



Door closers

Door closers

G-SR door
coordinators

Concealed door
closers

Floor spring sets

Floor spring
components

Door closers	4
G-SR Door coordinators	13
Concealed door closers	16
Floor springs	18
Floor spring components	28



Door closers

TS 77

Rack and pinion projecting arm door closer

Closing Force EN 3/4



TS77	Non hold open
TS77 HO	Hold Open
TS77 PA	Parallel arm bracket included

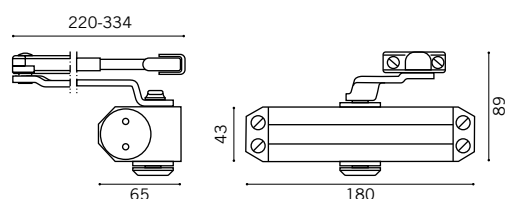
Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Hydraulic speed control



TS 68

Rack and pinion projecting arm door closer

Closing Force EN 2/3/4



TS68	Non hold open
TS68 HO	Hold Open
TS68 PA	Parallel arm bracket included

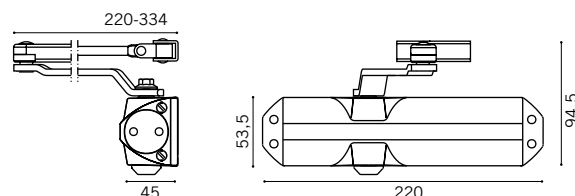
Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Hydraulic speed control



Door closers

TS 71

Rack and pinion projecting arm door closer

Closing Force EN 3/4



TS71	Non hold open
TS71 HO	Hold Open
TS71 PA	Parallel arm bracket included

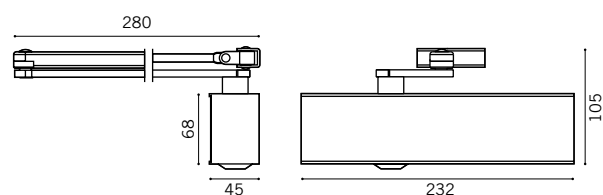
Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Hydraulic speed control



TS 73V

Rack and pinion projecting arm door closer

Closing Force EN 2-4



TS73V	Non hold open
TS73V HO	Hold Open
TS73V PA	Parallel arm bracket included
TS73 DC	Delayed closing

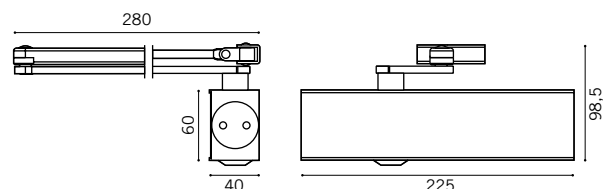
Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Adjustable Strength. Hydraulic speed control



Door closers

TS 83

Rack and pinion projecting arm door closer

Closing Force EN 3-6



TS83	Non hold open
TS83 HO	Hold Open
TS83 PA	Parallel arm bracket included
TS83 DC	Delayed closing

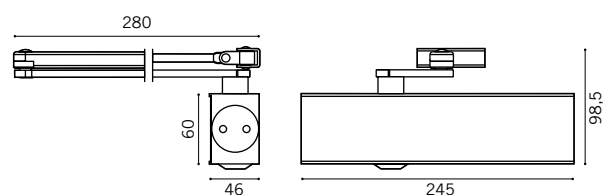
Max door width - 1400mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Adjustable Strength. Hydraulic speed control.
Back check



TS83 EN7

Rack and pinion projecting arm door closer

Closing Force EN 7



TS83 EN7	Non hold open
TS83 EN7 HO	Hold Open
TS83 EN7 PA	Parallel arm bracket included

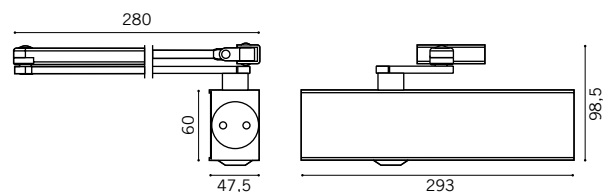
Max door width - 1600mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Push-side door leaf fixing
(Parallel arm bracket is required for this application)

Hydraulic speed control



Door closers

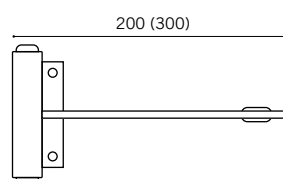
ART 623

Index door spring

Closing Force EN 1-2 (3-4)

Max door width - 800mm (1000mm)

Push-side frame fixed



ART 623 1-2

ART 623 3-4

Door closers

TS 90

Cam action slide channel door closer

Closing Force EN 3/4



Max door width - 1100mm

Pull-side door leaf fixing (Standard)

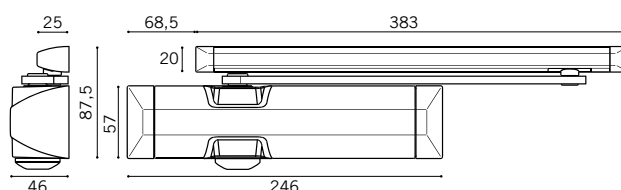
Pull-side transom fixing

Push-side transom fixing

Push-side door leaf fixing (Standard)

(Angle bracket may be required for this application)

Hydraulic speed control



TS90

Non hold open

TS90 HO

Mechanical hold open

Angle bracket

Optional cushioned limit stay

TS 91B

Cam action slide channel door closer

Closing Force EN 3

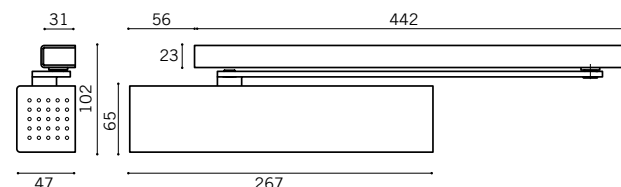


Max door width - 950mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Hydraulic speed control



