

BELLEVUE
ARCHITECTURAL

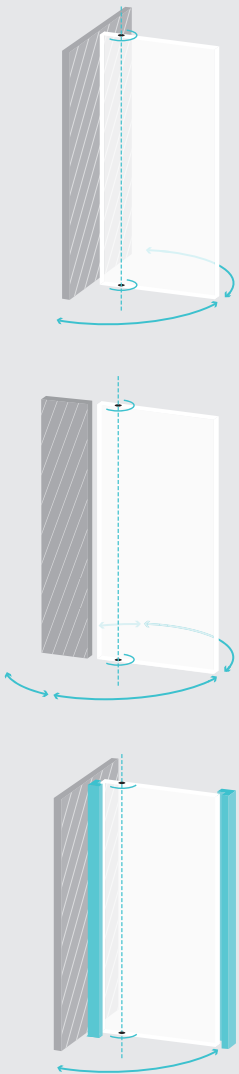
SYSTEM M

hidden perfection
concealed sprung pivot system

FritsJurgens®

SYSTEM M
APPLICATIONS

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



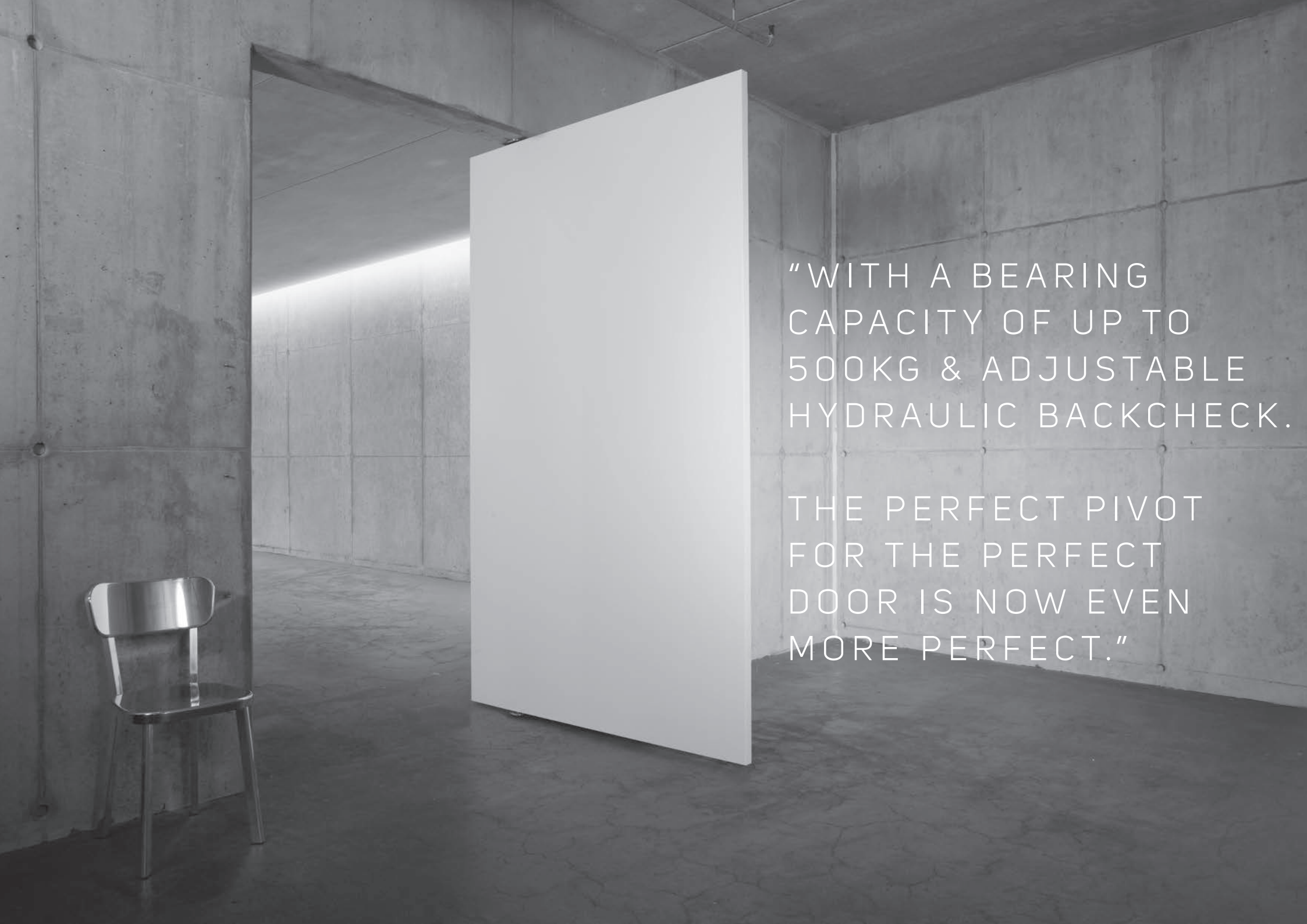
Choose the pivot door system that
meets all your needs. Please see our
complete line of products on pages
10 - 11.

FRITSJURGENS BY BELLEVUE
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WHERE TO BUY

Visit bellevuearch.com.au or call us on +61 3 9571 5666 to find your nearest distributor.



“WITH A BEARING
CAPACITY OF UP TO
500KG & ADJUSTABLE
HYDRAULIC BACKCHECK.

THE PERFECT PIVOT
FOR THE PERFECT
DOOR IS NOW EVEN
MORE PERFECT.”



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, a self-closing concealed pivot system with a bearing capacity of up to 500 kg and an adjustable hydraulic backcheck. It's in the door, not the floor.

100% made in the Netherlands.

SYSTEM M HIDDEN PERFECTION



A pivot door is a symbol of hidden perfection. System M adds a totally new dimension to the FritsJurgens® pivot hinge range by creating an unsurpassed experience: total control over the flow and movement of the door.

The opening is as light as a feather, the movement extremely elegant, and the closing as soft as a whisper, even for doors that weigh up to 300kg. All this thanks to our brilliantly engineered, patented dampeners that operate in seamless co-ordination.

System M is perfect for single action and double action pivot doors.





SYSTEM M DESIGNED TO STAND THE TEST OF TIME

System M packs an enormous amount of force into a compact space. To harness this power we have used cutting edge technology to develop a casing out of a single piece of aluminum. We have also made the camshafts out of tempered steel for ultimate endurance.

This means that the pivot system is extremely strong, rigid and virtually indestructible: our intense testing has shown that even after 1 million cycles (similar to 136 years of daily use) System M still behaves flawlessly. This is a system that is truly designed for the ages: invisible, stylish and maintenance-free.

System M is engineered to perfection and incredibly reliable.

FRITSJURGENS® OVERVIEW SYSTEMS

The FritsJurgens® pivot door range consists of three systems.

System One is the most compact system: the hinge is non sprung providing free movement.

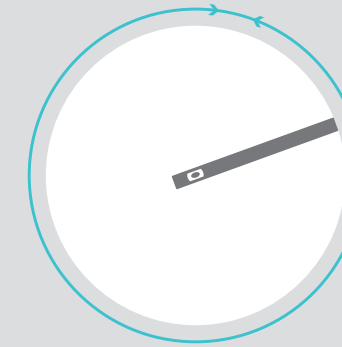
System 3 has three functions: rotation, closing and hold positions. System 3 can turn through 360° and is characterized by a hold position at every quarter of a circle including a self opening and self closing feature.

The System M adds a new dimension to the pivot door by creating the ultimate smoothness in: total control over the movement of the door making it ideal for 90° and 180° swing doors.

