

Floor Springs

ASSA ABLOY

The global leader in
door opening solutions

ASSA ABLOY Floor Springs

Features & Benefits

ASSA ABLOY

Floor Spring

Key features:

- Non-handed system
- Up to 1 million cycles tested
- Fire rated
- Concealed mounting
- Cam Motion system

Benefits:

- Versatile usage
- High durability
- Suitable for fire doors
- Modern & compact design
- Energy conservation

Standard & Certification

EN1154
CE Marked

Technical details:

- Various power sizes
- Suitable for wood, glass, metal and fire rated doors
- Available finishes - SSS, PSS and customized finishes available on request

Functions:

- Back-check
- Hold-open
- Controlled closing speed
- Thermodynamic valves
- Independent hydraulic circuit

This new range of product is based on a new modular concept and a common design, under a unique platform for both premium and standard floor spring.



ASSA ABLOY Floor Springs

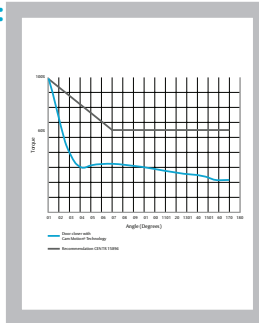
Features & Benefits

ASSA ABLOY

Key Features

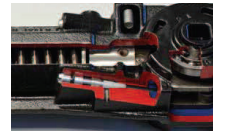
Cam Motion® Technology:

This technology enables floor springs to comply with CEN TR 15894 requirements and ensures that the force which a user needs to apply to open the door up to 60° must be reduced by 40%.



Thermodynamic valves:

The thermodynamic valves enable the consistent performance of a floor spring in case of temperature fluctuation.



1 Million Cycles:

The required durability according to EN1154 is 5,00,000 test cycles. ASSA ABLOY floor springs are tested to 1,000,000 cycles for improved durability and performance.



Metal eyelet:

Cover plate and eyelet are made from Satinless Steel and in the same color design for a consistent aesthetic appeal. Additionally, the eyelet cannot be removed after it is installed.

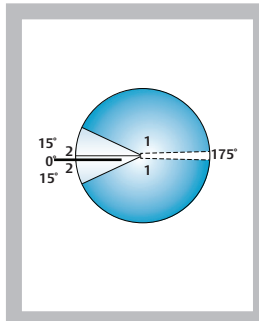


Floor Spring

Overview of functions

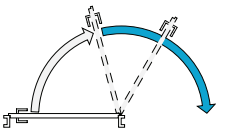
Independent hydraulic circuits:

The hydraulic circuits in floor spring, for the closing and latching speed adjustment, enable to regulate (slow down or speed up) the closing and latching speed precisely and independently from each other by thermodynamic valves.



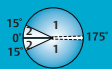


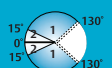




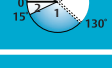
Back-check:

Integrated back-check function hydraulically slows down the opening motion from an opening angle of about 75°.



ASSA ABLOY Floor Spring

use state-of-the-art technology

Floor Spring - Overview of functions											
Models	EN Size	Door max. width (mm)	Max. weight of door	Applications	Opening angle (incl. hold-open)	BC	Single-action	Double-action	Fire doors (CE)	Hinge distance (mm)	Dimension L x D x H (mm)
DC475	EN3-6	950-1400	<300kg	Heavy doors, high traffic doors, exterior doors		✓	✓	✓	✓	36-42	345 x 78 x 82
DC477	EN2-4	850-1100	<170kg	Recommended exterior & Interior doors		✓	✓	✓	✓	54-57	277 x 110 x 70
DC420	EN3/4	950/1100	<100kg	Recommended for glass doors		-	✓	✓	✓	36-46	306 x 82 x 47
DC460	EN2/3/4	850/950 /1100	<120kg	Recommended for light-duty interior doors		-	✓	✓	✓	48-54	308 x 108 x 40
DC450	EN3/4	950/1100	<120kg	Recommended for light-duty interior door		-	✓	✓	-	49-54	277 x 108 x 40
AF-220F	EN3	950	<120kg	Recommended for light-duty interior door		-	✓	✓	✓	49-54	319 x 108 x 40.5
AF-224P	EN2-4	850-1100	<150kg	Recommended for light-duty interior door		-	✓	✓	✓	49-54	319 x 82 x 49.5
AF503	Size3	950	<105kg	Recommended exterior & Interior doors		-	✓	✓	-	45-50	274 x 97 x 40
DC600	Size3/4	950/1100	<150kg	Recommended exterior & Interior doors		-	✓	✓	-	48-56	308 x 108 x 40

ASSA ABLOY Floor Spring DC475

ASSA ABLOY

Floor Spring with Cam Motion® technology and adjustable closing force for large or very heavy doors

ASSA ABLOY DC475:

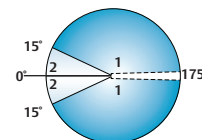
- Floor spring with adjustable closing force for large and very heavy doors
- In compliance with EN1154 size EN3-6
- 1,000,000 cycles tested
- Suitable for fire and smoke protection doors
- For single and double action door up to 300kg



Characteristics of DC475:

- Closing from 175° in both door swing directions with hydraulic control from 175°
- Two thermodynamic valves for consistent performance
- Adjustable door speed and latching speed through top regulating valves
- Back-check
- Cast Iron body
- Adjustments in all directions within the cement box
- Cement box is hot zinc plated
- Cover plates and eyelets made in polished or Satin Stainless Steel and Polished Brass
- Interchangeable spindle from 0 to 30mm
- Available without hold-open or with hold-open angle 90° and 105°

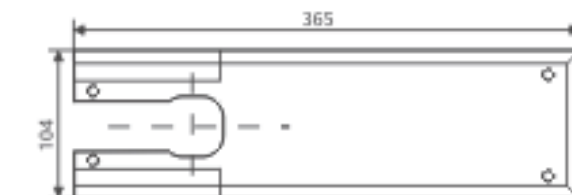
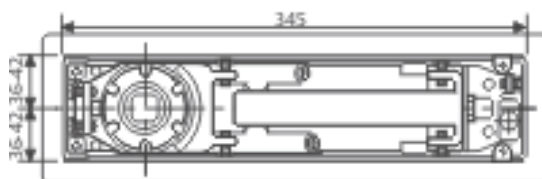
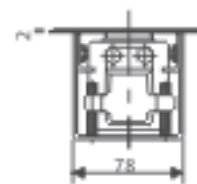
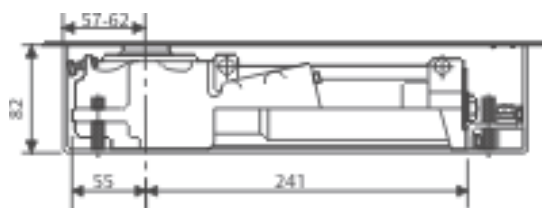
CE	ASSA ABLOY Italia S.p.A. Via Bovaresa, 13 40017 San Giovanni in Persiceto Bologna - Italy		04			
	0425 D00663	EN 1154:1996+A1:2002	3	8	3	6



Speed adjustment:

1 variable closing speed 175° - 15°

2 variable latching speed 15° - 0°



All dimensions are in mm

Floor Spring

DC475

Technical details:

Adjustable closing force	EN3-6
Door width up to	1400mm
Door weight up to	300 kg
Max. opening angle	175°
Closing speed	Variable between 175°-15°
Latching speed	Variable between 15°- 0°
Back-check	Mechanical
Weight	7.3kg
Height	82mm
Length	345mm
Width	78mm
Body adjustment within cement box	Vertical 9mm, side 6mm, front 5mm, angular 2°
DIN-direction	Left/Right-handed doors or double action
Hold-open mode	90°/105°/Non hold-open
In compliance with	EN1154
CE Marking for building products	Yes
Fire and smoke protection	Yes

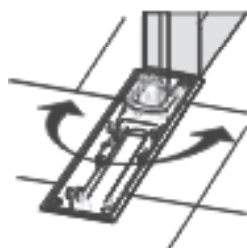
Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

The advantages at a glance:

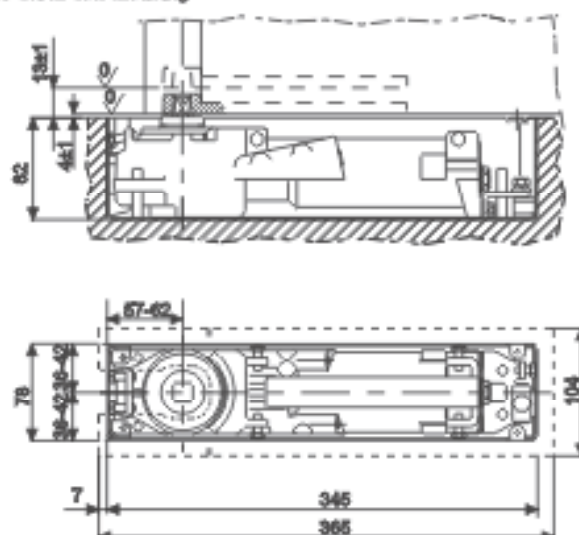
Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Hold-open at 90°, 105° and non hold-open - Variety of available spindles: squared Italian, rectangular German - Architectural finishes: Cover plates and eyelets in Polished Satinless Steel Polished Brass
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double-action doors - Overpressure relief valve to protect unit against abuse - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for a large variety of mounting positions - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Adjustable operating force to meet door construction requirements and user needs - Easier door opening and improved accessibility due to Cam Motion® technology - Back-check feature offers optimum protection for doors and walls

Floor Spring

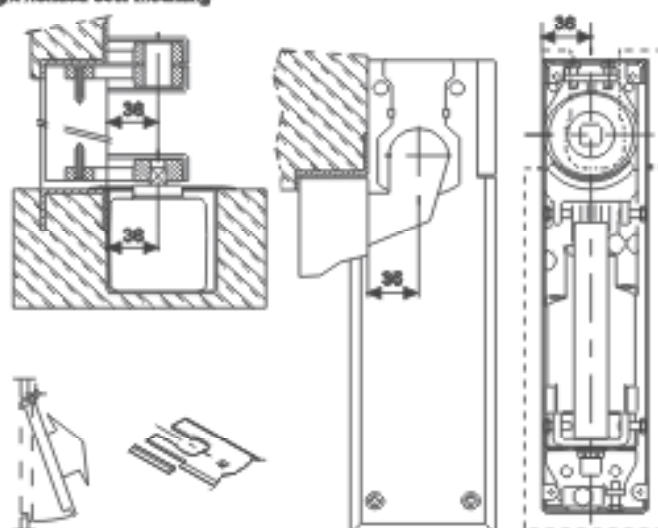
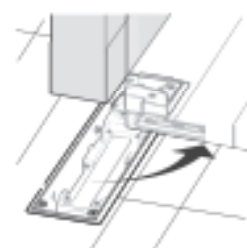
Dimensional drawings for DC475



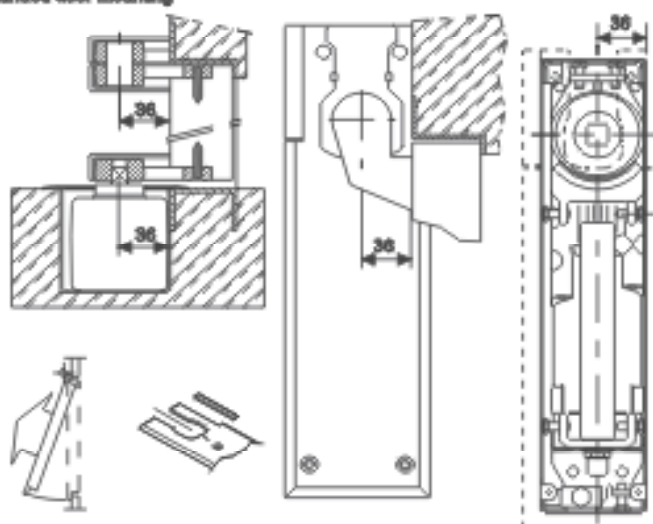
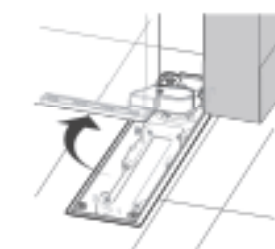
Double-action door mounting



Right-handed door mounting



Left-handed door mounting



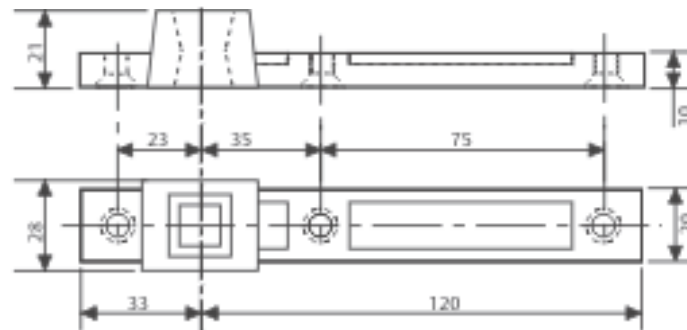
Floor Spring

Accessories for DC475



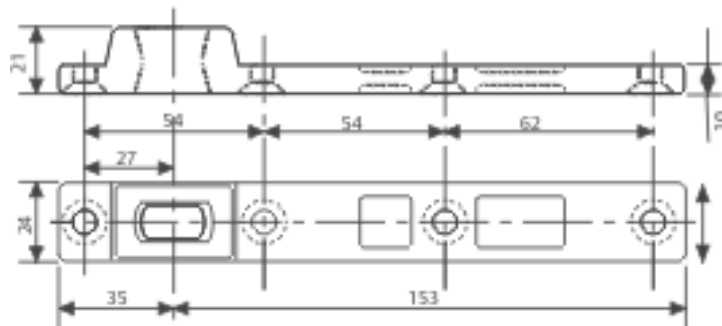
AC269

Available in Satin Stainless Steel, Polished Stainless Steel and Polished Brass.



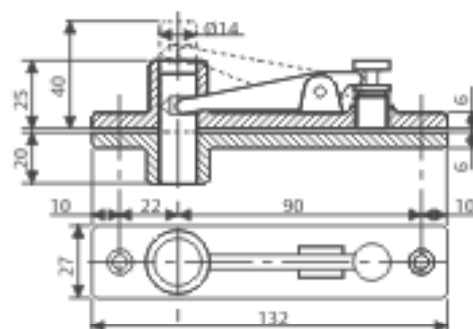
AC115

Reversible bottom arm in steel for double action doors, socket for Italian squared spindle.



