GEZE 5000 DOOR CLOSERS

GEZE TS 5000

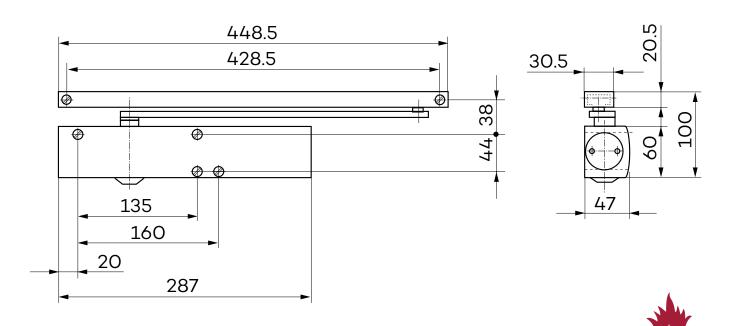
Guide rail door closer for single-leaf doors with up to 1400mm leaf width.

The TS 5000 overhead door closer stands for clear, clean lines and diverse system variations. It is for right and left-hand single-action doors with large leaf widths up to 1400 mm and approved for use on fire and smoke doors. The closing force, size 2-6 to EN 1154, the thermo-stabilised closing speed, the hydraulic latching action and the back check can be effortlessly adjusted from the front when installed. Due to the visual display the set closing force can be easily checked.

Special versions:

- GEZE TS 5000 with mechanical hold-open, stepless adjustable between 80° and 130° (not approved for use on fire and smoke doors).
- GEZE TS 5000 S door closer with delayed closing adjustable from the front.





Fire Rated

NOV / S

GEZE TS 5000

Applications

- For single-action doors, leaf width up to 1400mm.
- Can be used for right and left-hand doors without conversion.
- For fire protection doors (door closer with mounting plate).

Technical data

Product features	GEZE TS 5000 closes	r GEZE TS 5000 S closer	GEZE TS 5000 L closer
Closing force to EN 1154		2 - 6	
Recommended leaf width, up to		1400 mm	
Same version for left and right-hand doors	••		•
Product tested to	Doo	r closer tested to E	N 1154
Fire door suitability	••		•
Mounting plate with hole pattern to EN 1154 supplement	nt ••		•
Length		287 mm	
Overall depth		47 mm	
Height		60 mm	
Functions			
Adjustable closing force		Yes, stepless	
Adjustable closing speed	••		•
Adjustable latching action		Yes, via valve	
Integrated back check	Yes,	hydraulically adjus	table
Integrated delayed closing		•	
Position of closing force adjustment		Front	
Visual display of the closing force	••		•
Safety valve against vandalism	••		•
Thermo-stabilised valves	••		•

Technical data (guide rail)

Product features	Guide rail TS 5000 adjust-able height	Guide rail TS 5000	T-STOP guide rail TS 5000
Length	448.5 mm	448.5 mm	452.5 mm
Overall depth	30.5 mm	30.5 mm	33 mm
Height	20.5 mm	20.5 mm	30 mm
Functions			
Integrated opening restrictor	OO	# t	•
Integrated hold-open	000		
Height correction possible	•		

O = optional

● = standard



GEZE 5000E DOOR CLOSERS

GEZE TS 5000E

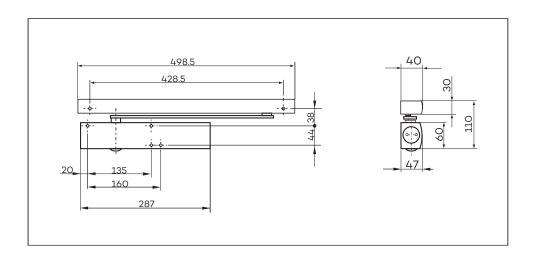
Guide rail door closer for single-leaf doors up to 1400 mm leaf width with electrical hold-open.

Due to the electromechanical hold-open (to EN 1155) in the 30 mm low guide rail the TS 5000 E overhead door closer can be stepless adjusted to an exact point between 80° and 130°.

Since this hold-open device is released in case of fire or a power failure and the door closes safely, this closer is authorised for use with single leaf fire and smoke doors.

The closing force, size 2-6 to EN 1154, the closing speed, the latching action and the back check can be adjusted from the front. The door closer has a visual closing force display. The holding force of the holdopen is adjustable and the hold-open position can be overridden.