SYSTEM ONE

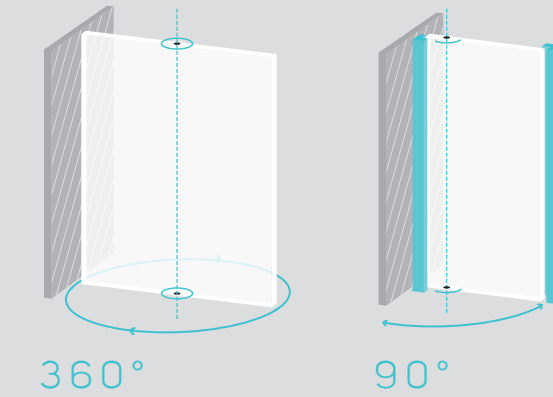


MOVEMENT

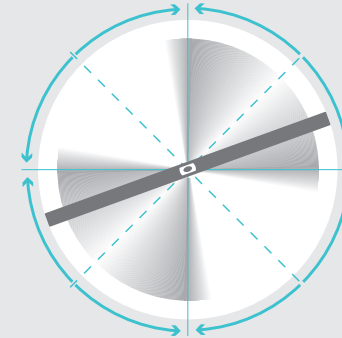


- Rotates 360°
- No hold open positions or self closure function

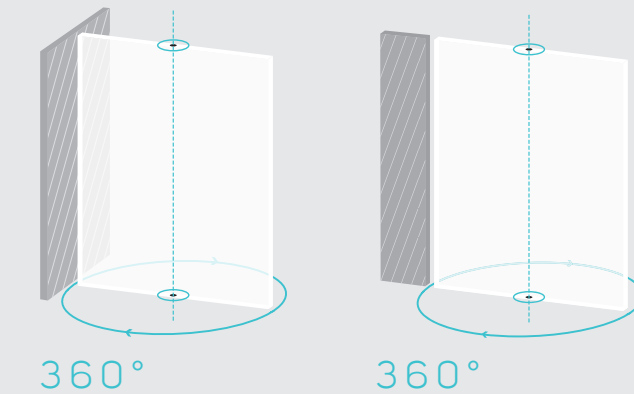
POSITIONING



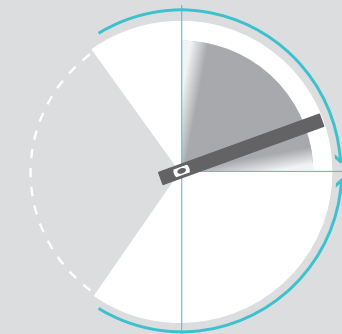
SYSTEM 3



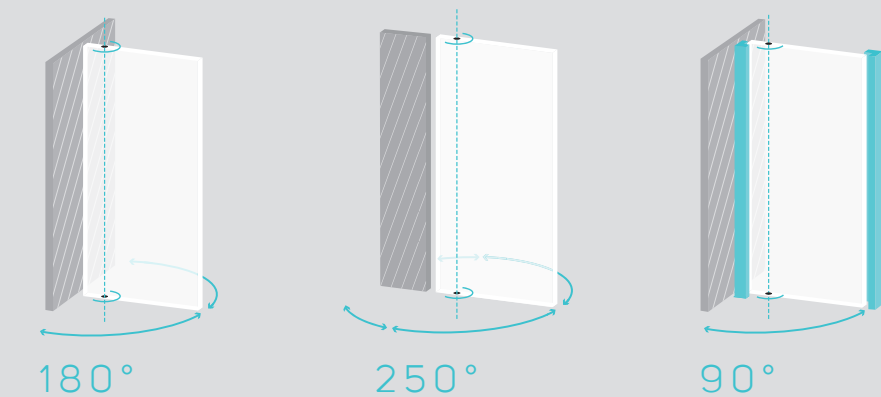
- Rotates 360°
- Hold open at 0°, 90°, 180° and 270°
- Self-opening - The door automatically moves from each 45° angle in both directions to the next hold position
- Self-closing - The door comes to rest in the desired hold position after a two overswing movements



SYSTEM M



- Hold open at 0°, 90° and -90°
- Self-closing from -125° and 125° - After opening, the door returns smoothly to the 0° position unless pushed to the hold open position at 90° or -90°.
- Adjustable closing damping (soft close)
- Adjustable hydraulic back check





FRITSJURGENS® SYSTEM M

NO STRUCTURAL ELEMENTS

All of our pivot systems are fully integrated into the top and bottom of the door: no structural elements live in the floor or ceiling; leaving a beautiful clean look and feel. The aesthetics of the environment are not diminished by unsightly traditional floor or ceiling plates.

LOAD-BEARING CAPACITY: UP TO 500 KG

Incredibly, our pivot systems can support the heaviest doors, upto 500kg. Thanks to our purpose built, robust precision bearing system and the use of the highest quality materials like hardened stainless steel and anodized aluminum.

MINIMUM DOOR THICKNESS: 38MM

The thickness of System M is only 32 mm.

FOR NEW AND RETROFIT SITUATIONS

The floorplate spigots only need to be rebated 8mm into the floor, this means System M is ideal for in-slab Hydronic Heating.

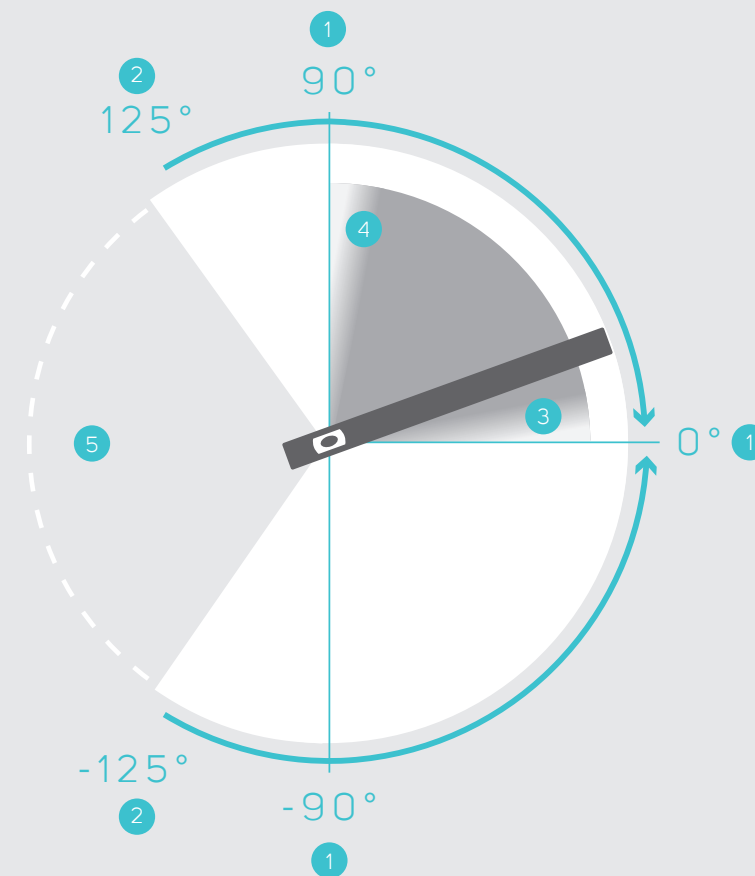
EASILY-ADJUSTABLE

The innovative design of our pivot systems means the closing seam and the radial position can be easily adjusted whilst the door stays in place.

SUITABLE FOR ALL TYPES OF DOORS

Ideal for timber, steel, framed glass and massive cladde doors. Perfect for internal and external doors, in both residential and commercial environments.

SYSTEM M ULTIMATE SMOOTHNESS



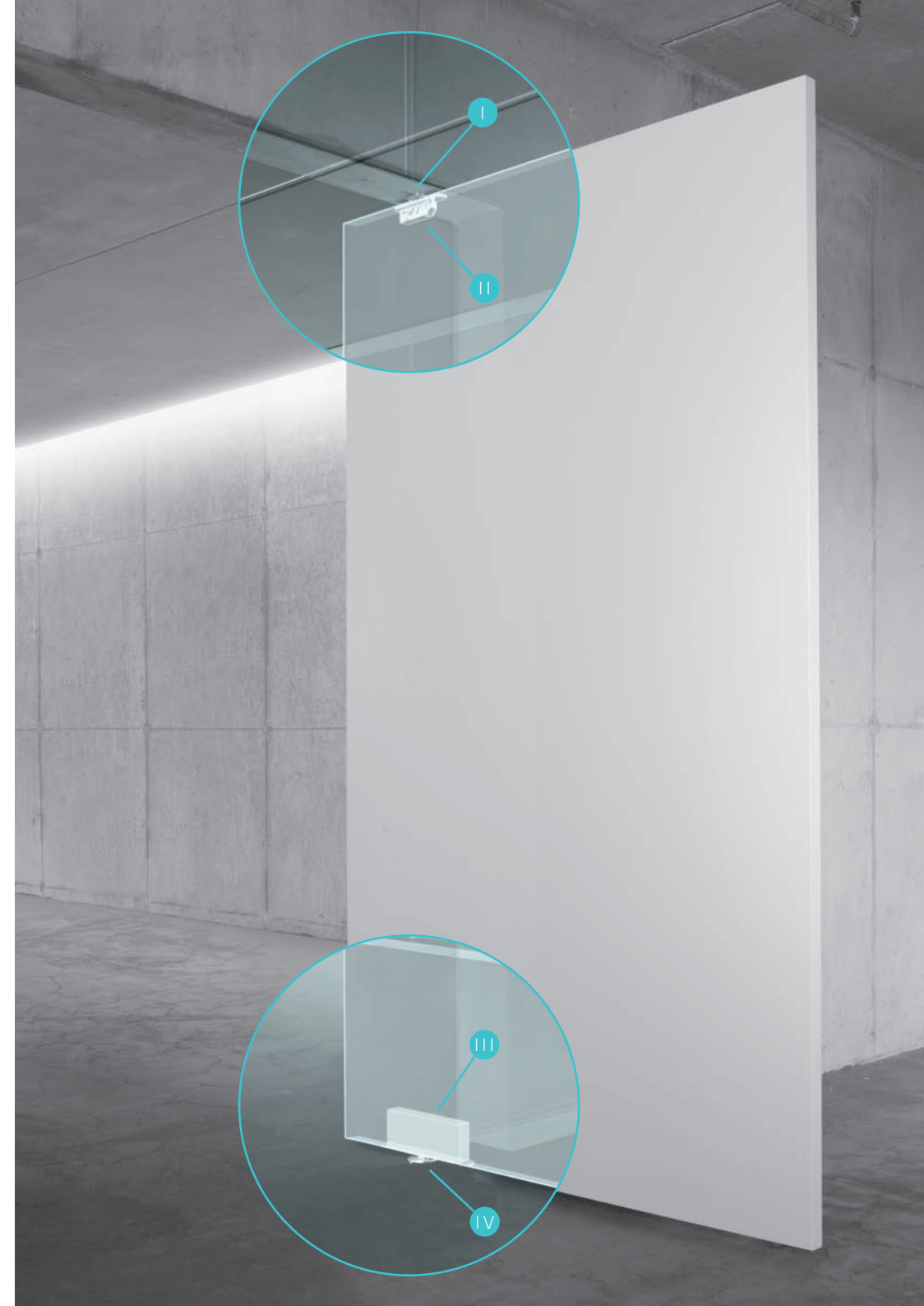
- 1 HOLD POSITIONS AT 0°, 90° AND -90°**
The door can be placed in a hold position of 90° or -90°. Thanks to the self-closing function the door will return to the 0° position.
- 2 SELF-CLOSING FROM 125° AND -125°**
After opening, the door returns smoothly to the 0° position unless taken to the hold open positions at 90° or -90°.
- 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

