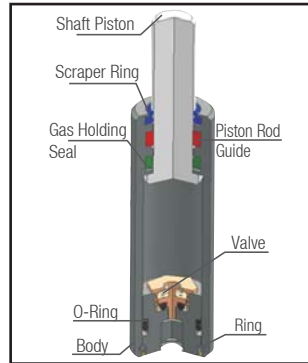


KN Series, Gas Spring - Mini & Low Force

Adjustable forces, maximum flexibility.

KN Series; In many series such as die fixtures ejector, shock absorber fixing and it is also used as die matrix remover. All gas springs are designed the same without depending on the spring forces. The reason that the forces are different is that they are filled with the gas in different pressures. The pressure of the spring can be adjusted at the bottom of the spring. Do not repair worn springs. The worn springs should be completely replaced.

Max. Pressure: **150 Bar** - Max. Speed : **0.6 m/s** - Max. Temp. : **0-80°C**



KN Series, Gas Spring - Mini & Low Force

Order Model	Stroke (K) mm	L1 min.	L Length	Initial Force	Final Force	Weight Kg.
KN.19.10	10	55	65	120 Kg.	250 Kg.	0.09
KN.19.16	16	61	77			0.10
KN.19.25	25	70	95			0.11
KN.19.38	38	83	121			0.14
KN.19.50	50	95	145			0.15
KN.19.63	63	108	171			0.18
KN.19.80	80	125	205			0.20
KN.19.100	100	145	245			0.26

Note: According to the 20°C value calculated nominally, any variation at temperature can cause a change in gas pressure (P). In gas spring selection, a spring over the criteria must be selected. The usage criteria should be adjusted by assuming that the processed sheet metal quality may change.

Order Model	Stroke (K) mm	L1 min.	L Length	Initial Force	Final Force	Weight Kg.
KN.25.10	10	55	65	150 Kg.	260 Kg.	0.15
KN.25.13	13	59	71			0.16
KN.25.16	16	61	77			0.17
KN.25.25	25	70	95			0.19
KN.25.38	38	83	121			0.22
KN.25.50	50	95	145			0.25
KN.25.63	63	108	171			0.29
KN.25.80	80	125	205			0.33
KN.25.100	100	145	245			0.38
KN.25.125	125	170	295			0.45

Spring forces according to spring diagram
Stroke increase / spring force relocation
 The pressure increase factor consider relocations, however you should consider the external effects.

Fixing with screw from the bottom is only recommended for stroke lengths up to 25m.
Mounting selections:
 BT - BTA - BTB

Mounting at the housing
 Volume
 Ø
 +1.0
 +0.5

Bottom mount
 M6

Supported
 Ø
 +1.0
 +0.5

Gas Spring Mounting Examples:
 Mount gas springs directly via threaded holes at the bottom or by using fixing elements. Generally for other fitting position of gas springs that are completed their mounting by extractor with screw from bottom in compliance with your die, you can select fitting type specified at drawing.

All Gas Spring Cylinders: They are designed with a stroke reserve between 1 to 3 mm. Thus, the nominal value (stroke) can be totally implemented. However, it is recommended not to exceed 90% of the stroke value in order to avoid an extra stroke risk caused by the changes or errors in the system. Otherwise, it may cause irreparable damages to the cylinders and serious dangers for the personnel.