

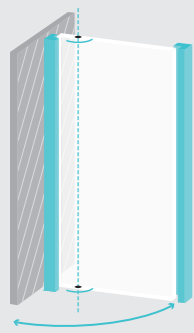
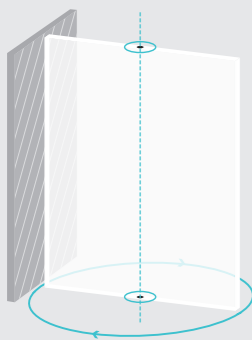
SYSTEM ONE

hidden perfection

FritsJurgens®

SYSTEM ONE APPLICATIONS

System One is the perfect solution for 360° rotating doors and in combination with door frames:



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

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WHERE TO BUY

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





HIDDEN PERFECTION SYSTEM ONE

A pivot door is a symbol of hidden perfection. No visible frame hinges, but an invisible vertical axis which allows free movement of the door panel.

FritsJurgens® pivot door systems are unique because the pivot technology is completely integrated into the door. System One is the most compact system in our range of pivot door hinges.

SYSTEM ONE HEAVY-DUTY PERFORMANCE



FritsJurgens® System One excels in its simplicity. One pivot point. Rotation of 360° or 90° in combination with door frames.

The performance of System One is outstanding. The pivot hinge system is suitable for large, heavy and tall doors. The possibilities are endless. Due to the high load-bearing capacity of System One of up to 1100 Lb, there are virtually no restrictions on the design of the pivot door.





SYSTEM ONE DESIGNED TO STAND THE TEST OF TIME

The System One hinge is virtually indestructible. Our rigorous testing has shown that even after 1 million cycles System One still performs flawlessly. Built from high performance materials, the system is maintenance-free.

System One packs the highest corrosion resistance (according to the standard EN 1154, class 4). Even the most diverse conditions do not affect the operation of this system. Thanks to a very compact housing and a cam made of duplex stainless steel, the System One has considerable power. This is a system truly designed for the ages: invisible, built-to-last and maintenance-free.

FRITSJURGENS® OVERVIEW SYSTEMS

The FritsJurgens® pivot hinge range consists of three systems.

System One is the most compact system: the hinge acts as a revolving point.

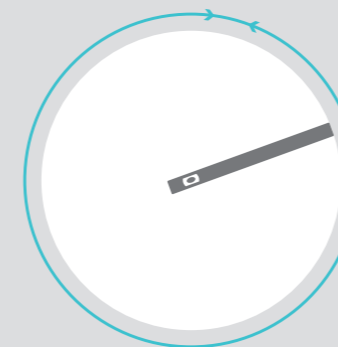
System 3 has three functions: rotation, hold and closing positions. System 3 can turn through 360° and is characterized by a hold position at every quarter of a circle.

System M adds a new dimension to the pivot door by creating the ultimate smoothness. System M is a total control over the movement of the door. A dual acting pivot with adjustable closing speed.

SYSTEM ONE

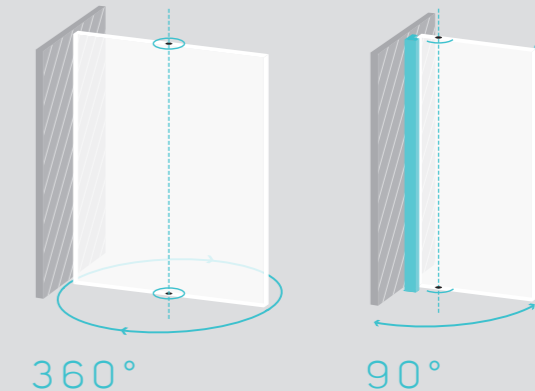


MOVEMENT

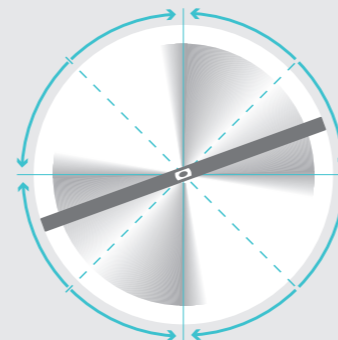


- Rotates 360°
- No hold positions
- For doors up to 1,100 lbs.
- No closer or damper function
- Minimum door thickness: 1-1/2"

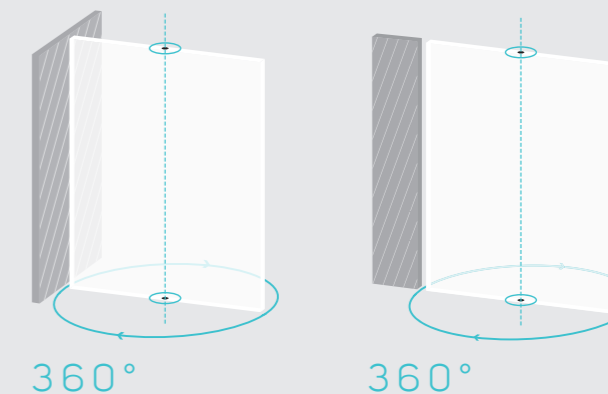
POSITIONING



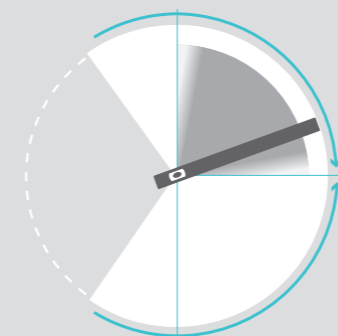
SYSTEM 3



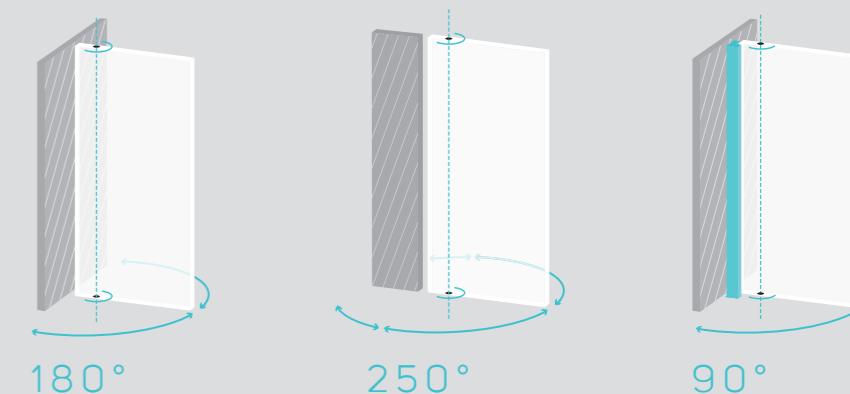
- Rotates 360°
- Hold positions at 0°, 90°, 180° and 270°
- Closes with damper from each 45° position like the smoothest turnstile.
- Self-closing - The door comes to rest in the hold position each 45°
- Load capacity: 1,100 lbs
- Available in 4 spring strengths to ensure proper closing speed up to 440 lbs
- Minimum door thickness: 1-1/2"



