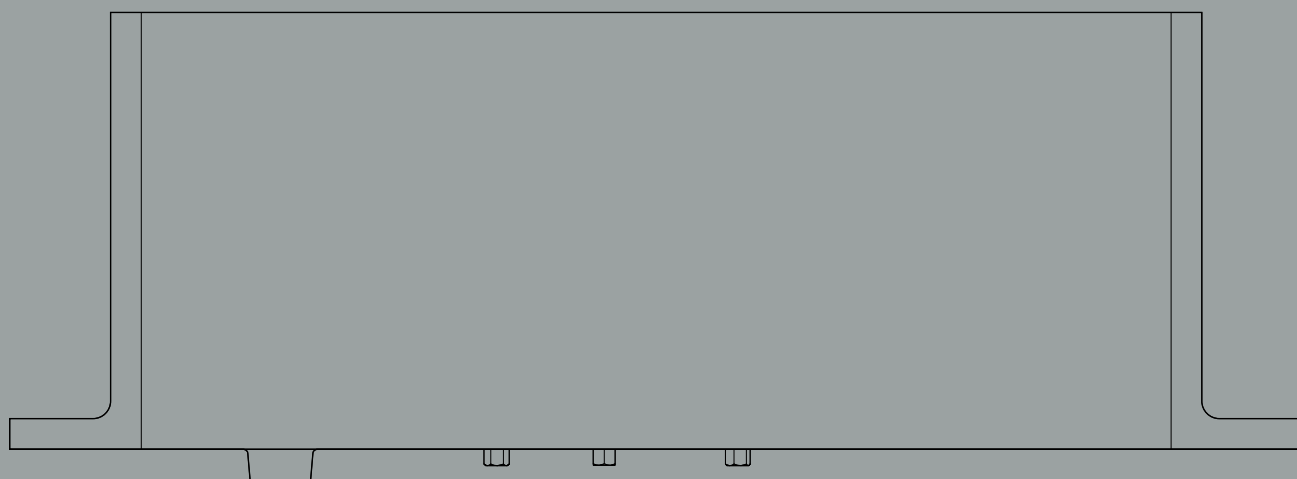


System M+ FA NHO
Technical documentation
Functionalities and specifics



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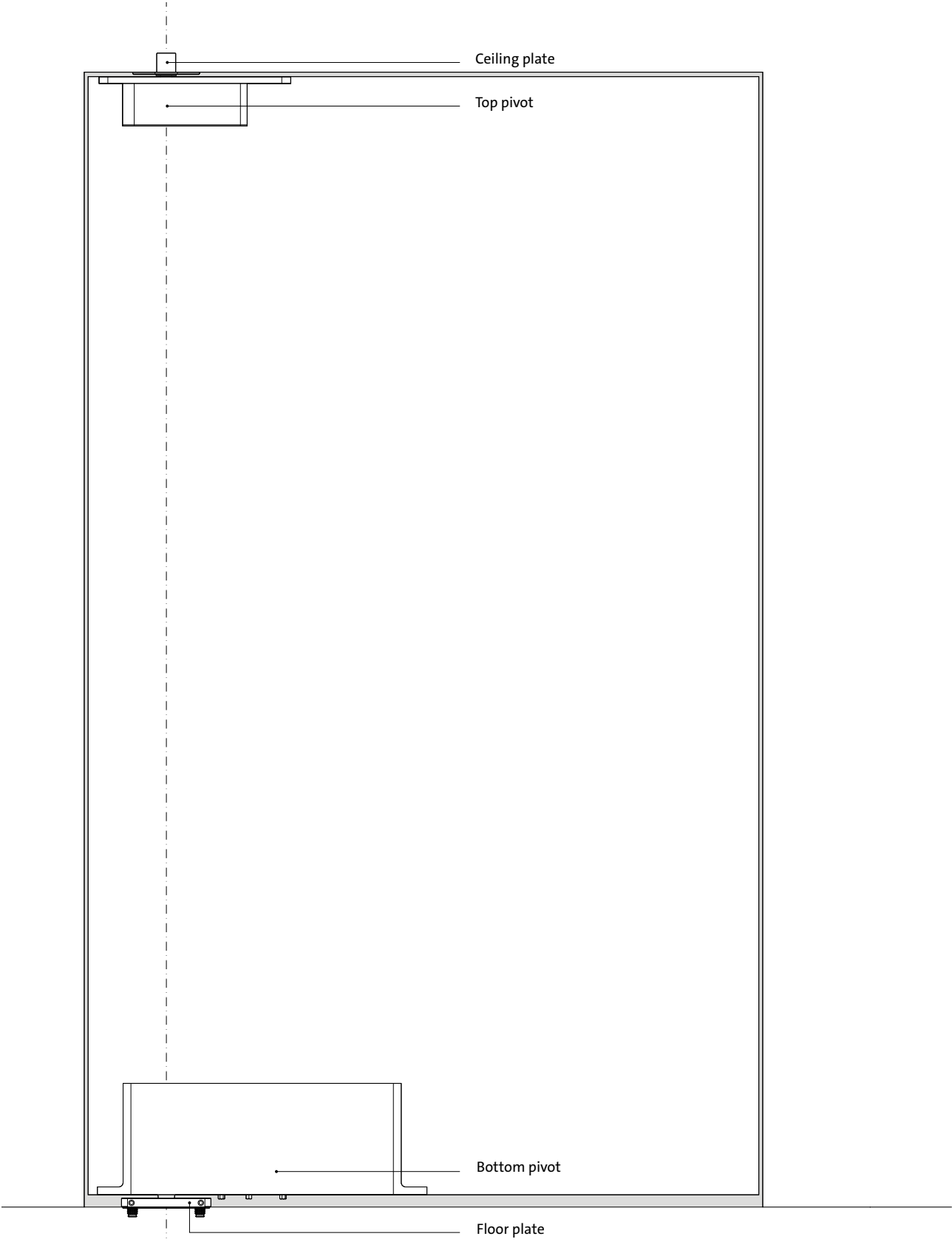
Overview

