

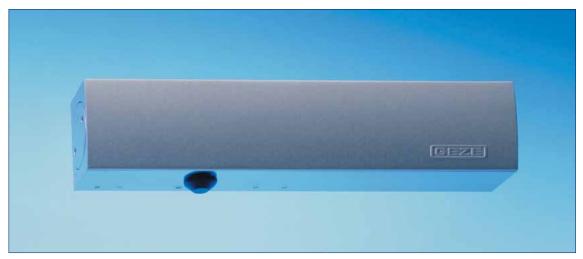
Steiff Museum, Gienger

# **GEZETS 1500 / TS 2000 V / TS 4000**

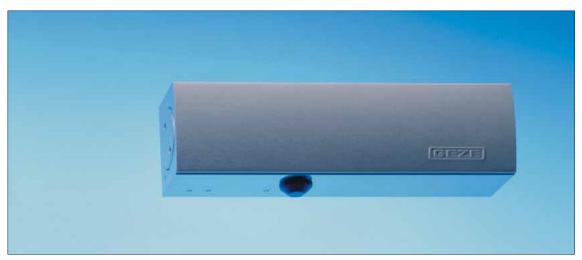
Overhead rack and pinion door closers



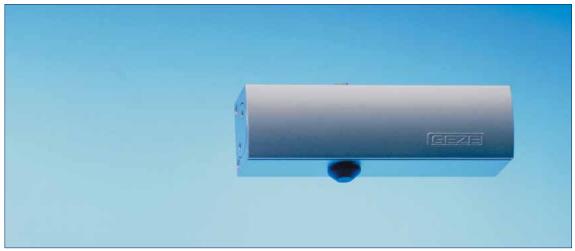
# GEZE door closer – Clear lines



GEZE TS 4000



GEZE TS 2000 V

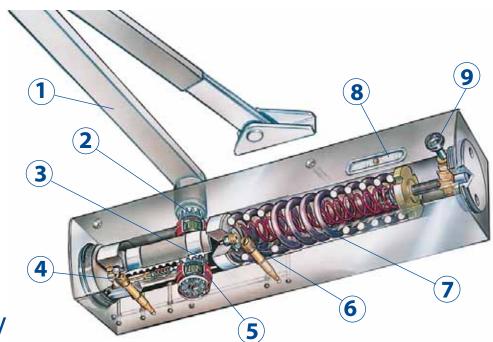


GEZE TS 1500

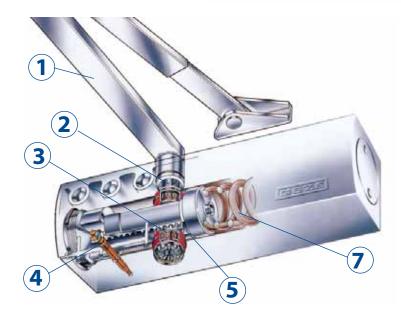
# Technology – Overhead door closer GEZETS 4000

#### 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



GEZETS 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:



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

#### 

Surface-mounted door closer with arm, closing force size 2-4 according to EN 1154

#### **16-19 I** 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 according to EN 1154

#### **26-29 I** TS 4000 R

Door closer with electrohydraulic hold-open according to EN 1155 and integrated smoke switch, certification No. Z-6.5-1068 closing force size 1-6 according to EN 1154

# Overhead rack and pinion door closer, single-leaf, with freeswing function

#### 

Door closer with freeswing arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6 according to EN 1154

#### **29-30 F** TS 4000 RFS

Door closer with freeswing arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6 according to EN 1154, and integrated smoke switch, certification No. Z-6.5-1058

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



**DOOR TECHNOLOGY** 



**GLASS SYSTEMS** 



**AUTOMATIC DOOR SYSTEMS** 



RWA AND WINDOW TECHNOLOGY



SAFETY TECHNOLOGY

# GEZETS 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



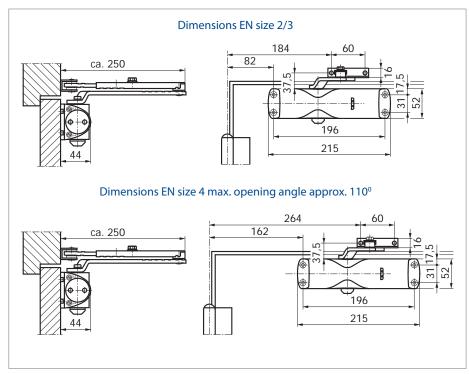


Fig. 6-1

#### 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 GEZETS 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 1000 C – Ordering information