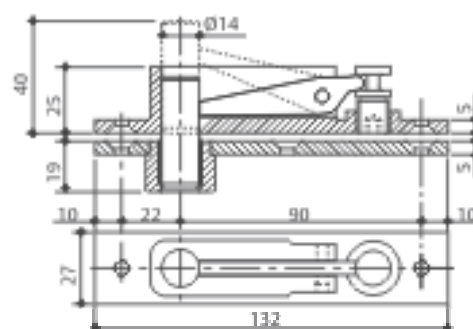
AC393

Reversible bottom arm in steel for double action doors, socket for German rectangular spindle.



AC8

Double action top pivot

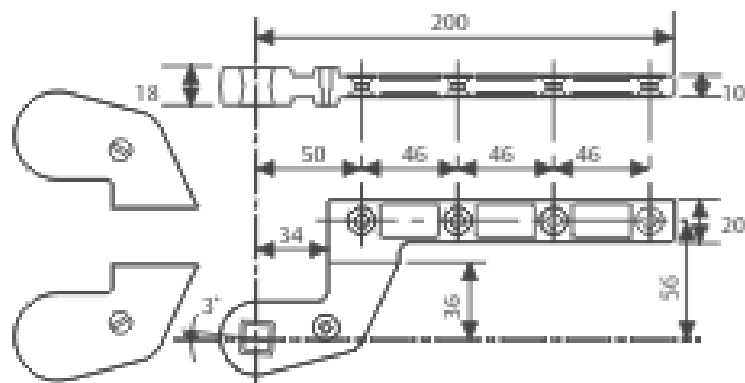


AC375

Double action top pivot in full steel with self lubricating bushing

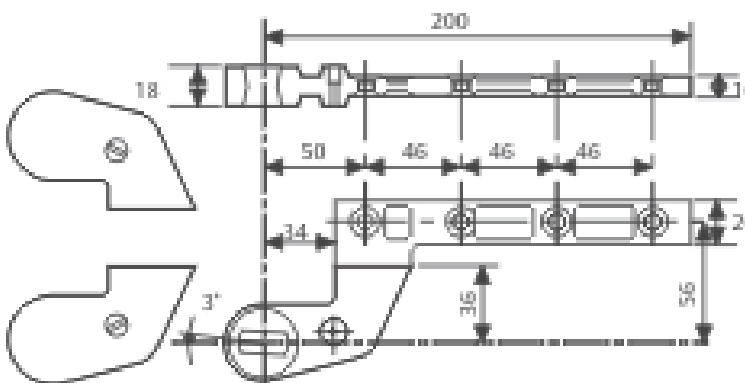
Floor Spring

Accessories for DC475



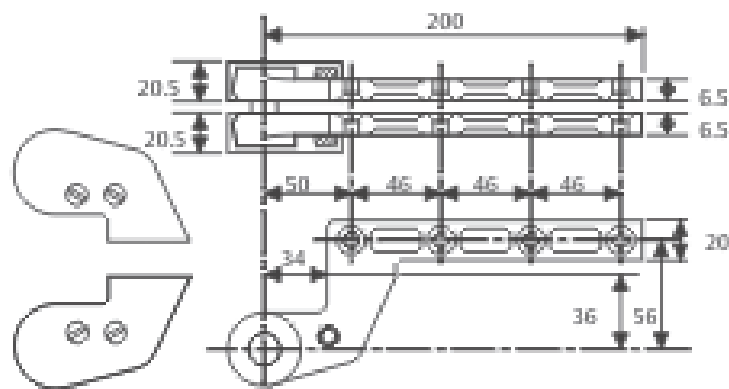
AC583

Right and left bottom arm in steel for single-action doors, 36mm offset. Socket for Italian squared spindle, Silver or Black painted.



AC392

Right and left bottom arm in steel for single action doors, 36 mm offset, socket for German rectangular spindle, Silver and Black painted ABS covers.

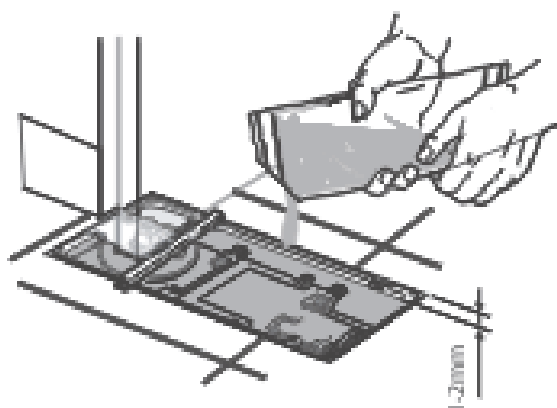


AC384

Right and left top arm in full steel, 36mm offset with Silver or Black painted ABS cover.

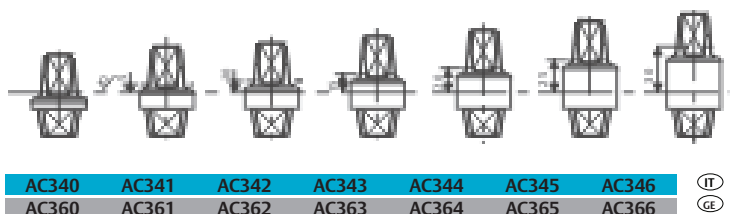
AC612

Sealing compound for floor springs



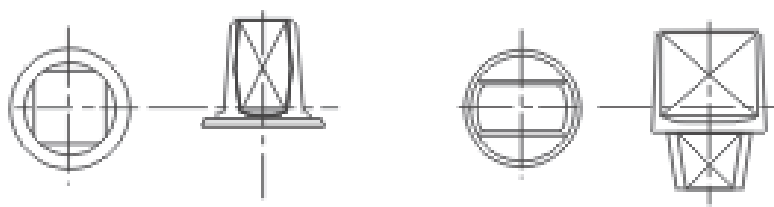
Floor Spring

Accessories and
order placement
information for
DC475



Detachable spindles

Italian spindle - square
shape (left image)
German spindle - flat-
conical shape
(right image)



You can find the
complete specifica-
tions on the internet
at: www.assaabloy.com, under "Service"
in the support
section.

Specifications for DC475:

ASSA ABLOY Floor spring DC475 featuring
Cam Motion® technology is in compliance with
EN1154

- 1,000,000 cycles tested
- Closing power variable adjustable, size EN3-6,
for doors up to 1400mm wide
- Closing speed, latching speed adjustable
through top regulating valves
- CE approved
- 9mm height adjustable within cement box
- Suitable for left/right handed double-action
doors

Accessories:

- ☐ AC115 - Reversible bottom arm Italian spindle
- ☐ AC393 - Reversible bottom arm German spindle
- ☐ AC8 - Double action top pivot
- ☐ AC375 - Double action top pivot
- ☐ AC583 - Right and left bottom arm. Socket for
Italian square spindle.
- ☐ AC392 - Right & left bottom arm. Socket for
German rectangular spindle.
- ☐ AC384 - Top pivot for left or right doors
- ☐ AC612 - Sealing compound for floor springs
- ☐ AC269 - Cover plate for DC475

Colour:

- ☐ Polished Satinless Steel
- ☐ Satin Satinless Steel
- ☐ Polished Brass

ASSA ABLOY Floor Spring DC477

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Floor Spring with Cam Motion® technology and adjustable closing force for heavy doors

ASSA ABLOY DC477:

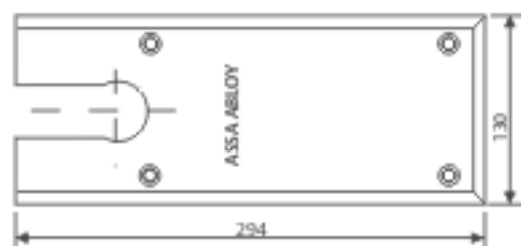
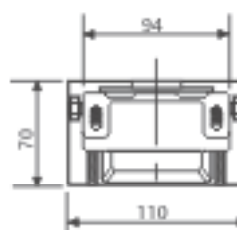
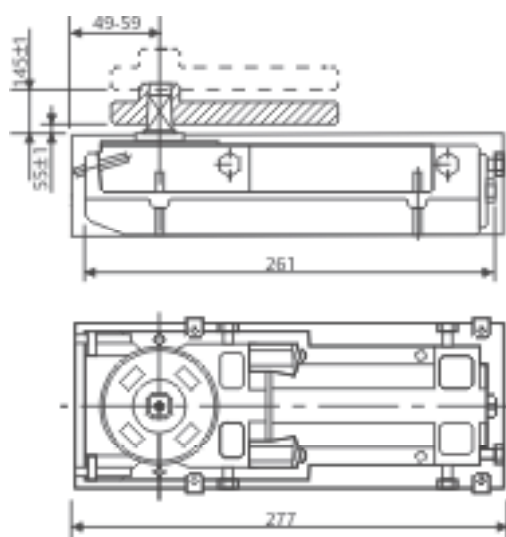
- Floor spring with adjustable closing force for large and heavy doors
- In compliance with EN1154, size EN2-4
- 1,000,000 cycles tested
- Suitable for fire and smoke protection doors
- For single and double action doors up to 170kg

Characteristics of DC477:

- From 175° in both door swing directions with hydraulic control from 150°
- Two thermodynamic valves for consistent performance
- Adjustable door speed and latching speed through top regulating valves
- Back-check
- Cast Iron body
- Adjustments in all directions within the cement box
- Cement box is hot zinc plated
- Cover plates and eyelets made in polished or Satin Stainless Steel and Polished Brass
- Interchangeable spindle from 0 to 30mm
- Available without hold-open or with hold-open angle 90°, 105°



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	0425.DO.2221	EN 1154:1996+A1:2002	3	8	2 4	1 1	4



All dimensions are in mm

Floor Spring**DC477****Technical details:**

Adjustable closing force	EN2-4
Door width up to	1100mm
Door weight up to	170kg
Max. opening angle	175° (Max. 150° in case of no hold-open)
Closing speed	Variable between 150°-15°
Latching speed	Variable between 15°- 0°
Back-check	Mechanical
Weight	5.4kg
Height	70mm
Length	277mm
Width	110mm
Body adjustment within cement box	Vertical 9mm, side 4mm, front 10mm, angular 4°
DIN-direction	Left/Right handed double-action doors
Hold-open mode	90°/105°/Non hold-open
In compliance with	EN1154
CE marking for building products	Yes
Fire and smoke protection	Yes

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

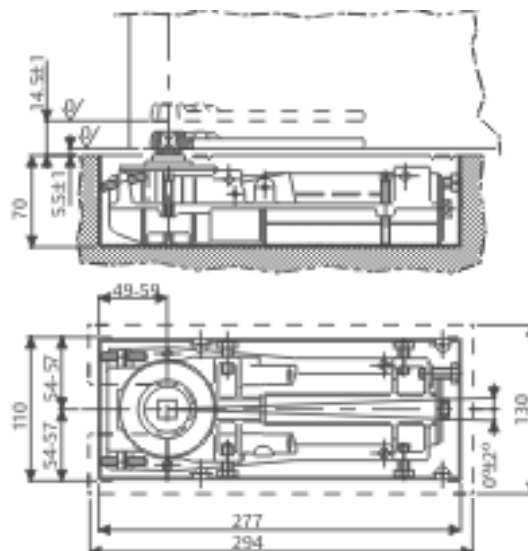
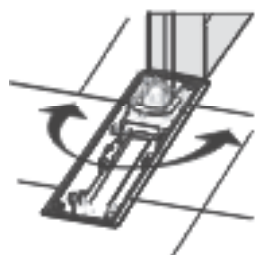
The advantages at a glance:

Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Hold-open at 90°, 105° and non hold-open version - Variety of available spindles: squared Italian, rectangular German - Architectural finishes: Cover plates and eyelets in Polished Satinless Steel, Satin Satinless Steel, Polished Brass
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double-action door - Overpressure relief valve to protect unit against abuse - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for a large variety of mounting positions - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Ideal for residential interiors, thanks to adjustable opening/closing force that makes opening/closing easy - Adjustable operating force to meet door construction requirements and user needs - Back-check feature offers optimum protection for doors and walls - Easier door opening and improved accessibility due to rapidly decreasing opening force (Cam Motion®)

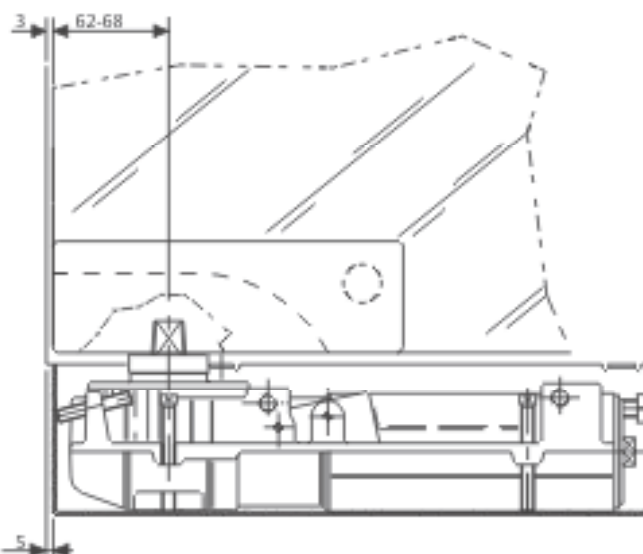
Floor Spring

Dimensional drawings for DC477

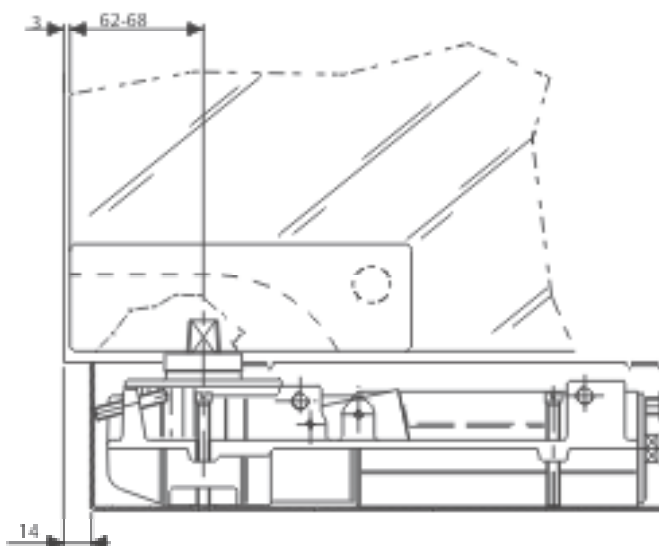
Double-action door mounting



Right-handed double-action door with patch fitting V500 bottom hinge for centre-hung doors