The FritsJurgens Friendly Access is part of the System M+ pivot hinge range. The System M+ FA NHO of FritsJurgens delivers total control over the movement of the pivot door, without hold open positions at 90°. This level of control enabled FritsJurgens to finetune the closing speed and door-opening force to meet the conditions of ICC A117.1-2017 in compliance with the Americans with Disabilities Act.

An ADA compliant pivot door equipped with Friendly Access pivot hinge meets the minimum required closing speed of 5 seconds from 90° to 12°, in compliance with ICC A117.1-2017 – chapter 404.2.7. The force for pushing or pulling the pivot door open is a maximum of 5.0 pounds (22.2 N), in compliance with ICC A117.1-2017 – chapter 404.2.8.

Components

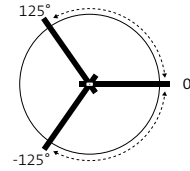
Our systems always consist of the following components:



Functions

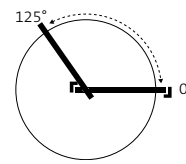
Rotation	Double-acting: 180° Single-acting: 90°
Hold positions	Double-acting: 0° Single-acting: 0°
Free swing	No
Self-closing	Double-acting: from 125° and -125° to 0° Single-acting: from 125° to 0°

Rotation



Double-acting

Double-acting means that the pivot door can be opened towards both sides, without a hold position at 90° at either side.

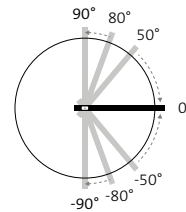


Single-acting

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.

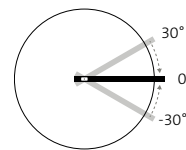
Movement

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



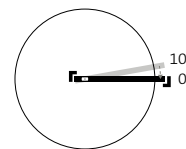
Damper Control

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.



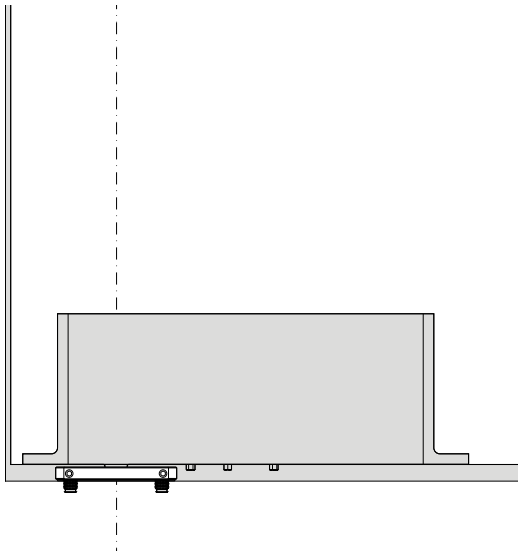
Latch Control

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

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+ FA NHO 70 mm Class AA to C

294.8 × 32 × 99.6 mm

Placement	Side to middle placement
Pivot point	Pivot point from 70 mm (2 3/4") to middle placement
Cover plates	No
Door weight*	Class AA: 80 - 220 lbs (36 - 100 kg) Class A: 80 - 330 lbs (36 - 150 kg) Class B: 80 - 440 lbs (36 - 200 kg) Class C: 80 - 660 lbs (36 - 300 kg)

Compatible with

Top pivots	Top pivot 70 mm Class B (Class AA to B) Top pivot 70 mm Class G (Class C) Top pivot Cable Grommet Top pivot Reversed
Floor plates	Floor plate squared Floor plate round Floor plate Flush rounded Floor plate Flush squared

