



Steiff Museum, Giengen

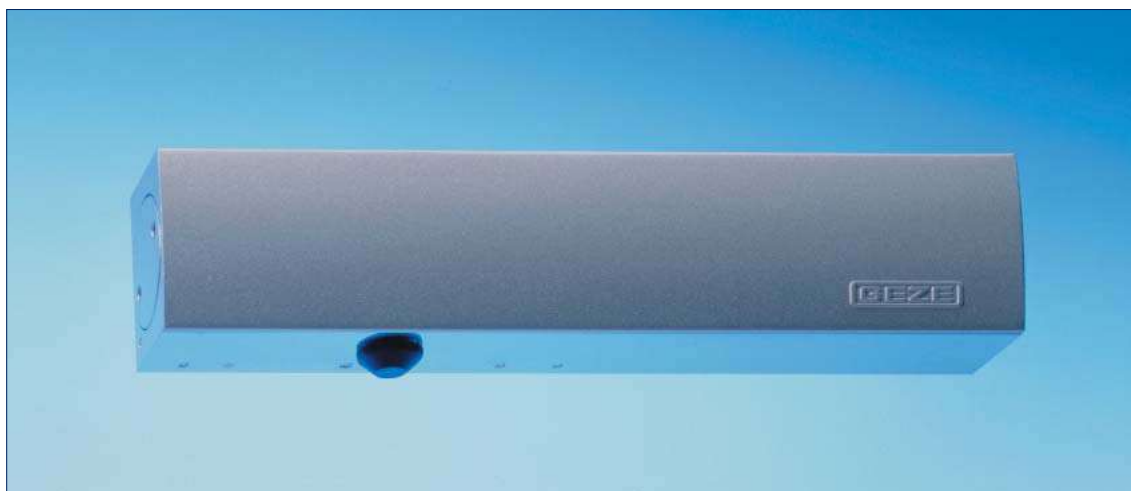
GEZE TS 1500 / TS 2000 V / TS 4000

Overhead rack and pinion door closers

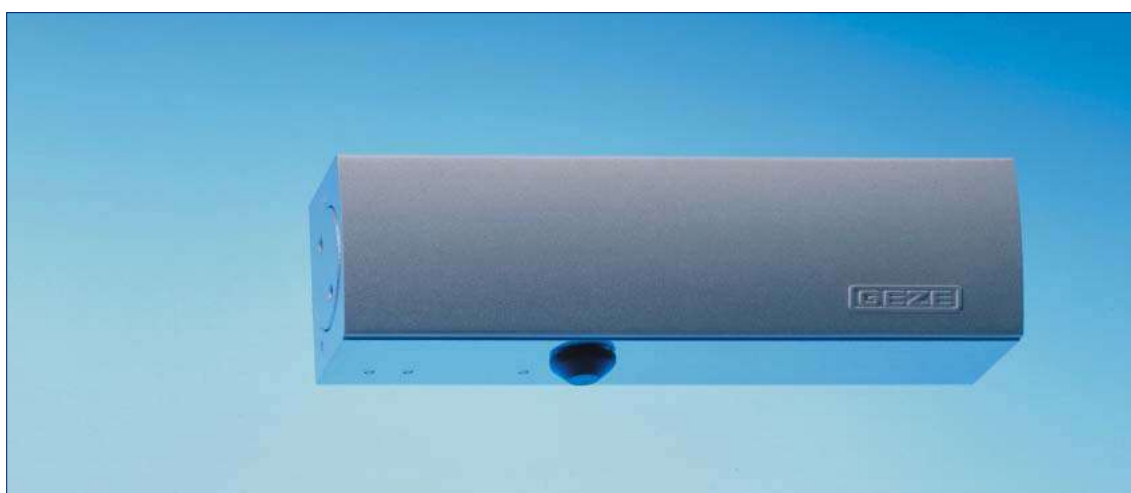


BEWEGUNG MIT SYSTEM

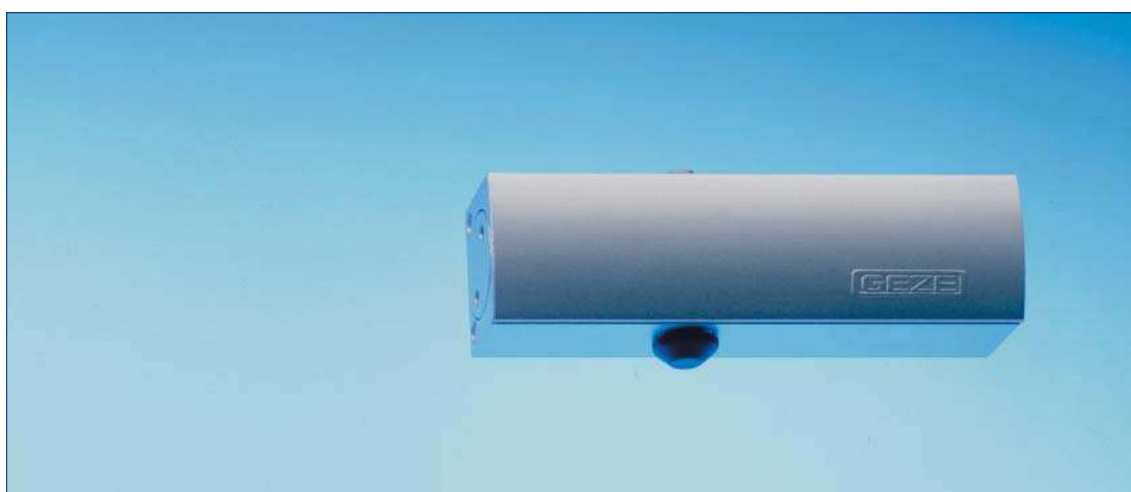
GEZE door closer – Clear lines



GEZE TS 4000



GEZE TS 2000 V

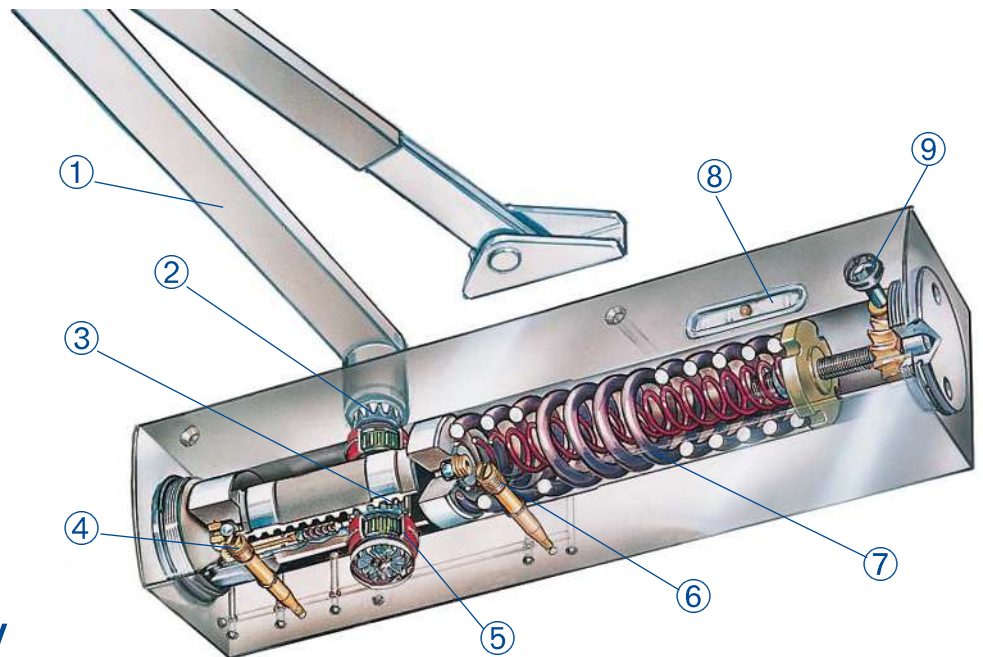


GEZE TS 1500

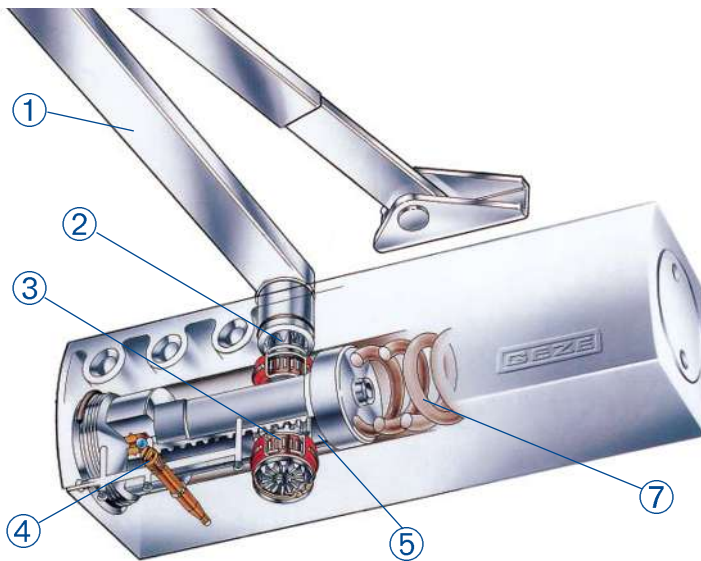
Technology – Overhead door closer GEZE TS 4000

Legend:

- ① Arm
- ② Toothed spindle
- ③ Rack and pinion gear
- ④ Closing speed adjuster
- ⑤ Needle bearing
- ⑥ Back check adjuster
- ⑦ Spring
- ⑧ Closing force indicator
- ⑨ Closing force adjuster



GEZE TS 2000 V



GEZE door closer with adjustable closing force:

The standards stipulate that the door closer size (closing force of the closer) must be selected appropriate to the door width. The next highest size must be selected if the structural (door height, door weight) or local conditions (wind influence) makes this necessary.

The GEZE TS 4000 and variants covers several door closer sizes in one housing. These sizes can be adjusted using an adjustment screw. The adjusted closing force is shown by a closing force indicator.

Door closer size EN	Door leaf width (mm)
Size 1	up to 750
Size 2	over 750 up to 850
Size 3	over 850 up to 950
Size 4	over 950 up to 1100
Size 5	over 1100 up to 1250
Size 6	over 1250 up to 1400
Size 7	over 1400 up to 1600

Cover caps for GEZE door closer

For GEZE door closer TS 2000 V and TS 4000 cover caps are as follows available:

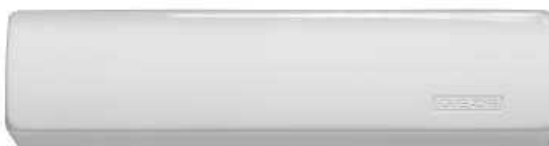
▶ silver



▶ dark bronze



▶ white RAL 9016



▶ polished brass



▶ stainless steel



and further RAL colours on request.

