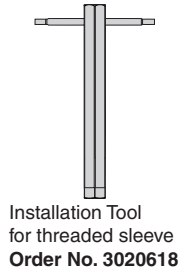
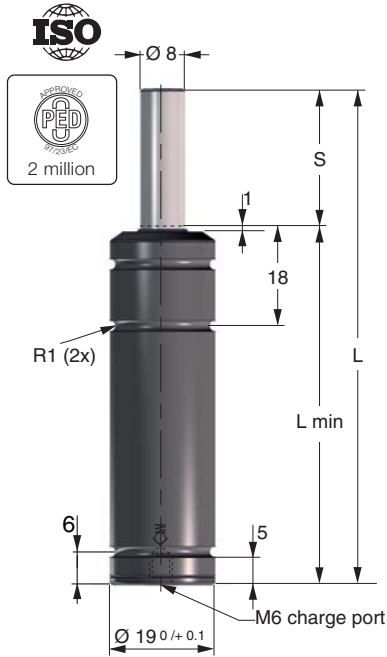


R19



The R series get their name from the fact their tube is roll formed and therefore permanently closed, making them non-repairable.

R series springs are available with Ø 12, Ø 15, and Ø 19 mm tube diameters and with stroke lengths up to 125 mm. There are 4 color-coded models, whose forces are preset. An adjustable model (black) is also available, that can be ordered to a specific charge pressure or adjusted by customers with the appropriate charging equipment and training.

How to order R19 - 7 - Yellow

Model: R19
 Stroke Length (mm) (7, 10, 15, 25, 38.1, 50, 63.5, 80, 100, 125)
 Force: Green, Blue, Red, Yellow, Black, state desired force in N

Model	Force in N at +20°C		Color	Charging pressure (bar)
	Initial	Initial		
R19	300	67	Green	60
R19	500	112	Blue	100
R19	700	157	Red	140
R19	900	202	Yellow	180
R19 XX *	125-900	67-202	Black	25-180

*Force to be set by the end user. Delivered with a pre-charge of 5-10 bar.

TM sleeve, M24 x 1.5
 Order No. 3020615-M24

TI sleeve, UNC 1" - 8
 Order No. 3020615-UNC1



S stroke	End force in N at +20°C*				End force in lbf at +20°C*				L ±0.25	L min.	Gas vol. (l)	Weight (kg)	ISO
	R19	R19	R19	R19	R19	R19	R19	R19					
** 7	530	880	1,200	1,600	119	199	270	360	56	49	0.003	0.07	
** 10	470	780	1,100	1,400	105	175	247	315	62	52	0.003	0.08	
** 15	440	730	1,000	1,300	99	164	225	292	72	57	0.004	0.08	✓
** 25	420	700	980	1,300	94	157	220	292	92	67	0.006	0.08	✓
** 38.1	410	690	970	1,200	92	155	218	270	118.2	80.1	0.009	0.10	✓
** 50	410	680	960	1,200	92	152	216	270	142	92	0.011	0.12	✓
** 63.5	410	680	950	1,200	92	152	214	270	172	108.5	0.014	0.13	✓
** 80	410	680	950	1,200	92	152	214	270	205	125	0.018	0.14	✓
** 100	410	670	940	1,200	92	152	214	270	245	145	0.022	0.17	
** 125	410	670	940	1,200	92	152	214	270	295	170	0.027	0.20	

*at full stroke

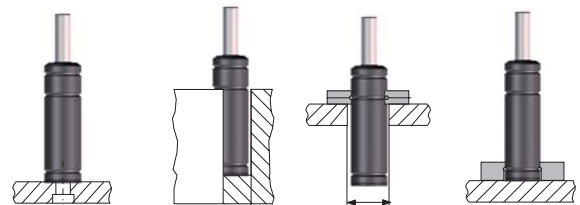
** Recommended stroke length for optimal delivery

Basic Information

For general information see "About gas springs", 2.1
 Pressure medium Nitrogen
 Max. charging pressure 180 bar
 Min. charging pressure 25 bar
 Operating temperature 0 to +80°C
 Force increase by temperature ± 0.3%/°C
 Recommended max strokes/min ~ 100-150 (at 20°C)
 Max piston rod velocity 1.6 m/s

Rod surface..... Nitrided
 Tube surface Black oxide
 Repair kit..... Non-repairable

Mounting Possibilities



Body Ø $\begin{matrix} +1.0 \\ +0.5 \end{matrix}$
Base mount B
 only to be used for strokes 7-25 mm
Drop-in
Top mount FCR
Foot mount BF-19
 only to be used for strokes 7-25 mm