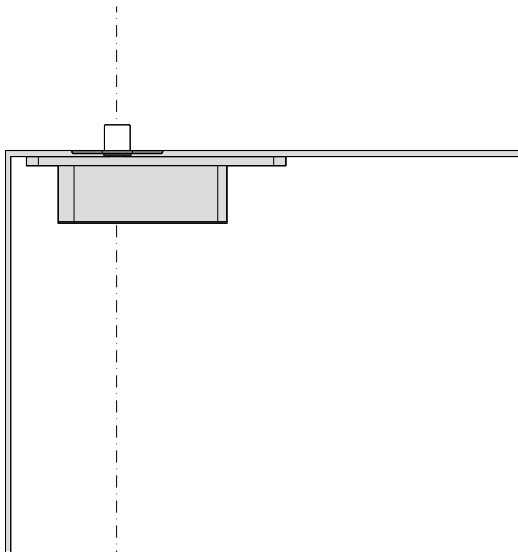
* Depending on door width, see System M+ FA NHO weight classes table.

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

Top pivots

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

Installation inside the door



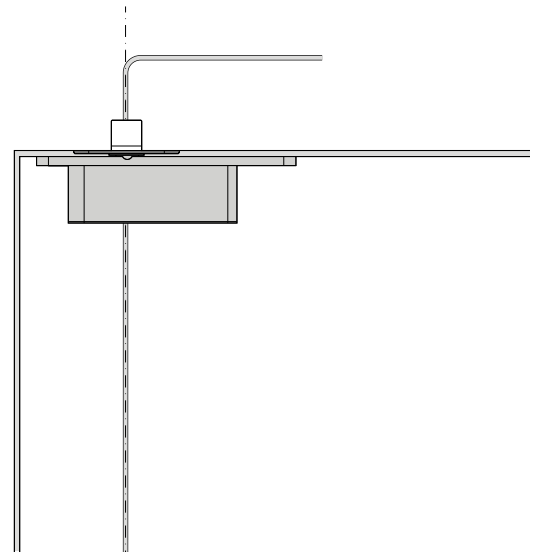
Top pivot 70 mm Class B

171.5 × 32 × 44 mm

Placement	Side to middle placement
Pin diameter	Ø10 mm (≈13/32")
Pivot point	Pivot point from 70 mm (2 3/4") to middle placement
Adjustment	From the side of the door: 5 mm (≈3/16") to the left and 5 mm (≈3/16") to the right
Cover plates	No

Compatible with

Bottom pivots	System M+ FA NHO 70 mm (Class AA, A and B)
Ceiling plates	Ceiling plate Class B



Top pivot 70 mm Class G

171.5 × 32 × 44 mm

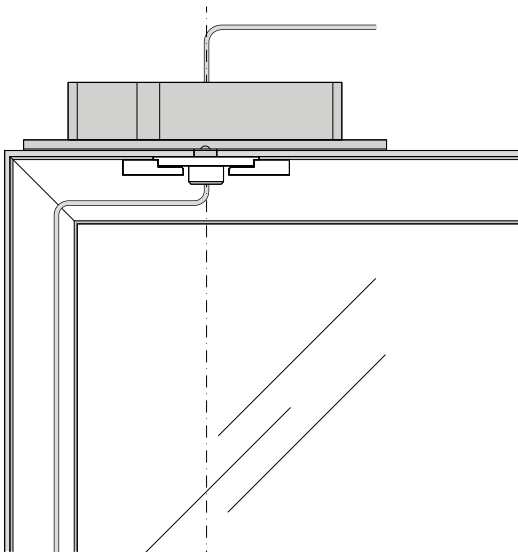
Placement	Side to middle placement
Pin diameter	Ø15 mm (≈19/32")
Pivot point	Pivot point from 70 mm (2 3/4") to middle placement
Adjustment	From the side of the door: 5 mm (≈3/16") to the left and 5 mm (≈3/16") to the right
Cable grommet	Yes, Ø7.5 mm cable entry
Cover plates	No

Compatible with

Bottom pivots	System Fx 70 mm (Class C)
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 to middle placement
Pin diameter	Ø15 mm (≈19/32")
Pivot point	Pivot point from 130 mm (5 1/8") to middle placement
Adjustment	From inside the door opening: 5 mm (≈3/16") to the left and 5 mm (≈3/16") to the right
Cable grommet	Yes, Ø7.5 mm cable entry
Cover plates	Stainless steel Black White

Compatible with

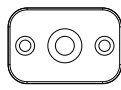
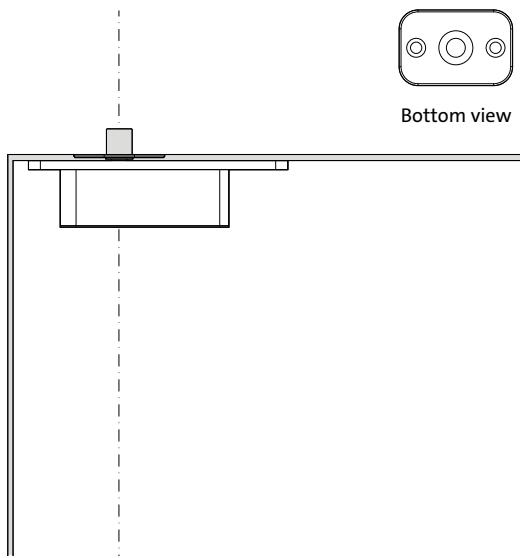
Bottom pivots	System Fx 70 mm (all classes)
Ceiling plates	Receiver

