

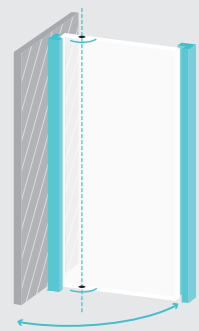
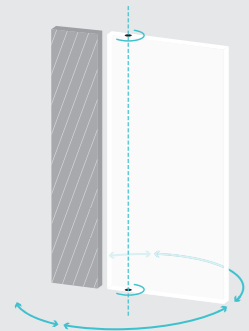
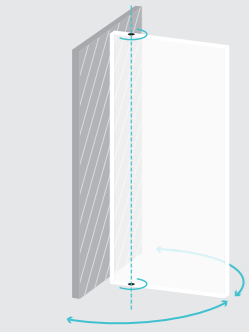
SYSTEM M

hidden perfection

FritsJurgens®

SYSTEM M APPLICATIONS

System M is the perfect solution
for single and double-acting doors.



Choose the pivot door system that
meets all your needs. Please see our
complete line of products on pages
10 - 11.

TABLE OF CONTENTS

FRITSJURGENS® SYSTEM M		TECHNICAL DOCUMENTATION	
05	Improving upon perfection	18	Technical drawings
06	Hidden perfection	20	Milling drawings
09	Designed to stand the test of time	22	Type selector
10	Overview Systems	24	Gaps around the door
12	FritsJurgens® System M	26	Pressure load
14	Components	29	Lateral force
		30	Setting top pivot
		32	Setting System M
		34	SYSTEMS FEATURES

WHERE TO BUY

Please visit fritsjurgens.com to find the contact details of partners and dealers in your area.





IMPROVING UPON PERFECTION SYSTEM M

You value design and aesthetics. You appreciate beauty that surpasses current trends. You strive for the best. You are not only seeking the perfect door – the pivot door – but also the perfect movement: the ultimate in smoothness. At the touch of a finger you expect a single fluid movement.

Perfectly balanced. FritsJurgens® System M offers all this and much more.

SYSTEM M HIDDEN PERFECTION



A pivot door is a symbol of hidden perfection. System M adds quality to the design of any pivot door: total control over the flow of the movement. No matter the width or weight of your door.

FritsJurgens® pivot hinge systems offer a solution that applies years of design and engineering to the smooth functioning of the door. This is thanks to our patented system consisting of two state-of-the-art dampers operating in seamless coordination.





SYSTEM M DESIGNED TO STAND THE TEST OF TIME

The System M hinge is virtually indestructible. Built from high performance materials, the system is maintenance-free. Our rigorous testing has shown that even after 1 million cycles (similar to 136 years of daily use) System M still behaves flawlessly. System M packs the highest corrosion resistance.

Even the most diverse conditions do not affect the operation of this system. System M packs an enormous amount of force into a compact space. To harness this power we have developed a casing out of a monolithic piece of aluminum. We have also made the camshafts out of tempered steel for ultimate endurance. This is a system truly designed for the ages: invisible, built-to-last and maintenance-free.

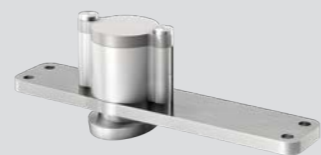
FRITSJURGENS® OVERVIEW SYSTEMS

The FritsJurgens® pivot door range consists of three systems. System One is the most compact system: the hinge acts as a revolving point.

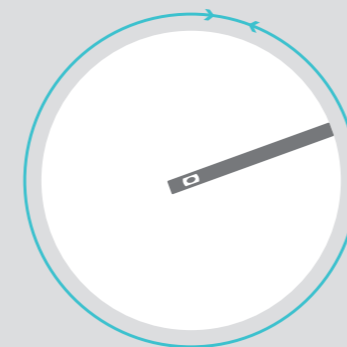
System 3 has three functions: rotation, closing and hold positions. System 3 can turn through 360° and is characterized by a hold position at every quarter of a circle.

The System M adds a new dimension to the pivot door by creating the ultimate smoothness: total control over the movement of the door.

SYSTEM ONE

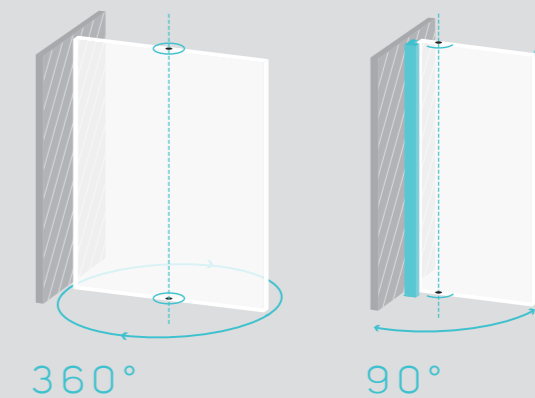


MOVEMENT

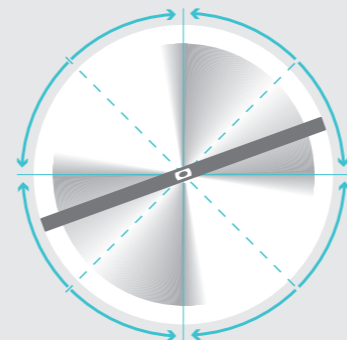


- Rotates 360°
- No hold positions or closing function

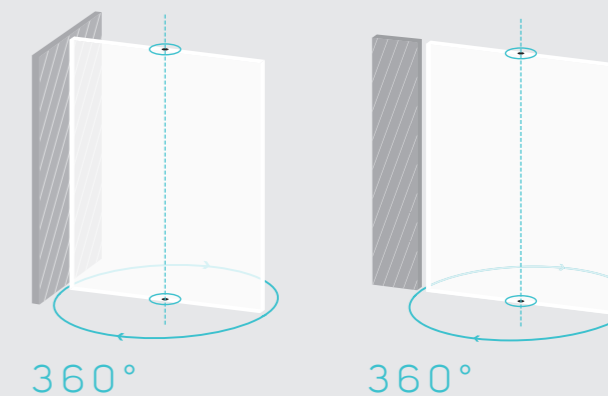
POSITIONING



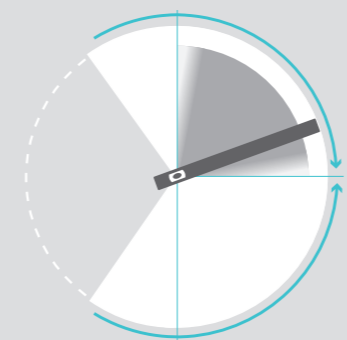
SYSTEM 3



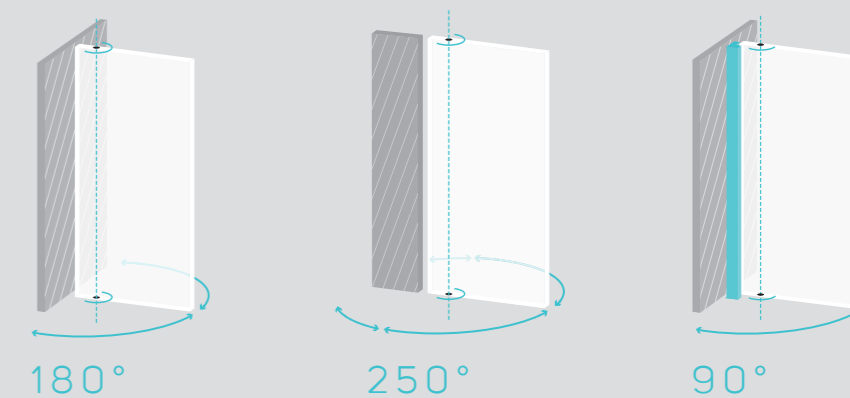
- Rotates 360°
- Hold positions at 0°, 90°, 180° and 270°
- Self-opening - The door automatically moves from each 45° angle in both directions to the next hold position
- Self-closing - The door comes to rest in the desired hold position after a few movements



SYSTEM M



- Hold positions at 0°, 90° and -90°
- Self-closing from -125° and 125° - After opening, the door returns smoothly to the 0° position. The door can be manually set to the hold position 90° or -90°.
- Adjustable closing damping (soft close)
- Adjustable hydraulic back check



FRITSJURGENS® SYSTEM M

NO STRUCTURAL ELEMENTS

System M is fully-mortised into the top and bottom of the door: no structural elements in floor and ceiling.

LOAD-BEARING CAPACITY: UP TO 500 KG

System M can support large and heavy doors up to max 500 kg thanks to high performance and corrosion resistant materials like duplex stainless steel and anodized aluminum.

