# Overview table for GEZE floor springs

# For 1-leaf doors

	TS 500 NV	TS 500 N EN 3	TS 550 NV	TS 550 NV F	TS 550 NV E	TS 550 F-G	TS 550 E-G
Approval for fire and smoke protection doors				•	•	•	•
Max. door leaf width (mm)	1100	950	1400	1400	1400	1400	1400
Application possibilities:							
Single-action doors (right/left)	•	•	•	•	•	•	•
Opening angle	170°	170°	170°	180°	180°	180°	180°
Double-action doors	•	•	•				
Leaf weight up to (kg)	150	100	300	300	300		
Functions:							
Closing force, adjustable	•	EN 3 fix	•	•	•	•	•
Back check, fixed	•	•	•	•	•		
Hydraulic stop, adjustable	•		•	•	•	•	•
Closing speed, adjustable	•	•	•	•	•	•	•
Mechanical hold-open device	•	•	•				
Electric hold-open device					•		•
Hold-open angle	optional 85° 90° 105° 120°	optional 85° 90° 105° 120°	85° - 165°		75° - 165°		80° - 150°
Mechanical closing sequence control, integrated							
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 $\bullet$  = yes

## Table showing the ratio of closing force to door leaf width

Closing force	Door leaf width (mm)
Size 2	up to 850
Size 3	from 850 to 950
Size 4	from 950 to 1100
Size 5	from 1100 to 1250
Size 6	from 1250 to 1400

#### For 2-leaf doors

	TS 550 IS	TS 550 E-IS	TS 550 IS-G	TS 550 E-IS-G
Approval for fire and smoke protection doors	•	•	•	•
Max. door leaf width (mm)	1400	1400	1400	1400
Application possibilities:				
Single-action doors (right/left)	•	•	•	•
Opening angle	180°	180°	180°	180°
Double-action doors				
Leaf weight up to kg	250	250		
Functions:				
Closing force, adjustable	•	•	•	•
Back check, fixed	•	•		
Hydraulic stop, adjustable	•	•	•	•
Closing speed, adjustable	•	•	•	•
Mechanical hold-open device				
Electric hold-open device		•		•
Hold-open angle		80° - 175°		80° - 150°
Mechanical closing sequence control, integrated	•	•	•	•
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#### **Cover plates**

There are various cover plates with screw accessories available for GEZE floor springs. These can be used on the right, left and with double-action doors.

# Pivot hinges / door rails

Special pivot hinges and door rails with 36 mm pivot point distance are required for the installation of a floor spring on single-action doors. (See Accessories for floor springs from page 54)

#### The requirement

The standard (EN 1154) stipulates that the door closer size (closing force) must be set to match the door leaf width. The next higher size has to be set if the structural circumstances (door height, door weight) or local conditions (wind influence) make this necessary.

## The GEZE solution

The floor spring variants of the TS 500 NV/TS 550 and TS 550 NV series comprise several sizes in one housing. Using an adjustment screw, the corresponding closing force can easily be adapted to the structural and local circumstances.

#### GEZE TS 550 NV E

#### Floor spring with electric hold-open device for 1-leaf fire and smoke protection doors up to 1400 mm leaf width

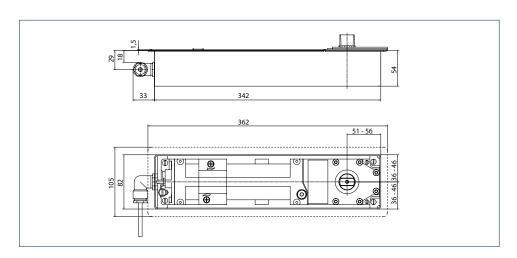
The floor spring TS 550 NV E has been tested in accordance with DIN EN 1155 and can be held open in any position between 75° and 165° due to the electric hold-open device. This allows the door to be held open for any length of time. The door closer is suitable for use on fire and smoke protection doors. The closing speed and hydraulic latching action can be regulated. The closing force, size 3-6 according to EN 1154, can be variably adjusted from above. A safety valve helps prevent intentional overloading. The closer is authorised for use with renowned smoke detector systems by DIBt (the German Centre of Competence for Construction).

#### Standard package / scope of delivery

Floor spring complete with flat conical spindle, cement box and installation instructions (cover plate not included).