NOV / S

GEZE TS 5000E

Applications

- For single-action doors, leaf width up to 1400mm.
- Can be used for right and left-hand doors without conversion.
- For fire doors (door closer with mounting plate).

Technical data

Product features	GEZE TS 5000 closer	GEZE TS 5000 L closer	
Closing force to EN 1154	2 - 6		
Recommended leaf width, up to	140	0 mm	
Same version for left and right-hand doors	•	•	
Product tested to	Door closer t	ested to EN 1154	
Fire door suitability	•	•	
Mounting plate with hole pattern to EN 1154 supplement	•	•	
Length	287 mm		
Overall depth	47 mm		
Height	60 mm		
Functions			
Adjustable closing force	Yes, s	tepless	
Adjustable closing speed	•	•	
Adjustable latching action	Yes, via valve		
Integrated back check	Yes, hydraulically		
Position of closing force adjustment	adjustable Front		
Visual display of the closing force	•	•	
Safety valve against vandalism	•	•	
Thermo-stabilised valves	•	•	

Technical data (guide rail)

Product features	TS 5000 E-guide rail	BG TS 5000 E-guide rail		
Supply voltage	24 V	24 V DC		
Enclosure rating	IP 4	3		
Product tested to	Hold-open devic	e tested to EN		
Length	1154 498	3.5 mm		
Overall depth	40 n	nm		
Height	30 m	30 mm		
Functions				
Integrated hold-open	Electr	rical		
Hold-open position can be overridden	•	•		
Hold-open angle	80°-130°	from 80°		
Height correction possible	•	•		

O = optional

= standard



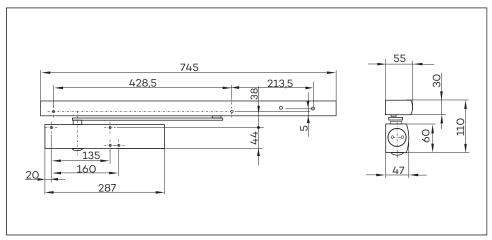
GEZE 5000 DOOR CLOSERS

GEZE TS 5000 R

Guide rail door closer for single-leaf doors up to 1400 mm with electrical hold-open and smoke switch control unit

The TS 5000 R overhead door closer with electromechanical hold-open (to EN 1155) and integrated smoke switch control unit in the 30 mm low guide rail is approved for mounting on single-leaf fi re and smoke doors. In case of fi re, the smoke detector will be acti-vated and the door closes automatically. The closing force to EN 1154 size 2-6, the closing speed and the latching action are adjustable from the front, the door closer has adjustable back check and a visual closing force display. The holding force of the hold-open is adjustable and the hold-open position can be overridden. The hold-open system has a national technical approval.









GEZE TS 5000R

Applications

- For single-action doors, leaf width up to 1400mm.
- Can be used for right and left-hand doors without conversion.
- For fire protection doors (door closer with mounting plate).

Technical data

Product features	GEZE TS 5000 close	r GEZE TS 5000 S closer	GEZE TS 5000 L closer
Closing force to EN 1154		2 - 6	
Recommended leaf width, up to		1400 mm	
Same version for left and right-hand doors	••		•
Product tested to	Doo	r closer tested to E	N 1154
Fire door suitability	••		•
Mounting plate with hole pattern to EN 1154 supplement	nt ••		•
Length		287 mm	
Overall depth		47 mm	
Height		60 mm	
Functions			
Adjustable closing force		Yes, stepless	
Adjustable closing speed	••		•
Adjustable latching action		Yes, via valve	
Integrated back check	Yes,	hydraulically adjus	table
Integrated delayed closing		•	
Position of closing force adjustment		Front	
Visual display of the closing force	••		•
Safety valve against vandalism	••		•
Thermo-stabilised valves	••		•

Technical data (guide rail)

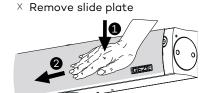
Product features	TS 5000 R-guide rail	BG TS 5000 R-guide rail		
Supply voltage	230	230 V 50 Hz		
Enclosure rating		IP 20		
Product tested to	Hold-open dev	rice tested to EN 1154		
	DIBt national techni	ical approval as hold-open		
Length	syste	em 745 mm		
Overall depth		55 mm		
Height		30 mm		
Functions				
Integrated hold-open	E	lectrical		
Hold-open position can be overridden	•	•		
Hold-open angle	80°-130°	from 80°		
Integrated smoke switch	•	•		
with visual operating state display	•	•		
with clogging indicator	•	•		
with alarm threshold tracing	•	•		
Integrated power pack	•	•		
Height correction possible	•			

