

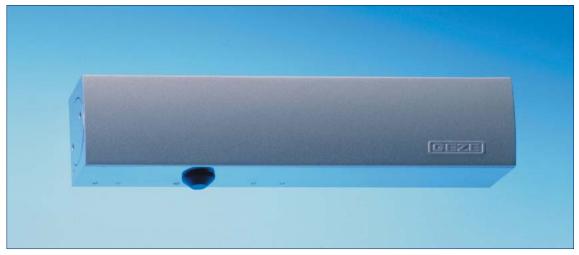
Steiff Museum, Giengen

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

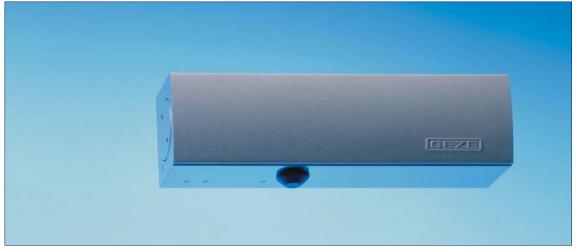
Overhead rack and pinion door closers



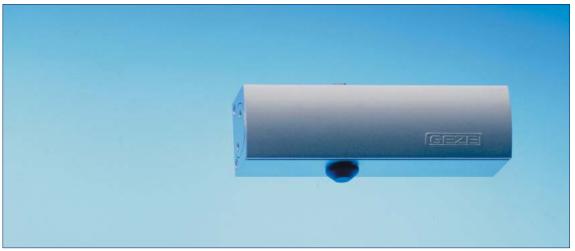
# GEZE door closer – Clear lines



GEZE TS 4000



GEZE TS 2000 V

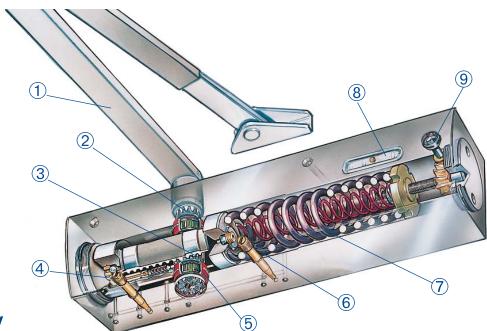


GEZE TS 1500

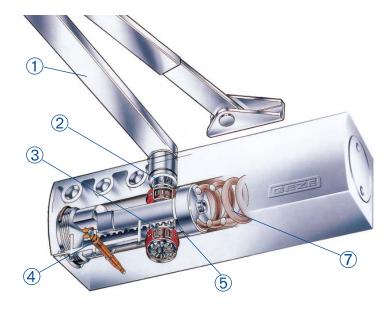
# Technology – Overhead door closer GEZETS 4000

#### Legend:

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



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

#### **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** 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

#### 

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

#### 

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

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



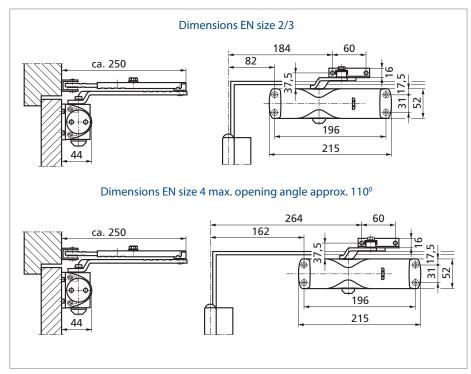


Fig. 6-1

#### 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 1500 – Ordering information

| Description                                     | Finish         | ID No. |
|---|----------------|--------|
| GEZE TS 1000 C                                  | silver         | 101765 |
| with standard link arm                          | dark bronze    | 101766 |
|   | white RAL 9016 | 101767 |
|   | black RAL 9005 | 101678 |
|   | brass-colored  | 101770 |
|   | RAL-colour     | 101769 |
| GEZETS 1000 C                                   | silver         | 101771 |
| with hold-open link arm                         | dark bronze    | 101772 |
| · · · · · · · · · · · · · · · · · · ·           | white RAL 9016 | 101773 |
|   | black RAL 9005 | 101774 |
|   | brass-colored  | 101777 |
|   | RAL-colour     | 101776 |
| GEZETS 1000 C                                   | silver         | 114303 |
| door closer without link arm                    | 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                                  | 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°



