



T3 Series

T3-170 to T3-20000

High Force Gas Springs



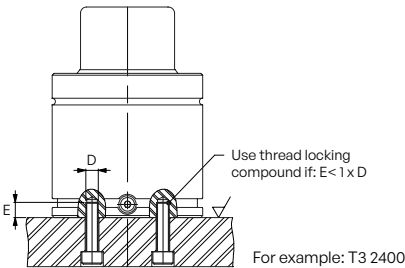
Product Value

- The highest force nitrogen Gas Spring in the smallest space.
- The T3 models comply with the standards, ISO 11901-3 and VDI 3003 Part 3.
- Reduces your cost per ton.

Product Features

- Twelve models with contact forces from 380 lbf to 45,000 lbf.
- Extended stroke lengths to 125 mm/4.92 in.
- Variety of mounting options available.
- Standard charge ports work with most charging equipment.

Mounting Guidelines



For those Gas Springs whose thread depth (E) is less than 1 times its thread size (D) we recommend the following:

- select a screw length to engage all available thread depth
- use a thread locking compound
- ensure the correct screw torque setting is applied

Thread	Torque (for screw class 8.8 according to ISO 898-1)
M6	10 Nm
M8	24 Nm
M10	45 Nm
M12	80 Nm
M16	160-200 Nm



When tightening the mounting screws in the tool, apply an evenly cross like pattern according to the picture (1-2-3-4). Otherwise there is a risk for the mount to tilt.



Product Specifications

Pressure medium	Nitrogen
Min. charging pressure	25 bar
Max. charging pressure	
T3-170, T3-320, T3-350	180 bar
T3-500, T3-750, T3-1000, T3-1500, T3-2400, T3-4200, T3-6600, T3-9500, T3-20000.....	150 bar
Operating temperature	0° to 80°C
Force increase by temperature	±0.3% per °C
Recommended max strokes/min	~15-100 @20 °C
Max piston rod velocity	1.6 m/s
Max. Utilized Stroke	100%
Valve Inlet	
T3-170, T3-320, T3-500, T3-750, T3-1000, T3-1500, T3-2400, T3-4200, T3-6600.....	4018112
T3-9500, T3-20000	56-072-5500
Charge fitting	
T3-170, T3-320, T3-350, T3-500, T3-750, T3-1000, T3-1500, T3-2400.....	T2-770-T3
T3-4200, T3-6600, T3-9500, T3-20000.....	T2-770-G1/8-P

Ordering Options

T3-1500	X	50
Model		Stroke (mm)
T3-170		See
T3-320		Dimensional
T3-350		Information
T3-500		Charts
T3-750		
T3-1000		
T3-1500		
T3-2400		
T3-4200		
T3-6600		
T3-9500		
T3-20000		

Repair Kits

Gas Spring	Repair Kit order number
T3-350	T3SK-350
T3-500	T3SK-500
T3-750	T3SK-750
T3-1000	T3SK-1000
T3-1500	T3SK-1500
T3-2400	T3SK-2400
T3-4200	T3SK-4200
T3-6600	T3SK-6600
T3-9500	T3SK-9500
T3-20000	T3SK-20000

Note: The T3-2400x16 and T3-2400x19 are not possible to repair.

Gas Spring Model	Page		
T3-170	66	T3-1500	78
T3-320	68	T3-2400	80
T3-350	70	T3-4200	82
T3-500	72	T3-6600	84
T3-750	74	T3-9500	86
T3-1000	76	T3-20000	88

T3-170 provide full stroke force of 2,800 N (630 lbf) and is available in 12 stroke lengths.

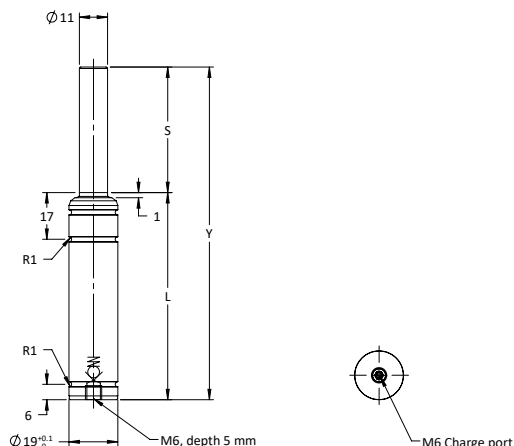
The T3 170 has a bottom port for gas charging that can also be used to connect to a gas link system. The T3 170 has an upper ISO Standard C-groove and a lower C-groove, which together with a threaded bottom hole offer various mounting possibilities using our standard mounts.



Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	180 bar
Contact Force at max. pressure (N)	1700
Contact Force at max. pressure (lbf)	382
Recommended max strokes/min (at 20°C)	~ 40-100
Cylinder diameter (mm)	19
Charge port	M6
Repair kit	Non-repairable
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T3-170x25	25	0.98	1,700	380	2,800	630	80	3.15	55	2.17	0.006	0.08	0.176
T3-170x38	38	1.50					106	4.17	68	2.68	0.009	0.09	0.198
T3-170x50	50	1.97					130	5.12	80	3.15	0.012	0.10	0.220
T3-170x63	63	2.48					156	6.14	93	3.66	0.015	0.12	0.265
Alternative Stroke Lengths													
T3-170x7	7	0.28	1,700	380	2,800	630	44	1.73	37	1.46	0.002	0.06	0.132
T3-170x10	10	0.39					50	1.97	40	1.57	0.002	0.06	0.132
T3-170x15	15	0.59					60	2.36	45	1.77	0.004	0.07	0.154
T3-170x19	19	0.75					68	2.68	49	1.93	0.005	0.07	0.154
T3-170x75	75	2.95					185	7.28	110	4.33	0.018	0.14	0.309
T3-170x80	80	3.15					195	7.68	115	4.53	0.019	0.14	0.309
T3-170x100	100	3.94					235	9.25	135	5.31	0.024	0.16	0.353
T3-170x125	125	4.92					285	11.22	160	6.30	0.030	0.19	0.419

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



Mounting Possibilities



Top mount
FCR, FCR ISO



Foot mount
FM
only to be used for
strokes 7-25 mm

Recommended Flanges



FM-90

232



FCR-19 VD12

236



FCR-90

236

Note!

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

T3-320 provide full stroke force between 4,800 N (1080 lbf) and 5300 N (1190 lbf) and is available in 12 stroke lengths.

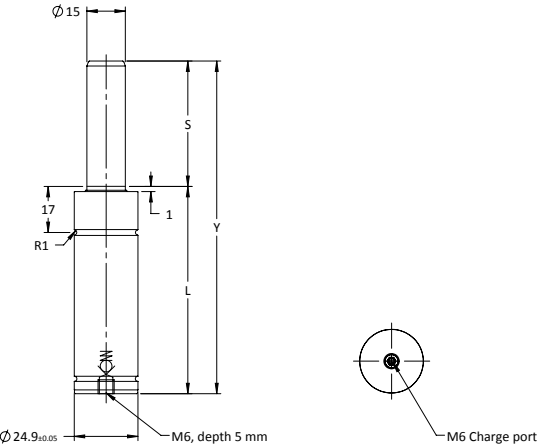
The T3 320 has a bottom port for gas charging that can also be used to connect to a gas link system. Do not use bottom thread for mounting for strokes 38, 50, 63, 75, 80, 100, and 125.



Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	180 bar
Contact Force at max. pressure (N)	3200
Contact Force at max. pressure (lbf)	720
Recommended max strokes/min (at 20°C)	~ 40-100
Cylinder diameter (mm)	25
Charge port	M6
Repair kit	Non-repairable
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T3-320x25	25	0.98	3,200	720	5,200	1,170	80	3.15	55	2.17	0.011	0.14	0.14
T3-320x38	38	1.50			5,300	1,190	106	4.17	68	2.68	0.017	0.16	0.16
T3-320x50	50	1.97			5,300	1,190	130	5.12	80	3.15	0.022	0.19	0.19
T3-320x63	63	2.48			5,300	1,190	156	6.14	93	3.66	0.028	0.21	0.21
Alternative Stroke Lengths													
T3-320x7	7	0.28	3,200	720	4,800	1,080	44	1.73	37	1.46	0.004	0.10	0.10
T3-320x10	10	0.39			4,900	1,100	50	1.97	40	1.57	0.005	0.11	0.11
T3-320x15	15	0.59			5,100	1,150	60	2.36	45	1.77	0.007	0.12	0.12
T3-320x19	19	0.75			5,100	1,150	68	2.68	49	1.93	0.009	0.13	0.13
T3-320x75	75	2.95			5,300	1,190	185	7.28	110	4.33	0.034	0.24	0.24
T3-320x80	80	3.15			5,300	1,190	195	7.68	115	4.53	0.036	0.25	0.25
T3-320x100	100	3.94			5,300	1,190	235	9.25	135	5.31	0.044	0.29	0.29
T3-320x125	125	4.92			5,300	1,190	285	11.22	160	6.30	0.055	0.33	0.33

