

DO2 - DO3 SLIDING DOOR GEAR

DO4 - DO9 FLOOR SPRING

DO10 - DO11 BTS ACCESSORIES

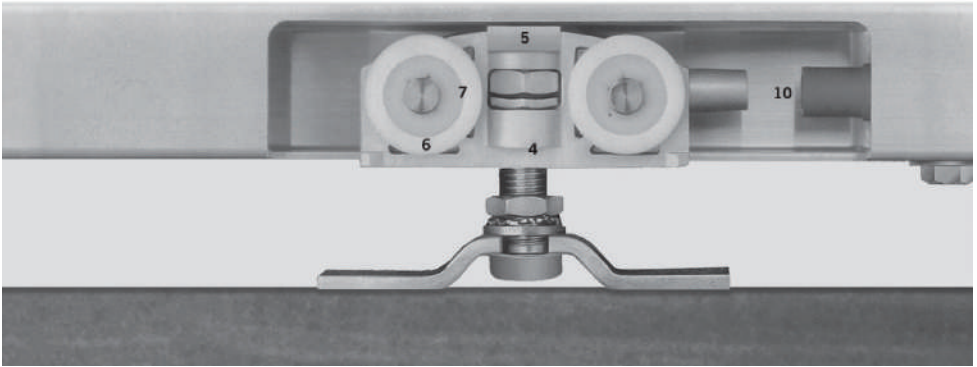
DO12 - DO13 PATCH FITTING

DO14 - DO22 DOOR CLOSER

DO23 - DO26 CONCEAL DOOR CLOSER

DO27 - DO28 MORTISE LOCK



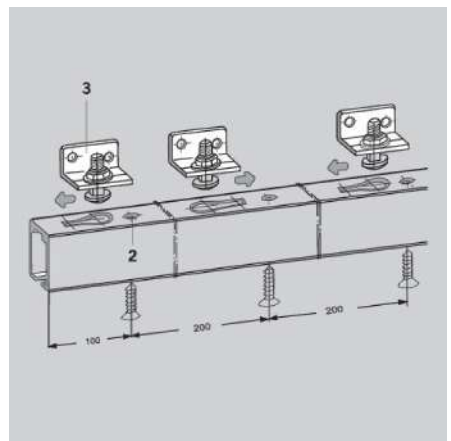
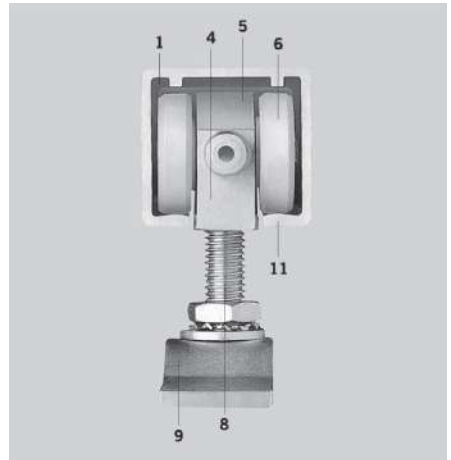


## DORMA SL-12 Fingertip control plus...

...designing made easy  
 ...ordering and stocking made simple  
 ...uncomplicated installation  
 ...superb action  
 ...trouble-free operation

**Carrying capacities up to 120kg**  
**door leaf widths up to 1800mm.**

- Sturdy extruded aluminium closed track** giving reliable and smooth operation whilst protecting the carriers from dust and dirt.  
**Two-in-one profile** suitable for side or top fixing.
- Direct to fixing** through predrilled holes with uniform spacing.
- Side fixing** by brackets that are secured into special slotted holes. Opposing slot patterns ensure safe, non-slip fixing.
- Rugged carrier** made from heavy-duty glass-reinforced plastic.
- Extended carrier head** to prevent rollers from hitting the top of the track if the door is jerked upwards.
- Large diameter nylon rollers** for smooth, quiet running.
- Independently connected rollers with needle bearings** allowing individual rotation to ensure optimum operation and protection of the running surface from excess wear.
- Self-aligning suspension** ensures that the door load is equally distributed, helping to compensate if the track is slightly out of alignment.
- Detachable fixing plate** for quick and easy installation. Height and offset adjustments give great flexibility.
- Door holder mechanism** for both open and closed positions is standard equipment. If not required the rollers can simply be reversed. The holding position(s) are adjustable.
- Convex track bearing surface** prevents clogging through dirt build-up and is in effect self-cleaning.

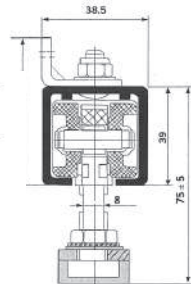
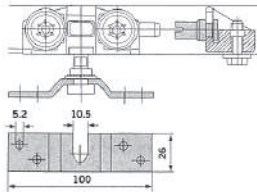
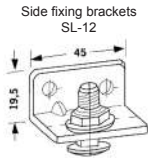


# SLIDING DOOR GEAR

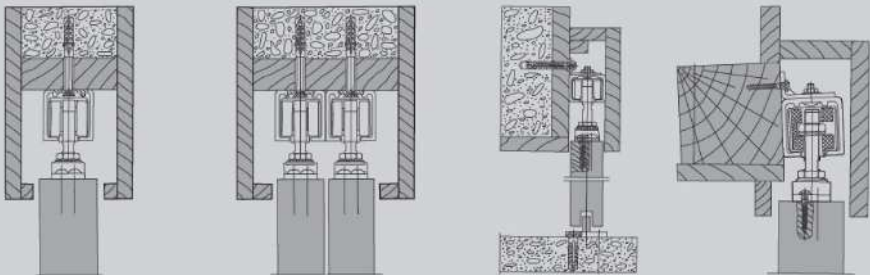


SL 12/120/2M **U/Price: 913.00**

SL 12/120/3M **U/Price: 1150.00**



## Typical Installations for SL-12



\* Illustration to show that the DORMA SL can be used even when the fixing for the track is not square.

## THE ECONOMIC DOUBLE ACTION FLOOR SPRING

### Special shallow design optional hold-open.

The DORMA BTS 84 is a double action floor spring which has been specially developed for the aluminium and toughened glass door industries.

This unit is intended to complement our internationally acclaimed RTS concealed overhead door closer by giving the shopfitting industry the option of a DORMA quality

floor spring designed for their particular purpose.

The BTS 84 has many of the features of the other DORMA BTS closers with the addition of reduced depth and an array of accessories designed for the aluminium door fabricator and toughened glass door manufacturer.

Certified to ISO 9001.

### Plus points

#### For the trade

- Outstanding value for money.
- Also available with stronger and weaker springs for special requirements.

#### For the installer

- Easy installation thanks to shallow design.
- Easy to adapt to individual requirements with dual valve control 130° to 0° and 130° to 20°.
- Interchangeable spindle inserts available to suit site conditions.

#### For the architect/specifier

- Concealed unit for invisible installation.
- Minimum floor recess dimension.
- Proven, robust unit for door weights up to 100 kg.

#### For the user

- Thermoconstant smooth operation.
- High mechanical efficiency for easy door opening.
- Optional single point hold-open

Technical Data		BTS 84		
Spring strength		EN 2	EN 3	EN 4
Standard and external doors <sup>1)2)</sup>	up to 850 mm	●	–	–
	950 mm	–	●	–
	1100 mm	–	–	●
Closing speed variable by valve adjustment			●	
Backcheck			–	
Delayed action			–	
Hold-open point 90°			○	
Weight in kg, approx.			5.0	
Dimensions in mm	Length	306		
	Width	108		
	Height	40		
Door closer tested to EN 1154			●	
CE mark for building products (products with factory-fitted hold-open do not carry a CE mark)		–	●	●

● Yes – No ○ Option

<sup>1)</sup> For applications involving particularly high or heavy doors, and doors which have to close against wind or draught conditions, the next larger closer size or the DORMA BTS 80 should be selected.

<sup>2)</sup> Max. opening 130°.

Door stop necessary for doors which can open further than 130°.



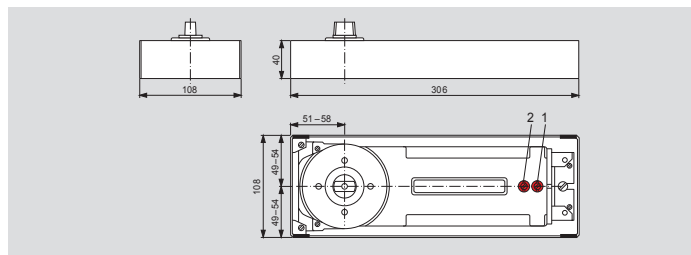
### BTS 84

EN3 with Hold Open

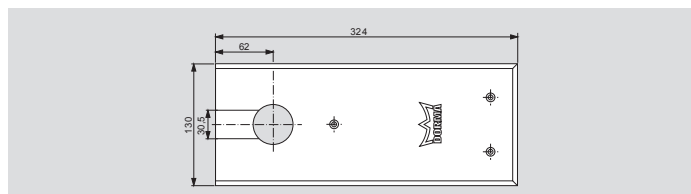
**U/Price: 825.00**

EN4 with Hold Open

**U/Price: 825.00**



- 1 Valve for closing speed adjustment 130° – 0°
- 2 Valve for increasing closing speed 130° – 20°



**Universal cover plate**  
available in stainless steel or satin brass.

# FLOOR SPRING



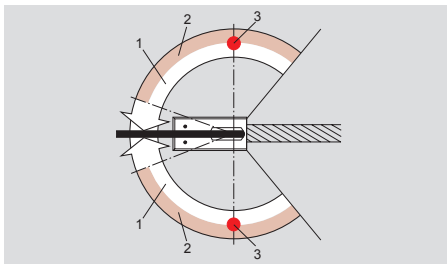
## Standard and optional functions

### Closing ranges

The floor spring has two controlled closing ranges:  
 Valve 1: 130° – 0° sweep  
 Valve 2: Increases the closing speed between 130° and 20°.