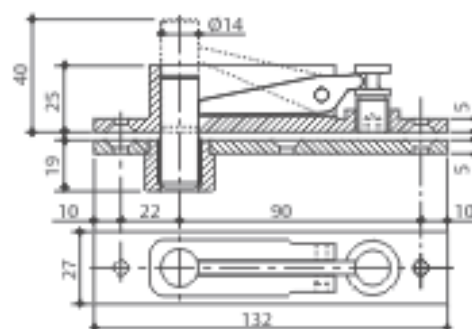
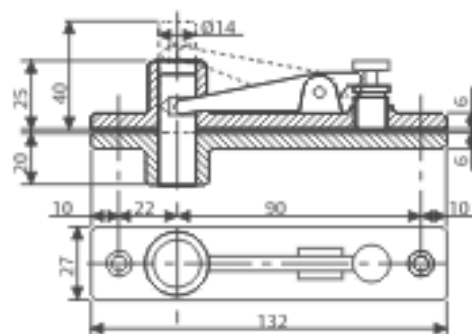
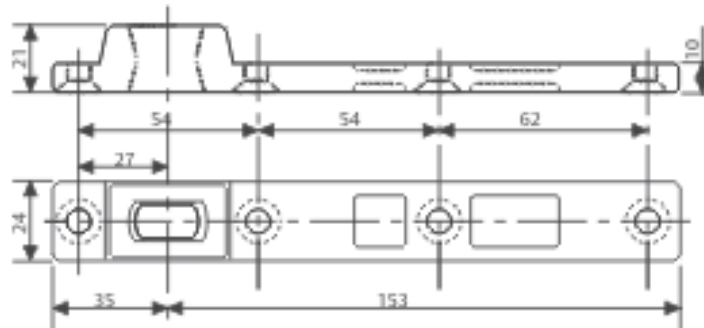
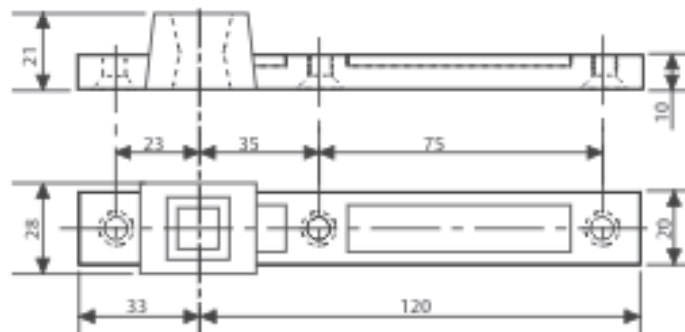
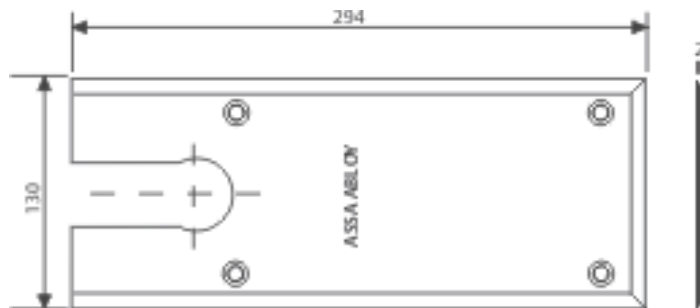


Left-handed double-action door with patch fitting V500 bottom hinge for centre-hung doors



Floor Spring

Accessories for DC477



AC534

Available in Satin Stainless Steel, Polished Stainless Steel and Polished Brass.

AC115

Reversible bottom arm in steel for double action doors, socket for Italian squared spindle.

AC393

Reversible bottom arm in steel for double action doors, socket for German rectangular spindle.

AC8

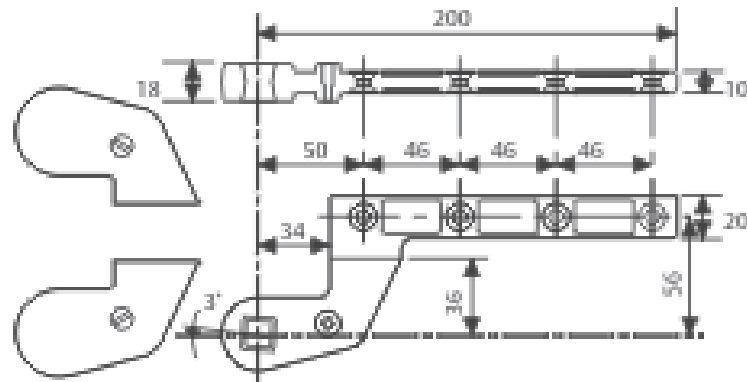
Double action top pivot

AC375

Double-action top pivot in full steel with self-lubricating bushing

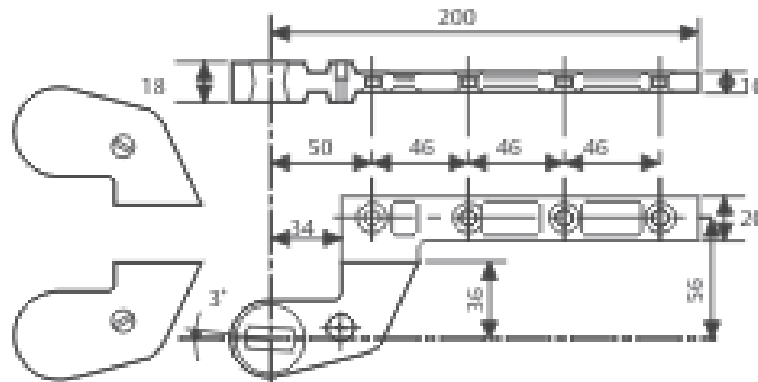
Floor Spring

Accessories for DC477



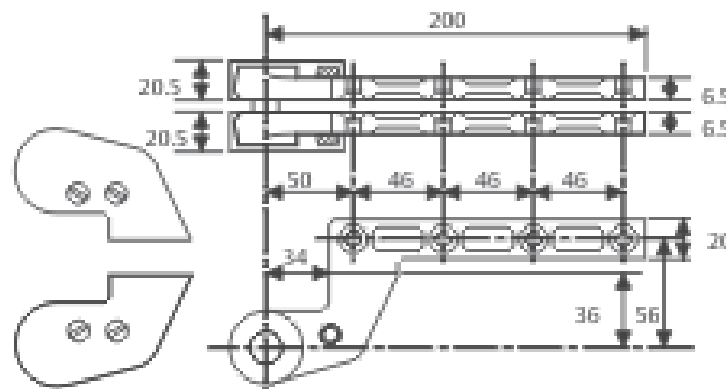
AC583

Right and left bottom arm in steel for single action doors, 36mm offset, socket for Italian square spindle, Silver or Black painted ABS covers.



AC392

Right and left bottom arm in steel for single action doors, 36 mm offset, socket for German rectangular spindle, Silver and Black painted ABS covers.

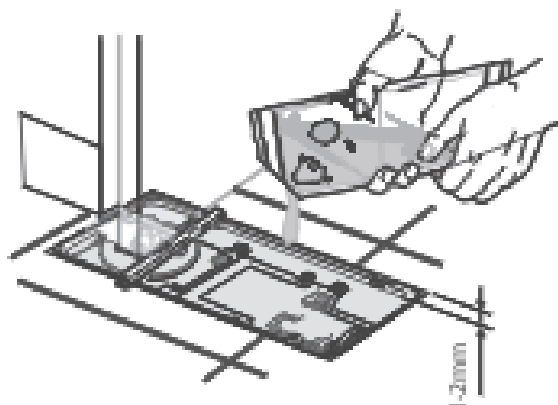


AC384

Right and left top arm in full steel, 36mm offset, Silver or Black painted ABS cover.

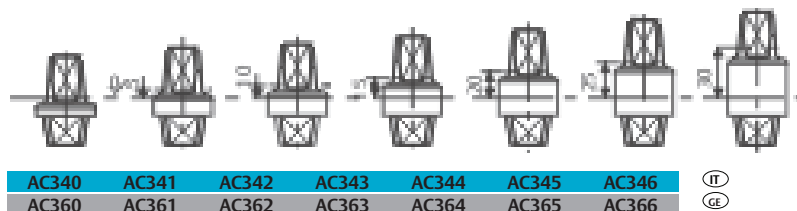
AC612

Sealing compound for floor springs

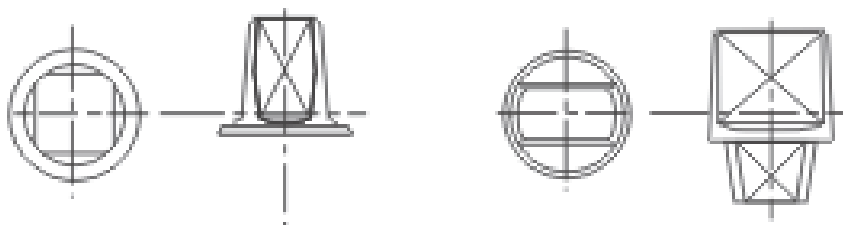


Floor Spring

Accessories and
order placement
information for
DC477



Detachable spindles:
Italian spindle - square
shape (left image)
German spindle - flat-
conical shape
(right image)



You can find the
complete specifica-
tions on the internet
at: www.assaabloy.com, under "Service"
in the support
section.

Specifications for DC477:

ASSA ABLOY Floor spring DC477 featuring
Cam Motion® technology is in compliance with
EN1154

- Closing power size EN2-4 for doors up to 1100mm wide
- 1,000,000 cycles tested
- Closing speed, latching speed adjustable through regulating valves
- CE approved
- 9mm height adjustable within cement box
- Suitable for left/right handed double action doors

Colour:

- ☐ Polished Satinless Steel
- ☐ Satin Satinless Steel
- ☐ Polished Brass

Accessories:

- ☐ AC115 - Reversible bottom arm Italian spindle
- ☐ AC393 - Reversible bottom arm German spindle
- ☐ AC8 - Double action top pivot
- ☐ AC375 - Double action top pivot
- ☐ AC583 - Right and left bottom arm. Socket for Italian square spindle.
- ☐ AC392 - Right & left bottom arm. Socket for German rectangular spindle.
- ☐ AC384 - Top pivot for left or right doors
- ☐ AC612 - Sealing Compound for floor springs
- ☐ AC537 - Cover plate for DC477
- ☐ AC534 - Cover plate for DC477

ASSA ABLOY Floor Spring DC420

ASSA ABLOY

Floor Spring with Cam Motion® technology and fixed closing force for thin slabs

ASSA ABLOY DC420:

- Floor spring with fixed closing force for thin slabs
- In compliance with EN1154, size EN3/EN4 cycle test over 1,000,000, cycles
- Suitable for fire and smoke protection doors
- For single and double action doors up to 100kg

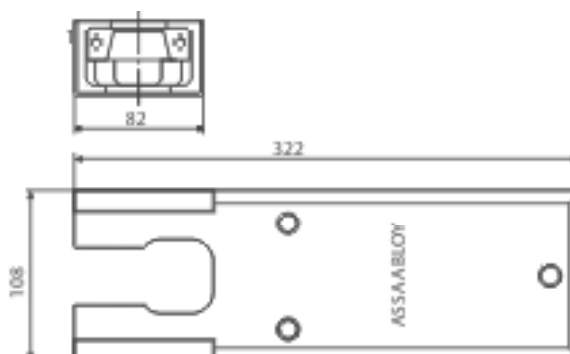
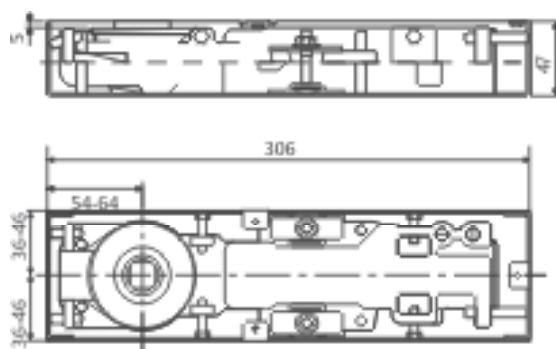


Characteristics of DC420:

- Same dimensions for two bodies according to fix size EN3/EN4
- Hydraulic control over 175° in both door swing directions
- Adjustable door speed and latching speed from top regulating valves
- Cast Iron body
- Adjustments in all directions within the cement box
- Cement box hot zinc plated
- Cover plates and eyelets made in Polished or Satin Stainless Steel
- Interchangeable spindle from 0 to 30mm
- Available without hold-open or with hold-open angle 90°, 105°

CE	ASSA ABLOY Italia S.p.A. Via S. Giovanni, 10 40137 San Giovanni Persiceto Bologna - Italy	04
0421 003834	EN 1154:1996+A1:2002	3 8 3 1 1 4

CE	ASSA ABLOY Italia S.p.A. Via S. Giovanni, 10 40137 San Giovanni Persiceto Bologna - Italy	04
0425 003825	EN 1154:1996+A1:2002	3 8 4 1 1 4



All dimensions are in mm

Floor Spring**DC420****Technical details:**

Fix closing force	EN3/EN4
Door width up to	950mm/1100mm
Door weight up to	100kg
Max. opening angle	175°
Closing speed	Variable between 175°-15°
Latching speed	Variable between 15°-0°
Back-check	No
Weight	3.9kg
Height	47mm
Length	306mm
Width	82mm
Body adjustment within cement box	Vertical 5mm, side 10mm, front 10mm, angular 6°
DIN-direction	Left/Right handed double-action doors
Hold-open mode	90°/105°/Non hold-open
In compliance with	EN1154
CE marking for building products	Yes
Fire and smoke protection	Yes