Description	Finish	ID No.
GEZE TS 1000 C	silver	101765
with standard link arm	dark bronze	101765 101766
WITH STANDARD HINK ATTH	white RAL 9016	101766
	black RAL 9005	101678
	brass-colored	101770
	RAL-colour	101770
GEZE TS 1000 C	silver	101779
with hold-open link arm	dark bronze	101771
with hold-open link ann	white RAL 9016	101772
	black RAL 9005	101773
	brass-colored	101774
	RAL-colour	101777
GEZE TS 1000 C	silver	114303
door closer without link arm	dark bronze	114304
door closer without link arm	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	silver	072019
for doors where direct mounting is not possible	dark bronze	072020
	white RAL 9016	072021
	black RAL 9005	072022

# **GEZETS 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°



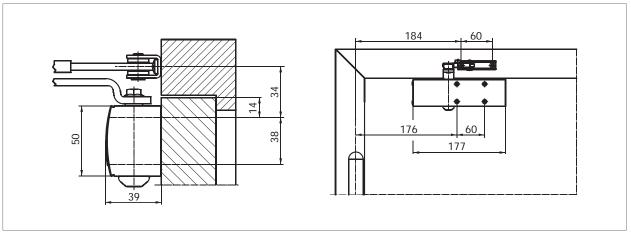


Fig. 8-1

#### 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°

#### ► GEZETS 1500 BC

with hydraulic latching action adjustable at front and fixed back check

#### Specification text

Overhead rack and pinion door closer GEZETS 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.
GEZE TS 1500	silver	101792
door closer without link arm	dark bronze	101793
addi cidaci without ilink ariti	white RAL 9016	101794
	RAL-colour	101875
GEZETS 1500 BC	silver	102505
door closer with back check	dark bronze	102506
door close. With back check	white	102507
	RAL-colour	102509
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	silver	029682
for doors where direct mounting is not possible	dark bronze	029683
	white RAL 9016	029685
	RAL-colour	029686
Accessories	,	,
Cover caps	silver	080147
(only suitable for direct installation)	dark bronze	080148
	white RAL 9016	080149
	RAL-colour	080150

# GEZETS 1500 G

# Overhead door closer GEZETS 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



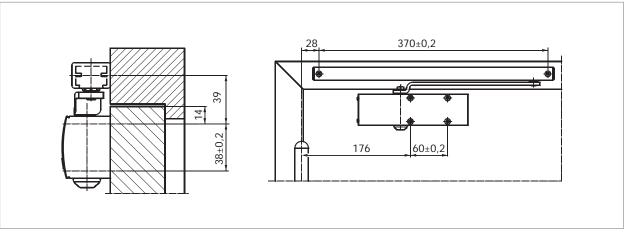


Fig. 10-1

#### 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...

#### GEZETS 1500 – Ordering information

Description	Finish	ID No.
CE7E TC 1500		101702
GEZE TS 1500	silver	101792
door closer without guide rail	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	silver	101889
with hold-open device	dark bronze	101890
	weiß RAL 9016	101891
	RAL-colour	101892
Opening restrictor		069780
Mounting material		
Mounting plate	silver	029682
for doors where direct mounting is not possible	dark bronze	029683
	white RAL 9016	029685
	RAL-colour	029686
Mounting plate for guide rail	silver	072333
3.	RAL-colour	072355
Accessories		
Cover caps	silver	080147
(only suitable for direct installation)	dark bronze	080148
	white RAL 9016	080149
	RAL-colour	080150

# GEZETS 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



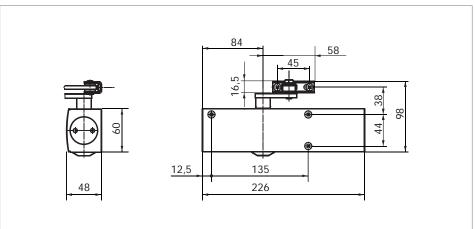


Fig. 12-1

#### 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 GEZETS 2000 V complete with screw accessories and fitting template (mounting plate not included); still needed: link arm

# ► GEZETS 2000 V with hold-open link arm for an adjustable opening angle between 70° and 150°

#### ► GEZETS 2000 V BC

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...

