

Overview table for GEZE floor springs

For 1-leaf doors

	TS 500 NV	TS 500 N EN 3	TS 550 NV	TS 550 NVF	TS 550 NVE	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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● = 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

GEZE TS 500 NV / TS 550 NV / TS 550 AND VARIANTS

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 500 NV / TS 500 N EN3

Floor spring for 1-leaf single-action/double-action doors up to 1100 mm leaf width with optional hold-open mechanism

The TS 500 NV and TS 500 N EN3 versions are two floor springs for use with doors with a maximum available leaf width of 1100 mm. The closing speed and hydraulic latching action can be adjusted. The fixed back check prevents uncontrolled opening of the door and prevents damage. The closing force, size 1-4 according to EN 1154, can be adjusted from above with the TS 500 NV and is fixed with the TS 500 N EN3, size 3. The very low overall height of just 42 mm is a welcome benefit for both new constructions and retro-fitting. The safety valve provides protection against intentional overload.

Standard package / scope of delivery

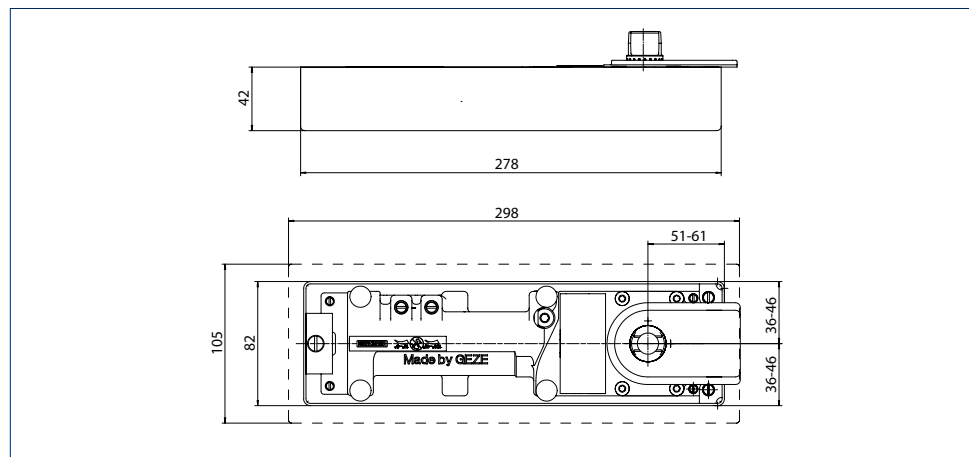
Floor spring complete with flat conical spindle, cement box and installation instructions, without hold-open mechanism (cover plate not included).

Special versions

- with hold-open mechanism 85°, 90°, 105° and 120°
- with extended pivot up to 50 mm (5 mm-grading)



GEZE TS 500 NV



GEZE floor spring TS 500 NV (Dimensions of GEZE TS 500 N EN3 identical)

Area of application TS 500 NV

- For right and left hung doors
- For internal double-action doors
- For leaf widths up to 1100 mm
- For leaf weights up to 150 kg

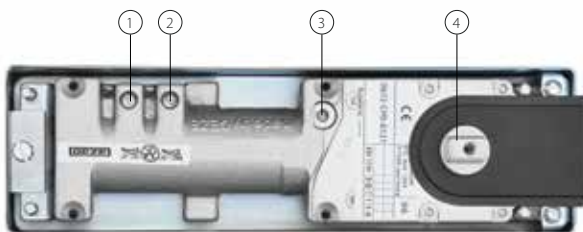
Area of application TS 500 N EN 3

- For right and left hung doors
- For internal double-action doors
- Leaf widths up to 950 mm
- Leaf weights up to 100 kg