Due to the pivot being fully integrated into the top and bottom of the door; there is no imposing ceiling or traditional unsightly floor plate to distract from a beautifully crafted door and designer environment, the pivot becomes a virtually invisible system.

The FritsJurgens® pivot door systems design is totally unique, in that there are no structural elements in the floor and the ceiling. As a result of its design, installation is quick and simple, without having to damage or cut blocks out of a concrete floor.

Due to the pivot being fully integrated into the top and bottom of the door; there is no imposing ceiling or traditional unsightly floor plate to distract from a beautifully crafted door and designer environment, the pivot becomes a virtually invisible system.



SYSTEM M COMPONENTS

I CEILING PLATE



II TOP PIVOT



III SYSTEM M



IV FLOOR PLATE

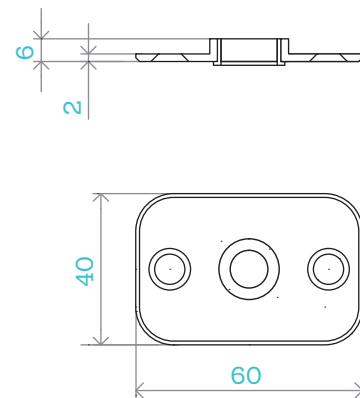




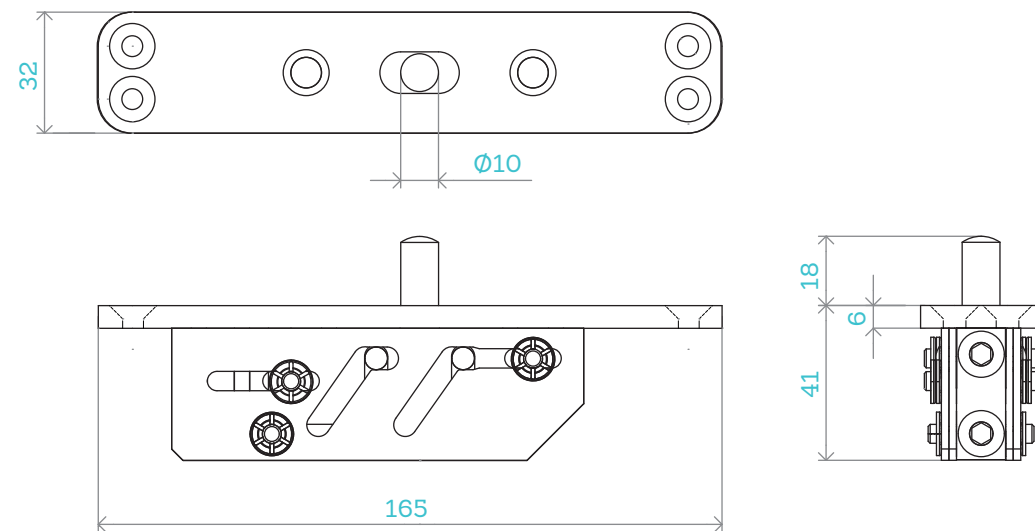
SYSTEM M
TECHNICAL
DOCUMENTATION

SYSTEM M
TECHNICAL DRAWINGS

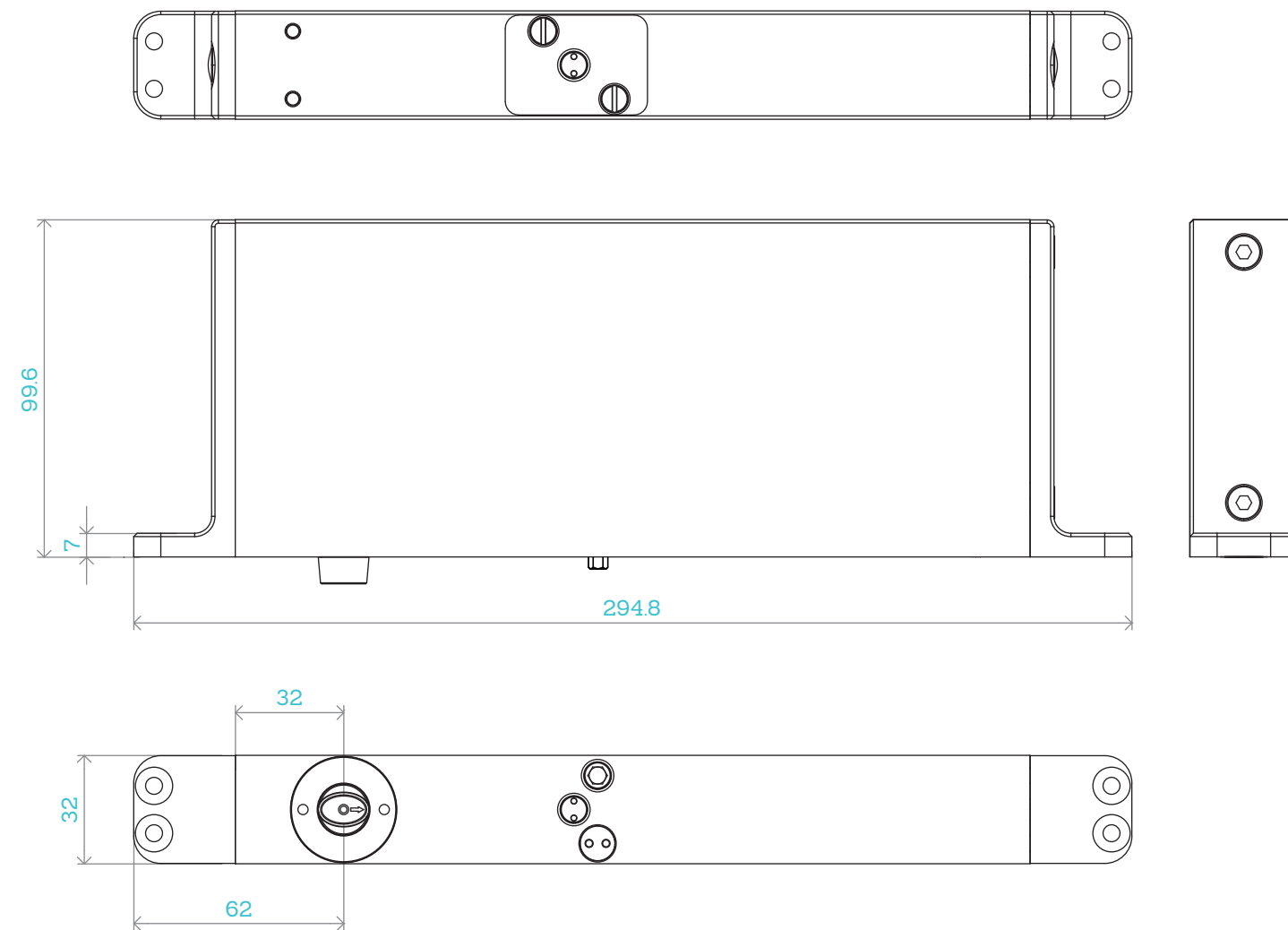
CEILING PLATE



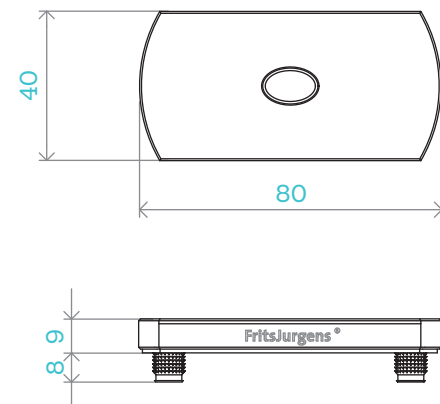
TOP PIVOT



SYSTEM M

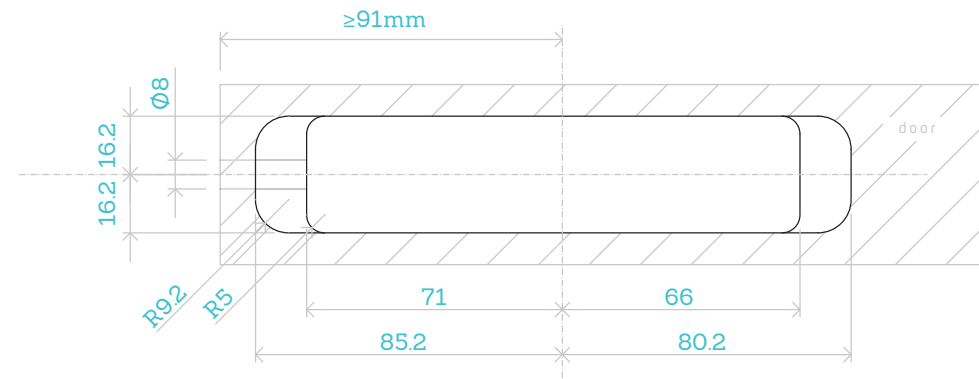
