ITS 96

Concealed cam-action door closer system
Concealed cam-action door closer system DORMA ITS 96

Concealed cam-action door closer system DORMA ITS 96

To ensure that prestigious doors retain all their inherent attraction, they can now be fitted with a concealed cam-action door closer system – the DORMA ITS 96. This is the first system of its kind, one which can be integrated in the door leaf and frame with the utmost elegance. Where the emphasis is on appearance, the disappearing DORMA System ITS 96 is the ideal solution for your doors: Advanced technology accommodated within the tightest of spaces, totally out of sight and featuring the proven heart-shaped cam which characterises all DORMA slide channel door closers. The cam is literally at the heart of DORMA slide channel door closers – it guarantees secure closing while at the same time offering a rapidly decreasing opening force so that even children, the elderly and disabled people encounter only minimum resistance as they open the door. However, it is not only these categories of user who benefit. Thanks to the substantial reduction in effort required, this technology offers the ultimate in user convenience to all.

Flawless beauty

To ensure that prestigious doors retain all their inherent attraction, they can now be fitted with a concealed cam-action door closer system – the DORMA ITS 96. This is the first system of its kind, one which can be integrated in the door leaf and frame with the utmost elegance. Where the emphasis is on appearance, the disappearing DORMA System ITS 96 is the ideal solution for your doors: Advanced technology accommodated within the tightest of spaces, totally out of sight and featuring the proven heart-shaped cam which characterises all DORMA slide channel door closers. The cam is literally at the heart of DORMA slide channel door closers – it guarantees secure closing while at the same time offering a rapidly decreasing opening force so that even children, the elderly and disabled people encounter only minimum resistance as they open the door. However, it is not only these categories of user who benefit. Thanks to the substantial reduction in effort required, this technology offers the ultimate in user convenience to all.

Force profile of an ITS 96 cam action door closer (Size EN 3 – 6, max. closing strength setting)

- Opening force
- Closing force

Flawless beauty

To ensure that prestigious doors retain all their inherent attraction, they can now be fitted with a concealed cam-action door closer system – the DORMA ITS 96. This is the first system of its kind, one which can be integrated in the door leaf and frame with the utmost elegance. Where the emphasis is on appearance, the disappearing DORMA System ITS 96 is the ideal solution for your doors: Advanced technology accommodated within the tightest of spaces, totally out of sight and featuring the proven heart-shaped cam which characterises all DORMA slide channel door closers. The cam is literally at the heart of DORMA slide channel door closers – it guarantees secure closing while at the same time offering a rapidly decreasing opening force so that even children, the elderly and disabled people encounter only minimum resistance as they open the door. However, it is not only these categories of user who benefit. Thanks to the substantial reduction in effort required, this technology offers the ultimate in user convenience to all.
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.

Data and features

<table>
<thead>
<tr>
<th>Data and features</th>
<th>ITS 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable closing force</td>
<td>Spring strength</td>
</tr>
<tr>
<td>Standard doors</td>
<td>up to 1100 mm</td>
</tr>
<tr>
<td>External doors, outward opening</td>
<td>–</td>
</tr>
<tr>
<td>Fire and smoke check doors</td>
<td>up to 1100 mm</td>
</tr>
<tr>
<td>Door leaf thickness</td>
<td>equal to/greater than 40 mm</td>
</tr>
<tr>
<td>Max. door leaf weight in kg</td>
<td>100</td>
</tr>
<tr>
<td>Non-handed design (closer)</td>
<td>●</td>
</tr>
<tr>
<td>Closing force variable by means of adjustable screw</td>
<td>●</td>
</tr>
<tr>
<td>Closing speed adjustable by means of valve</td>
<td>●</td>
</tr>
<tr>
<td>Latching speed adjustable by means of valve</td>
<td>●</td>
</tr>
<tr>
<td>Cushioned limit stay, mechanical</td>
<td>●</td>
</tr>
<tr>
<td>Delayed action</td>
<td>–</td>
</tr>
<tr>
<td>Hold-open</td>
<td>○</td>
</tr>
<tr>
<td>Max. door opening angle (depends on door design)</td>
<td>approx. 120°</td>
</tr>
<tr>
<td>Weight in kg</td>
<td>1.3</td>
</tr>
<tr>
<td>Dimensions in mm</td>
<td>Length</td>
</tr>
<tr>
<td>External doors</td>
<td>277</td>
</tr>
<tr>
<td>Fire and smoke check doors</td>
<td>291</td>
</tr>
<tr>
<td>Doors</td>
<td></td>
</tr>
<tr>
<td>Door closer tested to EN 1154 A</td>
<td>●</td>
</tr>
<tr>
<td>Hold-open devices tested to EN1155</td>
<td>●</td>
</tr>
<tr>
<td>Door co-ordinators tested to EN1158</td>
<td>●</td>
</tr>
<tr>
<td>£ mark for building products</td>
<td>●</td>
</tr>
<tr>
<td>● Yes – No</td>
<td>○</td>
</tr>
</tbody>
</table>