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



Bottom view

Ceiling plate Class B

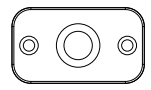
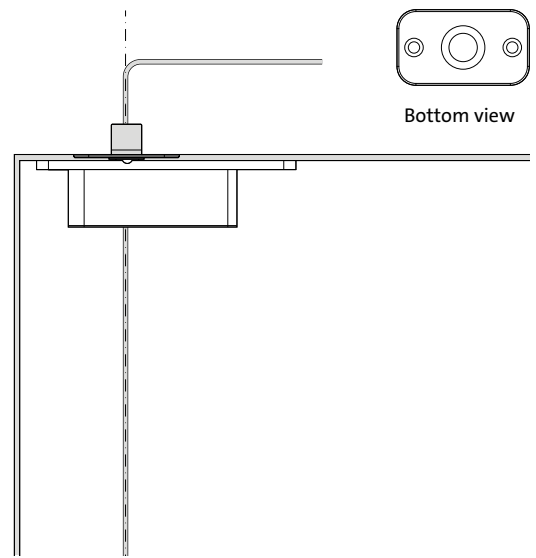
60 × 40 × 20 mm

Colours Stainless steel
 Black

Pin diameter Ø10 mm (≈13/32")

Compatible with

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



Bottom view

Ceiling plate Class G

70 × 40 × 23 mm

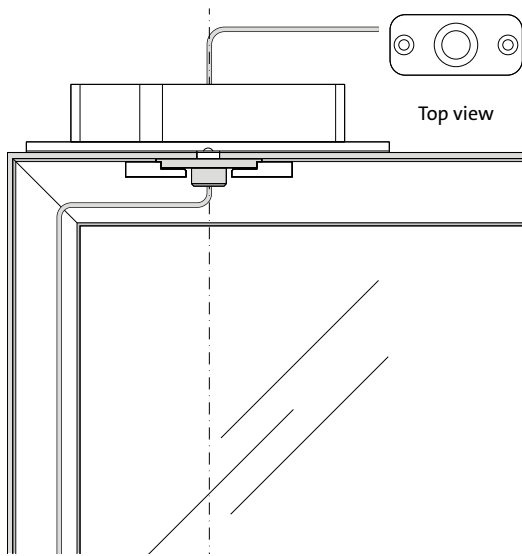
Colours Stainless steel
 Black

Pin diameter Ø15 mm (≈19/32")

Compatible with

Top pivots Top pivot 70 mm Class G
 Top pivot 40 mm Class G

Receiver



Receiver

70 × 32 × 18 mm

Colours Stainless steel

Pin diameter Ø15 mm (≈19/32")

Compatible with

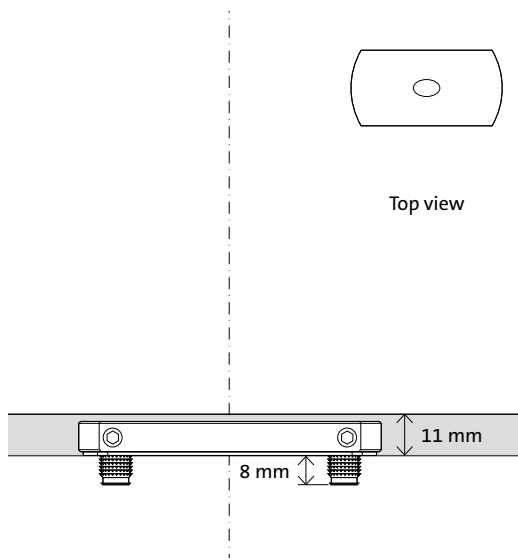
Top pivots Top pivot Reversed

Accessories Adapters

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



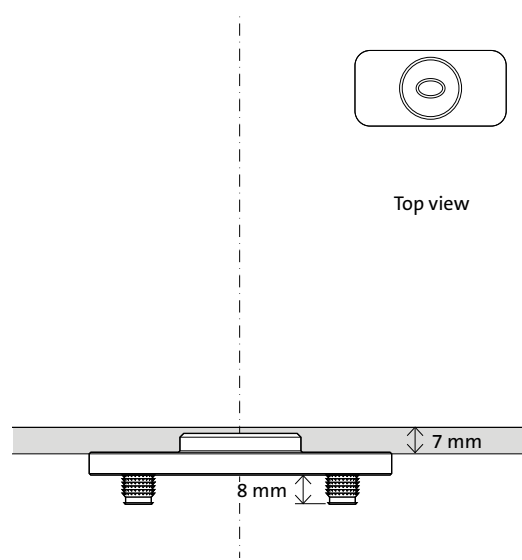
Floor plate squared

80 × 40 × 9 mm

This floor plate features radial adjustment possibilities.

