



Cam action door closer system in Contur Design

VERSATILE AND ELEGANT



The TS 93 cam action door closer system provides a high-quality architectural solution for all project application requirements. The proven DORMA technology featuring the heart-shaped cam ensures exceptional ease of opening.

The new Contur design offers an even more impressive specification - thanks to

- concealed fixings
- height-adjustable G-N slide channel
- delayed closing action as standard
- smoke detector integrated in the slide channel
- simple, fast installation



TS 93 N



TS 93 EMF



TS 93 EMR

Rapidly decreasing opening force

The TS 93 system's unique cam technology sets it apart from conventional door closer systems. The resistance encountered when opening the door is instantly reduced, offering an

easy opening action much appreciated by, in particular, children and older people.

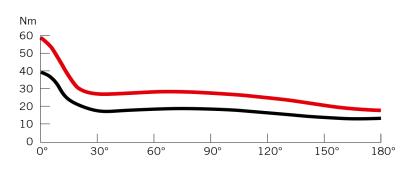








Force profile DORMA TS 93 (Spring strength EN 5)



Opening forceClosing force

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CAM ACTION DOOR CLOSER SYSTEM TS 93

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.

...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.

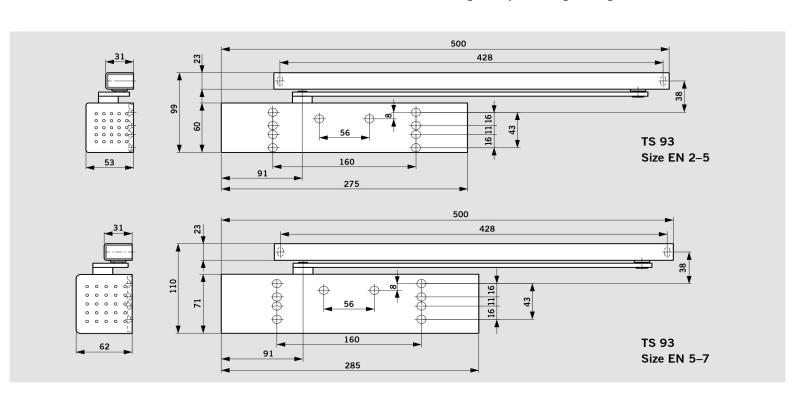
...for the user

- 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 ¹⁾
Variable	Spring		EN	EN
closing force	strength		2–5	5–7
Standard doors ²⁾	≤ 1250 mm		•	_
	≤ 1600 mm		_	•
External doors,	≤ 1250 mm		•	_
outward opening ²⁾	≤ 1600 mm		_	•
For fire and	≤ 1250 mm		•	_
smoke check doors ²⁾	≤ 1600 mm		_	•
Non-handed			•	•
Arm assembly type	Standard		_	_
	Slide channel		•	•
Closing force variable by means o	f adjustment s	crew	•	•
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			0	0
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 1	155		•	•
Door co-ordinators tested to EN 1	158		•	•
C€ mark for building products			•	•
ves – no ○ optional				

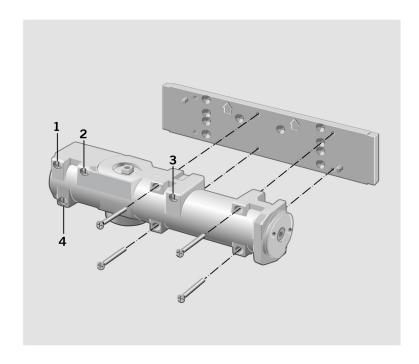
yes – no ○ optional

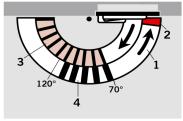
- $^{1)}$ B = Standard model for pull-side door leaf fixing/push-side transom fixing G = Special model for push-side door leaf fixing/pull-side transom fixing.
- ²⁾ For applications involving particularly heavy or wide doors, and doors which have to close against wind resistance, the next highest door 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.



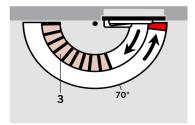


- 1 Fully controlled closing action with adjustable speed
- 2 Adjustable latch speed
- 3 Adjustable backcheck
- 4 Adjustable delayed action

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 adYescent wall being damaged.