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

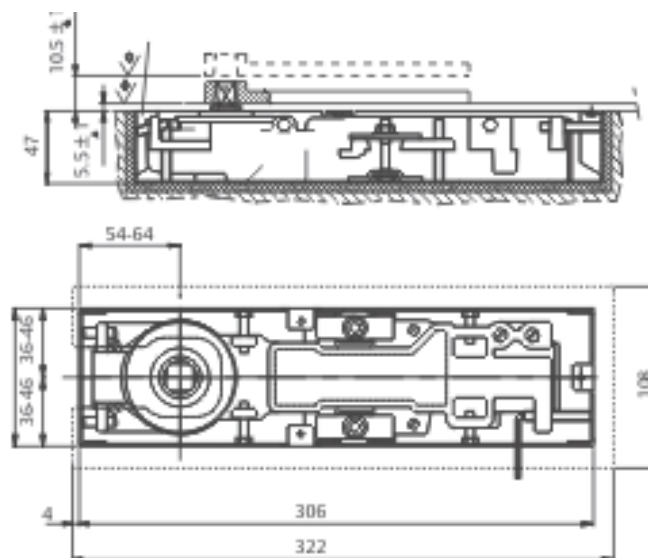
The advantages at a glance:

Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Particularly suitable in case of double-action glass doors - Recommended for thin slabs - Hold-open at 90°, 105° and non hold-open - Variety of available spindles: squared Italian, rectangular German - Architectural finishes: Cover plates and eyelets in Polished Satinless Steel, Satin Satinless Steel, Polished Brass
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double-action doors - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for a large variety of mounting positions
User	<ul style="list-style-type: none"> - Complementary accessories available for the whole product range - Easier door opening and improved accessibility due to rapidly decreasing opening force (Cam Motion®)

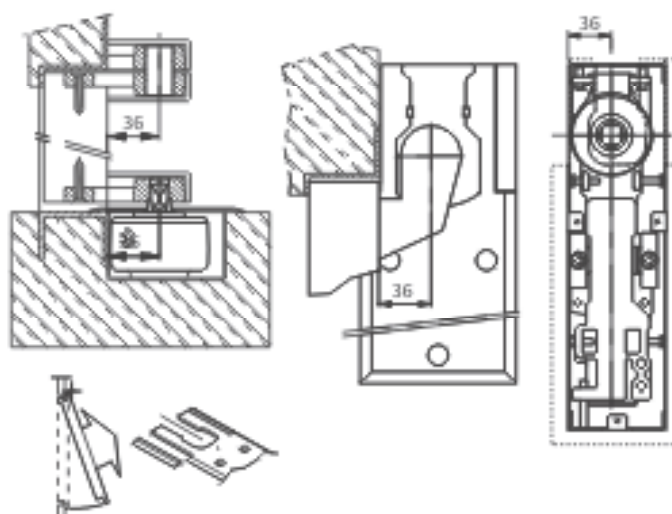
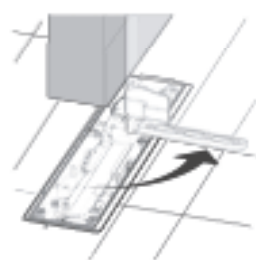
Floor Spring

Dimensional drawings for DC420

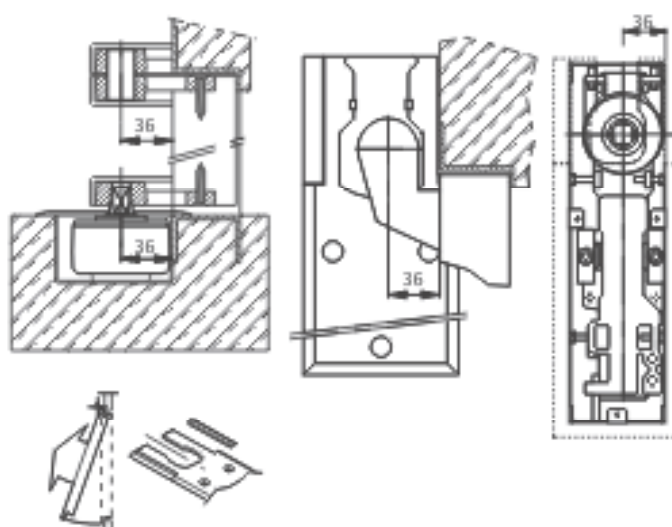
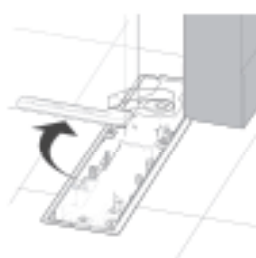
Double-action door mounting



Right-handed door mounting

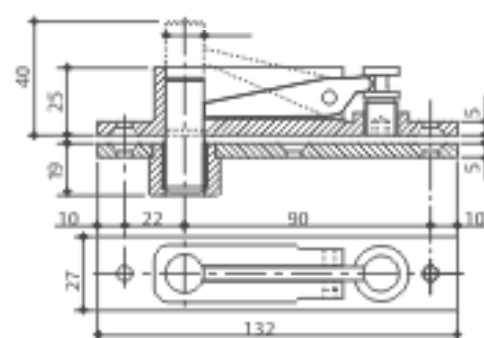
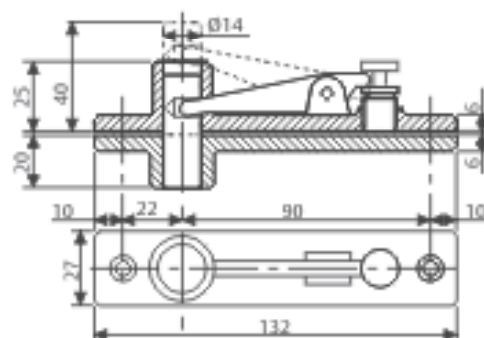
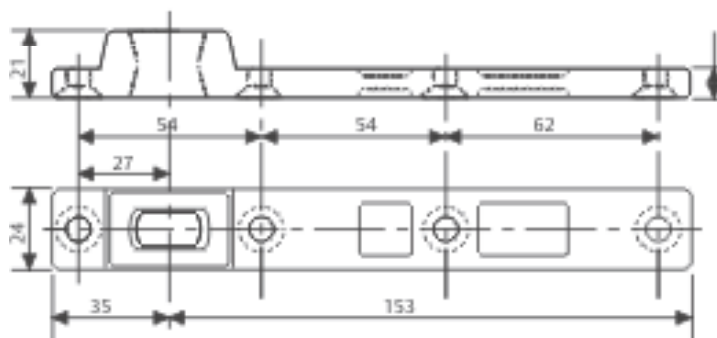
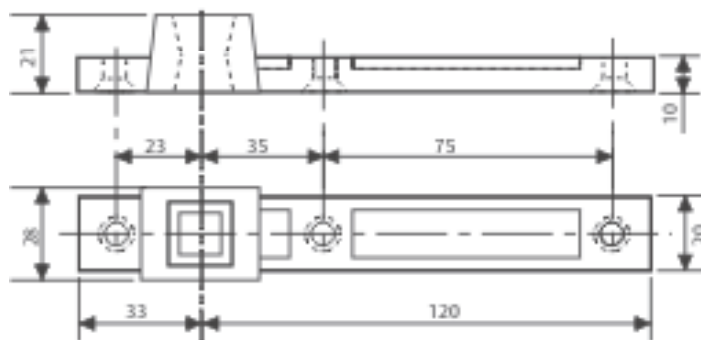
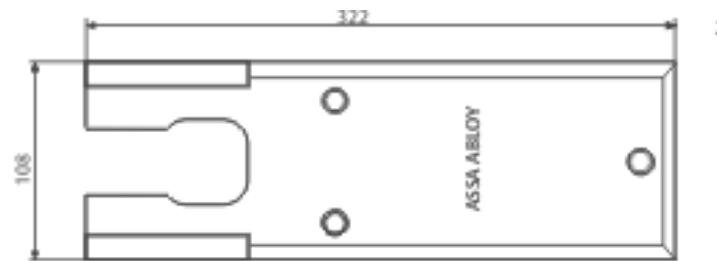


Left-handed door mounting



Floor Spring

Accessories for DC420



AC307

Available in Satin Stainless Steel, Polished Stainless Steel and Polished Brass.

AC115

Reversible bottom arm in steel for double action doors, socket for Italian squared spindle.

AC393

Reversible bottom arm in steel for double action doors, socket for German rectangular spindle.

AC8

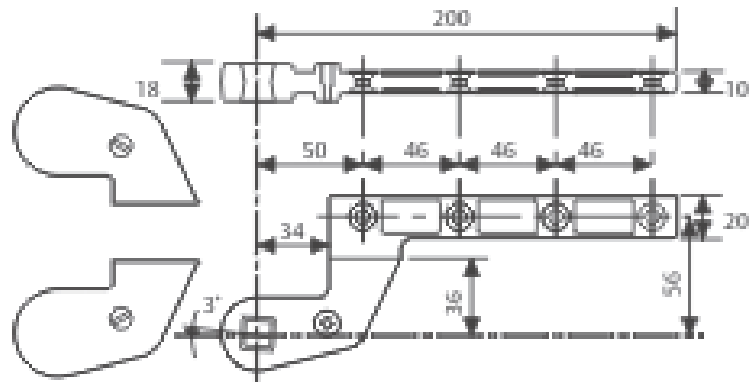
Double action top pivot

AC375

Double action top pivot in full steel with self-lubricating bushing.

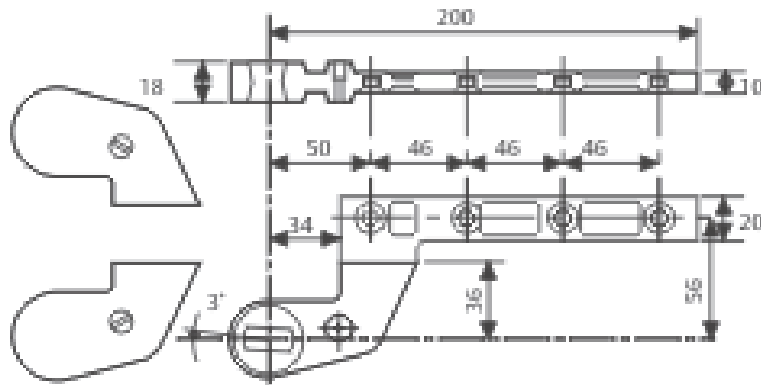
Floor Spring

Accessories for DC420



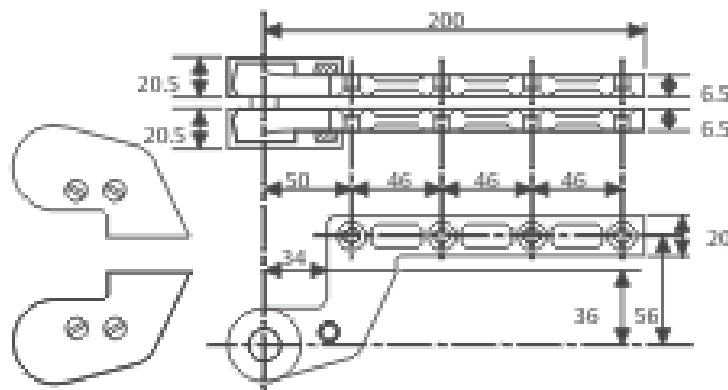
AC583

Right and left bottom arm in steel for single action doors, 36mm offset, socket for Italian squared spindle, Silver or Black painted.



AC392

Right and left bottom arm in steel for single action doors, 36mm offset, socket for German rectangular spindle, Silver and Black painted ABS covers.

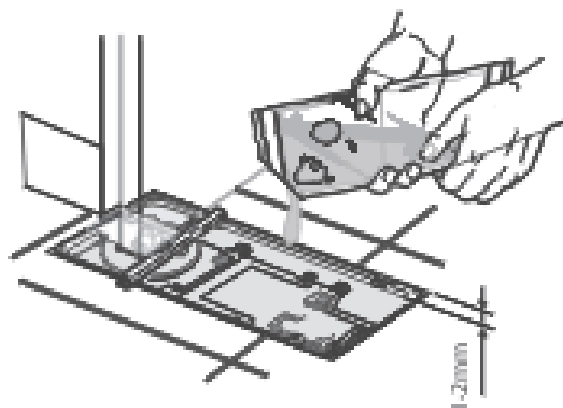


AC384

Right and left top arm in full steel, 36mm offset, Silver or Black painted ABS cover.

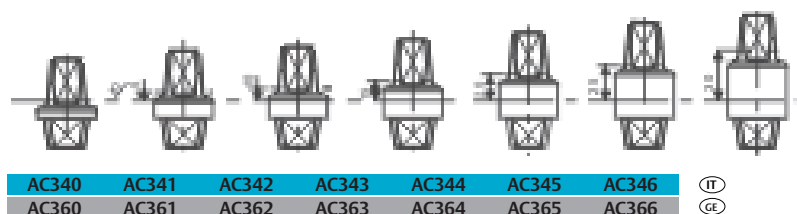
AC612

Sealing compound for floor springs.

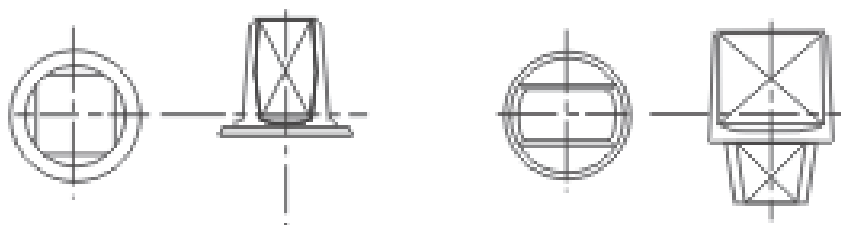


Floor Spring

Accessories and
order placement
information for
DC420



Detachable spindles:
Italian spindle - square
shape (left image)
German spindle - flat-
conical shape
(right image)



You can find the
complete specifica-
tions on the internet
at: www.assaabloy.com, under "Service"
in the support
section.