Page Contents

	Overhead rack and pinion door closer, single-leaf
6-7	TS 1000 C Surface-mounted door closer with arm, closing force size 2-3(4) according to EN 1154
8-9	TS 1500 Surface-mounted door closer with arm, closing force size 3-4 according to EN 1154
10-11	TS 1500 G Surface-mounted door closer TS 1500 with guide rail
12-15	TS 2000 V Surface-mounted door closer with arm, closing force size 2/4/5 according to EN 1154
16-19	F TS 4000 Surface-mounted door closer with arm, closing force size 1-6 and 5-7 according to EN 1154 A
20-24	F TS 4000 E Door closer with electrohydraulic hold-open according to EN 1155, closing force size 1-6
26-29	F TS 4000 R Door closer with electrohydraulic hold-open according to EN 1155, closing force size 1-6, and integrated smoke switch, certification No. Z-6.5-1068
	Overhead rack and pinion door closer, single-leaf, with freeswing function
24-25	F TS 4000 EFS Door closer with freeswing arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6
29-30	F TS 4000 RFS Door closer with freeswing arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6, and integrated smoke switch, certification No. Z-6.5-1058



DOOR TECHNOLOGY



GLASS SYSTEMS



AUTOMATIC DOOR SYSTEMS



RWA AND WINDOW TECHNOLOGY



SAFETY TECHNOLOGY

F Approved for use with smoke and fire doors by DIBt
(German Institution for Construction Technology)

GEZE TS 1000 C

Overhead door closer for single-leaf doors

Product features

- ▶ Variable closing force in two sizes achieved by simply turning the link arm's power shoe:
 - 'Weak' (closing force size 2 to EN 1154) for leaf widths up to 850 mm
 - 'Strong' (closing force size 3 to EN 1154) for leaf widths up to 950 mm
- ▶ Increased closing force due to offset installation for leaf widths up to 1100 mm (size 4 to EN 1154)
- ▶ Closing speed adjustable, as is hydraulic latching action
- ▶ Option: with hold-open link arm allowing the closer to hold doors open between 70° and 150°

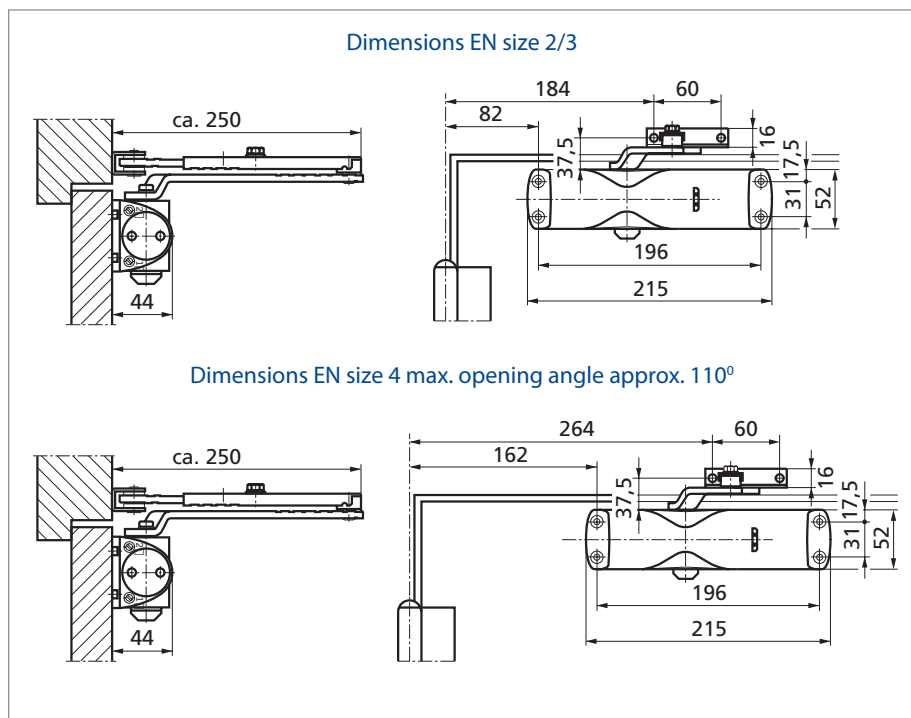


Fig. 6-1

Application range

- ▶ For single-action doors up to 950 mm (1100 mm)
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For all common types of installation

Standard version/package

Overhead door closer GEZETS 1000 C complete with link arm, screw accessories and installation template (Mounting plate not included)

- ▶ **GEZETS 1000 C with hold-open link arm**
for an adjustable opening angle between 70° and 150°

Specification text

Overhead rack and pinion door closer
GEZE TS 1000 C
with adjustable closing speed and adjustable latching action, also available with optional mounting plate.

Finish:

- () silver
- () dark bronze
- () white
- () black
- () brass-colored
- () RAL ...

GEZETS 1500 – Ordering information

Description	Finish	ID No.
GEZETS 1000 C with standard link arm	silver	101765
	dark bronze	101766
	white RAL 9016	101767
	black RAL 9005	101678
	brass-colored	101770
	RAL-colour	101769
GEZETS 1000 C with hold-open link arm	silver	101771
	dark bronze	101772
	white RAL 9016	101773
	black RAL 9005	101774
	brass-colored	101777
	RAL-colour	101776
GEZETS 1000 C door closer without link arm	silver	114303
	dark bronze	114304
	white RAL 9016	114305
	black RAL 9005	114306
	brass-colored	114307
	RAL-colour	114308
Link arm	silver	101878
	dark bronze	101879
	white RAL 9016	101881
	RAL-colour	101882
Hold-open link arm	silver	101815
	dark bronze	101816
	white RAL 9016	101817
	RAL-colour	101818
Mounting material		
Mounting plate for doors where direct mounting is not possible	silver	072019
	dark bronze	072020
	white RAL 9016	072021
	black RAL 9005	072022

GEZE TS 1500

Surface-mounted rack and pinion door closer, size 3-4 according to EN 1154

Product features

- ▶ Variable closing force in two sizes achieved by simply turning the link arm's power shoe:
 - 'Weak' (closing force size 3 to EN 1154) for leaf widths up to 950 mm
 - 'Strong' (closing force size 4 to EN 1154) for leaf widths up to 1100 mm
- ▶ Closing speed adjustable, as is hydraulic latching action
- ▶ Option: with hold-open link arm allowing the closer to hold doors open between 70° and 150°

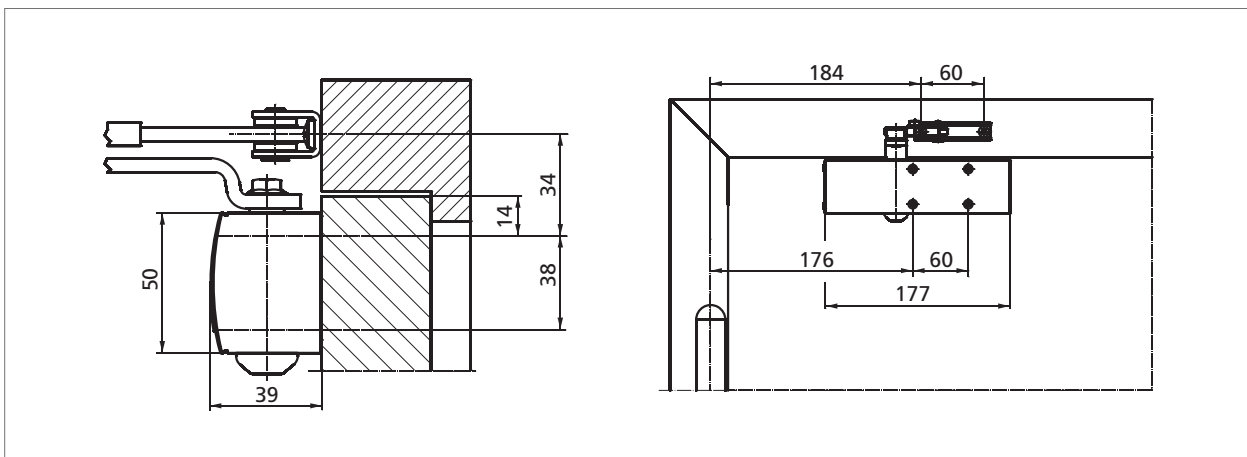


Fig. 8-1

Application range

- ▶ For single-action doors up to 1100 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ Standard type of installation: door mount, transom mounting is possible

Standard version/package

Overhead door closer GEZETS 1500 complete with screw accessories and installation template (Mounting plate not included); still needed: link arm

- ▶ GEZETS 1500 with hold-open link arm for an adjustable opening angle between 70° and 150°

Specification text

Overhead rack and pinion door closer GEZE TS 1500 complete with hold-open arm, adjustable closing speed and latching action, also available with optional mounting plate.

Finish:

- () silver
- () dark bronze
- () white
- () RAL ...

GEZETS 1500 – Ordering information

Description	Finish	ID No.
GEZETS 1500 door closer without link arm	silver	101792
	dark bronze	101793
	white RAL 9016	101794
	RAL-colour	101875
Link arm	silver	101878
	dark bronze	101879
	white RAL 9016	101881
	RAL-colour	101882
Hold-open link arm	silver	101815
	dark bronze	101816
	white RAL 9016	101817
	RAL-colour	101818
Mounting material		
Mounting plate for doors where direct mounting is not possible	silver	029682
	dark bronze	029683
	white RAL 9016	029685
	RAL-colour	029686
Accessories		
Cover caps (only suitable for direct installation)	silver	080147
	dark bronze	080148
	white RAL 9016	080149
	RAL-colour	080150

GEZE TS 1500 G

Overhead door closer GEZE TS 1500 with guide rail

Product features

- ▶ Surface-mounted rack and pinion door closer TS 1500 with guide rail, for interior doors up to 850 mm
- ▶ Closing speed adjustable, as is hydraulic latching action

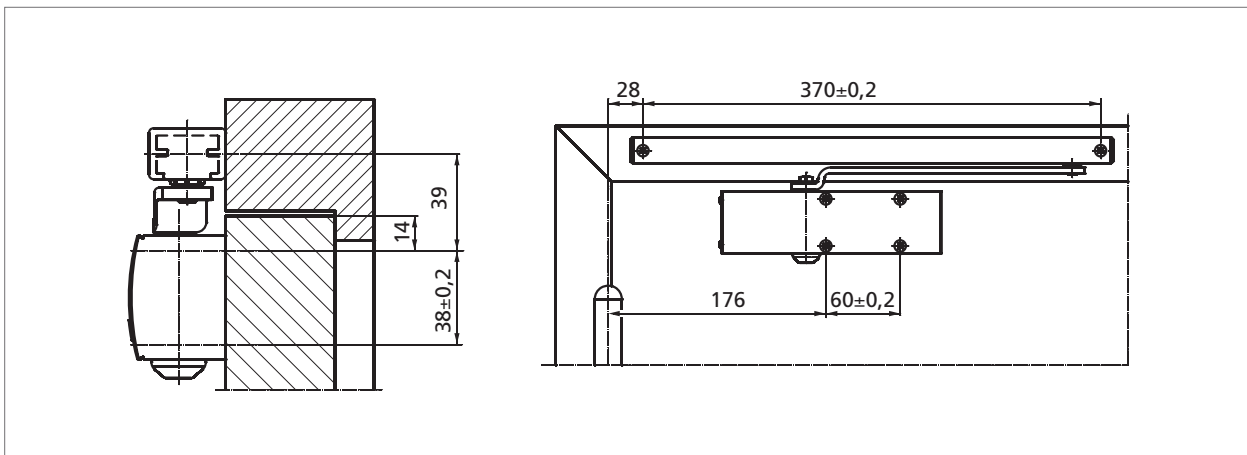


Fig. 10-1

Application range

- ▶ For interior doors
- ▶ For single-action doors up to 850 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ Standard type of installation: door mount

Standard version/package

Overhead door closer GEZETS 1500 G complete with screw accessories and installation template (Mounting plate not included); still needed: guide rail

Specification text

Overhead rack and pinion door closer GEZE TS 1500 G with guide rail, for leaf widths up to 850 mm, adjustable closing speed and latching action, also available with optional mounting plate.

Finish:

- () silver
- () dark bronze
- () white
- () RAL ...