SYSTEM M



- Dual-Acting pivot/closer
- Load capacity: 1100 lbs
- Hold positions at 0°, 90° and -90°
- Self-closing from -125° and 125°
- Fully-adjustable closing speed
- Hydraulic backcheck
- Adjustable 0° position
- Minimum door thickness: 1-1/2"





FRITSJURGENS® SYSTEM ONE

NO STRUCTURAL ELEMENTS

System One fully mortised into the top and bottom of the door: no pivot or closer elements in floor and ceiling.

LOAD-BEARING CAPACITY: UP TO 1100 LBS

System One can support large and heavy doors up to max 1100 lbs thanks to high performance and corrosion resistant materials like duplex stainless steel and anodized aluminium.

MINIMUM DOOR THICKNESS: 1-1/2" (40MM)

System Ones components have been engineered to fit in virtually any door.

MAINTENANCE - FREE

Built from materials of the highest quality, the system is maintenance-free. Tested to beyond 1-million cycles.

FOR NEW AND RETROFIT SITUATIONS

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

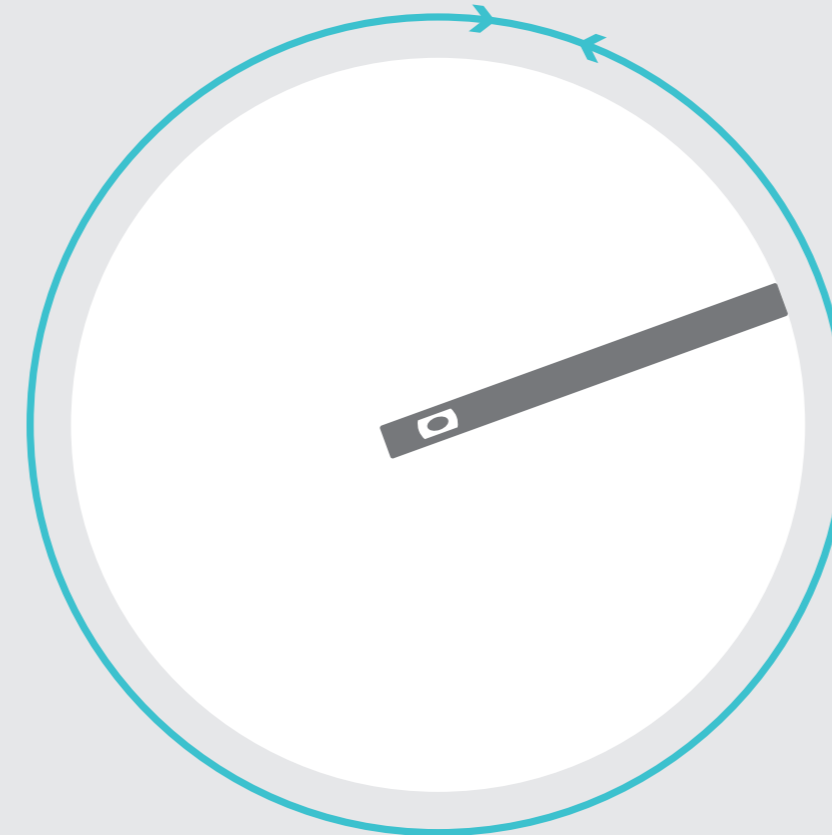
EASILY-ADJUSTABLE

The innovative design of our hinge systems means the gap between the door and jamb can be adjusted with the door fully-loaded.

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 ONE COMPACT SOLUTION



ROTATES 360°

The door rotates 360° in both directions and does not contain hold positions.

ONE FUNCTION: ROTATION

System One is simply a very powerful pivot.