#### GEZETS 2000 V – Ordering information

Description	Finish	ID No.
GEZETS 2000 V	silver	103386
door closer without link arm	dark bronze	103387
	white RAL 9016	103388
	RAL-colour	103389
GEZE TS 2000 V BC	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	silver	102431
for transom mounting with soffit 70-170 mm	dark bronze	102432
_	white RAL 9016	102433
	RAL-colour	102434
Hold-open link arm	silver	102445
can be enabled / disabled	dark bronze	102446
	white RAL 9016	102447
	RAL-colour	102448
Hold-open link arm	silver	102454
cannot be disabled	dark bronze	102455
	white RAL 9016	102456
	RAL-colour	102457

Continuation GEZE TS 2000 V – Ordering information, see page 14

<sup>1)</sup> 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	· direct		055756
Clamping plate for plate glass d	oors	silver	055773
h 24 m m m 2 m m		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		silver	059044
(max. arch height 130 mm)		dark bronze	059045
Drilling template			053134
Accessories			
Cover caps		silver	013487
(only suitable for direct installat	ion)	dark bronze	014849
		white RAL 9016	014855
		polished brass	072770
		stainless steel	072769
		RAL-colour	014856
Serrated	10 mm	galvanised	103548
spindle extensions, length:	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

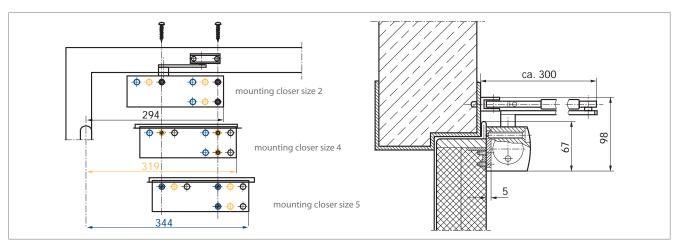


Fig. 15-1

#### 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:

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

#### 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

#### Direct installation

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

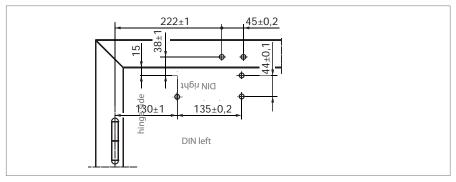
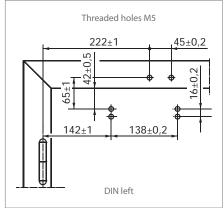
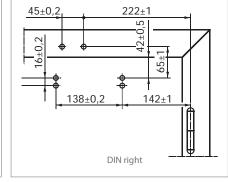


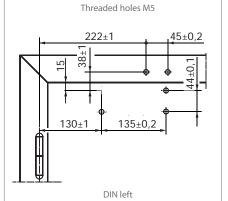
Fig. 15-2

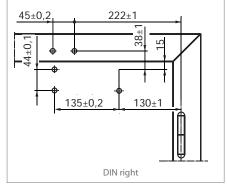




Threaded holes M5

Fig. 15-3 Fig. 15-4





Threaded holes M5

Fig. 15-5 Fig. 15-6

# GEZETS 2000 NV / NV BC

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

#### **Product features**

- ► Closing force size EN 2-4 infinitely adjustable
- ► Closer in only one construction size
- ► Closing speed and latching action adjustable at front
- ► Hydraulic back check adjustable at front (TS 2000 NV BC only)
- ► Concealed mounting plate



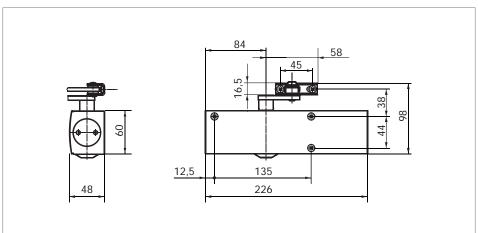


Fig. 16-1

#### Application range

- ► For single-action doors, door leaf widths up to 1100 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 2000 NV complete with screw accessories and fitting template (mounting plate not included); still needed: link arm

- ► GEZETS 2000 NV / NV BC with hold-open link arm for an adjustable opening angle between 70° and 150°
- ► GEZETS 2000 NV BC
  with hydraulic back check adjustable at front

#### Specification text

GEZE Overhead door closer TS 2000 NV / NV BC with infinitely adjustable closing force size 2-4, EN 1154, closing force adjustment from side, closing speed and latching action hydraulic back check (TS 2000 NV BC only) adjustable at front

