



T2L Series

T2L-300 to T2L-750

Low Profile Nitrogen Gas
Springs



Product Value

The T2L Series gives you the same force, the same stroke, and the same diameter as standard Gas Springs but in a much shorter overall package, ideal when shut height is limited.

Discontinued Models

The following models were discontinued in 2010 but can be replaced with T3 Gas Springs. The T3 models have the same diameters but may require a spacer in order to match the overall length. Please note that using a spacer may change the location or style of mounting groove. Spacers are provided with screws for attachment to the bottom of the Gas Spring.

Discontinued	Replace with	and Spacer
T2LS-500	T3-750*	N/A
T2LS-750	T3-1000	N/A
T2L-1500	T3-2400	3020686-0150
T2L-3000	T3-4200	3020682-0120

Please note:

T3 cylinders have larger piston rods resulting in greater contact force.

Additionally, charge ports on T3 replacements are different than L & LS cylinders

*** Body diameter is 0.75mm larger than T2LS-500**

Product Specifications

Pressure medium	Nitrogen
Max. charging pressure	150 bar
Operating temperature	0° to 80°C
Force increase by temperature	±0.3% per °C
Max piston rod velocity	1.6m per min.

Ordering Options

T2L-300	X	16	-	2175
Model		Stroke (mm)	Charge pressure	
T2L-300		See	Max: 150 bar/2175 psi	
T2L-500		Dimensional		
T2L-750		Information Charts		

Note: All T2L Gas Springs shipped at maximum charge pressure unless otherwise specified.

Gas Spring Model		Page
T2L-300	58	T2L-750 62
T2L-500	60	
T2L-500	60	

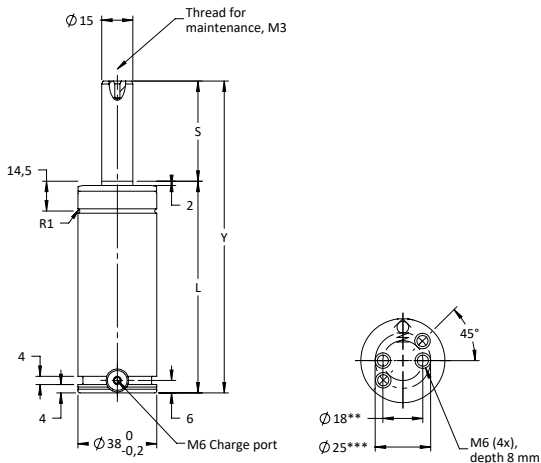
T2L-300 is available in 19 stroke lengths.

Flanges for T2L-300 are Circular Flange T2-250-FC, Upper Square Flange T2-250-FCS, and Lower Square Flange T2L-250-BFL.

Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	50 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	2650
Contact Force at max. pressure (lbf)	595
Recommended max strokes/min (at 20°C)	~ 80-100
Cylinder diameter (mm)	38
Charge port	M6
Repair kit	T2SLSK-300
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order number Model X Stroke	Stroke		Contact Force		Cylinder Height		Body Height		Weight	
	S		2175 psi at 68 ° F		Y ±0.25	Y ±0.010	L			
	mm	in	N	lbf.	mm	in	mm	in	kg	lb
Preferred Stroke Lengths (optimal delivery)										
T2L-300 x 25	25.0	0.98	2650	595	100.0	3.94	75.0	2.95	0.48	1.056
T2L-300 x 50	50.0	1.97	2650	595	150.0	5.91	100.0	3.94	0.60	1.32
T2L-300 x 80	80.0	3.15	2650	595	210.0	8.27	130.0	5.12	0.75	1.65
T2L-300 x 100	100.0	3.94	2650	595	250.0	9.84	150.0	5.91	0.85	1.87
T2L-300 x 125	125.0	4.92	2650	595	300.0	11.81	175.0	6.89	0.97	2.134
Alternative Stroke Lengths										
T2L-300 x 0.25	6.4	0.25	2650	595	62.7	2.47	56.4	2.22	0.40	0.88
T2L-300 x 10	10.0	0.39	2650	595	70.0	2.76	60.0	2.36	0.41	0.902
T2L-300 x 0.5	12.7	0.50	2650	595	75.4	2.97	62.7	2.47	0.42	0.924
T2L-300 x 16	16.0	0.63	2650	595	82.0	3.23	66.0	2.60	0.43	0.946
T2L-300 x 0.75	19.1	0.75	2650	595	88.1	3.47	69.1	2.72	0.46	1.012
T2L-300 x 1	25.4	1.00	2650	595	100.8	3.97	75.4	2.97	0.48	1.056
T2L-300 x 1.5	38.1	1.50	2650	595	126.2	4.97	88.1	3.47	0.54	1.188
T2L-300 x 2	50.8	2.00	2650	595	151.6	5.97	100.8	3.97	0.60	1.32
T2L-300 x 2.5	63.5	2.50	2650	595	177.0	6.97	113.5	4.47	0.67	1.474
T2L-300 x 3	76.2	3.00	2650	595	202.4	7.97	126.2	4.97	0.69	1.518
T2L-300 x 3.5	88.9	3.50	2650	595	227.8	8.97	138.9	5.47	0.76	1.672
T2L-300 x 4	101.6	4.00	2650	595	253.2	9.97	151.6	5.97	0.85	1.87
T2L-300 x 4.5	114.3	4.50	2650	595	278.6	10.97	164.3	6.47	0.90	1.98
T2L-300 x 5.0	127.0	5.00	2650	595	304.0	11.97	177.0	6.97	0.44	2.156