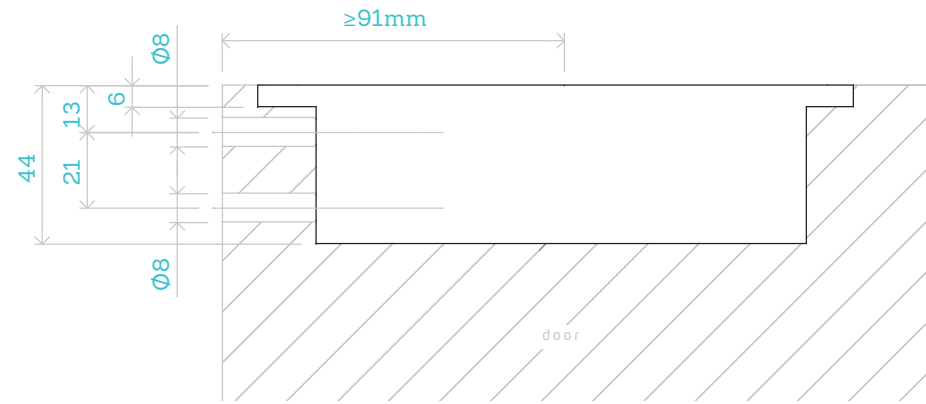


FLOOR PLATE

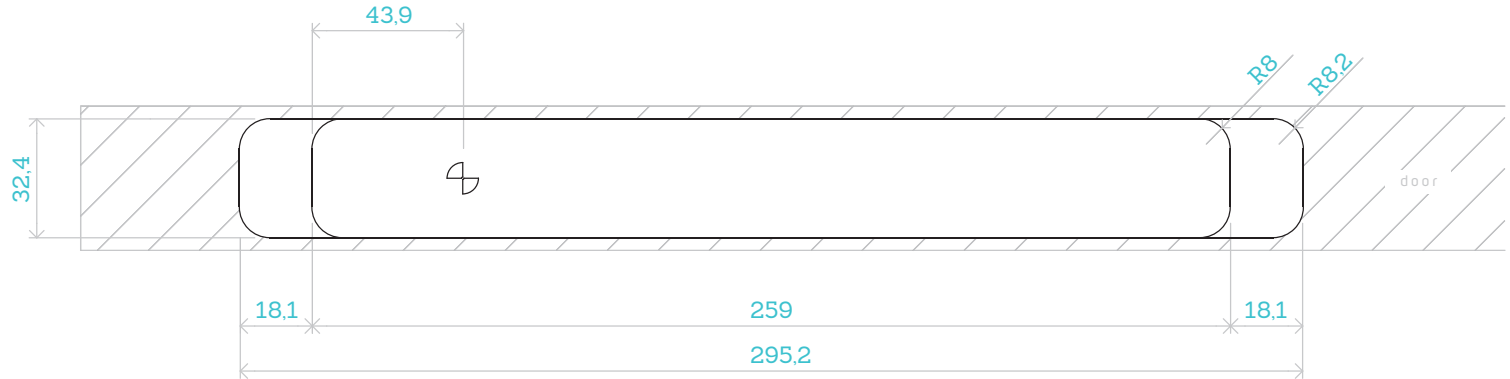


SYSTEM M
MILLING DRAWINGS

TOP PIVOT



SYSTEM M



SYSTEM M MODEL SELECTOR

To ensure the desired door movement, System M is available in multiple versions depending upon the weight and width of the door. Using the chart on the next page you can easily select which model best matches your door specifications.

If you require a system for a pivot door outside these dimensions, please let us know. FritsJurgens® has an in-house testing facility which enables us to determine whether our systems are suitable for your specific situation.

ORDER CODE:	PRODUCT DESCRIPTION

FJSM32A: SCA - Fully Concealed Pivot Kit

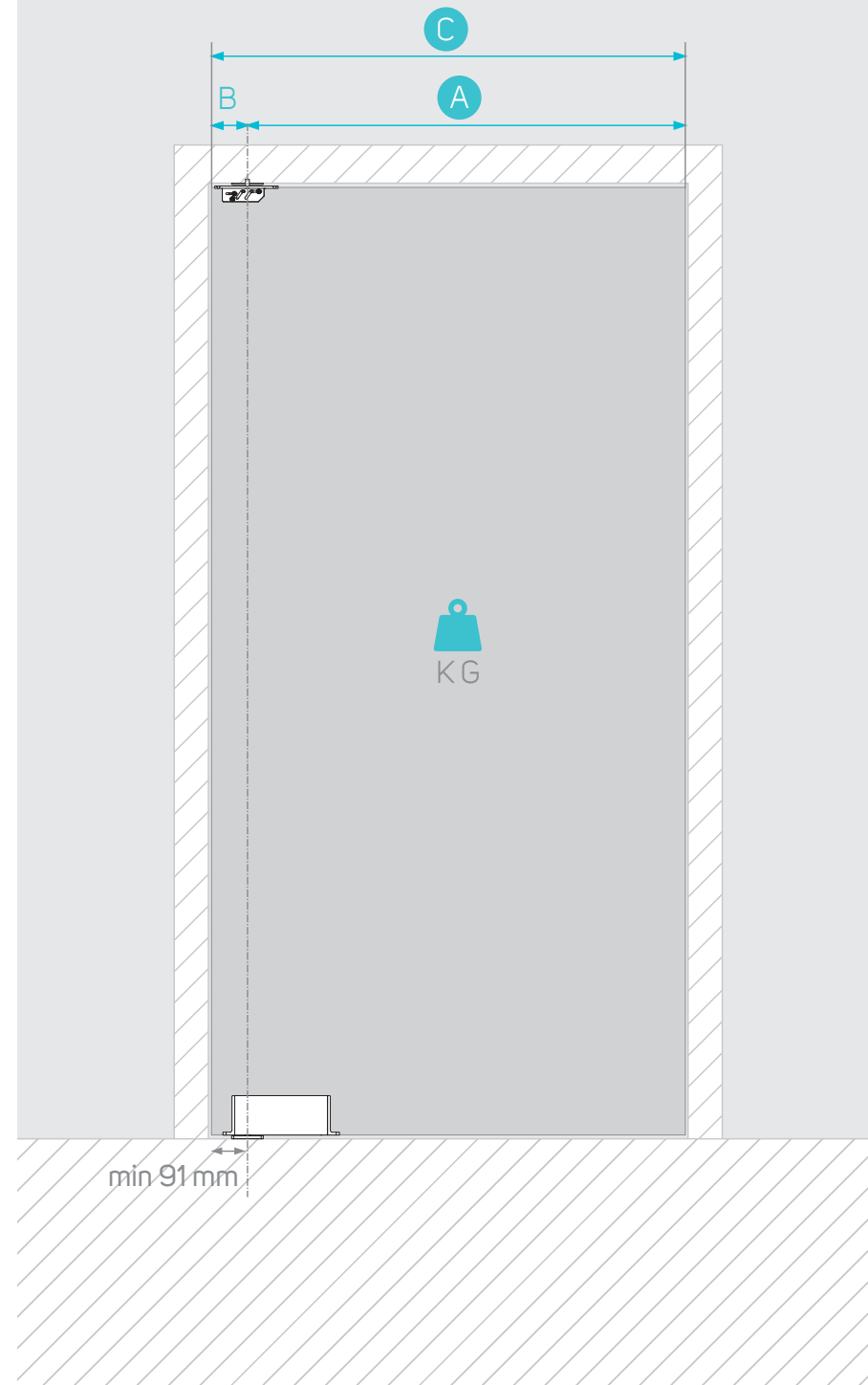
FJSM32B: SCB - Fully Concealed Pivot Kit

FJSM32C: SCC - Fully Concealed Pivot Kit

FJSM32D: SCD - Fully Concealed Pivot Kit

FJSM32E: SCE - Fully Concealed Pivot Kit

- Step 1: Determine A – distance of pivot point to the closing side of the door
- Step 2: Determine C - width of the door
- Step 3: Determine KG – weight of the door
- Step 4: Determine which system is suitable for your door



M32 SERIES

Weight 165 kg. The center of the pivot is 91 mm from the edge.