Further information

Additional information about many of our products is available from a range of electronic media (Internet, CD-ROM, diskettes). 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.

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.

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 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.

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... (see pages 8 – 15)

<table>
<thead>
<tr>
<th>Size</th>
<th>Make DORMA ITS 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 2 – 4</td>
<td>ITS96/2-4</td>
</tr>
<tr>
<td>EN 3 – 6</td>
<td>ITS96/3-6</td>
</tr>
</tbody>
</table>

[Diagram showing screw for adjusting the closing strength, valve for adjusting the closing speed, and valve for adjusting the latching speed]

STOP

[Diagram showing cushioned limit stay features]

available in the US through index-d. 877-777-0592. www.index-d.com
The DORMA ITS 96 concealed cam action door closer system is suitable for various door designs and different rebate clearance dimensions. This is achieved through the combination of different spindle lengths available with the closer and the universal K8/K12 slide channel. Installation suggestions for the DORMA ITS 96 door closer system relating to the most common door types are available from DORMA on request.
Timber door, flush-closing, clearance 8.5 mm, with ITS 96 EN 3–6 and slide channel G 96 N20 K8.

Tubular steel frame door, flush-closing, clearance 12 mm, with ITS 96 EN 3–6 and slide channel G 96 N20 K12.

Hollow steel door with steel frame, over-rebated, clearance 12 mm, with ITS 96 EN 3–6, 4 mm extended spindle and slide channel G 96 EMF K8.

Aluminium tubular frame door, flush-closing, clearance 16 mm, with ITS 96 EN 3–6, 4 mm extended spindle and slide channel G 96 N20 K12.

Timber door with steel frame, flush-closing, clearance 12.5 mm, with ITS 96 EN 3–6, 4 mm extended spindle and slide channel G 96 N20 K8.

Timber door with solid frame, double rebated, clearance 20 mm, with ITS 96 EN 3–6, 8 mm extended spindle and slide channel G 96 N20 K12.

Please check dimensions carefully.

Please check dimensions carefully.
The DORMA G 96 N20 slide channel pack includes the arm, slide channel, slide block, cushioned limit stay and fixing screws, and can be combined with both door closer sizes in the DORMA ITS 96 range.

The DORMA G 96 N20 slide channel is tested to EN 1154 A in conjunction with the DORMA ITS 96. Additionally, it has CERTIFIRE approval 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 slide channel must be increased by 2 mm to accommodate the gasket.

The length, width and height of mortice for the slide channel is adjustable to K8/K12.

The G 96 N20 slide channel is tested to EN 1154 A in conjunction with the DORMA ITS 96. Additionally, it has CERTIFIRE approval 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 slide channel must be increased by 2 mm to accommodate the gasket.

The DORMA RF hold-open unit enables doors to be securely held without any fail-back at precisely the required position up to an opening angle of approx. 120°. The pull-off force can be adjusted to any door situation. The DORMA RF mechanism is non-handed and has been specifically designed for retrofitting to the G 96 N20 slide channel.

Not for fire and smoke check doors.

The DORMA RF hold-open unit enables doors to be securely held without any fail-back at precisely the required position up to an opening angle of approx. 120°. The pull-off force can be adjusted to any door situation. The DORMA RF mechanism is non-handed and has been specifically designed for retrofitting to the G 96 N20 slide channel.

Not for fire and smoke check doors.
DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in a timber door
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in an aluminium framed door
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

*Add 25 mm for aluminium profile frames with corner-angle reinforcement.

DORMA ITS 96 door closer with DORMA G 96 N20 slide channel in a timber door-transom fixing
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.
Electro-mechanical hold-open

The DORMA G 96 EMF slide channel assembly enables the door to be held open securely at a pre-selected position without fall-back. The hold-open point can be adjusted within an opening angle of approx. 80° and 120°.