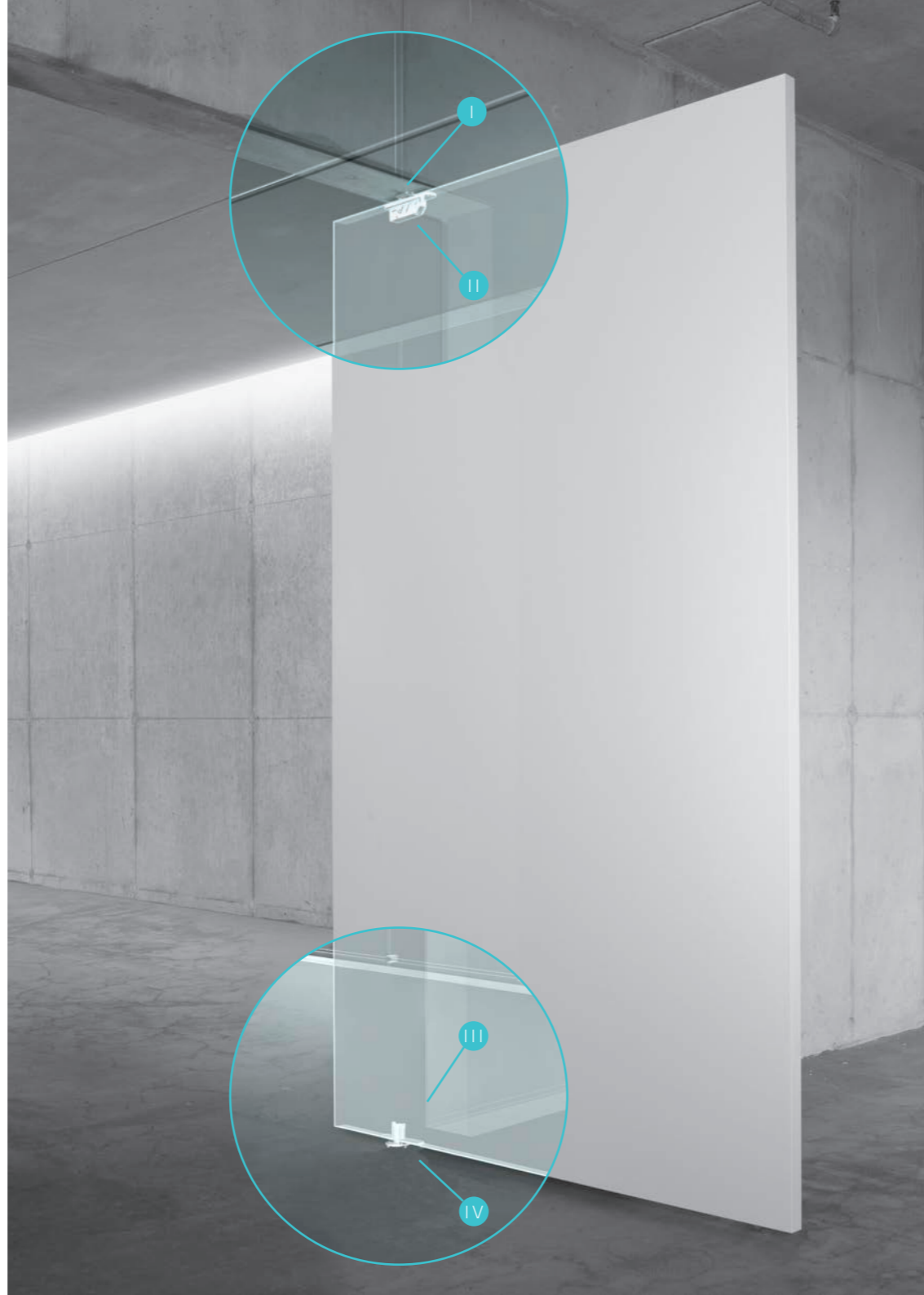
CAN BE COMBINED WITH DOORFRAMES

System One is also suitable for doors with door frames.

NO STRUCTURAL ELEMENTS IN THE FLOOR AND CEILING

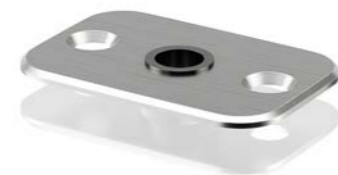
The revolution FritsJurgens® brings to the idea of a pivot hinge is that all the closer technology is fully-mortised in the top and bottom of the door. A virtually invisible system.

System One is combined with the high-performance top pivot of FritsJurgens®, completed by small ceiling and floor plates.