Technical data for floor springs

Product features	GEZE TS 500 NV	GEZE TS 500 N EN3
Use on single /double-action door	Single-action door / double-action door	
Closing force in accordance with EN 1154	1 – 4	3
Recommended leaf width up to	1100 mm	950 mm
Leaf weight (max.)	150 kg	100 kg
Door buffer stop DIN direction	left / right	
Product tested in accordance with	Door closer tested in accordance with EN 1154	
Length	278 mm	
Overall depth	82 mm	
Height	42 mm	
Length adjustment range for cement box	10 mm	
Width adjustment range for cement box	10 mm	
Height adjustment range for cement box	6 mm	
Functions		
Adjustable closing force	Yes, stepless	No
Adjustable closing speed	•	•
Adjustable latching action	Yes, via valve	No
Integrated back check	Yes, mechanical, fixed	
Position of closing force adjustment	Top	
Safety valve against wilful damage	•	•
Thermo-control valves	•	•
Closing effect from	170 °	
Hold-open mechanism	Optional	
Hold-open range	85 °, 90 °, 105 °, 120 °	

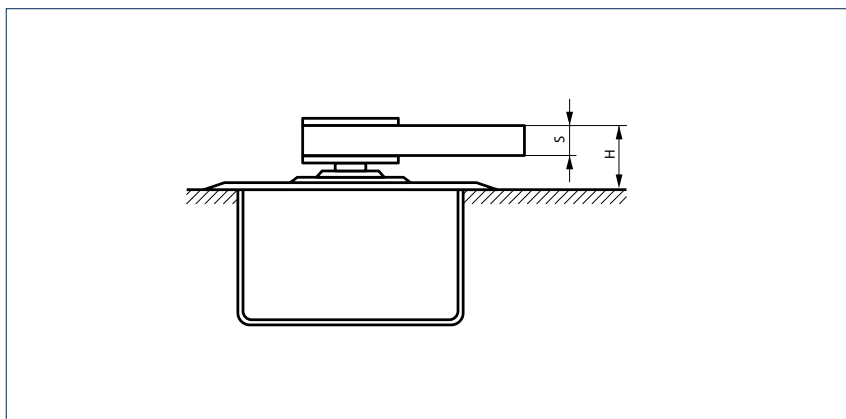
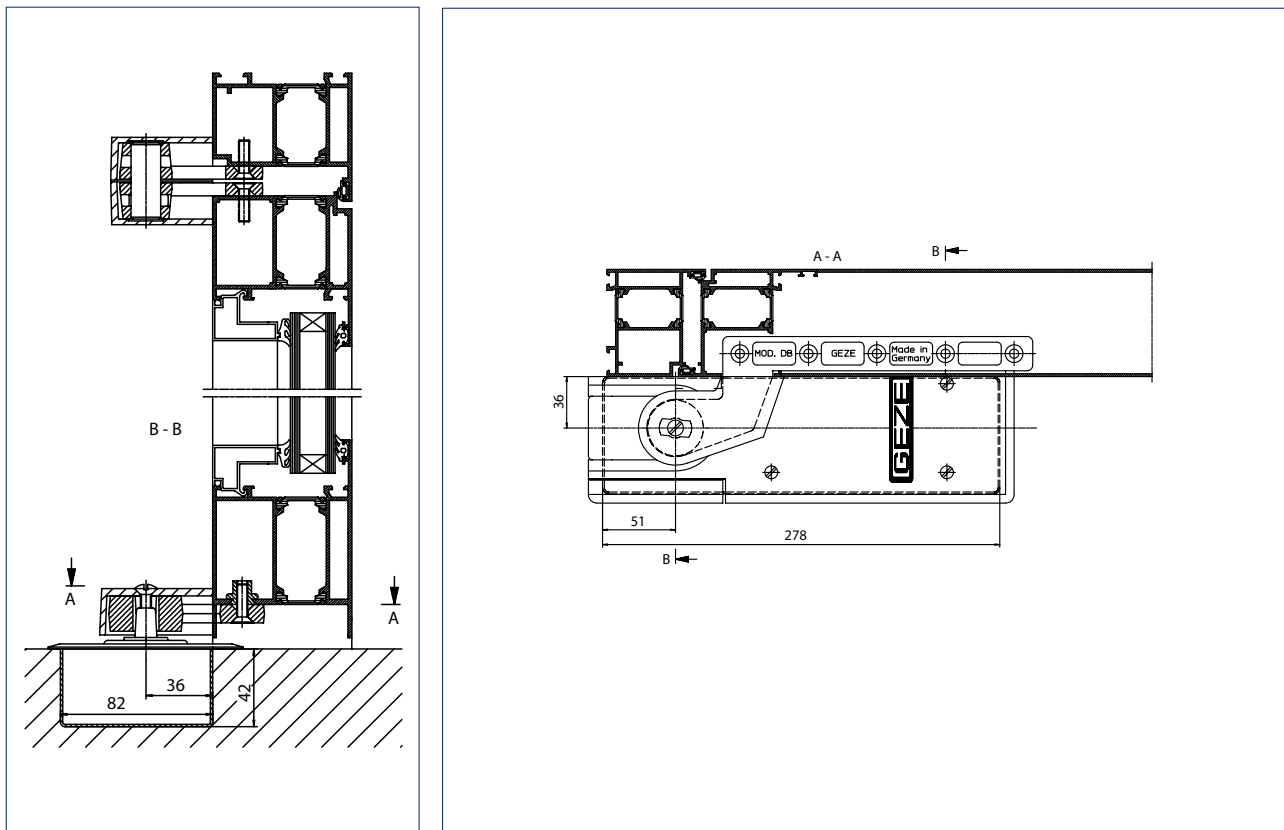
• = YES