MINIMUM DOOR THICKNESS: 40MM

The thickness of System M is only 32 mm.

MAINTENANCE - FREE

Built from materials of the highest quality, the system is maintenance-free.

FOR NEW AND RETROFIT SITUATIONS

The floorplate fasteners only need to mortise 8mm in the floor, which means System M can also be combined with underfloor heating.

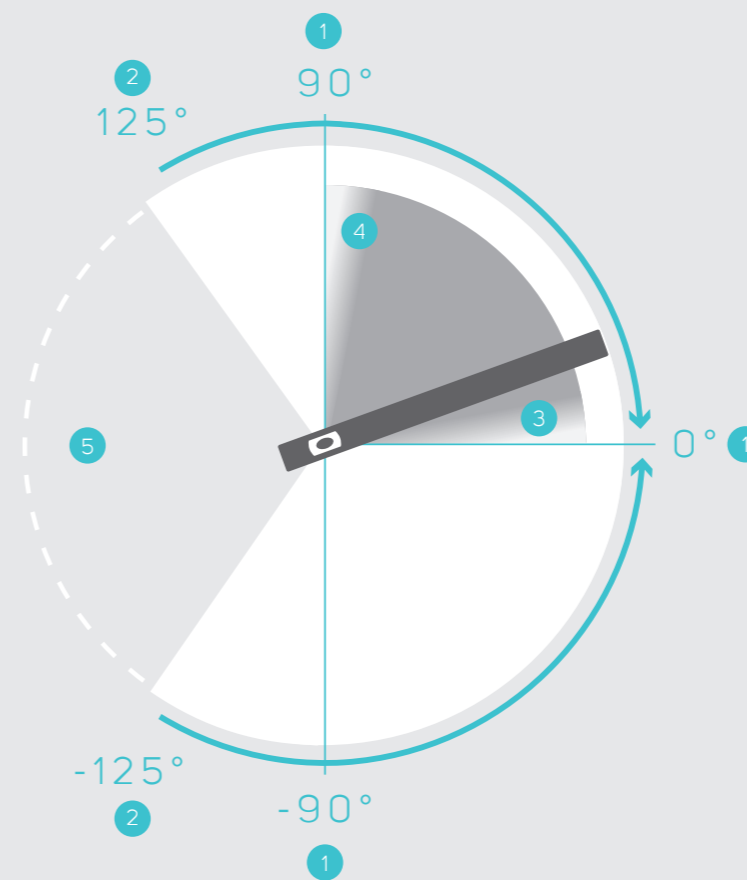
EASILY-ADJUSTABLE

The innovative design of our hinge systems means the gap between the door and jamb can be adjusted with the door fully-loaded. The closing speed of the door can be adjusted (see page 33).

SUITABLE FOR ALL TYPES OF DOORS

Ideal for large, heavy and tall timber, steel, framed glass and massive clad doors. Perfect for interior and exterior doors, in both residential and commercial environments.

SYSTEM M ULTIMATE SMOOTHNESS



1 HOLD POSITION AT 0°, 90° AND -90°
The door can be placed in a hold position of 90° or -90°. Thanks to the self-closing function the door will return to the 0° position.

2 SELF-CLOSING FROM 125° AND -125°
When opened past 90°, the closer returns the door to the 0° position.

3 ADJUSTABLE CLOSING DAMPING
The closing damping can be adjusted steplessly (soft close).

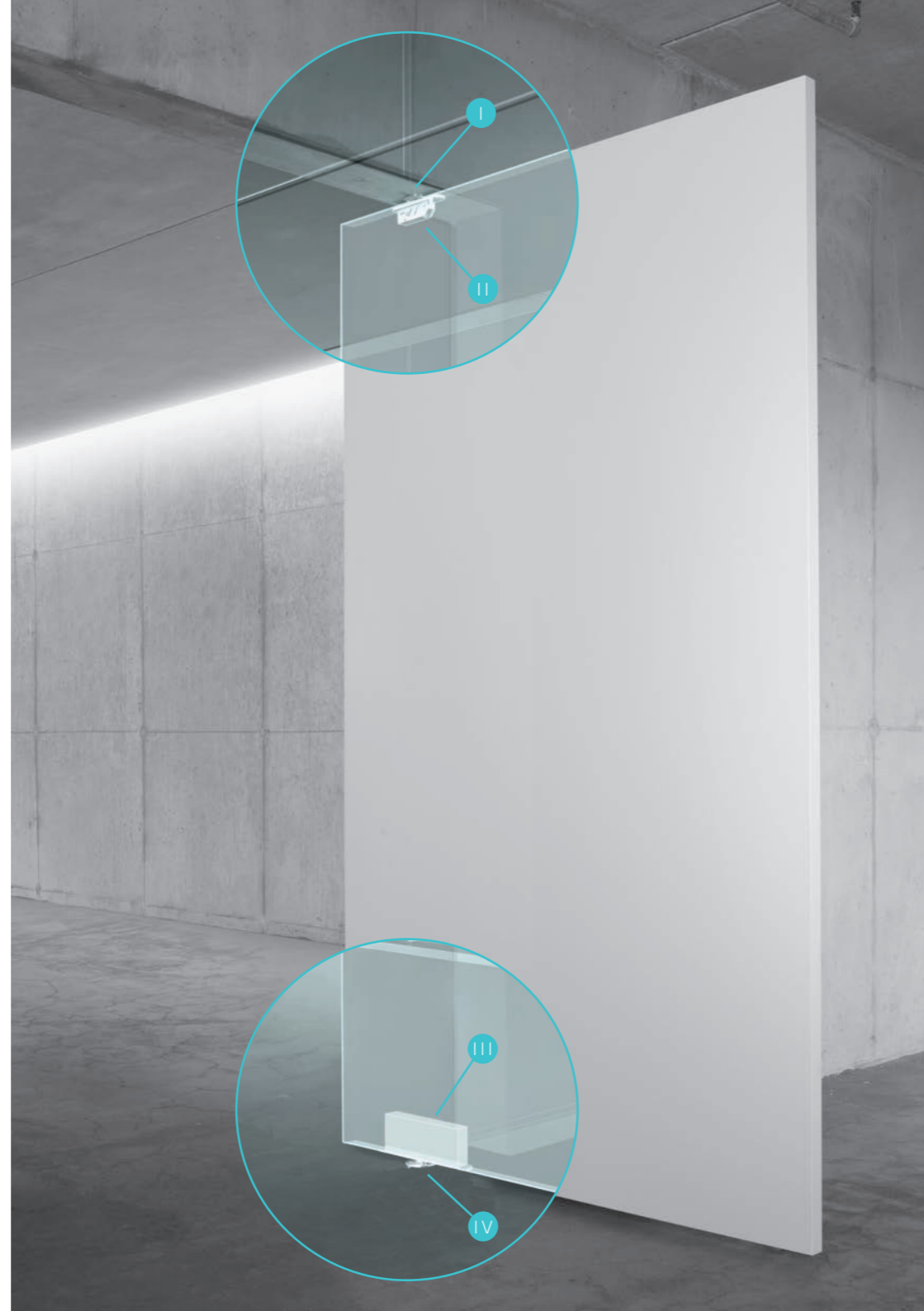
4 ADJUSTABLE HYDRAULIC BACKCHECK
On opening the door, the speed resistance at 70° to prevent knocking against any obstacles at 90°.

5 NO OPENING AND CLOSING FUNCTION
In this area the System M rotates free as with a center pivot without the closer function.

NO STRUCTURAL ELEMENTS IN FLOOR AND CEILING

The revolution FritsJurgens® brings to the idea of a pivot door is that all the closer technology is fully-mortised in the top and bottom of the door, so that only floor and ceiling plates need to be installed. A virtually invisible system.

The bottom hinge of System M and its floorplate have been completely re-engineered from the ground up to deliver a state-of-the-art closer in the smallest profile possible for just about any door. The system can be combined with existing FritsJurgens® top pivots.