SYSTEM ONE COMPONENTS

I CEILING PLATE



II TOP PIVOT



III SYSTEM ONE



IV FLOORPLATE

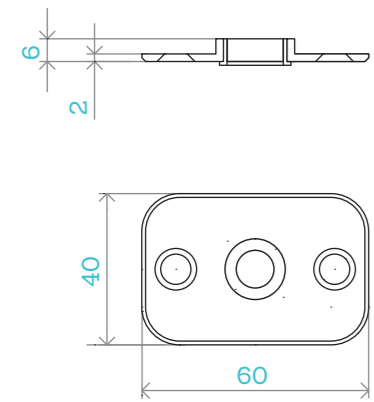




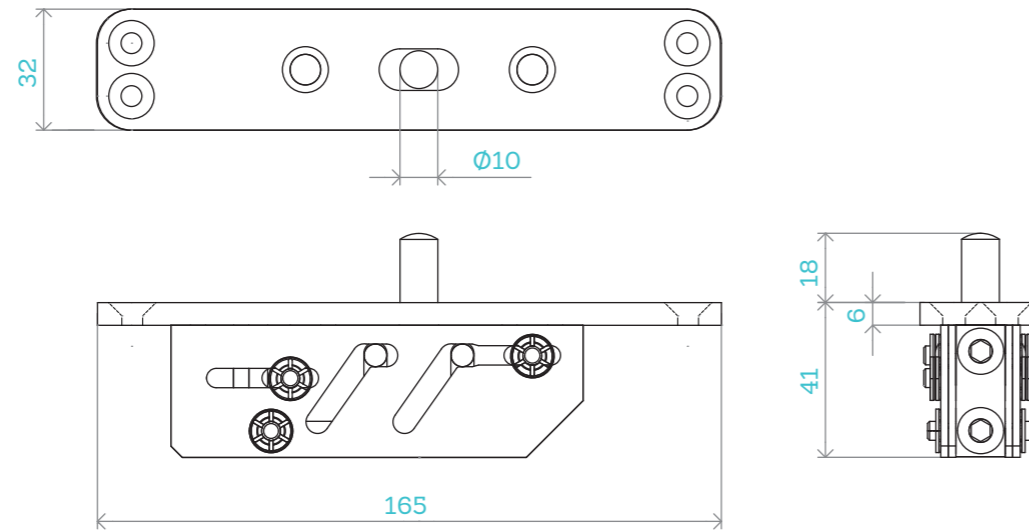
SYSTEM ONE
TECHNICAL
DOCUMENTATION

SYSTEM ONE TECHNICAL DRAWINGS

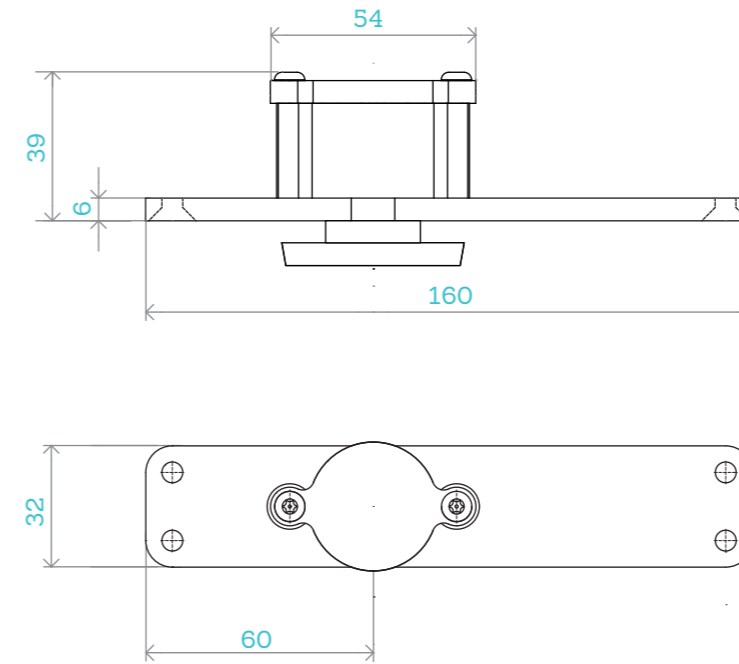
CEILING PLATE



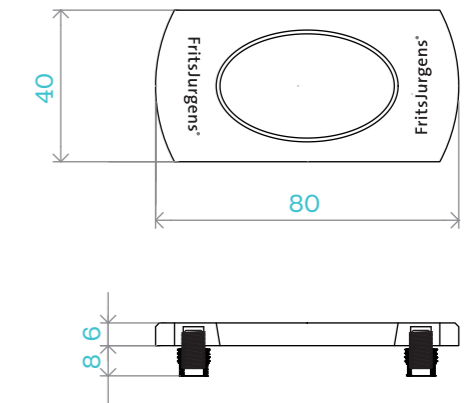
TOP PIVOT



SYSTEM ONE

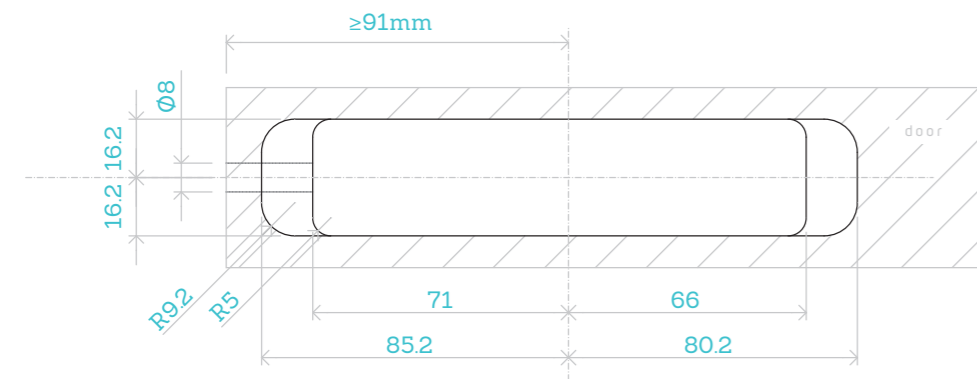
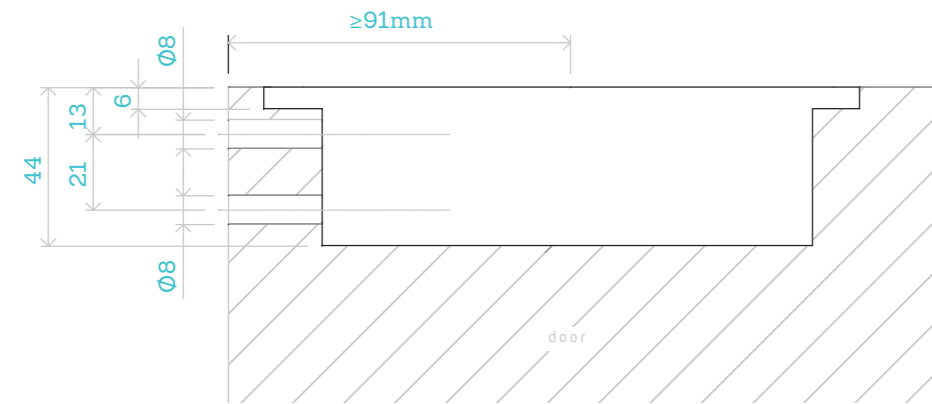


FLOORPLATE

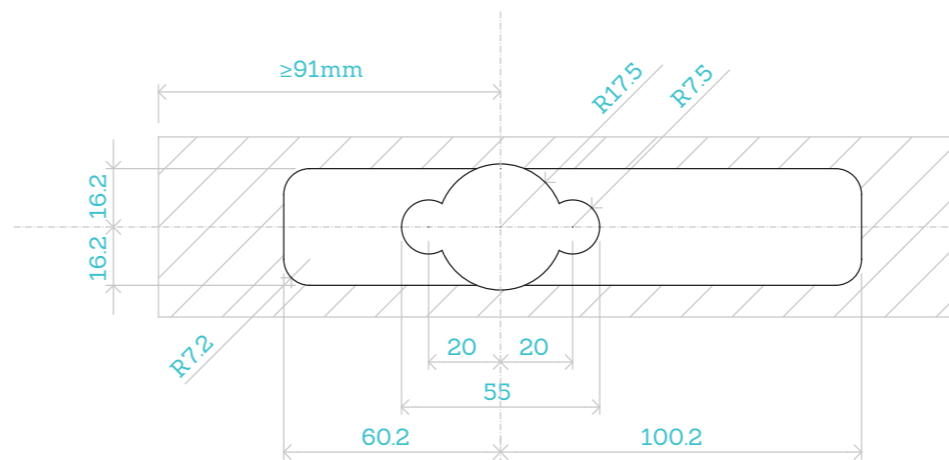
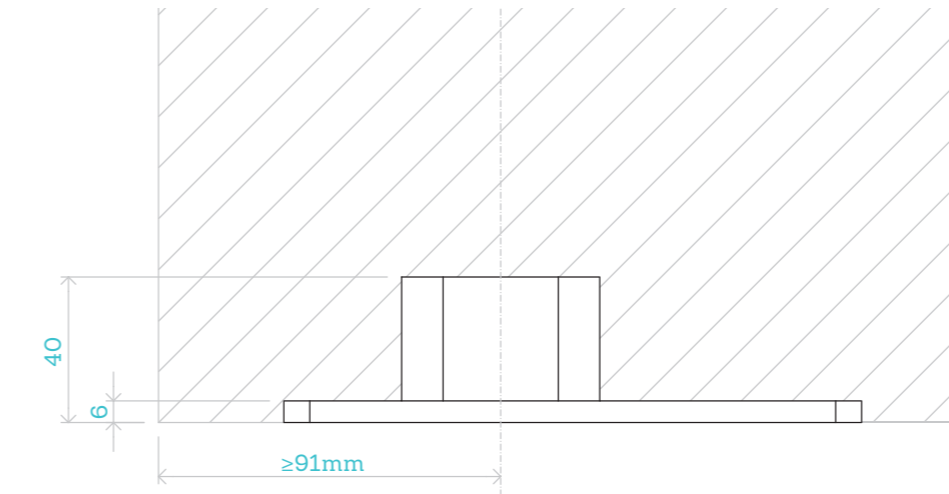