GEZE TS 1500 – Ordering information

Description	Finish	ID No.
GEZE TS 1500 door closer without guide rail	silver	101792
	dark bronze	101793
	white RAL 9016	101794
	RAL-colour	101875
Guide rail TS 1500 G	silver	101885
	dark bronze	101886
	white RAL 9016	101887
	RAL-colour	101888
Guide rail TS 1500 G / F with hold-open device	silver	101889
	dark bronze	101890
	weiß RAL 9016	101891
	RAL-colour	101892
Opening restrictor		069780
Mounting material		
Mounting plate for doors where direct mounting is not possible	silver	029682
	dark bronze	029683
	white RAL 9016	029685
	RAL-colour	029686
Mounting plate for guide rail	silver	072333
	RAL-colour	072355
Accessories		
Cover caps (only suitable for direct installation)	silver	080147
	dark bronze	080148
	white RAL 9016	080149
	RAL-colour	080150

GEZE TS 2000 V

Surface-mounted rack and pinion door closer, closing force size 2/4/5 according to EN 1154

Product features

- ▶ With variable closing force, size EN 2/4/5
- ▶ Closer body available as only one size as standard
- ▶ Closing speed adjustable at front
- ▶ Latching action adjusted via link arm
- ▶ Concealed mounting plate

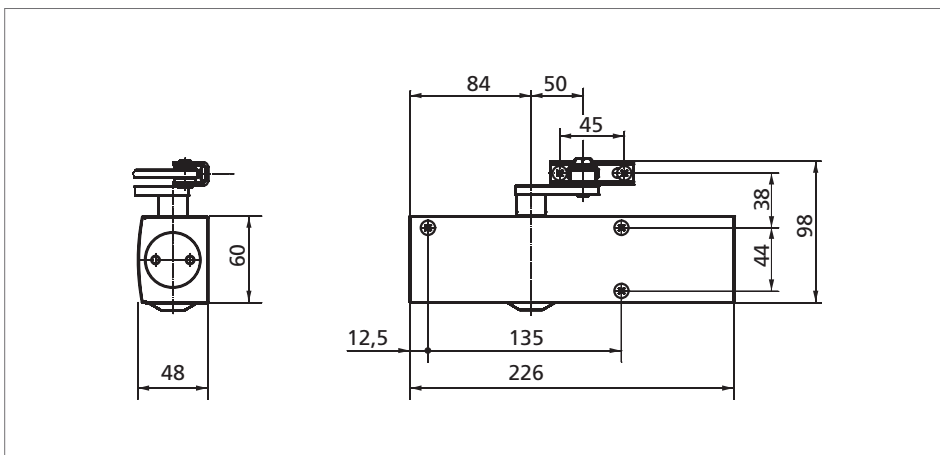


Fig. 12-1

Application range

- ▶ For single-action doors up to 1250 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ Standard type of installation: door mount, transom mounting is possible

Standard version/package

Overhead door closer GEZE TS 2000 V complete with screw accessories and fitting template (mounting plate not included); still needed: link arm

- ▶ **GEZE TS 2000 V with hold-open link arm**
for an adjustable opening angle between 70° and 150°
- ▶ **GEZE TS 2000 BV**
with hydraulic latching action adjustable at front and fixed back check

Specification text

Overhead rack and pinion door closer GEZE TS 2000 V with variable closing force size 2,4 and 5 as per EN 1154, closing speed adjustable at front, standard type of installation: door mount on hinge side, also available with optional mounting plate.

Finish:

- () silver
- () dark bronze
- () white
- () RAL ...

GEZE TS 2000 V – Ordering information

Description	Finish	ID No.
GEZE TS 2000 V door closer without link arm	silver	103386
	dark bronze	103387
	white RAL 9016	103388
	RAL-colour	103389
GEZE TS 2000 BV	silver	103392
	dark bronze	103393
	white RAL 9016	103394
	RAL-colour	103406
Link arm	silver	102421
	dark bronze	102422
	white RAL 9016	102423
	stainless steel effect ¹⁾	102426
	RAL-colour	102425
Extended link arm for transom mounting with soffit 70-170 mm	silver	102431
	dark bronze	102432
	white RAL 9016	102433
	RAL-colour	102434
Hold-open link arm can be enabled / disabled	silver	102445
	dark bronze	102446
	white RAL 9016	102447
	RAL-colour	102448
Hold-open link arm cannot be disabled	silver	102454
	dark bronze	102455
	white RAL 9016	102456
	RAL-colour	102457
Continuation GEZE TS 2000 V – Ordering information, see page 14		

¹⁾ finish stainless steel effect for dry rooms only

Continuation GEZE TS 2000 V – Ordering information

Description		Finsh	ID No.
Mounting material			
Mounting plate for doors where direct mounting is not possible			055756
Clamping plate for plate glass doors		silver	055773
		dark bronze	055774
		white RAL 9016	009499
		RAL-colour	009500
Lintel casing angle for transom mounting		silver	055766
		dark bronze	055767
		RAL-colour	104450
Mouting plate for segmental arch door (max. arch height 130 mm)		silver	059044
		dark bronze	059045
Drilling template			053134
Accessories			
Cover caps (only suitable for direct installation)		silver	013487
		dark bronze	014849
		white RAL 9016	014855
		polished brass	072770
		stainless steel	072769
		RAL-colour	014856
Serrated spindle extensions, length:	10 mm	galvanised	103548
	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

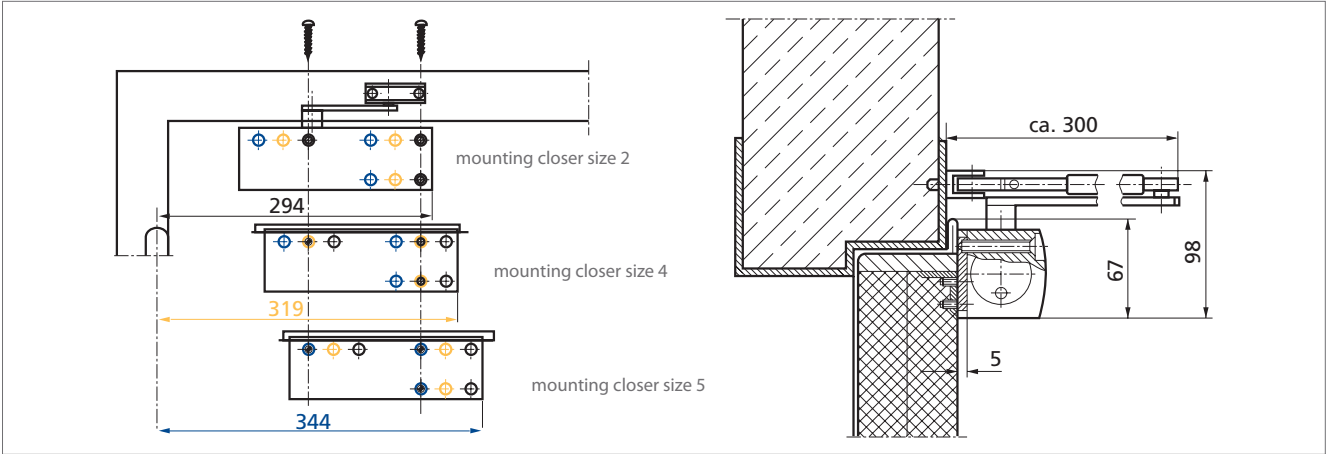


Fig. 15-1

Mounting on hinge side / door mount

Example showing the mounting of GEZE TS 2000 V, see Fig. 15-1

The closing force is adjusted by changing the mounting position:

- = mounting closer size 2
 - = mounting closer size 4
 - = mounting closer size 5
- according to EN 1154

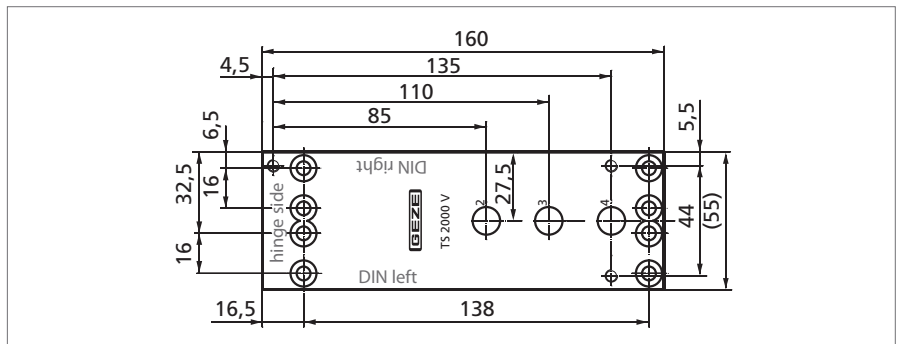


Fig. 15-2

Installation with mounting plate

Mounting plate, 5 mm deep, drill-hole pattern to DIN EN 1154 appendix 1, for doors where direct mounting is not possible, see Fig. 15-2

Mounting dimensions for left closing door, see Fig. 15-3 for right closing door, see Fig. 15-4

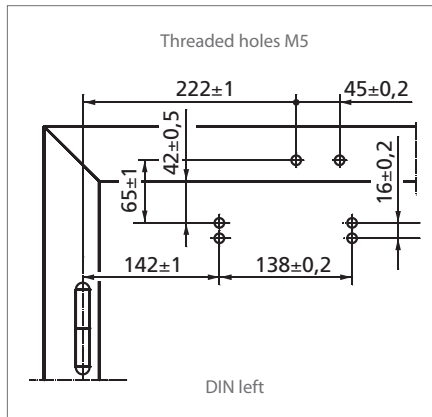


Fig. 15-3

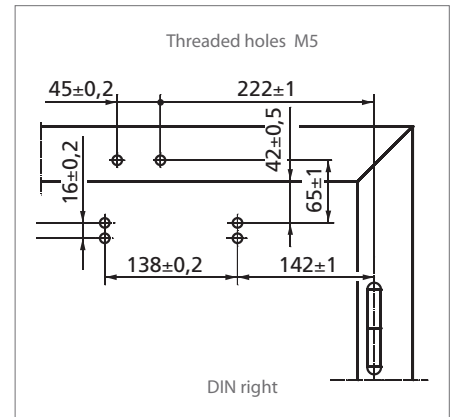


Fig. 15-4

Direct installation

Mounting dimensions for left closing door, see Fig. 15-5 for right closing door, see Fig. 15-6

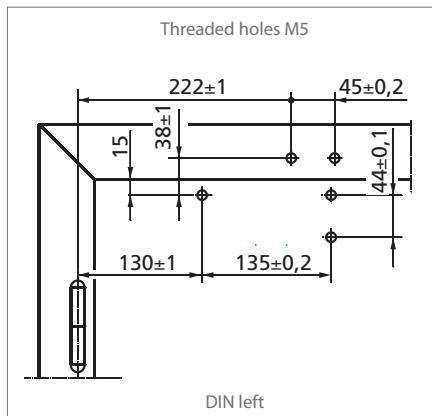


Fig. 15-5

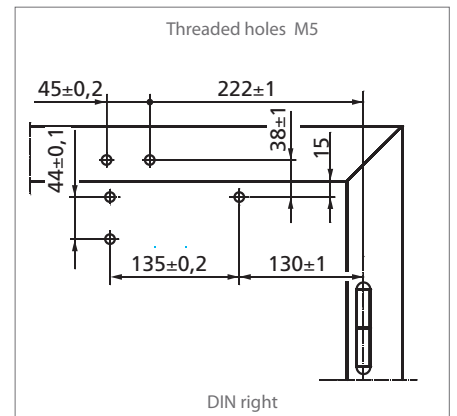


Fig. 15-6

GEZE TS 4000

Surface-mounted rack and pinion door closer, closing force size 1-6 and size 5-7 according to EN 1154

Product features

- ▶ Closing force size EN 1-6 and size EN 5-7 adjustable
- ▶ Closer in only one construction size
- ▶ Optical power size indicator
- ▶ Backcheck and thermo constant closing speed adjustable at front
- ▶ Latching action adjusted via link arm
- ▶ Safety valve in open and close direction

