

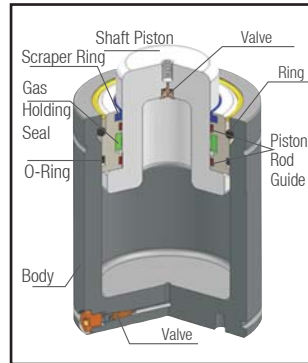
### YO Series, Gas Spring - High Force

YO series are designed to save space and they provide minimum height as possible today with the highest forces. They can be connected in series to the hose systems. Wide connection range and accessories for all kinds of applications.

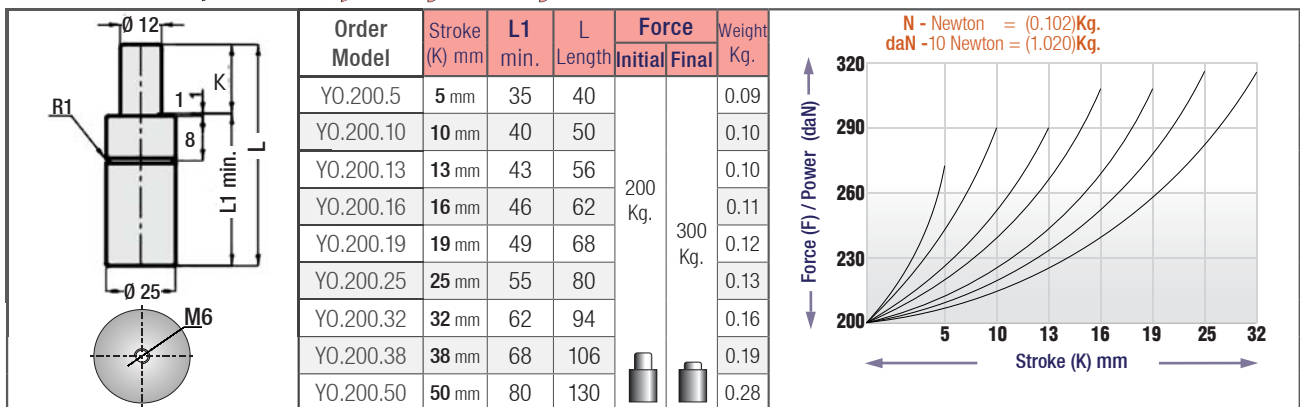
When filling / charging the gas spring, the maximum pressure level recommended for each model should not be exceeded (150 bar).

This standard series connection is recommended when supply tanks are used. 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.