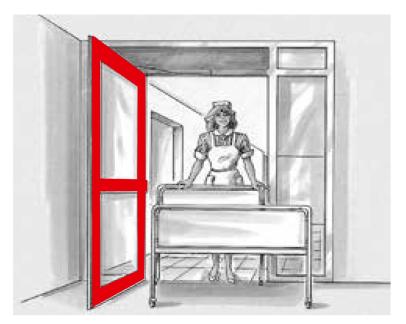


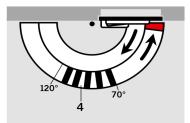


3 Adjustable backcheck

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

PULL-SIDE DOOR LEAF FIXING

max. 16

Door leaf fixing (standard arrangement) of the TS 93 B on the pull side. Structural conditions permitting, an opening angle of 180° is

428 84⁽⁸⁰⁾ 160 () = TS 93 5-7

possible with this fixing method. In most cases, a wall recess may have to be provided for the door closer.

F Approval certification

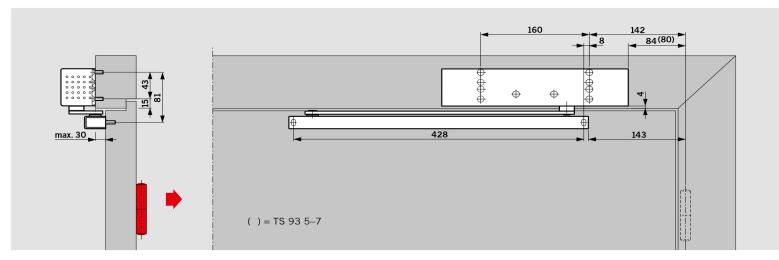
The DORMA TS 93 B is **CERTIFIRE** approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240.

Certifire

Example:

Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

PUSH-SIDE TRANSOM FIXING



Transom fixing (overhead frame fixing) of the TS 93 B on the push side. Backcheck and delayed action non-operative with this fixing arrangement. The door opening angle is limited to approx. 120° to 145°,

depending on the structural conditions. In order to prevent damage to the wall and door, a door stop should be installed to limit the maximum angle of door opening.

Approval certification

The DORMA TS 93 B is **CERTIFIRE** approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240.



Example:

Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

PUSH-SIDE DOOR LEAF FIXING

() = TS 93 5-7

Door leaf fixing (standard installation) of the TS 93 G on the push side.

The door opening angle is limited to approx. 120° to 145°, depending on the structural conditions. In order to prevent damage to the wall and door, a

door stop should be installed to limit the maximum angle of door opening.

A door stop must be installed for fire and smoke doors.

F Approval certification

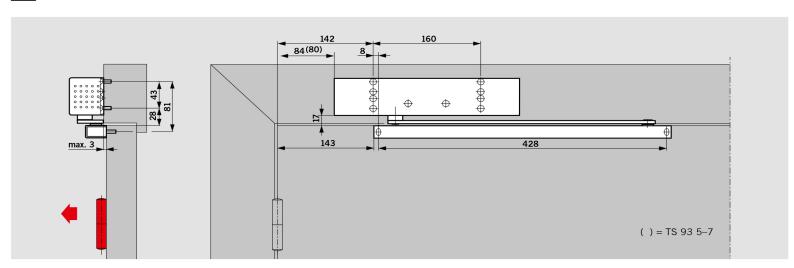
The DORMA TS 93 G is CERTIFIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240.

certifire

Example:

Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors.

PULL-SIDE TRANSOM FIXING



Transom fixing (overhead frame fixing) of the TS 93 G on the pull side.

Structural conditions permitting, an opening angle of 180° is possible with this fixing method.

F Approval certification

The DORMA TS 93 G is CERTIFIRE approved (Certificate No. CF 119) for door types ITT 120, MM/IMM 240.

certifire

Example:

Anticlockwiseclosing (ISO 6) door; mirrored arrangements apply to clockwise-closing (ISO 5) doors