Weight (kg)	Door Width (mm)	Model
340-349	400	SCE
330-339	400	SCE
320-329	400	SCE
310-319	400	SCE
300-309	400	SCE
290-299	400	SCE
280-289	400	SCD
270-279	400	SCD
260-269	400	SCD
250-259	400	SCD
240-249	400	SCD
230-239	400	SCD
220-229	400	SCD
210-219	400	SCD
200-209	400	SCC
190-199	400	SCC
180-189	400	SCC
170-179	400	SCC
160-169	400	SCC
150-159	400	SCB
140-149	400	SCB
130-139	400	SCB
120-129	400	SCB
110-119	400	SCA
100-109	400	SCA
90-99	400	SCA
80-89	400	SCA
70-79	400	SCAA
60-69	400	SCAA
50-59	400	SCAA
40-49	400	SCAA
30-39	400	SCAA
20-29	400	SCAA

1. Determine distance to pivot point A (C: 1600 mm - B: 91 mm) = 1509 mm

2. Check the door width C = 1600 mm

3. Cross reference the weight KG = 165 kg

For this door you would specify model **SCD**

EXAMPLE

Door specifications: Door width 1600 mm, Door height 3200 mm, Weight 165 kg. The center of the pivot is 91 mm from the edge.

1	1. Determine distance to pivot point A (C: 1600 mm - B: 91 mm)	1509 mm
2	Check the door width C	1600 mm
3	Cross reference the weight KG	165 kg
!	For this door you would specify model	SCD

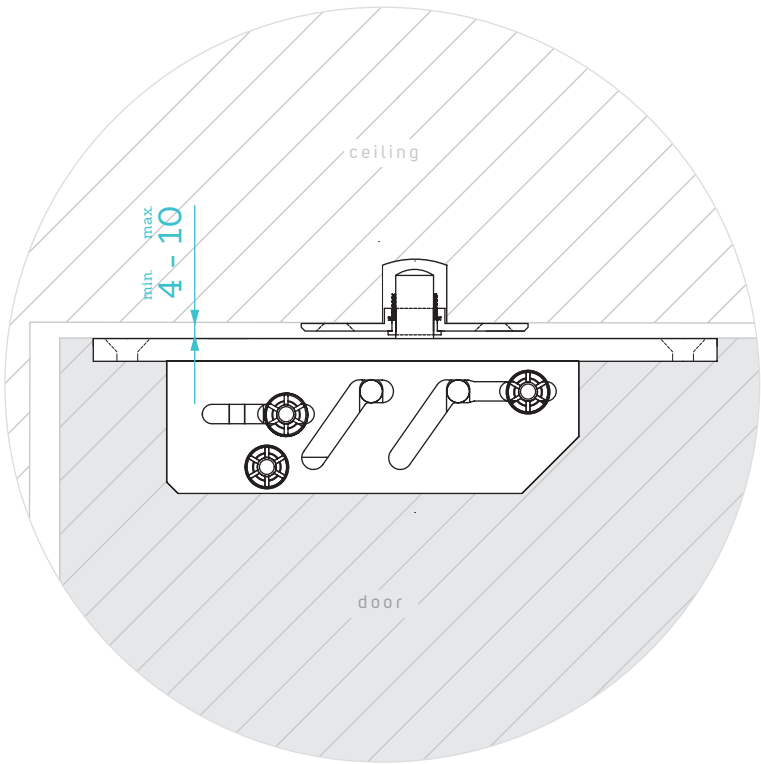
SYSTEM M

DIMENSIONS

AROUND

THE DOOR

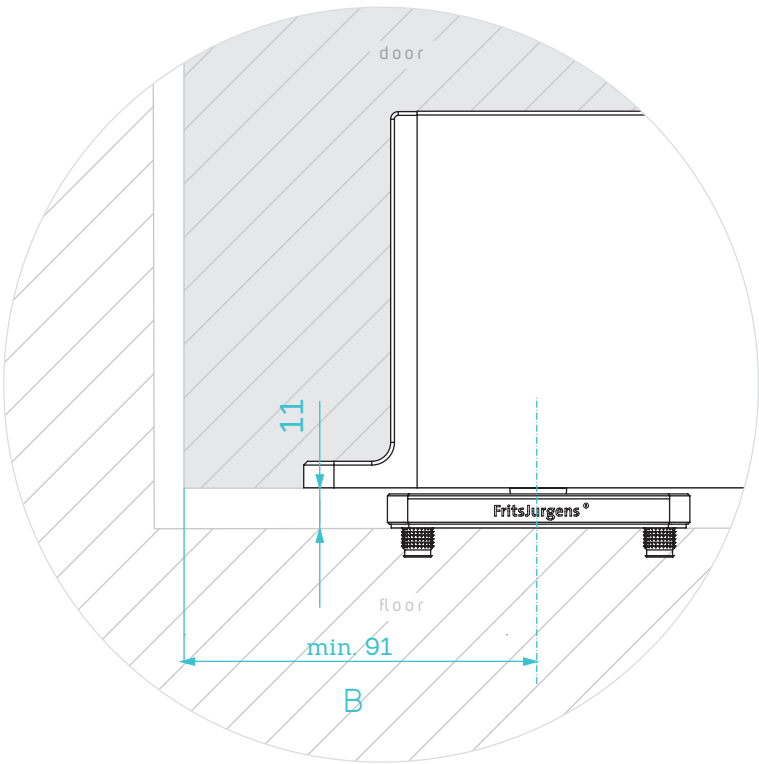
TOP PIVOT



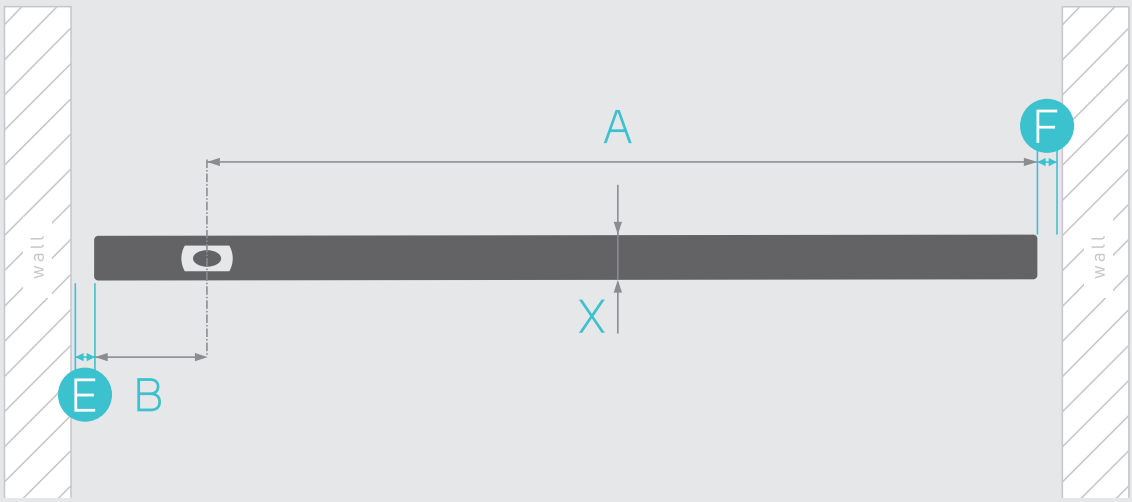
System M is designed to be virtually invisible with hardly any gaps between the door, wall and floor. The minimum installation dimensions are 4mm at the top (ceiling) and 11mm at the bottom (floor).

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

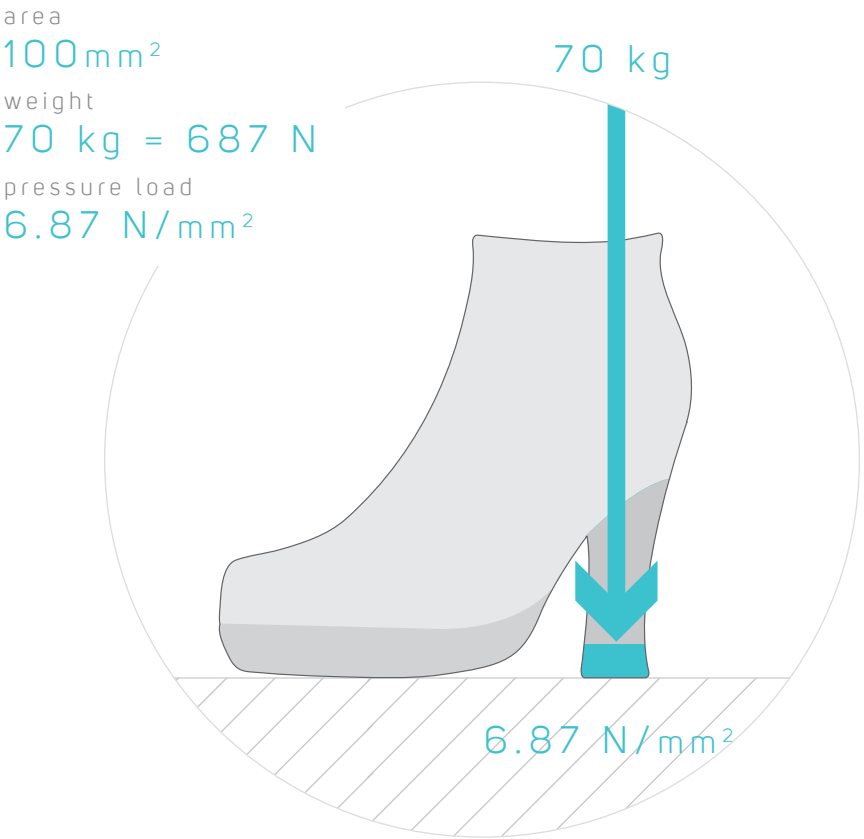
X	Door thickness	40
A	Distance of rotation point to latch side of the door	1500
B	Distance pivot point to the start of the door	91
E*	Minimum gap between door and wall	4.2
F*	Minimum gap between door and wall	2.1