Max. Pressure: **150 Bar** - Max. Speed : **1.6 m/s** - Max. Temp. : **0-80°C**

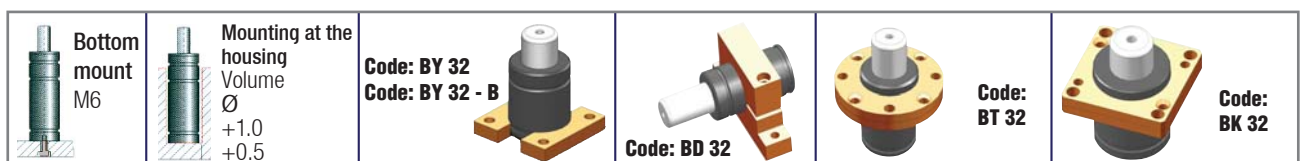
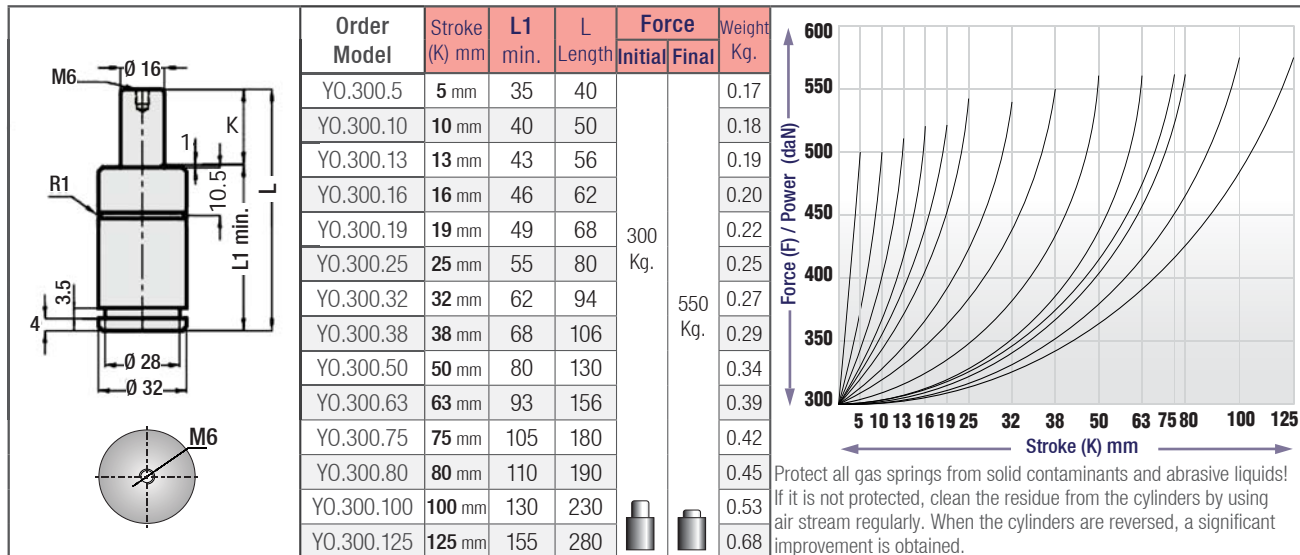


### YO Series, Gas Spring - High Force



**Pressure Increase:** During operation, the piston of the gas spring inserts into the body and the volume of the gas inside gradually decreases. As a result, the pressure increase can be seen as the multiplication factor in the gas spring diagram. The spring force can be easily calculated by multiplying the initial force and the pressure increase factor.

**Adjusting filling pressure:** It can be adjusted according to the spring force and determined by using spring diagram in advance. Spring forces according to spring diagram: The stroke increase / spring force replacement, pressure increase factor and replacements are considered, however you should take into consideration external effects. Lateral loads should not be applied on gas springs. When press goes down, the lateral forces and the vibrations from the die should be checked.



**Mounting:** The gas springs should be placed to surface on flat and in vertical position, the surface should encountered the gas spring force. Do not repair worn springs. The worn springs should be replaced.

# YO Series, Gas Spring - High Force

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.500.5	5 mm	35	40	500	950	0.25
YO.500.10	10 mm	40	50			0.27
YO.500.13	13 mm	43	56			0.29
YO.500.16	16 mm	46	62			0.31
YO.500.19	19 mm	49	68			0.33
YO.500.25	25 mm	55	80			0.36
YO.500.32	32 mm	62	94			0.40
YO.500.38	38 mm	68	106			0.44
YO.500.50	50 mm	80	130			0.50
YO.500.63	63 mm	93	156			0.57
YO.500.75	75 mm	105	180			0.61
YO.500.80	80 mm	110	190			0.66
YO.500.100	100 mm	130	230			0.77
YO.500.125	125 mm	155	280			0.90

N - Newton = (0.102)Kg.  
daN - 10 Newton = (1.020)Kg.