Mounting pins	Two or four 8 mm (≈5/16") pins for optimal stability between two floor types. Or two 30 mm (≈1 3/16") 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

Sunk into the sill

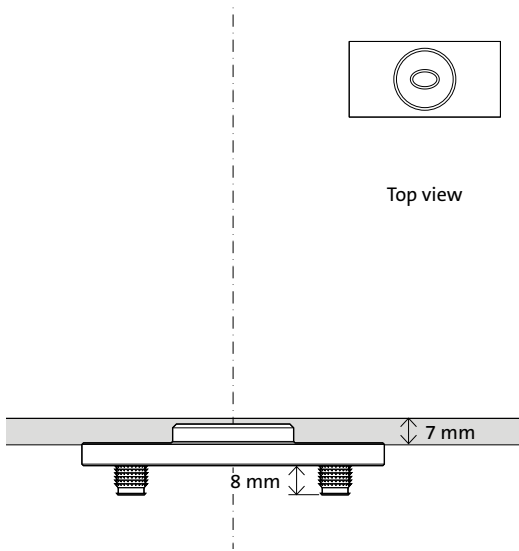


Floor plate Flush rounded

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 (≈5/16") pins
Undercut	7 mm
Colours	Stainless steel
Radial adjustment	No



Floor plate Flush squared

80 × 40 × 11 mm

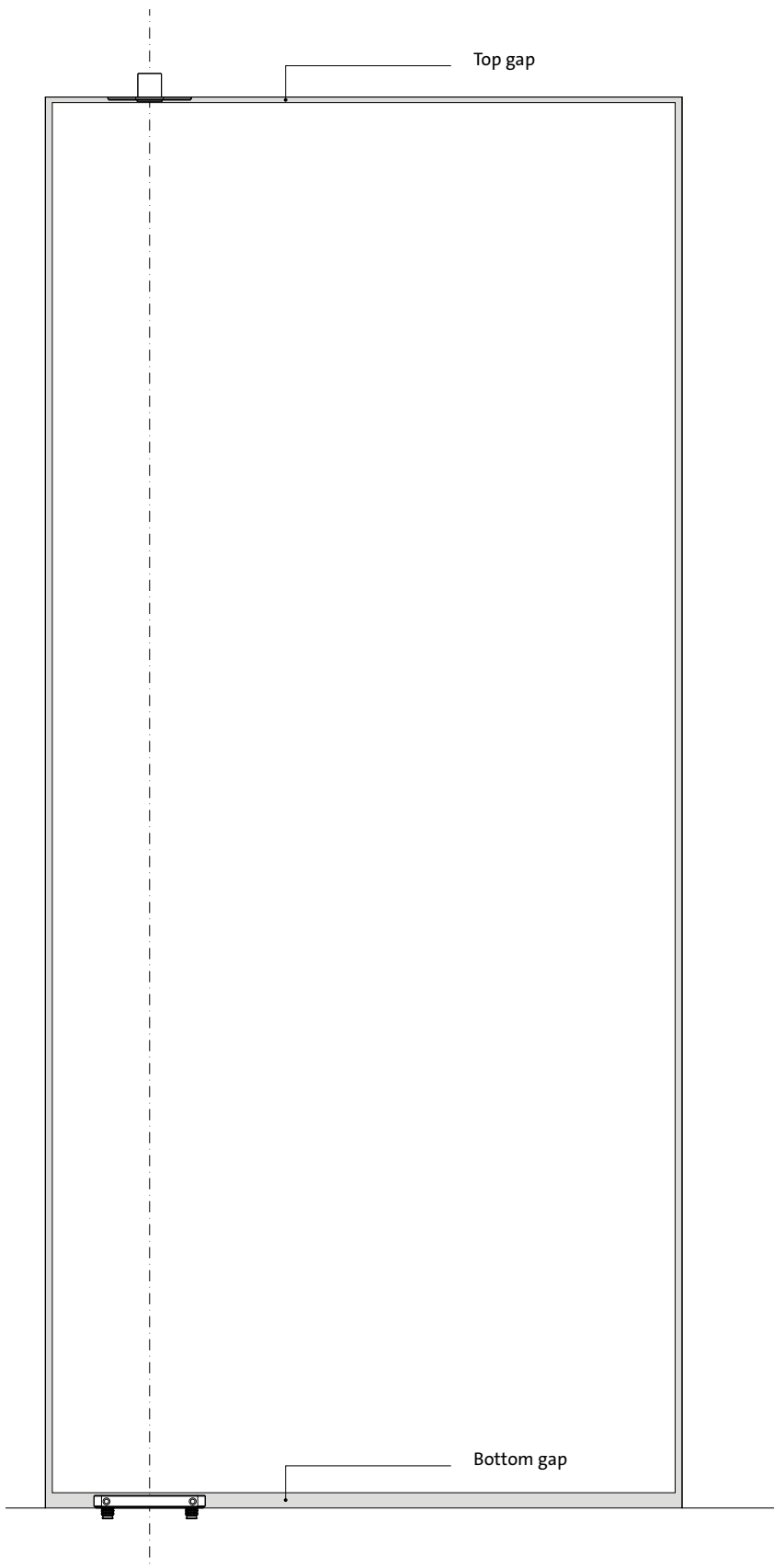
Floor plate Flush squared offers the possibility to recess your floorplate in the door frame. If you plan to use drop seals to prevent draught or as a seal for an exterior pivot door, a floor plate Flush is the floor plate you need.