TS91B

Non hold open

TS91B HO

Mechanical hold open

TS91B EMF

Electro mechanical hold open

Optional cushioned limit stay. Optional integrated smoke detector-EMR

Door closers

TS 92B

Cam action slide channel door closer

Closing Force EN 2-4V

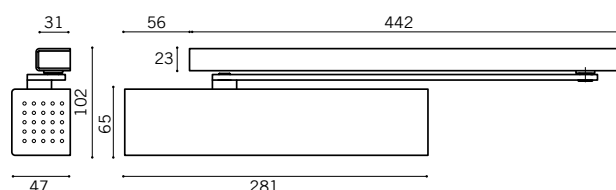


Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Adjustable strength. Hydraulic speed control



TS92B	Non hold open
TS92B HO	Mechanical hold open
TS92B EMF	Electro mechanical hold open

Optional cushioned limit stay. Optional integrated smoke detector-EMR. Optional frameless glass door saddle

TS 92G

Cam action slide channel door closer

Closing Force EN 2-4V

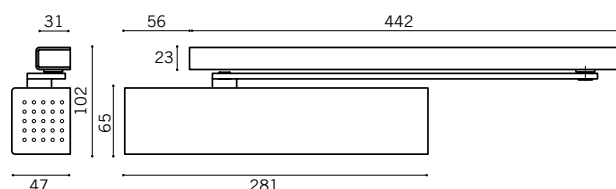


Max door width - 1100mm

Push-side door leaf fixing (Standard)
(Angle bracket may be required for this application)

Pull-side transom fixing

Adjustable strength. Hydraulic speed control



TS92G	Non hold open
TS92G HO	Mechanical hold open
TS92G EMF	Electro mechanical hold open
Angle bracket	

Optional cushioned limit stay. Optional integrated smoke detector-EMR. Optional frameless glass door saddle

Door closers

TS 93B

Cam action slide channel door closer

Closing Force EN 2-5V

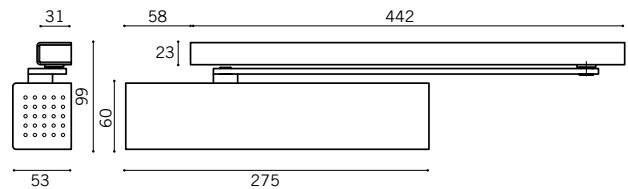


Max door width - 1250mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Adjustable strength. Hydraulic speed control.
Backcheck. Delayed action



TS93B	Non hold open
TS93B HO	Mechanical hold open
TS93B EMF	Electro mechanical hold open

Optional cushioned limit stay. Optional integrated smoke detector-EMR

TS 93G

Cam action slide channel door closer

Closing Force EN 2-5V

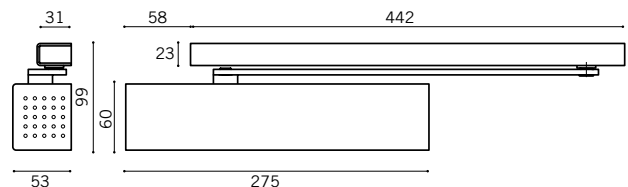


Max door width - 1250mm

Push-side door leaf fixing (Standard)
(Angle bracket may be required for this application)

Pull-side transom fixing

Adjustable strength. Hydraulic speed control.
Backcheck. Delayed action



TS93G	Non hold open
TS93G HO	Mechanical hold open
TS93G EMF	Electro mechanical hold open
Angle bracket	

Optional cushioned limit stay. Optional integrated smoke detector-EMR

Door closers

TS 93B EN5-7

Cam action slide channel door closer

Closing Force EN 5-7V

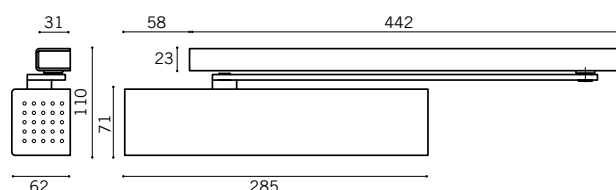


Max door width - 1600mm

Pull-side door leaf fixing (Standard)

Push-side transom fixing

Adjustable strength. Hydraulic speed control.
Backcheck. Delayed action



TS93B EN5-7 Non hold open

TS93B EN5-7 HO

Mechanical hold open

Optional cushioned limit stay. Optional integrated smoke detector-EMR

TS 93G EN5-7

Cam action slide channel door closer

Closing Force EN 5-7V



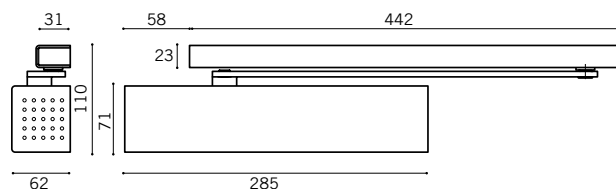
Max door width - 1600mm

Push-side door leaf fixing (Standard)

(Angle bracket may be required for this application)

Pull-side transom fixing

Adjustable strength. Hydraulic speed control.
Backcheck. Delayed action



TS93G EN5-7 Non hold open

TS93G EN5-7HO

Angle bracket

Mechanical hold open

Optional cushioned limit stay. Optional integrated smoke detector-EMR

Door closers

TS 97

Cam action slide channel door closer

Closing Force EN 2-4V

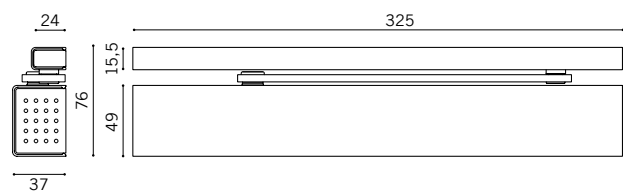


Max door width - 1100mm

Pull-side door leaf fixing (Standard)