SYSTEM M COMPONENTS

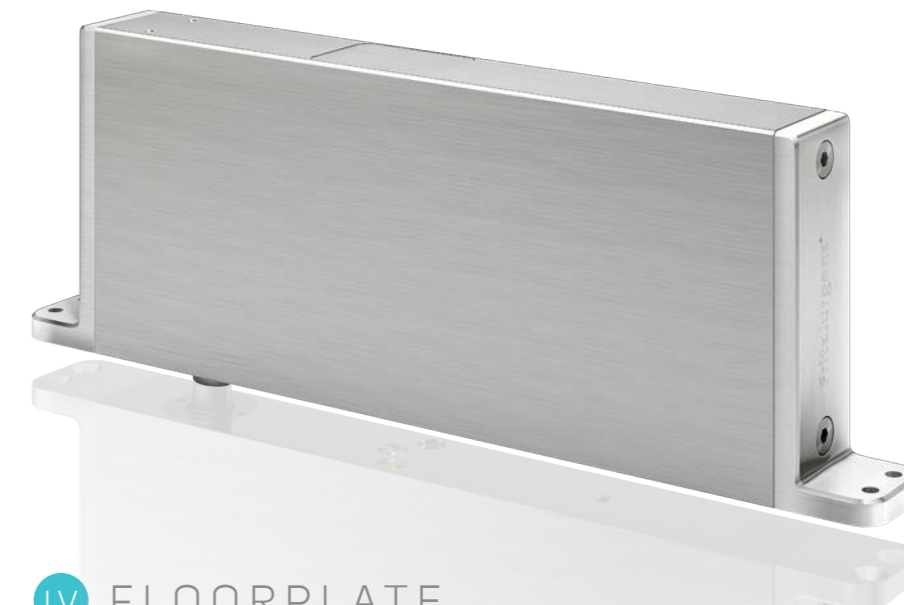
I CEILING PLATE



II TOP PIVOT



III SYSTEM M



IV FLOORPLATE



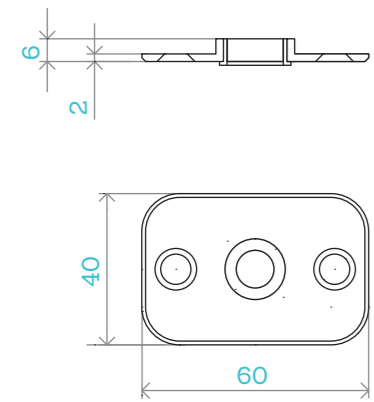


SYSTEM M

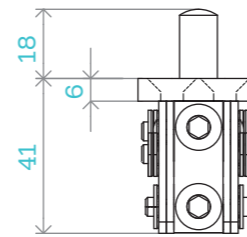
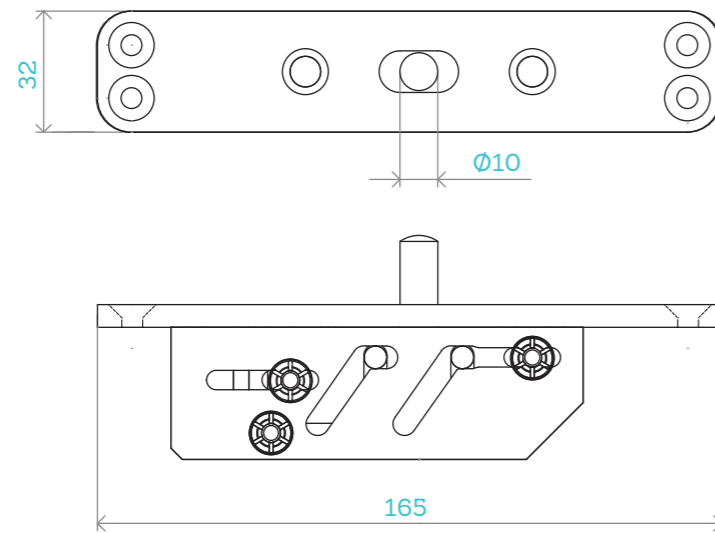
TECHNICAL DOCUMENTATION

