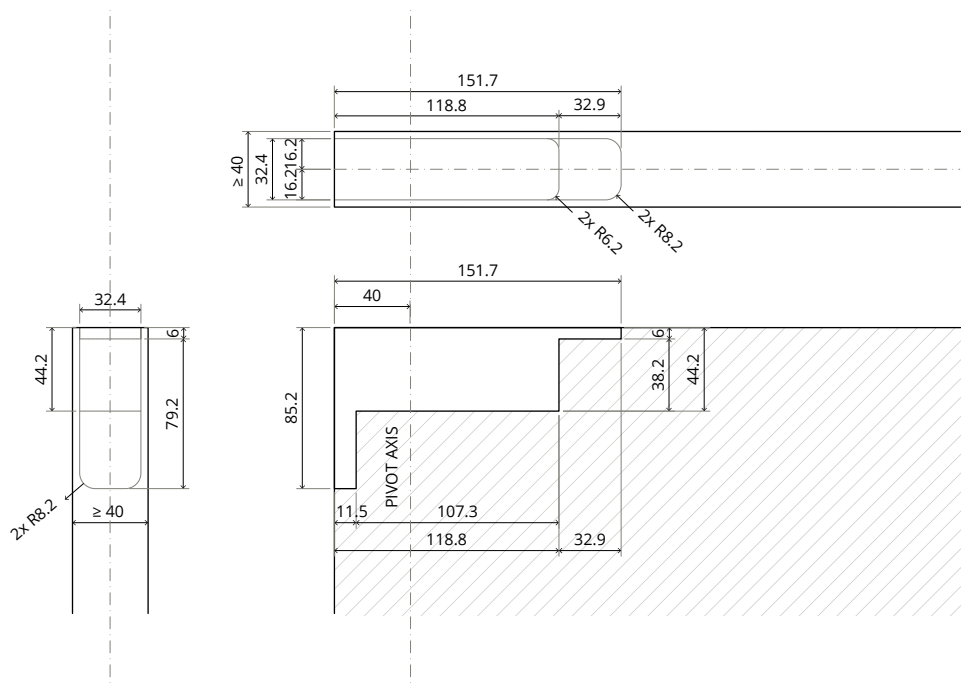


Components

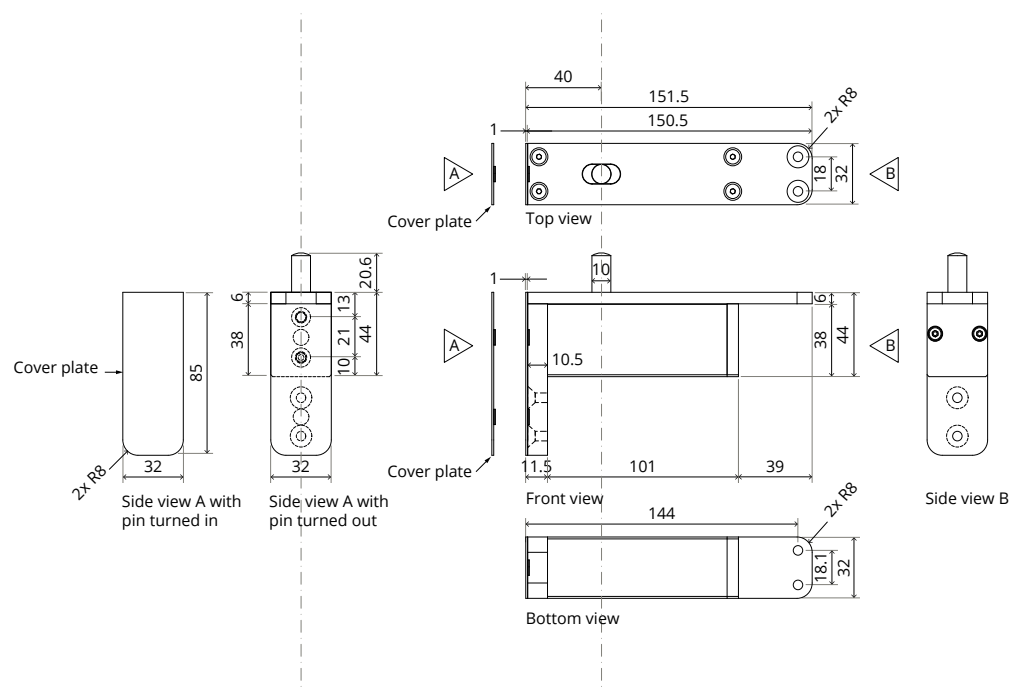


Top pivot 40 mm Class B

