



TS 99 EN 2-5

Free-swing slide channel door closer in Contur design



Ironmongery, Curtain Rails, Blinds, Flooring, Carpets, Automatic Sliding & Swing Doors, Movable Partitions Renovations & much more

- **** 0722 493 359 / 0726 399 819
- ✓ info@nextcraftke.com
- ¶ Gate No. 95A Limuru Road, Parklands.
- www.nextcraftke.com

For easy use of fire and smoke check doors combined with safe closing in an emergency.

The DORMA TS 99 FL in the Contur design is a hold-open device with a free-swing function from a door opening angle of >0°, which, combined with a smoke detector system (e.g. DORMA RMZ), can be used as a hold-open system for fire doors.

An integrated solution, i.e. hold-open device with free-

swing function from a door

opening angle of $>0^{\circ}$, plus

built-in smoke detector system, is also available in the form of the DORMA TS 99 FLR or TS 99 FLR-K. In both systems, the door can be operated without resistance thanks to their freeswing feature. In the event of an alarm or power failure, however, the door isreliably closed by the re-instated action of the door closer. Certified to ISO 90001.

ы	us	poi	nts
		-	

For the trade

- Ideal complement to the product range
- Clear range structure for easy stock management

For the installer/fabricator

- Easy and quick to fit
- Flexible application suitability thanks to standard leaf or overhead transom installation

For the architect/specifier

- Meets legal requirements for barrier-free building
- Universally suitable for single or double doors

 Uniform appearance matching all products of the DORMA Contur design

For the user

- Free-swing function from a door opening angle of >0°
- Resistance-free opening of doors in passive/preventive fire protection applications
- Maximum degree of user safety

F Approval certification

TS 99 FL

The DORMA TS 99 FL is approved and certified by the MPA NRW, Dortmund, to EN 1155.

TS 99 FLR

The DORMA TS 99 FLR is approved and certified by the MPA NRW, Dortmund, to EN 1155. Approved by the German Institute for Building Technology, Berlin,

TS 99 FLR-K

The DORMA TS 99 FLR-K is certified and approved by the MPA NRW, Dortmund, to EN 1155. Approved by

When using the TS 99 FL in a transom-mounted arrangement, a certificate of compliance in conjunction with the relevant fire and smoke check door is mandatory.

for use as a hold-open system. An acceptance inspection is mandatory. Certificate of compliance in conjunction with the fire and smoke check door concerned is additionally required.

the German Institute for Building Technology, Berlin, for use as a hold-open system. An acceptance inspection is mandatory.

Data and features	5	TS 99 FL	TS 99 FLR	TS 99 FLR-K	
Adjustable spring					
strength setting	Size	EN 2-5	EN 2-5	EN 2-5	
Standard doors	≤ 1250 mm	•	•	•	
Fire and smoke check doors	≤ 1250 mm	•	•	•	
Non-handed		•	•	•	
Slide channel		•	•	•	
Closing speed adju	stable at valve	•	•	•	
Latching action ad	justable at valve	•	•	•	
Cushioned limit s	tay, mechanical	0	0	0	
Free-swing function a door opening ang		•	•	•	
Weight in kg		5,2	5,9	5,7	
Dimensions in mm (without slide channel)	Length Overall depth Height	413 52 71	785 52 71	413 52 71	
Door closer complia		•	•	•	
Hold-open device compliant with EN 1155		•	•	•	
Hold-open device compliant with DIN EN 14637		under preparation			
(€ mark for build	ling products	•	•	•	
Functions	Smoke detector Release device Power supply unit	- • -	•	•	
Smoke detection	Scattered light principle Optical sensor		•	•	
Connection of othe	r detectors	-	•	•	
Total installed load for further detector	,	-	7,8	7,8	
LED indicators	Alarm Standby Maintenance due Contaminated	- - -	•	•	
Input voltage		24 V DC ±15%	230 V AC +10%/-15%		
Output voltage		_	24 V DC	24 V DC	
Power consumption	n in W	2	14,8	14,8	
Floating change-ov safety extra low vol		-	24 V AC/DC 2A	24 V AC/DC 2A	
Reset	Manual reset		•	•	
Connection termin for external manua		-	•	•	
Degree of protectio	n	-	IP 20	IP 20	
• Vos No o	Ontion				

Yes − No ○ Option

Note

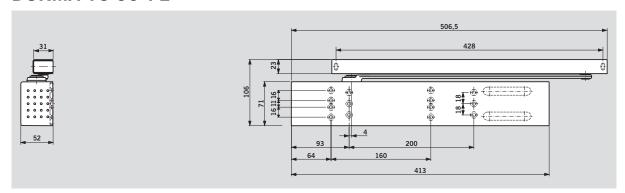
According to the regulations governing hold-open systems issued by the Institute of Building Technology (DIBt), Berlin, a manual release switch (e.g. DORMA HT) must be provided for freeswing door closers.

This switch must be red and carry the inscription "Close Door". The switch must be located in the immediate vicinity of the door and must not be hidden by the opened door.

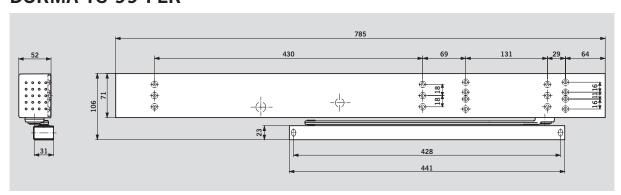




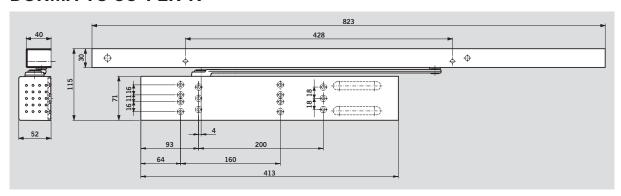
DORMA TS 99 FL



DORMA TS 99 FLR



DORMA TS 99 FLR-K

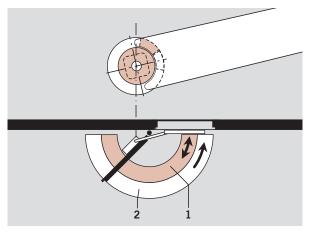


Free-swing function from an opening angle $>0^{\circ}$

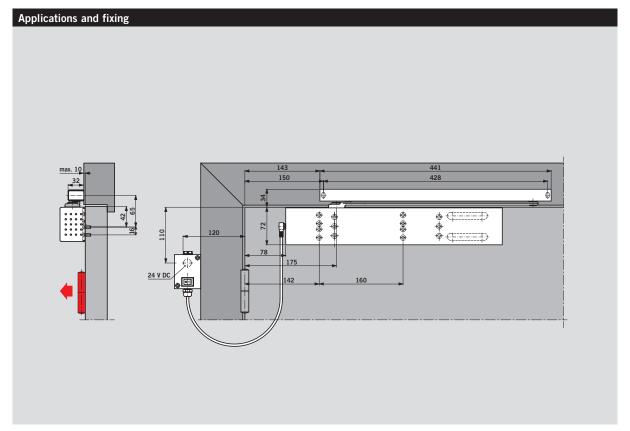
As the door is opened, the free-swing function is activated from an opening angle of >0°. The free-swing function enables the door to be opened with ease by reducing the amount of resistance encountered by the user. The door remains freely operable and is not automatically closed, facilitating access in both directions in heavily frequented zones and passageways.

In the event of a fire or power failure, the door is automatically and safely closed by the door closer. This system is ideal for ensuring the closure of fire and smoke check doors in senior homes, centres for the disabled, hospitals and clinics.

- 1 Free-swing range
- 2 Fully controlled closing action (mechanical)