SYSTEM M TECHNICAL DRAWINGS

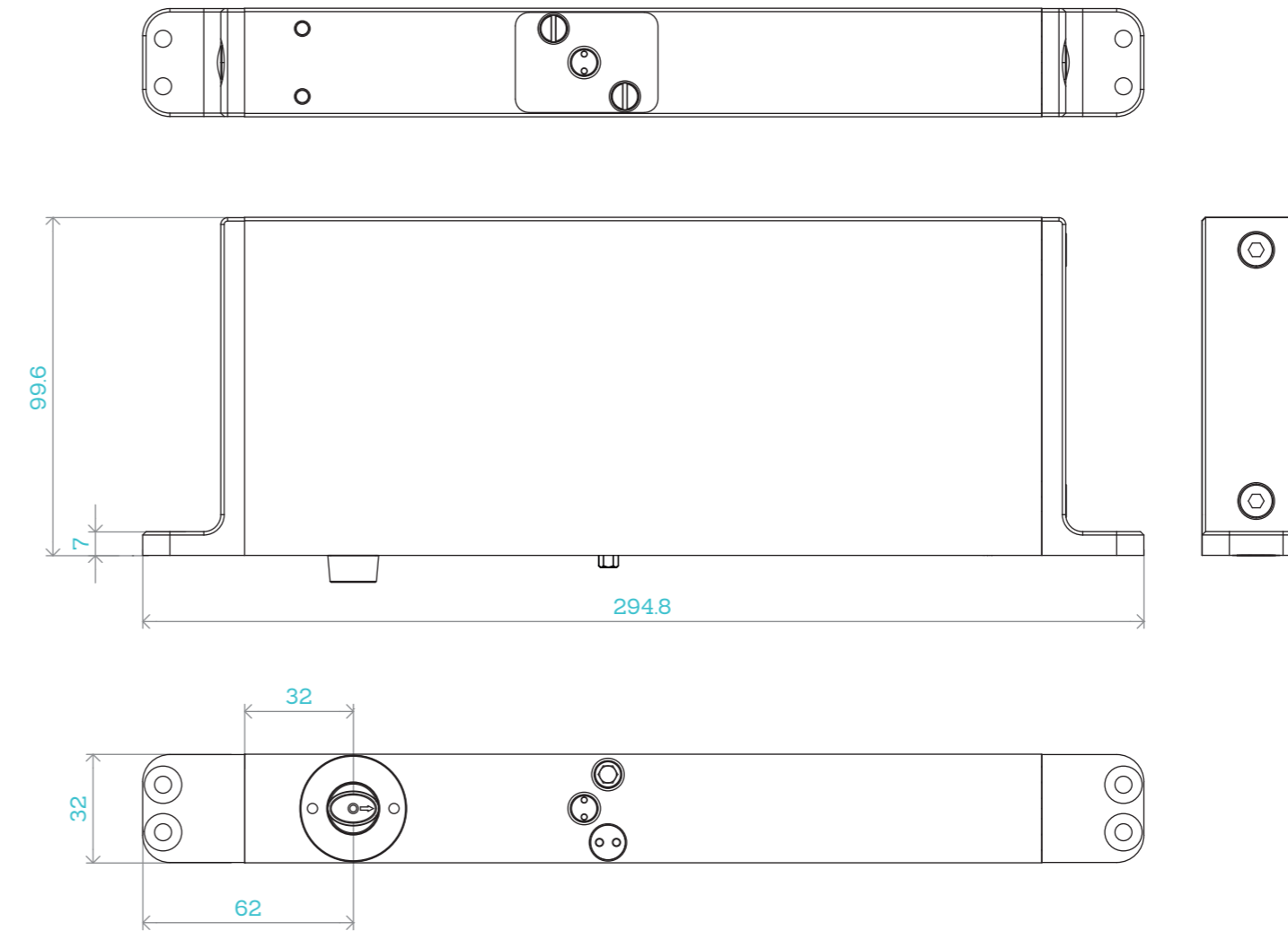
CEILING PLATE



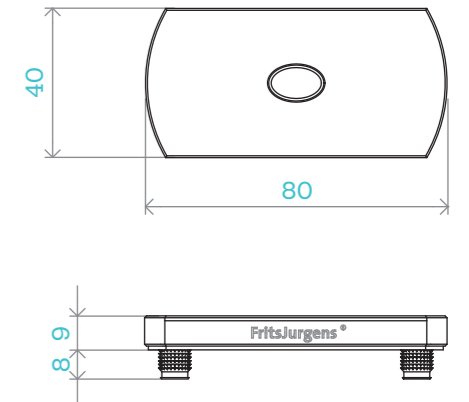
TOP PIVOT



SYSTEM M

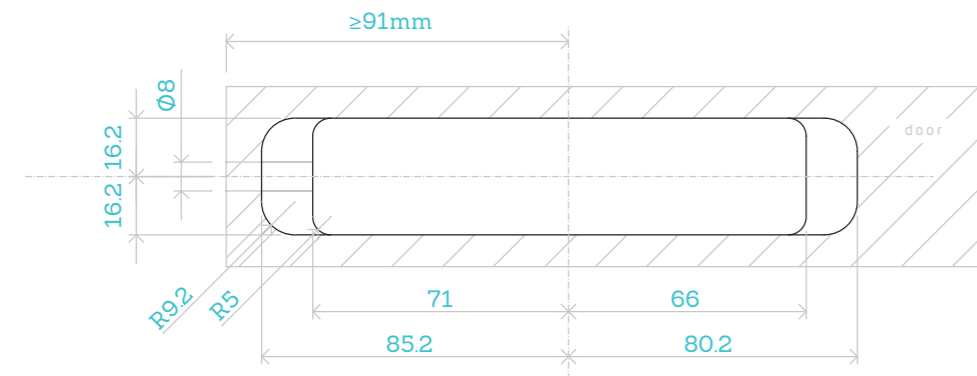
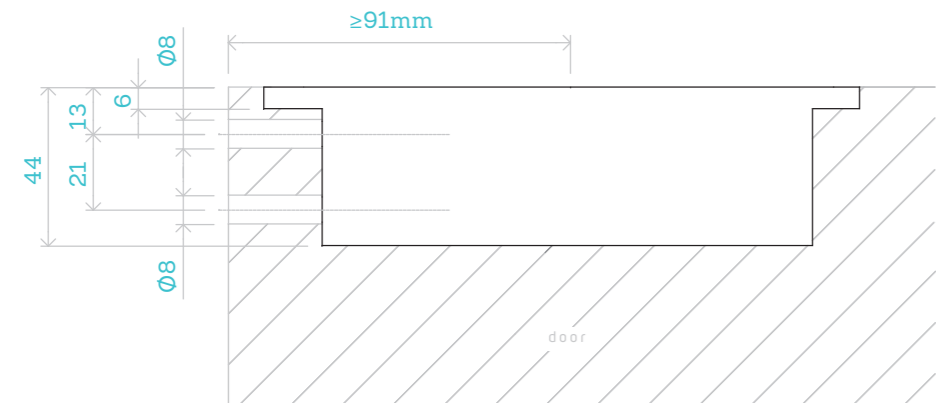