Milling - preparing the door

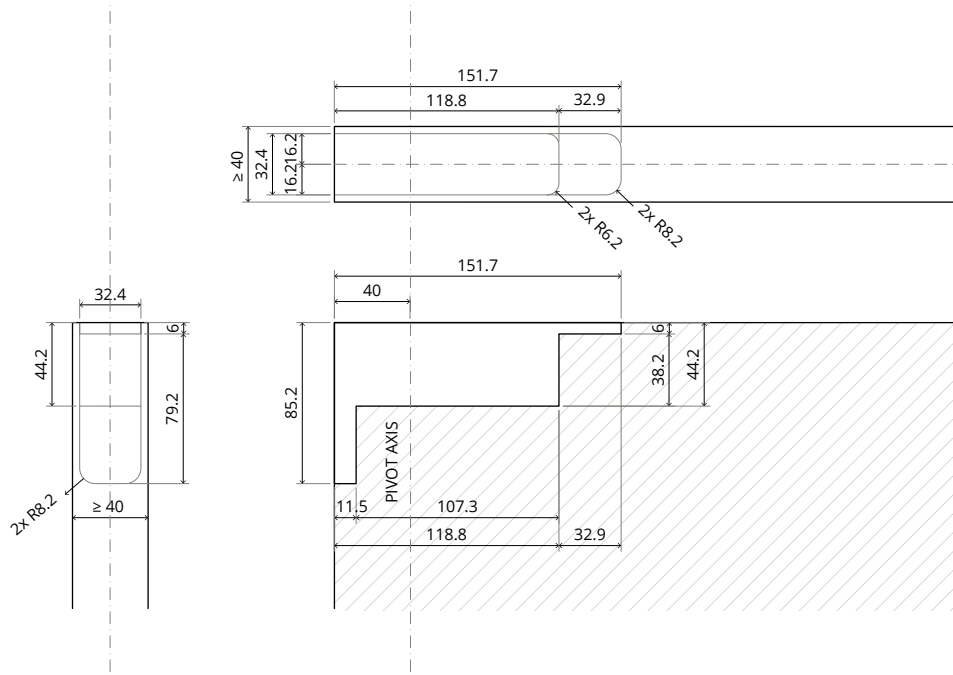


Components

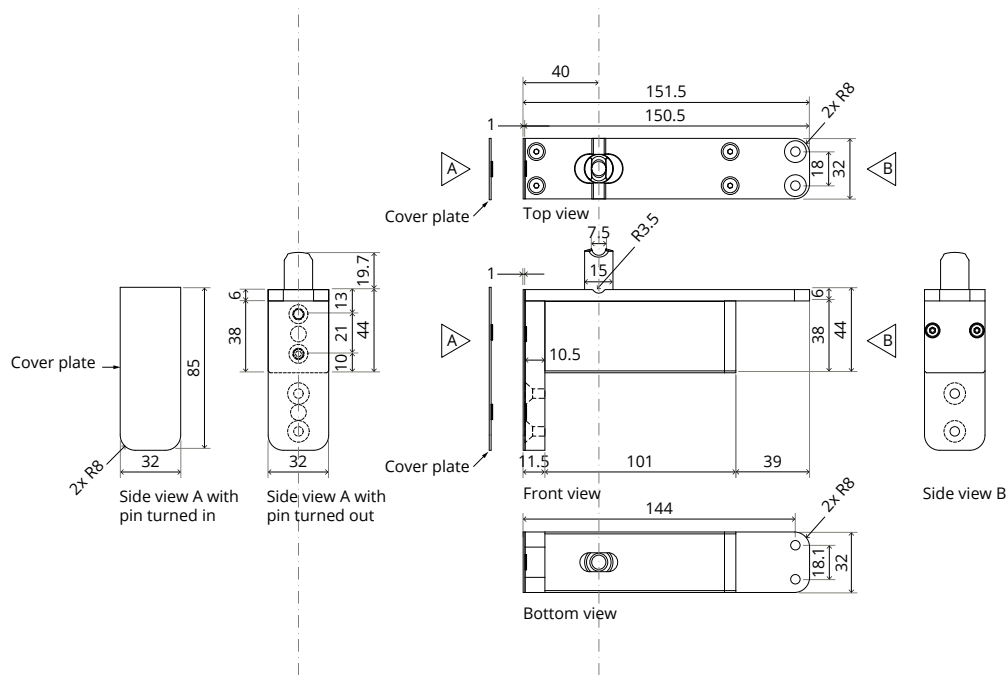


Top pivot 40 mm Class G