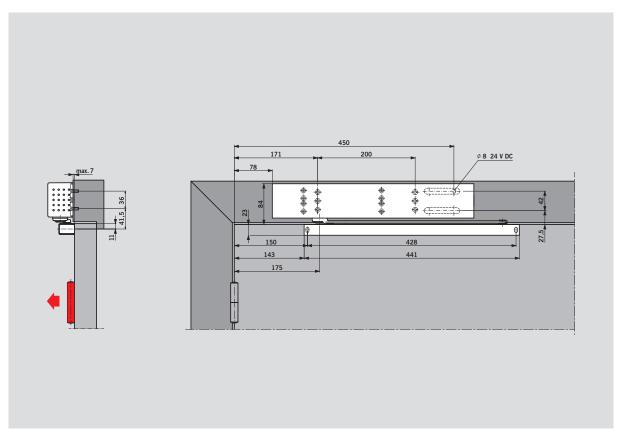






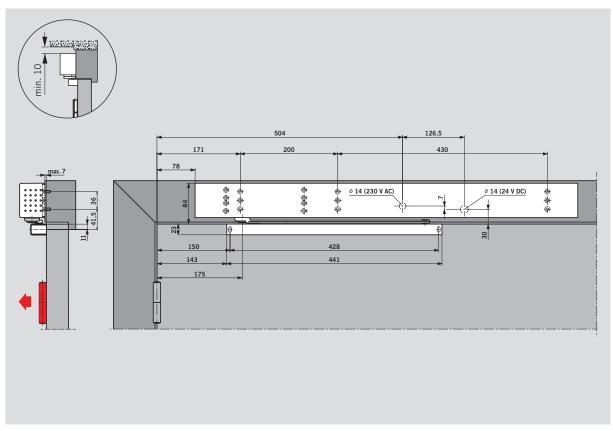
DORMA TS 99 FL door closer, standard application (door leaf fixing)

Examples: Anticlockwise-closing (ISO 6/LH) door; mirrored arrangements apply to clockwise-closing (ISO 5/RH) doors



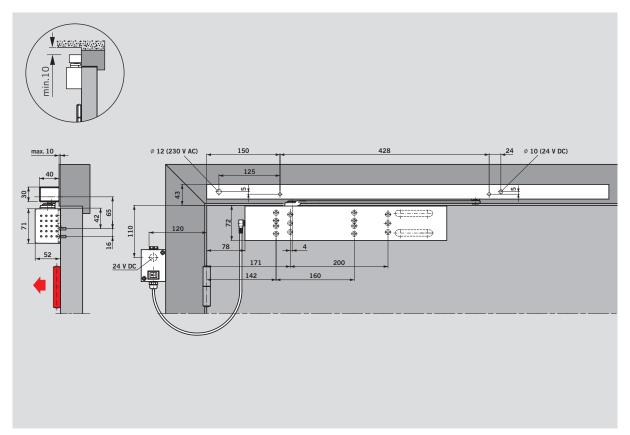
DORMA TS 99 FL door closer, frame mounted (transom fixing)
Examples: Anticlockwise-closing (ISO 6/LH) door; mirrored arrangements apply to clockwise-closing (ISO 5/RH) doors





DORMA TS 99 FLR door closer

Examples: Anticlockwise-closing (ISO 6/LH) door; mirrored arrangements apply to clockwise-closing (ISO 5/RH) doors



DORMA TS 99 FLR-K door closer

Examples: Anticlockwise-closing (ISO 6/LH) door; mirrored arrangements apply to clockwise-closing (ISO 5/RH) doors



Application on double doors

The modular TS 93 GSR system also enables the use of the TS 99 FL EN 2-5 on the active leaf of double doors. As the door is opened, the free-swing function is activated from an opening angle of >0° at the active leaf. The door remains freely

operable and is not automatically closed, which facilitates access in doors located in heavily frequented areas. The GSR system ensures the closure of double doors in the correct sequence: first the inactive leaf then the active leaf.

The system operates independently of the door closer hydraulics using a push rod clamping arrangement with protective overload release. The door release/closer activator mechanism is integrated in the slide channel.

DORMA TS 99 FL GSR

Door co-ordinator with free-swinging active leaf

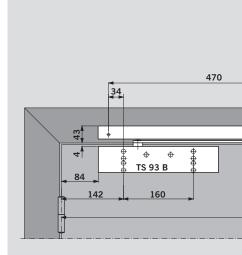
The GSR system ensures the closure of double doors in the correct sequence: first the inactive leaf then the active leaf.

DORMA TS 99 FL GSR-EMF 1

Door co-ordinator with free-swinging active leaf and electro-mechanical holdopen of the inactive leaf The GSR-EMF 1 system ensures the closure of double doors in the correct sequence: first the inactive leaf then the active leaf. It also facilitates the combined hold-open of both door leaves. The inactive leaf can be held at an angle between 80° and 130°, and the active leaf is held open at any angle up to max. 150° by the door co-ordinator.

In the event of an alarm or power failure, the hold-open is released and the door co-ordinator ensures that the door leaves close in the correct sequence. The release signal is emitted by external smoke detectors (e.g. DORMA RMZ in the Contur design). DORMA RM-N units can also be connected as a second and third detector. With adjustable pull-off force (no tools required), the hold-open can also be readily released by hand. Note: The hold-open point of the inactive leaf is always located at the maximum door opening angle - install

a door stop at this position.