FLOORPLATE

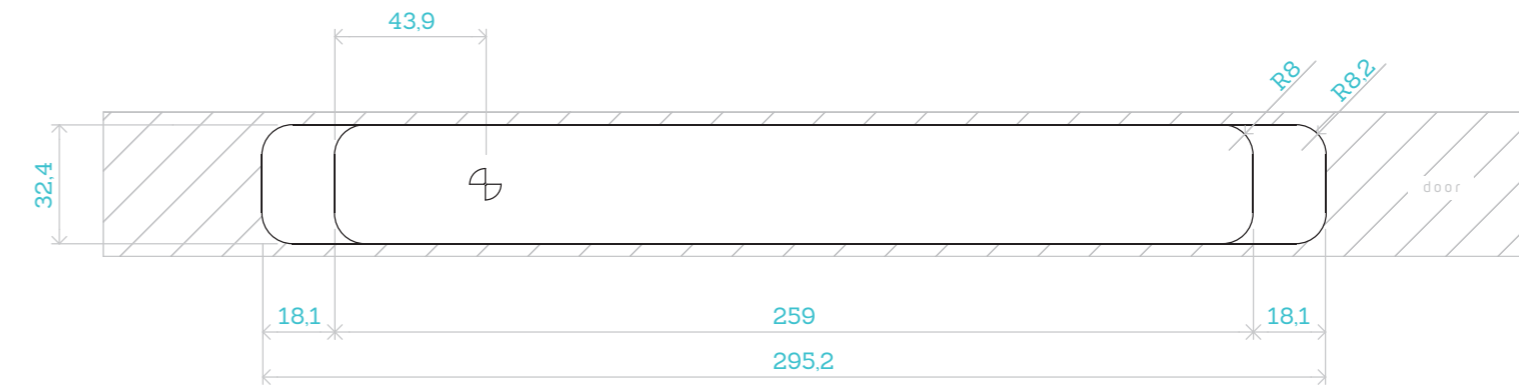


SYSTEM M MILLING DRAWINGS

TOP PIVOT

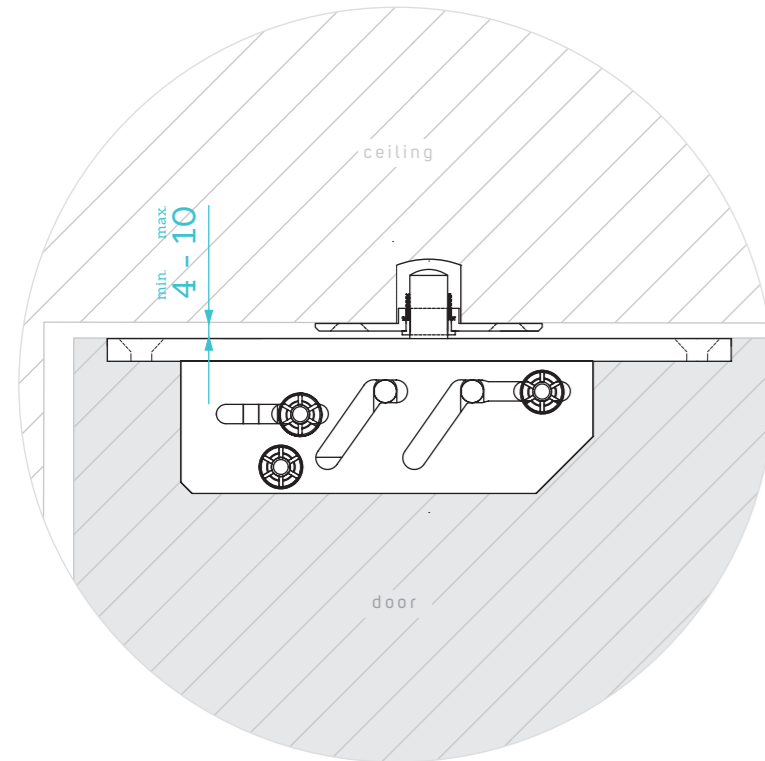


SYSTEM M



SYSTEM M GAPS AROUND THE DOOR

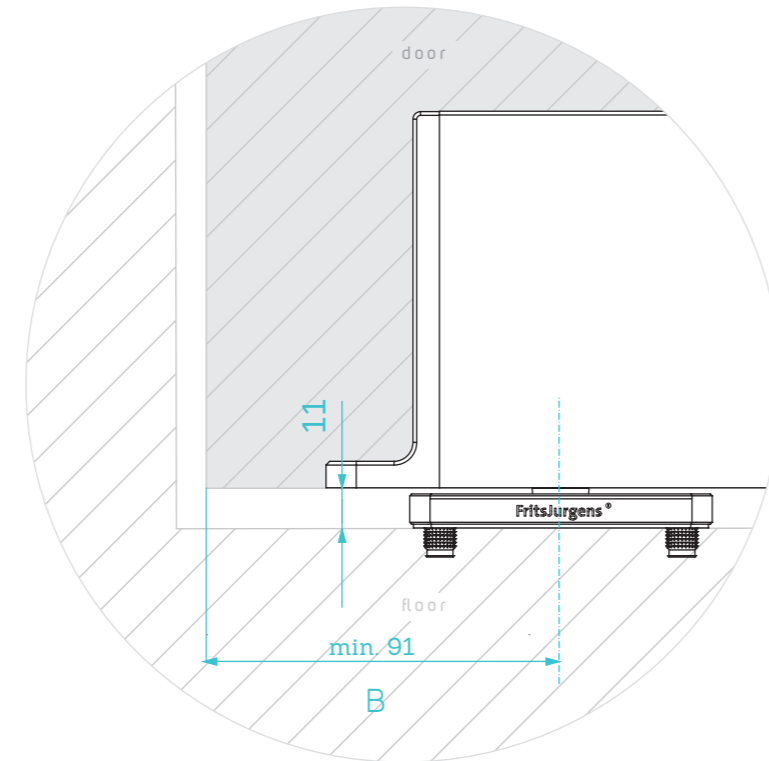
TOP PIVOT



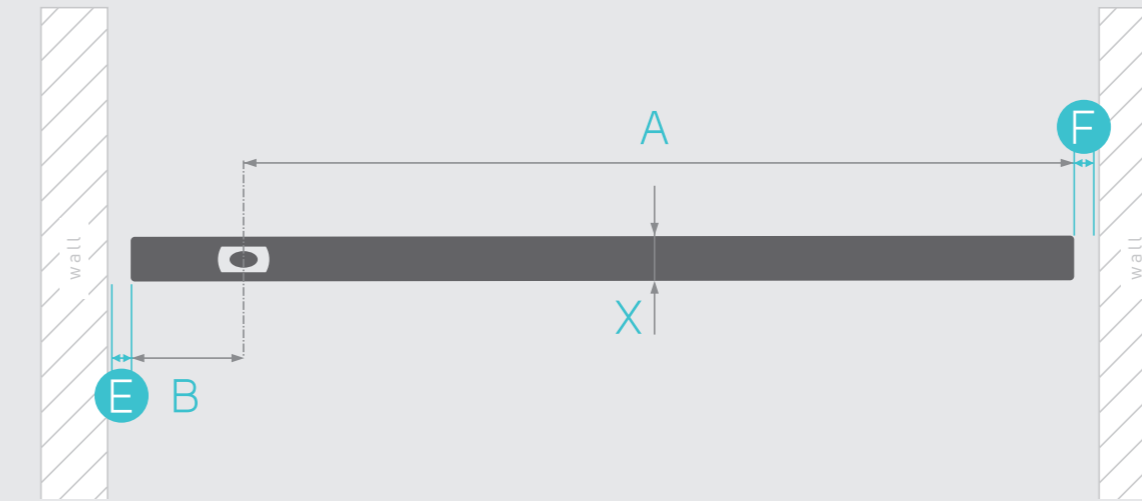
System M is designed to be virtually invisible. The system allows minimal gaps all around the door. The minimum installation dimensions are 4mm at the top (ceiling) and 11mm at the bottom (floor).

The minimum vertical dimensions for installation depend on the thickness (X) and width of the door in relation to the positioning of the hinge (A and B). **Important:** the minimum distance from the pivot point of the hinge to the edge of the door (B) is 91mm.

SYSTEM M



GAP CALCULATION



EXAMPLE

X	Door thickness	40
A	Distance of rotation point to latch side of the door	1500
B	Distance pivot point to beginning door	91
E*	Minimum gap between door and wall	4.2
F*	Minimum gap between door and wall	2.1

B	X						
	40	50	60	70	80	90	100
91	4.2	5.4	6.8	8.5	10.4	12.5	14.8
250	2.8	3.3	3.8	4.4	5.2	6	7
500	2.4	2.6	2.9	3.2	3.6	4	4.5
1000	2.2	2.3	2.5	2.6	2.8	3	3.3
1500	2.1	2.2	2.3	2.4	2.5	2.7	2.8
2000	2.1	2.2	2.2	2.3	2.4	2.5	2.6

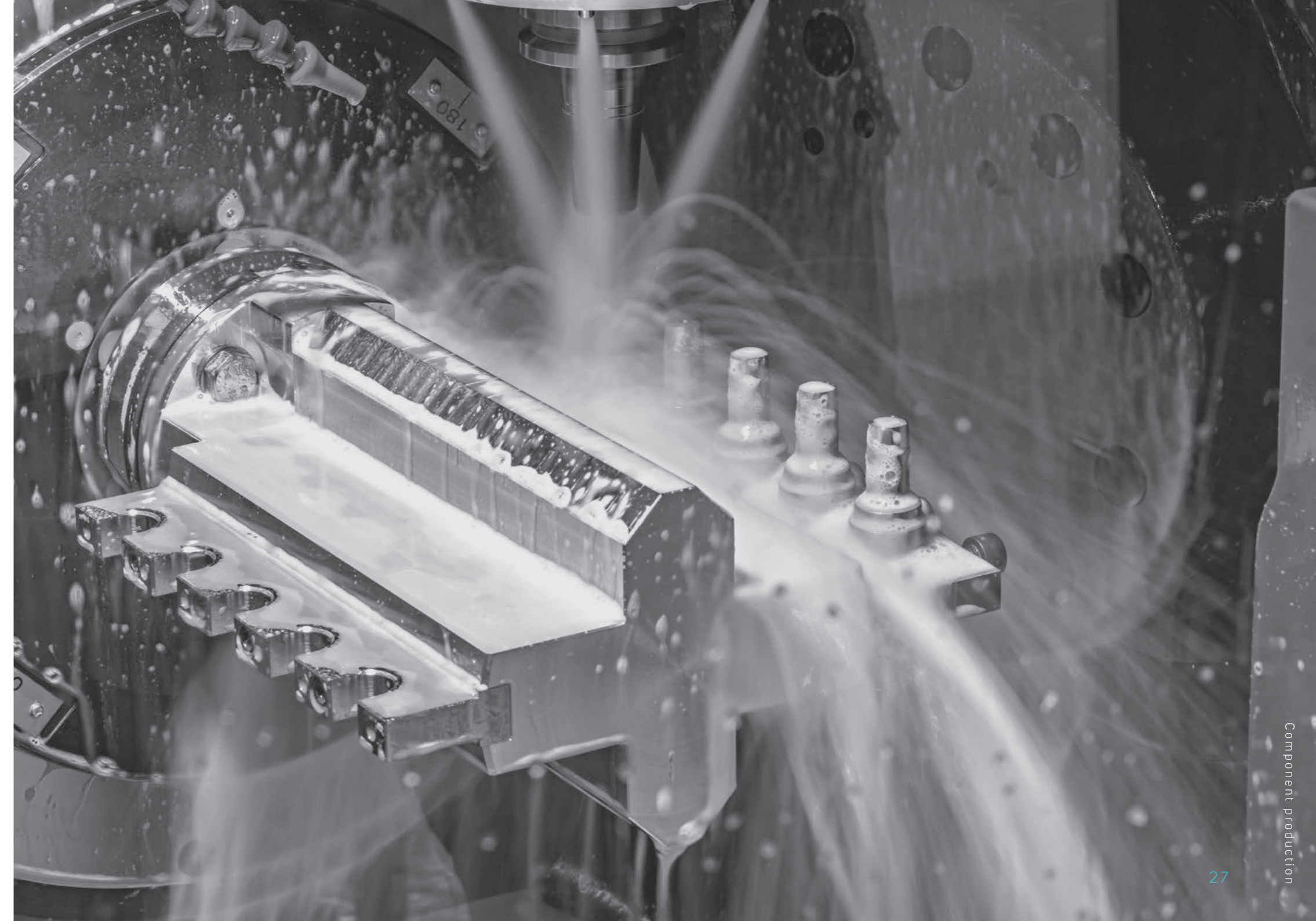
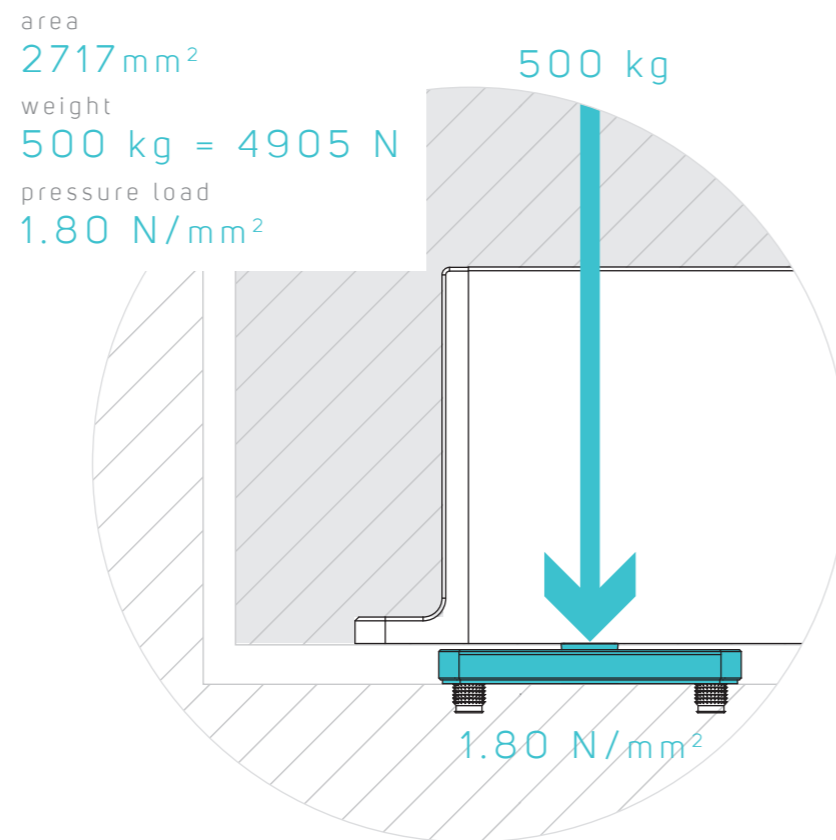
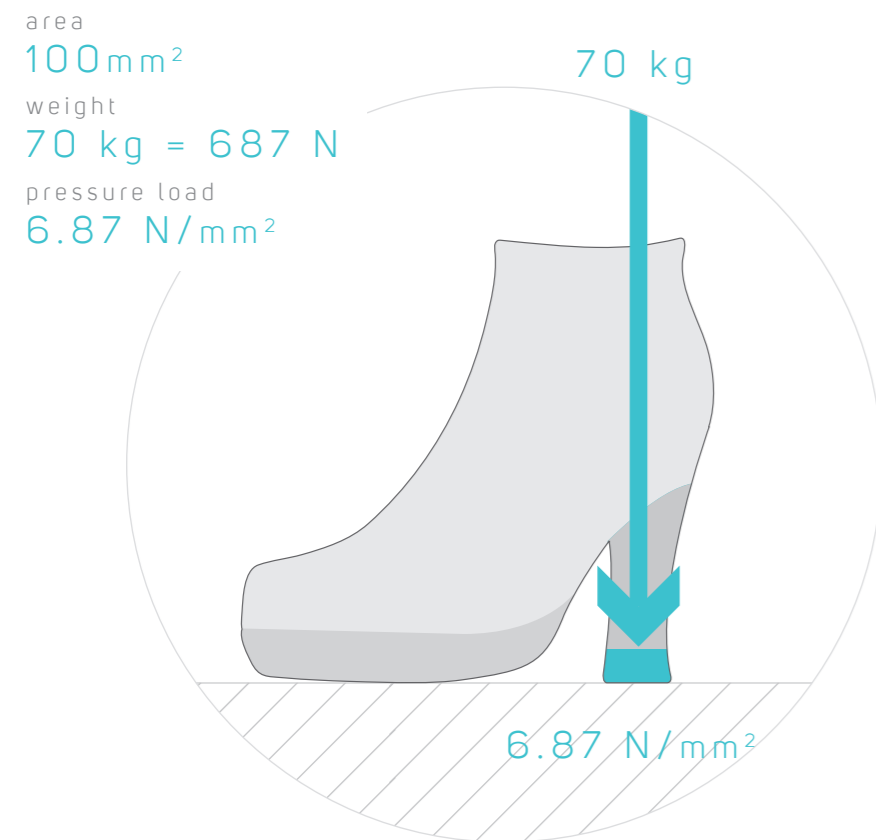
A	X						
	40	50	60	70	80	90	100
500	2.4	2.6	2.9	3.2	3.6	4	4.5
1000	2.2	2.3	2.5	2.6	2.8	3	3.3
1500	2.1	2.2	2.3	2.4	2.5	2.7	2.8
2000	2.1	2.2	2.2	2.3	2.4	2.5	2.6