Note! All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Top mount
FC, FCS,



Foot mount
FFC



Drop-in
mount

Recommended Flanges



FC-250

235



FCS-250

238



FFC-250

240

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

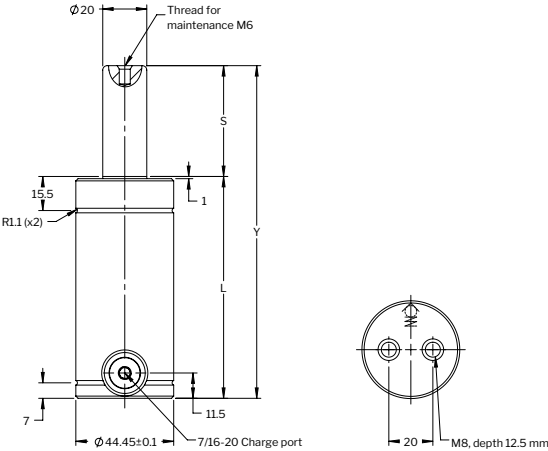
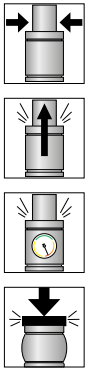
T2L-500 is available in 12 stroke lengths.

Flanges for T2L-500 are Circular Flange T2-500-FC, Upper Square Flange T2-500-FCS, and Lower Square Flange T2L-500-BFL.

Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	4700
Contact Force at max. pressure (lbf)	1055
Recommended max strokes/min (at 20°C)	~ 40-80
Cylinder diameter (mm)	45
Charge port	G 1/8"
Repair kit	T2LSK-500
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order number Model X Stroke	Stroke		Contact Force		Cylinder Height		Body Height		Weight	
	S		2175 psi at 68 ° F		Y ±0.25	Y ±0.010	L		kg	lb
	mm	in	N	lbf.	mm		mm	in		
T2L-500 x 0.25	6.35	0.25	4700	1060	63.5	2.50	57.15	2.25	0.50	1.100
T2L-500 x 0.50	12.7	0.50	4700	1060	76.2	3.00	63.5	2.50	0.54	1.188
T2L-500 x 0.75	19.1	0.75	4700	1060	88.9	3.50	69.9	2.75	0.59	1.298
T2L-500 x 1	25.4	1.00	4700	1060	101.6	4.00	76.2	3.00	0.62	1.364
T2L-500 x 1.5	38.1	1.50	4700	1060	127.0	5.00	88.9	3.50	0.71	1.562
T2L-500 x 2	50.8	2.00	4700	1060	152.4	6.00	101.6	4.00	0.78	1.716
T2L-500 x 2.5	63.5	2.50	4700	1060	177.8	7.00	114.3	4.50	0.88	1.936
T2L-500 x 3	76.2	3.00	4700	1060	203.2	8.00	127.0	5.00	0.98	2.156
T2L-500 x 3.5	88.9	3.50	4700	1060	228.6	9.00	139.7	5.50	1.06	2.332
T2L-500 x 4	101.6	4.00	4700	1060	254.0	10.00	152.4	6.00	1.12	2.464
T2L-500 x 4.5	114.3	4.50	4700	1060	279.4	11.00	165.1	6.50	1.20	2.640
T2L-500 x 5	127.0	5.00	4700	1060	304.8	12.00	177.8	7.00	1.28	2.816