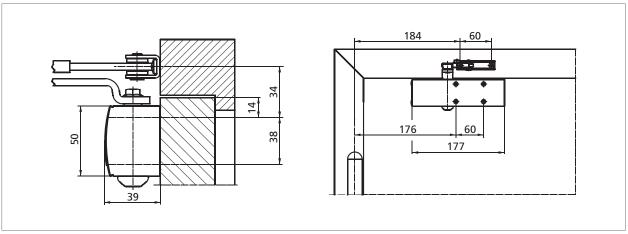


Fig. 8-1

#### 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  $70^{\circ}$  and  $150^{\circ}$ 

#### 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. |
|---|----------------|--------|
|   |                |        |
| GEZETS 1500                                     | silver         | 101792 |
| door closer without link arm                    | 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                                  | 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



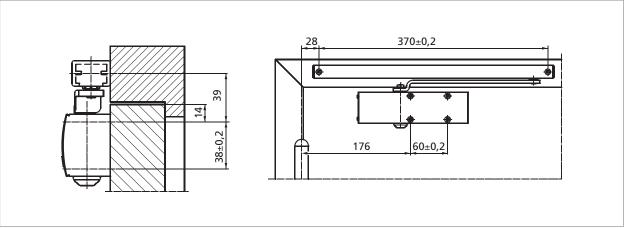


Fig. 10-1

#### 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                                    | -11            | 101703 |
| 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



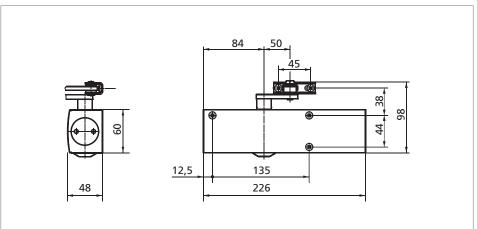


Fig. 12-1

#### 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 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 ...

#### GEZETS 2000 V – Ordering information

| Description  | Finish                    | ID No. |
|--|---------------------------|--------|
|  |                           |        |
| GEZE TS 2000 V   | silver                    | 103386 |
| door closer without link arm   | 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  | silver                    | 102431 |
| for transom mounting with soffit 70-170 mm   | dark bronze               | 102432 |
| , and the second se | 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 GEZETS 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 |
| e.apg place io. place glass a      | 00.0                                  | 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 are    | ch 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 |

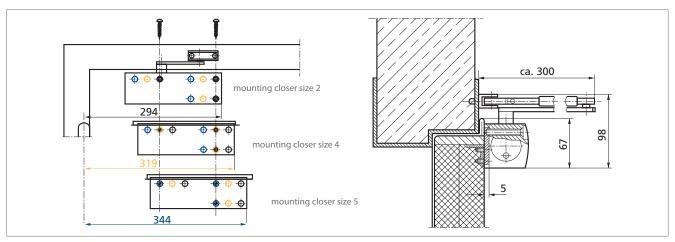


Fig. 15-1

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



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

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

#### Direct installation

see Fig. 15-2

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

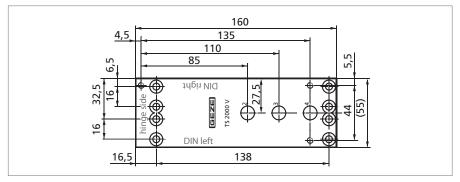


Fig. 15-2

Fig. 15-3

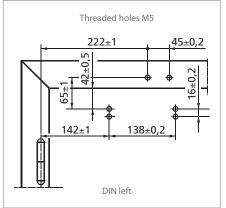
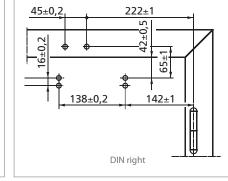