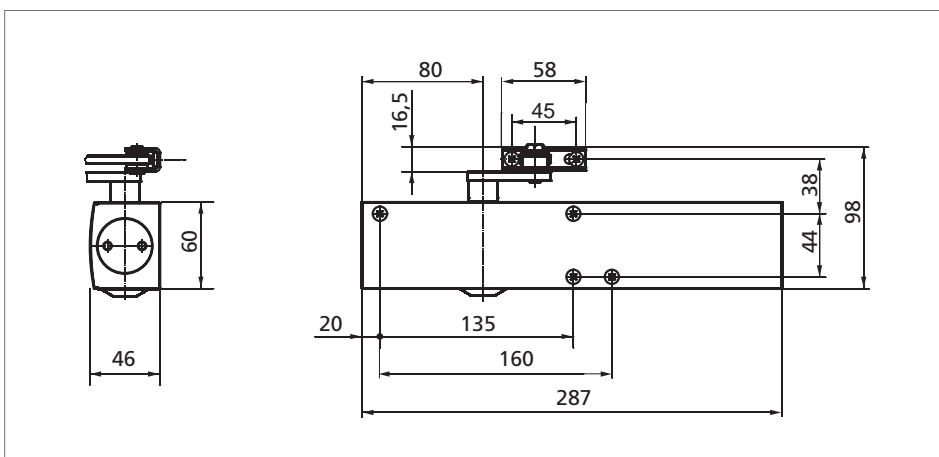


Fig. 16-1

Application range

- ▶ For single-action doors, door leaf widths up to 1400 mm (size 1-6) resp. 1600 mm (size 5-7)
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For smoke and fire-proof doors
- ▶ Standard type of installation: door mount, transom mounting is possible

Standard version/package

Overhead door closer GEZE TS 4000 complete with screw accessories and installation template (mounting plate not included); still needed: link arm

- ▶ **GEZETS 4000 with hold-open link arm**
for an adjustable opening angle up to 150°
(not permitted for use on smoke and fire-proof doors)
- ▶ **GEZETS 4000 S**
with delayed closing up to 30 sec., adjustable at front
(delayed closing is not effective for transom mounting on opposite hinge side)

Specification text

Overhead door closer GEZE TS 4000 for mounting on smoke and fire-proof doors, size 1-6 and 5-7 as per EN 1154 A, closing force adjustable at front with size 1-6, closing speed and backcheck adjustable at front, with visual size indicator, standard type of installation: door mount / hinge side, also available with optional mounting plate.

- Finish:
- () silver
 - () dark bronze
 - () white
 - () RAL ...

GEZE TS 4000 – Ordering information

Description	Finish	ID No.
GEZE TS 4000, size 1-6 door closer without link arm	silver	102789
	dark bronze	102790
	white RAL 9016	102791
	RAL-colour	102792
GEZE TS 4000, size 5-7 door closer without link arm	silver	102837
	RAL-colour	102838
GEZE TS 4000 S, size 1-6 with delayed closing action, without link arm	silver	107745
	dark bronze	107746
	white RAL 9016	107747
	RAL-colour	107748
Link arm	silver	102421
	dark bronze	102422
	white RAL 9016	102423
	stainless steel effect ¹⁾	102426
	RAL-colour	102425
Extended link arm for transom mounting with soffit 70-170 mm	silver	102431
	dark bronze	102432
	white RAL 9016	102433
	RAL-colour	102434
Hold-open link arm can be enabled / disabled	silver	102445
	dark bronze	102446
	white RAL 9016	102447
	RAL-colour	102448
Hold-open link arm cannot be disabled	silver	102454
	dark bronze	102455
	white RAL 9016	102456
	RAL-colour	102457
Continuation GEZE TS 4000 – Ordering information, see page 18		

¹⁾ finish stainless steel effect for dry rooms only

Continuation GEZE TS 4000 – Ordering information

Description		Finish	ID No.
Mounting material			
Mounting plate for doors where direct mounting is not possible		silver	049185
		dark bronze	052351
		white RAL 9016	068627
		galvanised steel	057956
		RAL-colour	029176
Lintel angle bracket for transom mounting on opposite hinge side with deep soffit		silver	049240
		dark bronze	052352
Clamping plate for plate glass doors		silver	057126
		dark bronze	057127
		white RAL 9016	009491
		RAL-colour	009494
Frame plate for parallel arm mounting		silver	053318
		dark bronze	053319
Mounting plate for segmental arch doors (max. arch height 130 mm)		silver	059044
		dark bronze	059045
		RAL-colour	119472
Drilling template			053134
Accessories			
Cover caps (only suitable for direct installation)		silver	067724
		dark bronze	067725
		white RAL 9016	067726
		polished brass	072698
		stainless steel	072696
		RAL-colour	000756
Serrated spindle extensions ¹⁾ , length:	10 mm	galvanised	103548
	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

¹⁾ Only permitted for smoke and fire-proof doors if the intended use is listed in the approval notification of the door

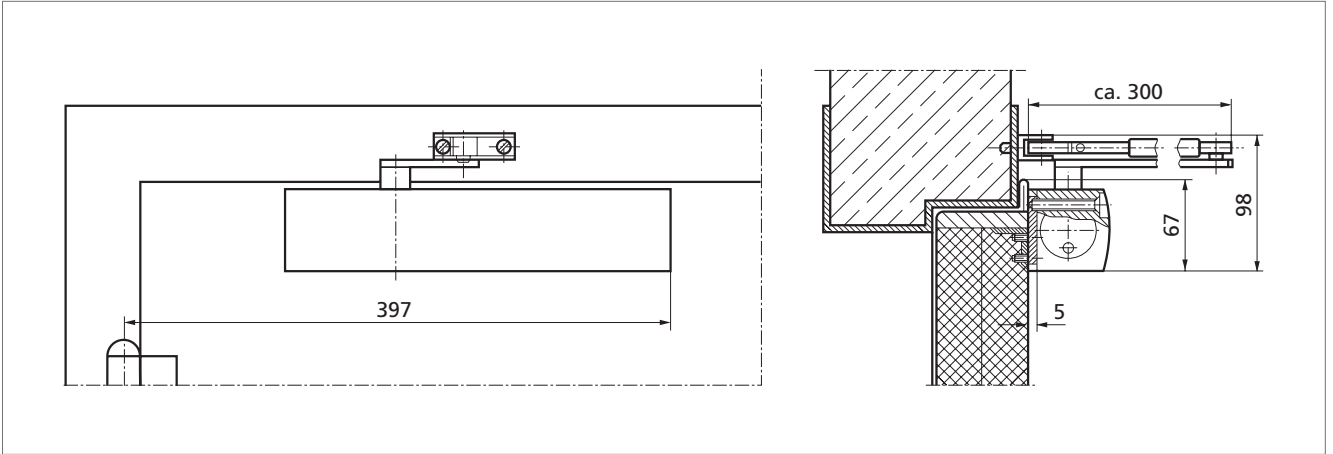


Fig. 19-1

Mounting on hinge side / door mount

Example showing the mounting of GEZE TS 4000 with mounting plate, see Fig. 19-1

Installation with mounting plate

Mounting plate, 5 mm deep, drill-hole pattern to DIN EN 1154 appendix 1, for doors where direct mounting is not possible, see Fig. 19-2

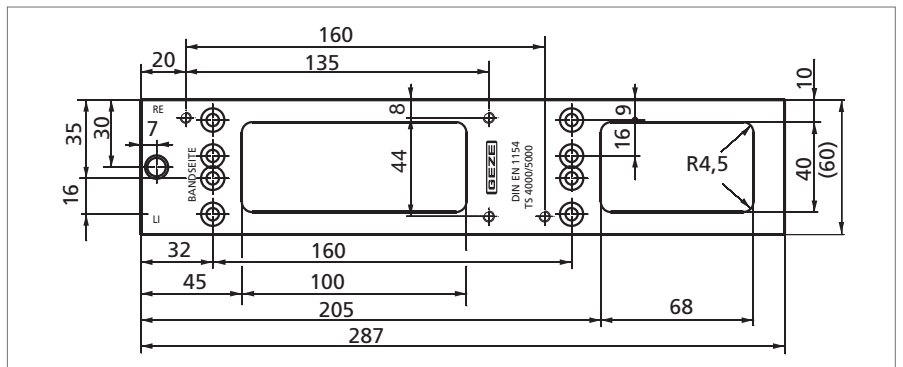


Fig. 19-2

Mounting dimensions

for left closing door, see Fig. 19-3
for right closing door, see Fig. 19-4

Direct installation

Mounting dimensions for left closing door, see Fig. 19-5
for right closing door, see Fig. 19-6

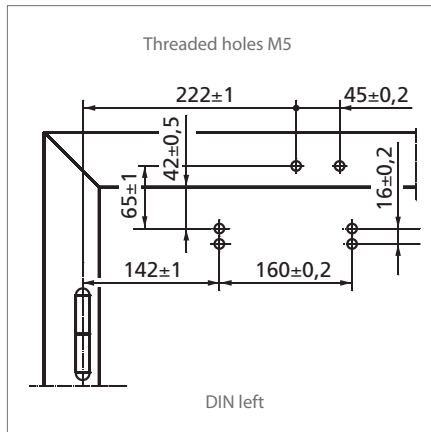


Fig. 19-3

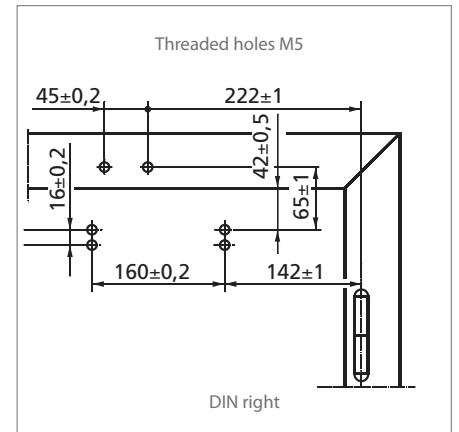


Fig. 19-4

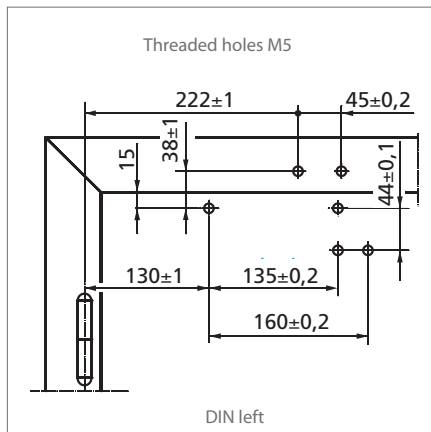


Fig. 19-5

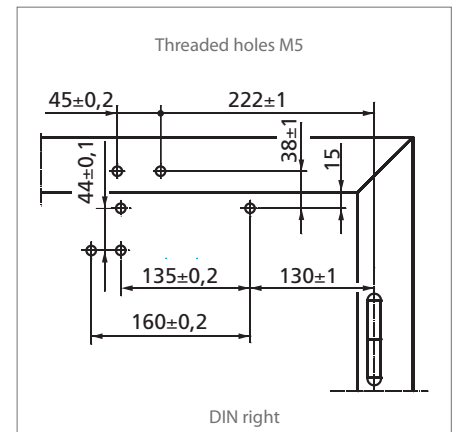


Fig. 19-6

GEZE TS 4000 E

Overhead door closer with electrohydraulic hold-open according to EN 1155, closing force size 1-6

Product features

- ▶ Closing force size EN 1-6 adjustable
- ▶ Closer in only one construction size
- ▶ Optical power size indicator
- ▶ Thermo constant closing speed adjustable at front
- ▶ Latching action adjustable via link arm
- ▶ Infinitely variable hold-open angle between 80° and 180°
- ▶ Operating voltage 24 V DC
- ▶ Low power consumption approx. 1 Watt
- ▶ Same fitting hole pattern as all GEZE TS 4000 closers