Specifications for DC420:

ASSA ABLOY Floor spring DC420 featuring
Cam Motion® technology is in compliance with
EN1154

- Closing power sizes EN3/4 for doors up to
1100mm wide
- 1,000,000 cycles tested
- Closing speed, latching speed adjustable
through top regulating valves
- CE approved
- 5mm height adjustable within cement box
- Suitable for left/right handed and double-action
doors

Colour:

- ☐ Polished Stainless Steel
- ☐ Satin Stainless Steel
- ☐ Polished Brass

Accessories:

- ☐ AC115 - Reversible bottom arm Italian spindle
- ☐ AC393 - Reversible bottom arm German spindle
- ☐ AC8 - Double action top pivot
- ☐ AC375 - Double action top pivot
- ☐ AC583 - Right and left bottom arm. Socket for
Italian square spindle.
- ☐ AC392 - Right & left bottom arm. Socket for
German rectangular spindle.
- ☐ AC384 - Top pivot for left or right doors
- ☐ AC612 - Sealing compound for floor springs
- ☐ AC307 - Cover plate

Floor Spring

Ordering details for
DC420

Ordering no.	Product description
DC420 EN3	ASSA ABLOY DC420 Floor spring size 3
DC420 EN4	ASSA ABLOY DC420 Floor spring size 4

ASSA ABLOY Floor Spring DC460

ASSA ABLOY

Floor Spring with Cam Motion® technology and fixed closing force for very thin slabs

ASSA ABLOY DC460:

- Floor spring with fixed closing force for very thin slabs
- In compliance with EN1154, size EN2/3/4
- Suitable for fire and smoke protection doors up to 120kg
- For single and double-action doors up to 120kg

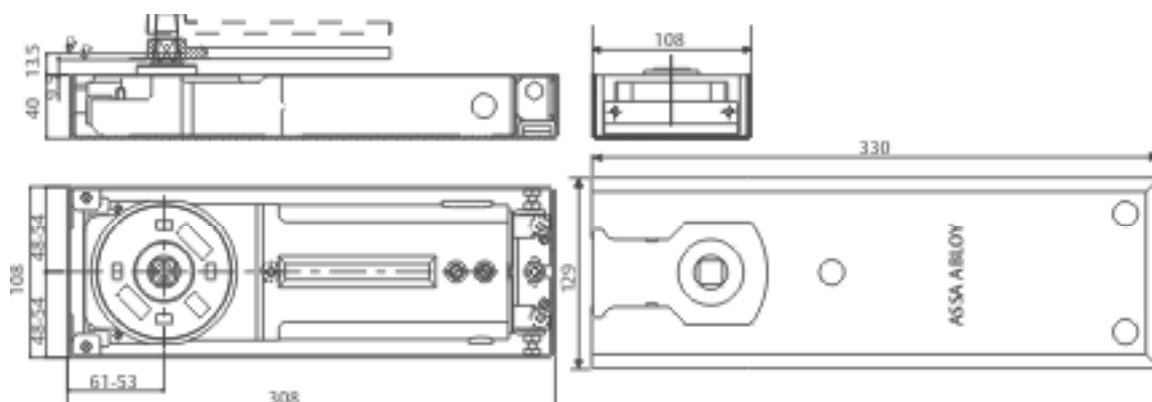


Characteristics of DC460:

- Same dimensions for three bodies according to fix size EN2/EN3/EN4
- Hydraulic control over 130° in both door swing directions
- Adjustable closing speed and latching speed through top regulating valves
- Cast Iron body
- Adjustments in all directions within the cement box
- Cement box is painted black and only 40mm high
- Cover plates and eyelets are made in Polished or Satin Satinless Steel
- Interchangeable spindle from 0 to 30mm
- Available without hold-open or with hold-open angle 90°, 105°

CE	ASSA ABLOY Italia S.p.A. Via Bovaresa, 13 40017 San Giovanni in Persiceto Bologna - Italy		13					
	1121-CPD-AD5075	EN 1154:1996+A1:2002	3	8	3	1	1	3

CE	ASSA ABLOY Italia S.p.A. Via Bovaresa, 13 40017 San Giovanni in Persiceto Bologna - Italy		13					
	1121-CPD-AD5076	EN 1154:1996+A1:2002	3	8	4	1	1	3



All dimensions are in mm

Floor Spring

DC460

Technical details:

Fix closing force	EN2/EN3/EN4
Door width up to	850mm/950mm/1100mm
Door weight up to	120kg
Max. opening angle	130°
Closing speed	Variable between 130°-15°
Latching speed	Variable between 15°- 0°
Back-check	No
Weight	5kg
Height	40mm
Length	308mm
Width	108mm
Body adjustment within cement box	Vertical 4mm, side 6mm, front 8mm, angular 2°
DIN-direction	Left/Right handed double-action doors
Hold-open mode	90°/105°/Non hold-open
In compliance with	EN1154
CE marking for building products	Yes
Fire and smoke protection	Yes

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

The advantages at a glance:

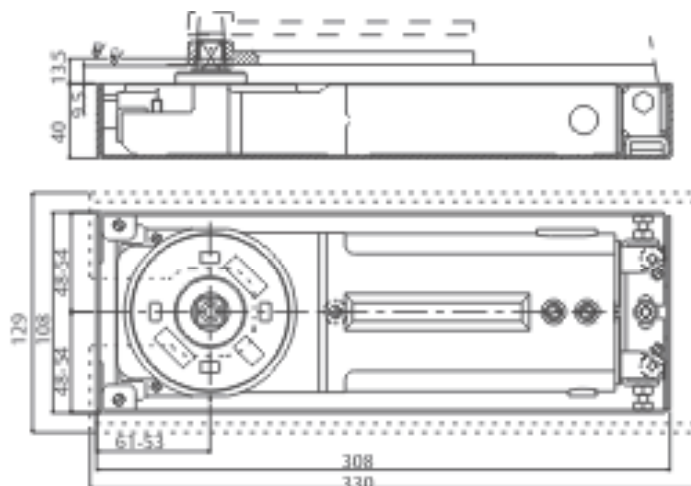
Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Particularly suitable in case of double-action glass doors - Recommended for thin slabs - Hold-open at 90°, 105° and non hold-open - Variety of available spindles: squared Italian, rectangular German - Architectural finishes: Cover plates and eyelets in Polished Satinless Steel, Satin Satinless Steel, Polished Brass
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double-action doors - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for a large variety of mounting positions
User	<ul style="list-style-type: none"> - Complementary accessories available for the whole product range - Easier door opening and improved accessibility due to Cam Motion® technology

Floor Spring

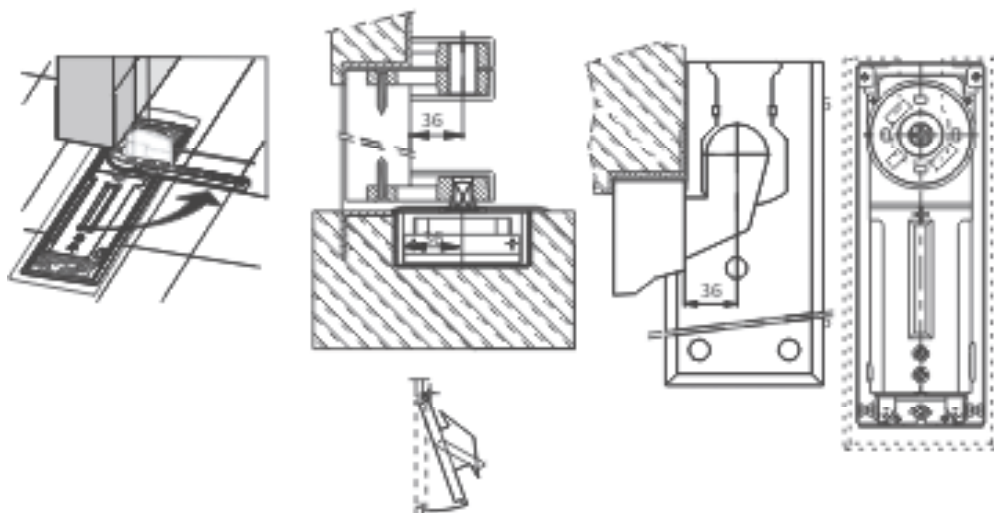
Dimensional drawings for DC460



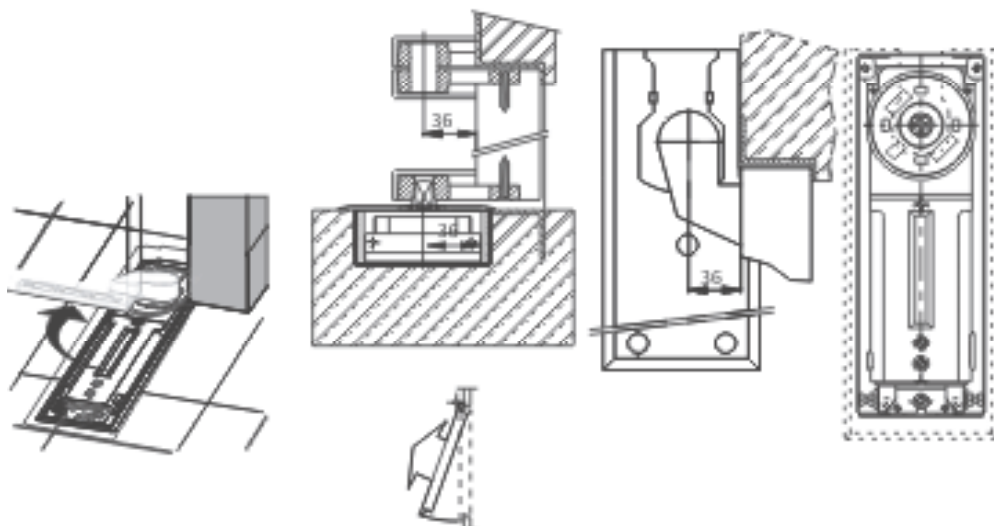
Double-action door mounting



Left-hand door mounting special installation below door frame

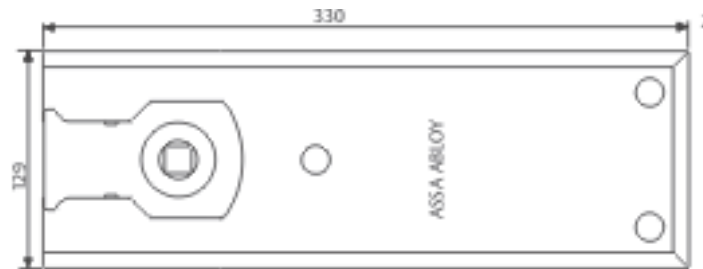


Right-hand door mounting special installation below door frame



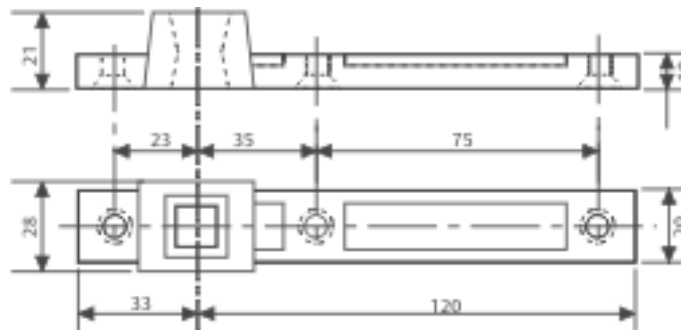
Floor Spring

Accessories for DC460



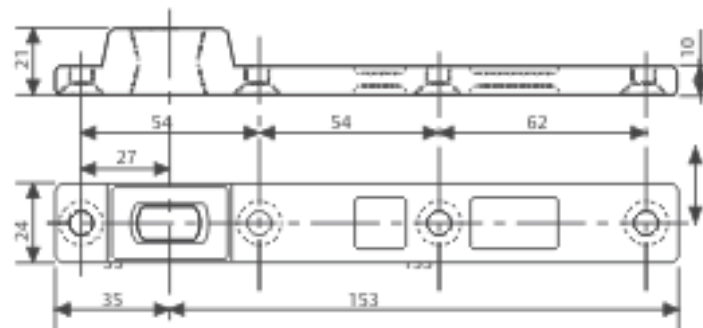
AC616

Available in Satin Stainless Steel, Polished Stainless Steel and Polished Brass.



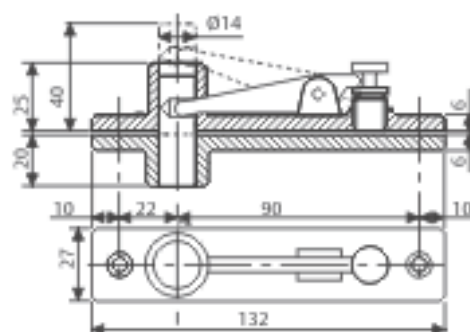
AC115

Reversible bottom arm in steel for double-action doors, socket for Italian squared spindle.



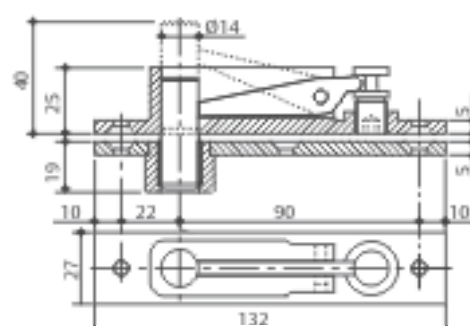
AC393

Reversible bottom arm in steel for double-action doors, socket for German rectangular spindle.



AC8

Double action top pivot

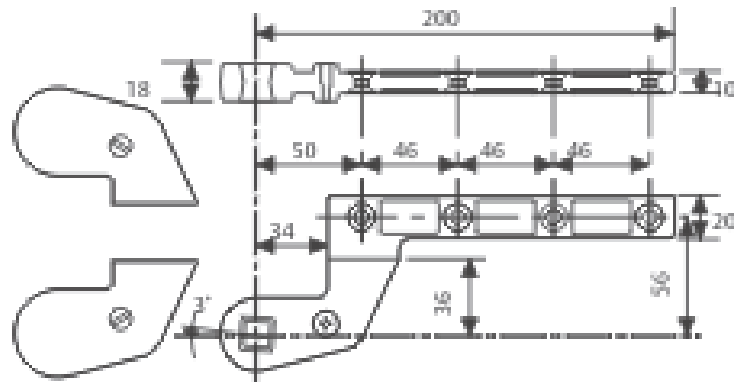


AC375

Double action top pivot in full steel with self-lubricating bushing

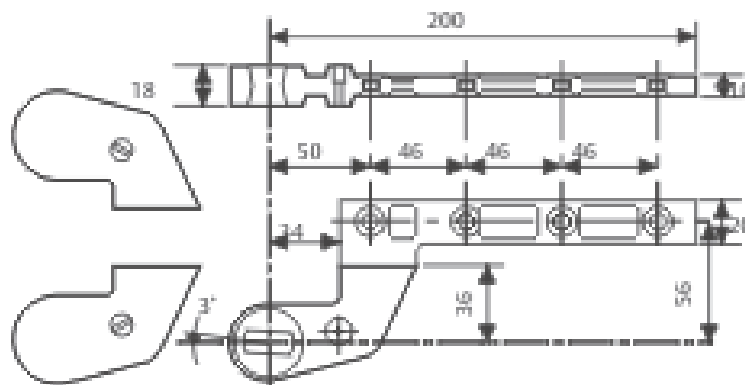
Floor Spring

Accessories for DC460



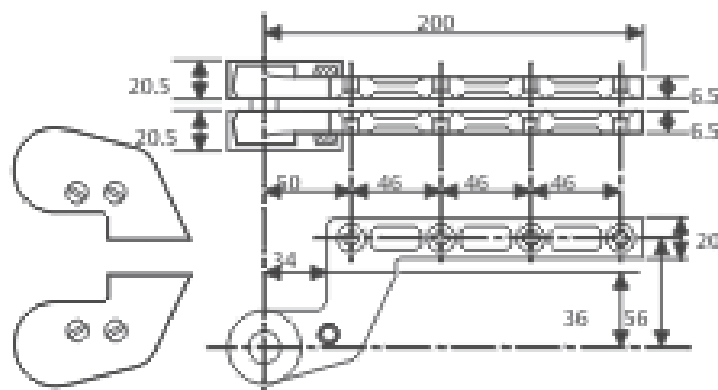
AC583

Right and left bottom arm in steel for single action doors, 36mm offset, socket for Italian square spindle. Silver or Black painted.