Note:
The hold-open point also constitutes the max. door opening angle (position door stop accordingly).

In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release is triggered by a signal from external smoke detectors (e.g. DORMA RMZ). The release force for the hold-open mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually.

The DORMA G 96 EMF slide channel assembly comprises the arm, slide channel, slide block, electro-mechanical hold-open unit and fixing screws, and can be combined with both door closer sizes in the DORMA ITS 96 range.

In the case of particularly large and heavy doors (over 1250 mm), we recommend that DORMA EM hold-open magnets be employed instead of the electro-mechanical hold-open unit.

Technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating voltage</td>
<td>24 V DC, ± 15%</td>
</tr>
<tr>
<td>Power input</td>
<td>1.4 W</td>
</tr>
<tr>
<td>Rated for continuous duty</td>
<td>100%</td>
</tr>
<tr>
<td>Release force</td>
<td>Adjustable</td>
</tr>
</tbody>
</table>

Example application for a hold-open system

Recommended cabling:
I - (St) Y 2 x 2 x 0,6
DORMA ITS 96 door closer with DORMA G 96 EMF slide channel assembly in a timber door
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

DORMA ITS 96 door closer with DORMA G 96 EMF slide channel assembly in an aluminium framed door
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

1) Add 25 mm for aluminium profile frames with corner-angle reinforcement.

Approval certification

The DORMA ITS 96 EMF has been tested by the State Material Testing Authority, Dortmund, to EN 1155, Electrically Powered Hold-open Devices.

Regulations/Information

The use of hold-open devices may be subject to certain conditions – see page 25.
Door co-ordinator

The DORMA G 96 GSR slide channel with integral door co-ordinator for pairs of doors ensures that the active leaf always closes after the inactive leaf.

The DORMA G 96 GSR slide channel door co-ordinator features a push rod clamping system. As this system operates independently of door closer hydraulics, it offers maximum safety and reliability.

An overload release protects the door co-ordinator and the door set from damage. The DORMA G 96 GSR can be combined with both door closer sizes of the DORMA ITS 96 range.

<table>
<thead>
<tr>
<th>Version/Function</th>
<th>Door width (mm)</th>
<th>Door leaf thickness min. (mm)</th>
<th>Closer size ITS 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSR Door co-ordinator</td>
<td>1400 – 2200</td>
<td>40</td>
<td>2 – 4</td>
</tr>
<tr>
<td></td>
<td>1400 – 2800</td>
<td>50</td>
<td>3 – 6</td>
</tr>
</tbody>
</table>

A DORMA G 96 GSR slide channel door co-ordinator encompasses an active leaf and an inactive leaf slide channel with cushioned limit stay, a connecting tube, a cover for the co-ordinator mechanism on the active leaf slide channel, and two arms.

The DORMA ITS 96 GSR has been tested to EN 1158, Door Co-ordinator Devices by the State Material Testing Authority, Dortmund/Germany.
Specification text
DORMA ITS 96 ... door closer (see pages 4 – 5) with G 96 GSR K8/K12 slide channel, featuring integrated mechanical door co-ordinator using a push rod clamping system with overload release which operates independently of the closer hydraulics. Standard design – door leaves with no hold-open. Tested to EN 1158.

Approved by the Institute of Building Technology, Berlin, for general use in conjunction with fire and smoke check doors.

Make
DORMA ITS 96 GSR

Example application

Make
DORMA ITS 96 GSR

Example application

Active leaf
Inactive leaf

Active leaf
Inactive leaf
Door co-ordinator with electro-mechanical hold-open

This door co-ordinator not only ensures the correct closing sequence of pairs of doors, but also allows the door leaves to be individually held open by an electro-mechanical device. The hold-open point for both door leaves lies between approx. 80° and 120°.

**Note:**
The hold-open point also constitutes the max. door opening angle – position door stop accordingly.

In the event of an alarm or a fault in the power supply, the hold-open is released and the door is closed by the door closer. The release is initiated by a signal from external smoke detectors (e.g. DORMA RMZ) or other fire alarm. The release force for the hold-open mechanism can be adjusted without tools and is rated to ensure that the door can also be easily released manually.