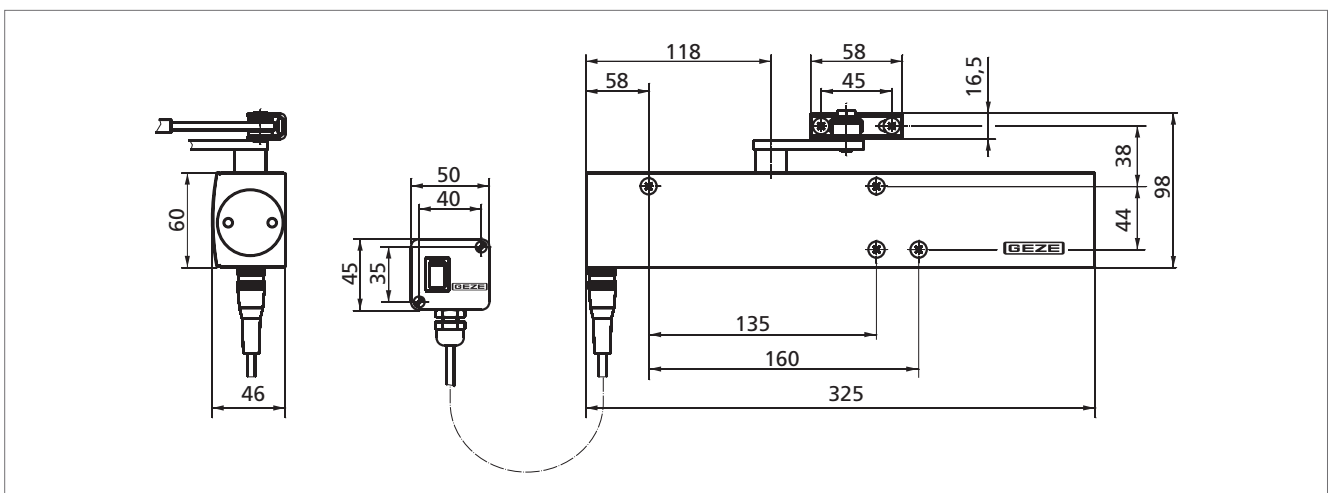


Fig. 20-1

Application range

- ▶ For single-action doors up to 1400 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For smoke and fire-proof doors

Standard version/package

Overhead door closer GEZETS 4000 E for standard mounting, 24 V DC, complete with mounting material and installation template (mounting plate not included); still needed: link arm

- ▶ **GEZETS 4000 E / transom mounting 24 V DC**
(on smoke and fire-proof doors only permitted if transom mounting has been approved for the respective door in the official approval certificate)

Electrical installation

The GEZE TS 4000 E has to be connected to a 24 V DC direct voltage supply to allow the door to be held open.

Function

- ▶ Voltage applied to closer = door held open
- ▶ No voltage applied or switched off = door not held open, door closes automatically
- ▶ The door can be closed manually at any time regardless of whether or not voltage is being applied

Electrical data

- ▶ Operating voltage 24 V DC \pm 10%
- ▶ Connected load 45 mA
- ▶ Max. permissible residual ripple 20%
- ▶ Enclosure rating IP 43 (for interior use only)

Power supply cable, standard mounting

The power supply cable can be either surface-mounted or flush-mounted, see Fig. 21-1

Power is supplied from the terminal box to the closer via a cable with a threaded circular connector. To prevent the closer, terminal box, and cable from being damaged, the terminal box has to be mounted within the area shown on the illustration, see Fig. 22-1

Power cable supply, transom mounting

The power supply cable to the closer is flush-mounted. The cables are connected to special terminals in the closer, see Fig. 21-2

Specification text

Overhead door closer GEZE TS 4000 E 24 V DC for mounting on smoke and fire-proof doors, with electrohydraulic hold-open device infinitely variable between 80° and 180° as per EN 1155, closing force EN size 1-6 and closing speed adjustable at front, with visual size indicator, standard type of installation: door mount / hinge side, also available with optional mounting plate.

Finish:

- () silver
- () RAL ...

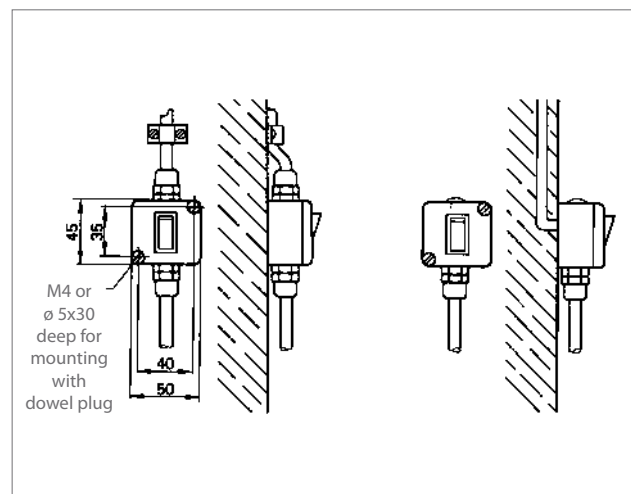


Fig. 21-1

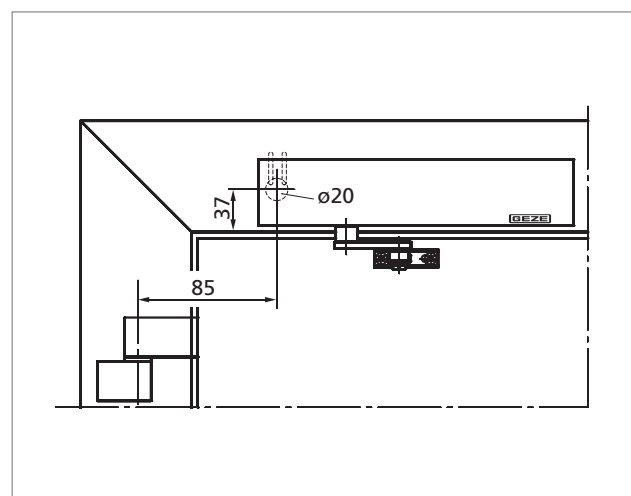


Fig. 21-2

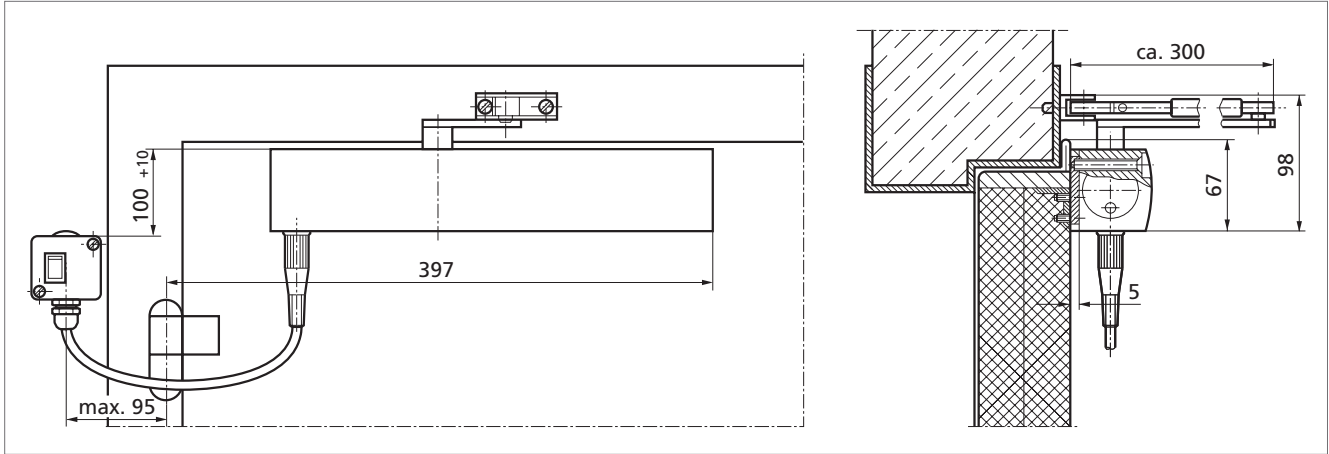


Fig. 22-1

Mounting on hinge side / door mount

Example showing the mounting of GEZE TS 4000 E with mounting plate to a fire-proof door, see Fig. 22-1

Installation with mounting plate

Mounting plate, 5 mm deep, drill-hole pattern to DIN EN 1154 appendix 1, for doors where direct mounting is not possible, see Fig. 22-2

Mounting dimensions for left closing door, see Fig. 22-3 for right closing door, see Fig. 22-4

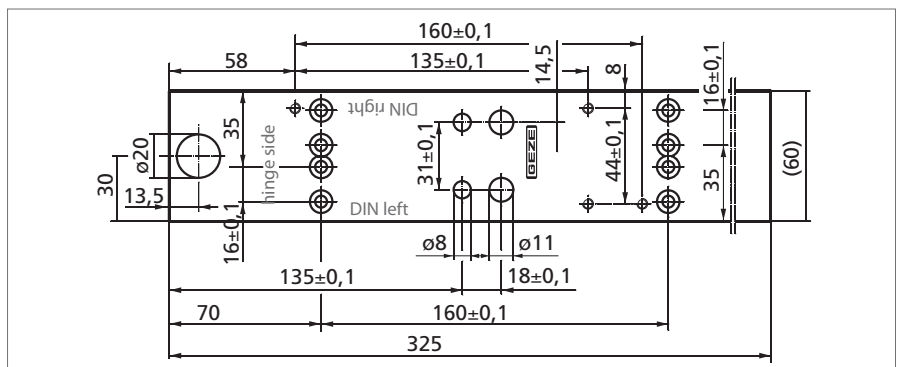


Fig. 22-2

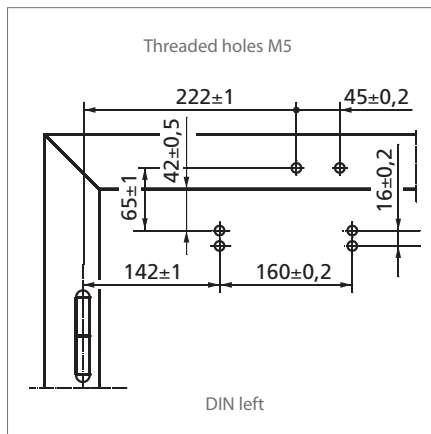


Fig. 22-3

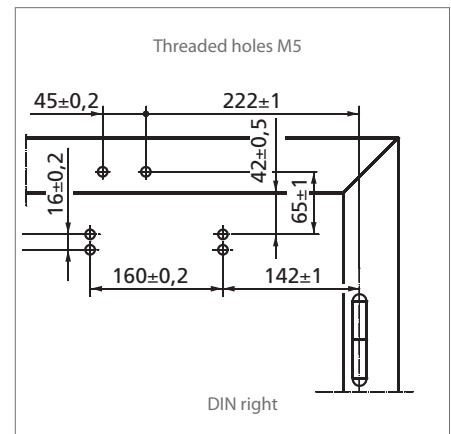


Fig. 22-4

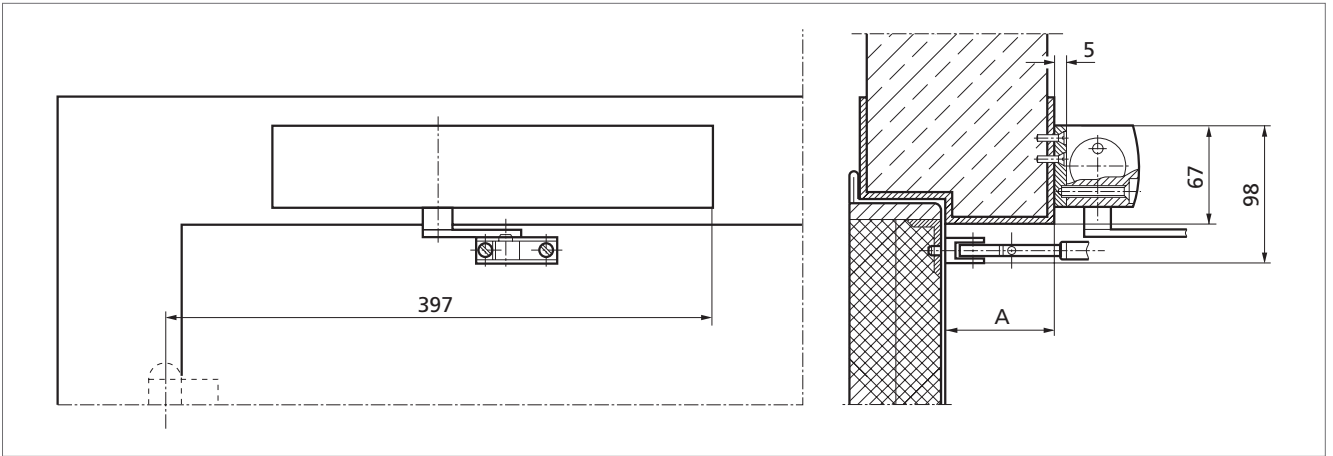


Fig. 23-1

Transom mounting / opposite hinge side

Example showing the mounting of GEZE TS 4000 E with mounting plate to a fire-proof door, see Fig. 23-1

For smoke and fire-proof doors, the lintel depth A should not exceed 70 mm.