#### Colour:

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

#### GEZE TS 2000 NV / NV BC – Ordering information

Description	Finish	ID No.
GEZE TS 2000 NV	silver	128885
GEZE TS 2000 NV BC	silver	124944
door closer without link arm	dark bronze	124945
	white RAL 9016	124946
	RAL colour	124947
Link arm	silver	102421
	dark bronze	102422
	white RAL 9016	102423
	stainless steel effect 1)	102426
	RAL colour	102425
Extended link arm	silver	102431
for transom mounting with soffit 70-170 mm	dark bronze	102432
	white RAL 9016	102433
	RAL colour	102434
Hold-open link arm	silver	102445
can be enabled / disabled	dark bronze	102446
	white RAL 9016	102447
	RAL colour	102448
Hold-open link arm	silver	102454
cannot be disabled	dark bronze	102455
	white RAL 9016	102456
	RAL colour	102457
Mounting material		
Mounting plate		126234
Lintel casing bracket	silver	127432
	RAL colour	127435
-lat panel	silver	127434
	RAL colour	127435
Mounting and counterplate for all-glass doors	silver	090259
Jane de la companya d	RAL colour	090260

Further accessories see GEZETS 2000 V – Ordering information, page 14

<sup>1)</sup> finish stainless steel effect for dry rooms only

#### Mounting on hinge side / door mount

Example showing the mounting of GEZETS 2000 NV / NV BC direct mounting, see Fig. 18-1 with mounting plate, see Fig. 18-2

#### Direct installation

Mounting dimensions for left closing door, see Fig. 18-3 for right closing door, see Fig. 18-4

#### Installation with mounting plate

Mounting dimensions for left closing door, see Fig. 18-5 for right closing door, see Fig. 18-6

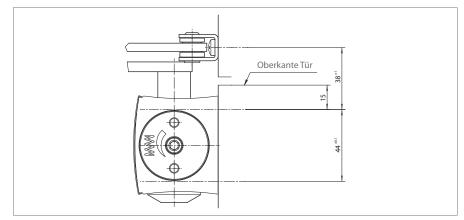


Fig. 18-1

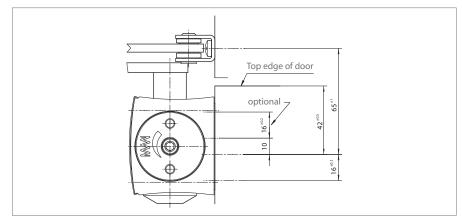
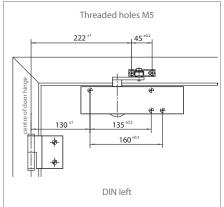


Fig. 18-2



Threaded holes M5 160<sup>±0.2</sup> DIN right Fig. 18-4

Fig. 18-3

Threaded holes M5

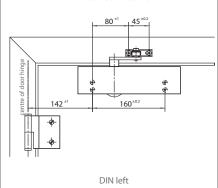
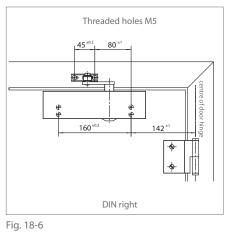


Fig. 18-5



#### Transom mounting / opposite hinge side

Example showing the mounting of GEZE TS 2000 NV / NV BC direct mounting, see Fig. 19-1 with mounting plate, see Fig. 19-2

#### Direct installation

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

#### Installation with mounting plate

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

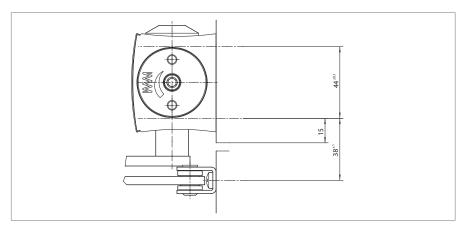


Fig. 19-1

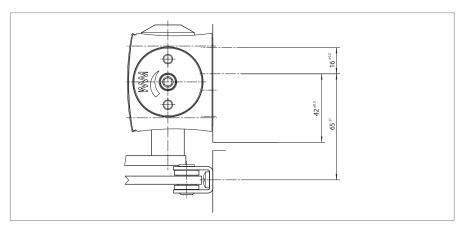
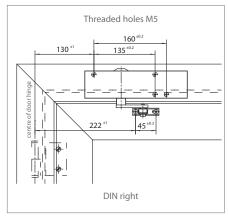