- 1 = Latching action adjustment
 2 = Closing speed adjustment
 3 = Closing force adjustment
 4 = Spur-cut spindle

Standard installation

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



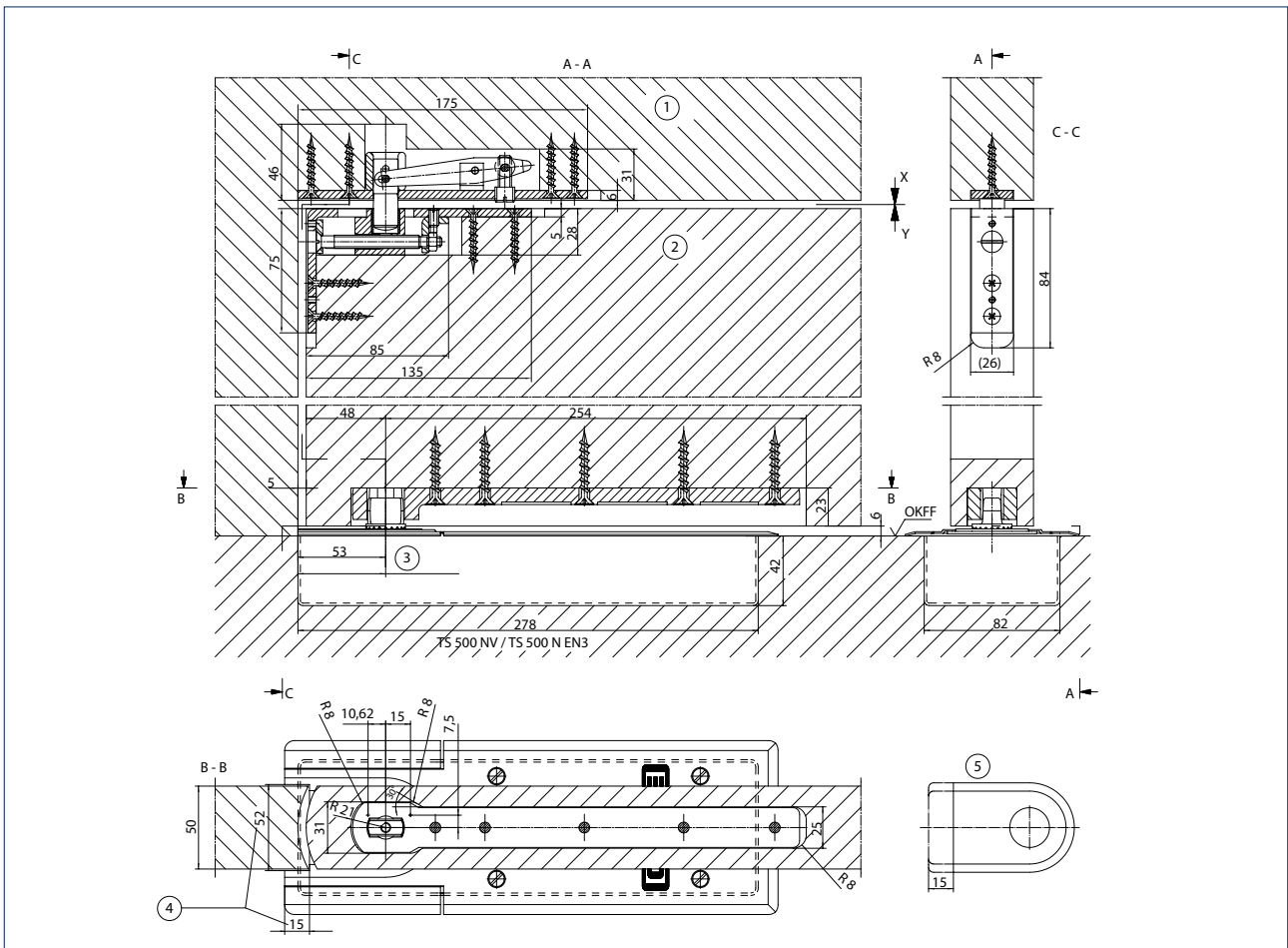
Door rail model DM, DB, EK, FK for single-action doors

