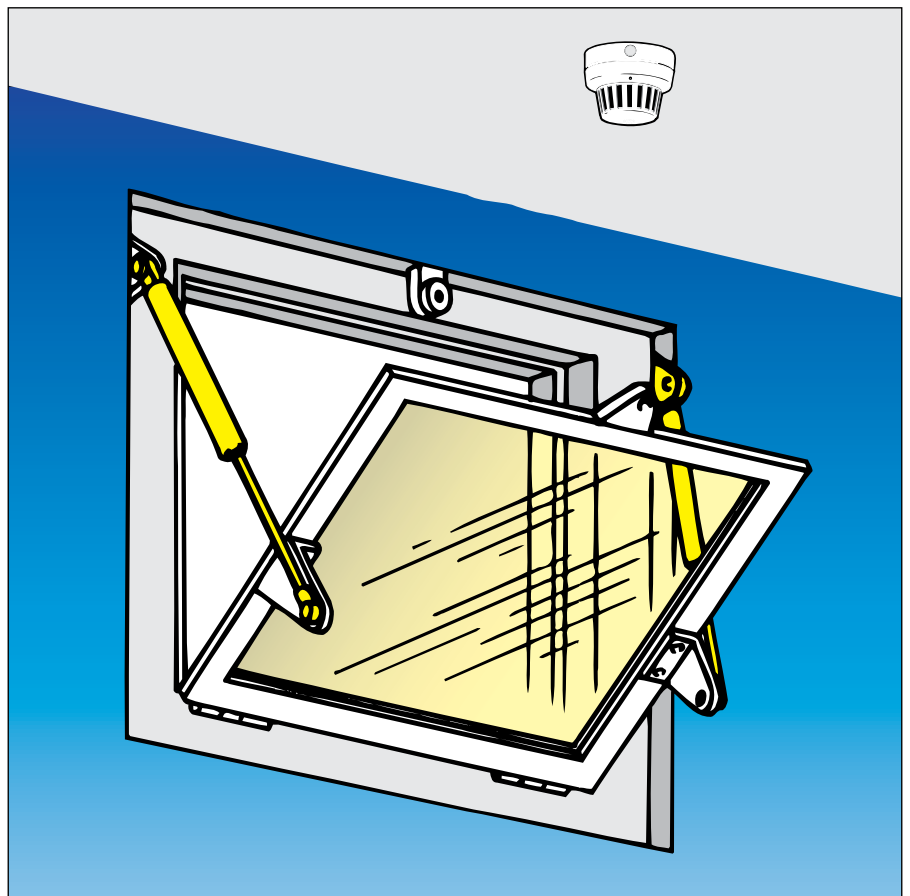


Gas Springs with Floating Piston

Push type gas springs are usually selected with damping on the extending stroke so they prevent hinges etc. from wearing as quickly. However in some cases this is not enough. DICTATOR offers **push type gas springs with a floating piston**. This allows for an **extra slow and controlled movement while the piston rod is extending**. The extending speed can also be greatly reduced.

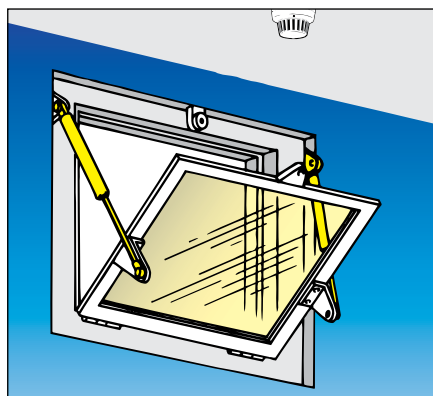
Gas springs with floating piston are available in 3 diameter ranges. We manufacture the gas spring according to your individual application requirements - either as a single unit, in small or large batches. In addition to the normal details given when ordering (as in push type gas springs) please also specify the required piston rod extension time.

Examples where push type gas springs are used: glass flaps, windows and sensitive medical equipment.