Pull-side transom fixing

Adjustable strength. Hydraulic speed control.
Optional cushioned limit stay



TS97

Non hold open

TS97 HO

Mechanical hold open

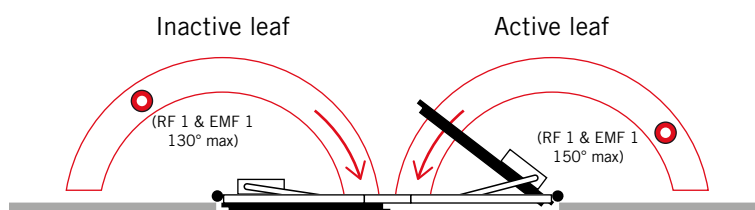
Optional frameless glass door saddle

G-SR slide channel door coordinator



TS91B G-SR

Pull-side fixing



TS91B G-SR

Non hold open

TS91B G-SR RF 1

Mechanical hold open

TS91B G-SR EMF 1

Electro mechanical hold open

Hydraulic speed control

In the case of unequal leaves, min size of the inactive leaf - 370mm

Suitable for combined door width measuring 1350-1900mm

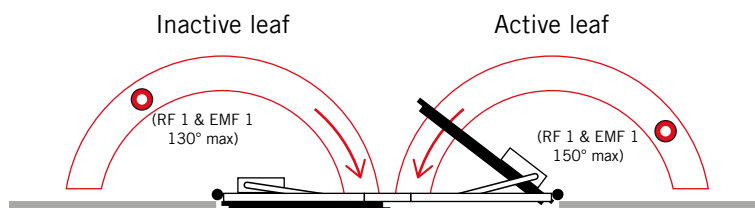
Closing Force EN 3

Max door width 950mm per leaf

Optional integrated smoke detector-EMR

TS92B G-SR

Pull-side fixing



TS92B G-SR

Non hold open

TS92B G-SR RF 1

Mechanical hold open

TS92B G-SR EMF 1

Electro mechanical hold open

Adjustable strength. Hydraulic speed control

In the case of unequal leaves, min size of the inactive leaf - 370mm

Suitable for combined door width measuring 1350-2200mm

Order VK version for combined door width measuring 1220-1350mm

Closing Force EN 2-4

Max door width 1100mm per leaf

Optional integrated smoke detector-EMR

G-SR slide channel door coordinator



TS92G G-SR/BG

Push-side fixing

Angle bracket may be required for this application

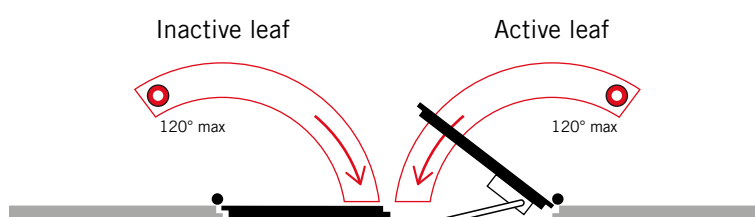
TS92G G-SR/BG

Non hold open

TS92G G-SR EMF2/BG

Electro mechanical hold open

Angle bracket



Adjustable strength. Hydraulic speed control

In the case of unequal leaves, min size of the inactive leaf - 600mm

Suitable for combined door width measuring 1500-2200mm

Closing Force EN 2-4

Max door width 1100mm per leaf

Optional integrated smoke detector-EMR

TS93B G-SR

Pull-side fixing

TS93B G-SR

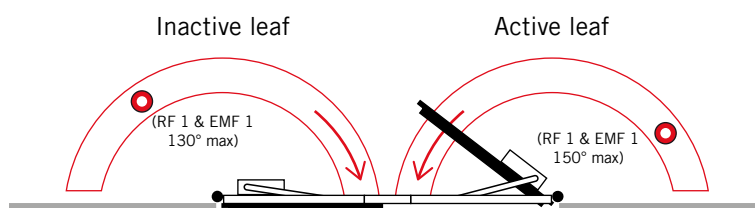
Non hold open

TS93B G-SR RF 1

Mechanical hold open

TS93B G-SR EMF 1

Electro mechanical hold open



Adjustable strength. Hydraulic speed control. Back Check. Delayed action

In the case of unequal leaves, min size of the inactive leaf - 370mm

Suitable for combined door width measuring 1350-2500mm

Order VK version for combined door width measuring 1220-1350mm

Closing Force EN 2-5

Max door width 1250mm per leaf

Optional integrated smoke detector-EMR

G-SR slide channel door coordinator



TS93G G-SR/BG