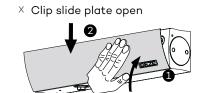


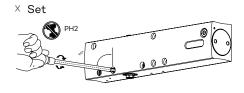
$OV \wedge S$

GEZETS 5000

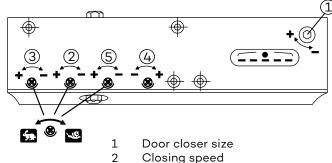
Recommended settings for GEZE door closers





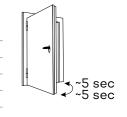


GEZE TS 5000



- Closing speed
- Latching action 3
- Back check
- Delayed closing action (only S with T 5000 S)

Display Door closer size	Leaf width [mm]
2	up to 850
3	850-950
4	950-1100
5	1100-1250
6	1250 - 1400



Fire Rated

Light-running door must be closed completely by the closer!

GEZE door closer with mechanical hold-open:

By installing the hold-open unit in the relevant guide rail, a stepless adjustable door hold-open function is enabled between 800 and 1300. The holding force of the hold-open is adjustable. The hold-open can also be switched off.

1) **Backcheck**

Reduces the speed of forcefully thrown open door at approx. 900 door opening. However, e.g. in the case of outward-opening doors exposed to the wind, it cannot replace separate restriction of the opening angle – installa-tion of a door stop or other structural measures.

2) Closing speed

The closing speed of a door can be set individually.

Latching action 3)

The door movement is accelerated in the last degrees of closing in order to overcome closing resistance, e.g. air resistance

4) **Delayed closing**

Reduces the closing speed of a door or stops the door, so that passing people have sufficient time to get through the door.

GEZE 5000E DOOR CLOSERS

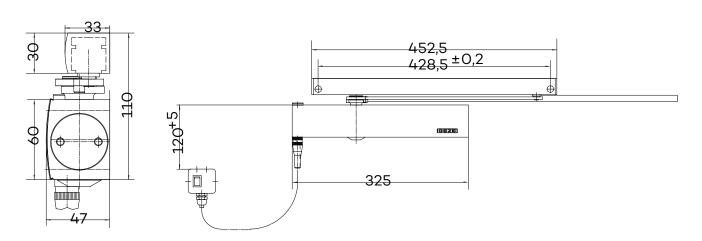
GEZETS 5000EFS

Guide rail door closer for single-leaf doors up to 1250mm leaf width with electrical free swing function.

The TS 5000EFS overhead door closer for single leaf doors is equipped with the "free swing" function. It is possible to use the door with little effort in the opening or closing direction, e.g. in retirement facilities or hospitals, after the free swing function has been activated by opening the door once to approx. 90°, e.g. in the morning. Safe automatic closing of the door in case of a fire. As a result, it is approved for mounting on single-leaf fire and smoke doors, to EN 1155.

The door closer is approved for mounting on right and left-hand single-action doors with up to 1250mm leaf width. The closing force to EN 1154, size 2-5, the closing speed and the latching action are adjustable from the front. The door closer has a visual closing force display.







NOV / S

GEZE TS 5000EFS

Applications

- For single-action doors, leaf width up to 1250mm
- Can be used for right and left-hand doors without conversion
- For fire doors (door closer with mounting plate)
- Door leaf mounting/hinge side variation or frame mounted/hinge side variation available

Technical data

Product features	GEZE TS 5000 EFS complete pack, leaf	GEZE TS 5000 EFS - complete pack, frame	
Closing force to EN 1154	mounted 2	- 5 mounted	
Recommended leaf width, up to	125	0 mm	
Same version for left and right-hand doors	•	•	
Supply voltage	24	4 V DC	
Product tested to	Door closer tes	ted to EN 1154 Hold-	
	open device	tested to EN 1154	
Fire door suitability		•	
Mounting plate with hole pattern to EN 1154 supplement	•	•	
Length	325 mm		
Overall depth	46 mm		
Height	60 mm		
Functions			
Freeswing function	•	•	
Freeswing range	859	°-170°	
Adjustable closing force	Yes,	stepless	
Adjustable closing speed	•	•	
Adjustable latching action	Yes, v	via valve	
Integrated back check	No		
Position of closing force adjustment	Front		
Visual display of the closing force		•	
Safety valve against vandalism		•	
Thermo-stabilised valves		•	