	B	X						
		40	50	60	70	80	90	100
E*	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
F*	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

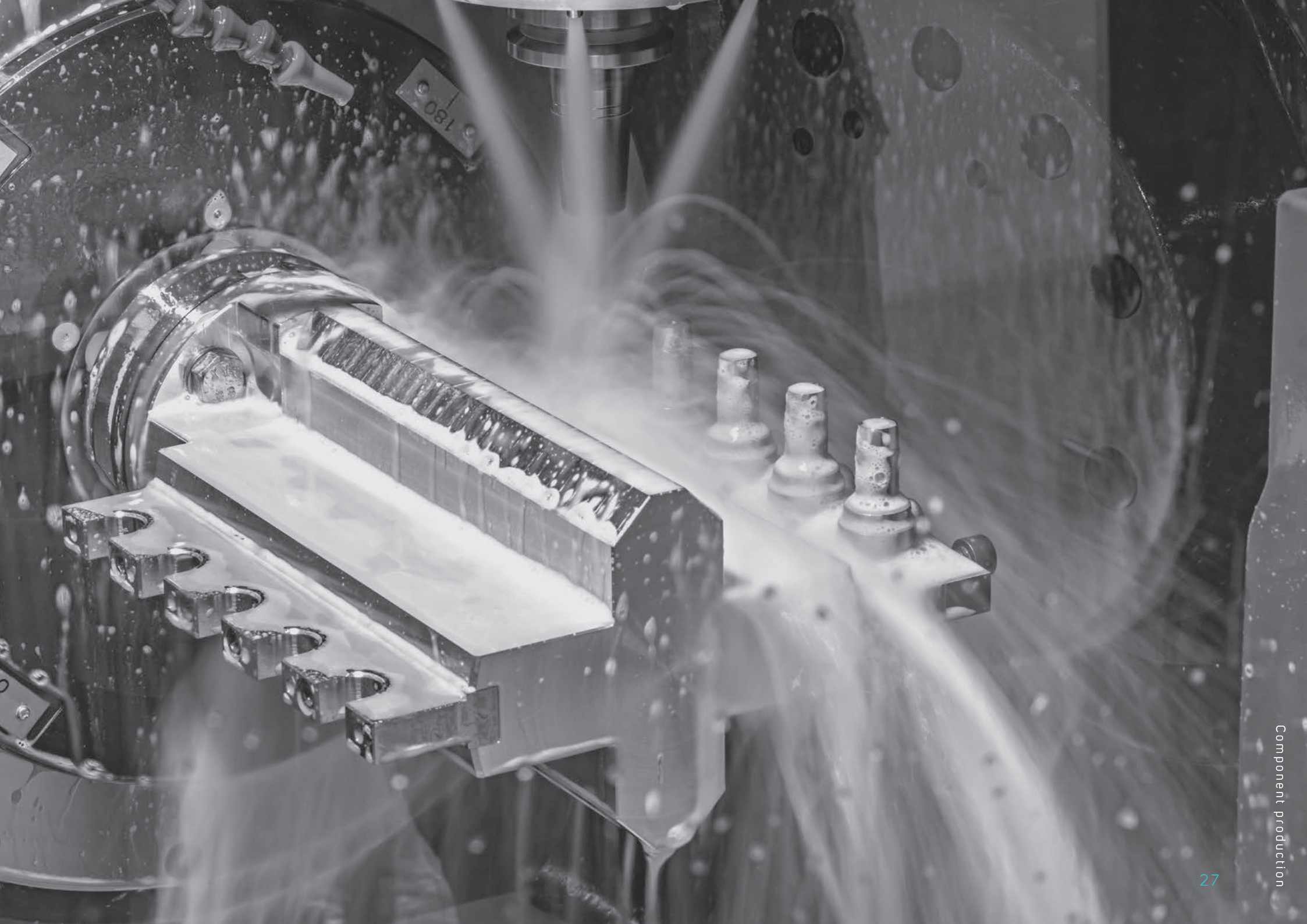
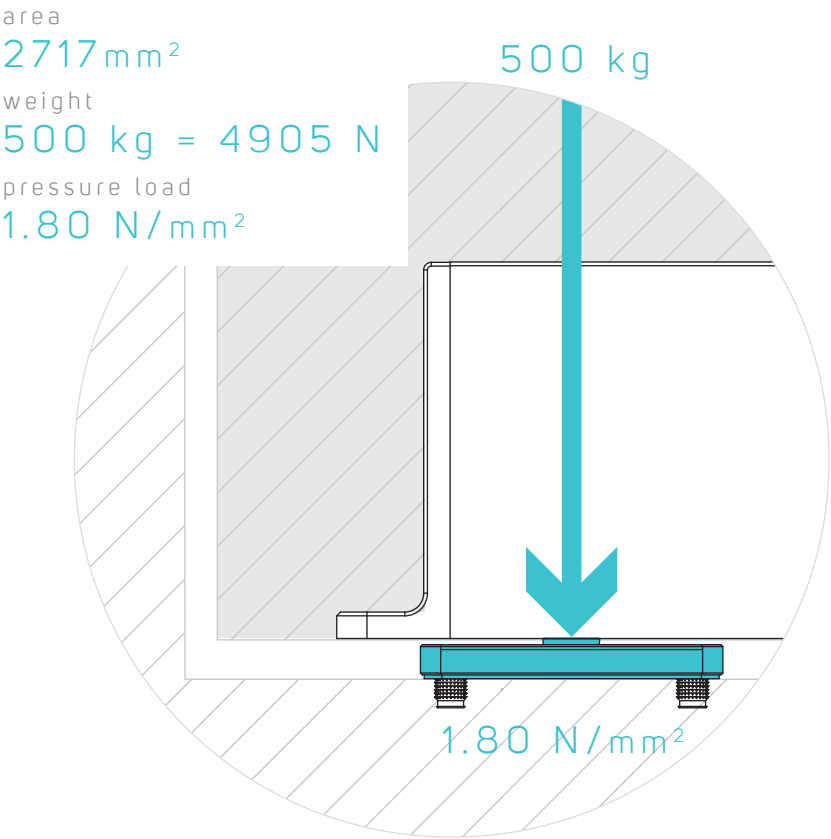
* There is no need to add extra space for installing.
The outcome for E and F includes a 2mm tolerance.

SYSTEM M PRESSURE LOAD



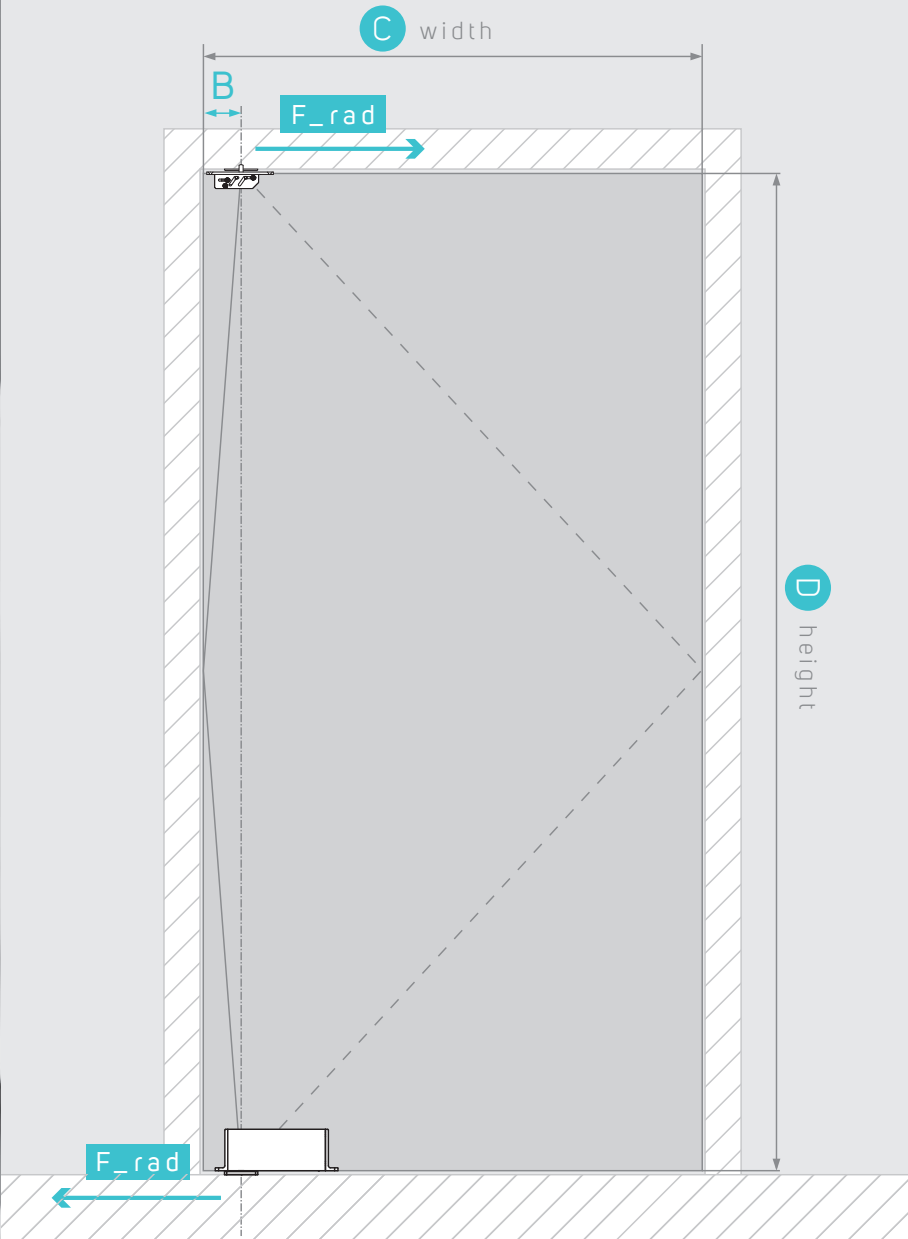
The FritsJurgens® pivot door stands on a floorplate of 40 x 80mm and produces a pressure load (Fw) of 1.80 N/mm^2 with a door of 500 kg.