Installation with mounting plate

Mounting plate, 5 mm deep, drill-hole pattern to DIN EN 1154 appendix 1, for doors where direct mounting is not possible, see Fig. 23-2

Mounting dimensions for right closing door, see Fig. 23-3
for left closing door, see Fig. 23-4

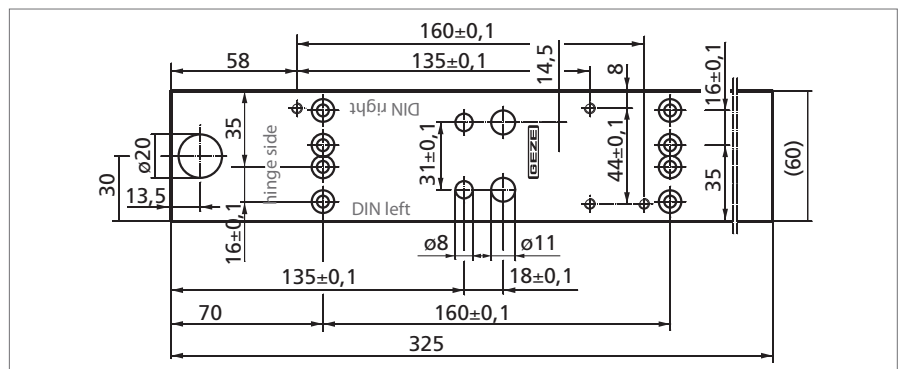


Fig. 23-2

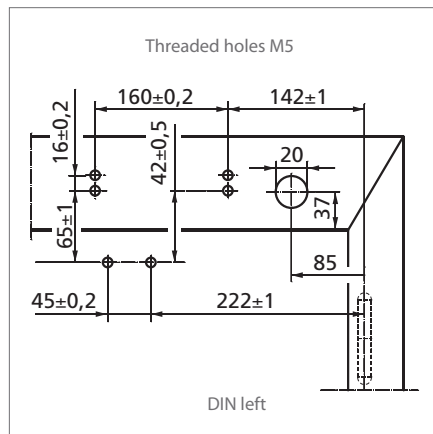


Fig. 23-3

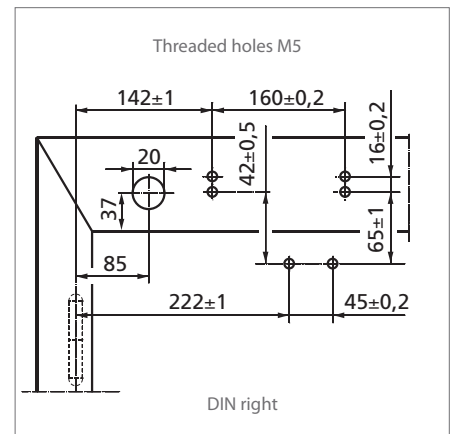


Fig. 23-4

GEZE TS 4000 E / EFS – Ordering information

Description		Finish	ID No.
GEZE TS 4000 E for standard installation with terminal box, without link arm		silver	105211
		RAL-colour	105212
GEZE TS 4000 E for transom mounting without link arm		silver	105213
		RAL-colour	105214
GEZE TS 4000 E for transom mounting on hinge side ¹⁾²⁾ without guide rail		silver	105235
		RAL-colour	105236
Link arm		silver	102421
		RAL-colour	102425
Freeswing-link arm TS 4000 EFS		silver	106460
		RAL-colour	106462
Guide rail		silver	102527
		RAL-colour	102528
Freeswing-guide rail ²⁾ for TS 4000 EFS		silver	106844
		RAL-colour	106466
Mounting material			
Mounting plate		silver	059107
		RAL-colour	100044
Accessories			
Serrated spindle extensions ¹⁾ , length:	10 mm	galvanised	103548
	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

¹⁾ only in conjunction with standard or Freeswing guide rail, arm not possible

²⁾ at the moment not permitted for use with smoke and fire-proof doors , size 3 according to EN, leaf width up to 950 mm

GEZE TS 4000 EFS

Overhead door closer with freeswing-link arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6

Product features

- ▶ Freeswing funktion: Door can be used without any resistance in opening and closing direction (e.g. homes for the elderly, hospitals) after initial opening of the door (e.g. in the morning)
- ▶ Reliable automatic closing of the door in the event of fire, irrespective of door position
- ▶ Freeswing function provided by replacing standard arm with Freeswing arm (same mounting dimensions)
- ▶ Same closer features as GEZE TS 4000 E



Application range

- ▶ For single-action doors up to 1400 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For smoke and fire-proof doors

Standard version/package

Overhead door closer GEZE TS 4000 EFS for standard mounting, 24 V DC, complete with screw accessories and installation template (mounting plate not included); still needed: Freeswing arm

Note: Following the guideline for hold-open systems by the DIBt (German Institution for Construction Technology) the installation of a circuit breaker is compulsory, if door closers with freeswing function are used.

- ▶ **Ausführung GEZE TS 4000 EFS / transom mounting 24 V DC** (on smoke and fire-proof doors only permitted if transom mounting is explicitly permitted in the approval certificate for the respective smoke and fire-proof door)

Specification text

Overhead door closer GEZE TS 4000 EFS 24 V DC for mounting on smoke and fire-proof doors, with freeswing function, with electrohydraulic hold-open device infinitely variable between 800 and 1800 as per EN 1155, closing force size 1-6 and closing speed adjustable from the front, with visual size indicator, standard type of installation: door mount on hinge side, also available with optional mounting plate.

Finish:
 silver
 RAL ...

GEZE circuit breaker
 surface-mounted
 flush-mounted

GEZE TS 4000 R

Overhead door closer with electrohydraulic hold-open according to EN 1155, closing force size 1-6, with integrated smoke switch, certification No. Z-6.5-1068

Product features

- ▶ Closing force as per EN size 1-6 adjustable
- ▶ Closer in only one construction size
- ▶ Optical power size indicator
- ▶ Adjustable thermo constant closing speed
- ▶ All functions adjustable at front
- ▶ Infinitely variable hold-open angle between 80° and 180°
- ▶ Power supply, mains voltage 230 V
- ▶ Apart from power supply, no other installation work is required
- ▶ Smoke detector (optical system) with integrated electronics inside the closer housing
- ▶ Additional smoke detectors can be connected (max. 2 units)
- ▶ With double leaf doors, a second TS 4000 R or a TS 4000 E device can also be connected, power supply and electric control are provided by the electronics of the TS 4000 R

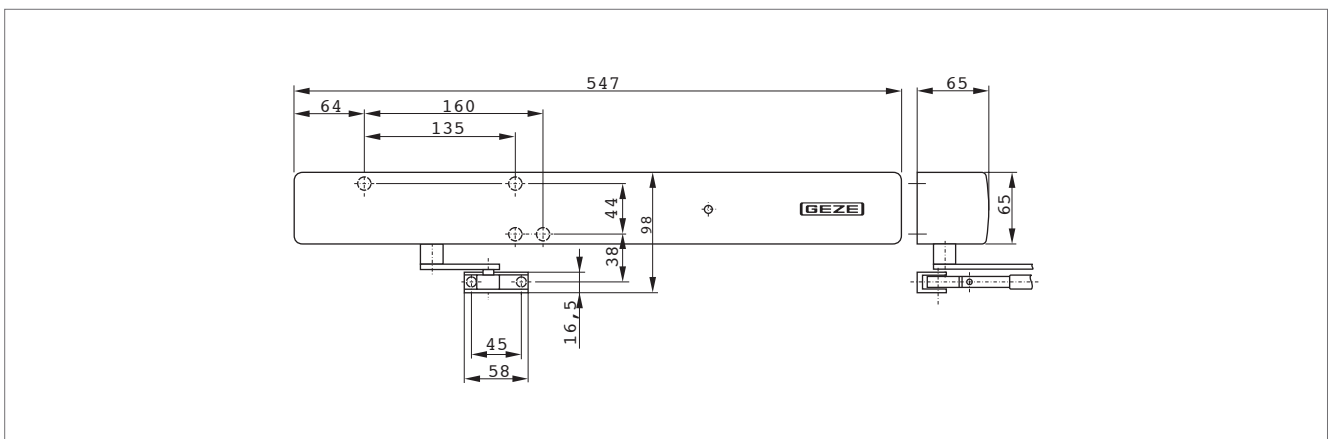


Fig. 26-1

Application range

- ▶ For single-action doors up to 1400 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For smoke and fire-proof doors
- ▶ With double leaf doors, the TS 4000 R always has to be mounted above the moving leaf

Standard version/package

GEZE TS 4000 R for transom mounting; comprising: door closer, smoke detector, electronic evaluation system, cover, with screw accessories and installation template (mounting plate not included); still needed: link arm

Electrical installation

The GEZE TS 4000 R only has to be connected to the 230 V mains voltage supply to be fully functional.

Function

- ▶ Infinitely variable hold-open angle between 80° - 180°
- ▶ In the event of fire, the integrated smoke detector responds and the door closes automatically
- ▶ Irrespective of whether or not the smoke detector and electronics are functioning, the door can be closed manually at any time

Connection possibilities

for the GEZE TS 4000 R, see wiring diagram Fig. 27-1

- ▶ Two additional smoke detectors, if structurally required
- ▶ A TS 4000 R - secondary closer or a TS 4000 E, can also be controlled by the electronics of the TS 4000 R (e.g. double leaf door)

Electrical data

- ▶ 230 V AC alternating voltage $\pm 10\%$
- ▶ Power consumption TS 4000 R without accessories approx. 11 Watt
- ▶ Enclosure rating IP 20 (for dry locations only)
- ▶ Additional output voltage:
 - 1) 24 V for two additional smoke detectors
 - 2) 24 V max. 0,16 A, for second door closer TS 4000 E or TS 4000 R - secondary closer

Cable connection

Surface-mounted or flush-mounted possible for all power supply cables, see Fig. 27-2

Specification text

Overhead door cl GEZE TS 4000 R 230 V AC for mounting on smoke and fire-proof doors, with electrohydraulic hold-open device infinitely variable between 800 and 1800 as per EN 1155, with integrated smoke detector, closing force size 1-6 and closing speed adjustable at front, with visual size indicator, transom mounting / opposite hinge side, also available with optional mounting plate.

Finish:

- () silver
- () RAL ...