### Hold-open

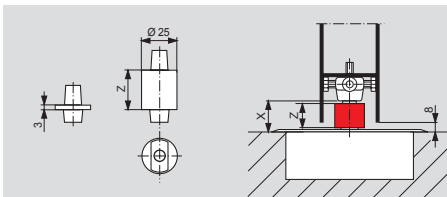
With the hold-open (optional extra), the door can be held at an angle of 90°.



- 1 First adjusting closing range (130° – 0°)
- 2 Second adjusting closing range (130° – approx. 20°)
- 3 Hold open at 90° (optional extra)

## Accessories

Applications and fixing instructions, door straps and top centres  
 See Technical Information "Floor spring accessories".



### DORMA 2300 Sealing Compound

For filling the cavities between the floor spring body and the cement box to prevent moisture penetration (mandatory according to e.g. VOB regulations for wet rooms).

### Note

Closer and bottom strap must be installed per fixing instructions for door clearances shown to be valid. Closers with extended spindle inserts are used with

thresholds, carpeted floors, terazzo pans or in cases where more clearance between door and floor is required.  
 Surface finish: Zinc plated.

### Extended spindle insert

Spindle Extension (mm)	Dimension "X" (mm)	Dimension "X" (Door Clearance) (RM)
Standard	8.0	281.00
5.0	13.0	281.00
7.5	15.5	350.00
10.0	18.0	406.00
12.5	20.5	406.00
15.0	23.0	531.00
20.0	28.0	531.00
25.0	33.0	531.00
30.0	38.0	531.00
35.0	43.0	531.00
40.0	48.0	531.00
45.0	53.0	531.00
50.0	58.0	531.00

## Standard equipment and accessories

Floor spring BTS 84 including cement box and standard spindle insert	Floor spring BTS 84 including cement box without spindle insert	normal	Extended spindle inserts (extension in mm)														Universal cover plate		Sealing compound 2300 0.5 kg
			0	5	7.5	10	12.5	15	20	25	28	30	35	40	45	50	Stainless steel	Satin brass	
45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	46700022	46700023	45090086			
<b>Standard</b>																			
EN 2 81125002	EN 2 81125001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
EN 3 81110002	EN 3 81110001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
EN 4 81100002	EN 3 81100001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
<b>with hold-open 90°</b>																			
EN 2 81225002	EN 2 81225001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
EN 3 81210002	EN 3 81210001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		
EN 4 81200002	EN 4 81200001	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△		

△ Accessory

## Specification text

Floor spring for double action doors, with hydraulic fully controlled closing from approx. 130°; including cement box and removable spindle insert.

### Size

- EN 2
- EN 3
- EN 4

### Models

- Standard
- Hold-open 90°

### Accessories

- Universal cover plate
  - Stainless steel
  - Satin brass
- Extended spindle insert, . . . mm extended
- Sealing compound

## UNIVERSAL APPLICATION, INDIVIDUAL FUNCTIONS AND ASSURED QUALITY

Whether standard, narrow or wide, whether LH, RH, or single or double action – BTS 80 and BTS 75 V door springs are designed for all types of door. A comprehensive program of accessories ensures that they can be used successfully with a wide variety of door constructions and floor coverings.

Thanks to a wide range of functions, which can be individually selected to suit different requirements, BTS 80 and BTS 75 V floor springs offer maximum reliability and quality.

Certified to ISO 9001.

### Plus points

#### For the trade

- Reduced stock requirements because of separate, interchangeable spindles.
- Slim product range offering all key functions.

#### For the installer

- Suitable for installation with LH or RH single and double action doors.
- Interchangeable spindles enable easy adaptation to structural conditions – even when retrofitted.

#### For the architect/specifier

- Concealed installation for maximum visual elegance
- All essential functions provided
- Proven, robust design capable of withstanding leaf weights of up to 300 kg (BTS 80).

#### For the user

- Constant, temperature-independent dosing cycle.
- Highly efficient mechanism gives maximum user convenience.

Data and features	BTS 80	BTS 75 V
Spring strength (EN)	3 4 6	1-4
Spring strength adjustment	–	●
Standard and external doors <sup>1)</sup>	●	●
≤ 950 mm	–	–
≤ 1100 mm	–	●
≤ 1400 mm	–	–
For fire and smoke check doors	–	–
Max. leaf weight (kg)	300	120
Non-handed, suitable for single and double action doors	●	●
Closing force variable by means of adjustment screw	–	–
Closing speed adjustable by valve	175° – 0°	–
175° – 15°	–	●
15° – 0°	–	●
Backcheck, mechanical	●	●
Delayed action adjustable by valve (selectable alternative to the hold-open feature)	●	–
Hold-open	Adjustable	–
Fixed 90°	–	●
Fixed 105°	–	●
Coverplate secured to cement box floor spring	–	–
Weight in kg	7.1	3.0
Dimensions in mm	Length	341
Overall depth	78	82
Height	60	50
Floor spring tested to EN 1154	●	●
CE mark for building products (products with factory-fitted hold-open do not carry a CE mark)	–	●

● yes – no

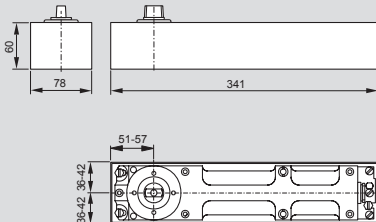
<sup>1)</sup> For particularly heavy doors and doors which have to close against wind resistance, we recommend the DORMA BTS 80.



**BTS 80**  
EN4 with Hold Open /  
EN6 with Hold Open

**U/Price: 4575.00**

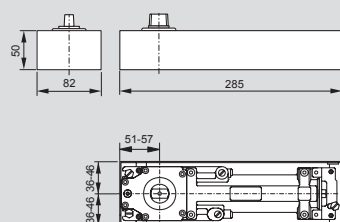
**BTS 80**



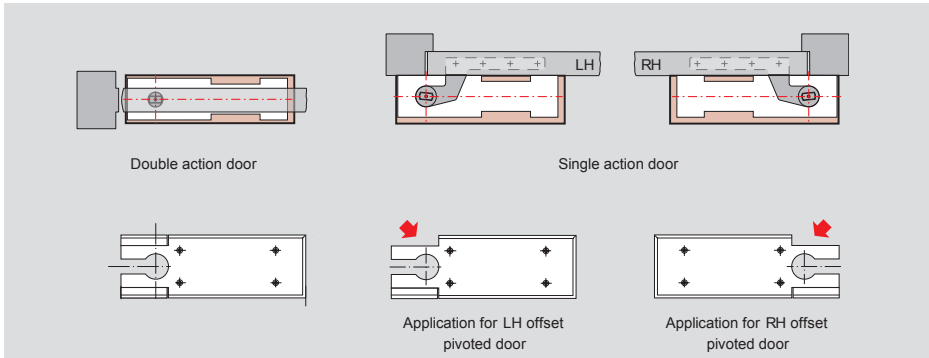
**BTS 75V**  
EN(1-4) with Hold Open

**U/Price: 1625.00**

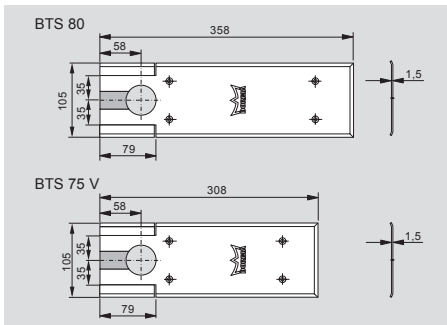
**BTS 75 V**



## APPLICATION AND INSTALLATION



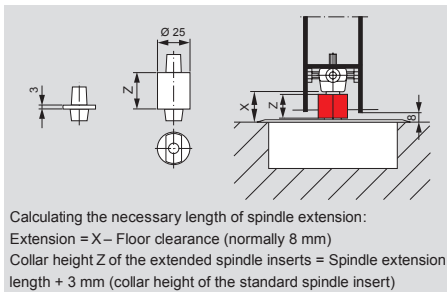
## ACCESSORIES



### Universal cover plate

Adaptable to right or left hand single action applications by simply snapping off the appropriate pre-blanked corner sections. For double action doors, the corner sections remain in place.

The universal cover plate is available in stainless steel or satin brass (material thickness 1.5 mm).



### Spindles

A range of interchangeable spindles is available to provide greater floor clearance if required (e.g. doors with thresholds, carpeted floors etc).













Special spindles available on application: e.g. with flat face profile and 3° offset or square section; spindles for non-DORMA-specific accessories are also available.

### DORMA 2300 sealing compound

For filling cavities between the floor spring body and the cement box to protect against moisture penetration.