AC392

Right and left bottom arm in steel for single action doors, 36 mm offset, socket for German rectangular spindle. Silver and Black painted ABS covers.

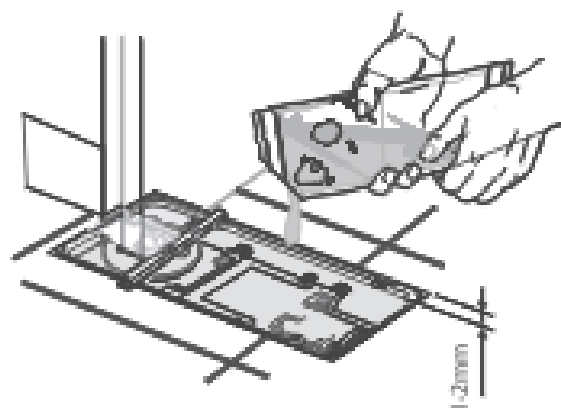


AC384

Right and left top arm in full steel, 36mm offset, Silver or Black painted ABS cover.

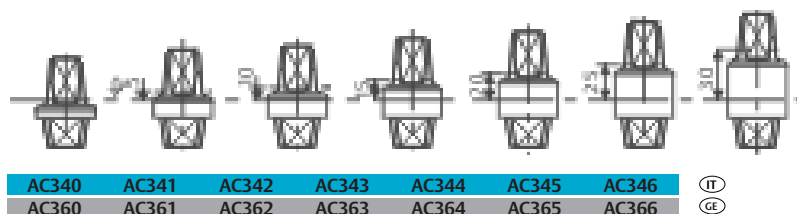
AC612

Sealing compound for floor springs



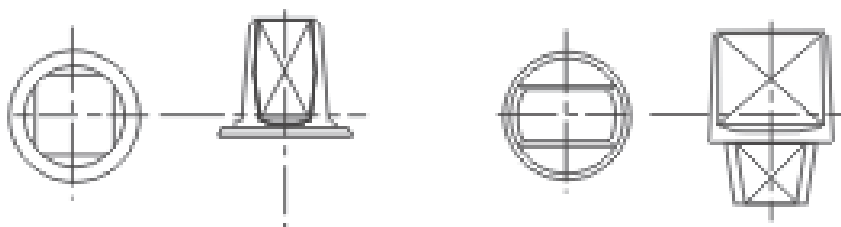
Floor Spring

Accessories and
order placement
information for
DC460



Detachable spindles

Italian spindle - square
shape (left image)
German spindle - flat-
conical shape
(right image)



You can find the
complete specifica-
tions on the internet
at: www.assaabloy.com, under "Service"
in the support
section.

Specifications for DC460:

ASSA ABLOY Floor spring DC460 featuring
Cam Motion® technology is in compliance with
EN1154

- Closing power size EN2/3/4 for doors up to
120kg and 1100mm wide
- Closing speed, latching speed adjustable
through top regulating valves
- 40mm high cement box
- CE approved
- Suitable for left/right handed and double-action
doors

Accessories:

- ☐ AC115 - Reversible bottom arm Italian spindle
- ☐ AC393 - Reversible bottom arm German spindle
- ☐ AC8 - Double action top pivot
- ☐ AC375 - Double action top pivot
- ☐ AC583 - Right and left bottom arm. Socket for
Italian square spindle.
- ☐ AC392 - Right and left bottom arm. Socket for
German rectangular spindle.
- ☐ AC384 - Top pivot for left or right doors
- ☐ AC612 - Sealing compound for floor springs
- ☐ AC616 - Cover plate

Colour:

- ☐ Polished Satinless Steel
- ☐ Satin Satinless Steel

Ordering details

Ordering no.	Product description
DC460 EN2	ASSA ABLOY DC460 Floor Spring size 2
DC460 EN3	ASSA ABLOY DC460 Floor Spring size 3
DC460 EN4	ASSA ABLOY DC460 Floor Spring size 4

ASSA ABLOY Floor Spring DC450

ASSA ABLOY

Floor Spring with Cam Motion® technology and fixed closing force for very thin slabs

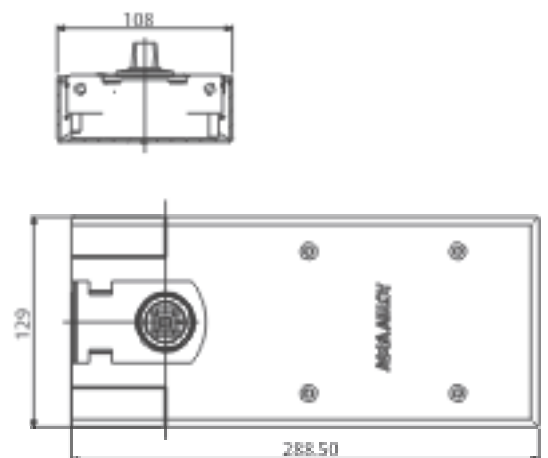
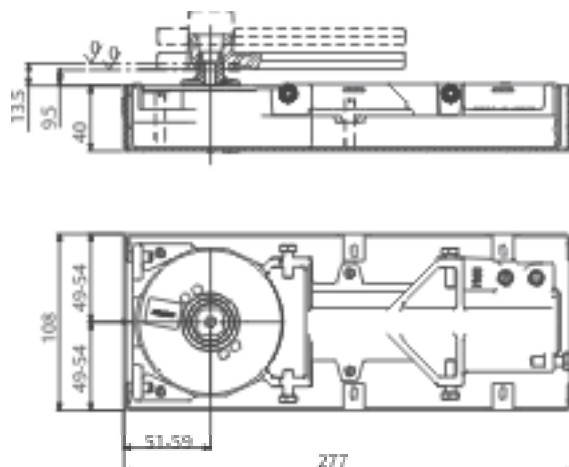
ASSA ABLOY DC450:

- Floor spring with fixed closing force for very thin slabs
- In compliance with EN1154, size EN3/EN4
- Suitable for fire and smoke protection doors
- For single and double-action doors up to 120kg



Characteristics of DC450:

- Same dimensions for two bodies according to fix size EN3/EN4
- Hydraulic control over 130° in both door swing directions
- Adjustable door speed and latching speed through top regulating valves
- Cast Iron body
- Adjustments in all directions within the cement box
- Cement box is hot zinc plated and only 40 mm high
- Cover plates and eyelets are made in Polished or Satin Stainless Steel
- Interchangeable spindle from 0 to 30mm
- Available without hold-open or with hold-open angle 90°, 105°



All dimensions are in mm

Floor Spring

DC450

Technical details:

Fix closing force	EN3/EN4
Door width up to	950mm/1100mm
Door weight up to	120kg
Max. opening angle	130°
Closing speed	Variable between 130°-15°
Latching speed	Variable between 15°- 0°
Back-check	No
Weight	3.8kg
Height	40 mm
Length	277 mm
Width	108 mm
Body adjustment within cement box	Vertical 2mm, side 6mm, front 7mm, angular 4°
DIN-direction	Left/Right handed or double-action
Hold-open mode	90°/105°/Non hold-open
In compliance with	EN1154

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

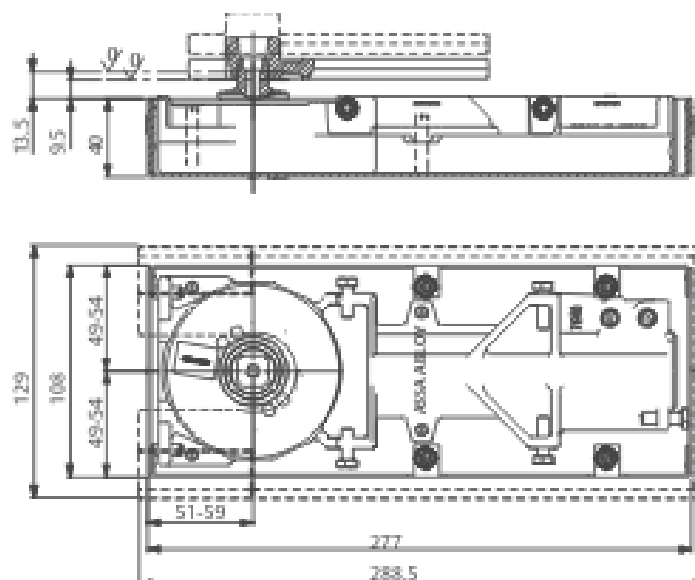
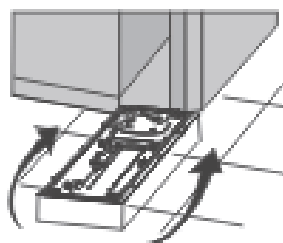
The advantages at a glance:

Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Particularly suitable in case of double-action glass doors - Recommended for thin slabs - Hold-open at 90°, 105° and non hold-open - Variety of available spindles: squared Italian, rectangular German - Architectural finishes: Cover plates and eyelets in Polished Satinless Steel, Satin Satinless Steel, Polished brass
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double action doors - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular products range - One single product suitable for a large variety of mounting positions
User	<ul style="list-style-type: none"> - Complementary accessories available for the whole product range - Easier door opening and improved accessibility due to Cam Motion® technology

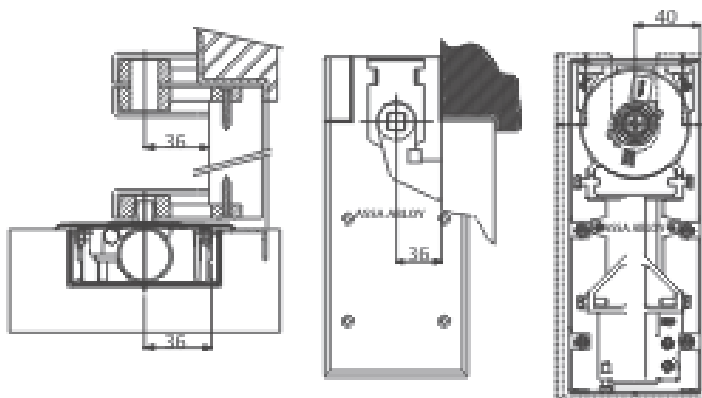
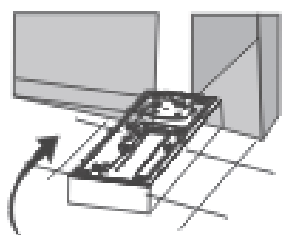
Floor Spring

Dimensional drawings for DC450

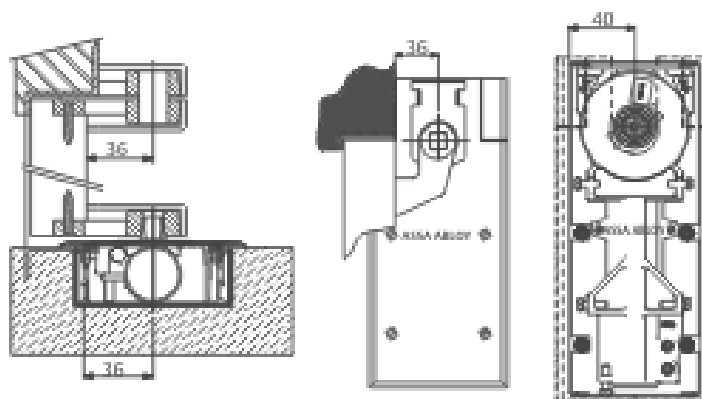
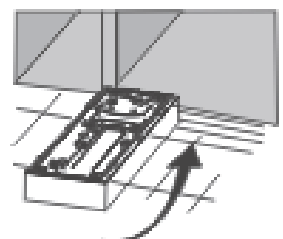
Double-action door mounting



Left-hand door mounting special installation below door frame

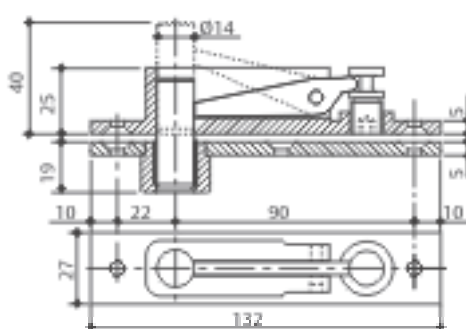
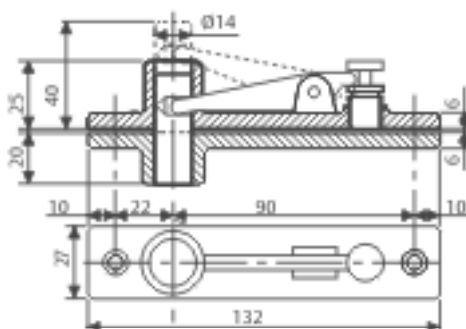
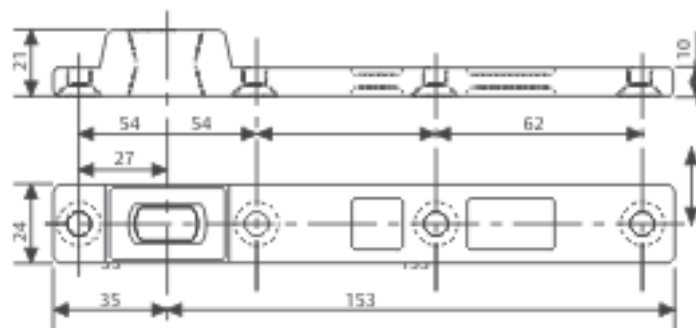
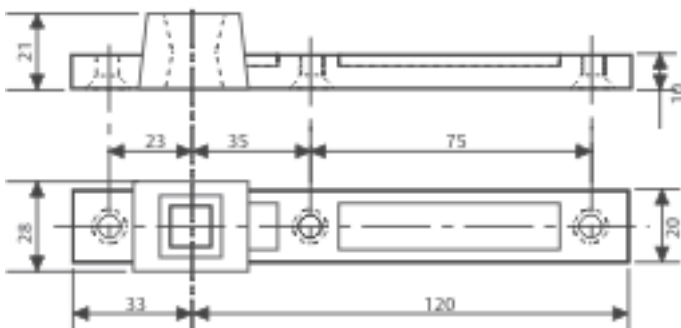


Right-hand door mounting special installation below door frame



Floor Spring

Accessories for DC450



AC619

Available in Satin Stainless Steel, Polished Stainless Steel and Polished Brass.