H = Installation height dimension

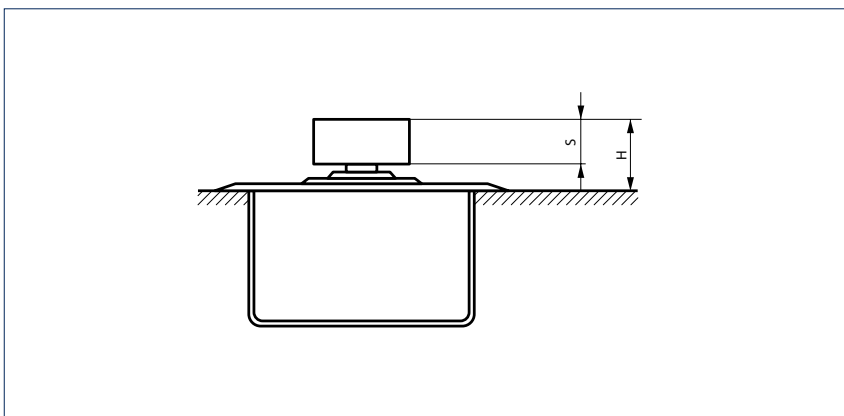
With extended spindles, the installation height dimension „H“ is increased by the respective pivot extension

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

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



- 1 = Pivot top
- 2 = Pivot bottom
- 3 = Adjustment range 51 - 61
- 4 = Cover plate levered out
- 5 = Cover plates - cap shortened
- OKFF = Finished floor level



Door rail model CM, C for double-action doors

With extended spindles, the installation height dimension „H“ is increased by the respective pivot extension