Mounting pins	Four 8 mm (≈5/16") pins
Undercut	7 mm
Colours	Stainless steel
Radial adjustment	No

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 ($\approx 5/32$ - $13/32$ "*)

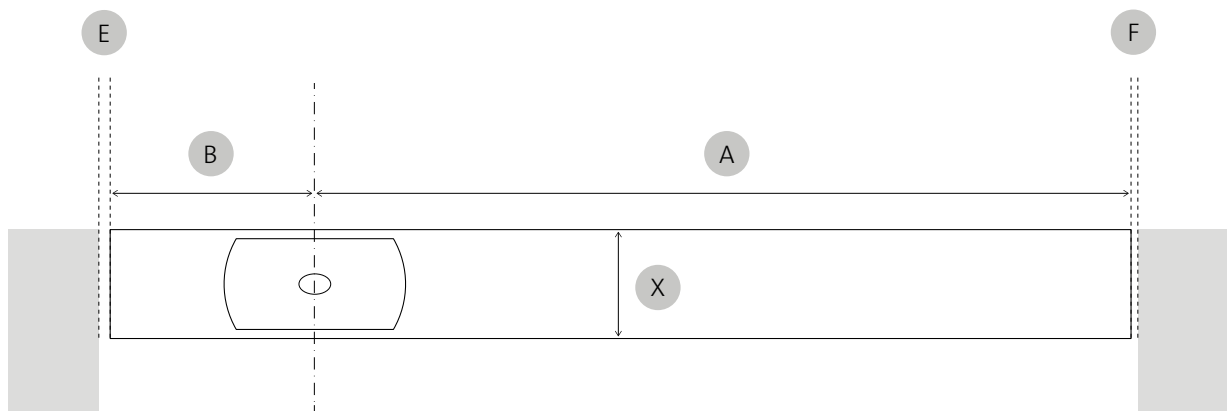
* In all situations, beware of sagging.

Bottom gap

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

Floor plate squared	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+ FA NHO weight classes table

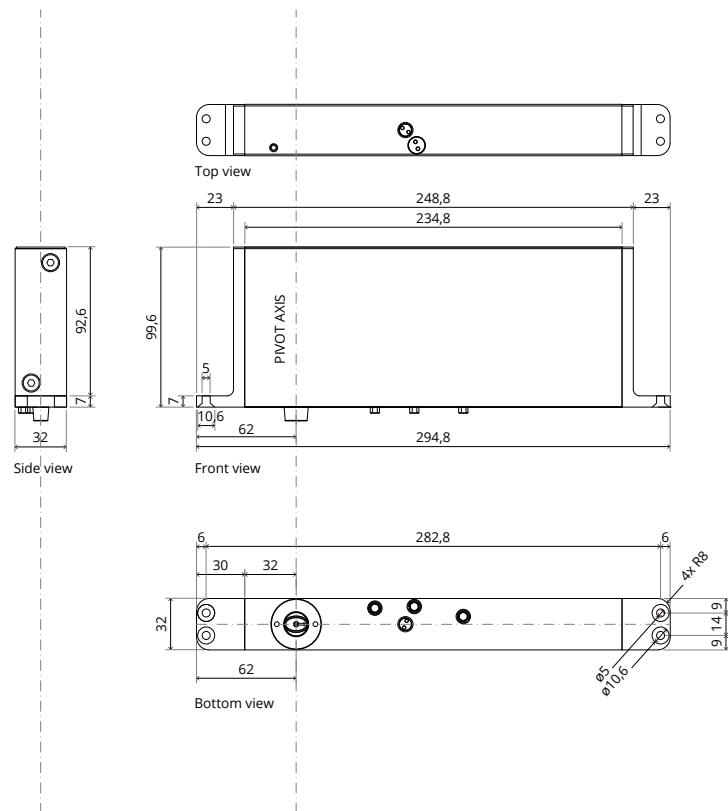
660				System M+ FA NHO Class C	
440			System M+ FA NHO Class B		
330		System M+ FA NHO Class A			
220	System M+ FA NHO Class AA				
80					
	30	40	50	60	80