Fig. 15-4

45±0,2

\_ 44±0,`



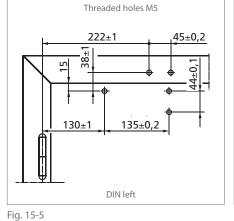
Threaded holes M5

DIN right

130±1

135±0,2

Threaded holes M5





## **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



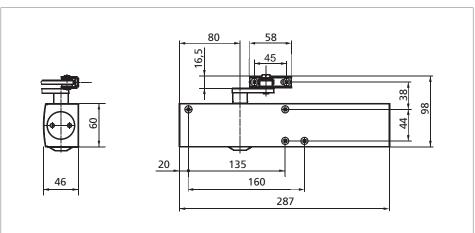


Fig. 16-1

#### 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 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

| Description                                   | Finish                    | ID No. |
|---|---------------------------|--------|
|   |                           |        |
| GEZE TS 4000, size 1-6                        | silver                    | 102789 |
| door closer without link arm                  | dark bronze               | 102790 |
|   | white RAL 9016            | 102791 |
|   | RAL-colour                | 102792 |
| GEZE TS 4000, size 5-7                        | silver                    | 102837 |
| door closer without link arm                  | RAL-colour                | 102838 |
| GEZE TS 4000 S, size 1-6                      | silver                    | 107745 |
| with delayed closing action, without link arm | 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                             | 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 |

Ordering information, see page 18

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

#### Continuation GEZETS 4000 – Ordering information

| Description                                       |          | Finish           | ID No. |
|---|----------|------------------|--------|
|   |          |                  |        |
| Mounting material  Mounting plate for doors where | diract   | silver           | 049185 |
| mounting plate for doors where o                  | arrect   | dark bronze      | 052351 |
| mounting is not possible                          |          | white RAL 9016   | 068627 |
|   |          | galvanised steel | 057956 |
|   |          | RAL-colour       | 037936 |
| Lintel angle bracket for transom r                | mounting | silver           | 049240 |
| on opposite hinge side with deep                  |          | dark bronze      | 052352 |
| Clamping plate for plate glass do                 |          | silver           | 057126 |
| Claimping plate for plate glass do                | OIS      | dark bronze      | 057127 |
|   |          | white RAL 9016   | 009491 |
|   |          | RAL-colour       | 009491 |
| Frame plate for parallel arm mou                  | nting    | silver           | 053318 |
| riaine plate for parallel aini mou                | nung     | dark bronze      | 053316 |
| Mounting plate for segmental are                  | -h doors | silver           | 059044 |
| (max. arch height 130 mm)                         | 11 00013 | dark bronze      | 059045 |
| (max. arch neight 130 mm)                         |          | RAL-colour       | 119472 |
| Drilling template                                 |          | IVAL-COIOUI      | 053134 |
| Accessories                                       |          |                  | 033134 |
| Cover caps  |          | silver           | 067724 |
| (only suitable for direct installation            | nn)      | dark bronze      | 067725 |
| (orn) suitable for affect instanding              | ,,       | 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 |
| ,g  | 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 permitted for smoke and fire-proof doors if the intended use is listened in the approval notification of the door

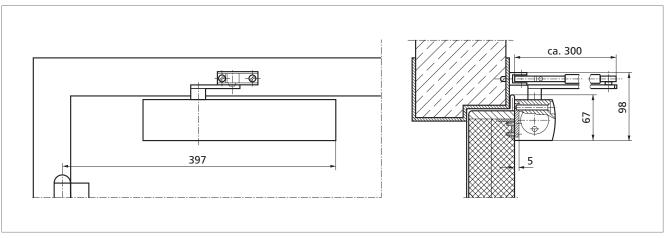


Fig. 19-1

#### 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

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

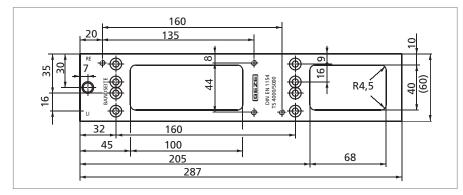
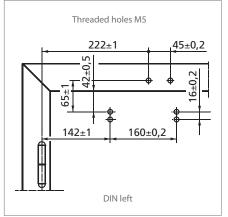


Fig. 19-2



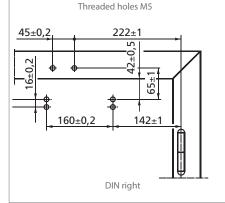
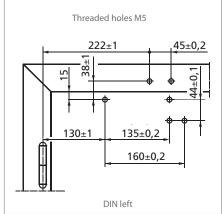
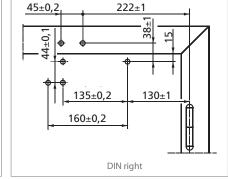