Information about other accessories such as door straps and top centres can be found in the "Accessories for DORMA BTS Floor Springs" leaflet

## STANDARD EQUIPMENT AND ACCESSORIES

BTS 80 Floor spring	BTS 75 V Floor spring	Spindles												Sealing compound, 2300		
																0.5 kg
		normal	5	7,5	10	12,5	15	20	25	28	30	35	40	45	50	
		45200401	45200402	45200403	45200404	45200419	45200405	45200406	45200407	45200414	45200408	45200409	45200410	45200411	45200412	
						Extended spindle inserts (extension in mm)										45090086


Including cement box and standard spindle

EN 3	EN 1-4	●	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80120000	61701000																
EN 4	EN 1-4 with hold-open at 90°	●	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80110000	61701200																
EN 6	EN 1-4 with hold-open at 105°	●	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80130000	61701300																

Including cement box without spindle

EN 3	EN 1-4	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80120001	61701001																
EN 4	EN 1-4 with hold-open at 90°	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80110001	61701201																
EN 6	EN 1-4 with hold-open at 105°	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
80130001	61701301																

Universal cover plate

46700000	46700059	Stainless steel		△
46700100	46700159	Satin brass		

● Floor spring with spindle △ Accessories

## SPECIFICATION TEXT

### BTS 80

Universal non-handed floor spring conforming to DIN EN 1154 for single and double action doors up to max. 300 kg leaf weight. With adjustable closing speed and closing action from approx. 175°, with hydraulically fully controlled closing cycle and backcheck. With integral pressure compensation feature for temperature-independent hold-open between 75° and 175° (removable). With adjustable hold-open start point and delayed action (end of delayed action range adjustable between 75° and 105°). Including cement box.

#### Size

- EN 3
- EN 4
- EN 6

#### Accessories

- Spindle
  - standard
  - ... mm extension
  - special model ...
- Universal cover plate (1.5 mm thick)
  - stainless steel
  - satin brass
- Sealing compound

### BTS 75 V

Universal floor spring conforming to DIN EN 1154, non-handed unit suitable for LH and RH single and double action doors up to 120 kg leaf weight, with adjustable spring strength (size EN 1 – 4) and closing speed, with closing action operational from approx. 175°. Featuring hydraulically fully controlled closing cycle and backcheck. Including cement box.

#### Models

- With spindle
- Without spindle
- Fixed hold-open at 90°
- Fixed hold-open at 105°

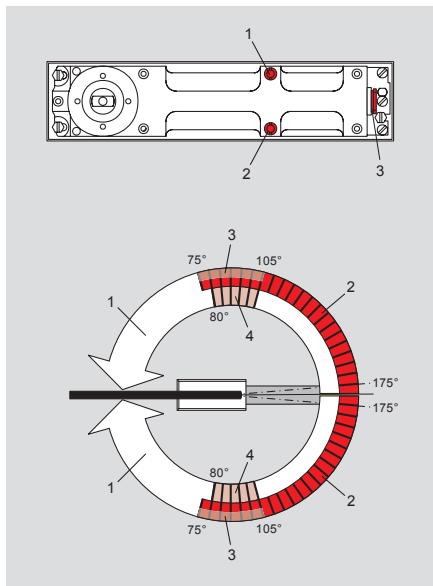
#### Accessories

- Spindle
  - standard
  - ... mm extension
  - special model ...
- Universal cover plate (1.5 mm thick)
  - stainless steel
  - satin brass
- Sealing compound



## STANDARD AND OPTIONAL FUNCTIONS

### BTS 80



- 1 Adjustable closing speed
- 2 Hold-open range or delayed action range

- 3 Adjustment range – point at which hold-open begins, or end of delayed action range (approx. 75° to 105°).
- 4 Mechanical backcheck (from approx. 80°)

#### Hydraulic hold-open

The integrated hold-open function allows the door to be held open at any angle between 75° and 175°. The angle at which the hold-open function begins can be adjusted in the range of 75° to 105°.

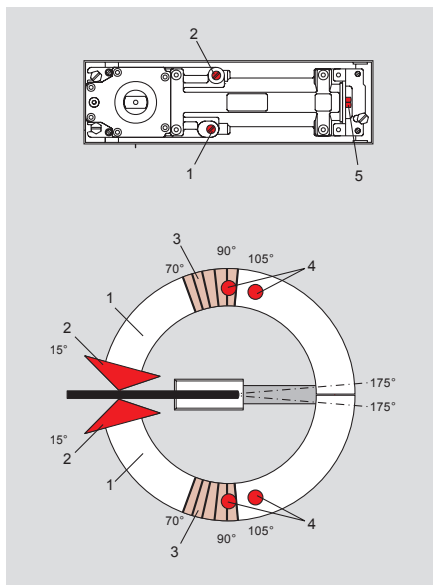
#### Delayed action

The delayed action function slows the door closing speed, thereby allowing disabled persons, mothers with pushchairs, staff with trolleys or hospital gurneys etc. to pass through the door without problem.

#### Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

### BTS 75 V



- 1 Adjustable closing speed in the range 175° – 15°.
- 2 Adjustable closing speed in the range 15° – 0°.

- 3 Mechanical backcheck (from approx. 70°).
- 4 Fixed hold-open at 90° or 105° (option).
- 5 Adjustable spring strength (EN 1–4).

#### Closing speed

With two independently adjustable closing ranges (175° – 15° and 15° – 0°) the DORMA BTS 75 V is ideally adaptable to different structural conditions.

#### Fixed hold-open (option)

With the fixed hold-open function the door can be held open at an angle of 90° or 105°, depending on model.

#### Backcheck

The integrated mechanical backcheck function protects the wall and door from damage caused by excessively vigorous opening.

#### Not suitable for use on Fire doors.



The DORMA BTS 75 V is CERTIFIRE approved (Certificate No. 127) for door types ITT 60 and IMM, IMM 240.

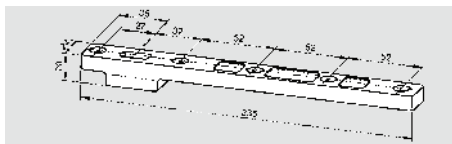
## BOTTOM STRAP



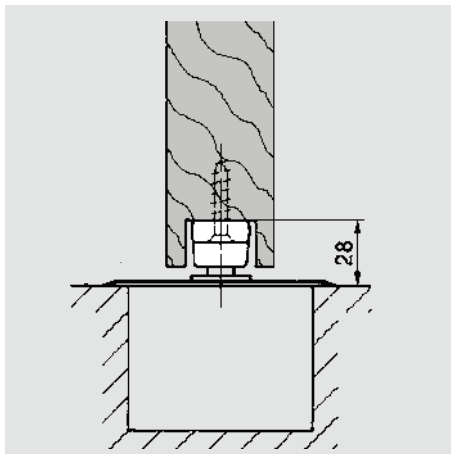
DRM-7421

U/Price: 290.00

Bottom strap Art. No. 7421



Drop forged steel, zinc-plated for door weights up to 300 kg.

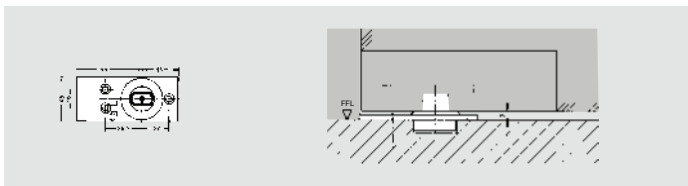


Bottom strap  
7421

## FLOOR PIVOT BEARING

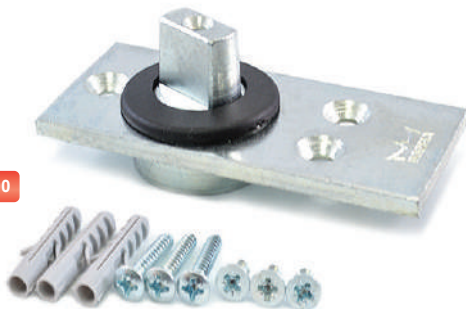
Art. No. 7475 AX  
with angular contact roller  
bearing, load capacity  
max. 300 kg.

Also available in stainless steel.  
Art. No 8560 GE



DRM-7475

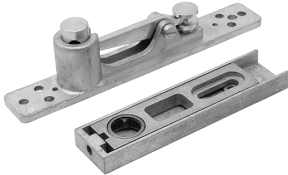
U/Price: 545.00



## ADJUSTABLE TOP CENTRE

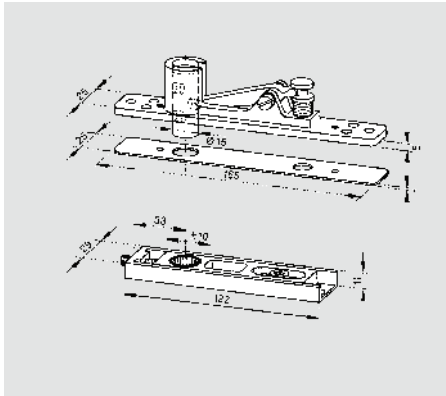
### Adjustable top centres (120KG) (zinc die-cast)

comprising an frame portion with adjustable pin for deep profiles up to max. 20 mm, and door portion with needle bearing (8067 with plastics bearing). For deeper profiles, the top centre assembly can be supplied with pins extended by 10 mm.



DRM-8062/8064

**U/Price: 393.00**



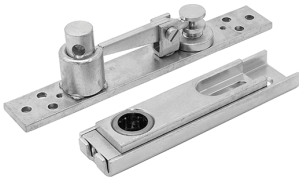
Frame portion 8062

Cover plate 8064

Door portion 8062

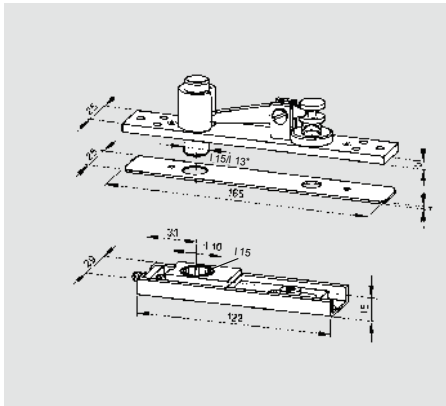
### Adjustable top centres (300KG) (steel)

comprising an frame portion with adjustable pin for deep profiles up to max. 16 mm, and door portion with needle bearing. For deeper profiles, the top centre assembly can be supplied with pins extended by 10 mm.