SYSTEM ONE MILLING DRAWINGS

TOP PIVOT

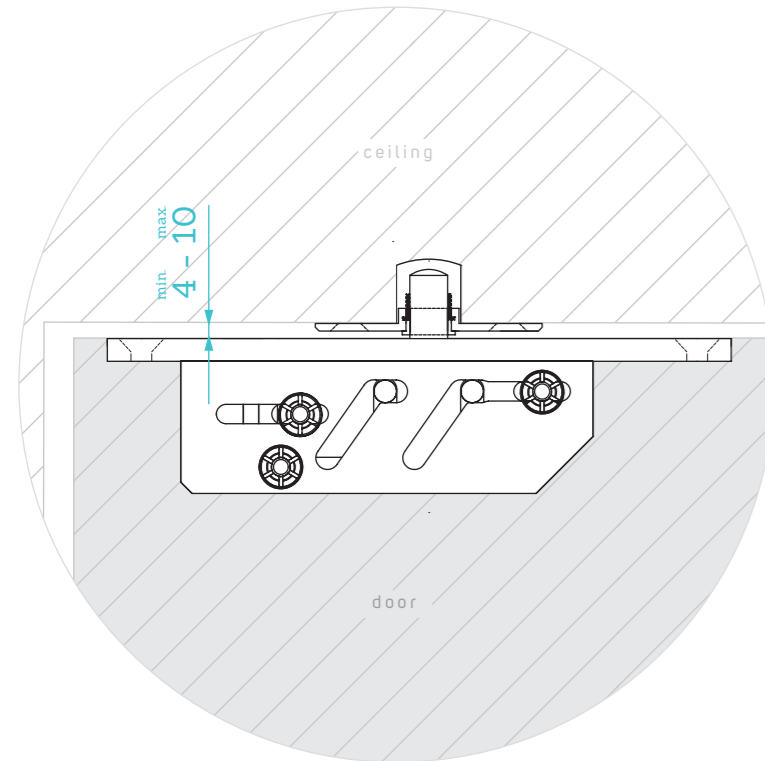


SYSTEM ONE



SYSTEM ONE GAPS AROUND THE DOOR

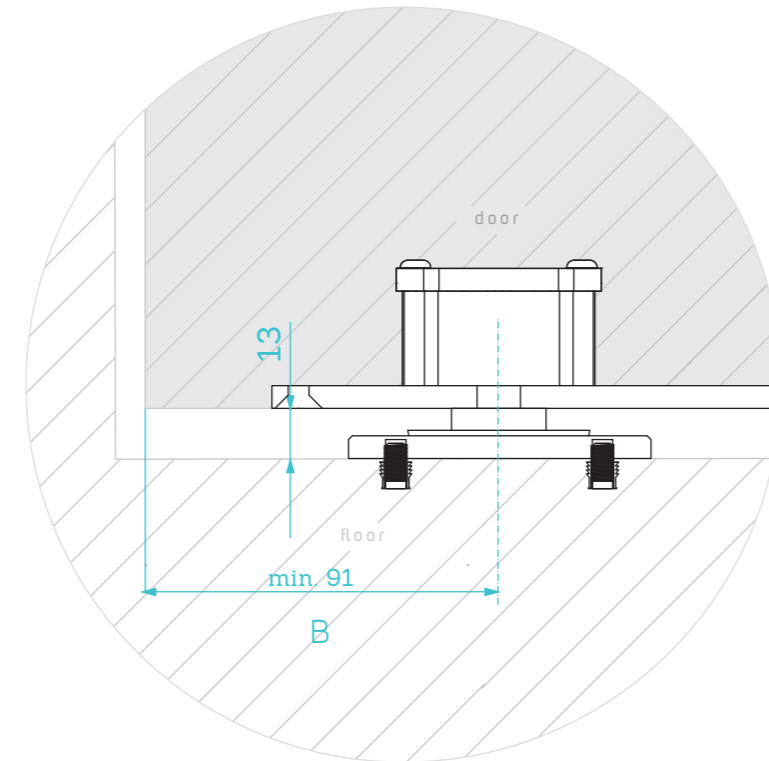
TOP PIVOT



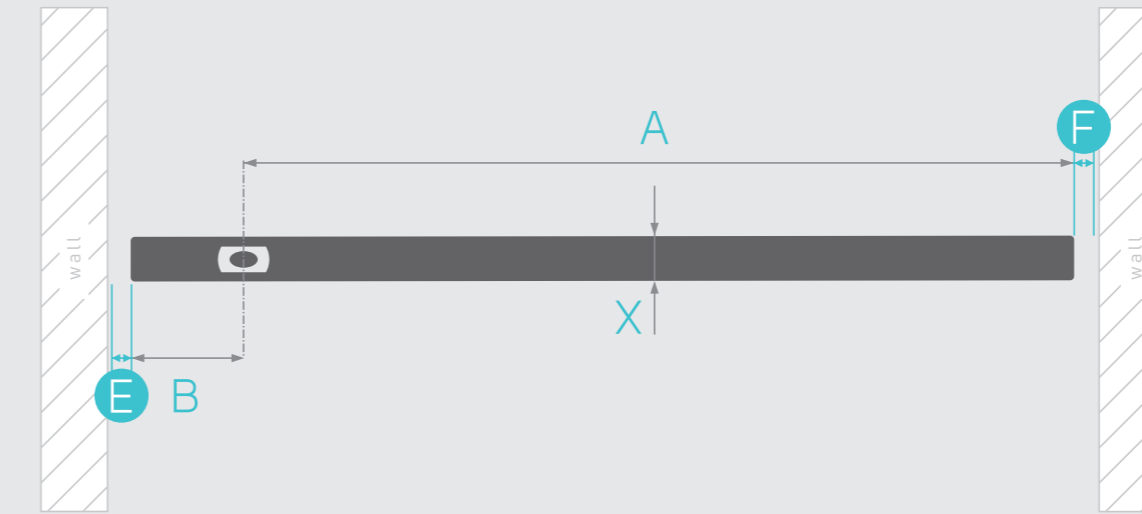
System One is designed to be virtually invisible. In addition, the system allows for minimal gaps all around the door. The minimum installation dimensions are 4mm at the top (ceiling) and 13mm at the bottom (floor).