Push-side fixing

Angle bracket may be required for this application

TS93G G-SR/BG

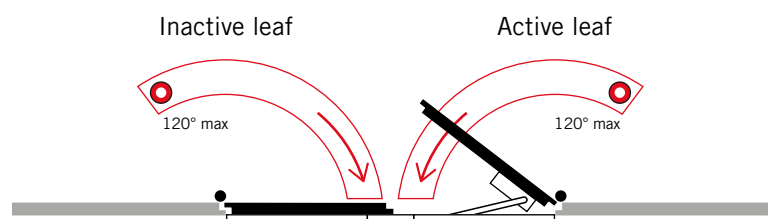
Non hold open

TS93G G-SR EMF2/BG

Electro mechanical hold open

Angle bracket

Optional integrated smoke detector-EMR



Adjustable strength. Hydraulic speed control. Back Check. Delayed action

In the case of unequal leaves, min size of the inactive leaf - 600mm

Suitable for combined door width measuring 1500-2500mm

Closing Force EN 2-6

Max door width 1250mm per leaf

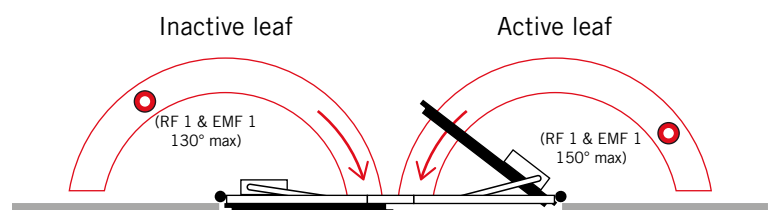
TS93B EN5-7 G-SR VL

Pull-side fixing

TS93B EN5-7 G-SR VL

Non hold open

Optional integrated smoke detector-EMR



Adjustable strength. Hydraulic speed control. Back Check. Delayed action

Suitable for combined door width measuring 2500-3200mm

Closing Force EN 5-7

Max door width 1600mm per leaf

Concealed door closers

ITS 96 2-4

Concealed cam-action door closer system

Closing Force EN 2-4V



Max door width 1100mm

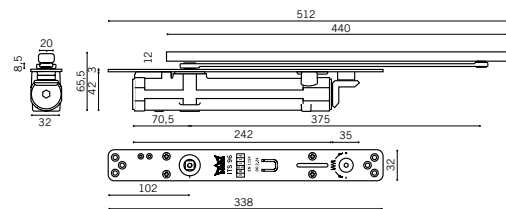
Min door thickness 40mm

Max door weight 130kg

Specify timber or aluminium frame

Adjustable strength. Hydraulic speed control.
Cushioned limit stay

Available on request: Electro mechanical hold open. Integrated selector for double doors - ITS 96 GSR



ITS 96 2-4 Non hold open

ITS 96 2-4 HO Mechanical hold open

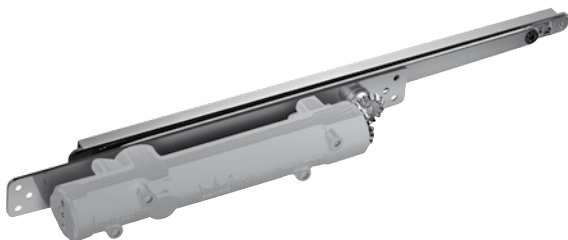
Optional Double Action Arm

Not recommended for hollow core or semi-solid doors

ITS 96 3-6

Concealed cam-action door closer system

Closing Force EN 3-6V



Max door width 1400mm

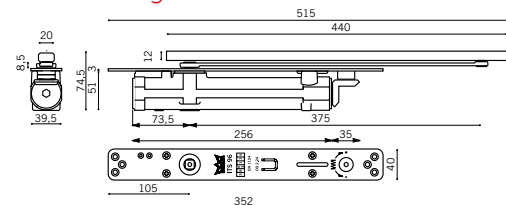
Min door thickness 50mm

Max door weight 180kg

Specify timber or aluminium frame

Adjustable strength. Hydraulic speed control.
Cushioned limit stay

Available on request: Electro mechanical hold open. Integrated selector for double doors - ITS 96 GSR. Free swing unit - ITS 96 FL.



ITS 96 3-6 Non hold open

ITS 96 3-6 HO Mechanical hold open

Optional Double Action Arm

Not recommended for hollow core or semi-solid doors

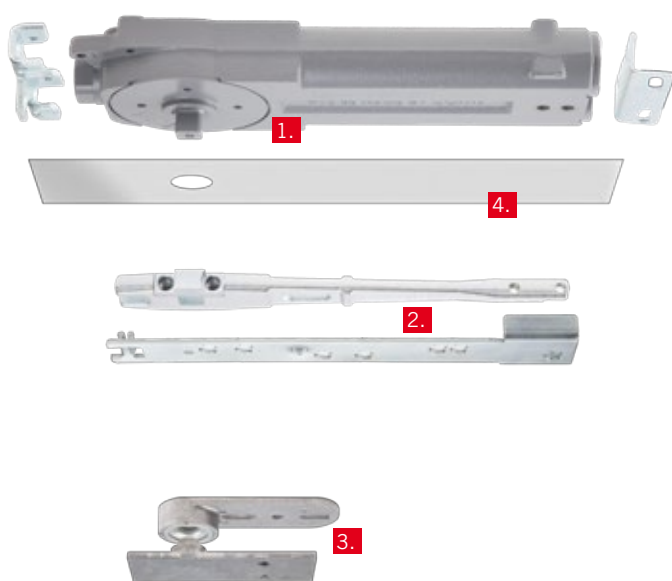
Concealed door closers

TRANSOM CONCEALED DOOR CLOSER

RTS 85

Timber Set: RTS 85. RTS 85W cover plate. 8530 side load arm and channel. 8550 floor pivot.

Aluminium Set: RTS 85. 8530 side load arm and channel. 8550 floor pivot.