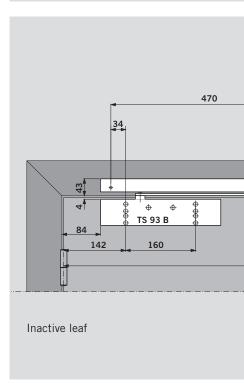
Inactive leaf Minimum width 370 mm in the case of unequal leaves

DORMA TS 99 FL GSR-EMR 1

Door coordinator with free-swinging active leaf, electro-mechanical holdopen of the inactive leaf and integral smoke detector

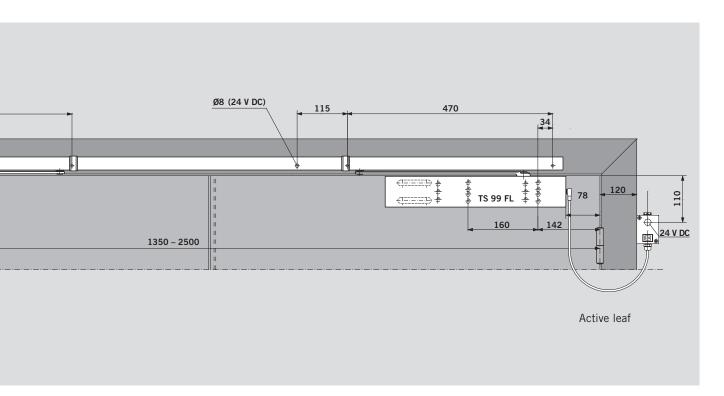
The GSR-EMR 1 system. ensures the closure of double doors in the correct sequence: first the inactive leaf then the active leaf. It also facilitates the combined hold-open of both door leaves. The inactive leaf can be held at an angle between 80° and 130°, and the active leaf is held open at any angle up to max. 150° by the door co-ordinator.

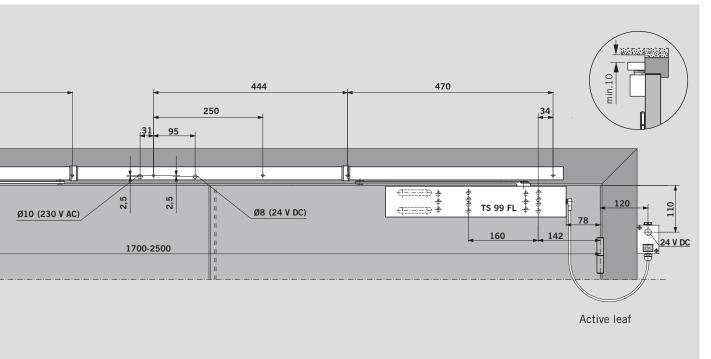
In the event of an alarm or power failure, the hold-open is released and the door co-ordinator ensures that the door leaves close in the correct sequence. Holdopen release is initiated by the GSR-EMR via a smoke detector integrated in the door coordinator. DORMA RM-N units can also be connected as a second and third detector. With adjustable pull-off force (no tools required), the hold-open can also be readily released by hand. Note: The hold-open point of the inactive leaf is always located at the maximum door opening angle - install a door stop at this position.