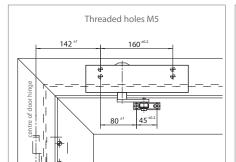
Fig. 19-2



Threaded holes M5

160 sept 135 sept 130 sept 13

Fig. 19-3



DIN right

Threaded holes M5

160 \*\*\*\*

142 \*\*\*

Centre of door hinge

DIN left

Fig. 19-5

Fig. 19-6

Fig. 19-4

# **GEZETS 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



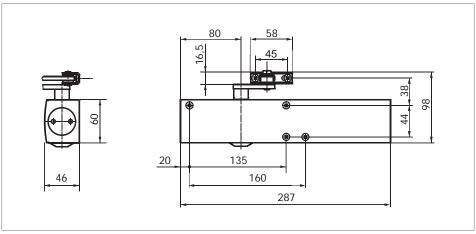


Fig. 20-1

#### 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 GEZETS 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 GEZETS 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

GEZE TS 4000, size 1-6 loor closer without link arm	silver	
	cilvar	100=00
loor closer without link arm		102789
	dark bronze	102790
	white RAL 9016	102791
	RAL-colour	102792
GEZE TS 4000, size 5-7	silver	102837
loor closer without link arm	RAL-colour	102838
GEZETS 4000 S, size 1-6	silver	107745
vith delayed closing action, without link arm	dark bronze	107746
	white RAL 9016	107747
	RAL-colour	107748
ink arm	silver	102421
	dark bronze	102422
	white RAL 9016	102423
	stainless steel effect 1)	102426
	RAL-colour	102425
extended link arm	silver	102431
or transom mounting with soffit 70-170 mm	dark bronze	102432
3	white RAL 9016	102433
	RAL-colour	102434
Hold-open link arm	silver	102445
an be enabled / disabled	dark bronze	102446
	white RAL 9016	102447
	RAL-colour	102448
Hold-open link arm	silver	102454
annot be disabled	dark bronze	102455
aor be allowed	white RAL 9016	102456
	RAL-colour	102457

Ordering information, see page 18

<sup>1)</sup> 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	silver	049185
mounting is not possible		dark bronze	052351
3 '		white RAL 9016	068627
		galvanised steel	057956
		RAL-colour	029176
Lintel angle bracket for transom	mounting	silver	049240
on opposite hinge side with dee		dark bronze	052352
Clamping plate for plate glass do	oors	silver	057126
		dark bronze	057127
		white RAL 9016	009491
		RAL-colour	009494
Frame plate for parallel arm mou	ınting	silver	053318
		dark bronze	053319
Mounting plate for segmental ar	ch doors	silver	058782
(max. arch height 130 mm)		dark bronze	058783
		RAL-colour	119472
Drilling template			053134
Accessories			
Cover caps		silver	067724
(only suitable for direct installati	on)	dark bronze	067725
		white RAL 9016	067726
		polished brass	072698
		stainless steel	072696
		RAL-colour	000756
Serrated	10 mm	galvanised	103548
spindle extensions 1), length:	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

 $<sup>^{1)}</sup>$  Only permitted for smoke and fire-proof doors if the intended use is listened in the approval notification of the door

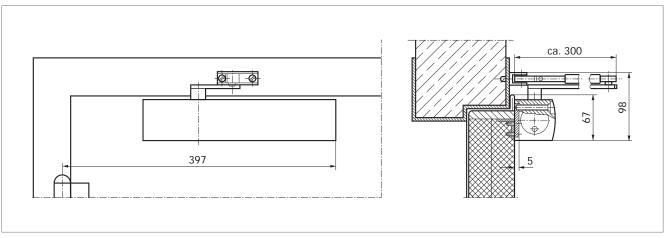


Fig. 23-1

#### Mounting on hinge side / door mount

Example showing the mounting of GEZE TS 4000 with mounting plate, see Fig. 23-1

#### 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. 23-2

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

#### Direct installation

Mounting dimensions for left closing door, see Fig. 23-5 for right closing door, see Fig. 23-6

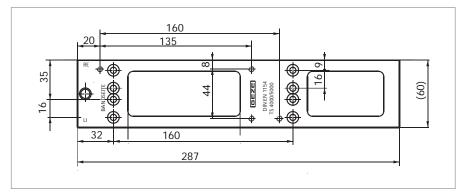
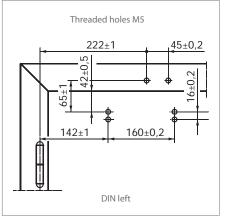