Note! All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



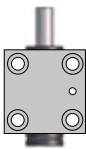
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, LM-lug,
L



Body mount
HMF



Base mount
MP

Recommended Flanges



FC-500

235



FCS-500

238



FFC-500

240



HMF-500

243



MP-500

246

Additional Flanges



FCSC-500

239



LM-LUG-500

242



L-500

244

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

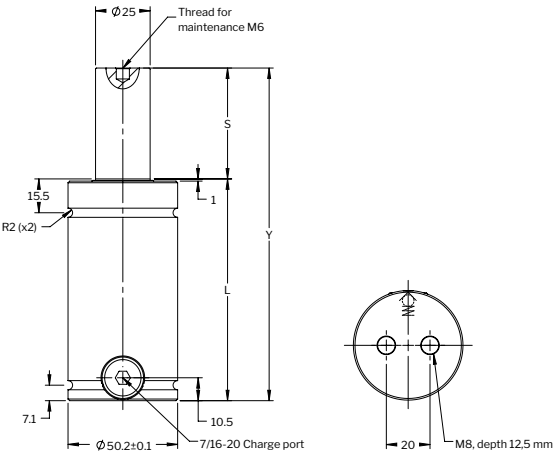
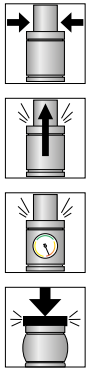
T2L-750 is available in 12 stroke lengths.

Flanges for T2L-750 are Circular Flange T2-750-FC, Upper Square Flange T2-750-FCS, and Lower Square Flange T2L-750-BFL.

Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	150 bar
Contact Force at max. pressure (N)	7400
Contact Force at max. pressure (lbf)	1665
Recommended max strokes/min (at 20°C)	~ 15-40
Cylinder diameter (mm)	20
Charge port	SAE-4
Repair kit	T2LSK-750
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



Order number Model X Stroke	Stroke		Contact Force		Cylinder Height		Body Height		Weight	
	S		2175 psi at 68 ° F		Y ±0.25	Y ±0.010	L		kg	lb
	mm	in	N	lbf.	mm	in	mm	in		
T2L-750 x 0.25	6.35	0.25	7400	1660	63.5	2.50	57.15	2.25	0.68	1.496
T2L-750 x 0.50	12.7	0.50	7400	1660	76.2	3.00	63.5	2.50	0.73	1.606
T2L-750 x 0.75	19.1	0.75	7400	1660	88.9	3.50	69.9	2.75	0.80	1.760
T2L-750 x 1	25.4	1.00	7400	1660	101.6	4.00	76.2	3.00	0.82	1.804
T2L-750 x 1.5	38.1	1.50	7400	1660	127.0	5.00	88.9	3.50	0.92	2.024
T2L-750 x 2	50.8	2.00	7400	1660	152.4	6.00	101.6	4.00	1.06	2.332
T2L-750 x 2.5	63.5	2.50	7400	1660	177.8	7.00	114.3	4.50	1.12	2.464
T2L-750 x 3	76.2	3.00	7400	1660	203.2	8.00	127.0	5.00	1.26	2.772
T2L-750 x 3.5	88.9	3.50	7400	1660	228.6	9.00	139.7	5.50	1.32	2.904
T2L-750 x 4	101.6	4.00	7400	1660	254.0	10.00	152.4	6.00	1.39	3.058
T2L-750 x 4.5	114.3	4.50	7400	1660	279.4	11.00	165.1	6.50	1.47	3.234
T2L-750 x 5	127.0	5.00	7400	1660	304.8	12.00	177.8	7.00	1.57	3.454

Note! All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



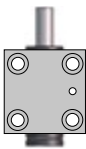
Mounting Possibilities



Top mount
FCS, FCSC



Foot mount
FFC, LM-lug,
L



Body mount
HMF, S



Base mount
MP, RM

Recommended Flanges



FCS-750

238



FFC-750

240



HMF-750

243



MP-750

246



S-750

248

Additional Flanges



FCSC-750

239



LM-LUG-750

242



L-750

244



RM-750

247

Note!

For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.