Model	S	H
CM	19 mm	29 mm
C	19 mm	29 mm

Order information

Description	DIN direction	Hold-open angle	Spindle extension	Version	ID no.
GEZE TS 500 NV closer Size EN 1-4, optionally with fixed mechanical hold-open device (without cover plate and accessories) ¹⁾	left / right	0 °		silver	102084
	left / right	85 °		silver	103974
	left / right	90 °		silver	104028
	left / right	105 °		silver	104029
	left / right	120 °		silver	104030
GEZE TS 500 N EN3 closer Size EN 3, optionally with fixed mechanical hold-open device (without cover plate and accessories) ¹⁾	left / right	0 °		silver	103086
	left / right	85 °		silver	104046
	left / right	90 °		silver	104047
	left / right	105 °		silver	111594
GEZE floor spring cover plate for TS 500 NV / TS 500 N EN3				brass	103012
				stainless steel	102127
Accessories					
GEZE cover caps for door rails (flush-impact doors) suitable for model DB, DM, EK, FK	left			simulated stainless steel	137586
	left			EV1	006794
	left			aluminium, matt	006792
	right			simulated stainless steel	137577
	right			EV1	006798
	right			aluminium, matt	006796
GEZE cover caps for door rails (rebated doors) suitable for model DB, DM, EK, FK	left			simulated stainless steel	137618
	left			EV1	045196
	left			aluminium, matt	045184
	right			simulated stainless steel	137617
	right			EV1	045155
	right			aluminium, matt	045011
GEZE caps for pivot hinges (flush-impact doors) suitable for model DB, EK, FK	left / right			EV1	001090
	left / right			aluminium, matt	001089
	left / right			simulated stainless steel	137640
GEZE caps for pivot hinges (rebated doors) suitable for model DB, EK, FK	left			EV1	037918
	left			aluminium, matt	037917
	right			EV1	038302
	right			aluminium, matt	038284
	left			simulated stainless steel	137641
	right			simulated stainless steel	137642

¹⁾ The specified hold-open angle is valid for single-action doors. When it comes to double-action doors, this hold-open angle is respectively 5° larger.

Description	DIN direction	Hold-open angle	Spindle extension	Version	ID no.
GEZE spindle cap for floor spring ²⁾ with flat cone, including clamping-extension bolt	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
	left / right		30 mm		010374
	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
GEZE spindle cap for floor spring with square for double-action doors, including clamping-extension bolt			0 mm		053315
GEZE spindle cap for floor spring ²⁾ with square for single-action doors, including clamping-extension bolt	left		10 mm		053958
	left		15 mm		053960
	left		20 mm		053962
	left		25 mm		053964
	left		5 mm		053956
	left		0 mm		053954
	right		10 mm		053959
	right		15 mm		053961
	right		20 mm		053963
	right		25 mm		053965
	right		5 mm		053957
right		0 mm		053955	
GEZE pivot hinge top cover plate for pivot hinge model B and C				EV1	006669
GEZE door rail for double-action doors Model C, for metal and wooden doors				flat cone	007432
GEZE door rail for double-action doors Model CM, for metal doors, on-site adaptation to profile system, without surface treatment				galvanised	021817
GEZE door rail for double-action doors Model CM, for metal doors, adapted to profile system				flat cone	001067
GEZE door rail for single-action doors Model DB, for rebated, flush-impact metal and wooden doors				flat cone	044579
				square	037581
GEZE door rail for single-action doors Model DM, for metal doors, on-site adaptation to profile system, without surface treatment				flat cone	037630
				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 Model EK, for welding to steel doors				flat cone	008269
				square	006696
				flat cone	008270
				square	006699

2) 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 pivot is put in place.

Description	DIN direction	Hold-open angle	Spindle extension	Version	ID no.
GEZE door rail for double-action doors Model S, for welding to steel doors				flat cone	007434
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
GEZE adjustable pivot hinge for double-action doors Model B, suitable for door rails C, CM, S				pivot pin 43 mm	006371
				pivot pin 55 mm	000108
				pivot pin 65 mm	000903
GEZE adjustable pivot hinge for double-action doors Model C, suitable for door rails C, CM, S				pivot pin 43 mm	006666
				pivot pin 55 mm	000905
				pivot pin 65 mm	000904
GEZE pivot hinge for single-action doors Model DB, for rebated, flush-impact metal and wooden doors				combination b DIN left	044697
				combination b DIN right	044680
				combination c	044787
				combination a	044676
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
GEZE pivot hinge for single-action doors Model FK, for welding to steel doors				combination c	000891
				combination a	006724
				combination b DIN left	000895
			combination b DIN right	000896	
			combination c	000897	

* See page 55 onwards for more information regarding possible combinations