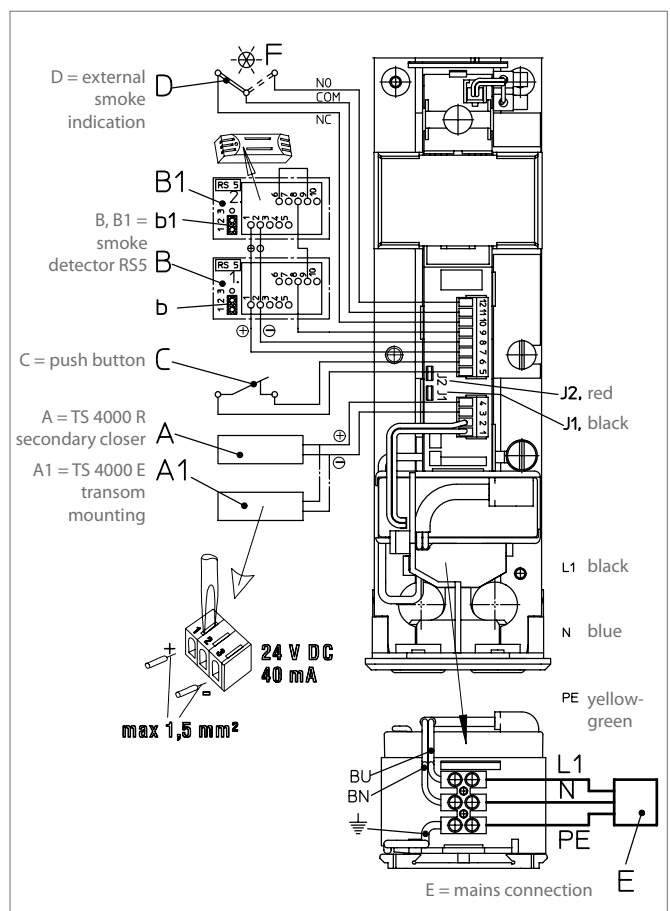


Fig. 27-1

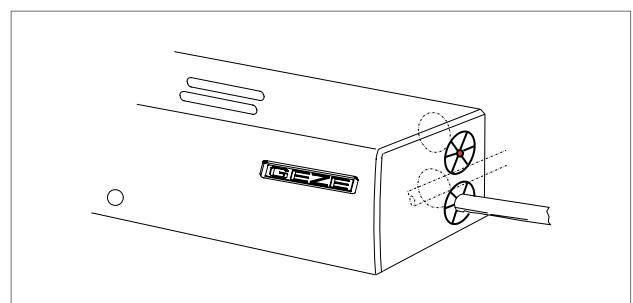


Fig. 27-2

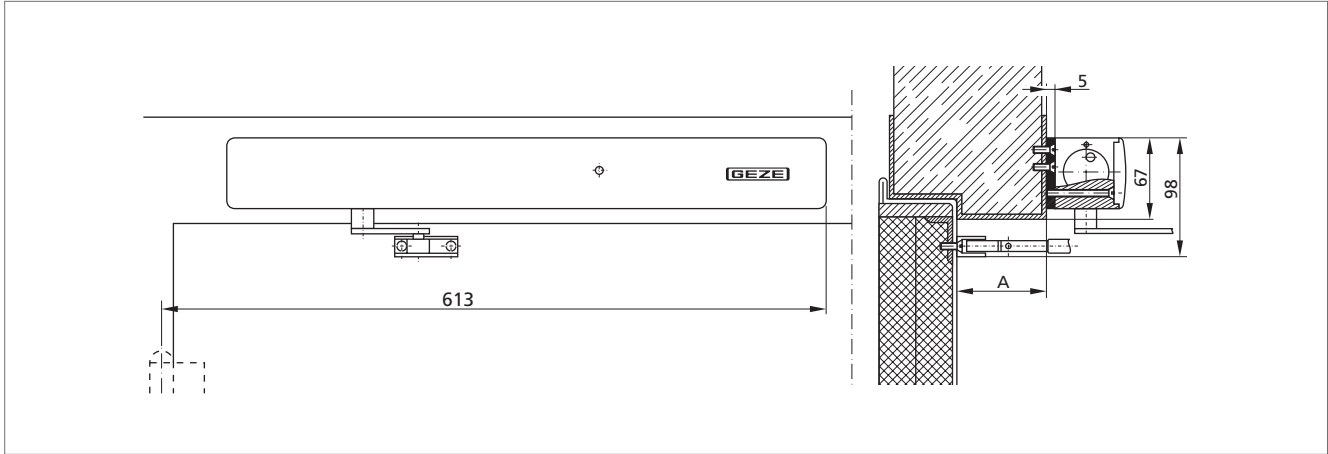


Fig. 28-1

Transom mounting / opposite hinge side
 (this type of installation is only permitted for smoke and fire-proof doors if transom installation on opposite hinge side has been approved for the respective door in the official approval certificate)

Example showing the mounting of GEZE TS 4000 R to a fire-proof door, see Fig. 28-1

For smoke and fire-proof doors, the lintel depth A should not exceed 70 mm., see Fig. 28-2

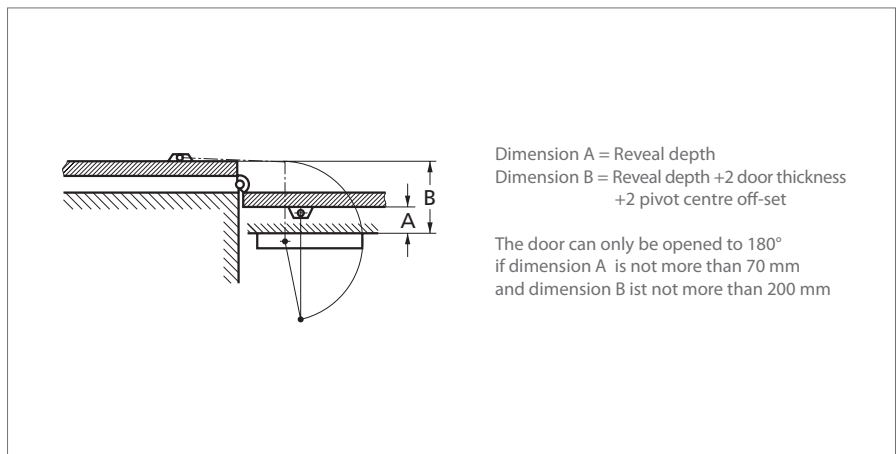


Fig. 28-2

Installation with mounting plate

Mounting plate, 5 mm deep, drill-hole pattern to DIN EN 1154 appendix 1, for doors where direct mounting is not possible, see Fig. 28-3

Mounting dimensions for left closing door, see Fig. 28-4
 for right closing door, see Fig. 28-5

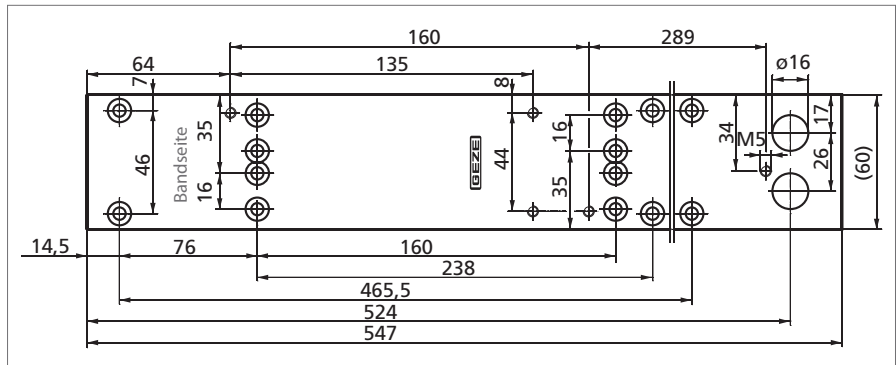


Fig. 28-3

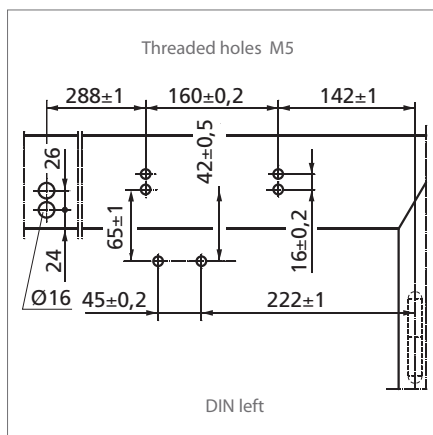


Fig. 28-4

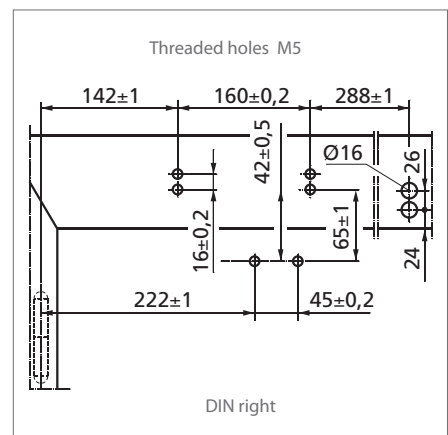


Fig. 28-5

GEZE TS 4000 R / RFS – Ordering information

Description		Finish	ID No.
GEZE TS 4000 R for transom mounting on opposite hinge side, with integrated smoke detector, without link arm		silver	105241
		RAL-colour	105242
GEZE TS 4000 R for transom mounting ^{1) 2)} on hinge side, with integrated smoke detector, without guide rail		silver	105243
		RAL-colour	105267
GEZE TS 4000 R additional closer, for transom mounting on opposite hinge side, with integrated smoke detector, without link arm		silver	105246
		RAL-colour	105247
Link arm		silver	102421
		RAL-colour	102425
Freeswing-link arm TS 4000 RFS		silver	106460
		RAL-colour	106462
Guide rail		silver	102527
		RAL-colour	102528
Freeswing-guide rail ²⁾ for TS 4000 RFS		silver	106844
		RAL-colour	106466
Mounting material			
Mounting plate			058808
Accessories			
Serrated spindle extensions ³⁾ , length:	10 mm	galvanised	103548
	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

¹⁾ only in conjunction with standard or Freeswing guide rail, arm not possible

²⁾ at the moment not permitted for use with smoke and fire-proof doors , size 3 according to EN, leaf width up to 950 mm

³⁾ only permitted for smoke and fire-proof doors if the use has been listed in the official approval certification

GEZE TS 4000 RFS

Overhead door closer with freeswing-link arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6, with integrated smoke switch, certification No. Z-6.5-1068

Product features

- ▶ Freeswing funktion: Door can be used without any resistance in opening and closing direction (e.g. homes for the elderly, hospitals) after initial opening of the door (e.g. in the morning)
- ▶ Reliable automatic closing of the door in the event of fire, irrespective of door position
- ▶ Freeswing funktion provided by replacing standard arm with Freeswing arm (same mounting dimensions)
- ▶ Same closer features as GEZE TS 4000 R



Application range

- ▶ For single-action doors up to 1400 mm
- ▶ Can be used for right and left hand doors without adjustment
- ▶ For smoke and fire-proof doors
- ▶ With double leaf doors, the TS 4000 RFS always has to be mounted above the moving leaf

Standard version/package

GEZE TS 4000 RFS for transom mounting 230 V AC, functional unit comprising: door closer, smoke detector, electronic evaluation system, cover, with screw accessories and installation template (mounting plate not included); still needed: Freeswing arm

Note: Following the guideline for hold-open systems by the DIBt (German Institution for Construction Technology) the installation of a circuit breaker is compulsory, if door closers with freeswing function are used.

Specification text

Overhead door closer GEZE TS 4000 RFS 230 V AC for mounting on smoke and fire-proof doors, with freeswing funktion, with electrohydraulic hold-open device infinitely variable between 800 and 1800 as per EN 1155, with integrated smoke switch, closing force size 1-6 and closing speed adjustable from the front, with visual size indicator, transom mounting on opposite hinge side, also available with optional mounting plate.