O = optional

● = standard



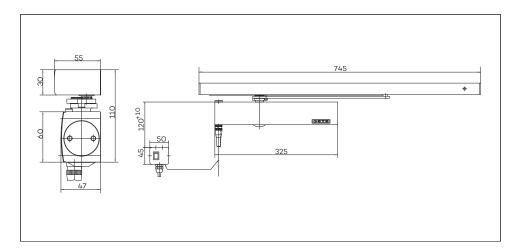
GEZE 5000 DOOR CLOSERS

GEZE TS 5000 RFS

Guide rail door closer for single-leaf doors up to 1250 mm leaf width with electrical free-swing function and smoke switch control unit

The TS 5000 RFS overhead door closer for single leaf doors has an integrated smoke switch and the "free swing" function. This enables the door to be used with little effort in the opening or closing direction, e.g. in retirement facilities or hospitals, after the free-swing function has been activated by opening the door once, e.g. in the morning. Safe automatic closing of the door in case of fire. As a result, it is approved for mounting on single-leaf fire and smoke doors, to EN 1155. The closing force to EN 1154, size 2-5, the closing speed and the latching action are adjustable from the front. The door closer has a visual closing force display. The hold-open system has a national technical approval.







GEZETS 5000RFS

Applications

- For single-action doors, leaf width up to 1250 mm
- Can be used for right and left-hand doors without conversion
- Forfire doors (door closer with mounting plate)
- Door leaf mouting/hinge side variation or frame mounted/hinge side variation available

Technical data

Product features	GEZE TS 5000 RFS - complete pack, door leaf	GEZE TS 5000 RFS - complete pack, frame
Closing force to EN 1154	mounting 2	- 5 mounted
Recommended leaf width, up to	1250	O mm
Same version for left and right-hand doors	•	•
Supply voltage	230 V	50 Hz
Product tested to	Door closer tes	sted to EN 1154
	Hold-open device	tested to EN 1154
	DIBt national technical	approval as hold-open
Fire door suitability	• sys	tem •
Mounting plate with hole pattern to EN 1154 supplement	•	•
Length	325 mm	548 mm
Overall depth	46 mm	66 mm
Height	60 mm	65 mm
Freeswing function Freeswing range		• -170°
Adjustable closing force	Yes, s	stepless
Adjustable closing speed	•	•
Adjustable latching action	,	ria valve
Integrated back check	•	lo
Position of closing force adjustment		ont
Visual display of the closing force	•	•
Safety valve against vandalism	•	•
Thermo-stabilised valves	•	•
Integrated smoke switch	•	•
with visual operating state display	•	•
with clogging indicator	•	•
with alarm threshold tracing	•	•
Integrated power pack	•	•







GEZE 5000E DOOR CLOSERS

GEZE TS 5000ISM

Guide rail door closer system for double-leaf doors up to 2800 mm hinge clearance with integrated closing sequence control.

The integrated closing sequence control ensures the correct closing sequence of both doors for double-leaf doors. When closing the door the active leaf remains in the waiting position until the fixed leaf is closed and releases the active leaf via the closing sequence control.

The GEZE system solution consists of two TS 5000 overhead door closers with adjustable closing force, size 2-6 to EN 1154, combined with the ISM guide rail with integrated mechanical closing sequence control, tested to EN 1158. The overhead door closing system TS 5000ISM is approved for double-leaf fire and smoke doors.

For the opposite hinge side the version TS 5000 L-ISM is available in standard or panic function only on the active leaf. For all full panic demands the version TS 5000 L-ISM VPK with an X-dimension of 125mm is available, also with symmetric fitting dimensions.