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 ONE



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

E*	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

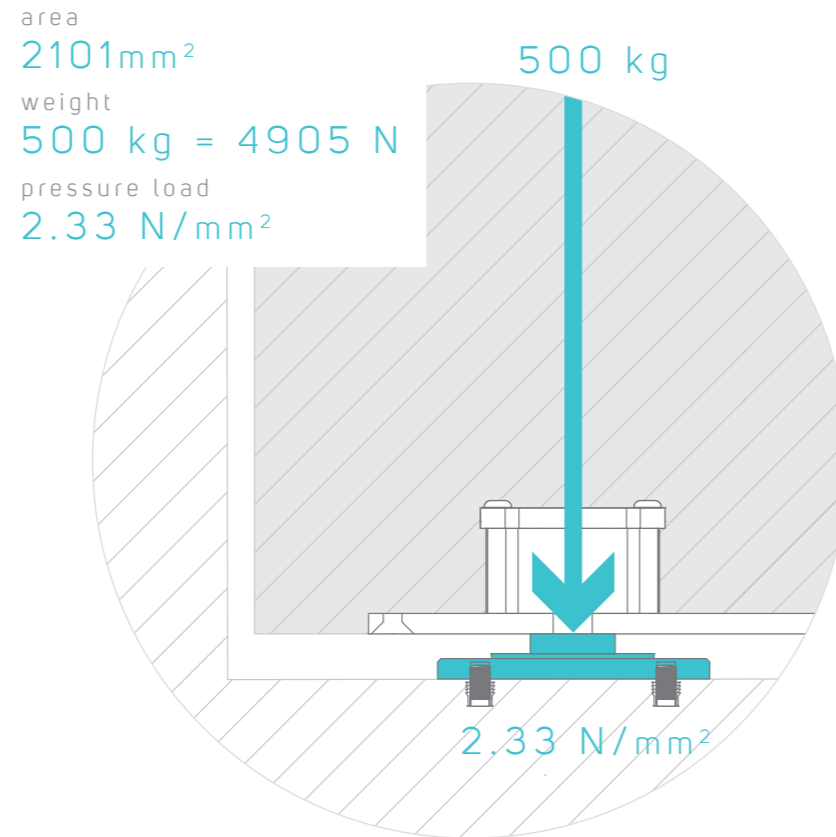
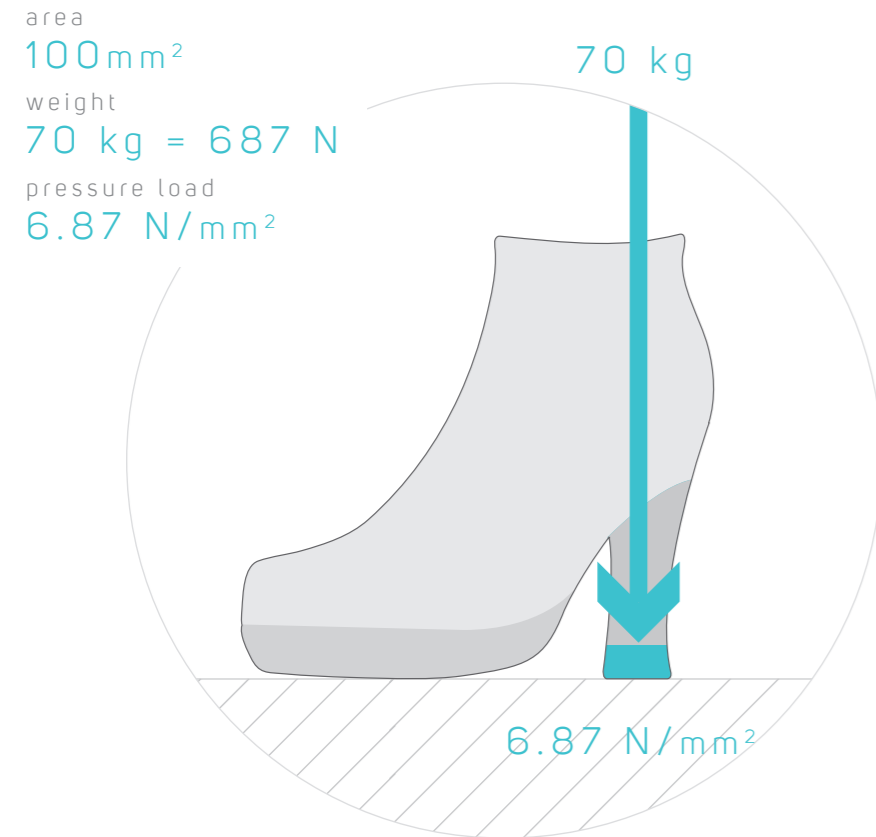
F*	A	X						
		40	50	60	70	80	90	100
500		2.4	2.6	2.9	3.2	3.6	4	4.5
1000		2.2	2.3	2.5	2.6	2.8	3	3.3
1500		2.1	2.2	2.3	2.4	2.5	2.7	2.8
2000		2.1	2.2	2.2	2.3	2.4	2.5	2.6