The DORMA G 96 GSR-EMF slide channel door co-ordinator can be combined with both door closer sizes of the DORMA ITS 96 range. In the case of particularly large and heavy doors (over 2500 mm), we recommend that DORMA EM hold-open magnets be employed instead of the electro-mechanical hold-open unit.

### Regulations/Information
The use of hold-open devices may be subject to certain conditions – see page 25.

### Technical data
- **Operating voltage:** 24 V DC, ± 15%
- **Power input:** 2.8 W
- **Rated for continuous duty:** 100%
- **Release force:** Adjustable

### Version/Function

<table>
<thead>
<tr>
<th>Version/Function</th>
<th>Door width (mm)</th>
<th>Door leaf thickness min. (mm)</th>
<th>Closer size ITS 96</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSR-EMF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Door-coordinator and</td>
<td>1400 – 2200</td>
<td>40</td>
<td>2 – 4</td>
</tr>
<tr>
<td>hold-open in both leaves</td>
<td>1400 – 2800</td>
<td>50</td>
<td>3 – 6</td>
</tr>
</tbody>
</table>

A DORMA G 96 GSR slide channel door co-ordinator encompasses an active leaf and an inactive leaf slide channel with electro-mechanical hold-open, a connecting tube, a cover for the co-ordinator mechanism on the active leaf slide channel, and two arms.

The DORMA ITS 96 GSR-EMF has been tested by the State Materials Testing Authority, Dortmund, to EN 1158, Door Co-ordinator Devices, and EN 1155, Electrically Powered Hold Open Devices.
DORMA ITS 96 ... door closer (see pages 4 – 5) with G 96 GSR-EMF K8/K12 slide channel, featuring integrated mechanical door co-ordinator using a push rod clamping system with overload release which operates independently of the closer hydraulics, with integrated electro-mechanical hold-open, 24 V DC. Hold-open point (80° – 120°) and release force adjustable.

Tested to EN 1158 and EN 1155.

Approved by the Institute of Building Technology, Berlin, for general use in hold-open systems. Acceptance inspection of the system is mandatory in Germany.

Make
DORMA

ITS96GSR-EMF/2-4
ITS96GSR-EMF/3-6

Example application, hold-open system

Recommended cabling:
1 - (St) Y 2 x 2 x 0,6
Installation in a timber door

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

DORMA ITS 96 door closer with DORMA G 96 GSR/GSR-EMF slide channel
Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.

DORMA G 96 GSR
DORMA G 96 GSR-EMF
Slide channel
door co-ordinators
When installed in fire and smoke check doors, ensure that the DORMA MK 397 carry bar is also fitted.
Installation in an aluminium framed door

DORMA ITS 96 door closer with DORMA G 96 GSR/GSR-EMF slide channel

Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.
When installed in fire and smoke check doors, ensure that the DORMA MK 397 carry bar is also fitted.
The DORMA RMZ and DORMA RM smoke detectors provide the ideal complement to the successful, service-proven DORMA ITS 96 range in preventive fire protection environments. They are designed in accordance with the latest codes issued by the German Institute for Building Technology and ensure perfect interaction between all the devices employed for holding open fire and smoke check doors – whatever the situation.

**DORMA RMZ**

The DORMA RMZ smoke detector provides a 24 V DC supply for all the hold-open devices connected to it. In the event of an alarm or power failure, it de-energises the devices (release function). It has an automatic reset, which can be switched to manual reset if required. A floating (volt-free) change-over contact and connections for further detectors and external manual release devices are also provided.

**DORMA RM**

The DORMA RM smoke detector is designed as a smoke switch and actuates a floating (volt-free) change-over contact in the event of an alarm or power failure. It is also suitable as an add-on smoke detector for the DORMA RMZ. A floating (volt-free) change-over contact and connections for further detectors and external manual release devices are also provided.