$NOV\Lambda S$

GEZE TS 5000ISM

Applications

- For 2-leaf doors, leaf width up to 1400mm
- Min. hinge clearance = 1300mm, max. hinge clearance = 2800mm
- Overlength version up to 3200mm
- Symmetrical and asymmetrical division of door possible, minimum width of the fixed leaf = 400mm
- For fireproof doors (door closer with mounting plate)

Technical data

Product features	GEZE TS 5000 closer	GEZE TS 5000 L closer	
Closing force to EN 1154	2 - 6		
Recommended leaf width, up to	1400 mm		
Same version for left and right-hand doors	•		
Product tested to	Door closer tested to EN 1154		
Fire door suitability	•	•	
Mounting plate with hole pattern to EN 1154 supplement	•	•	
Length	287 r	nm	
Overall depth	47 mm		
Height	60 mm		
Functions			
Adjustable closing force	Yes, st	epless	
Adjustable closing speed	•	•	
Adjustable latching action	Yes, vio	a valve	
Integrated back check	Yes, hydraulically adjustable		
Position of closing force adjustment	Front		
Visual display of the closing force	•	•	
Safety valve against vandalism	•	•	
Thermo-stabilised valves	•	•	

Technical data (guide rail)

Product features	ISM-guide rail TS 5000	ISM-guide rail BG TS 5000	ISM-guide rail BG VPK TS 5000 complete package
Minimum hinge clearance	1300 mm	1360 mm	1300 mm
Minimum fi xed leaf width	400 mm	380 mm	380 mm
Product tested according to	Closing sequence controller tested acc. to EN 1158	Closing sequence controller tested acc. to EN 1158	Door closer tested acc. to EN 1154. Closing sequence controller tested acc. to EN 1158.
Length	2630 mm	2730 mm	2730 mm
Overall depth	40 mm	55 mm	55 mm
Height		30 mm	
Functions			
Closing sequence control integrated	•		•
Hold-open mechanism integrated	O	•	O
Height correction possible	•		•



= standard



GEZE 5000E-ISM DOOR CLOSERS

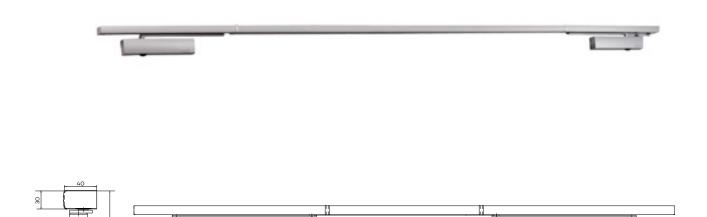
GEZE TS 5000E-ISM

Guide rail door closer system for double-leaf doors up to 2800 mm hinge clearance with integrated closing sequence control and electrical hold open

The TS 5000 E-ISM overhead door closer system for double-leaf doors with integrated, invisible closing sequence control has an additional electromechanical hold-open function in the guide rail so that the door can be opened to an exact point. As the hold-open releases in case of fire and the doors close automatically, the system is approved for use with fire and smoke doors.

he GEZE system solution consists of two TS 5000 overhead door closers with adjustable closing force, size 2-6 to EN 1154, combined with the E-ISM guide rail with integrated mechanical closing sequence control, tested to EN 1158 and electromechanical hold-open to EN 1155 on both sides. The holding force is adjustable and the hold-open position can be overridden.

For the opposite hinge side the version TS 5000 L-E-ISM is available as standard or as panic function only on the active leaf. For all full panic demands the version TS 5000 L-E-ISM VP up to an X-dimension of 100 mm is available, with asymmetric fitting dimensions.







GEZE 5000L-E-ISM DOOR CLOSERS

GEZE TS 5000L-E-ISM

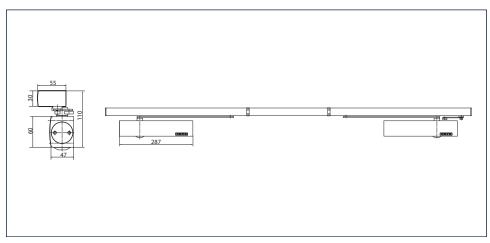
Guide rail door closer system for double-leaf doors up to 2800 mm hinge clearance with integrated closing sequence control and electrical hold open

The TS 5000 E-ISM overhead door closer system for double-leaf doors with integrated, invisible closing sequence control has an additional electromechanical hold-open function in the guide rail so that the door can be opened to an exact point. As the hold-open releases in case of fire and the doors close automatically, the system is approved for use with fire and smoke doors.

The GEZE system solution consists of two TS 5000 overhead door closers with adjustable closing force, size 2-6 to EN 1154, combined with the E-ISM guide rail with integrated mechanical closing sequence control, tested to EN 1158 and electromechanical hold-open to EN 1155 on both sides. The holding force is adjustable and the hold-open position can be overridden.

