

R12



The R series was named because the tube is Roll-formed and therefore permanently closed, making these springs non-repairable.

R series springs are available with Ø12, Ø15, and Ø19 mm tube diameters and with stroke lengths up to 125 mm.

There are 4 color-coded models, all with preset forces. An adjustable model (black) is also available. It can be ordered either set to a specific charge pressure or it can be adjusted by customers with the appropriate charging equipment and training.

How to order

R12 - 7- Blue
 Model: R12
 Stroke Length (mm) (7, 10, 12.7, 15, 19, 25, 38.1, 50, 63.5, 75, 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		
R12	130	29	Green	45
R12	250	56	Blue	90
R12	380	85	Red	135
R12	500	112	Yellow	180
R12 XX*	60-500	13-112	Black	20-180

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

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]
	R12	R12	R12	R12	R12	R12	R12	R12				
** 7	149	299	448	597	34	67	101	134	56	49	0.001	0.03
10	158	317	475	634	36	71	107	143	62	52	0.001	0.03
12.7	164	329	493	657	37	74	111	148	67.4	54.7	0.001	0.03
** 15	168	335	503	670	38	75	113	151	72	57	0.002	0.03
19	172	344	517	689	39	77	116	155	80	61	0.002	0.04
** 25	177	354	530	707	40	80	119	159	92	67	0.002	0.04
** 38.1	183	365	548	730	41	82	123	164	118	80	0.003	0.04
** 50	185	371	556	742	42	83	125	167	142	92	0.004	0.05
63.5	197	395	592	789	44	89	133	178	172	108.5	0.005	0.06
75	197	394	591	788	44	89	133	178	195	120	0.006	0.06
80	207	414	620	827	47	93	139	186	205	125	0.006	0.07
100	204	409	613	817	46	92	138	184	245	145	0.008	0.07
125	202	405	607	810	45	91	137	182	295	170	0.010	0.09

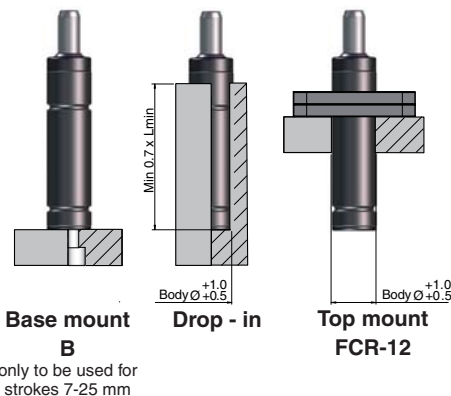
*= at full stroke.

** 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 (at 20°C)
- Min. charging pressure..... 20 bar (at 20°C)
- Operating temperature..... 0 to +80°C
- Force increase by temperature ±0.3 %/°C
- Recommended max. strokes/min..... ~40 – 100 (at 20°C)
- Max. piston rod velocity..... 1.6 m/s
- Rod surface..... Nitrided
- Tube surface Black oxide
- Repair Kit..... Non-repairable

Mounting Possibilities



only to be used for strokes 7-25 mm