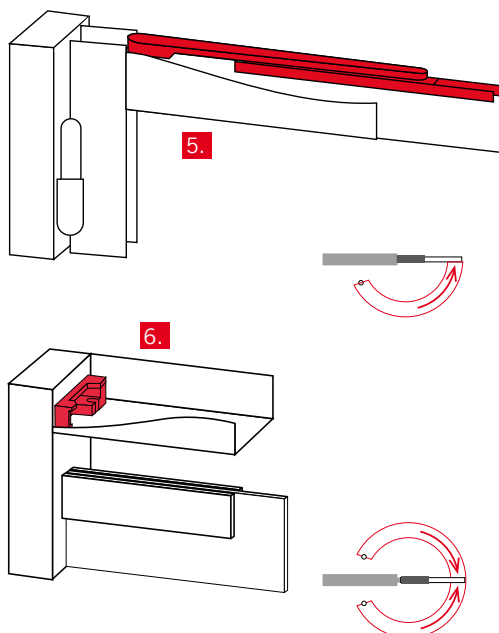
Max door width - 1250mm
Max door weight - 110kg
Min door thickness - 38mm
Closing Force EN 3/4/5
Double action pivot system

Specify: Hold open/Non hold open. EN strength 3/4/5

Available on request: 8510 Single action slide arm. 8520G fixing bracket for 65mm pivot point (Glass door patch fitting application)

Components

- 1. RTS 85- Unit only
- 2. 8530 - Side load arm and channel
- 3. 8550 - 27mm floor pivot for side load
- 4. RTS85W - Cover Plate for Wood Installation
- 5. 8510 - Slide arm and channel for single action
- 6. 8520G - Fixing bracket patch fitting application



Single action floor spring for aluminium doors

BTS75 SA LM

BTS 75V. SS Cover Plate. Dust Cover. Standard Spindle. 7459 Aluminium Strap. B36.1.2 LM Hinge

Max door width - 1100mm

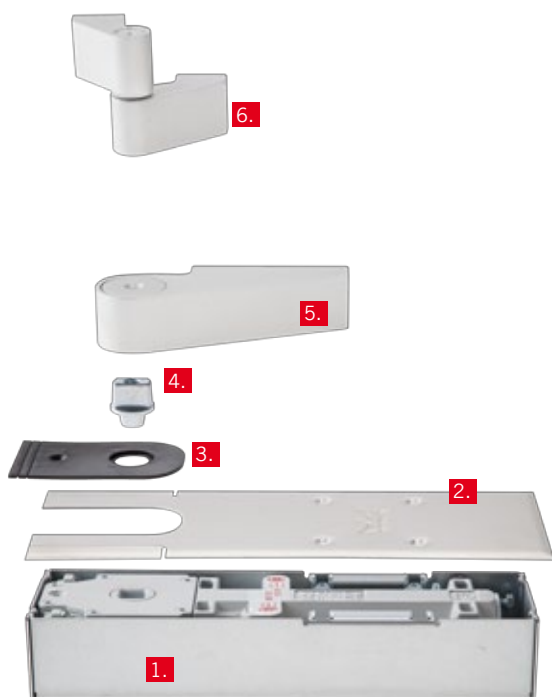
Max door weight - 120kg

Adjustable strength EN 1-4

Hydraulic speed control

Mechanical backcheck

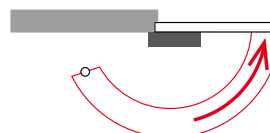
Specify: Hold open or Non hold open



Brass Cover Plate

Components

- 1. BTS 75V
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7459 Aluminium Strap
- 6. B36.1.2 LM Hinge



Single action floor spring for aluminium doors

BTS75 SAA

BTS 75V. SS Cover Plate. Dust Cover. Standard Spindle. 7456/1 Bottom Strap. 7411K/56E Top Centre

Max door width - 1100mm

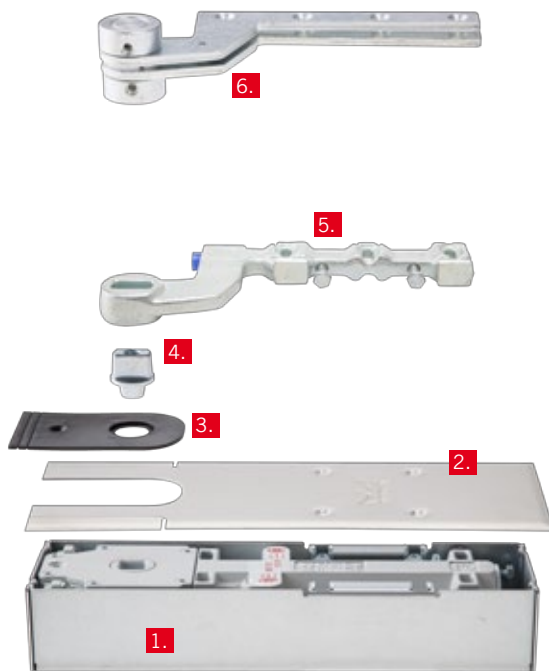
Max door weight - 120kg

Adjustable strength EN 1-4

Hydraulic speed control

Mechanical backcheck

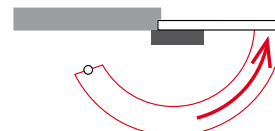
Specify: Hold open or Non hold open



Brass Cover Plate
7483 Top Centre cover cap
7481 Bottom Strap cover cap

Components

- 1. BTS 75V
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7456/1 Bottom Strap
- 6. 7411K/56E Top Centre



Single action floor spring for timber doors

BTS75 SAT

BTS 75V. SS Cover Plate. Dust Cover. Standard Spindle. 7411/56 Bottom Strap. 7411K/56E Top Centre