Technical Data

Piston rod diameter	8, 10, 14 mm
Cylinder diameter	19, 23, 28 mm
Forces	80 N - 2500 N
Stroke lengths	100 mm - 300 mm
Extending speed	min. 0.02 m/s
Operating temperature	-10 °C to +80 °C
Gas	nitrogen (N), (non-flammable!)
Maximum number of strokes	6 strokes per min



Summary of Gas Springs with Floating Piston

DICTATOR industrial push type gas springs are usually manufactured according to your requirements. The following table gives you a short summary of push type gas springs with floating piston available.

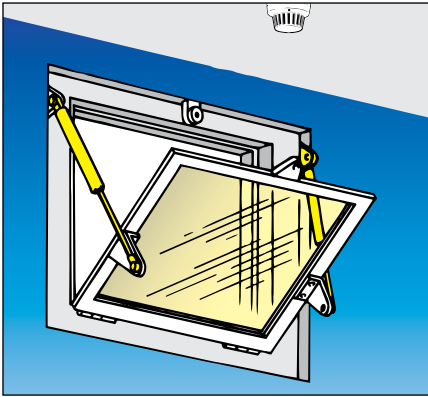
Information of possible additional options for gas springs with floating piston can be found at the bottom of this page. Detailed data concerning each individual diameter range, which will help you when selecting your gas spring, can be found on the following pages. Or just ask our advisory service.

Technical Data

Ø Piston rod	8	10	14
Ø Cylinder	19	23	28
Min. stroke S (mm)	100	100	100
Max. stroke S (mm)	300	300	300
Damping	1, 2, 3	1, 2, 3	1, 2, 3
Min. force	80 N	100 N	250 N
Max. force	700 N	1200 N	2500 N
L comp. (GZ-GZ) *	Lext. - S	Lext. - S	Lext. - S
L ext. (GZ-GZ) *	3x S + 60	3x S + 60	3x S + 60
Min. extension speed	0,02 m/sec.	0,02 m/sec.	0,02 m/sec.
End fittings	GZ, A, G WG, KGA, GK	GZ, A, G WG, KGA, GK	GZ, A, G WG, KGA, GK
Protective tube (6) *	L + 5	L + 5	L + 5
* Stroke (S) and given length (L) + additional lengths in mm [Example: 8-19 range; stroke 100; L ext. = 3 x 100 + 60 = 360 mm]			

Additional Options

Please order a protective tube if the gas spring will be exposed to dirt, paint or other such hazards, and if there is danger of mechanical damage. The protective tube slides over the cylinder and piston rod and prevents the piston rod from damage. The gas spring can also be supplied with 2 protective tubes on request. The **protective tube** has **code no. 6**. (the total length increases by 5 mm per protective tube.) (Please also see page 06.011.00).



DT 8-19 and DT 10-23 Push Type Gas Springs with Floating Piston, Force 80 N - 1200 N

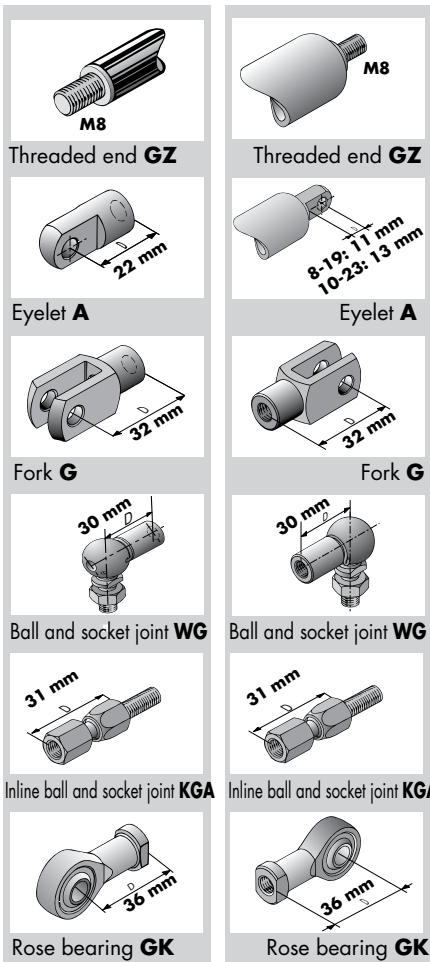
DT 8-19 and DT 10-23 gas springs with floating piston simply differ by the diameter of the piston rod and cylinder, as well as the corresponding force. The measurements of available end fittings are identical. Compared to normal push type gas springs in this diameter range the cylinder is considerably longer. (Please also see page 06.006.00). **Mounting devices** for DT 8-19 and DT 10-23 gas springs with floating piston can be found on pages 06.065.00 - 06.068.00.