### Data and features

<table>
<thead>
<tr>
<th>Functions</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke detector</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Release device</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Power supply unit</td>
<td>✅</td>
<td>✅</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Smoke detection</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scattered light principle</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>(optical sensor)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixing</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame-mounted</td>
<td>✅</td>
<td></td>
</tr>
<tr>
<td>Ceiling-mounted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connection of other smoke switches</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-wire -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>smoke switches</td>
<td>✅</td>
<td>✅</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total installed load (max.)</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>for hold-open device and other detectors in W</td>
<td>9,8</td>
<td>Depends on power supply unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power input of internal detectors in W</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2</td>
<td>0,6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LED indicators</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Standby</td>
<td>✅</td>
<td></td>
</tr>
<tr>
<td>Maintenance due</td>
<td>✅</td>
<td></td>
</tr>
<tr>
<td>Contaminated condition</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input voltage</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>230 V AC ±10 %</td>
<td>24 V DC +15%, -10%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output voltage</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 V DC</td>
<td>24 V DC</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detector operating voltage</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 V DC +15%, -10%</td>
<td>24 V DC</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input current (max.) with external power supply unit, in A</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current input (max.) in mA</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Floating (volt-free) change-over contact</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety extra-low voltage (SELV)</td>
<td>24 V AC</td>
<td>24 V AC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reset</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>can be changed to manual reset</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Function checking</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoke extraction opening test</td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connection terminals for external manual release</th>
<th>RMZ</th>
<th>RM</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>✅</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Degree of protection</th>
<th>RMZ</th>
<th>RM</th>
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<tr>
<td>IP 30</td>
<td>IP 20</td>
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<table>
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<tr>
<th>Ambient temperature in °C</th>
<th>RMZ</th>
<th>RM</th>
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<tr>
<td>-20, +40</td>
<td>-20, +50</td>
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<table>
<thead>
<tr>
<th>Weight in kg</th>
<th>RMZ</th>
<th>RM</th>
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<tr>
<td>0,25</td>
<td>0,40</td>
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<table>
<thead>
<tr>
<th>Dimensions in mm</th>
<th>RMZ</th>
<th>RM</th>
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<tbody>
<tr>
<td>Length</td>
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<td>195</td>
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<tr>
<td>Overall depth</td>
<td>34</td>
<td>52</td>
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<tr>
<td>Height</td>
<td>30</td>
<td>53</td>
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</table>

- yes – no

---

### Specification texts

**RMZ**

Smoke detector, Contur design, with standby and maintenance indicators, integral power pack and optical smoke sensor for transom/lintel fixing. For activation of DORMA hold-open devices. A floating (volt-free) alarm contact and connections for further detectors and external manual release devices are provided. Can be switched to manual reset. One-piece cover. Overall height 30 mm. Power supply 230 V AC, operating voltage 24 V DC

Approved by the German Institute for Building Technology, Berlin, for use in a hold-open system. Acceptance inspection of the system is mandatory.

**Colour**

- ☐ silver
- ☐ white, sim. to RAL 9010
- ☐ stainless steel
- ☐ polished brass
- ☐ special colour (sim. to RAL)

**Make**

DORMA RMZ

**RM**

Universal, non-directional optical smoke detector, 24 V DC, for transom, lintel and ceiling fixing. For use as a smoke switch and monitoring unit for hold-open devices. A floating (volt-free) alarm contact and connections for external manual release device are provided. Approved by the German Institute for Building Technology, Berlin, for use in a hold-open system, and approved by the VdS, Cologne, to EN 54, Part
RMZ frame-mounted smoke detector on the pull side connected to an ITS 96 EMF
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

RMZ frame-mounted smoke detector on the pull side connected to an ITS 96 GSR-EMF
Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.

RMZ frame-mounted smoke detector on the push side connected to an ITS 96 GSR-EMF
Example: Anticlockwise-closing (ISO 6) active leaf; mirror image applies to clockwise-closing (ISO 5) active leaf.
Fixings for **G 96 N20** and mounting plate for ITS 96
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.

Fixings for height adjustment in relation to **G 96 N20, EMF, GSR**
Example: Anticlockwise-closing (ISO 6) door; mirror image applies to clockwise-closing (ISO 5) doors.
Connecting frame for **G 96 GSR** door co-ordinator for use on doors with electric keep/strike or overhead electromechanical locking element (see page 18)

*Door width min. 1900 mm*
If the DORMA G 96 GSR door co-ordinators are required to operate independently of the ITS 96 door closers, e.g. in combination with the ED 200 automatic swing door operator, the connection between the door co-ordinator and the door leaf is provided by means of GSR pivot blocks.

**Specification text**

Pivot bearing for closer-independent door co-ordination with DORMA G 96 GSR door co-ordinators.

**Make**

DORMA ITS GSR pivot block

The pivot bearing used in conjunction with the G 96 N20 slide channel also acts as a cushioned limit stay.
Hold-open systems

The use of hold-open devices may be subject to certain conditions. These usually deal particularly with the relevant acceptance, routine inspection and maintenance requirements.