Max door width - 1100mm

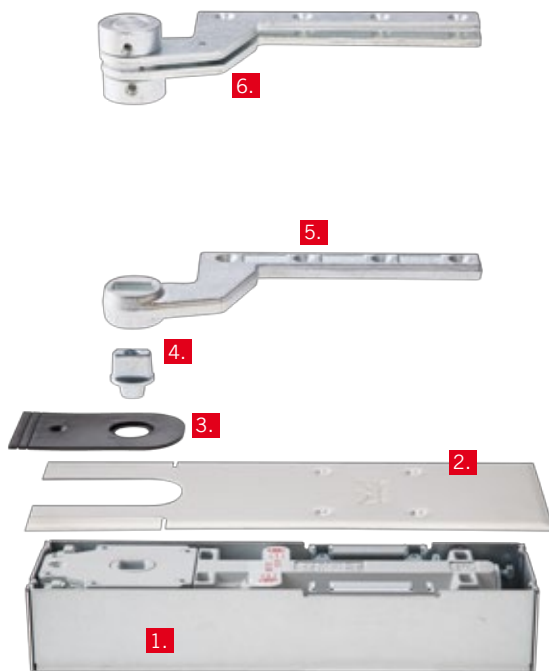
Max door weight - 120kg

Adjustable strength EN 1-4

Hydraulic speed control

Mechanical backcheck

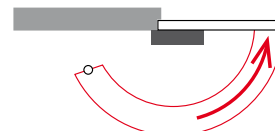
Specify: Hold open or Non hold open



Brass Cover Plate
7483 Top Centre cover cap
7481 Bottom Strap cover cap

Components

- 1. BTS 75V
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7411/56 Bottom Strap
- 6. 7411K/56E Top Centre



Double action floor spring for aluminium doors

BTS75 DAA

BTS 75V. SS Cover Plate. Dust Cover. Standard Spindle. 7422 Bottom Strap. 8062 Top Centre

Max door width - 1100mm

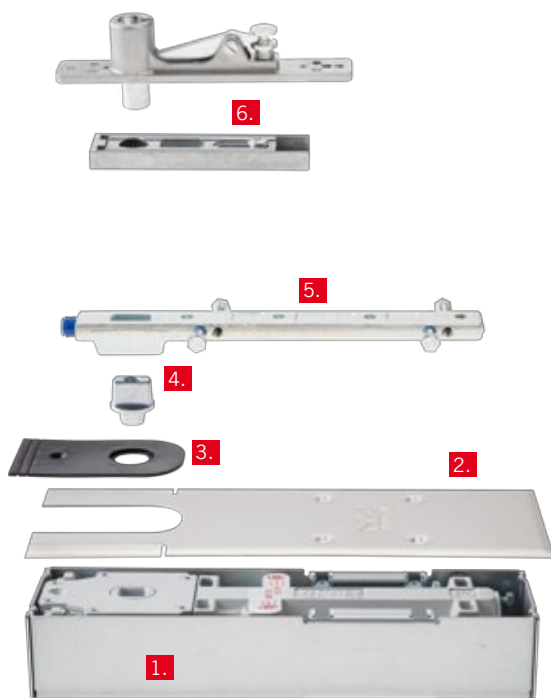
Max door weight - 120kg

Adjustable strength EN 1-4

Hydraulic speed control

Mechanical backcheck

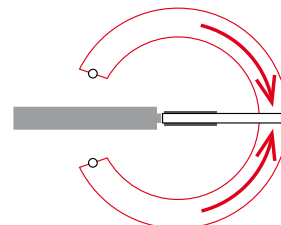
Specify: Hold open or Non hold open



Brass Cover Plate
8064 Top Centre Cover Plate

Components

- 1. BTS 75V
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7422 Bottom Strap
- 6. 8062 Top Centre



Double action floor spring for timber doors

BTS75 DAT

BTS 75V. SS Cover Plate. Dust Cover. Standard Spindle. 7421 Bottom Strap. 8062 Top Centre

Max door width - 1100mm

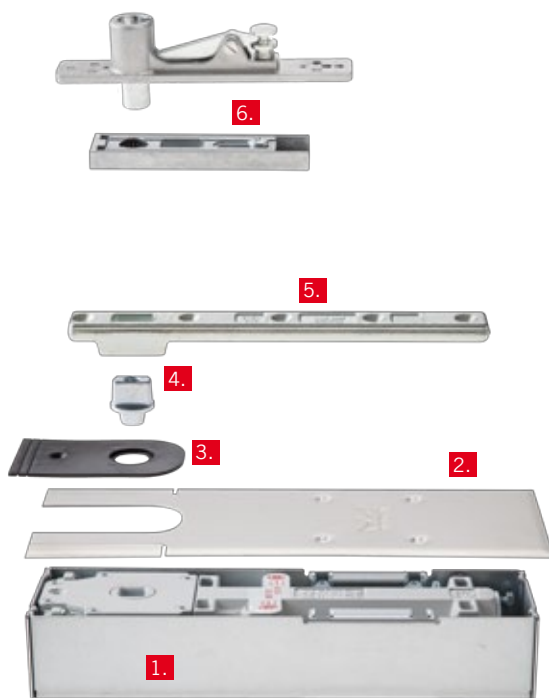
Max door weight - 120kg

Adjustable strength EN 1-4

Hydraulic speed control

Mechanical backcheck

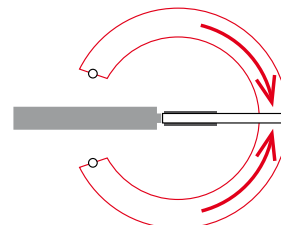
Specify: Hold open or Non hold open



Brass Cover Plate
8064 Top Centre Cover Plate

Components

- 1. BTS 75V
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7421 Bottom Strap
- 6. 8062 Top Centre



Single action floor spring for aluminium doors

BTS80 SA LM

BTS 80. SS Cover Plate. Dust Cover. Standard Spindle. 7459 Aluminium Strap. B36.1.2 LM Hinge

Max door width - 1400mm

Max door weight - 120kg

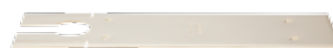
Hydraulic speed control

Mechanical backcheck

Delayed closing

Hold open - Non hold open

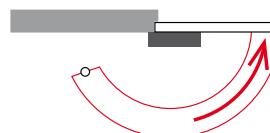
Specify: Spring strength EN 3/4/6



Brass Cover Plate

Components

- 1. BTS 80
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7459 Aluminium Strap
- 6. B36.1.2 LM Hinge