For the opposite hinge side the version TS 5000 L-E-ISM is available as standard or as panic function only on the active leaf. For all full panic demands the version TS 5000 L-E-ISM VP up to an X-dimension of 100 mm is available, with asymmetric fitting dimensions.





Closer technical data:

• X-dimension up to max. 100 mm, the door opening angle on the active leaf side is > 90°, the diagram "door opening angle" on page 8 does not apply for the L-E-ISM VP version Min. hinge clearance 1445 mm

Fire Rated

GEZE TS 5000E-ISM

Applications

- For 2-leaf doors, leaf width up to 1400mm
- Min. hinge clearance = 1300mm, max. hinge clearance = 2800mm
- Overlength version up to 3200mm
- Symmetrical and asymmetrical division of door possible, minimum width of the fixed leaf = 400mm
- For fireproof doors (door closer with mounting plate)
- Can be used for doors mounted in the right or left without conversion

Technical data

Product features	GEZE TS 5000 closer	GEZE TS 5000 L closer	
Closing force to EN 1154	2 - 6		
Recommended leaf width, up to	1400 mm		
Same version for left and right-hand doors	•		
Product tested to	Door closer tested to EN 1154		
Fire door suitability	•	•	
Mounting plate with hole pattern to EN 1154 supplement	•	•	
Length	287 mm		
Overall depth	47 mm		
Height	60 mm		
Functions			
Adjustable closing force	Yes, s	tepless	
Adjustable closing speed	•	•	
Adjustable latching action	Yes, v	ia valve	
Integrated back check	Yes, hydraulically adjustable		
Position of closing force adjustment	Front		
Visual display of the closing force	•	•	
Safety valve against vandalism	•	•	
Thermo-stabilised valves	•	•	

Technical data (guide rail)

Product features	TS 5000 E-ISM guide rail	TS 5000 E-ISM guide rail BG VF		
Minimum hinge clearance	1300 mm	1445 mm		
Minimum fi xed leaf width	400 mm	380 mm		
Supply voltage		24 V DC		
Enclosure rating	IF			
Product tested to	Hold-open device	Hold-open device tested to EN 1154		
	Closing sequence	Closing sequence controller tested to		
Length	2630 mm EN	1158 2645 mm		
Overall depth	40 mm	55 mm		
Height		30 mm		
Functions				
Closing sequence control, integrated	•	•		
Integrated hold-open	Ele	Electrical		
Hold-open on the active leaf / fi xed leaf	● / ●	● / ●		
Hold-open position can be overridden	•	•		
Hold-open angle	80°-130°	from 80°		
Height correction possible	•	•		

 $\mathbf{O} = \mathsf{optional}$

= standard



GEZE 5000R-ISM DOOR CLOSERS

GEZE TS 5000R-ISM

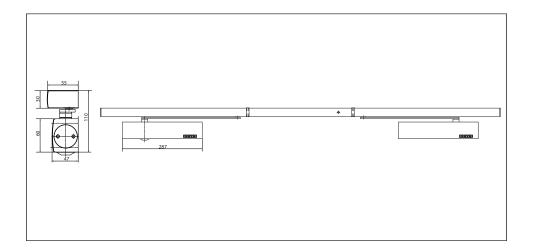
Guide rail door closer system for double-leaf doors up to 2800 mm hinge clearance with integrated closing sequence control, electrical hold-open and smoke switch control unit

The TS 5000 R-SIM overhead door closer system for double-leaf doors with integrated, invisible closing sequence control, electro-mechanical hold-open on both sides and integrated smoke switch control unit is approved for mounting on fi re and smoke doors. In the case of a fi re, the smoke detector will be activated and the doors close automatically.

The GEZE system solution consists of two TS 5000 overhead door closers with adjustable closing force, size 2-6 to EN 1154, combined with the R-ISM guide rail with integrated mechanical closing sequence control, tested to EN 1158, electromechanical hold-open to EN 1155 and smoke switch control unit with clogging indicator and alarm threshold tracing. The holding force is adjustable and the hold-open position can be overridden. The hold-open system has national technical approval.

For the opposite hinge side the version TS 5000 L-R-ISM is available as standard or as panic function only on the active leaf. For all full panic demands the version TS 5000 L-R-ISM VP up to an X-dimension of 100 mm is available, with asymmetric fitting dimensions.