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

SYSTEM ONE PRESSURE LOAD

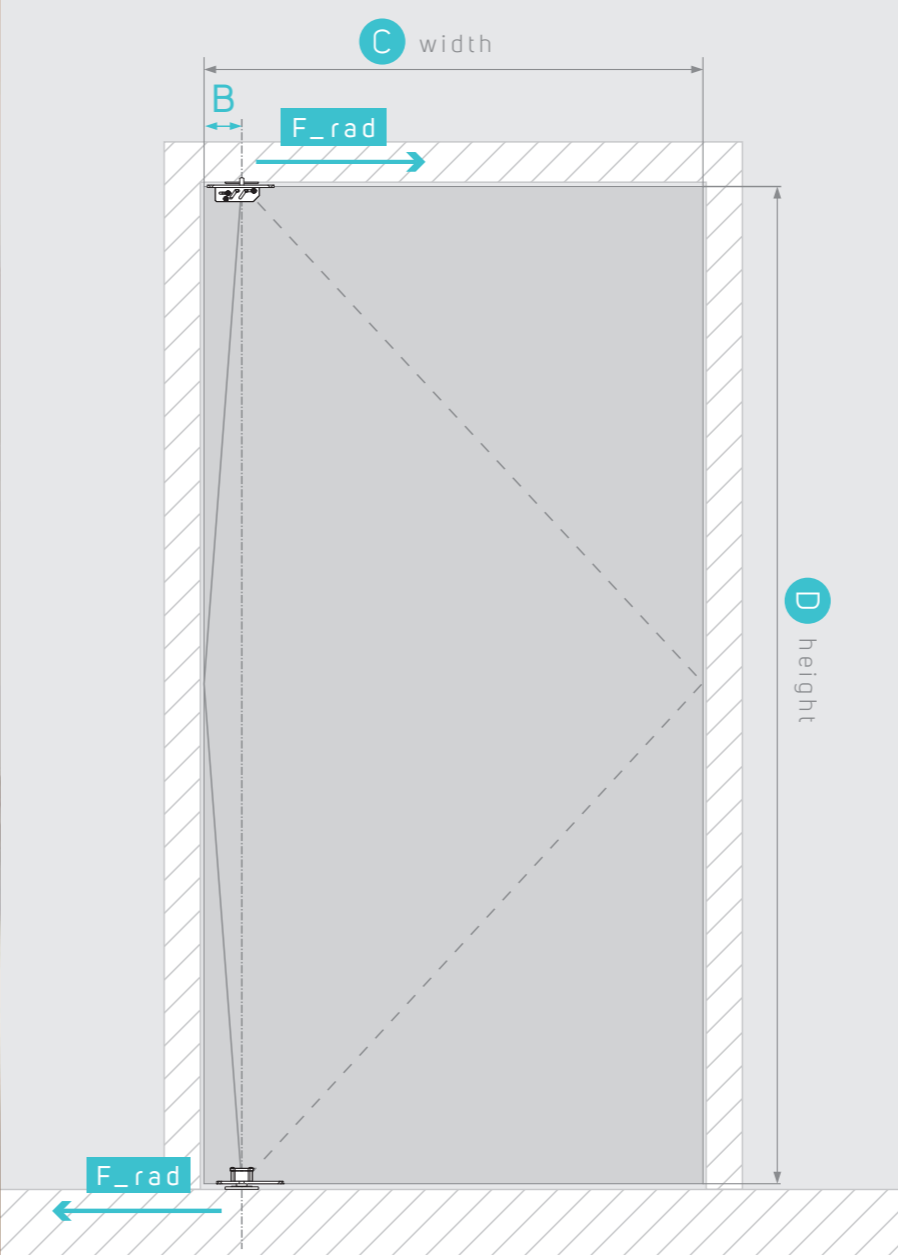
The Fritsjurgens® pivot door is fastened on a floorplate of 40 x 80mm and produces a pressure load (Fw) of 2.33 N/mm² with a door of 500 kg.

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



$B = 91\text{mm}$

weight door: 500 kg

C width (mm)

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

$B = 1/2$ width door

At 1/2 door width F_{rad} has 0 N in all situations of height D - width C. The door is completely balanced because System One is placed in the middle. As a result, there is no extra lateral force on the floor and ceiling.

9.8 N = 1 kg

SYSTEM ONE SETTING TOP PIVOT

MOUNTING TOP PIVOT

Two 8mm holes are required in the edge of the door to access the top pivot. The bottom hole sets the spindle, while the top is used to adjust the gaps around the door.

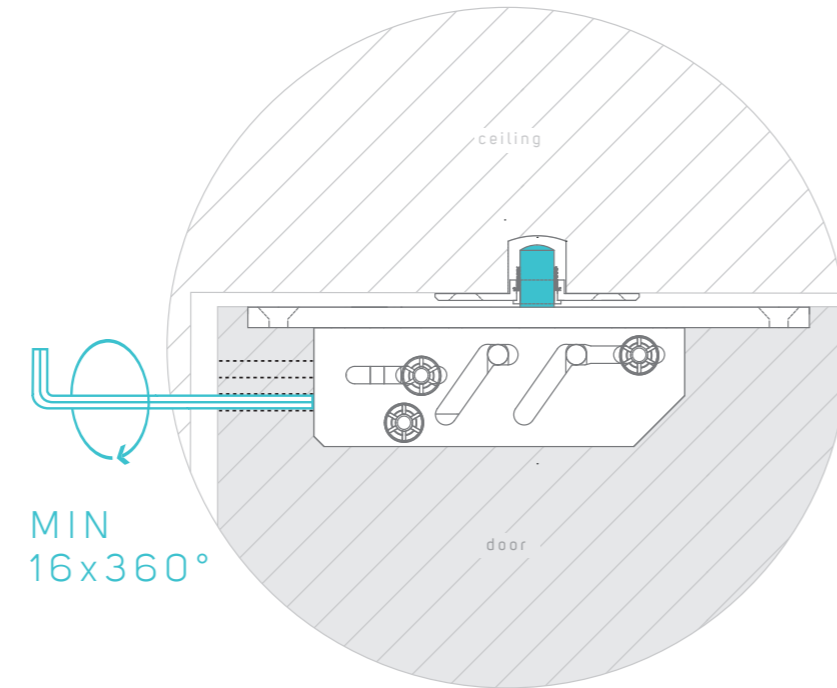
SETTING THE TOP SPINDLE

The top pivot can be set using a 5mm hex key in the bottom hole.