#### **GEZE TS 550 NV E**



# Area of application

- For right and left hung doors
- For leaf widths up to 1400 mm
- For leaf weights up to 300 kg
- For fire and smoke protection doors with provision for floor springs

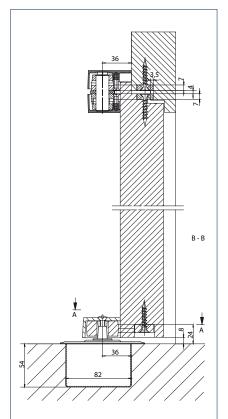
# Technical data for floor springs

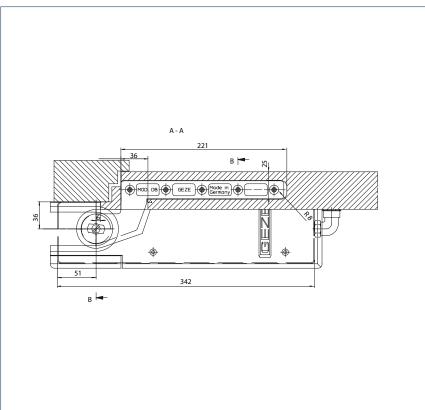
Product features	GEZE TS 550 NV E
Use on single / double-action door	Single-action door
Closing force in accordance with EN 1154	3 – 6
Recommended leaf width up to	1400 mm
Leaf weight (max.)	300 kg
Door buffer stop DIN direction	left / right
Product tested in accordance with	Door closer tested in accordance with EN 1154, hold-open mechanism tested in accordance with EN 1155
Length	342 mm
Overall depth	82 mm
Height	54 mm
Length adjustment range for cement box	5 mm
Width adjustment range for cement box	10 mm
Height adjustment range for cement box	6 mm
Functions	
Adjustable closing force	Yes, stepless
Adjustable closing speed	•
Adjustable latching action	Yes, via valve
Position of closing force adjustment	Тор
Safety valve against wilful damage	•
Thermo-control valves	•
Closing effect from	180 °
Hold-open mechanism	Electrical
Hold-open range	75 ° – 165 °

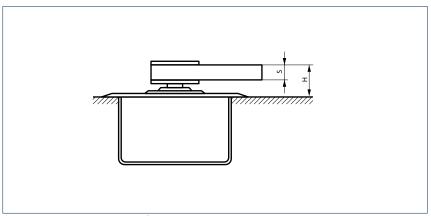
<sup>• =</sup> YES

#### Standard installation

Example of door rail, pivot hinge and floor spring installation on a single-action door:







Door rail model DM, DB, EK, FK for single-action doors

H = Installation height dimension

# With extended spindles, the installation height dimension ${}_{\it m}{\rm H}^{\it m}$ is increased by the respective pivot extension

Model	S	Н
DM	16 mm	27 mm
DB, EK, FK	10 mm	24 mm

#### **GEZE TS 550 NV E - Order information**

Description	DIN di- rection	Spindle extension	Version	ID no.
	left		silver	136481
GEZE TS 550 NV E closer	right		silver	136480
Floor spring with electric hold-open device for 1-leaf fire and smoke protection doors up to 1400 mm leaf width, 24 V DC	left		silver	141707
protection addits up to 1100 minical whating 21 v DC	right		silver	141706
GEZE floor spring cover plate			brass	125890
for TS 550 NV / TS 550 NV F / TS 550 NV E			stainless steel	125888
Accessories				
	left		simulated stainless steel	137586
	left		EV1	006794
GEZE cover caps for door rails (flush-impact doors)	left		aluminium, matt	006792
suitable for model DB, DM, EK, FK	right		simulated stainless steel	137577
	right		EV1	006798
	right		aluminium, matt	006796
	left		simulated stainless steel	137618
	left		EV1	045196
GEZE cover caps for door rails (rebated doors)	left		aluminium, matt	045184
suitable for model DB, DM, EK, FK	right		simulated stainless steel	137617
	right		EV1	045155
	right		aluminium, matt	045011
	left / right		EV1	001090
GEZE caps for pivot hinges (flush-impact doors)	left / right		aluminium, matt	001089
suitable for model DB, EK, FK	left / right		simulated stainless steel	137640
	left		EV1	037918
	left		aluminium, matt	037917
GEZE caps for pivot hinges (rebated doors) suitable for model DB, EK, FK	right		EV1	038302
	right		aluminium, matt	038284
	left		simulated stainless steel	137641
	right		simulated stainless steel	137642