Milling - preparing the door

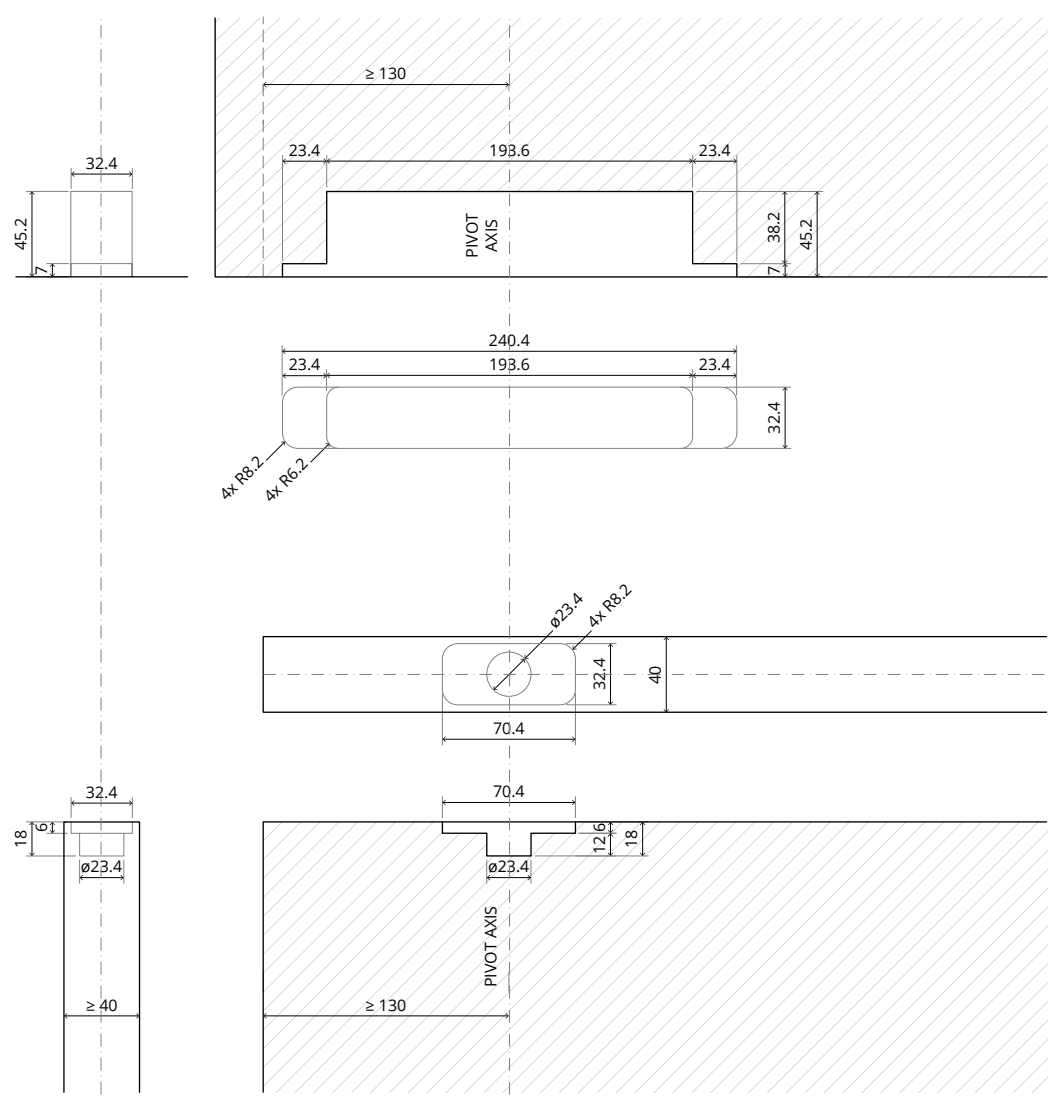


Components

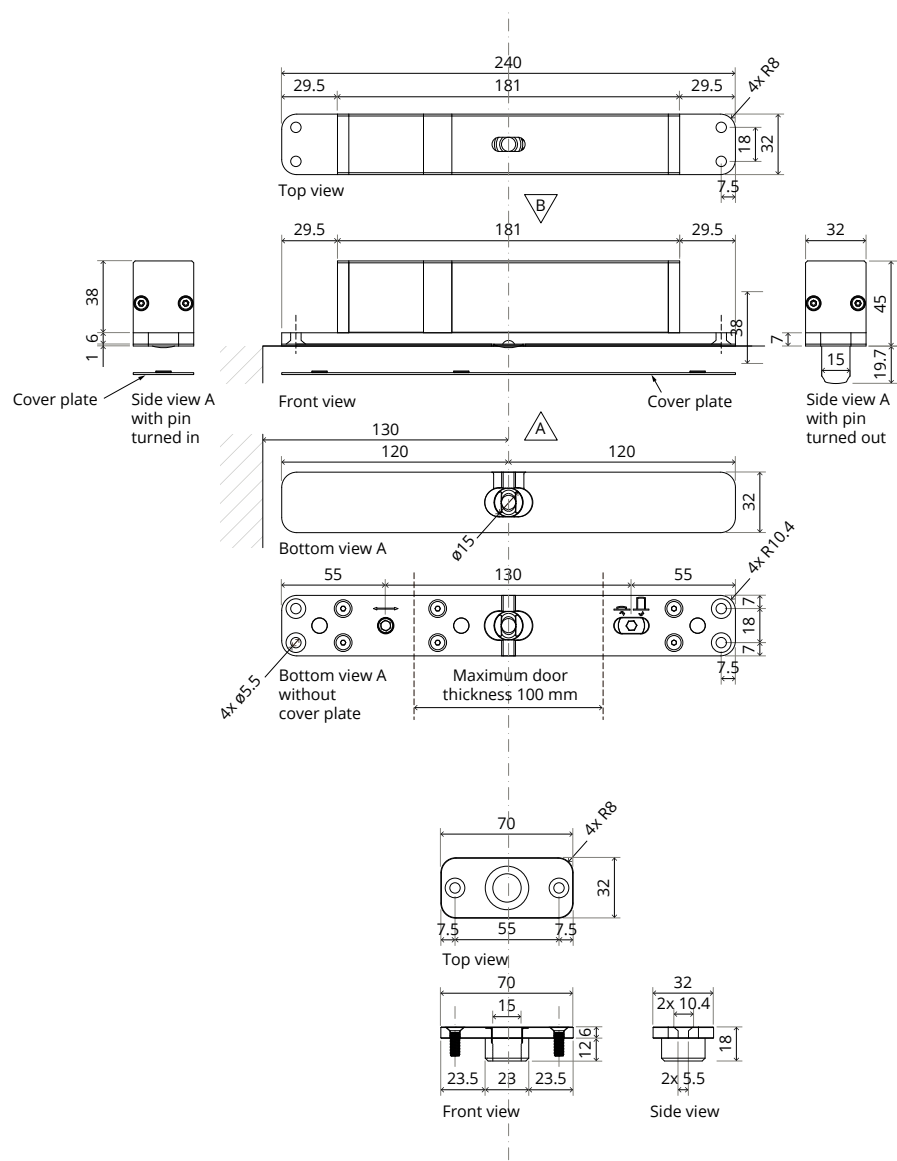


Top pivot Reversed

Milling - preparing the door and ceiling/head jamb



Components



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