As a reference: a woman of circa 70 kg wearing high heels produces a pressure load (Fw) of 6.87 N/mm^2 . 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

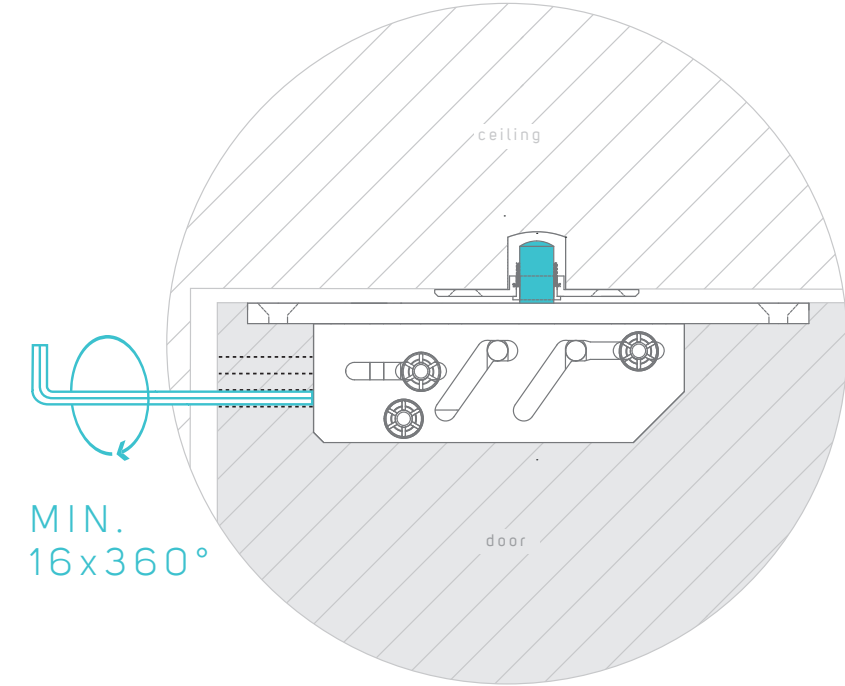
9.8 N = 1 kg

SYSTEM M SETTING TOP PIVOT

MOUNTING TOP PIVOT

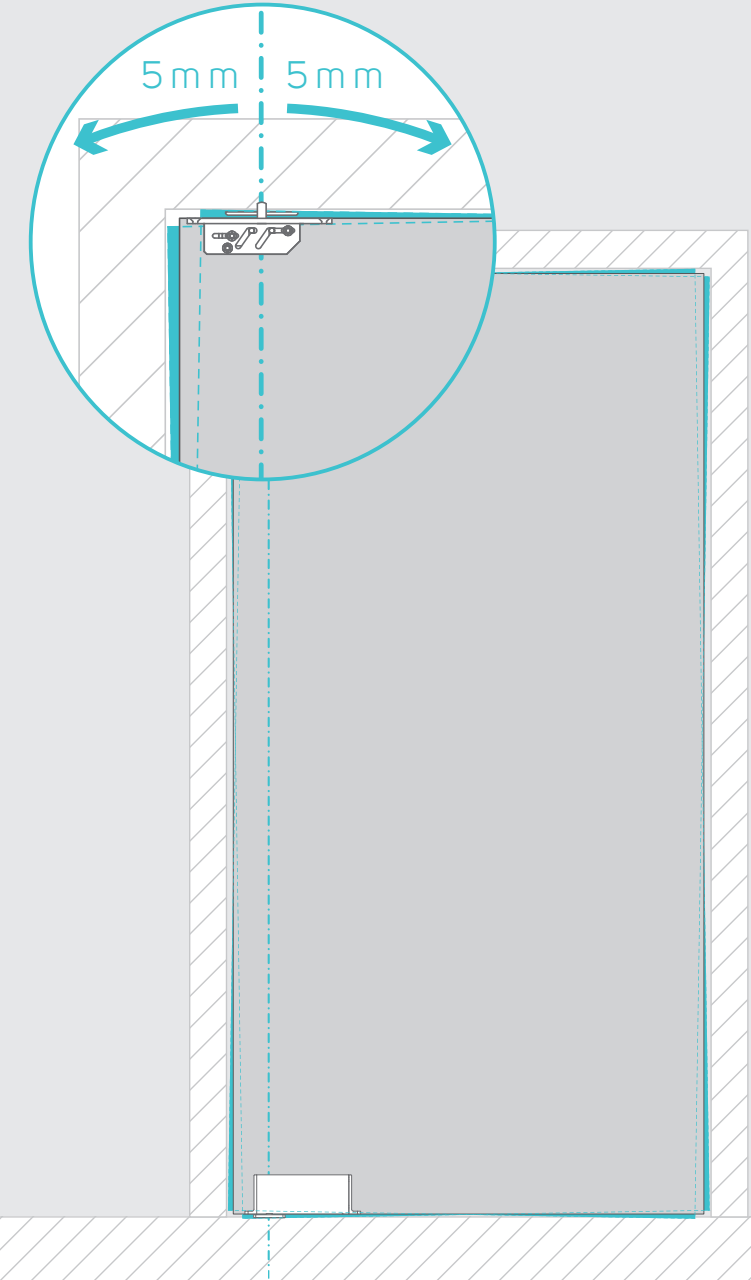
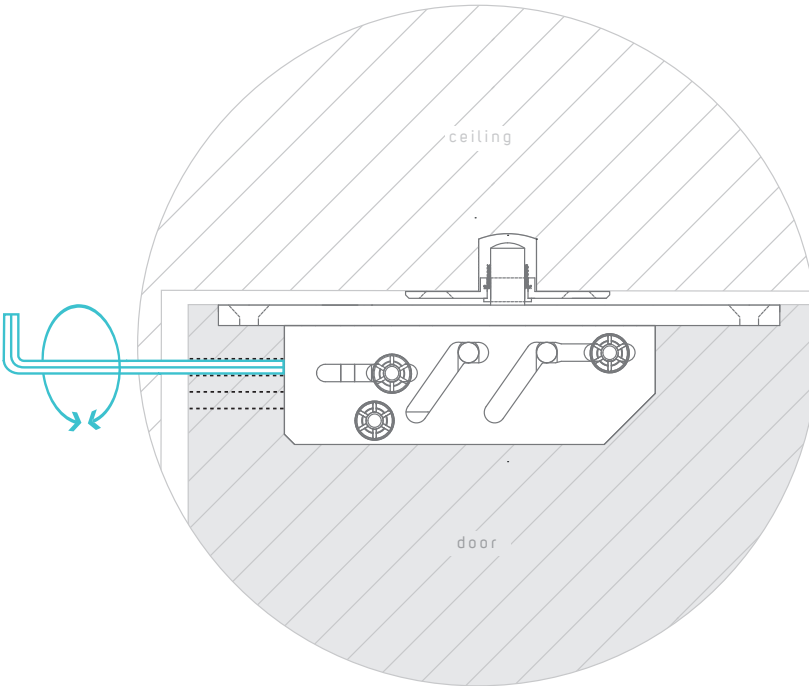
The top pivot can be engaged simply by inserting the 5mm hex key supplied into the bottom hole and twist.
Turn to the right: raise the pivot.
Turn to the left: lower the pivot.