Single action floor spring for aluminium doors

BTS80 SAA

BTS 80. SS Cover Plate. Dust Cover. Standard Spindle. 7456/1 Bottom Strap. 7411K/56E Top Centre

Max door width - 1400mm
Max door weight - 300kg

Hydraulic speed control

Mechanical backcheck

Delayed closing

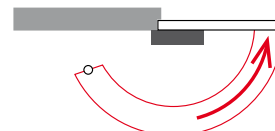
Hold open - Non hold open

Specify: Spring strength EN 3/4/6



Components

- 1. BTS 80
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7456/1 Bottom Strap
- 6. 7411K/56E Top Centre



Single action floor spring for timber doors

BTS80 SAT

BTS 80. SS Cover Plate. Dust Cover. Standard Spindle. 7411/56 Bottom Strap. 7411K/56E Top Centre

Max door width - 1400mm
Max door weight - 300kg

Hydraulic speed control

Mechanical backcheck

Delayed closing

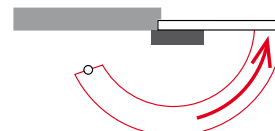
Hold open - Non hold open

Specify: Spring strength EN 3/4/6



Components

- 1. BTS 80
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7411/56 Bottom Strap
- 6. 7411K/56E Top Centre



Double action floor spring for aluminium doors

BTS80 DAA

BTS 80. SS Cover Plate. Dust Cover. Standard Spindle. 7422 Bottom Strap. 8062 Top Centre

Max door width - 1400mm
Max door weight - 300kg

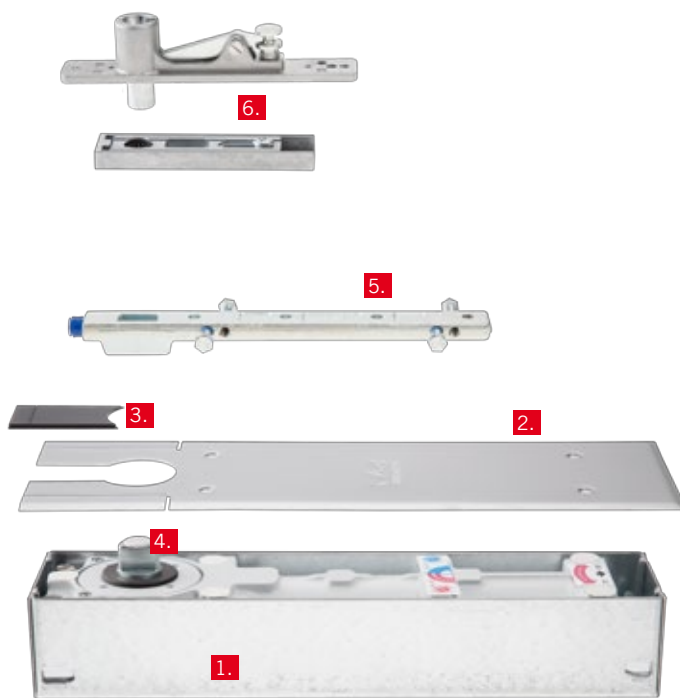
Hydraulic speed control

Mechanical backcheck

Delayed closing

Hold open - Non hold open

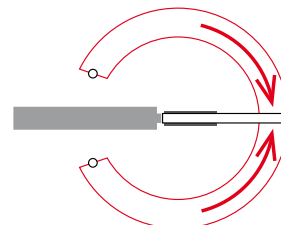
Specify: Spring strength EN 3/4/6



Brass Cover Plate
8064 Top Centre Cover Plate

Components

- 1. BTS 80
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7422 Bottom Strap
- 6. 8062 Top Centre



Double action floor spring for timber doors

BTS80 DAT

BTS 80. SS Cover Plate. Dust Cover. Standard Spindle. 7421 Bottom Strap. 8062 Top Centre

Max door width - 1400mm
Max door weight - 300kg

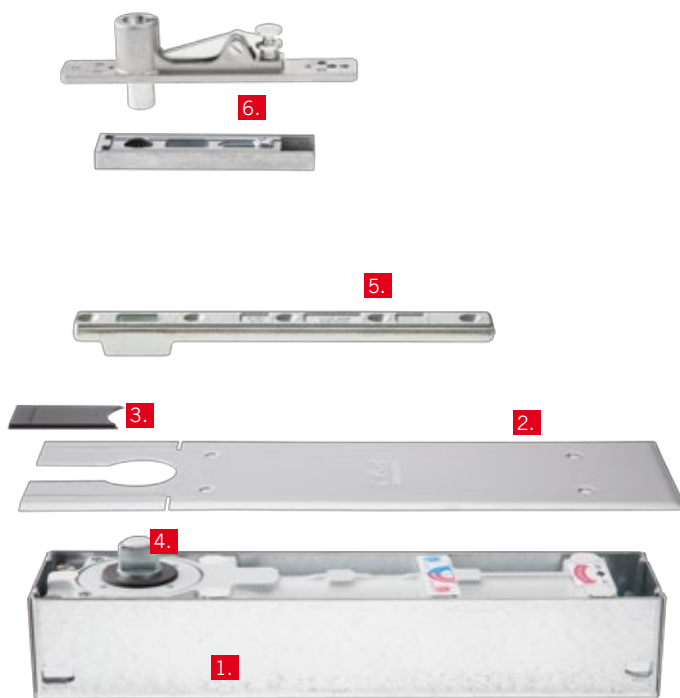
Hydraulic speed control

Mechanical backcheck

Delayed closing

Hold open - Non hold open

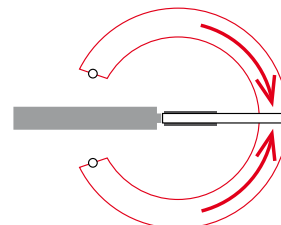
Specify: Spring strength EN 3/4/6



Brass Cover Plate
8064 Top Centre Cover Plate

Components

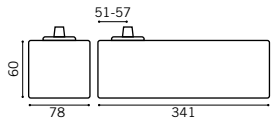
- 1. BTS 80
- 2. SS Cover Plate
- 3. Dust Cover
- 4. Standard Spindle
- 5. 7421 Bottom Strap
- 6. 8062 Top Centre