AC115

Reversible bottom arm in steel for double action doors, socket for Italian squared spindle.

AC393

Reversible bottom arm in steel for double action doors, socket for German rectangular spindle.

AC8

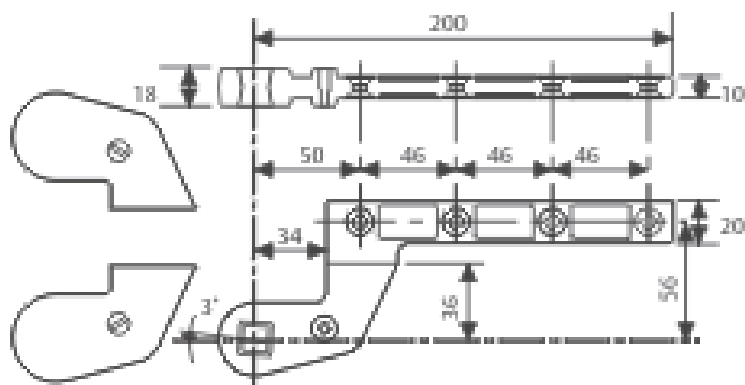
Double-action top pivot

AC375

Double-action top pivot in full steel with self-lubricating bushing

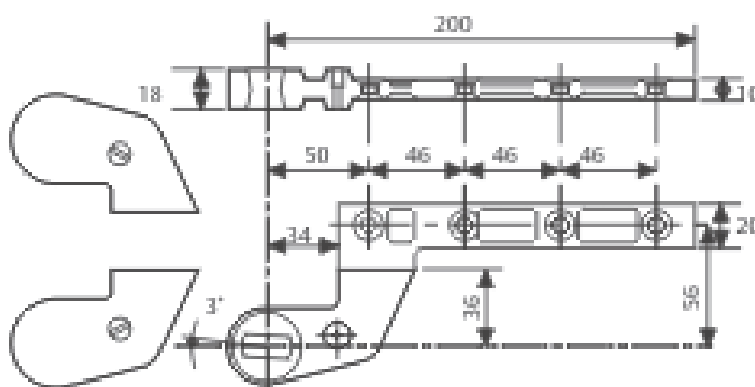
Floor Spring

Accessories and
order placement
information for
DC450



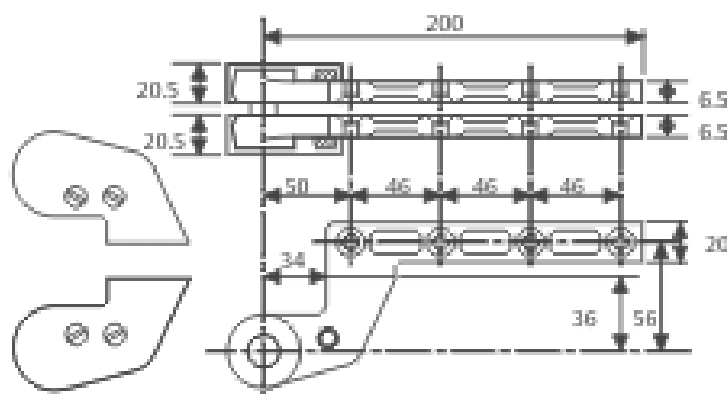
AC583

Right and left bottom arm in steel for single action doors, 36mm offset, socket for Italian square spindle, Silver or Black painted.



AC392

Right and left bottom arm in steel for single action doors, 36 mm offset, socket for German rectangular spindle, Silver and Black painted ABS covers.

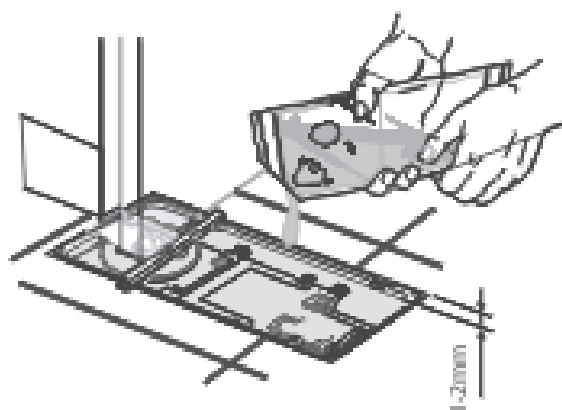


AC384

Right and left top arm in full steel, 36mm offset. Silver or Black painted ABS cover.

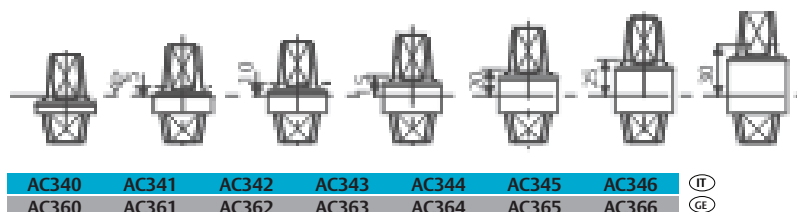
AC612

Sealing compound for floor springs



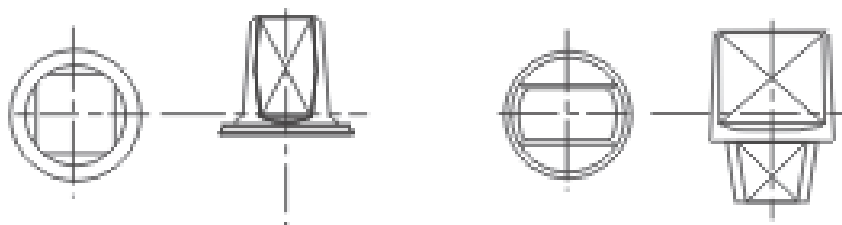
Floor Spring

Accessories and order placement information for DC450



Detachable spindles

Italian spindle - square shape (left image)
German spindle - flat-conical shape (right image)



Floor Spring

Specifications for DC450

Specifications for DC450:

ASSA ABLOY Floor spring DC450 featuring Cam Motion® technology is in compliance with EN1154.

- Closing power size EN3/4 for doors up to 120 kg and 1100mm wide
- Closing speed, latching speed adjustable through top regulating valves
- 40mm high cement box
- Suitable for left/right handed and double-action doors

Colour:

- ☐ Polished Satinless Steel
- ☐ Satin Satinless Steel

Accessories:

- ☐ AC115 - Reversible bottom arm Italian spindle
- ☐ AC393 - Reversible bottom arm German spindle
- ☐ AC8 - Double action top pivot
- ☐ AC375 - Double action top pivot
- ☐ AC583 - Right and left bottom arm. Socket for Italian squared spindle
- ☐ AC392 - Right & left bottom arm. Socket for German rectangular spindle
- ☐ AC384 - Top pivot for left or right doors
- ☐ AC612 - Sealing compound for floor springs
- ☐ AC616 - Cover plate

Floor Spring



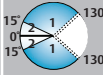

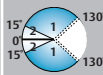



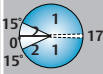

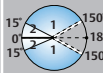

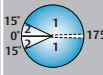

Ordering details for DC450

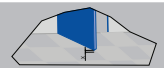
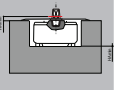
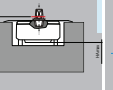
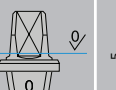
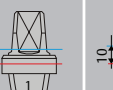
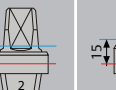
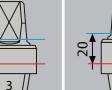
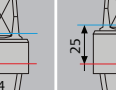
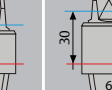
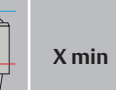
Ordering no.	Product description
DC450 EN3	ASSA ABLOY DC450 Floor Spring size 3
DC450 EN4	ASSA ABLOY DC450 Floor Spring size 4

Ordering matrix and replaceable spindle calculation

ASSA ABLOY

The following table shows the product and accessories overview and enables to select the right accessories for ASSA ABLOY floor springs. The table below shows how to choose the correct replaceable spindle. The distance between the door leaf and the floor can be enlarged if needed by means of various heights of replaceable spindles.

												Cover plate			
Floor Spring	EN Size	Hold open	Article Number	CE		Max. door leaf width	Max door leaf weight	Max opening angle	Double/Single action	Interior/Exterior	Polished Brass	Satin Stainless Steel	Polished Stainless Steel	Cealing Compound	
DC450	EN3		DCE7293TS0	CE		≤950mm	120 kg		Single action/Double action	Interior		DCA0619QR	DCA0619IR	MA0612S0	
		90°	DCE7263TS0												
		105°	DCE7213TS0												
	EN4		DCE7294TS0	CE		≤1100mm									
		90°	DCE7264TS0												
		105°	DCE7214TS0												
DC46	EN2		DCE6092TSW			≤850mm	120 kg		Single action/Double action	Interior		DCA0616QW	DCA0616IW		
		90°	DCE6062TSW												
		105°	DCE6012TSW												
	EN3		DCE6093TSW	CE		≤950mm				Interior					
		90°	DCE6063TSW												
		105°	DCE6013TSW												
	EN4		DCE6094TSW	CE		≤1100mm				Interior + Exterior					
		90°	DCE6064TSW												
105°		DCE6014TSW													
DC475	EN3-6		DCE7490TSR	CE		≤1400mm	300 kg		Single action/Double action	Interior + Exterior	DCA0269PR	DCA0269HR	DCA0269IR		
		90°	DCE7460TSR												
		105°	DCE7410TSR												
DC477	EN2-4		DCE7980TSR	CE		≤1100mm	170 kg		Single action/Double action	Interior + Exterior	DCA0534PR	DCA0534HR	DCA0534IR		
		90°	DCE7960TSR												
		105°	DCE7910TSR												
DC420	EN3		DCE4293TSR	CE		≤950mm	100 kg		Single action/Double action	Interior	DCA0307PR	DCA0307HR	DCA0307IR		
		90°	DCE4263TSR												
		105°	DCE4213TSR												
	EN4		DCE4294TSR	CE		≤1100mm				Interior + Exterior					
		90°	DCE4264TSR												
		105°	DCE4214TSR												

Floor Spring	HA min	HA max	AC340/ AC360	AC341/ AC361	AC342/ AC362	AC343/ AC363	AC344/ AC364	AC345/ AC365	AC346/ AC366	X		
										X min	X max	
DC420	5.5mm	10.5mm	0mm	5mm	10mm	15mm	20mm	25mm	30mm	5.5mm	40.5mm	
DC460	9.5mm	13.5mm								9.5mm	43.5mm	
DC477	5.5mm	15mm								5.5mm	45mm	
DC475	4mm	13.5mm								4mm	43.5mm	

Legend:

HA = Height adjustment within the cement box

SH = Spindle Height

X = Floor clearance

Formula Example

$X = HA + SH$ $X = 34.5mm$ Floor Spring = DC420











$34.5mm = (5.5mm \text{ or } 10.5mm) + SH;$

$SH \text{ max} = 29mm$ AC345/AC365;

$SH \text{ min} = 24.5mm$ AC344/AC364

HA min = 5.5 HA max = 10.5

Extended Spindle (0 - 30mm)				
Spindle Type	Square type (Italian)		Flat-conical type (German)	
				
Extension	Name	Art. no.	Name	Art. no.
0mm	AC360	MA0360S0	AC340	MA0340S0
5mm	AC361	MA0361S0	AC341	MA0341S0
10mm	AC362	MA0362S0	AC342	MA0342S0
15mm	AC363	MA0363S0	AC343	MA0343S0
20mm	AC364	MA0364S0	AC344	MA0344S0
25mm	AC365	MA0365S0	AC345	MA0345S0
30mm	AC366	MA0366S0	AC346	MA0346S0

Single/Double Pivot name	TOP PIVOT				BOTTOM PIVOT					
	S. Action A384	Double Action A8 A118 A375		AC583	AC392	Double Action AC2 AC213 AC115 AC393				
										
Material	Steel	Zamac	Zamac	Steel	Steel	Steel	Brass	Steel	Steel	Steel
Adjustment			Adjust- able							
Max. Door Wt.					≤300kg	≤100kg	≤170kg	≤300kg		
Spindle type					Square type	Flat- conical	Square type		Flat- conical	
	MA038400 - Silver MA038430 - Black	MA000850	MA011850	MA037550	MA058300 - Silver MA058330 - Black	MA039200 - Silver MA039230 - Black	MA000250	MA021350	MA011550	MA039350

Cover plates in
Polished Brass, Satin
Satinless Steel and
Polished Satinless
Steel:



Floor Spring AF-200F

ASSA ABLOY

Floor Spring

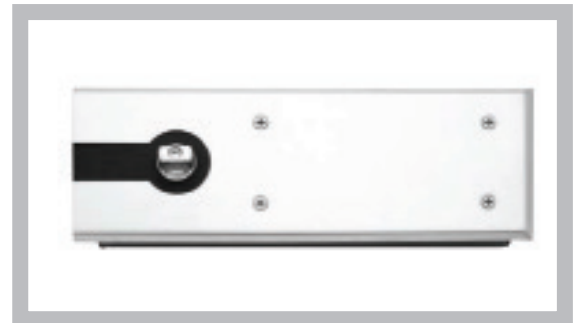
AF-200F

ASSA ABLOY AF-200F:

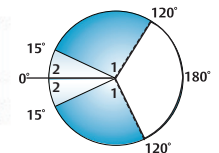
- Floor spring with fixed closing force for very thin slab
- Certified EN1154, size EN3
- 5,00,000 cycles tested
- Suitable for fire and smoke protection doors
- Maximum door weight 120 kg