GEZE TS 5000R-ISM

Applications

- For double-action doors, leaf width up to 1400 mm
- Min. hinge clearance = 1500 mm, max. hinge clearance = 2800 mm
- Overlength version up to 3200 mm
- Symmetrical and asymmetrical door divisions possible, minimum width of the fi xed leaf = 400 mm
- For fireproof doors (door closer with mounting plate)
- Can be used for right and left-hand doors without conversion

Technical data

Product features	GEZE TS 5000 closer	GEZE TS 5000 L closer	
Closing force to EN 1154	2 - 6		
Recommended leaf width, up to	1400 mm		
Same version for left and right-hand doors	•	•	
Product tested to	Door closer tested to EN 1154		
Fire door suitability	•	•	
Mounting plate with hole pattern to EN 1154 supplement	•	•	
Length	287 mm		
Overall depth	47 mm		
Height	60 mm		
Functions			
Adjustable closing force	Yes, stepless		
Adjustable closing speed	•	•	
Adjustable latching action	Yes, via valve		
Integrated back check	Yes, hydraulically		
Position of closing force adjustment	adjustable Front		
Visual display of the closing force	•	•	
Safety valve against vandalism	•	•	
Thermo-stabilised valves	•	•	

Technical data (guide rail)

Product features	TS 5000 R-ISM guide rail	R-ISM/G guide rail TS 5000	TS 5000 R-ISM guide rail BG VP	
Minimum hinge clearance	1500 mm	1500 mm	1645 mm	
Minimum fi xed leaf width	400 mm	400 mm	380 mm	
Supply voltage	230 V 50 Hz			
Enclosure rating	IP 20			
Ambient temperature		0 - 50 °C		
Product tested to	Hold-op	Hold-open device tested to EN 1154		
	Closing sequence controller tested to EN 1158			
	DIBt nationa	DIBt national technical approval as hold-open		
Length	2740 mm	27/40emm m	2730 mm	
Overall depth	55 mm			
Height	30 mm			
Functions			I	
Closing sequence control, integrated	•	•	•	
Integrated hold-open	Electrical			
Hold-open on the active leaf / fi xed leaf	• / •	•/-	• / •	
Hold-open position can be overridden	•	•	•	
Hold-open angle	80°-130°	80°-130°	from 80°	
Integrated smoke switch	•	•	•	
with visual operating state display	•	•	•	
with clogging indicator	•	•	•	
with alarm threshold tracing	•	•	•	
Integrated power pack	•	•	•	
Height correction possible	•	•	•	

NOVAS DOOR CONTROLS

GEZE Hydraulic door closers are designed to suit various residential and commercial applications. By definition, door closers are used to close hinged leaf doors after they have been manually opened. The smooth closing operation is controlled by the adjustable hydraulic rack and pinion mechanism.

In choosing a closer style for a particular application consideration should be given to the type of door being controlled, frame condition, aesthetic and the control features required by the end user.

The size and weight of the door is the main consideration in selecting a closer of the correct strength. Recommended door widths for each closer assume normal operating conditions. If a door is of exceptional height, weight, special construction, or if air pressure differentials exist, a more powerful closer should be considered.

A door closer effectively increases the loading on door hinges and their rate of wear. It is recommended that any door fitted with a door closer should use three or more Novas Ball Bearing/Sintered Bearing Hinges.

It is essential that the door be clear in the door frame and when fitted with a lock the latch bolt must engage freely with the strike.

Floor or wall mounted doorstops should be fitted to prevent possible damage to the door frame and fitted hardware.

Services

Novas offers a fully comprehensive (free of charge) specification/door scheduling service to meet project requirements. Door schedules are prepared by our scheduling team who are all design and/or industry trained professionals. Please contact your local Novas representative for assistance.

Guarantee

Novas guarantee all their products against defects in workmanship and materials subject to inspection and confirmation of fair wear and tear within the normal working life of the product.

Novas assumes no liability for:

- 1. Improper installation or failure to follow fitting instructions.
- 2. Product failure due to improper maintenance or unfair wear and tear.
- 3. Indirect or consequential loss or damage.
- 4. Cost of removal and/or replacement.
- 5. Cost of freight and/or travelling expenses.
- 6. Some plated finishes are classified as soft finishes. Deterioration is possible under some climatic conditions and cannot be unconditionally guaranteed.

Contact your local Novas representative or agent for advice on all finishes.