Distance of pivot point to the far edge of the door (inch)

Milling and components

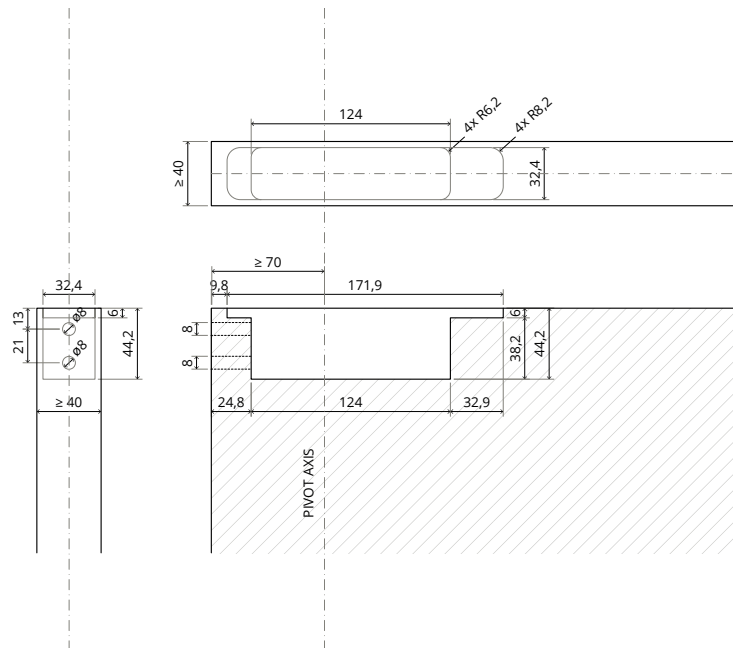
We tried to keep our milling procedure as simple as our designs. By following the step-by-step instructions, preparing a door to fit our components should be easy as one two three. Keep in mind that the space for milling is always larger than the system itself.