Fig. 19-3

Fig. 19-4





Threaded holes M5

Fig. 19-5

Fig. 19-6

## GEZETS 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 GEZETS 4000 closers



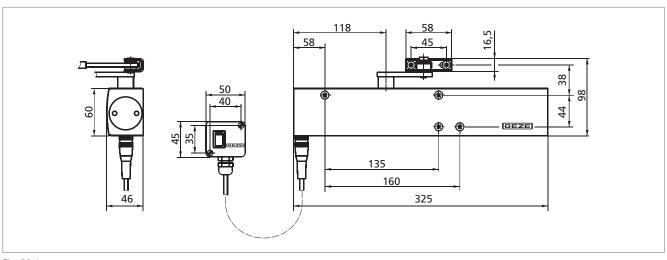


Fig. 20-1

#### 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)

#### 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 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 ...

#### **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 closerdoor 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. 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

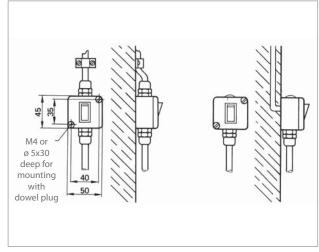


Fig. 21-1

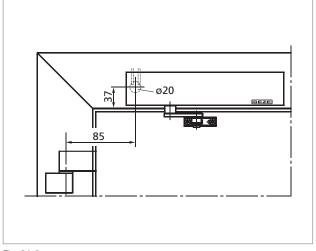


Fig. 21-2

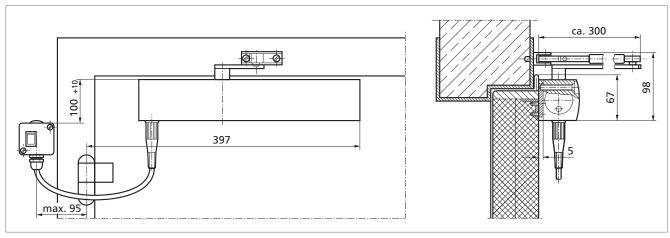


Fig. 22-1

#### 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

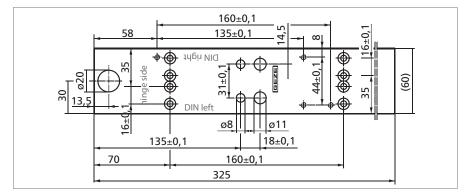
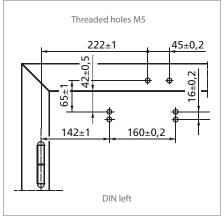


Fig. 22-2



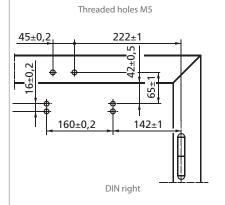


Fig. 22-3 Fig. 22-4

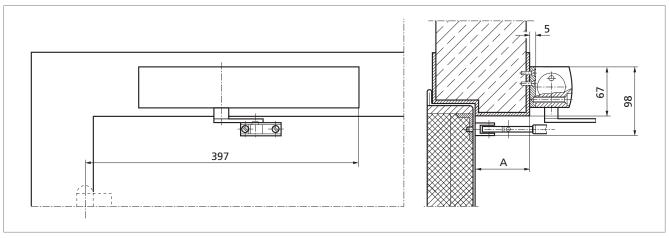


Fig. 23-1

#### 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

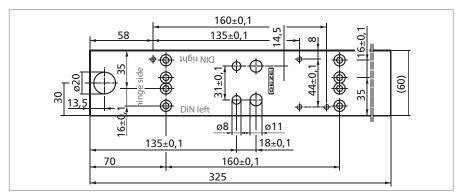
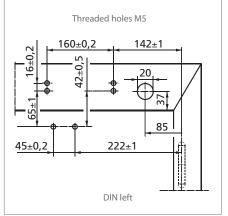


Fig. 23-2



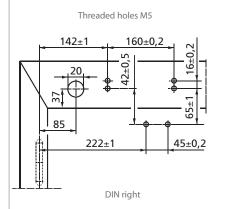


Fig. 23-3

Fig. 23-4

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

| Description                             |       | Finish          | ID No. |
|---|-------|-----------------|--------|
|   |       |                 |        |
| GEZE TS 4000 E for standard install     |       | silver          | 105211 |
| with terminal box, without link arn     |       | RAL-colour      | 105212 |
| GEZE TS 4000 E for transom mount        | ing   | silver          | 105213 |
| without link arm                        |       | RAL-colour      | 105214 |
| GEZE TS 4000 E for transom mount        | ting  | silver          | 105235 |
| on hinge side 1) 2) without guide rai   |       | 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 |
|   |       |                 | 106466 |
| Mounting material                       |       |                 |        |
| Mounting plate                          |       | silver          | 059107 |
|   |       | 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