The information given on this page is designed to inform all relevant persons of the most important measures to be implemented in order to ensure best practice governing the operation of hold-open systems.

Further details can be found in the following documents:

- Guidelines for hold-open systems, published by the German Institute for Building Technology, Berlin.
- Building Regulations, England and Wales
- Other national building regulations
- general building regulations approval of the hold-open system concerned
- EN 1155

1 General

1.1 In respect of doors etc. which are held open by hold-open systems, the area needed for closure must be kept permanently free of obstructions. This area should be clearly indicated by means of lettering, floor markings or similar. If necessary, structural measures may need to be taken in order to ensure that wiring/ducting, stored goods or structural components (e.g. false ceilings or other components) do not fall down into the area to be kept clear.

1.2 As far as possible, smoke detectors should be used for hold-open systems. Smoke detectors should be used for hold-open systems for doors etc. in emergency exits and escape routes.

1.3 All hold-open devices should allow manual release without their operational readiness being adversely affected. Door closers with electro-magnetic hold-open systems can be released by pressing lightly on the door leaf. If hold-open magnets or free-swing door closers are used, the release function is triggered by pressing a switch. The switch must be located in the immediate proximity of the door and must not be covered when the door is held open.

2 Commissioning

2.1 After the system has been fitted ready for use on site, it should be commissioned to check that its operation is problem-free and that its installation complies with all relevant regulations. The commissioning should only be performed by qualified technical personnel.

3 Routine Inspection

3.1 The operator should keep the hold-open system in a permanently fit state for use and must inspect it at least once a month to ensure its functional integrity.

3.2 In addition, it is the responsibility of the operator to ensure that all devices are checked and maintained/serviced to ensure their combined functional integrity, this to be performed at least once a year, unless a shorter time period is stipulated in the national regulations. This inspection and servicing activity should only be carried out by a specialist or suitably qualified person.

3.3 The scope, result and time of the routine inspections should be recorded, and these records should be retained by the operator.
## Range of equipment and optional accessories

### G 96 N20
- **L** 52003701
- **KB/K12**
- **R** 52003801

### G 96 EMF
- **L** 52001501
- **KB/K12**
- **R** 52001601

### G 96 GSR
- **KB/K12**
- 260– 52004001

### G 96 GSR-EMF
- **KB/K12**
- 260– 52004201

### Fixing plates for ITS 96
- 52000300

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<tr>
<th></th>
<th>ITS 96</th>
<th>ITS 96 with 4 mm extended spindle</th>
<th>ITS 96 with 8 mm extended spindle</th>
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<tr>
<td>EN 2 – 4</td>
<td>52400150</td>
<td>EN 2 – 4</td>
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<td>EN 3 – 6</td>
<td>52250150</td>
<td>EN 3 – 6</td>
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### Symbols
- **■** = Closer body separate
- **□** = Slide channel separate
- **#** = Optional accessory
- **L** = LH/anticlockwise closing (ISO 6)
- **R** = RH-clockwise closing (ISO 5)
- **‖** = GSR door co-ordinator for inactive leaf of 540–700 mm (inactive leaf slide channel shortened, arm 260 mm)

For specification text/product description, see page 4.
### Fixings for Connecting Pivot bearing

<table>
<thead>
<tr>
<th>Hold-open unit for G 96 N</th>
<th>Hold-open unit for G 96 GSR, inactive leaf</th>
<th>Fixing BZ I for narrow-stile/alu-framed doors</th>
<th>Fixing BZ II for narrow-stile/alu-framed doors</th>
<th>Fixings for mounting the G 96 N20 aluminium doors</th>
<th>Connecting frame for G 96 GSR</th>
<th>Pivot bearing MK 397</th>
<th>Carry bar</th>
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<tbody>
<tr>
<td>K8/K12 52005600</td>
<td>K8/K12 52003500</td>
<td>52004705</td>
<td>52004805</td>
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### Smoke detector system

<table>
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<th>RMZ 648000xx</th>
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**Colour**

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<tr>
<td>11</td>
<td>“Design” finish</td>
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<td>10</td>
<td>polished brass</td>
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<tr>
<td>09</td>
<td>special colour</td>
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For specification text/product description, see page 20
Door Control Division worldwide

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