Characteristics of AF-200F:

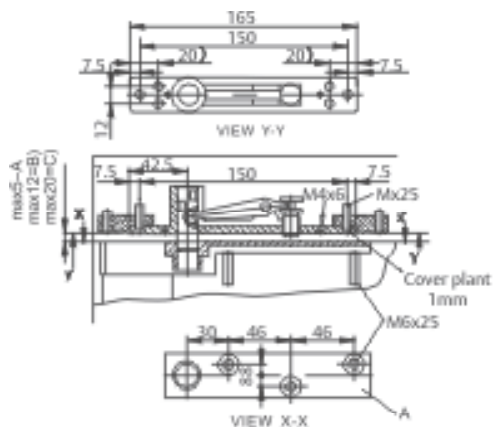
- CE Mark product
- Easy installation with thin body design
- Closing speed adjustable (1) - 120° -15°
- Latching speed (2) - 15°-0°
- Standard 90° hold-open, optional - Non hold-open
- Maximum door weight 120kg
- Suitable for wooden/glass/Aluminium profile doors application
- Body adjustable inside cement box with height up to 4mm, width up to 5mm, length up to 7mm



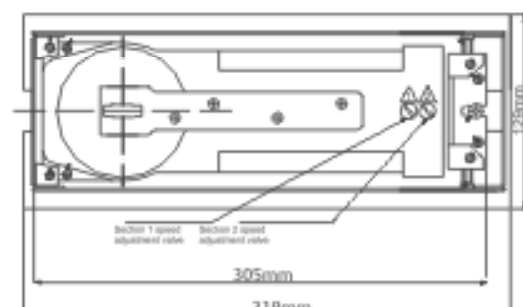
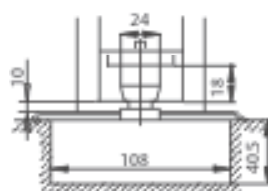
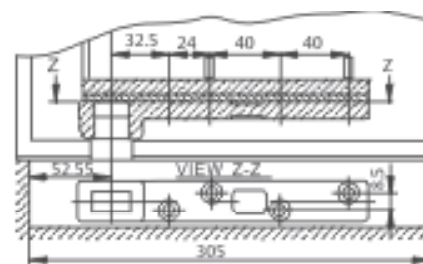
CE	ASSA ABLOY Asia Pacific Limited, Fluorim 1601 Tower 3, 16/F Hongkong 33 Canton Road, Tsim Sha Tsui H.K.			15 18		
	0366-CPR-00370	EN 1154:1996+A1:2002	3	8	9	1 1 3



Top of door frame



Bottom of door frame



Floor Spring

Technical details for AF-200F

Technical details:

Fixed closing force	EN3
Door width up to	950mm
Door weight up to	120 kg
Max. opening angle	120°
Closing speed	Variable between 120°-15°
Latching speed	Variable between 15°- 0°
Back-check	No
Height	40.5mm
Length	319mm
Width	108mm
Body adjustment within cement box	Body adjustable inside cement box with height up to 4mm, width up to 5mm, length up to 7mm
DIN-direction	Left/Right handed doors or double action
Hold-open mode	90,° Non hold-open
In compliance with	EN1154
CE Marking for building products	Yes
Fire and smoke protection	Yes

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

The advantages at a glance:

Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Particularly suitable in case of double-action glass doors - Recommended for thin slabs - Hold-open at 90° and non hold-open - Available with high quality rectangular German spindle - Architectural finishes: Satin Satinless Steel
Builders	<ul style="list-style-type: none"> - Universal for left/right handed and double-action doors
Trade	<ul style="list-style-type: none"> - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door - Reduced inventory costs due to modular product range
User	<ul style="list-style-type: none"> - One single product suitable for a large variety of mounting positions - Complementary accessories available for the whole product range - Easier door opening and improved accessibility due to Cam Motion® technology

Floor Spring AF-224P

ASSA ABLOY

Floor Spring

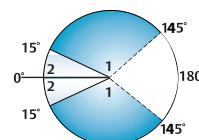
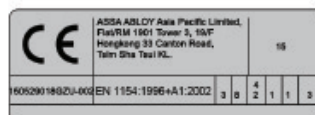
AF-224P

ASSA ABLOY AF-224P:

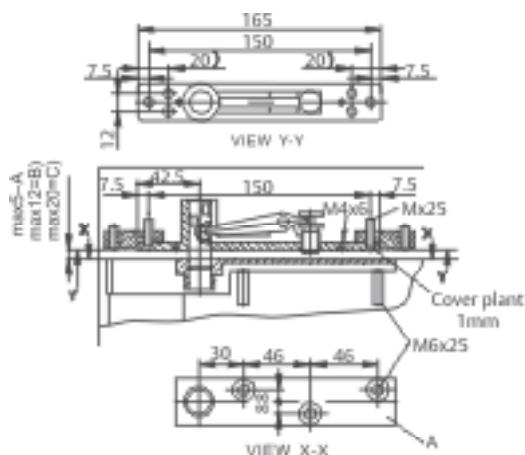
- Floor spring with adjustable closing force for very thin slab
- Certified EN1154, size EN2-4
- 5,00,000 cycles tested
- Suitable for fire and smoke protection doors
- Maximum door weight 150kg

Characteristics of AF-224P:

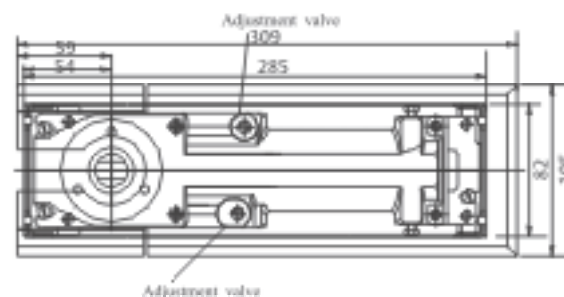
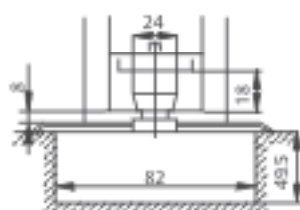
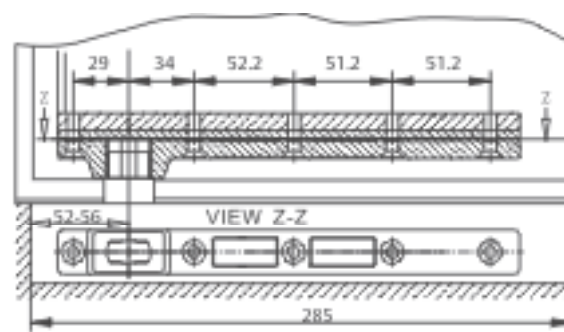
- CE Mark product
- Easy installation with thin body design
- Closing speed adjustable (1) - 145° - 15°
- Latching speed (2) - 15° - 0°
- Standard 90° hold-open, optional - Non hold-open
- Maximum door weight 150 kg
- Suitable for wooden/glass/aluminium profile doors application
- Body adjustable inside cement box with height up to 4mm, width up to 4mm, length up to 4mm



Top of door frame



Bottom of door



Floor Spring

Technical details for AF-224P

Technical details:

Adjustable closing force	EN2-4
Door width up to	850mm -1100mm
Door weight up to	150 kg
Max. opening angle	145°
Closing speed	Variable between 145°-15°
Latching speed	Variable between 15°- 0°
Back-check	No
Height	49.5mm
Length	309mm
Width	82mm
Body adjustment within cement box	Body adjustable inside cement box with height up to 4mm, width up to 4mm, length up to 4mm
DIN-direction	Left/Right handed or double action
Hold-open mode	90,° Non hold-open
In compliance with	EN1154
CE Marking for building products	Yes
Fire and smoke protection	Yes

Our service for you:
Here you can see the individual advantages of our floor spring models for your respective fields of business.

The advantages at a glance:

Customer segment	Advantages
Project planners	<ul style="list-style-type: none"> - Extensive range of uses: Fire and smoke protection doors as well as standard doors - Particularly suitable in case of double-action glass doors - Recommended for thin slabs - Hold-open at 90° and non hold-open - Available with high quality rectangular German spindle - Architectural finishes: Satin Satinless Steel - Universal for left/right handed and double-action doors
Builders	<ul style="list-style-type: none"> - Large range of adjustment within cement box to solve possible alignment problems on the site without taking down the door
Trade	<ul style="list-style-type: none"> - Reduced inventory costs due to modular product range - One single product suitable for a large variety of mounting positions - Complementary accessories available for the whole product range
User	<ul style="list-style-type: none"> - Easier door opening and improved accessibility due to Cam Motion® technology

Floor Spring Accessories

AC200F-TP
AC224P-TP

Model no.: AC200F-TP

Description: Top Pivot (Iron - double action) for AC200F

Model no.: AC224P-TP

Description: Top Pivot (Iron - double action) for AF-224P



Floor Spring Accessories

AC200FA/B-C
ACC224PA/B-C

Model no.: AC200FA/B-C

Description: Top Pivot & Bottom Arm (Iron - double action), Standard parts for AF-200F

Model no.: ACC224PA/B-C

Description: Top Pivot & Bottom Arm (Iron - double action), Standard parts for AF-224P



Floor Spring Accessories

AC200FA/B-O
ACC224PA/B-O

Model no.: AC200FA/B-OR, AC200FA/B-OL

Description: Top Pivot & Bottom Arm (Iron - single action), Standard parts for AF-200F

Model no.: ACC224PA/B-OR, ACC224PA/B-OL

Description: Top Pivot & Bottom Arm (Iron - single action), Standard parts for AF-224P



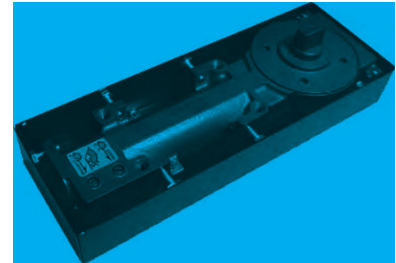
ASSA ABLOY Floor Spring AF503 Series

ASSA ABLOY

Floor Spring with Cam Motion® technology and fixed closing force for very thin slabs

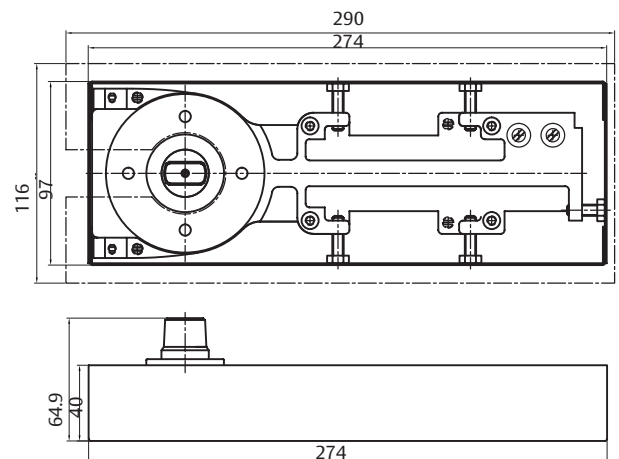
ASSA ABLOY AF503:

- Floor spring with double action
- Floor spring with power fixed size 3
- Maximum door weight 105kg



Characteristics of AF503:

- Double action floor spring
- Cast iron body
- Dual valve adjusting, closing and latching speed
- Maximum opening angle in each direction of 130°
- Applicable for timber, glass and aluminum door
- Power fixed size 3
- Standard spindle included is 10mm
- Hot zinc plated steel
- Satin stainless steel (standard) - US32D
- Optional Polished stainless steel - US32
- Adjustment within cement box
- Height 4mm adjustment
- Width 5mm adjustment
- Left to right 6mm adjustment
- Max. weight of door: 105kg



Floor Spring

AF503

Technical attributes:

	Size 3
Fixed closing force	19 N -m
Door width up to	950mm
Door weight up to	105kg
Max. opening angle	130°
Hold open	90°
Closing speed adjustment	Speed 1 (130° - 15°), Speed 2 (15° - 0°)
Removable spindle	Fixed
Applicable temperature	-15°C to 45°C
Applicability	Wooden, glass & aluminium door etc. Non-handed
Weight (kg)	4.5
Dimension of cement Box (mm) Length	274
Width	97
Height	40

ASSA ABLOY Floor Spring AF600 Series

ASSA ABLOY

Floor Spring with Cam Motion® technology and fixed closing force for very thin slabs

- Floor spring with double action
- Floor spring with power fixed size 3/4
- Maximum door weight 150kg



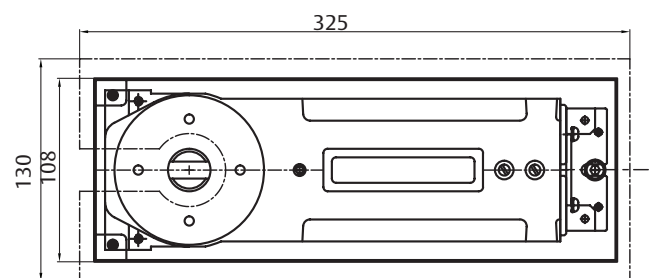
Characteristics of AF600 Series:

- Double action floor spring
- Cast iron body
- Dual valve adjusting, closing and latching speed
- Maximum opening angle in each direction of 130°
- Applicable for timber, glass and aluminum door
- Power fixed size 3/4
- Standard spindle included is 10mm
- Hot zinc plated steel
- Satin stainless steel (Standard) - US32D
- Optional Polished stainless steel - US32
- Adjustment within cement box
- Height 4mm adjustment
- Width 6mm adjustment
- Left to right 10mm adjustment
- Max. weight of door: 150kg



EN 1154

* Fire and performance certification available in size 3 only (AF603)



Floor Spring

AF600 Series

Technical details:

	AF603	AF604
Fixed closing force	19 N-m	31 N-m
Door width up to	950mm	1100mm
Fire and smoke protection	Yes	
Door weight (max. in kg)	105	150
Hold open 90°	Yes	
Maximum door opening angle	130°	
Closing speed adjustment	Speed 1 (130° - 15°), Speed 2 (15° - 0°)	
Removable spindle	Fixed	
Applicable temperature	-15°C to 45°	
Applicability	Wooden, glass & aluminium door etc. Non-handed	
Weight (kg)	6	
Dimension of cement Box (mm) Length	308mm	
Width	108mm	
Height	40mm	