Description	DIN di- rection	Spindle extension	Version	ID no.
	left / right	10 mm		010338
	left / right	13 mm		052170
	left / right	15 mm		010347
	left / right	20 mm		010372
	left / right	25 mm		010373
	left / right	28 mm		050931
GEZE spindle cap for floor spring 2) 3)	left / right	30 mm		010374
with flat cone, including clamping-extension bolt	left / right	35 mm		010377
	left / right	40 mm		010378
	left / right	45 mm		010381
	left / right	5 mm		010337
	left / right	50 mm		010385
	left / right	8 mm		050930
	left / right	0 mm		050644
	left	10 mm		053958
	left	15 mm		053960
	left	20 mm		053962
	left	25 mm		053964
	left	5 mm		053956
GEZE spindle cap for floor spring <sup>2) 3)</sup>	left	0 mm		053954
with square for single-action doors, including clamping-extension bolt	right	10 mm		053959
	right	15 mm		053961
	right	20 mm		053963
	right	25 mm		053965
	right	5 mm		053957
	right	0 mm		053955
Protective hose for E floor springs 3 m, for straightforward cable routing				063558
GEZE door rail for single-action doors			flat cone	044579
Model DB, for rebated, flush-impact metal and wooden doors		,	square	037581
GEZE door rail for single-action doors			flat cone	037630
Model DM, for metal doors, on-site adaptation to profile system, without surface treatment			square	037631
GEZE door rail for single-action doors Model DM, for metal doors, adapted to profile system with flat cone or square			galvanised	001068
GEZE door rail for single-action doors *			flat cone	008269
Model EK, for welding to steel doors			square	006696
GEZE door rail for single-action doors *			flat cone	008270
Model FK, for welding to steel doors			square	006699
GEZE sealing compound for floor springs For use in wet rooms and for installation on the outside of buildings, two- component system, sufficient for 1 cement box				058879
			combination b DIN left	044697
GEZE pivot hinge for single-action doors * Model DB, for rebated, flush-impact metal and wooden doors			combination b DIN right	044680
·			combination c	044787
			combination a	044676

<sup>2)</sup> Use of a longer spindle can be necessary depending on the installation situation. This is no problem for any of the GEZE floor spring variants of the TS 500 NV/TS 550/TS 550 NV series, where the standard spindle is simply unscrewed and the longer spindle in place.

<sup>3)</sup> Only permissible for fire and smoke protection doors when this use is included in the approval certificate of the door.

Description	DIN di- rection	Spindle extension	Version	ID no.
GEZE pivot hinge for single-action doors * Model EK, for welding to steel doors			combination a	006719
			combination b DIN left	000889
			combination b DIN right	000890
			combination c	000891
			combination a	006724
GEZE pivot hinge for single-action doors *			combination b DIN left	000895
Model FK, for welding to steel doors			combination b DIN right	000896
			combination c	000897
			silver	099851
GFZF smoke switch control unit RSZ 6			white RAL 9016	099858
Smoke switch and power supply for all GEZE hold-open mechanisms			simulated stainless steel	099856
			acc. to RAL	099859
			silver-coloured	154976
Set smoke switch control unit RSZ 6 ECwire			white RAL 9016	154979
Smoke switch control unit ECwire for simple wiring using 2-wire technology incl. 2 ceiling-mounted smoke detectors type GC 162 (white)			simulated stainless steel <sup>2)</sup>	154991
			acc. to RAL 2)	154980
GEZE smoke detector GC 152 Complete with base, 24 V DC, 20 mA, tested in accordance with EN54-7, with general approval for use with all GEZE hold-open systems, integra- ted line monitoring, conform with DIN EN 14637			white	139850
GEZE thermal detector GC 153 Complete with base, 24 V DC, 20 mA, tested in accordance with EN54-5, with general approval for use with all GEZE hold-open systems, integrated line control, conform with DIN EN 14637			white	139881
GEZE manual trigger switch AS 500 for the manual release of electrically controlled hold-open mechanisms including terminating resistance for line monitoring			alpine white	116266
GEZE manual trigger switch AS 500 (with glass pane and 5 inter- changeable labels) for the manual release of electrically controlled hold-open mechanisms			alpine white	120880
Surface-mounted box, single suitable for the AS 500 switch range				120503
Replacement glass cover for GEZE manual trigger switch 120880 and 120881				010994
*				

<sup>\*</sup> See page 55 onwards for more information regarding possible combinations