* There is no need to add extra space for installing. The outcome for E and F includes a 2mm tolerance.

SYSTEM M PRESSURE LOAD

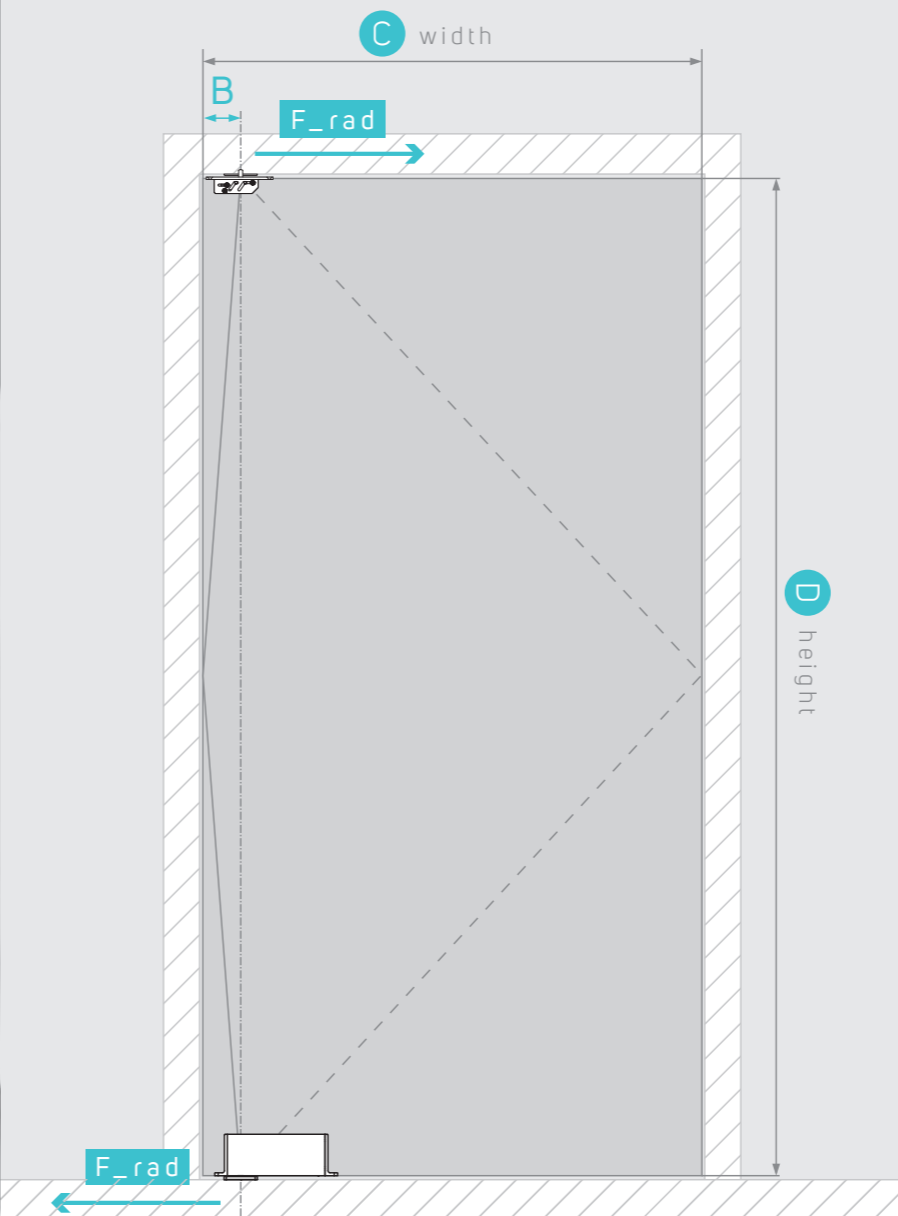
The FritsJurgens® pivot door stands on a floorplate of 40 x 80mm and produces a pressure load (Fw) of 1.80 N/mm² with a door of 500 kg.

As a reference: a woman of circa 70 kg wearing high heels produces a pressure load (Fw) of 6.87 N/mm². For application on your floor we refer to the specifications of the floor manufacturer.





LATERAL FORCE



B = 91 mm

C width (mm)

weight door: 500 kg

height (mm)	C width (mm)						
	500	750	1000	1250	1500	1750	2000
2000	390 N	697 N	1003 N	1310 N	1616 N	1923 N	2229 N
2100	371 N	663 N	955 N	1247 N	1539 N	1831 N	2123 N
2200	355 N	633 N	912 N	1191 N	1469 N	1748 N	2027 N
2300	339 N	606 N	872 N	1139 N	1405 N	1672 N	1939 N
2400	325 N	580 N	836 N	1091 N	1347 N	1602 N	1858 N
2500	312 N	557 N	803 N	1048 N	1293 N	1538 N	1784 N
2600	300 N	536 N	772 N	1007 N	1243 N	1479 N	1715 N
2700	289 N	516 N	743 N	970 N	1197 N	1424 N	1651 N
2800	279 N	498 N	717 N	936 N	1154 N	1373 N	1592 N
2900	269 N	480 N	692 N	903 N	1115 N	1326 N	1538 N
3000	260 N	464 N	669 N	873 N	1078 N	1282 N	1486 N