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



SETTING THE GAP

The closing seam can be adjusted simply by inserting the 5mm hex key supplied into the top hole and twist.

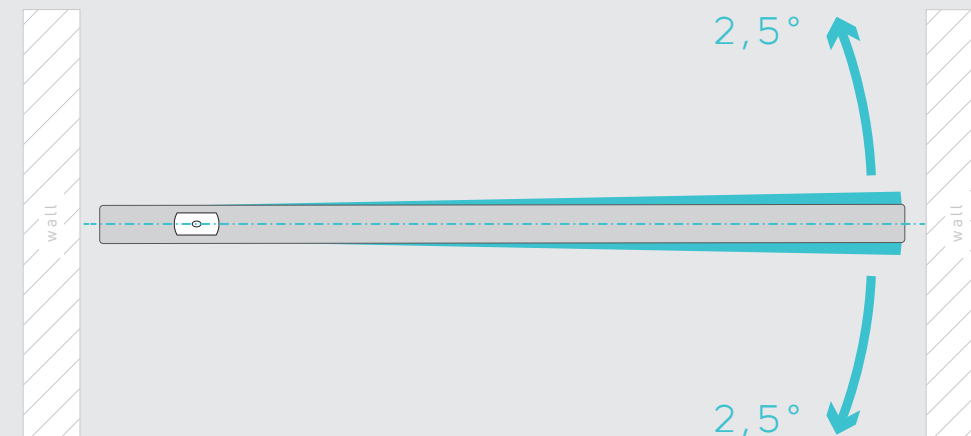
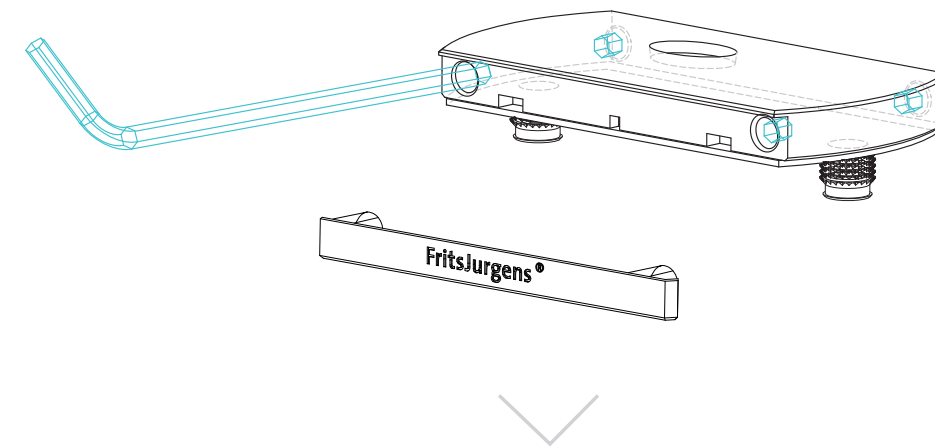


SYSTEM M SETTING SYSTEM M

SETTING THE RADIAL POSITION

Remove the cap from the floorplate, loosen the screws and adjust the angle of the door by moving it left or right, using the 3mm hex key supplied.

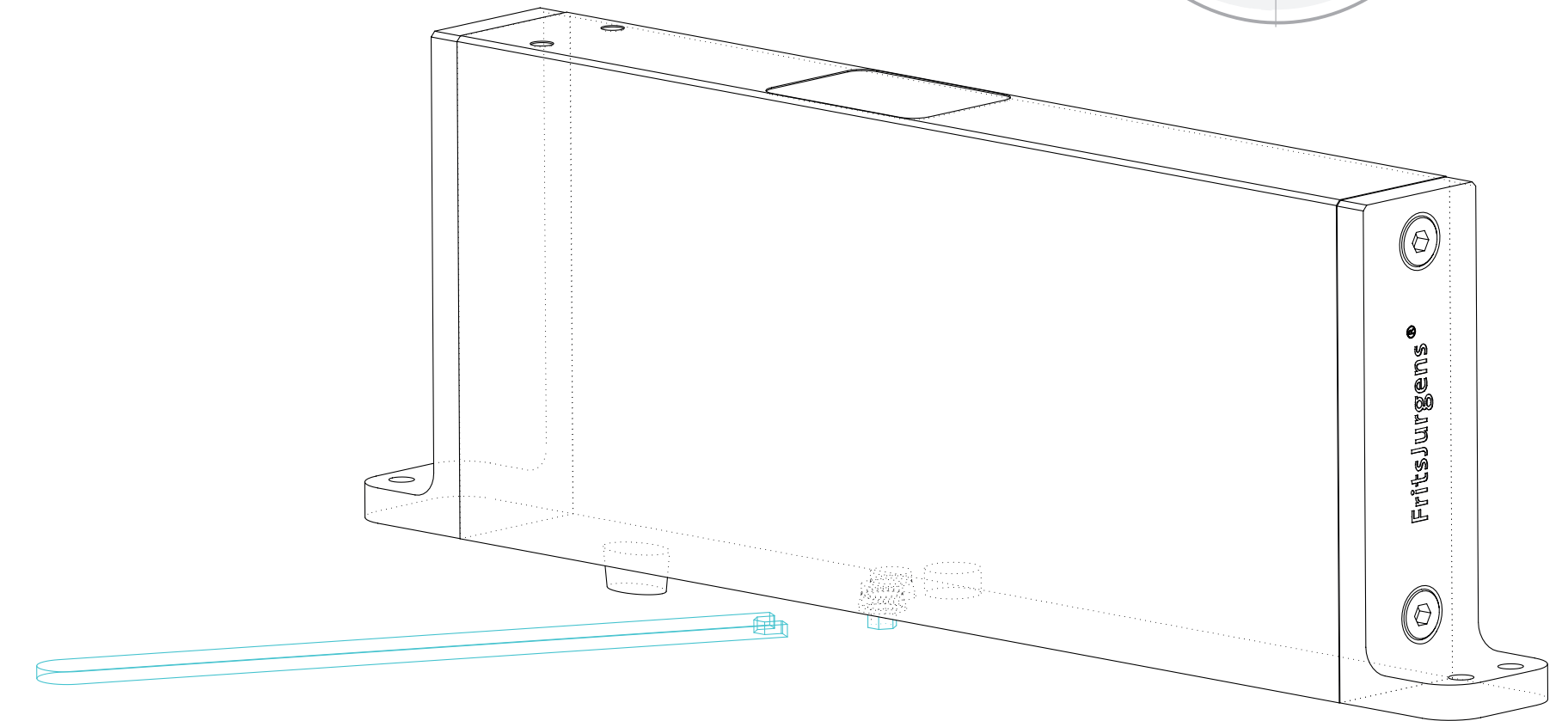
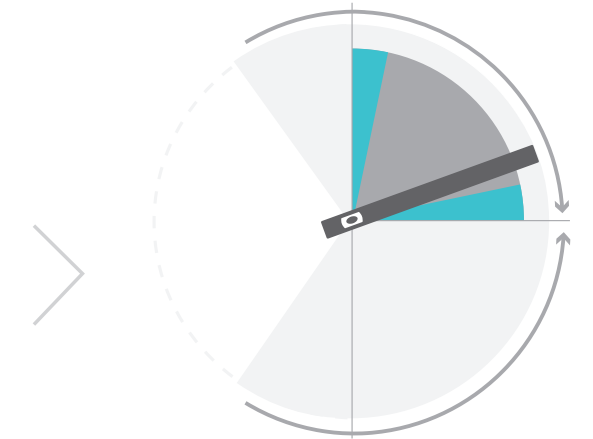
Important: all 4 screws need to be loosened before setting the radius. Don't forget to tighten them again after adjusting.



SETTING THE CLOSING SPEED

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

- + Turn to the right: more opening and closing damping, slows the door speed.
- Turn to the left: less closing damping, increasing the door speed.



FRITSJURGENS® SYSTEMS FEATURES

FritsJurgens provide pivot systems for multiple applications, all of which live in the door, not the floor. Depending on your door’s movement requirements, you can select a pivot system where the door stands parallel or perpendicular to the wall, a doors that revolve 180° or 360°, a soft-closing door, doors with or without hold open positions including many other options.

Please contact us on Ph: +61 3 9571 5666 or e-mail: info@bellevuearch.com.au if you need assistance in choosing the correct FritsJurgens pivot system for your requirements.

FRITSJURGENS® SYSTEMS

- No structural elements in the floor or ceiling
- Quick and simple to install
- Maintenance-free
- For new and existing environments
- Easily adjustable with the door in place

FRITSJURGENS® APPLICATION AREAS

- Timber, steel, massive and aluminum doors
- Massive claddd custom doors
- Steel and timber framed glass doors
- Single and double action doors
- Internal and external 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°	✗	✓	✗
Hold positions at 90° and -90°	✗	✗	✓
Self-opening	✗	✓	✗
Self-closing	✗	✓	✓
Adjustable closing damping (soft-close)	✗	✗	✓
Adjustable hydraulic backcheck	✗	✗	✓
Suitable for single action doors	✓	✗	✓
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)

BELLEVUE

ARCHITECTURAL

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