Fig. 23-2



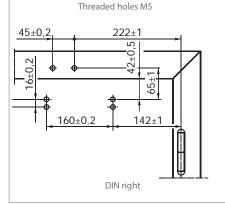
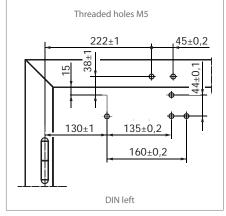


Fig. 23-3

Fig. 23-4



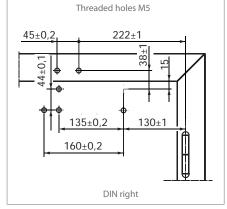


Fig. 23-5

Fig. 23-6

# GEZETS 4000 E

# Overhead door closer with electrohydraulic hold-open acc. to EN 1155, closing force size 1-6 acc. to EN 1154

#### **Product features**

- ► Closing force adjustable, size 1-6 according to EN 1154
- ► 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 GEZETS 4000 closers



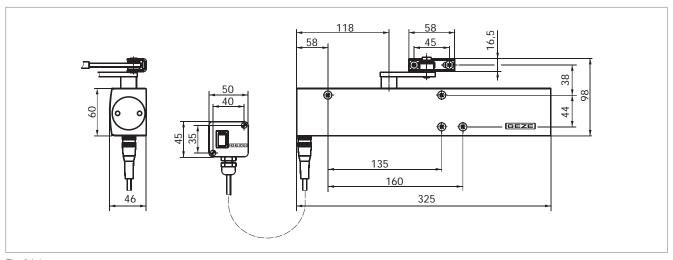


Fig. 24-1

#### 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)

#### Specification text

Overhead door closer GEZETS 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 size 1-6 as per EN 1154 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 ...

#### **Electrical installation**

The GEZETS 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 wheather or not voltage is being applied

#### Electrical data

- ► Operating voltage 24 V DC ± 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. 25-1

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. 25-2

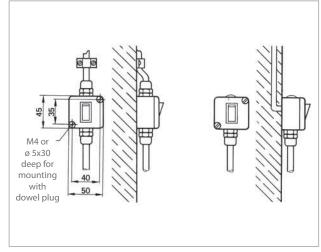


Fig. 25-1

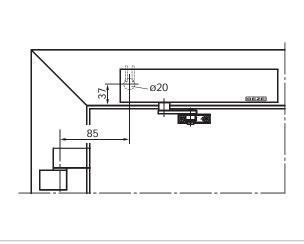


Fig. 25-2

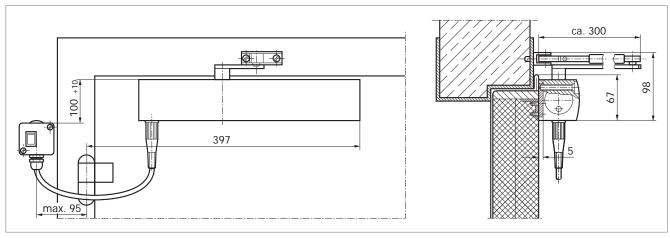


Fig. 26-1

#### 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. 26-1

#### 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. 26-2

Mounting dimensions for left closing door, see Fig. 26-3 for right closing door, see Fig. 26-4

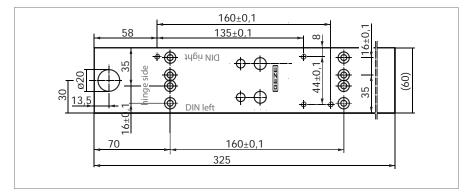
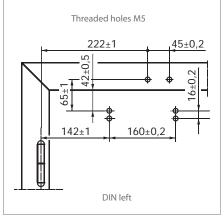


Fig. 26-2



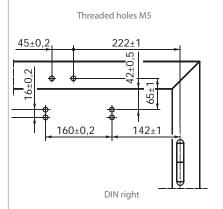


Fig. 26-3

Fig. 26-4

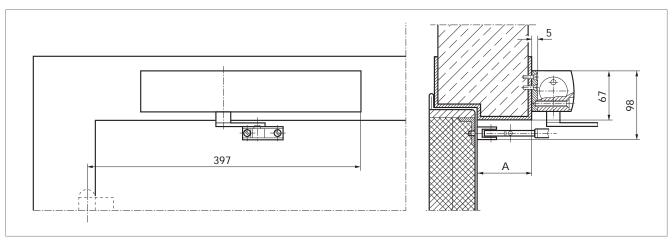


Fig. 27-1

#### Transom mounting / opposite hinge side

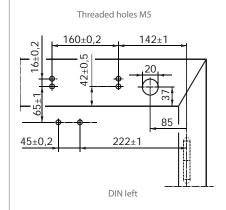
Example showing the mounting of GEZE TS 4000 E with mounting plate to a fire-proof door, see Fig. 27-1