B = 1/5 width door

C width (mm)

weight door: 500 kg

height (mm)	C width (mm)						
	500	750	1000	1250	1500	1750	2000
2000	368 N	552 N	736 N	920 N	1104 N	1288 N	1472 N
2100	350 N	526 N	701 N	876 N	1051 N	1226 N	1401 N
2200	334 N	502 N	669 N	836 N	1003 N	1171 N	1338 N
2300	320 N	480 N	640 N	800 N	960 N	1120 N	1280 N
2400	307 N	460 N	613 N	766 N	920 N	1030 N	1226 N
2500	294 N	442 N	589 N	736 N	883 N	1030 N	1177 N
2600	283 N	425 N	566 N	708 N	849 N	990 N	1132 N
2700	273 N	409 N	545 N	681 N	818 N	954 N	1090 N
2800	263 N	394 N	526 N	657 N	788 N	920 N	1051 N
2900	254 N	381 N	507 N	634 N	761 N	888 N	1015 N
3000	245 N	368 N	491 N	613 N	736 N	858 N	981 N

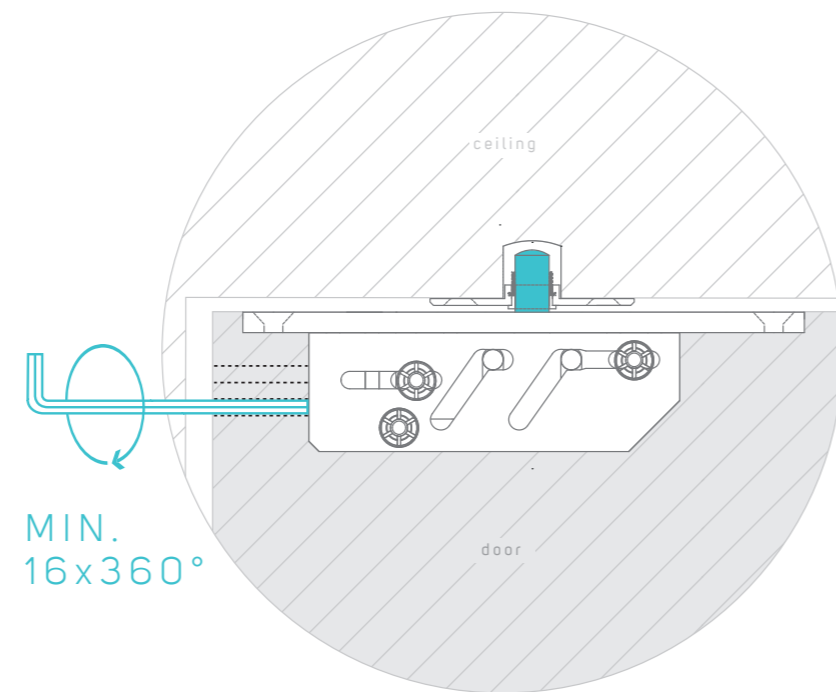
9.8 N = 1 kg

SYSTEM M SETTING TOP PIVOT

MOUNTING TOP PIVOT

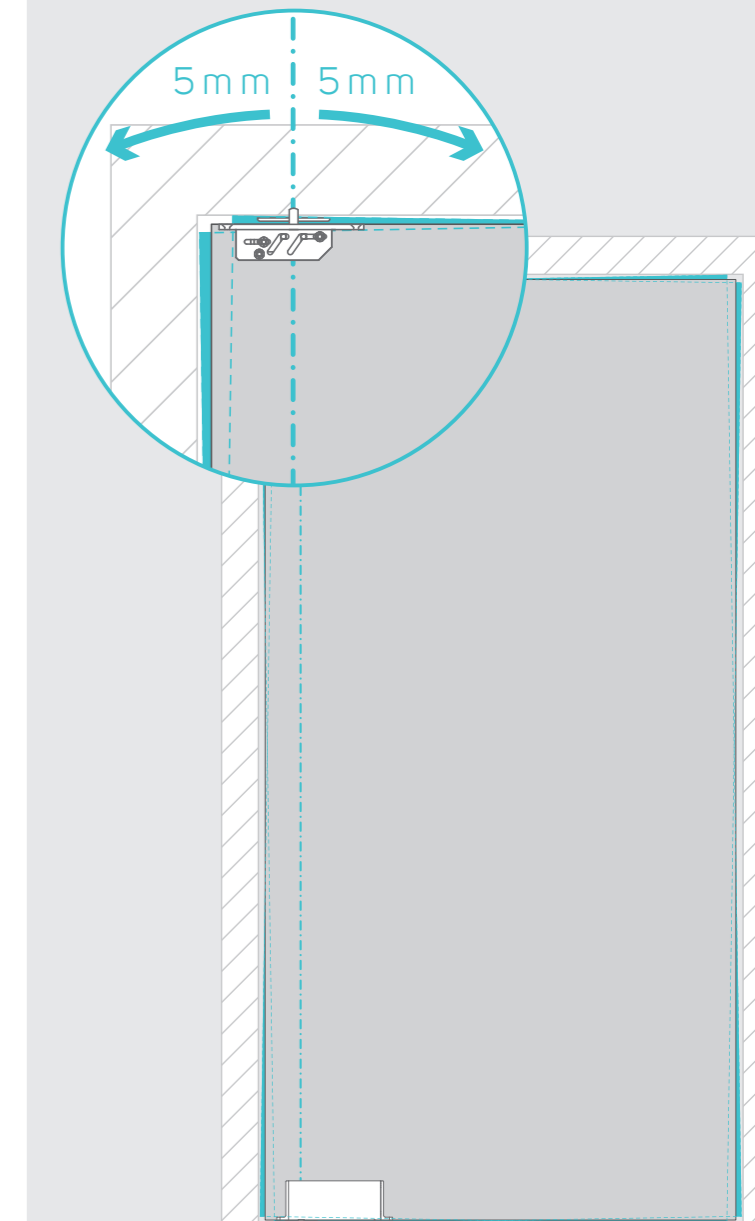
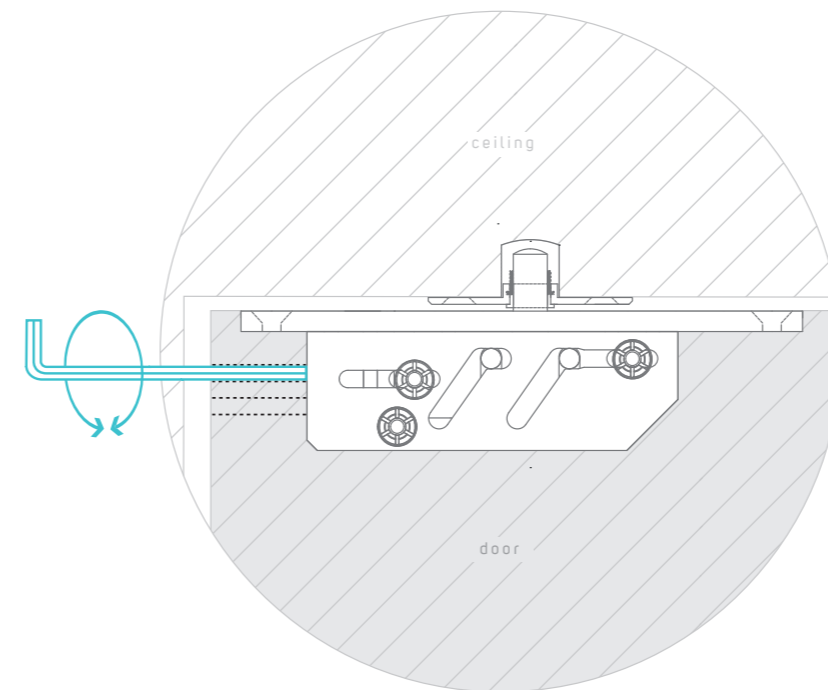
The top pivot can be set using a 5mm hex key in the bottom hole. Clockwise: assembly. Counterclockwise: disassembly.

Important: to ensure that the door is secured properly, a minimum of 16 rotations of 360° are required.



SETTING THE GAP

Gaps around the door can be adjusted using a 5mm hex key in the top hole.