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.700.10	10 mm	42	52	700	1400	0.39
YO.700.13	13 mm	45	58			0.42
YO.700.16	16 mm	48	64			0.45
YO.700.19	19 mm	51	70			0.48
YO.700.25	25 mm	57	82			0.53
YO.700.32	32 mm	64	96			0.58
YO.700.38	38 mm	70	108			0.62
YO.700.50	50 mm	82	132			0.71
YO.700.63	63 mm	95	158			0.81
YO.700.75	75 mm	107	182			0.85
YO.700.80	80 mm	112	192			0.93
YO.700.100	100 mm	132	232			1.04
YO.700.125	125 mm	157	282			1.28

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.1000.10	10 mm	48	58	1000	2250	0.57
YO.1000.13	13 mm	51	64			0.59
YO.1000.16	16 mm	54	70			0.62
YO.1000.19	19 mm	57	76			0.65
YO.1000.25	25 mm	63	88			0.70
YO.1000.32	32 mm	70	102			0.77
YO.1000.38	38 mm	76	114			0.83
YO.1000.50	50 mm	88	138			0.94
YO.1000.63	63 mm	101	164			1.07
YO.1000.75	75 mm	113	188			1.16
YO.1000.80	80 mm	118	198			1.21
YO.1000.100	100 mm	138	238			1.43
YO.1000.125	125 mm	163	288			1.70

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.1500.10	10 mm	54	64	1500	2950	1.02
YO.1500.13	13 mm	57	70			1.05
YO.1500.16	16 mm	60	76			1.10
YO.1500.19	19 mm	63	82			1.15
YO.1500.25	25 mm	69	94			1.25
YO.1500.32	32 mm	76	108			1.35
YO.1500.38	38 mm	82	120			1.44
YO.1500.50	50 mm	94	144			1.61
YO.1500.63	63 mm	107	170			1.81
YO.1500.75	75 mm	119	194			1.90
YO.1500.80	80 mm	124	204			2.06
YO.1500.100	100 mm	144	244			2.38
YO.1500.125	125 mm	169	294			2.86

# YO Series, Gas Spring - High Force

Series connection

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.2400.10	10	55	65			1.47
YO.2400.13	13	58	71			1.52
YO.2400.16	16	61	77			1.58
YO.2400.19	19	64	83			1.65
YO.2400.25	25	70	95			1.77
YO.2400.32	32	77	109			1.93
YO.2400.38	38	83	121			2.05
YO.2400.50	50	95	145			2.30
YO.2400.63	63	108	171			2.55
YO.2400.75	75	120	195			2.75
YO.2400.80	80	125	205			2.85
YO.2400.100	100	145	245			3.28
YO.2400.125	125	170	295			3.93

2400 Kg. 4850 Kg.

Series connection

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.4200.16	16	81	97			3.40
YO.4200.19	19	84	103			3.45
YO.4200.25	25	90	115			3.65
YO.4200.32	32	97	129			3.82
YO.4200.38	38	103	141			4.00
YO.4200.50	50	115	165			4.44
YO.4200.63	63	128	191			4.95
YO.4200.75	75	140	215			5.20
YO.4200.80	80	145	225			5.41
YO.4200.100	100	165	265			6.00
YO.4200.125	125	190	315			6.70

4200 Kg. 8600 Kg.

Series connection

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.6600.16	16	91	107			6.60
YO.6600.19	19	94	113			6.65
YO.6600.25	25	100	125			6.82
YO.6600.32	32	107	139			7.18
YO.6600.38	38	113	151			7.57
YO.6600.50	50	125	175			8.18
YO.6600.63	63	138	201			8.81
YO.6600.75	75	150	225			8.95
YO.6600.80	80	155	235			9.10
YO.6600.100	100	175	275			10.70
YO.6600.125	125	200	325			12.50

6600 Kg. 13200 Kg.

Series connection

Order Model	Stroke (K) mm	L1 min.	L Length	Force		Weight Kg.
				Initial	Final	
YO.11800.19	19	97	116			9.57
YO.11800.25	25	103	128			9.96
YO.11800.32	32	110	142			10.41
YO.11800.38	38	116	154			10.81
YO.11800.50	50	128	178			11.59
YO.11800.63	63	141	204			11.88
YO.11800.75	75	153	228			12.21
YO.11800.80	80	158	238			12.43
YO.11800.100	100	178	278			13.51
YO.11800.125	125	203	328			15.14

11800 Kg. 20500 Kg.