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

#### Installation with mounting plate

Mounting plate, see Fig. 26-2

Mounting dimensions for right closing door, see Fig. 27-2 for left closing door, see Fig. 27-3



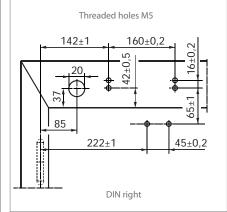


Fig. 27-2

Fig. 27-3

#### GEZE TS 4000 E / EFS – Ordering information

Description	Description		ID No.
GEZETS 4000 E for standard install	ation	silver	105211
with terminal box, without link arn	<u>n</u>	RAL-colour	105212
GEZE TS 4000 E for transom mount	ting	silver	105213
without link arm		RAL-colour	105214
GEZE TS 4000 E for transom mount	ing	silver	105235
on hinge side 1) 2) without guide rai	l	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
			102530
Freeswing-guide rail <sup>2)</sup> for TS 4000	Freeswing-guide rail 2) for TS 4000 EFS		106844
		RAL-colour	106466
Mounting material			
Mounting plate		silver	059107
3.		RAL-colour	100044
Accessories			
Serrated	10 mm	galvanised	103548
spindle extensions 1), length:	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

<sup>&</sup>lt;sup>1)</sup> only in conjuction with standard or Freeswing guide rail, arm not possible <sup>2)</sup> at the moment not permitted for use with smoke and fire-proof doors, size 3 according to EN, leaf width up to 950 mm

## **GEZETS 4000 EFS**

# Overhead door closer with freeswing-link arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6 according to EN 1154

#### **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 GEZETS 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 GEZETS 4000 EFS 24 V DC for mounting on smoke and fire-proof doors, with freeswing function, with electrohydraulic hold-open device infinitely variable between 80° and 180° as per EN 1155, closing force size 1-6 according to EN 1154 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

- () flush-mounted
- () box for surface-mounting

## GEZETS 4000 R

Overhead door closer with electrohydraulic hold-open acc. to EN 1155, closing force size 1-6 acc. to EN 1154, with integrated smoke switch, certification No. Z-6.5-1068

#### **Product features**

- ► Closing force adjustable, size 1-6 according to EN 1154
- ► Closer in only one construction size
- ► Optical power size indicator
- ► Thermo constand closing speed adjustable at front
- ► 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



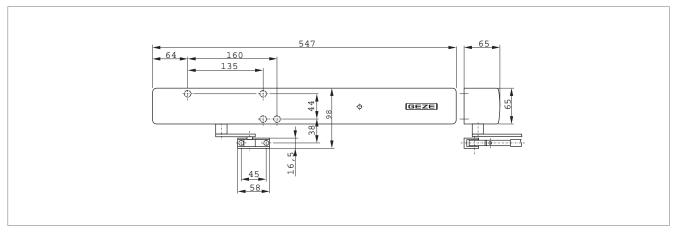


Fig. 30-1

#### 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° (depends on construction, see Fig. 32-2)
- ► 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. 31-1

- Two additional smoke detectors, if structurally required
- ► ATS 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 ±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. 31-2

#### Specification text

Overhead door cl GEZETS 4000 R 230 V AC for mounting on smoke and fire-proof doors, with electrohydraulic hold-open device infinitely variable between 80° and 180° as per EN 1155, with integrated smoke detector, closing force size 1-6 as per EN 1154 and closing speed adjustable at front, with visual size indicator, transom mounting / opposite hinge side, also available with optional mounting plate.

Finish:

() silver

() RAL ...