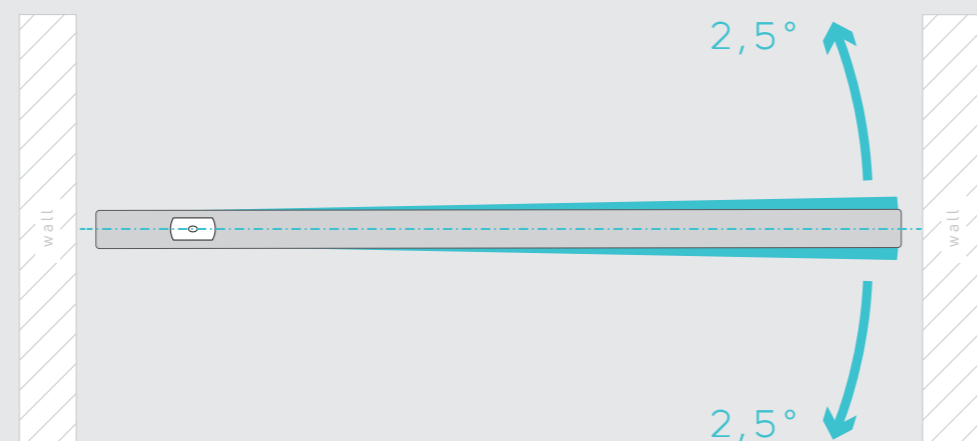
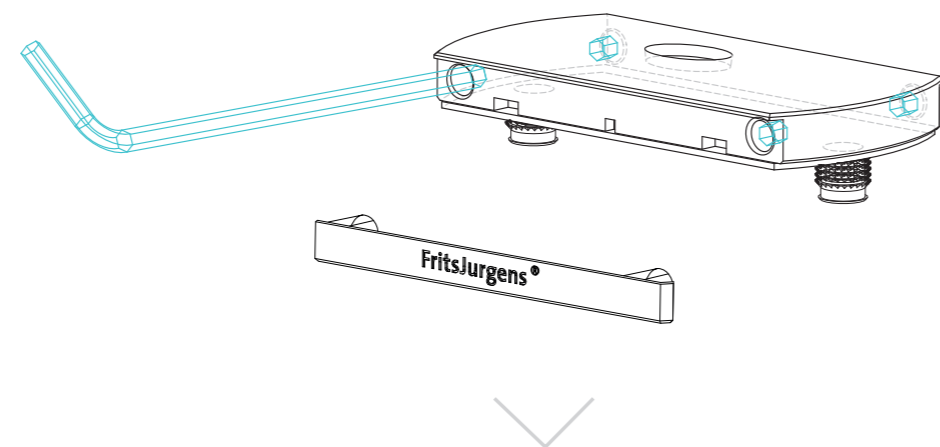


SYSTEM M SETTING SYSTEM M

SETTING THE RADIAL POSITION

Remove the small rectangular caps from the floorplate and adjust the angle of the door using a 3mm hex key. Afterwards put the caps back.

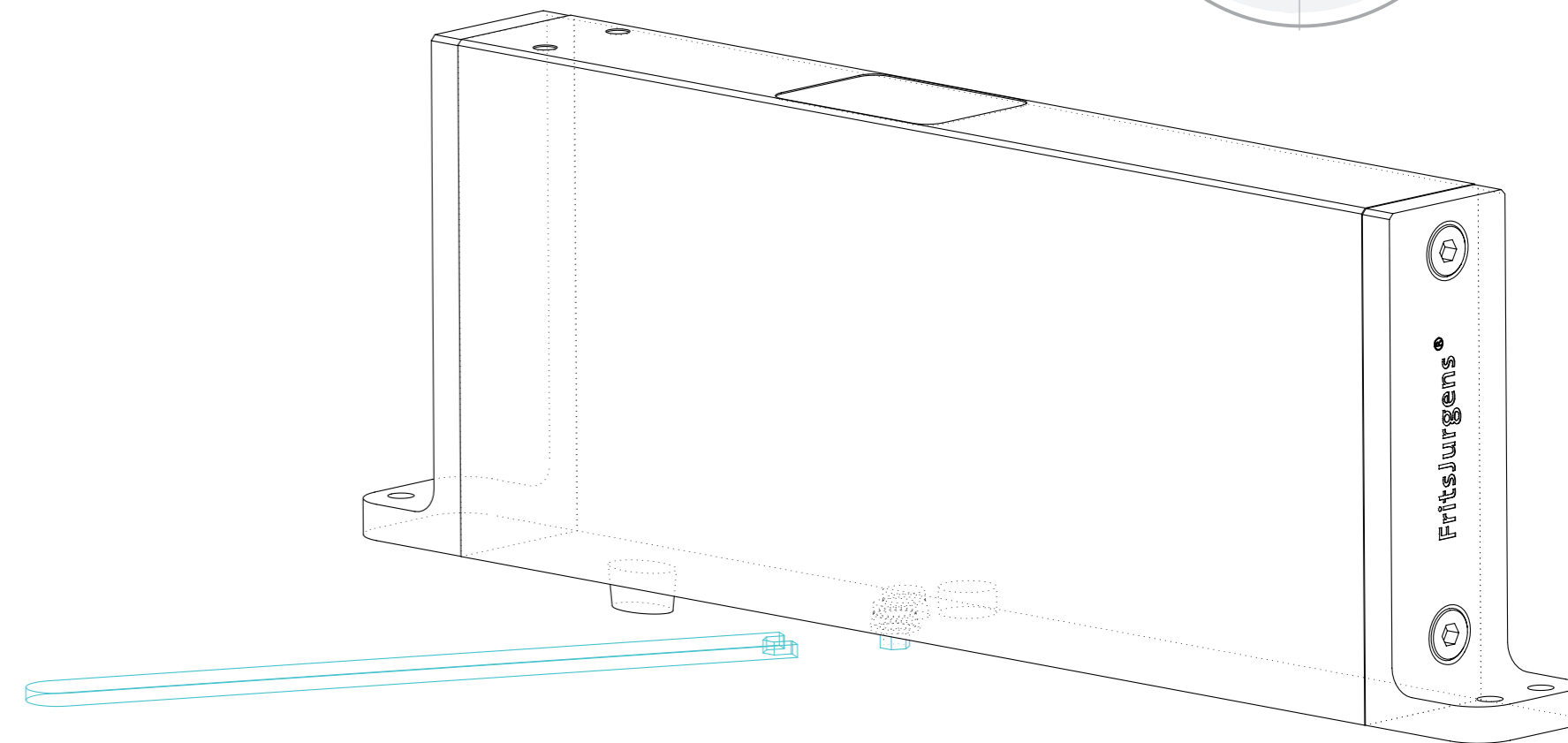
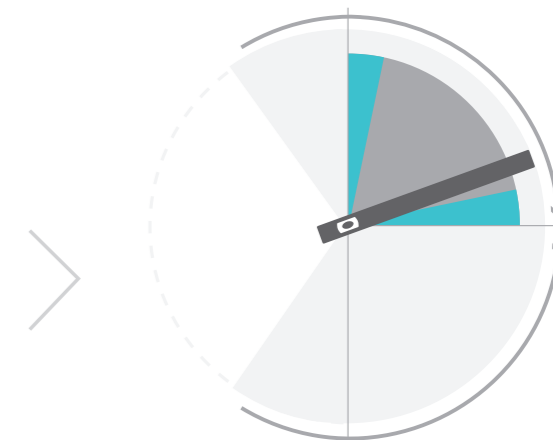
Important: all 4 screws need to be loosened before setting the radius. Don't forget to tighten them again after adjusting.



SETTING THE CLOSING SPEED

The closing speed can be adjusted using the key included with System M.

- + Decrease damping → faster speed
- More damping → slower speed



FRITSJURGENS® SYSTEMS FEATURES

FritsJurgens® provides systems for multiple applications:

- Single, double-acting and 360° rotating doors
- With or without hold positions
- Adjustable closing speed of the door (soft close and back check)

FritsJurgens® offers the perfect solution for any pivot door.

FRITSJURGENS® SYSTEMS

- No structural elements in the floor or ceiling
- Quick and simple to install
- Maintenance-free
- For new construction and retrofit situations
- Easily adjustable

FRITSJURGENS® APPLICATION AREAS

- Timber, steel, massive and aluminum doors
- Steel and timber framed glass doors
- Single and double-acting pivot doors
- Interior and exterior doors
- Commercial and residential



SYSTEM ONE



SYSTEM 3



SYSTEM M

Rotation	360°	360°	-125° to 125°
System dimensions	160 x 34 x 39 mm	160 x 34 x 143 mm	294,8 x 32 x 99,6 mm
System weight	0,335 kg	0,75 kg	2,6 kg
Hold positions at every 90°	X	✓	X
Hold positions at 90° and -90°	X	X	✓
Self-opening	X	✓	X
Self-closing	X	✓	✓
Adjustable closing damping (soft-close)	X	X	✓
Adjustable hydraulic back check	X	X	✓
Suitable for single action doors	✓	X	✓
Suitable for double action doors	✓	✓	✓
Minimal number of movements tested	1.000.000	1.000.000	1.000.000
Minimum door thickness	40mm	40mm	40mm
Load-bearing capacity (up to)	500 kg	500 kg	500 kg
Maximum weight at latch force	NA	350 kg (See the datasheet of System 3)	300 kg (According to schedule Type selector)

FritsJurgens®

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