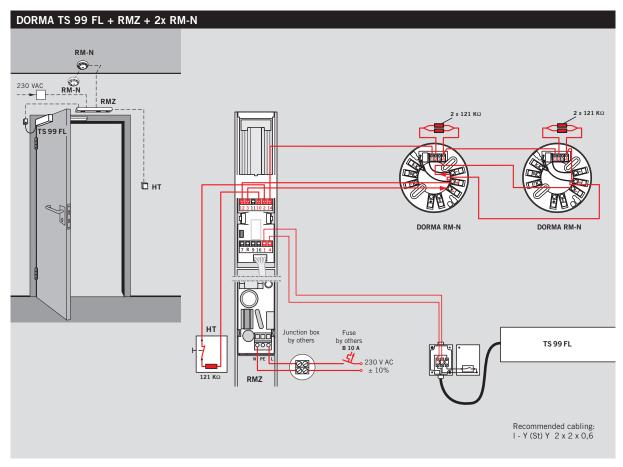


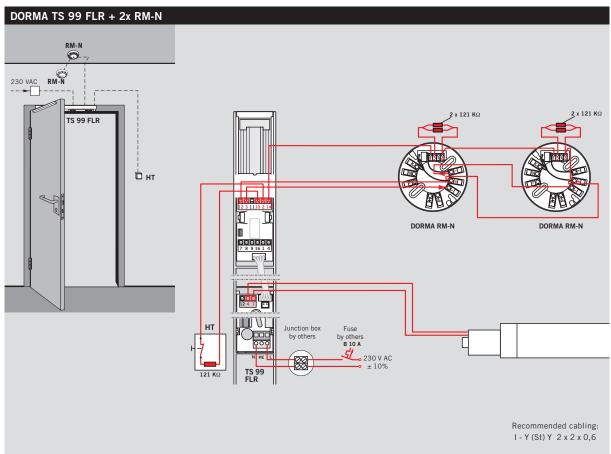






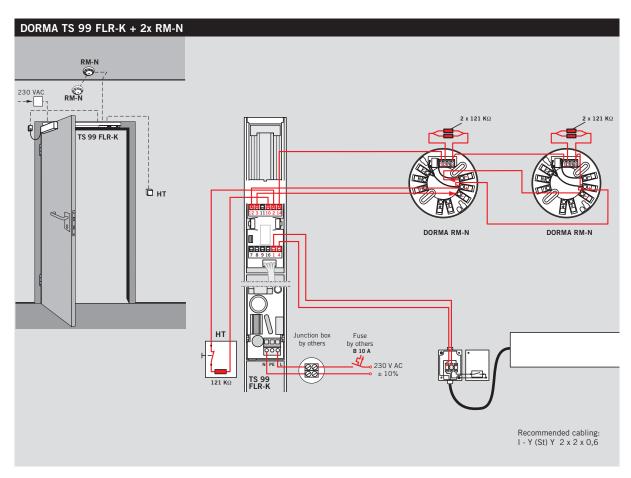


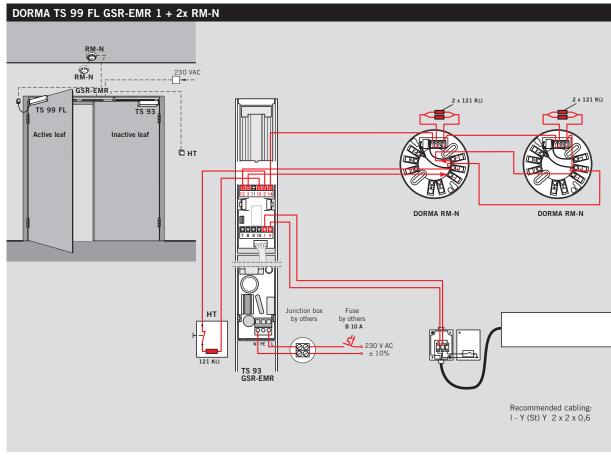












The DORMA RMZ in the Contur design and DORMA RM-N smoke detectors provide the ideal complement to the DORMA TS 99 FL system for passive/preventive fire protection.

They are designed in accordance with the latest codes

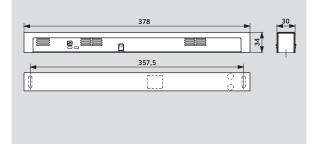
issued by the German
Institute for Building Technology and ensure perfect
interaction between all
the devices employed for
holdingopen fire and smoke
check doors – whatever the
situation.

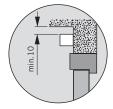
DORMA RMZ

The DORMA RMZ smoke detector in the Contur design provides a 24V 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 mode if required. A floating (no-volt) change-over contact and connections

for both further detectors and for an external manual release device are also provided. The unit is available in the RMZ version with a stabilised power pack, or in the RMZ DCW version without a power pack for integration in building management and control systems via a DCW bus and the DORMA TMS door management system.

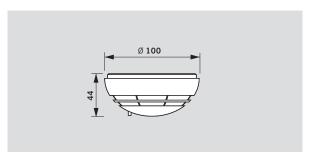




DORMA RM-N

The DORMA RM-N smoke detector ensures the early detection both of smouldering fires and open fires

with smoke evolution. It can be connected to all DORMA hold-open systems.