#### **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 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

### GEZETS 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 constand 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



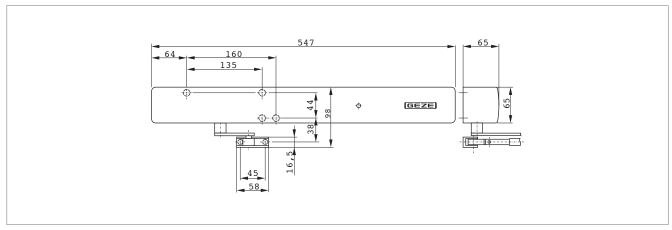


Fig. 26-1

#### 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 GEZETS 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 ±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, ffor 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 cI 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 ...

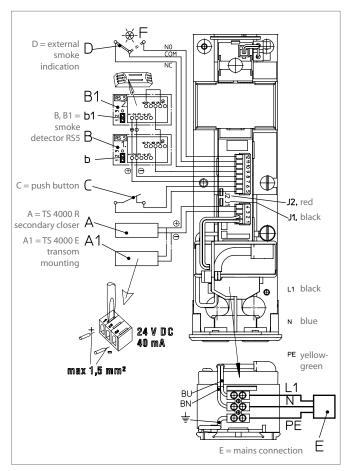


Fig. 27-1

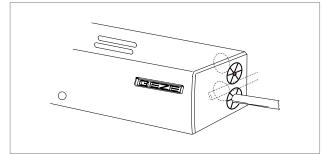


Fig. 27-2

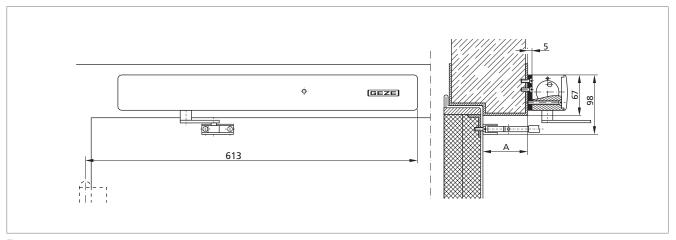


Fig. 28-1

#### 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

#### 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

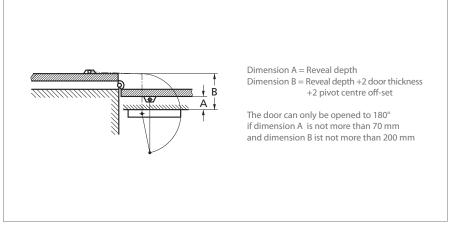


Fig. 28-2

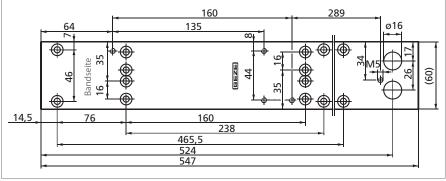
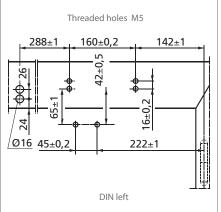


Fig. 28-3



DIN right

222±1

142±1

Threaded holes M5

160±0,2

288±1

Ø16

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                             |                       | silver          | 105241 |
| opposite hinge side, with integrate                                | ed smoke              | RAL-colour      | 105242 |
| detector, without link arm   |                       |                 |        |
| GEZE TS 4000 R for transom mount                                   | ting <sup>1) 2)</sup> | silver          | 105243 |
| on hinge side, with integrated smo<br>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   | Guide rail            |                 | 102527 |
|  |                       | RAL-colour      | 102528 |
| 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, 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
- ► 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 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

- () 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. 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 · 07/07 · Subject to alterations

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
Bühringstraße 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 Bühringstraße 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

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

**GEZE** Engineering Roma Srl

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 Par 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/ Comerc, 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
Høje Taastrup Boulevard 53
DK-2630 Taastrp
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 Developmen
Area (BEDA)
Tianjin 300400, P.R. China
Tel. +86 (0) 22-26973995-0
Fax +86 (0) 22-26972702
E-mail: qeze@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
PR. 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