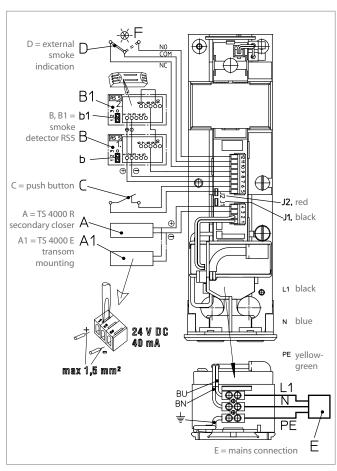


Fig. 31-1

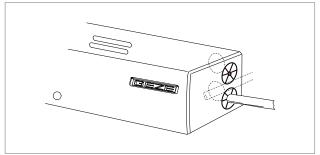


Fig. 31-2

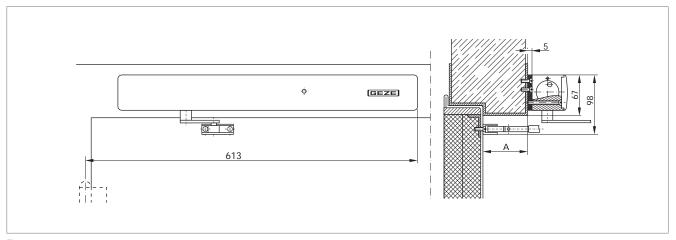


Fig. 32-1

#### 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 GEZETS 4000 R to a fire-proof door, see Fig. 32-1

For smoke and fire-proof doors, the lintel depth A should not exceed 70 mm., see Fig. 32-2

#### 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. 32-3

Mounting dimensions for left closing door, see Fig. 32-4 for right closing door, see Fig. 32-5

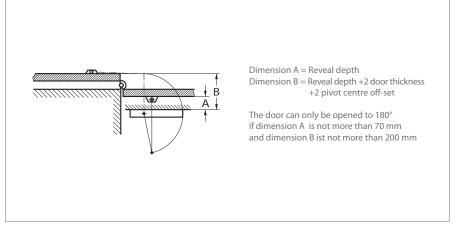
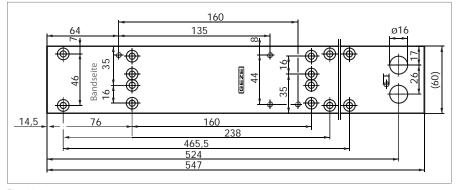


Fig. 32-2



160±0,2

42±0,5

DIN right

288±1

Ø16

45±0,2

Fig. 32-3

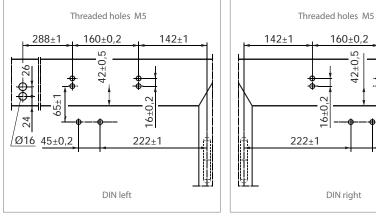


Fig. 32-4 Fig. 32-5

#### GEZE TS 4000 R / RFS – Ordering information

Description		Finish	ID No.
GEZE TS 4000 R for transom mounting on		silver	105241
opposite hinge side, with integrate	9	RAL-colour	105242
detector, without link arm			
GEZE TS 4000 R for transom mount	ing <sup>1) 2)</sup>	silver	105243
on hinge side, with integrated smo without guide rail	ke detector,	RAL-colour	105267
GEZE TS 4000 R additional closer, for	or transom	silver	105246
mounting on opposite hinge side, integrated smoke detector, withou		RAL-colour	105247
Link arm		silver	102421
		RAL-colour	102425
Freeswing-link arm TS 4000 RFS		silver	106460
		RAL-colour	106462
Guide rail 2)		silver	102527
		RAL-colour	102530
Freeswing-guide rail 2) for TS 4000 I	RFS	silver	106844
		RAL-colour	106466
Mounting material			
Mounting plate			058808
Accessories			
Serrated	10 mm	galvanised	103548
spindle extensions 3), length:	15 mm	galvanised	103549
	20 mm	galvanised	103550
	10 mm	black chromated	103677
	15 mm	black chromated	103678
	20 mm	black chromated	103679

<sup>&</sup>lt;sup>1)</sup> only in conjunction with standard or Freeswing guide rail, arm not possible <sup>2)</sup> at the moment not permitted for use with smoke and fire-proof doors, size 3 according to EN, leaf width up to 950 mm

<sup>&</sup>lt;sup>3)</sup> only permitted for smoke and fire-proof doors if the use has been listed in the official approval certification

## **GEZETS 4000 RFS**

# Overhead door closer with freeswing-link arm and electrohydraulic hold-open according to EN 1155, closing force size 1-6 according to EN 1154, 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 function 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

#### Standard version/package

GEZETS 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 function, 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

- () flush-mounted
- () box for surface-mounting

#### 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. precent 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 dydraulic 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 waer 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.



#### ID No. 091594 · Vers. GB · 090109 · Subject to alterations

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