Components

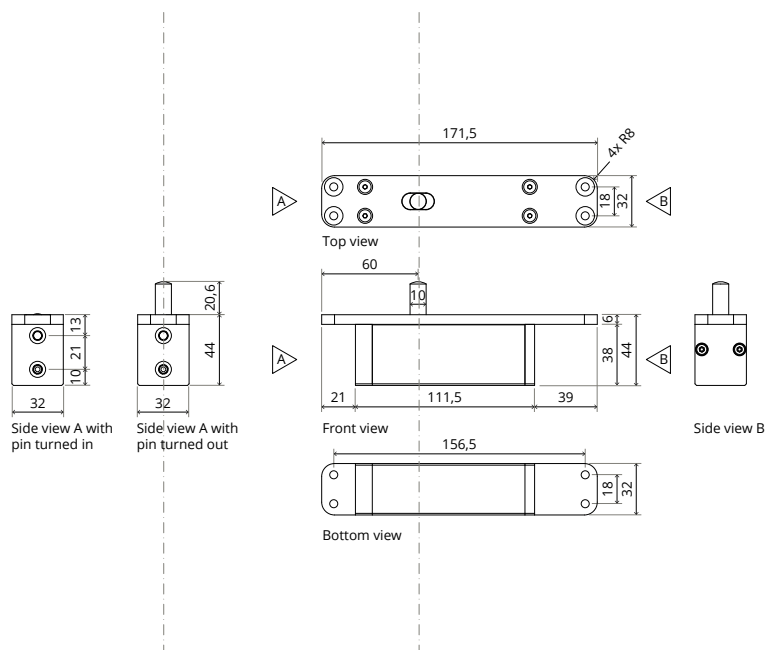


Top pivot 70 mm Class B

Milling - preparing the door

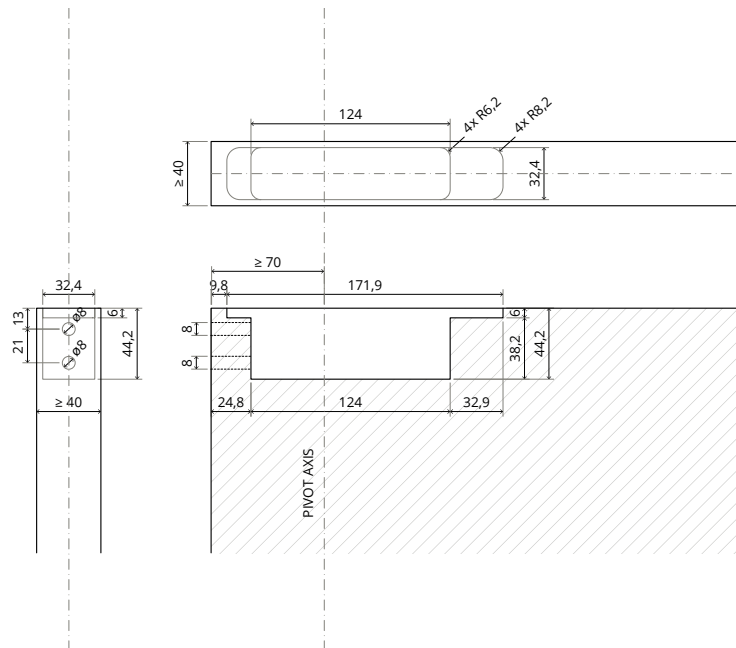


Components

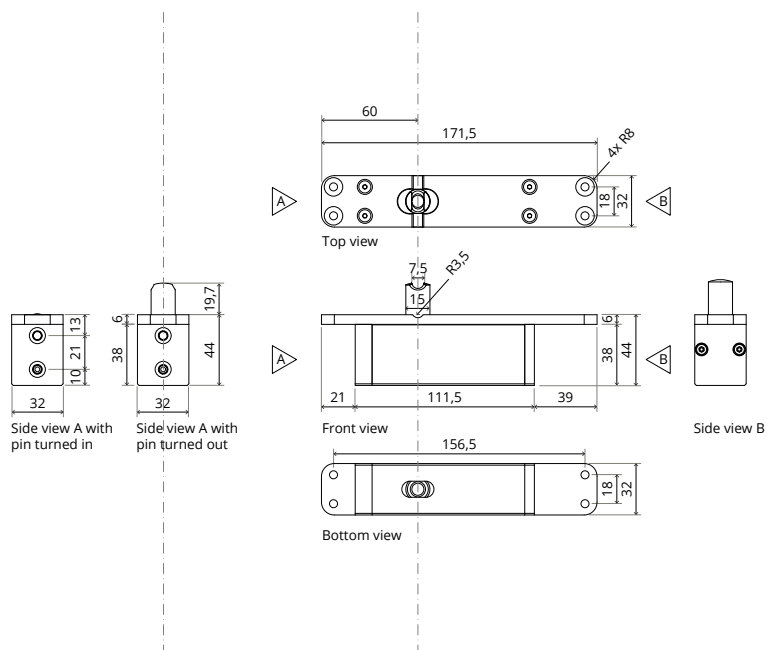


Top pivot 70 mm Class G

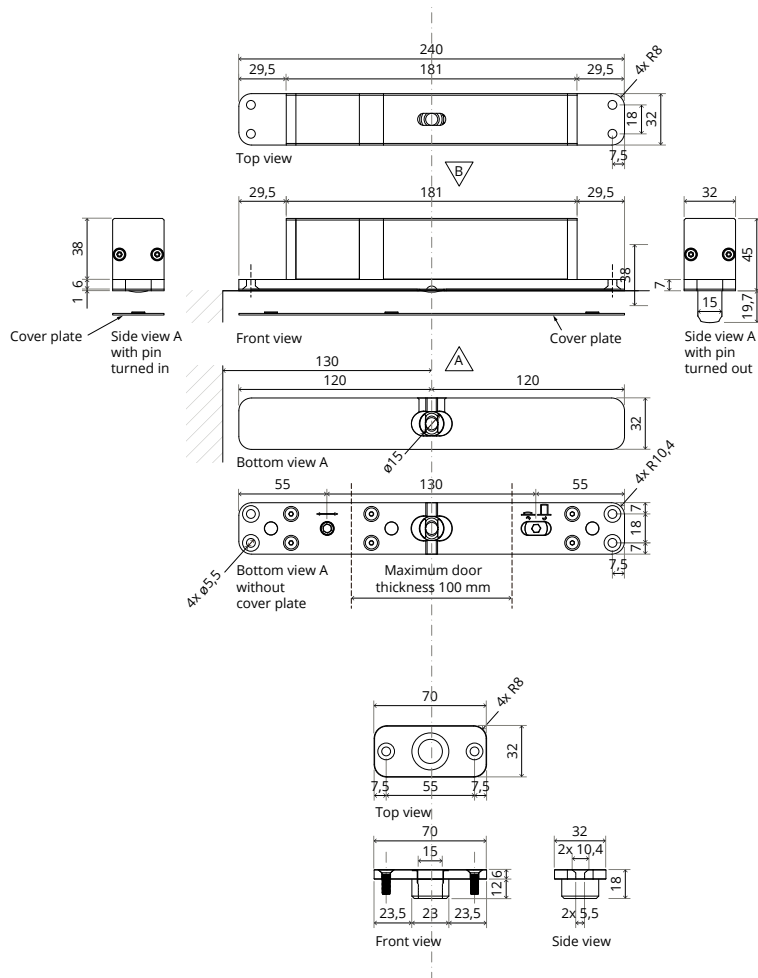
Milling - preparing the door



Components



Components



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