Data and features		RMZ	RM-N
Functions	Smoke detector Release device Power supply unit	•	• - -
Smoke detection	Scattered light principle (optical sensor)	•	•
Fixing	Lintel or transom-mounted Ceiling-mounted	• –	-
Connection of o	ther detectors	•	_
Total installed I for hold-open do other detectors	evice and	9,8	_
Power consump internal detector		1,2	0,65
LED indicators	Alarm Standby Maintenance due Contaminated	•	• - -
Input voltage		230 V AC	24 V DC +15%, -10%
Output voltage		24 V DC	
Detector operating voltage		24 V DC +15%, -10%	24 V DC
Input current (n	nax.) in mA	75	20
Floating (no-volt) change-over contact Safety extra low voltage (SELV)		24 V AC/DC 2 A	30 V AC/DC 1 A
Reset	Automatic Can be changed to manual reset	•	•
Functional check Smoke detection		•	•
Connection terminals for external manual release		•	_
Degree of protection		IP 30	IP 43
Ambient temperature in °C		-20, +40	-10, +60
Weight in kg		0,25	0,15
Dimensions in mm	Length Overall depth Height	379 34 30	ø 100 44
Compliant with	•	•	
C € mark for bui	lding products	•	•
• Voc. No.			

• Yes - No

F Approval certification

DORMA RMZ in the
Contur design and DORMA
RM-N smoke detectors have
been granted general building
approval by the German
Institute for Building
Technology, Berlin;
acceptance inspection
mandatory in Germany.



The use of hold-open systems is subject to special regulations based on official approval requirements. These relate in particular to the final inspection (acceptance), continuous monitoring and maintenance.

The regulations and instructions provided below are intended as an aid, pursuant to statutory regulations that apply e.g. in Germany, to ensure that all participants are properly informed of the most important requirements that relate to the installation and operation of hold-open systems.

Further information can be found in the following documents:

- Richtlinien für Feststellanlagen des Deutsches Instituts für Bautechnik, Berlin
 [Code of practice relating to hold-open systems issued by the German Institute for Building Technology, Berlin]
- General building regulations pertaining to the approval of the hold-open system concerned
- EN 1155
- DIN EN 14637

1. General

1.1 In the case of fire doors (and similar shutters/closures/barriers) that are held open by hold-open systems, the sweep area necessary for the closing operation must be kept constantly clear. This area must be clearly identified by lettering, floor markings or similar. Where necessary, structural measures must also be implemented to ensure that cables, leads, lines,

pipes, stored/deposited goods or components (e.g. false ceilings or other overhead items/elements) are reliably prevented from falling into the sweep area.

- 1.2 Wherever possible, smoke detectors should be used for hold-open systems. For hold-open systems for fire doors in emergency escape routes, smoke detectors must be used.
- 1.3 Each hold-open device must also be capable of being released by hand, without adversely affecting the functional capabilities of the automatic release device. In the case of door closers with electro-magnetic hold-open, the manual release may be performed by a small tug applied to the door leaf. If holding electro-magnets or free-swing door closers are

used, a pushbutton must be provided to facilitate manual release.

The manual release pushbuttons employed for this purpose must be red and carry the wording "Close Door" or equivalent. The pushbutton must be located in the immediate vicinity of the door and must not be concealed by the door when this is held open.

2. Final inspection (acceptance)

2.1 In Germany and countries governed by DIN regulations: Following on-site installation of the operable hold-open system, its functional integrity and quality of installation must be confirmed by an acceptance inspection procedure. The acceptance inspection may only be performed by skilled personnel of manufac-

turers of monitoring and/or hold-open devices, skilled personnel authorized by same, or skilled personnel from an accredited inspection agency.

2.2 In Germany and countries governed by DIN regulations: Once the acceptance inspection has been successfully completed, the operator shall permanently fix on the wall

in the immediate vicinity of the door, a plate supplied by the manufacturer of the hold-open system measuring 105 mm x 52 mm and carrying the inscription Hold-open system

- Inspected by... (company logo with month and year of acceptance inspection) or equivalent
- **2.3** The operator is to be provided with a certificate detailing the successful acceptance inspection; this certificate must be retained by the operator.

3. Periodic surveillance

3.1 The hold-open system must be kept by the operator in a constantly good operating condition, and inspected at least once a month to ensure that it is functioning properly.

3.2 In addition, the operator is obliged at least once a year, or at shorter intervals if specified in the approval certificate, to inspect all the devices to ensure that they are operating and interacting properly and without fault,

and to carry out or instigate adequate maintenance. The associated test, inspection and the maintenance work may only be performed by an expert or an appropriately trained person.

3.3 The scope, result and time of the periodic inspection are to be recorded. These records must be retained by the operator.