Finish:
 silver
 RAL ...

GEZE circuit breaker
 surface-mounted
 flush-mounted

Product information for door closers

The following information concerning door closers for hinged leaf doors must be observed. Failure to observe the information exonerates the manufacturer from liability or obligation.

① Product information and intended use

Door closers in terms of this definition shall be used to close hinged leaf doors again after they have been manually opened. The closing operation is performed with adjustable hydraulic damping. The necessary closing force relative to the leaf widths is defined in EN 1154. The information from the manufacturers must be observed in the case of areas of application other than conduit intended.

Door closers shall be used on installed hinged-leaf doors made of metal, wood, or UPVC and any combinations of these materials. The mounting method and position are precisely prescribed for smoke and fire doors or other standardised self-closing doors. Mounting methods and positions other than conduit intended do not conform to the intended use.

Door closers with back check must be used, especially in the case of hinged-leaf doors which are opened against wind. The back check contributes to protecting personnel, door elements, surrounding walls and objects without restricting the door opening angle.

If, owing to the structural characteristics of the door, it is necessary to mount the door leaf to the frame at the door's pivot axis, a stop which restricts the maximum door opening angle of the door must be used. Hinged leaf doors can only be held open at a specific position using additional special fittings or integrated construction elements. With smoke and fire doors, the equipment must be approved by an inspector from the responsible institute for structural engineering (documents supporting suitability must be observed).

Door closers are not suitable for the unprotected external installation into single-action doors and for use in environments with aggressive corrosion-promoting air contents as well as extremely low or high temperatures.

Fitting boxes for floor springs must be protected against dirt penetration after their installation. If floor mounted door closers are exposed to water penetration (e.g. damp locations or exterior doors without rain protection), the cavity between the cement box and door closer housing must be filled with a suitable sealing compound.

Before the door closers (including any additional equipment) are installed, any mandatory legal directives must be observed.

② Improper use

Improper use (i.e. utilisation of the product in a way differing from the intended use) for hinge leaf door may result in damage or injury in particular:

- ▶ if obstacles in the closing radius, dragging doors, jamming seals, wood wedges etc. prevent the closing operation
- ▶ if door closers have been incorrectly or unprofessionally fitted and/or adjusted
- ▶ if parts of the body are between the frame and leaf (risk of injury)
- ▶ if correct functioning is expected beyond the specified characteristics, e.g. in storm conditions, with extraordinary negative pressure or positive pressure acting on the door

- ▶ if door closers are used for purposes other than closing doors
- ▶ if the selected door closer size does not correspond to the recommendations of the manufacturer

③ Product characteristics

If the product characteristics are not described in the catalogues, brochures, instructions etc., any special requirement must be discussed with and then approved by the manufacturer.

Reference should be made to the standard DIN 18 263, parts 1, 2, 3 and 5 'Door closers with hydraulic damping'. Virtually all basic requirements and additional requirements are defined in this standard. The suitability of use for door closers depends on factors such as frequency of actuation, actuation principle, environmental influences, and care and maintenance. Door closers must be replaced as soon as correct and reliable closing operation can no longer be guaranteed.

④ Product maintenance

Safety elements of door closers must be checked regularly, according to requirements, for wear and to ensure that they are fitted correctly and securely. Fixing screws must be tightened and any faulty components must be changed. Furthermore, the following maintenance work must be performed at least once per year (depending on the type of hinged leaf doors and their applications):

- ▶ All moving parts on the link arm must be greased
- ▶ The closer settings (e.g. closing speed) must be checked
- ▶ Smooth operation of the door must be checked
- ▶ In the case of door closers with special functions (hold-open devices/hold-open systems), the legal check, monitoring, and maintenance must be observed.

Only cleaning agents not containing any corrosive and damaging components should be used.

⑤ Obligations regarding information and instruction

The following media are available to the planner, specialist trader, manufacturer, building owner, and user:

- ▶ Catalogues, brochures
- ▶ Tender documents
- ▶ Mounting instructions, installation drawings, operating instructions, standards
- ▶ Consultation with field service personnel

The following points are essential for the correct use, reliable functioning, maintenance, and care of door closers for hinged-leaf doors:

- ▶ architects and planners must request and observe the necessary product information,
- ▶ specialist dealers and manufacturers must observe the product information and information in the price list, and especially request all necessary instructions and pass them on to the customer, installer or end user
- ▶ manufacturers must observe product information and pass it on to the customers and end users.

**GEZE GmbH**

P.O. Box 1363
71226 Leonberg
Germany

GEZE GmbH

Reinhold-Vöster-Straße 21-29
71229 Leonberg
Germany
Telefon +49 (0) 7152-203-0
Telefax +49 (0) 7152-203-310

www.geze.com

GEZE branch offices**Germany****GEZE GmbH**

Niederlassung Nord/Ost
Bühningstraße 8
13086 Berlin (Weissensee)
Tel. +49 (0) 30-47 89 90-0
Fax +49 (0) 30-47 89 90-17
E-mail: berlin.de@geze.com

GEZE GmbH

Niederlassung West
Nordsternstraße 65
45329 Essen
Tel. +49 (0) 201-83082-0
Fax +49 (0) 201-83082-20
E-mail: essen.de@geze.com

GEZE GmbH

Niederlassung Mitte
Adenauerallee 2
61440 Oberursel (b. Frankfurt)
Tel. +49 (0) 6171-63610-0
Fax +49 (0) 6171-63610-1
E-mail: frankfurt.de@geze.com

GEZE GmbH

Niederlassung Süd
Reinhold-Vöster-Straße 21-29
71229 Leonberg
Tel. +49 (0) 7152-203-594
Fax +49 (0) 7152-203-438
E-mail: leonberg.de@geze.com

GEZE subsidiaries**Germany**

GEZE Sonderkonstruktionen
GmbH
Planken 1
97944 Boxberg-Schweigern
Tel. +49 (0) 7930-9294-0
Fax +49 (0) 7930-9294-10
E-mail: sk.de@geze.com

GEZE Service GmbH

Reinhold-Vöster-Straße 25
71229 Leonberg
Tel. +49 (0) 7152-9233-0
Fax +49 (0) 7152-9233-60
E-mail: info@geze-service.com

GEZE Service GmbH

Niederlassung Berlin
Bühningstraße 8
13086 Berlin (Weissensee)
Tel. +49 (0) 30-470217-30
Fax +49 (0) 30-470217-33

Europe**Benelux**

GEZE Benelux B.V.
Leemkuil 1
Industrieterrein Kapelbeemd
5626 EA Eindhoven
Tel. +31 (0) 40-26290-80
Fax +31 (0) 40-26290-85
E-mail: benelux.nl@geze.com

France

GEZE France S.A.R.L.
ZAC de l'Orme Rond
RN 19
77170 Servon
Tel. +33 (0) 1-60626070
Fax +33 (0) 1-60626071
E-mail: france.fr@geze.com

Great Britain

GEZE UK Ltd.
Blenheim Way
Fradley Park
Lichfield
Staffordshire WS13 8SY
Tel. +44 (0) 1543-443000
Fax +44 (0) 1543-443001
E-mail: info@geze-uk.com

Italy

GEZE Italia Srl
Via Giotto 4
20040 Cambiago (MI)
Tel. +39 02 95 06 95-11
Fax +39 02 95 06 95-33
E-Mail italia.it@geze.it

GEZE Engineering Roma Srl
Via Lucrezia Romana 91
00178 Roma
Tel. +39 06-7265311
Fax +39 06-72653136
E-mail: gezeroma@libero.it

GEZE Engineering Bari Srl
Via Treviso 58
70022 Altamura (Bari)
Tel. +39 080-3115219
Fax +39 080-3164561
E-mail: gezebari@libero.it

Austria

GEZE Austria GmbH
Mayrwiesstraße 12
5300 Hallwang b. Salzburg
Tel. +43 (0) 662-663142
Fax +43 (0) 662-663142-15
E-mail: austria.at@geze.com

Poland

GEZE Polska Sp. z o.o.
ul. Annopol 3 (Zeran Park)
03-236 Warszawa
Tel. +48 (0) 22-8142211
Fax +48 (0) 22-6142540
E-mail: geze@geze.pl

Switzerland

GEZE Schweiz AG
Bodenackerstrasse 79
4657 Dulliken
Tel. +41 (0) 62-285 54 00
Fax +41 (0) 62-285 54 01
E-mail: schweiz.ch@geze.com

Spain

GEZE Iberia S.R.L.
Pol. Ind. El Pla
C/ Comerç, 2-22, Nave 12
08980 Sant Feliu de Llobregat
(Barcelona)
Tel. +34-(0) 9-02 19 40 36
Fax +34-(0) 9-02 19 40 35
E-mail: iberia.es@geze.com

Scandinavia**Sweden**

GEZE Scandinavia AB
Mallslingan 10
Box 7060
18711 Täby
Tel. +46 (0) 8-7323-400
Fax +46 (0) 8-7323-499
E-mail: sverige.se@geze.com

Norway

GEZE Scandinavia AB avd. Norge
Postboks 63
2081 Eidsvoll
Tel. +47 (0) 639-57200
Fax +47 (0) 639-57173
E-mail: norge.se@geze.com

Finland

GEZE Finland
Branch office of **GEZE** Scandinavia AB
Postbox 20
158 71 Hollola
Tel. +358 (0) 10-400 51 00
Fax +358 (0) 10-400 51 20
E-mail: finland.se@geze.com

Denmark

GEZE Danmark
Branch office of **GEZE** Scandinavia AB
Hoje Taastrup Boulevard 53
DK-2630 Taastrup
Tel. +45 46 32 33 24
Fax +45 46 32 33 26
E-mail: danmark.se@geze.com

Middle East**U.A.E.**

GEZE Middle East
P.O. Box 17903
Jebel Ali Free Zone
Dubai
Tel. +971 (0) 4-8833112
Fax +971 (0) 4-8833240
E-mail: geze@emirates.net.ae

Asia

GEZE Industries (Tianjin) Co., Ltd.
Shuangchenzhong Road
Beichen Economic Development
Area (BEDA)
Tianjin 300400, P.R. China
Tel. +86 (0) 22-26973995-0
Fax +86 (0) 22-26972702
E-mail: geze@public1.tpt.tj.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Shanghai
Rm. 3010 Building No. 2
3 Hongqiao Road
200030 Shanghai, P.R. China
Tel. +86-(0)21-52 34 09-60/-61
Fax +86-(0)21-64 47 20 07
E-mail: gezesh@geze.com.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Guangzhou
Room 1113, Jie Tai Plaza
218-222 Zhong Shan Liu Road
510180 Guangzhou
P.R. China
Tel. +86 (0) 20-813207-02
Fax +86 (0) 20-813207-05
E-mail: gezegz@public2.sta.net.cn

GEZE Industries (Tianjin) Co., Ltd.
Branch Office Beijing
No. 6-32 Building, Jili Avenue
Daxing District
Chaoyang District
Tel. +86-(0)10-87 97 51-77/-78
Fax +86-(0)10-87 97 51-71
E-mail: gezebj@geze.com.cn

GEZE Asia Sales Ltd.
No. 88-1-408, East Road
Free Trade Zone of Tianjin Port
Tianjin, P.R. China
Tel. +86 (0)22-26 97 39 95-0
Fax +86 (0)22 26 97 27 02
E-mail: geze@public1.tpt.tj.cn

GEZE Sonderkonstruktionen
(Tianjin) Ltd.
No. 6-32 Building, Jili Avenue
Daxing District
Chaoyang District
100076 Beijing, P.R. China
Tel. +86 (0) 10-87 96 51-52
Fax +86 (0) 10-87 97 14-76

GEZE Representative