Clockwise : Spindle up.

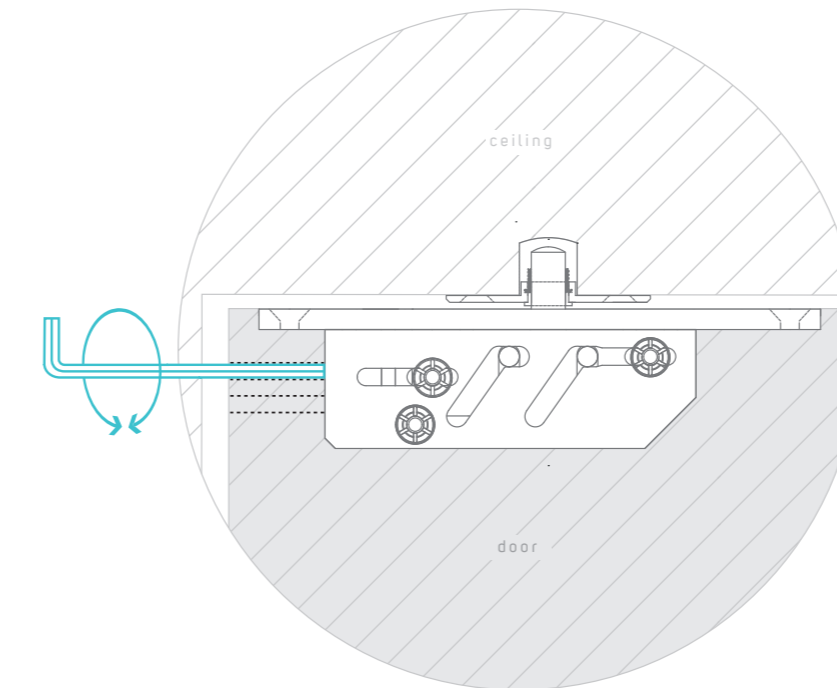
Counter-clockwise : Spindle down.

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

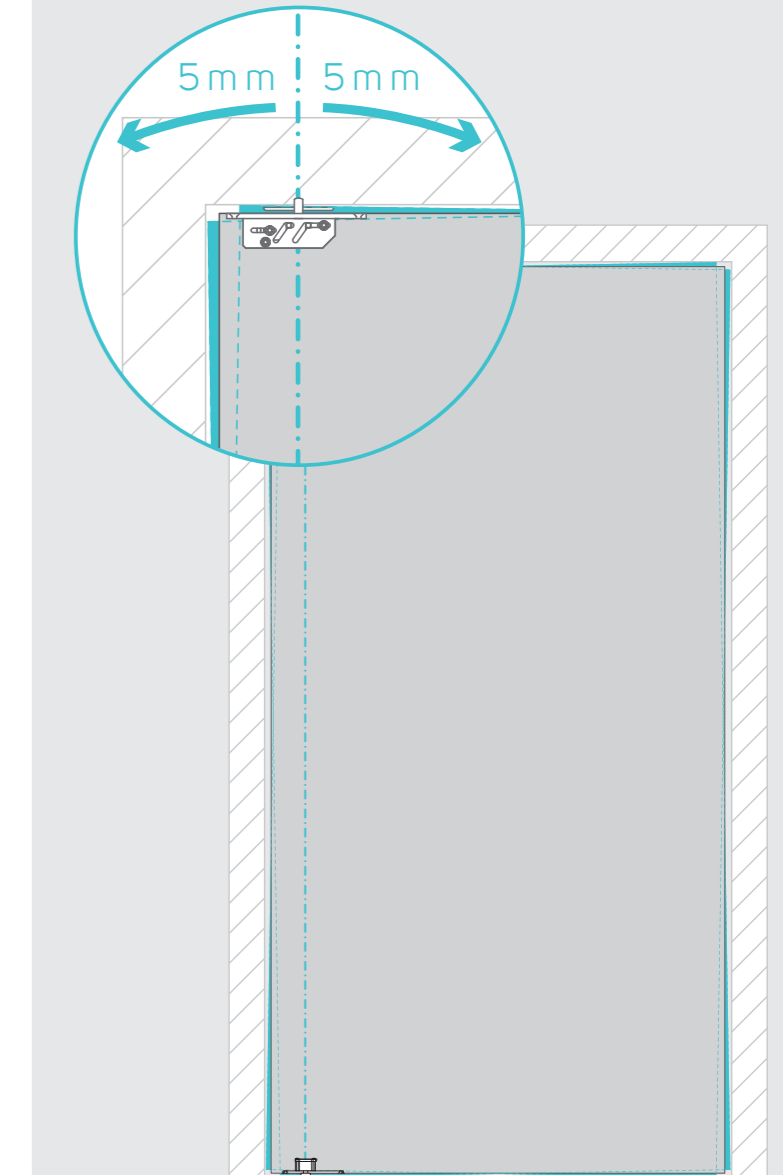


ADJUSTING THE GAP

Sometimes the top and bottom pivot centers are not perfectly aligned (plumb) and this is evident in uneven gaps around the door. These gaps can be adjusted along the plane of the door using a 5mm hex key in the top hole.



This adjustment moves the door relative to the bottom pivot point. Care should be taken when returning the door to its closed position after adjusting to ensure no binding occurs.



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

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

- Wood, steel, massive and aluminium doors
- Steel and wood framed glass doors
- Single and double-acting pivot doors
- Interior and exterior doors
- Commercial and residential projects



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	✓
Turnstile action	X	✓	X
Self-closing	X	✓	✓
Adjustable closing damping (soft-close)	X	X	✓
Hydraulic backcheck	X	X	✓
Suitable for single-action doors	✓	X	✓
Suitable for double action doors	✓	✓	✓
Minimal cycle testing	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	900 lbs (See the datasheet of System 3)	650 lbs (See the datasheet of System M)



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