DT 8-19 and DT 10-23 gas springs with floating piston can be used in smoke evacuation installations for example.

End Fittings

On piston rod

On cylinder



Exact dimensioned drawings for the above end fittings can be found beginning on page 06.061.00.

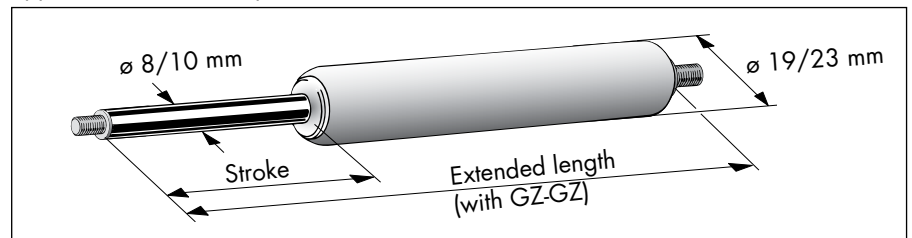
Types of damping

- 1 = damping on extending stroke
- 2 = damping on compression stroke
- 3 = damping on both extending and compression strokes

Determining Your DT 8-19 and DT 10-23 Gas Spring with Floating Piston

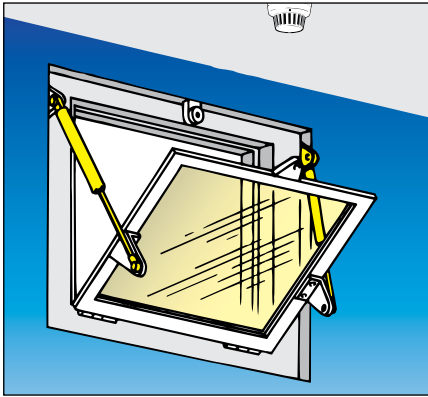
With help of the following table you can easily find the correct gas spring if you already know the necessary stroke and end fittings.

If you require a gas spring not only with threaded ends, but also, for example, an eyelet on the piston rod or both ends, then simply add the measurement D given in the drawings of the end fittings to the extended length to achieve the total length. The same applies for additional options.



	Type DT	See page
1. Piston rod diameter (8 or 10 mm):	<input type="text"/>	06.082.00
2. Cylinder diameter (19 or 23 mm):	<input type="text"/>	06.082.00
3. Stroke (100 - 300 mm):	<input type="text"/>	06.082.00
4. Type of damping (1, 2, 3):	<input type="text"/>	06.005.00 06.083.00
5. Extending speed (m/sec.):	<input type="text"/>	06.006.00
6. Force (DT 8-19 : 80 - 700 N/ DT 10-23 : 100 - 1200 N):	<input type="text"/>	06.083.00
7. Compressed length (= extended length - stroke):	<input type="text"/>	06.084.00
8. Extended length (total length): (min. 3 x stroke + 60 mm + measurement D of end fittings + measurements of additional options)	<input type="text"/>	06.084.00
9. Piston rod end fitting (see drawing for symbol):	<input type="text"/>	06.061.00
10. Cylinder end fitting (see drawing for symbol):	<input type="text"/>	06.061.00
11. Additional options: <input type="checkbox"/> Protective tube (6) (+ 5 mm)		06.011.00

Additional details:



DT 14-28 Push Type Gas Springs with Floating Piston Force 250 N - 2500 N

In spite of their relatively small measurements, gas springs with floating piston with 14 mm piston rod diameter and 28 mm cylinder diameter allow for more than double the amount of force than those in the DT 10-23 range.