Slide channel with free-swing arm assembly 533202xx Slide channel with free-swing arm assembly G-SR
Slide channel with free-swing arm assembly
Slide channel with free-swing arm assembly
free-swing arm assembly
G-SR
G4102001
G-SR-EMF 1 [64112001
G-SR-EMR 1
☐ 64215001
RMZ
smoke detector # #
648000xx
RM-N
smoke detector # #
64830000
Manual release pushbutton
HT-UP 35901531 # #
HT-AP 35901532



TS 99 FLR door closer body Size EN 2-5	TS 99 FLR-K door closer body Size EN 2-5	TS 99 FL door closer body, Leaf-fixed Size EN 2-5 with free-swing arm assembly, without slide channel, for GSR co-ordinator fixed to active leaf 53380201	TS 93 B door closer body Size EN 2-5 for GSR door co-ordinator fixed to inactive leaf 43020001	Cushioned limit stay 35800093
■□ 542903xx		00000201	- 10020001	#
	■□ 543001xx			#
		1x 1x		
		1x 1x		
			x 1x	
#	#	#1)		
#	#	#		
#	#	#		

■ = Closer body complete with slide channel assembly

= Closer body separate

 \square = Slide channel separate

= Accessory

Colour

Silver 01 White (sim. to RAL 9016) 11

хх

Special colour 09

Stainless steel "Design" 04

TS 99 FLR only available in 01 and 04

"Design" relates to the surface finish of the product

¹⁾Not necessary in the case of the G-SR-EMR1



DORMA TS 99 FL, Size EN 2-5

Slide channel door closer compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electrohydraulic hold-open, compliant with EN 1155, with free-swing action from a door opening angle of >0°. Closing speed and latching

action adjustable.
Non-handed.
Operating voltage 24V DC.
Approved by the German
Institute for Building
Technology, Berlin, for use
in a hold-open system.
Acceptance inspection
mandatory in Germany.
In transom-mounted

arrangement, a certificate of compliance in conjunction with the relevant fire and smoke check door is mandatory.

Model

☐ Leaf-fixed/pull side☐ Transom-fixed/pull side

Colour

☐ Silver

☐ White (sim. to RAL 9106) ☐ Stainless steel "Design"

☐ Special colour (sim. to RAL ____

Make

DORMA TS 99 FL

EN 2-5

DORMA TS 99 FLR, Size EN 2-5

Slide channel door closer compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electrohydraulic hold-open, compliant with EN 1155, with free-swing action from a door opening angle of >0°. Closing speed and latching

action adjustable.
Non-handed.
Additional connections
available for further detectors, external manual release
device and floating (no-volt)
alarm contact.
Power supply 230V AC.
Operating voltage 24V DC.
Approved by the German

Institute for Building Technology, Berlin, for use as a hold-open system. Acceptance inspection mandatory in Germany. Approval certification with the relevant fire and smoke check door mandatory. Model

☐ Transom-fixed/pull side

Colour

□ Silver

☐ Stainless steel "Design"

Make

DORMA TS 99 FLR

EN 2-5

DORMA TS 99 FLR-K, Size EN 2-5

Slide channel door closer compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electrohydraulic hold-open, compliant with EN 1155, with free-swing action from a door opening angle of >0°. Closing speed and latching action adjustable.

Non-handed.
Slide channel with integral power pack and smoke detector, with standby and maintenance due indicators.
Overall height 30 mm.
Additional connections available for further detectors, external manual release device and floating (no-volt) alarm contact.
Power supply 230V AC.

Operating voltage 24V DC. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open system. Acceptance inspection mandatory in Germany.

.

☐ Leaf-fixed/pull side

Colour

□ Silver

 $\hfill\square$ White (sim. to RAL 9106)

☐ Stainless steel "Design"

☐ Special colour (sim. to RAL ____)

Make

DORMA TS 99 FLR-K

EN 2-5

DORMA RMZ

Smoke detector in the Contur design, with standby and maintenance due indicators, integral power pack and optical smoke sensor for transom/lintel fixing. For release activation of DORMA hold-open devices. A floating (no-volt) alarm contact and connections for further detectors and external

manual release devices are provided.

Can be switched to manual

Can be switched to manual reset. One-piece cover.
Overall height 30 mm.
General building approval granted by DIBt, Berlin, for use in a hold-open system.
Acceptance inspection of the system is mandatory in Germany.

Model

□ RMZ with integrated power pack. Power supply 230V AC, operating voltage 24V DC

□ RMZ DCW. Smoke detector without power pack for connection to DCW bus.
 □ Optional integral alarm mo-

dule adding an audible signal to the visual indicator.