Floor spring components

BTS 80

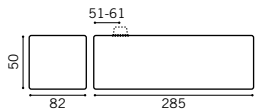
Floor spring mechanism
Mechanism. Cement box. Standard Spindle



Specify EN 3/4/6. Electro Mechanical Hold Open (EMB) on request.

BTS 75V

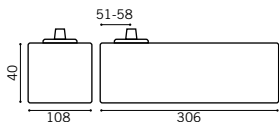
Floor spring mechanism
Mechanism. Cement box



Specify Hold open or Non hold open

BTS 84

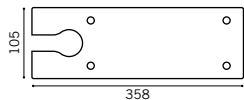
Floor spring mechanism
Mechanism. Cement box. Standard Spindle



Specify Hold open or Non hold open. Specify EN 2/3/4

COVER PLATE

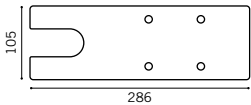
BTS 80 Cover Plate
7410 Stainless steel (7410B Brass)



Floor spring components

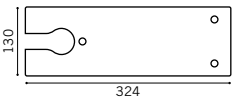
COVER PLATE

BTS 75V Cover Plate
7510 Stainless steel (7510B Brass)



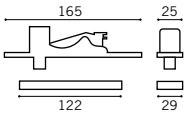
COVER PLATE

BTS 84 Cover Plate
8410 Stainless steel (8410B Brass)



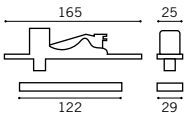
8062

Top Centres - Double Action
Universal double action Top Centre



8066

Top Centres - Double Action
Heavy duty double action Top Centre

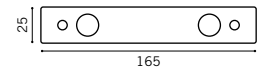


Floor spring components

8064

Top Centres - Double Action

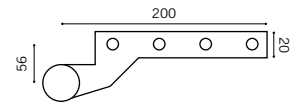
Stainless Steel Cover Plate for
8062/8066 Top Centre



7411K/56E

Top Centres - Single Action

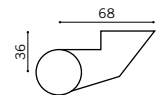
Single action Top Centre



7431K

Top Centres - Single Action

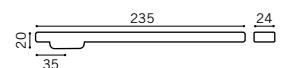
Weld on single action Top Centre for
steel doors



7421

Bottom Strap - Double Action

Bottom Strap for timber doors

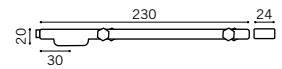


Floor spring components

7422

Bottom Strap - Double Action

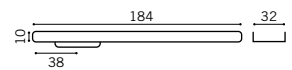
Bottom Strap for aluminium doors



8021

Bottom Strap - Double Action

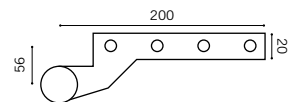
Bottom Strap for door less than 100Kg



7411/56

Bottom Strap - Single action

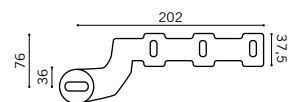
Single action Bottom Strap for timber doors



7456/1

Bottom Strap - Single action

Single action Bottom Strap for aluminium doors

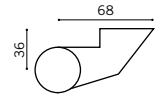


Floor spring components

7431

Bottom Strap - Single action

Weld on single action Bottom Strap for steel doors



7481

Cover caps - Single action

Cover cap for single action Bottom Strap



Specify LH/RH

7483

Cover Caps - Single action

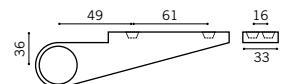
Cover cap for single action Top Centre



7459

Aluminium Strap - Single action

Aluminium Strap

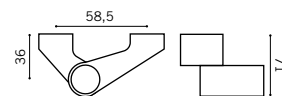


Floor spring components

B36.1.2

Aluminium Hinge - Single action

Aluminium Hinge



SPINDLE

Spindle

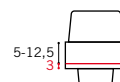
Standard Spindle



SPINDLE 5 TO 12.5MM

Spindle

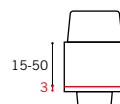
Extended by 2.5mm increments



SPINDLE 15 TO 50MM

Spindle

Extended by 5mm increments

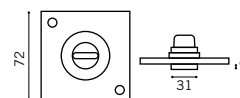


Floor spring components

7471K

Floor Pivot

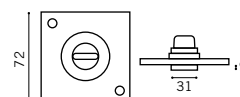
Pivot with Ball Bearing - Doors up to 200kg



7471AX

Floor Pivot

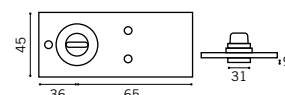
Pivot with Ball Bearing - Doors up to 300kg



7475AX

Floor Pivot

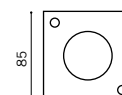
Pivot with Thrust Roller Bearing - Doors up to 300kg



7470

Floor Pivot

S.S. Cover for 7471 Pivot

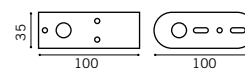


Floor spring components

8550

Floor Pivot

Pivot for Doors up to 100kg



7451-3N

Slide channel for floor spring

Swing lever and slide channel - complete