DRM-8066/8064

**U/Price: 800.00**



Frame portion 8066

Cover plate 8064

Door portion 8066

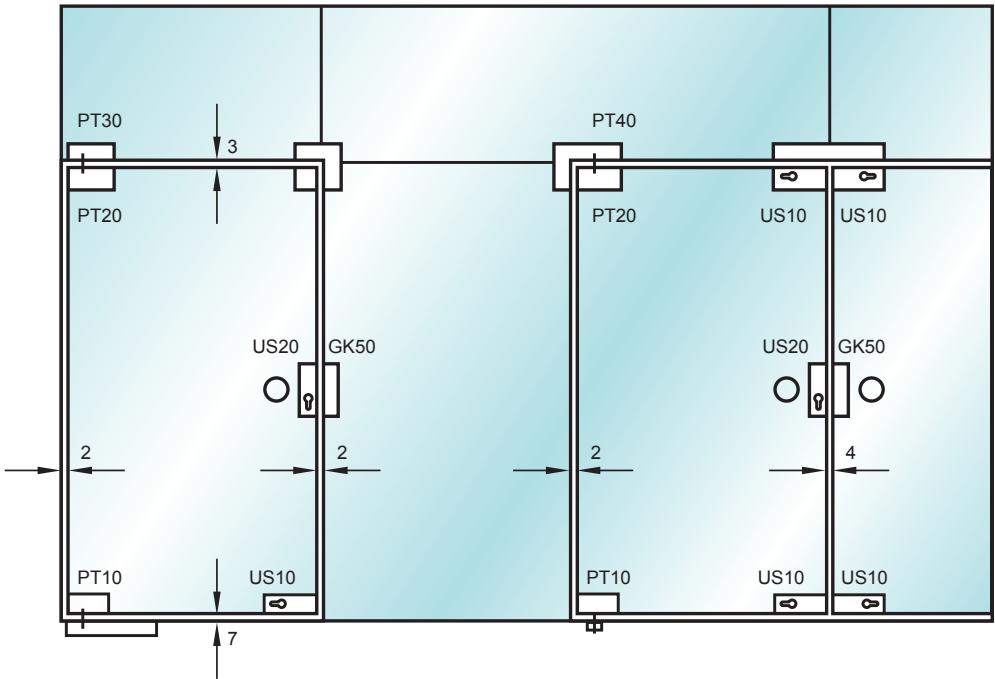
## DORMA UNIVERSAL LIGHT PATCH FITTINGS

The economic solution for toughened glass assemblies.

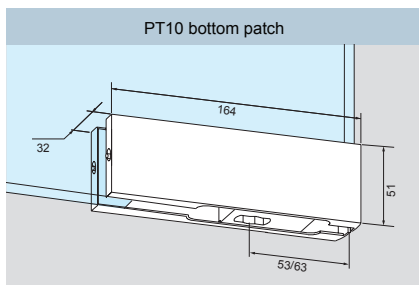
DORMA Universal Light patch fittings are designed and manufactured to high quality standards to meet the most widely demanded specifications for toughened glass assemblies. All Universal Light fittings are based on a modular system, consisting of a base unit, functional inserts, and clip-on covers. They are designed for doors up to a maximum weight of 85kg, and a maximum width of 1100mm. Universal Light fittings come with polished stainless steel covers, and are suitable for 10mm and 12mm thick glass doors.

Locks and other accessories in matching design complete the product offerings to give glass doors that integral and contemporary look from DORMA.

### Toughened glass assemblies with fittings and locks



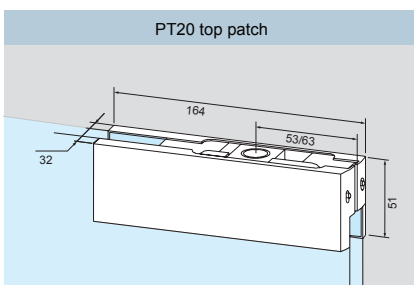
## PATCH FITTINGS & LOCKS



PT10 bottom patch

DRM-ULPT10

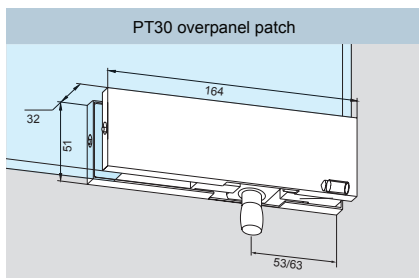
U/Price: 250.00



PT20 top patch

DRM-ULPT20

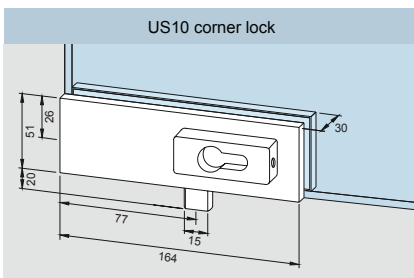
U/Price: 250.00



PT30 overpanel patch

DRM-ULPT30

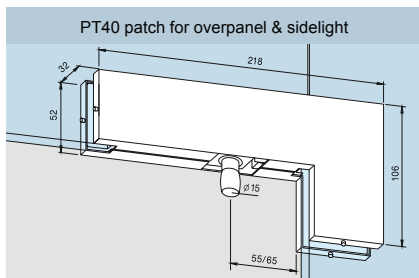
U/Price: 300.00



US10 corner lock

DRM-US10

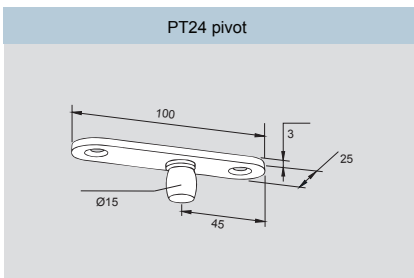
U/Price: 595.00



PT40 patch for overpanel & sidelight

DRM-ULPT40

U/Price: 438.00



PT24 pivot

DRM-ULPT24

U/Price: 94.00



## THE IDEAL LOW-COST SOLUTION FOR STANDARD DOORS

With the TS 68, DORMA has developed a low-cost door closer which can be universally used on all common door types. It is particularly quick and easy to install – and does not require a mounting backplate.

### Plus points

#### For the trade

- The low cost solution for standard doors.
- Just one model for all mounting positions.

#### For the installer

- Non-handed unit.
- Quick and easy to install.
- Fixes perfectly to all door types without the need for a mounting backplate.

The closer arm's power shoe and changes in templating allow easy selection of the closing force to suit various door sizes.

Certified to ISO 9001

#### For the architect/specifier

- Compact design.
- Inexpensive, proven reliability.

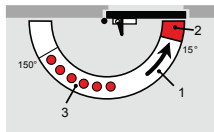
#### For the user

- Closing cycle largely unaffected by temperature changes.
- Two valves for optimum closing speed and reliable latching action.

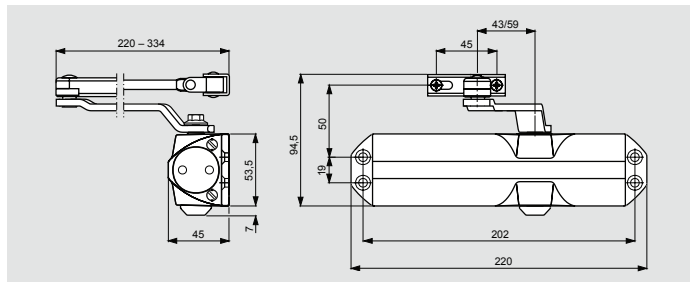
Technical Data		TS 68
Selectable closing force (variable via arm power shoe and templating)		EN 2/3/4
Door width	≤ 1100 mm	●
External doors, outward opening		–
Non-handed		●
Arm	Standard arm	●
	Slide channel	–
Closing speed adjustable via 2 independent valves	180° – 15°	●
	15° – 0°	●
Backcheck		–
Delayed action		–
Hold-open		○
Weight in kg		1.4
Dimensions in mm	Length	220.0
	Overall depth	45.0
	Height	53.5

● Yes – No ○ Option

### Standard and optional functions



- 1 Adjustable closing speed in the range 180° – 15°.
- 2 Adjustable closing speed in the range 15° – 0°.
- 3 Hold-open range with hold-open arm model (optional extra).



DRM-TS68 EN2/3/4

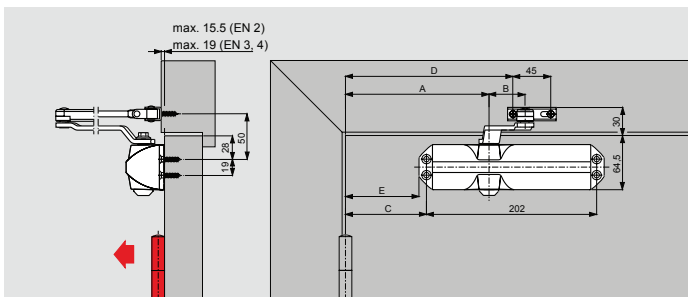
U/Price: 290.00

DRM-TS68HO EN2/3/4

U/Price: 450.00

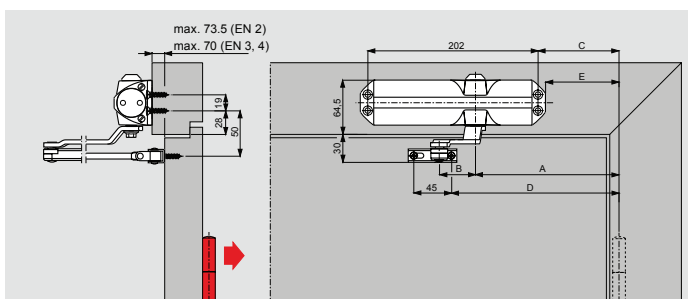
## DOOR-LEAF FIXING, PULL SIDE

	EN 2	EN 3	EN 4
<b>A</b>	170.0	170.0	250.0
<b>B</b>	59.0	43.0	43.0
<b>C</b>	96.0	96.0	176.0
<b>D</b>	198.5	198.5	278.5
<b>E</b>	87.0	87.0	167.0



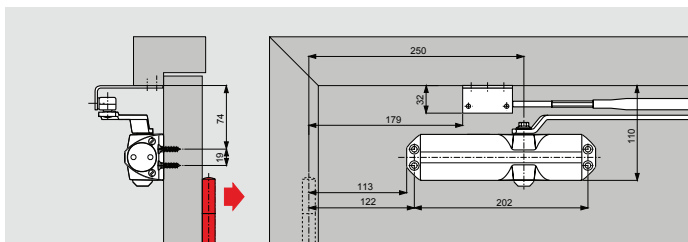
## FRAME FIXING, PUSH SIDE

	EN 2	EN 3	EN 4
<b>A</b>	170.0	170.0	250.0
<b>B</b>	59.0	43.0	43.0
<b>C</b>	96.0	96.0	176.0
<b>D</b>	198.5	198.5	278.5
<b>E</b>	87.0	87.0	167.0



## PARALLEL ARM FIXING, PUSH SIDE

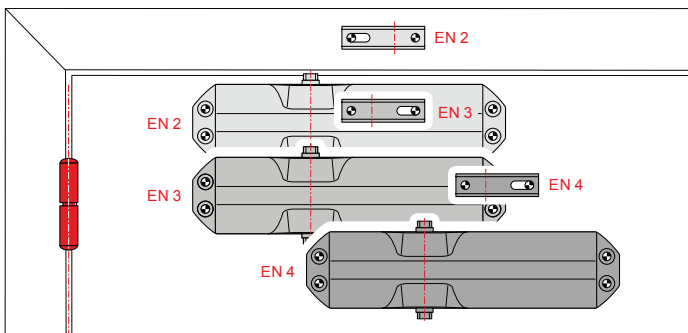
**EN 2**  
(door width max. 850 mm)



### Closing force settings

Door width	Size setting
≤ 850	EN 2
≤ 950	EN 3
≤ 1100	EN 4

The TS 68's size setting is selected for the door width by moving the closer body and/or turning the arm power shoe.





## HIGH-TECH FOR THE GLOBAL MARKET

The TS 90 Impulse combines technical superiority with outstanding value, and unites advanced design with convenient functionality – all on the basis of its heart-shaped cam.

With its installation versatility and inherent functional reliability, it is ideal for virtually any application.  
TS 90 Impulse:  
Certified to ISO 9001

### Benefits

For the trade

- Unique DORMA cam action technology for the entry-level segment, compliant with EN 1154.
- Complete package for easy stocking.
- Sets new standards to open up new markets.

### For the installer/fabricator

- Easy to fix without mounting backplate.
- Non-handed.
- Four installation arrangements with one model.
- Proven DORMA quality for long service life.

### For the architect/specifier

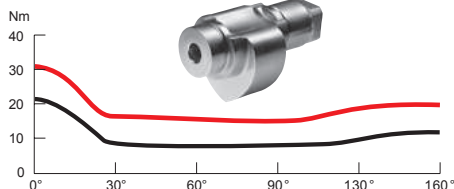
- Proven technology of the heart-shaped cam.
- Cost-efficient slide channel door closer for interior doors.

### For the user

- Convenient, low-resistance opening with fully controlled closing.
- Two regulating valves for precise adjustment of closing speed.
- Available with hold-open and cushioned limit stay options.



### Force profiles



Data and features		TS 90 Impulse
Closing force	Size	EN 3/4
Standard doors <sup>1)</sup>	≤ 1100 mm	●
External doors, outward opening <sup>1)</sup>		●
Fire and smoke check doors <sup>1)</sup>		●
Non-handed		●
Slide channel		●
Two independent valves for closing speed adjustment		●
Cushioned limit stay (mechanical)		○
Delayed action		–
Hold-open		○
Weight in kg		1.7
Dimensions in mm	Length	246
	Overall depth	46
	Height	57
Door closer compliant with EN 1154		●
CE-mark for construction products		●
● yes – no ○ option		

<sup>1)</sup> In the case of particularly heavy doors and doors that have to close against wind pressure, we recommend the DORMA TS 93.



DRM-TS90 EN3/4

U/Price: 800.00

DRM-TS90HO EN3/4

U/Price: 975.00

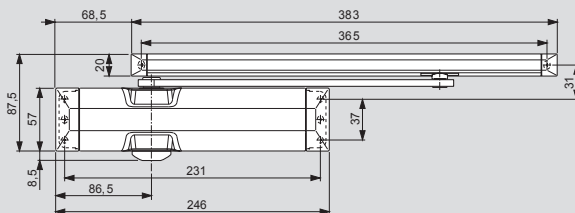
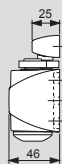
The heart-shaped cam and the linear drive mechanism of the TS 90 Impulse ensure that the resistance encountered decreases almost instantly with the door opening action – so even children, the elderly and people with disabilities have no problem in opening the door. User-friendly and reliable closing

is also ensured by the delayed increase in the actuating torque at the "latching" end of the sweep.

### Force profile

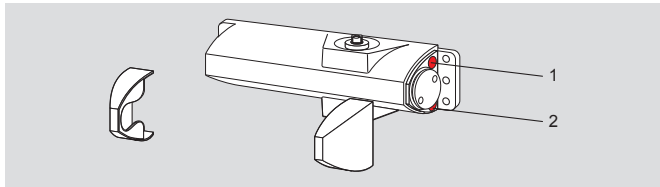
TS 90 Impulse  
(Spring strength: EN 3)

— Opening force  
— Closing force

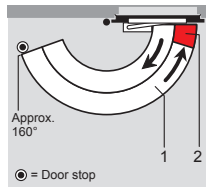


## STANDARD OPTIONAL FUNCTIONS

### Closing speed

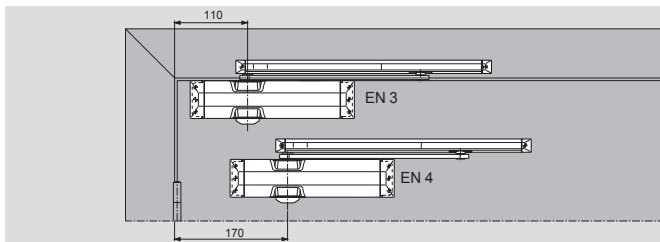


The closing speed of the TS 90 Impulse is adjustable in two independent ranges at the valves indicated.



- 1 Infinitely variable closing speed in the range 160° – 15°
- 2 Infinitely variable closing speed in the range 15° – 0°

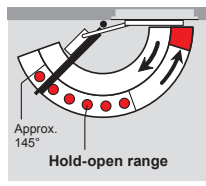
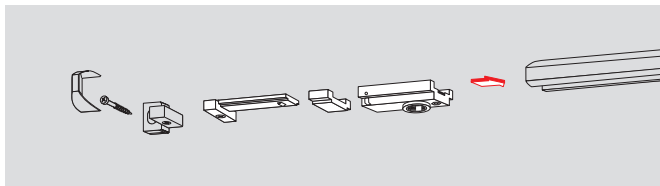
### Closing force settings EN3/4



Door width	size setting
≤ 950 mm	EN 3
≤ 1100 mm	EN 4

The TS 90 Impulse size setting is selected for the door width by the closer.

### Mechanical hold-open device

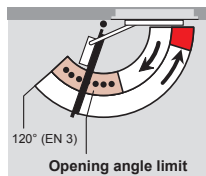
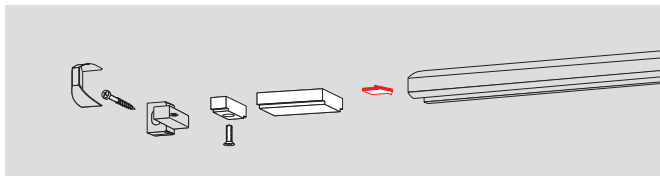


The hold-open device enables doors to be precisely held without any fall-back up to an opening angle of approx. 145°.

The hold-open device is suitable for both LH and RH doors and is designed for retrofitting to the slide channel.

**Not for fire and smoke doors.**

### Cushioned limit stay



Cushioned limit stay for retrofitting by insertion in the slide channel. Adjustable between 80° and max. 120°.

Use of the cushioned limit stay helps to prevent a normally opened door from colliding with adjacent walls.

**The cushioned limit stay is not an overload protection device and in many cases is no substitute for a door stop.** Only for the use of TS 90 Impulse size EN 3.

## CAM ACTION DOOR CLOSER SYSTEM TS93

### The perfect project solution for all application needs

The TS 93 cam action door closer system sets new standards in user convenience in project applications. The proven DORMA technology of the heart-shaped cam ensures exceptional ease of opening.

The TS 93 series comprises a modular system which enables just a few door closer models to be combined with a number of different slide channels to meet virtually every conceivable functional requirement. Doors of varying designs can be equipped for a wide range of different applications.

### Plus points...

#### ...for the trade

- Clear product allocation ensures use of the right models for the right applications.
- Identical door closer model for single and double doors

#### ...for the installer

- The TS 93 system is suitable for all fixing positions.
- Mounting bracket with universal fixing hole pattern for optimal fixing.
- Simple, fast installation.



DRM-TS93 EN2-5    DRM-TS93HO EN2-5

U/Price: 4143.00

U/Price: 4600.00

#### ...for the specifier/architect

- High-quality design ensures an ideal solution for all project applications.
- Harmonious appearance thanks to integral smoke detector.
- Available in a wide range of colours and finishes.

#### ...for the user

- Easy opening action and fully controlled closing.
- Smoke detector with convenient service and maintenance indicator.
- Adjustable hydraulic functions for easy adaptation to each specific door situation.

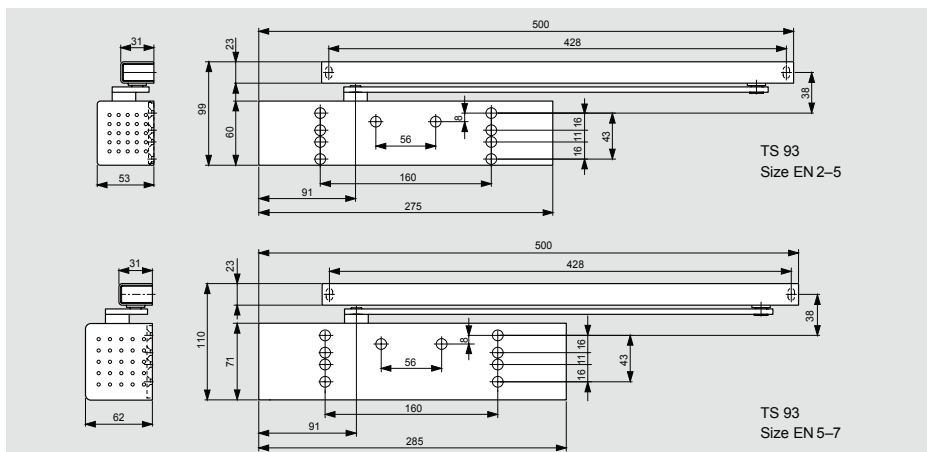
Data and features		TS 93 B/G <sup>1)</sup>	
Variable closing force	Spring strength	EN 2-5	EN 5-7
Standard doors <sup>2)</sup>	≤ 1250 mm ≤ 1600 mm	● -	- ●
External doors, outward opening <sup>2)</sup>	≤ 1250 mm ≤ 1600 mm	● -	- ●
For fire and smoke check doors <sup>2)</sup>	≤ 1250 mm ≤ 1600 mm	● -	- ●
Non-handed		●	●
Arm assembly type	Standard	-	-
	Slide channel	●	●
Closing force variable by means of adjustment screw		●	●
Closing speed adjustable by valve		●	●
Latching speed adjustable	at arm	-	-
	at valve	●	●
Backcheck (BC/ÖD)	adjustable	-	-
	at valve	●	●
Delayed action (DC/SV) adjustable at valve		●	●
Hold-open		○	○
Weight in kg		3.5	5.2
Dimensions in mm	Length (L)	275	285
	Overall depth (B)	53	62
	Height (H)	60	71
Door closer tested to EN 1154		●	●
Hold-open devices tested to EN 1155		●	●
Door co-ordinators tested to EN 1158		●	●
CE mark for building products		●	●

● yes    - no    ○ optional

<sup>1)</sup> B = Standard model for pull-side door leaf fixing/push-side transom fixing

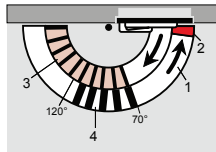
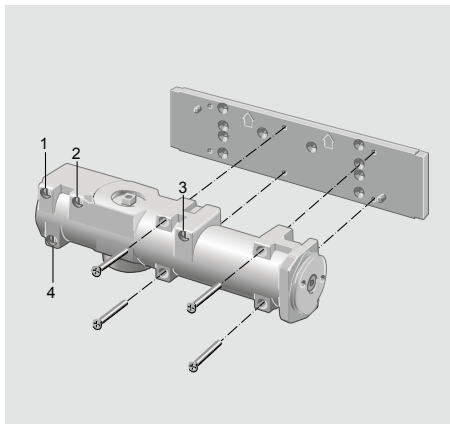
G = Special model for push-side door leaf fixing/pull-side transom fixing.

<sup>2)</sup> For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest door closer size should be selected, or the closing force adjusted to a higher setting.



## Standard mounting backplate with universal fixing hole system

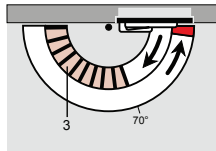
This mounting backplate with its universal hole system, including hole pattern to supplementary sheet 1 of DIN EN 1154 A, ensures ideal fixing whatever the conditions and irrespective of the door type. The fixing hole patterns are the same for both sizes of the TS 93. Additional mounting plates/brackets are no longer required. Alignment dowels on the mounting backplate facilitate location of the closer body.



- 1 Fully controlled closing action with adjustable speed
- 2 Adjustable latch speed
- 3 Adjustable backcheck
- 4 Adjustable delayed action

## Backcheck

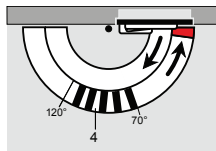
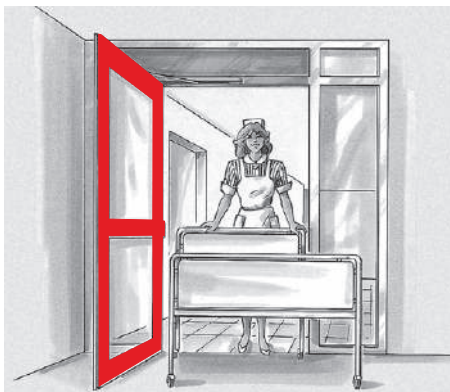
The backcheck feature ensures the safe deceleration and restraint of a door which has been flung open or caught by a gust of wind. This effectively reduces the danger of the door and adjacent wall being damaged.



- 3 Adjustable backcheck

## Delayed action

The delayed action feature retards the closing cycle between 120° and 70° (approximate values for pull-side door leaf fixing). The extra time allowed for passage through the doorway can be essential for people with luggage or bulky items: mothers with prams, personnel with tea trolleys, post trolleys, hospital beds, etc.; and also for disabled people.



- 4 Adjustable delayed action

## DOOR CLOSERS WITH PROJECTING ARM ASSEMBLY

Owing to their outstanding practical features and characteristics, DORMA door closers with projecting arm assembly are popular for use in hospitals, sheltered housing, hotels, public houses, bars, restaurants and office buildings.

### DORMA TS 83

If more time is required for passage through the doorway, the optional delayed-action mechanism provides this very feature - also applicable on fire and smoke check doors. The DORMA TS 83 is provided as standard with adjustable, self-regulating backcheck. Hold-open arms with on/off selector are also available for temporarily holding the doors at a specific point. And for external doors, the DORMA TS 83 can also be supplied with optimised corrosion protection.

### DORMA TS 73 V

A particularly versatile and compact door closer featuring conventional technology. It suits a wide range of internal doors and can also be used for fire and smoke check doors. The backcheck absorbs the force of doors opened energetically. Installation is simple and the DORMA TS 73 V can be provided with a hold-open device for doors that occasionally need to be kept open.

### DORMA TS 72

Whether LH or RH doors and whether timber, plastics or metal - the DORMA TS 72 is the ideal standard door closer. The unit is designed for direct fixing for easy installation and offers individual, infinitely variable closing force between EN 2 and 4 (adjustment screw) to suit the specific door sizes. The closing speed of the DORMA TS 72 can be set via two regulating valves. With an adjustable latching action and a second closing range from 15° to 0°.

Data and features	TS 83	TS 73V	TS 72
Closing force	EN	EN	EN
adjustable	3-6	7	2-4
Standard door,	≤1100mm	●	●*
external doors, outward opening	≤1250mm	-	-
fire and smoke check doors	≤1400mm	●	-
	≤1600mm	-	-
Non-handed	●	●	●
Arm assembly	●	●	●
Closing force adjustable	●	-	●
Closing speed adjustable by valve	●	●	●
Latching speed adjustable by arm	●	●	●
2nd closing range from 15° to 0°	-	-	●
Backcheck	Self-regulating	●	●
	Adjustable by valve	●	●
Delayed closing action adjustable by valve	○	-	-
Hold-open (not for fire and smoke check doors)	○	○	○
Door closer compliant with EN 1154	●	●	●

●Yes - no ○Option

\*Use only on standard doors

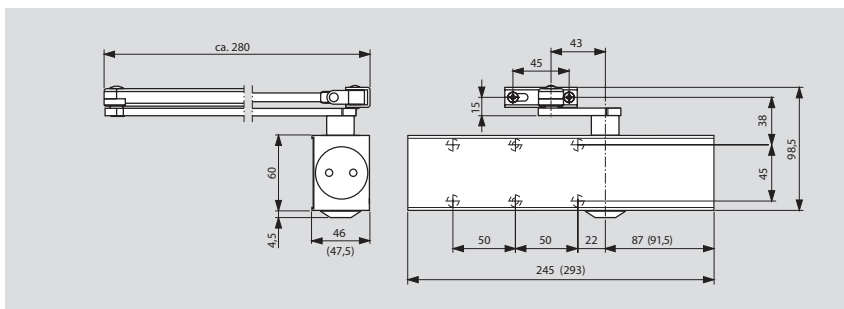


DRM-TS83 EN3-6

**U/Price: 1580.00**

DRM-TS83HO EN3-6

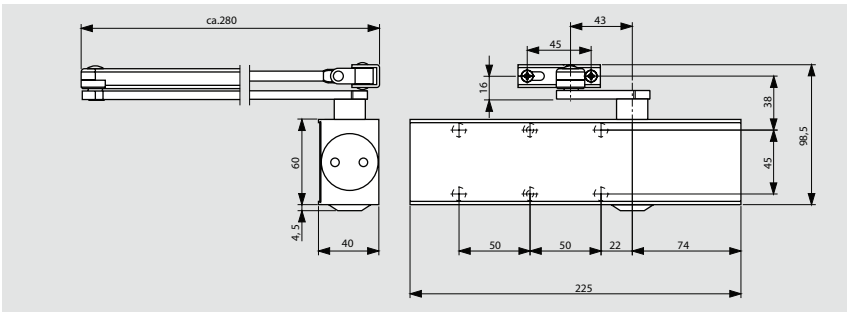
**U/Price: 1950.00**





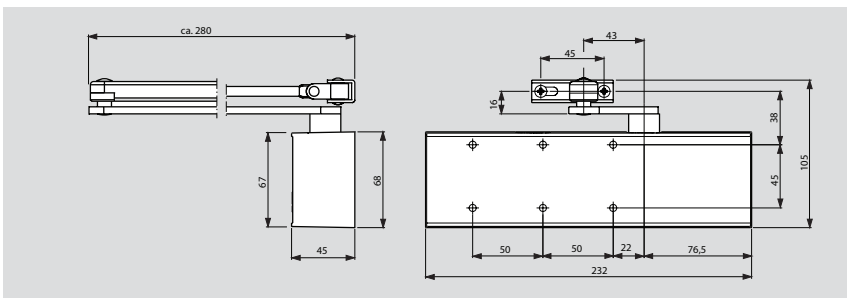
DRM-TS73V EN2-4

U/Price: 1100.00



DRM-TS72 EN2/3/4

U/Price: 650.00



## QUALITY-ASSURED CONCEALED OVERHEAD DOOR CLOSER

ITS 900 Cam-action door closer is designed and manufactured to high quality standards to meet the growing demand for an economical solution of high-performance concealed overhead door closer with standard features.

The compact design of the closer body and slide-channel arm assembly allows it to be installed in the door or frame, making it virtually invisible; and depending on the door

### Plus Points

#### For the trade

- Hassle-free ordering and inventory management - Closer body (non-handed) and slide-channel arm assembly in one box for ease of handling

#### For the installer

- Ease of installation - Compact concealed cam-action (non-handed system) door closer with identical mounting position for both size 3 and size 4.
- Easy adjustment of the two closing speeds separately.

#### For the architect/specifies/designer

- Innovative engineering and design by DORMA.
- Compliance with statutory requirements for barrier-free building (C UL US Listed).
- Unblemished appearance of prestige doors - concealed installation.

construction, it can be used on almost any type of door with a thickness of 45mm or more. ITS 900 offers all the benefits of advanced technology with the proven heart-shaped can which ensures that the closing and opening of the door are easy to use for everyone.

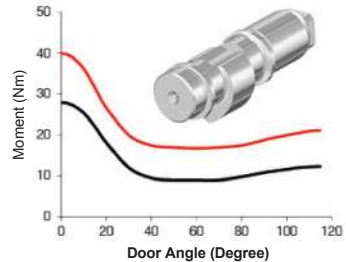
ITS 900 provides the reliability and quality which all DORMA products are well-known for.

#### For the user

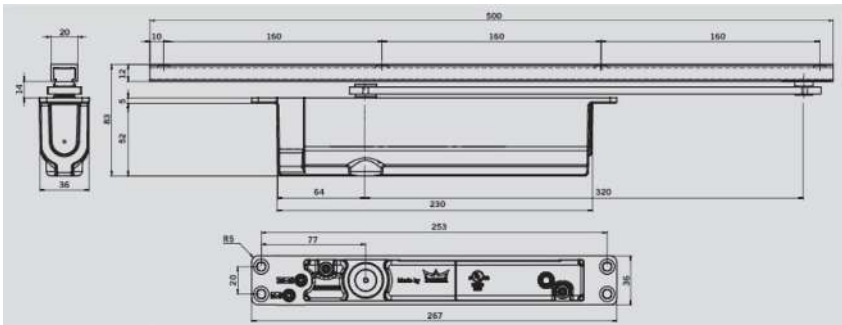
Barrier-free with DORMA Easy Open technology - Easy access for all users and for children, senior and the physically-disabled. Convenience and Comfort - optional hold-open device and cushioned limit stay. Enhanced protection against vandalism - concealed installation.

Features	Size 3	Size 4
First Closing Speed adjustable by valve	●	●
Second Closing Speed adjustable by valve	●	●
Maximum door opening angle	approx. 115°	
Closer width (mm)	36	
Body length (mm)	230	
Door leaf thickness	≥45mm	
Max door leaf weight (kg)	60	80
Max door Width (mm)	950	1100
Slide Channel	●	●
Non-handed design	●	●
Dimension (mm)	Length	267
	Width	36
	Height	57
Cushioned limit stay	●	●
Hold Open	○	○
C UL US Listed	●	●

●Yes - no ○Option



Moment profile of an ITS 900 cam-action door closer (Size 4) — Opening Moment — Closing Moment



## ENGINEERING AT ITS BEST FOR EASY ACCESS

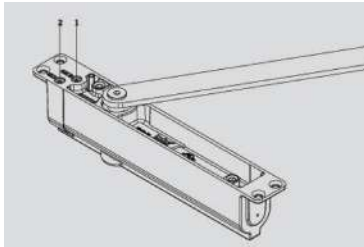
Engineered by DORMA, the inventor and leader of cam-action door closer, ITS 900 conceal door closer ensures that the door can be opened with exceptional ease for effortless access. The compact ITS 900 can be installed for complete visual concealment in

the door and frame. The system is optimally designed with selective strengthening of the closer body and a slim slide channel. At the same time, it offers the same level of user-convenience expected from high-quality door closers, combined with a wide range of

functionality. Its slender inclined body means that it can be easily installed in virtually all doors with a leaf thickness of 45mm or more, while it can operate doors of size 3 or size 4 with the same mounting locations. It offers easy adjustment with two independent valves.



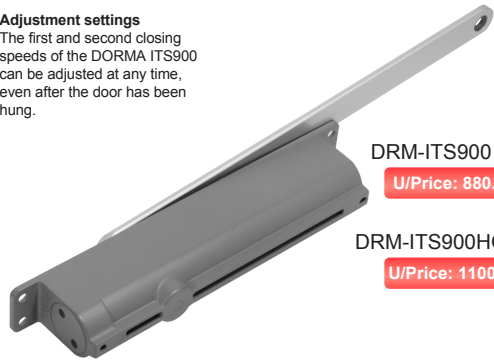
## VALVE ADJUSTMENT FOR SOLID CLOSING PERFORMANCE



- 1 Valve for adjusting the first closing speed ( $115^{\circ} - 15^{\circ}$ )
- 2 Valve for adjusting the second closing speed ( $15^{\circ} - 0^{\circ}$ )

### Adjustment settings

The first and second closing speeds of the DORMA ITS900 can be adjusted at any time, even after the door has been hung.



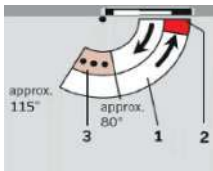
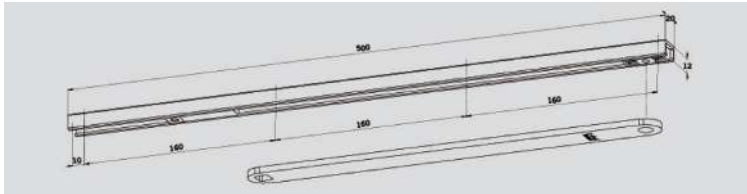
DRM-ITS900 EN4

U/Price: 880.00

DRM-ITS900HO EN4

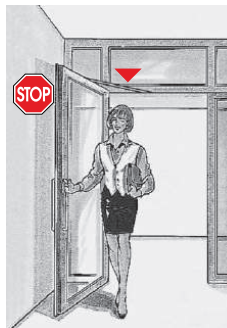
U/Price: 1100.00

## SLIDE CHANNEL



The ITS 900 pack includes the arm, slide channel, slide block, cushioned limit stay and fixing screws.

- 1 First adjustable closing speed
- 2 Second adjustable closing speed
- 3 Cushioned limit stay



### Cushioned limit stay

The mechanically-integrated cushioned limit stay of ITS 900 is progressively damped to protect the wall and doors from damage when the door is opened too wide (under conditions of normal usage). It can be adjusted to an opening angle between approximately  $80^{\circ}$  and a maximum of  $115^{\circ}$ .

**The cushioned limit stays feature is not an overload protection device and in many cases cannot replace a doorstop.**



# CONCEAL DOOR CLOSER



## UNCOMPROMISING TECHNICAL SOPHISTICATION

The DORMA ITS 96 has ushered in a new era in door closer technology. The closer body and slide channel are so compact that they can be installed out of sight in doors and their frames. These devices offer the same high quality expected of DORMA door closers, as characterised by their ease of operation for the user, and wide range of functions.

Thanks to the exceptionally slender dimensions of the unit, the DORMA ITS 96 can be installed in virtually all doors with thicknesses of 40 mm or more, and offers all the advantages of quality assured manufacture with third-party auditing.

Certified to ISO 9001.

## PLUS POINTS ...

### ...for the trade

- Low inventory costs and reduced stocking requirements thanks to streamlined modular system and separate packaging of closer body and slide channel assemblies.
- Tailor-made applications with special accessories.

### ...for the installer

- Non-handed system.
- Can be incorporated within the door pre-fabrication process, allowing complete installation in the factory.
- Easy adjustment of the closing strength, closing speed and latch action after hanging of the doors.

### ...for the specifier/architect

- Unblemished appearance of prestige doors thanks to concealed installation.
- Ideal for doors integral to the interior design.


### ...for the user

- Optimum protection against vandalism thanks to the concealed installation.
- Enhanced user convenience and fully controlled, reliable closing with adjustable latch action.
- Cushioned limit stay with progressive damping for protection of wall and door.

Data and features		ITS 96	
		EN 2-4	EN 3-6
Variable closing force	Spring strength	●	●
Standard doors	up to 1100 mm up to 1400 mm	–	●
External doors, outward opening		–	–
Fire and smoke check doors	up to 1100 mm up to 1400 mm	●	●
Door leaf thickness	equal to/greater than 40 mm equal to/greater than 50 mm	●	–
Max. door leaf weight in kg		100	180
Non-handed design (closer)		●	●
Arm	Slide channel	●	●
Closing force variable by means of adjustable screw		●	●
Closing speed adjustable by means of valve		●	●
Latching speed adjustable by means of valve		●	●
Cushioned limit stay, mechanical		●	●
Hold-open		○	○
Max. door opening angle (depends on door design)		approx. 120°	
Weight in kg		1.3	2.5
Dimensions in mm		Length	277
		Width	32
		Height	42
		291	39.5
Door closer tested to EN 1154 A			
Hold-open devices tested to EN 1155			●
Door co-ordinators tested to EN 1158			●
☑ mark for building products			●

● Yes – No ○ Option

### Further information

Additional information about many of our products is available from a range of electronic media (Internet, CD-ROM). The abbreviated codes next to the computer symbol  indicate the search terms.

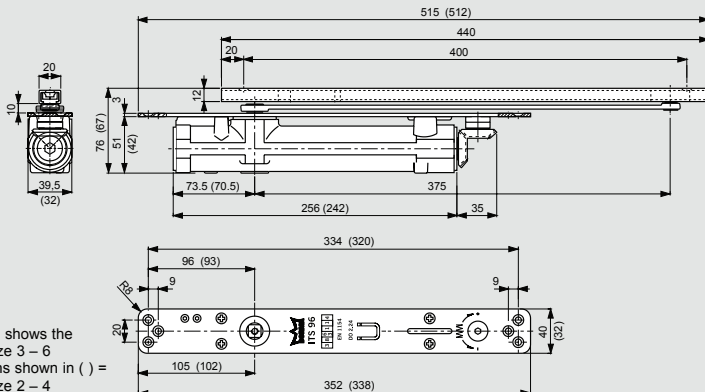
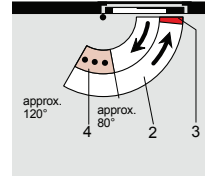
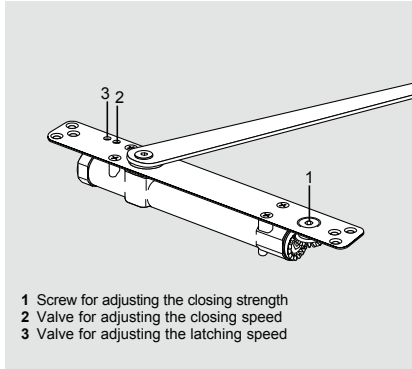


Illustration shows the ITS 96, size 3 – 6  
Dimensions shown in ( ) = ITS 96, size 2 – 4

## Adjustment of settings

The functions of the DORMA ITS 96 can be individually adapted to the local conditions of each application. The closing strength can be easily varied in accordance with the door width via the adjustment screw accessible from the top. The closing speed and the latch action can likewise be modified at any time using adjustment screws at the top, even after the door has been hung.

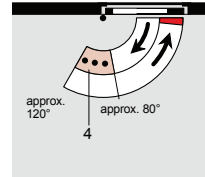
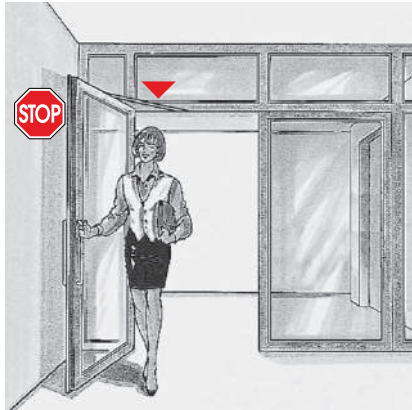


- 2 Fully controlled closing with adjustable speed
- 3 Adjustable latch action
- 4 Cushioned limit stay

## Cushioned limit stay

The integrated mechanically cushioned limit stay of the DORMA ITS 96 is progressively damped to protect the wall and doors from the damage arising from the door being opened too wide (under conditions of normal usage). It can be adjusted to an opening angle between approx. 80° and max. 120°.

**The cushioned limit stay feature is not an overload protection device and in many cases cannot replace a doorstop.**



- 4 Cushioned limit stay

## Approval certification

The DORMA ITS 96 is approved by the State Material Testing Authority, Dortmund, in accordance with EN 1154 A. Additionally, the model size EN 2 – 4 and EN 3 – 6 has CERTIFIRE approval (CF.140) for use on timber FD30 and FD60 doors (code ITT), when installed with the approved intumescent gasket set for FD30 or FD60 supplied by DORMA UK. The length, width and height of mortice for the body and slide channel must be increased by 2 mm to accommodate the gasket on 30 minute doors and 4 mm on the channel only for 60 minute doors. The ITS 96 has 4 hour CERTIFIRE approval for metal doors.

## Specification text

Cam-action door closer integrated in the door leaf or frame, tested to EN 1154 A, with rapidly decreasing opening torque/force. Closing strength, closing speed and latch action adjustable. Non-handed, with slide channel...

## Size

- EN 2 – 4
- EN 3 – 6



DRM-HODG96N

U/Price: 270.00

DRM-ITS96 EN2-4 U/Price: 1705.00

DRM-ITS96HO EN2-4 U/Price: 1955.00

DRM-ITS96 EN3-6 U/Price: 2750.00

DRM-ITS96HO EN3-6 U/Price: 3000.00



# MORTISE LOCK



## MORTISE LOCK 281 (AISI 304)

Locks for interior and exterior doors, e.g. in office buildings

### Features

Grade 2 – EN 12209

approved for fire-rated doors with CE certificate

- Lock case size DIN 18251-1, closed case, zinc plated
- lock case prepared for Euro profile cylinder (DIN18252) and standard fittings
- latch handing is reversible
- latch and dead bolt, stainless steel, satin
- follower, stainless steel, 8 mm square hole, mounted in drawn steel bushes
- centred forend, satin stainless steel 1.4301 / AISI 304

**Recommended Strike plate: 20**      **side: non-handed**

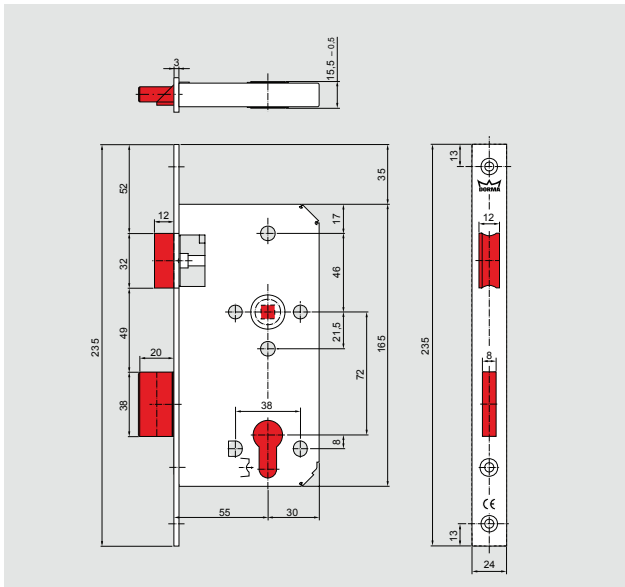
### Classification EN 12209

2	S	8	1	0	G	3	H	C	2	0
---	---	---	---	---	---	---	---	---	---	---



DRM-281A

U/Price: 192.00



## MORTISE LOCK 381 (AISI 316)

Locks for interior and exterior doors, e.g. in public buildings

### Features

- Grade 3 – EN 12209, approved for fire-rated doors with CE certificate
- Lock case size DIN 18251-1, closed case with sleeves, zinc plated, black painted
- lock case prepared for Euro profile cylinder (DIN18252) and standard fittings
- latch handing is reversible
- latch and dead bolt, stainless steel, satin
- Security dead bolt with hardened anti-saw pins, anti-picking shield
- clamp follower, stainless steel, 8 mm square hole, with separate bush bearing
- centred forend, satin stainless steel 1.4401 / AISI 316

**Recommended Strike plate: 20**      **side: non-handed**

### Classification EN 12209

3	X	8	1	0	G	4	H	C	2	0
---	---	---	---	---	---	---	---	---	---	---



DRM-381A

U/Price: 250.00