Colour

☐ Silver

☐ White (sim. to RAL 9106)☐ Stainless steel "Design"

☐ Special colour

_ sim. to RAL _

Make

DORMA RMZ DORMA RMZ DCW

DORMA RM-N

Optical smoke detector, 24V DC, for ceiling fixing. For use as second and third triggering detector on all DORMA hold-open systems. With floating (no-volt) change-over contact. General building approval granted by DIBt, Berlin and the VdS, Cologne; compliant to EN 54, Part 7. Acceptance inspection

mandatory in Germany.

Colour

☐ White (sim. to RAL 9106)

Make

DORMA RM-N



DORMA TS 99 FL EN 2-5 GSR

Slide channel door closer on the active leaf, compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electro-hydraulic hold-open complaint with EN 1155, and with a free-swing function from a door opening angle of $>0^{\circ}$. Closing speed and latching action adjustable. Non-handed.

Operating voltage 24V DC.

Slide channel with integral mechanical door coordinator, compliant with EN 1158. This system operates independently of the door closer hydraulics using a push rod clamping system with a protective overload release and one-piece cover. Overall height 30 mm. Non-handed.

Cam-action door closer on the inactive leaf: TS 93 EN 2-5.

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

Model

☐ Leaf-fixed/pull side (TS 99 FL on active leaf, TS 93 on inactive leaf)

Colour

- ☐ Silver
- ☐ White (sim. to RAL 9106)
- ☐ Stainless steel "Design"
- ☐ Special colour (sim. to RAL_

Make

DORMA TS 99 FL GSR

DORMA TS 99 FL EN 2-5 GSR-EMF 1

Slide channel door closer on the active leaf, compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electro-hydraulic hold-open complaint with EN 1155, and with a free-swing function from a door opening angle of $>0^{\circ}$. Closing speed and latching action adjustable. Non-handed.

Operating voltage 24V DC.

Slide channel with integral mechanical door coordinator, compliant with EN 1158. Electro-mechanical hold-open, 24V DC, compliant with EN 1155. Hold-open point 80°-130° and pull-off force adjustable.

This system operates independently of the door closer hydraulics using a push rod clamping system with a protective overload release and one-piece cover. Overall height 30 mm. Non-handed. Cam-action door closer on the inactive leaf: TS 93 EN 2-5.

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

Model

☐ Leaf-fixed/pull side (TS 99 FL on active leaf, TS 93 on inactive leaf)

Colour

- ☐ Silver
- ☐ White (sim. to RAL 9106)
- ☐ Stainless steel "Design"
- ☐ Special colour

(sim. to RAL_

DORMATS 99 FL GSR-EMF 1

DORMA TS 99 FL EN 2-5 GSR-EMR 1

Slide channel door closer on the active leaf, compliant with EN 1154, with CE mark, in the Contur design, for door widths up to 1250 mm, with electro-hydraulic hold-open complaint with EN 1155, and with a freeswing function from a door opening angle of $>0^{\circ}$. Closing speed and latching action adjustable. Non-handed. Operating voltage 24V DC. Smoke detector with standby and maintenance due indicators fully integrated in the housing of the door coordinator.

Additional connections available for further detectors, external manual release device and floating (no-volt) alarm contact.

Power supply 230V AC. Operating voltage 24V DC. Slide channel with integral mechanical door coordinator, compliant with EN 1158. Electro-mechanical holdopen, 24V DC, compliant with EN 1155. Hold-open point 80°-130° and pull-off force adjustable.

This system operates independently of the door closer hydraulics using a push rod clamping system with a

protective overload release and one-piece cover. Overall height 30 mm. Non-handed. Cam-action door closer on the inactive leaf: TS 93 EN 2-5. Approved by the German Institute for Building Technology, Berlin, for use as a hold-open system. Acceptance inspection mandatory in Germany.

Model

☐ Leaf-fixed/pull side (TS 99 FL on active leaf, TS 93 on inactive leaf)

Colour

- □ Silver
- ☐ White (sim. to RAL 9106)
- ☐ Stainless steel "Design"
- ☐ Special colour (sim. to RAL _

DORMA TS 99 FL GSR-EMR 1







Door Control



Automatic



Glass fittings and Accessories



Security Time and Access (STA)



Movable Walls



0722 493 359 / 0726 399 819

info@nextcraftke.com

Gate No. 95A Limuru Road, Parklands.

www.nextcraftke.com