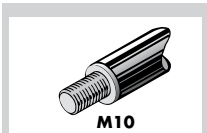
Mounting devices for DT 14-28 gas springs with floating piston can be found on pages 06.067.00 and 06.068.00.

DT 14-18 gas springs with floating piston are used in controlled machine elements, revolving and folding doors.

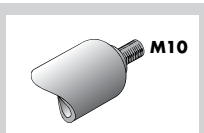
End Fittings

On piston rod

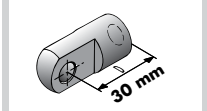
On cylinder



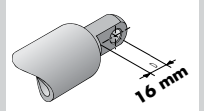
Threaded end **GZ**



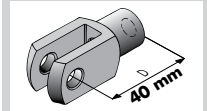
Threaded end **GZ**



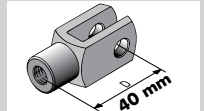
Eyelet **A**



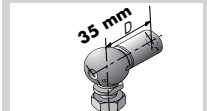
Eyelet **A**



Fork **G**



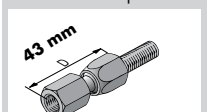
Fork **G**



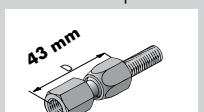
Ball and socket joint **WG**



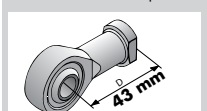
Ball and socket joint **WG**



Inline ball and socket joint **KGA**



Inline ball and socket joint **KGA**



Rose bearing **GK**



Rose bearing **GK**

Exact dimensioned drawings for the above end fittings can be found beginning on page 06.061.00.

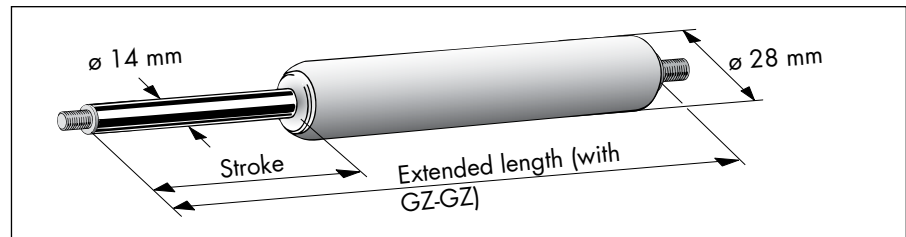
Types of damping

- 1 = damping on extending stroke
- 2 = damping on compression stroke
- 3 = damping on both extending and compression strokes

Determining Your DT 14-28 Gas Spring with Floating Piston

With help of the following table you can easily find the correct gas spring if you already know the necessary stroke and end fittings.

If you require a gas spring not only with threaded ends, but also, for example, an eyelet on the piston rod or both ends, then simply add the measurement D given in the drawings of the end fittings to the extended length to achieve the total length. The same applies for additional options.



	Type DT	See page
1. Piston rod diameter:	<input type="text" value="14 mm"/>	06.082.00
2. Cylinder diameter:	<input type="text" value="28 mm"/>	06.082.00
3. Stroke (100 - 300 mm):	<input type="text"/>	06.082.00
4. Type of damping (1, 2, 3):	<input type="text"/>	06.005.00 06.083.00
5. Extending speed (m/sec.):	<input type="text"/>	06.006.00
6. Force (250 - 2500N):	<input type="text"/>	06.083.00
7. Compressed length (= extended length - stroke):	<input type="text"/>	06.084.00
8. Extended length (total length): (min. 3 x stroke + 60 mm + measurement D of end fittings + measurements of additional options)	<input type="text"/>	06.084.00
9. Piston rod end fitting (see drawing for symbol):	<input type="text"/>	06.061.00
10. Cylinder end fitting (see drawing for symbol):	<input type="text"/>	06.061.00
11. Additional options: <input type="checkbox"/> Protective tube (6) (+ 5 mm)		06.011.00

Additional details: