

# The concealed cam action door closer system with slide channel

The DORMA ITS 96 system has become a standard in door closer technology. Closers and slide channels are now so compact that they can be installed out of sight in doors and their frames. Yet these devices offer the same high quality expected of DORMA door closers with all the familiar ease of operation and widely ranging functionality.

### Force profiles

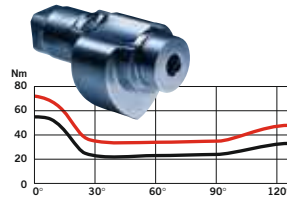
Equipped with the linear drive and heart-shaped cam, the door closers of the DORMA ITS 96 system offer the compelling advantage of an almost immediate reduction in resistance as the door is opened.

### Pre-assembly

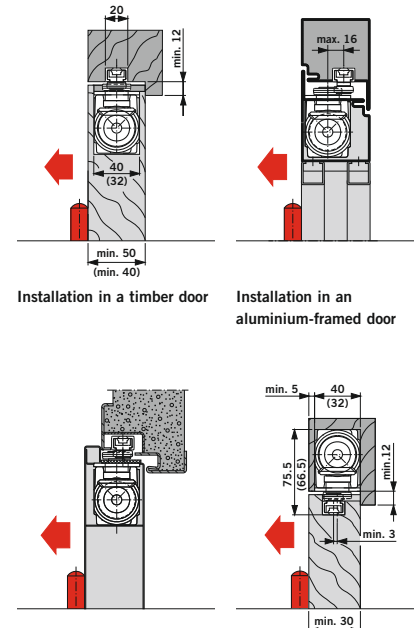
The door closers of the DORMA ITS 96 system are particularly suitable for pre-assembly. This is because the closing speed, closing force and latching action can all be adjusted without problem after component installation in the door.

### Approval certification

The DORMA ITS 96 has been tested and approved to EN 1154 by the State Material Testing Authority, Dortmund/Germany and is subject to third-party quality verification. Regular audit testing is undertaken. Test reports and/or certificates are available on request. The ITS 96 carries the **CE** mark. Additional approval certification of the relevant fire and smoke check door in combination with the closer system may be necessary – check local regulations.



Force profiles  
Closing force setting EN 6  
— Opening moment  
— Closing moment



Installation in a steel door Transom installation

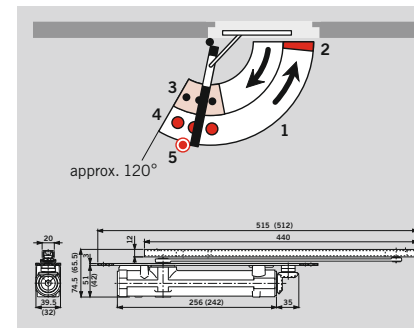
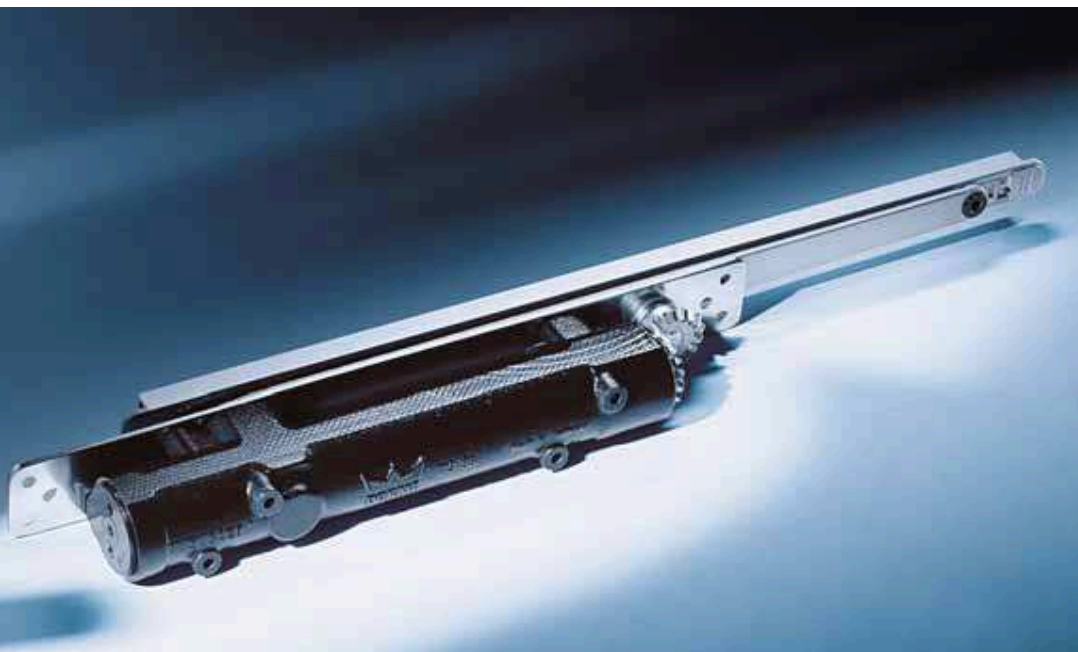
All examples refer to left-hand (ISO 6) doors; mirror image applies to right-hand (ISO 5) doors. All dimensions show ITS 96 3-6 ( ) = ITS 96 2-4

| Data and features                                  | ITS 96                 |               |
|--|------------------------|---------------|
|  | EN 2-4                 | EN 3-6        |
| Closing force adjustable                           | Spring strength        | EN 2-4 EN 3-6 |
| Standard doors, fire and smoke check doors         | ≤ 1100 mm<br>≤ 1400 mm | • •<br>- •    |
| Door leaf thickness                                | IV 40 mm<br>IV 50 mm   | • •<br>• •    |
| Max. door leaf weight in kg                        | 100                    | 180           |
| Non-handed   | •                      | •             |
| Slide channel                                      | •                      | •             |
| Closing force adjustable by screw                  | •                      | •             |
| Closing speed adjustable by valve                  | •                      | •             |
| Latching action adjustable by valve                | •                      | •             |
| Cushioned limit stay                               | •                      | •             |
| Hold-open (not for fire and smoke check doors)     | ○                      | ○             |
| Max. door opening angle (depending on door design) |                        | approx. 120°  |
| Door closer compliant with EN 1154                 |                        | •             |
| Hold-open devices compliant with EN 1155           |                        | •             |
| Door co-ordinators compliant with EN 1158          |                        | •             |
| CE mark for construction products                  |                        | •             |

• yes - no ○ optional

### ITS 96 compendium

You will find all the information you need relating to the DORMA ITS 96 system on this CD-ROM, which you can order online at [www.dorma.com](http://www.dorma.com).



### DORMA ITS 96 N 20

- Non-handed model for RH (ISO 5) and LH (ISO 6)
- Adjustable closing force (EN 2-4, 3-6)
- Adjustable closing speed (1)
- Adjustable latching action (2)
- Cushioned limit stay (3)
- Hold-open device RF, optional (4) (not approved for fire and smoke check doors)
- Floor stop OGRO TZ 5000 (5)

For specification texts, see page 288 ff.

## With hold-open for single-leaf fire and smoke check doors

### DORMA ITS 96 EMF

The electro-mechanical hold-open device ensures that the door is held open in precisely the position required. In the event of an alarm or power failure, the door is released and the door closer closes the door. Release activation is by external lintel or ceiling-mounted smoke detectors

(e.g. DORMA RMZ or RM in the Contur design). The hold-open can also be simply released by hand.

#### Note:

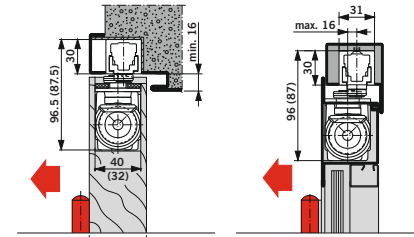
The hold-open point also constitutes the maximum door opening angle. A door stop must be installed at this position.

### Technical data

Operating voltage 24 V DC  
Power input 1.6 W  
Rated for continuous duty 100% DF  
Compliant with EN 1155

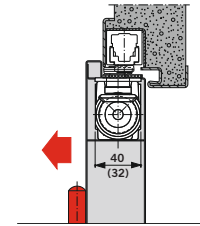
### F Approval certification

The DORMA ITS 96 EMF has been tested and approved to EN 1155 by the State Material Testing Authority, Dortmund/Germany and is subject to third-party quality verification. Regular audit testing is undertaken. Test reports and/or certificates are available on request. The ITS 96 carries the CE mark. Additional approval certification of the relevant fire and smoke check door in combination with the closer system may be necessary – check local regulations.



Installation in a timber door

Installation in an aluminium-framed door



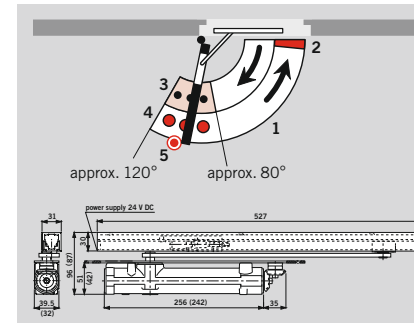
Installation in a steel door



#### Application example:

Hold-open system in a fire and smoke check door, comprising: Door closer DORMA ITS 96 EMF (1); slide channel DORMA G 96 EMF (2); lintel-mounted smoke detector DORMA RMZ (3); one ceiling-mounted smoke detector DORMA RM (4) located either side of the door; door stop OGRO TZ 5000 (5)

All examples refer to left-hand (ISO 6) doors; mirror image applies to right-hand (ISO 5) doors. All dimensions show ITS 96 3-6 ( ) = ITS 96 2-4



### DORMA ITS 96 EMF

- Non-handed model for RH (ISO 5) and LH (ISO 6)
- Adjustable closing force (EN 2-4, 3-6)
- Adjustable closing speed (1)
- Adjustable latching action (2)
- Cushioned limit stay (3)
- Electro-mechanical hold-open, adjustable release force (4)
- Floor stop OGRO TZ 5000 (5)

For specification texts, see page 288 ff.

## DORMA ITS 96 System project applications

### DORMA Movable Walls

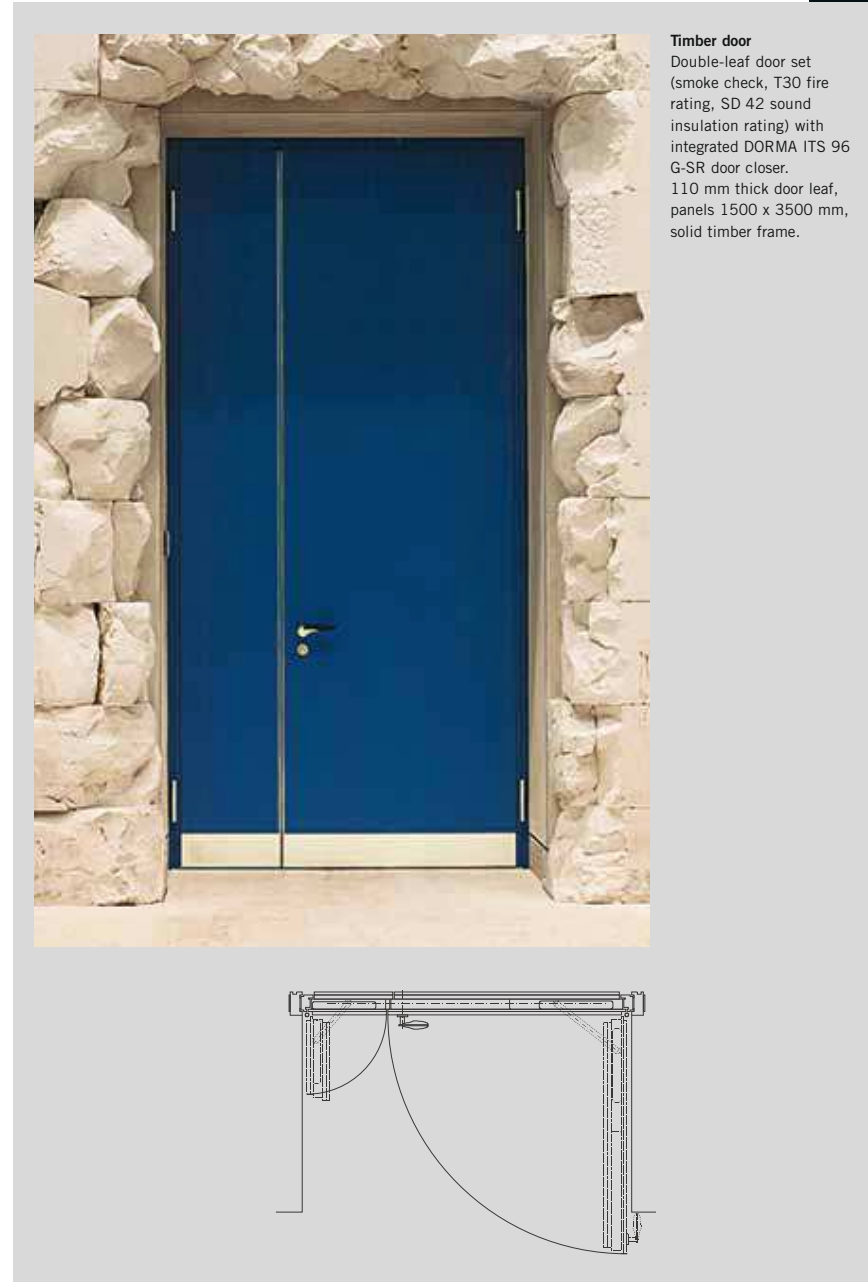
Varitrans CVA with sliding  
passdoor element.

Door closer system:  
DORMA ITS 96.



### T 30/RS/SD 42

Double-leaf door set (smoke  
check, T30 fire rating, SD 42  
sound insulation rating) with  
integrated DORMA ITS 96  
G-SR door closer. 110 mm  
thick door leaf, with fixed side  
screens and arching over-  
panel. Surface RAL-painted.  
Flush stainless steel kick  
plates and edge protection  
trim profiles.



**Timber door**  
Double-leaf door set  
(smoke check, T30 fire  
rating, SD 42 sound  
insulation rating) with  
integrated DORMA ITS 96  
G-SR door closer.  
110 mm thick door leaf,  
panels 1500 x 3500 mm,  
solid timber frame.





## For double-leaf standard and fire/smoke check double doors

### DORMA ITS 96 G-SR

**with door co-ordinator**  
Ensures the correct closing sequence of double doors, i.e. inactive leaf before active leaf.  
The system operates with a push-rod clamping system with overload release that operates independently of the closer hydraulics. The release mechanism is integrated in the slide channel.



### DORMA ITS 96 G-SR-EMF

**with door co-ordinator and electro-mechanical hold-open**

This system allows the precise and independent setting of the hold-open positions of each leaf of fire and smoke check double doors. In the event of an alarm or power failure, the hold-open is released and the door closer automatically closes the door leaves in the correct sequence.

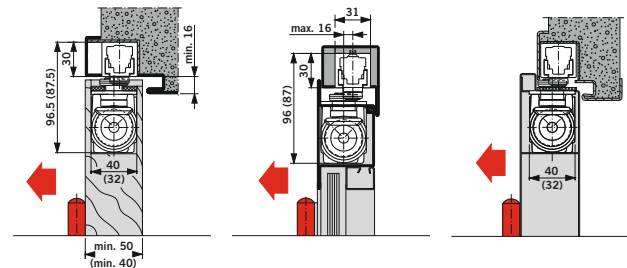
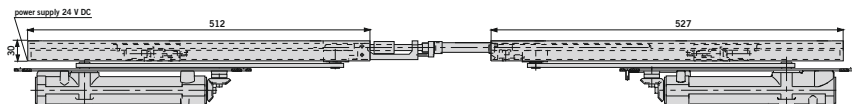
Release activation is by lintel or ceiling-mounted smoke detectors (e.g. DORMA RMZ or RM in the Contur design). Simple manual release is also possible.

#### Note:

The hold-open point is also the maximum door opening angle. A door stop must be installed at this position.

### F Approval certification

The DORMA ITS 96 G-SR-EMF has been tested and approved by the State Material Testing Authority, Dortmund/Germany for use on double doors in accordance with EN 1158 and EN 1155, and is subject to third-party verification. Regular audit testing is undertaken. Test reports and/or certificates are available on request. The ITS 96 carries the **CE** mark. Additional approval certification of the relevant fire and smoke check door in combination with the closer system may be necessary – check local regulations.



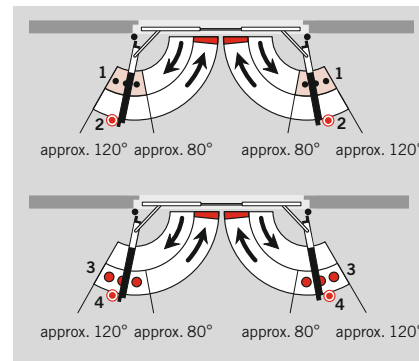
Installation in a timber door

Installation in an aluminium-framed door

Installation in a steel door

All examples refer to left-hand (ISO 6) doors; mirror image applies to right-hand (ISO 5) doors. ( ) = ITS 96 2-4

| Technical data            |         |
|---------------------------|---------|
| Operating voltage         | 24 V DC |
| Power input               | 3.2 W   |
| Rated for continuous duty | 100% DF |
| Adjustable release force  |         |



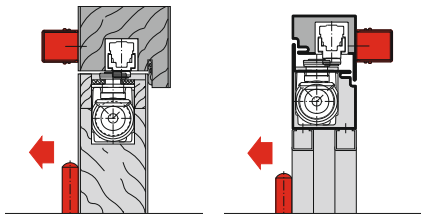
### DORMA ITS 96 G-SR

Ensuring the correct closing sequence of door leaves.  
Compliant with EN 1158  
– Cushioned limit stay (1)  
– Door stop OGRO TZ 5000 (2)

### DORMA ITS 96 G-SR-EMF

Independent hold-open of the door leaves and correct closing sequence in the event of an alarm  
– Electro-mechanical hold-open, adjustable release force (3)  
– Door stop OGRO TZ 5000 (4)

For specification texts, see page 288 ff.



Contur design RMZ lintel-mounted smoke detector on the pull side in conjunction with the ITS 96 G-SR-EMF

Contur design RMZ lintel-mounted smoke detector on the push side in conjunction with the ITS 96 G-SR-EMF

**Double doors with ITS 96 G-SR/G-SR-EMF**

| ITS 96 door closer size | Total door width (mm) | Width of inactive leaf min. (mm) | Door leaf thickness min. (mm) |
|-------------------------|-----------------------|----------------------------------|-------------------------------|
| EN 2-4                  | 1400-2200             | 700                              | 40                            |
| EN 3-6                  | 1400-2800             | 700                              | 50                            |

When installing on fire and smoke check doors, the DORMA MK 397 carry bar must also be used.

**G-SR door co-ordinator for narrow inactive leaf**

Only for timber doors

|                     |             |
|---------------------|-------------|
| Inactive leaf width | 540-700 mm  |
| Active leaf width   | min. 750 mm |

Other door situations on application



**Application example:** Hold-open system on a double door, comprising: Two door closers type DORMA ITS 96 (1); active and inactive slide channel DORMA G 96 G-SR-EMF (2) with push-rod clamping system; Contur design RMZ lintel-mounted smoke detector (3), and one DORMA RM ceiling-mounted smoke detector in the Contur design (4) on either side of the door; two door stops type OGRO TZ 5000 (5); carry bar MK 397 (6)

**Timber door**

Double-leaf, T30 fire-rated door with integrated door closer system type DORMA ITS 96 G-SR-EMF. Project: Siebeneichen Castle near Dresden



**Narrow-stile steel-framed door**

Double-leaf, T30 fire-rated, integrated door closer system type DORMA ITS 96 G-SR-EMF (left)



**Steel door**

Double door with narrow inactive leaf, integrated door closer system type DORMA ITS 96 G-SR (right)



**Special door**

Double-leaf door set, fire rating T 90, with integrated door closer type DORMA ITS 96 G-SR-EMF; solid timber frame integrated in wall cladding