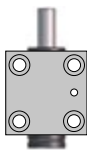
Note! All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



Mounting Possibilities



Body $\varnothing \begin{smallmatrix} 1.5 \\ +0.5 \\ -0.0 \end{smallmatrix}$
Top mount
FC, FCR,
FCR ISO



Body mount
SM

Recommended Flanges



FC-180

235



FCR-180

236



FCR-25

236

Additional Flanges



FCN-150

235



SM-180

250

Note!

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

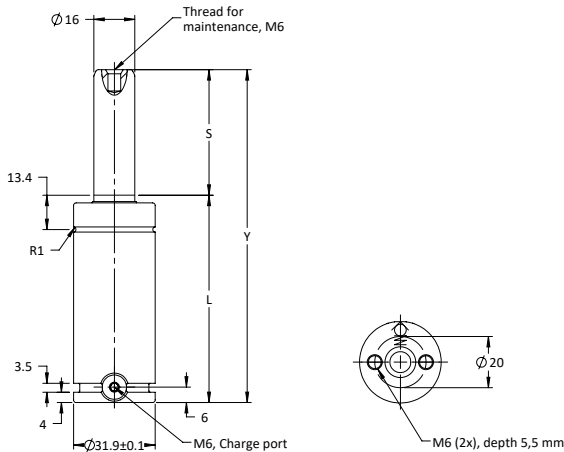
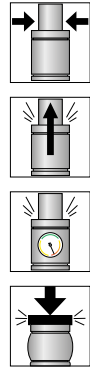
T3-350 provide full stroke force between 5,200 N (1170 lbf) and 5900 N (1325 lbf) and is available in 13 stroke lengths.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

Basic Information

For general information see “About Gas Springs”.

Min. charging pressure (at 20°C)	25 bar
Max. charging pressure (at 20°C)	180 bar
Contact Force at max. pressure (N)	3600
Contact Force at max. pressure (lbf)	810
Recommended max strokes/min (at 20°C)	~ 50-100
Cylinder diameter (mm)	32
Charge port	M6
Repair kit	T3SK-350
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T3-350x25	25	0.98	3,600	810	5,500	1,235	80	3.15	55	2.17	0.02	0.22	0.485
T3-350x38	38	1.50			5,500	1,240	106	4.17	68	2.68	0.03	0.26	0.573
T3-350x50	50	1.97			5,500	1,260	130	5.12	80	3.15	0.03	0.29	0.639
T3-350x63	63	2.48			5,500	1,260	156	6.14	93	3.66	0.04	0.33	0.728
Alternative Stroke Lengths													
T3-350x10	10	0.39	3,600	810	5,900	1,330	50	1.97	40	1.57	0.01	0.17	0.375
T3-350x13	13	0.51			5,200	1,190	56	2.20	43	1.69	0.01	0.18	0.397
T3-350x16	16	0.63			5,300	1,210	62	2.44	46	1.81	0.01	0.19	0.419
T3-350x19	19	0.75			5,600	1,260	68	2.68	49	1.93	0.01	0.20	0.441
T3-350x32	32	1.26			5,500	1,235	94	3.70	62	2.44	0.02	0.24	0.529
T3-350x75	75	2.95			5,500	1,260	180	7.09	105	4.13	0.05	0.37	0.816
T3-350x80	80	3.15			5,500	1,240	190	7.48	110	4.33	0.05	0.39	0.860
T3-350x100	100	3.94			5,500	1,240	230	9.06	130	5.12	0.06	0.45	0.992
T3-350x125	125	4.92			5,500	1,240	280	11.02	155	6.10	0.08	0.53	1.168

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



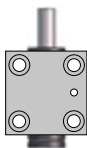
Mounting Possibilities



Body $\varnothing_{\pm 0.5}^{+0.5}$
Top mount
FC, FCS



Foot mount
FFC



Body mount
HMF, S

Recommended Flanges



FC-350

235



FCS-32

238



FFC-350

240



HMF-150

243



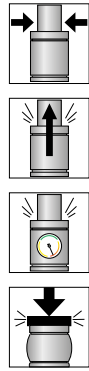
S-200

248

Note!

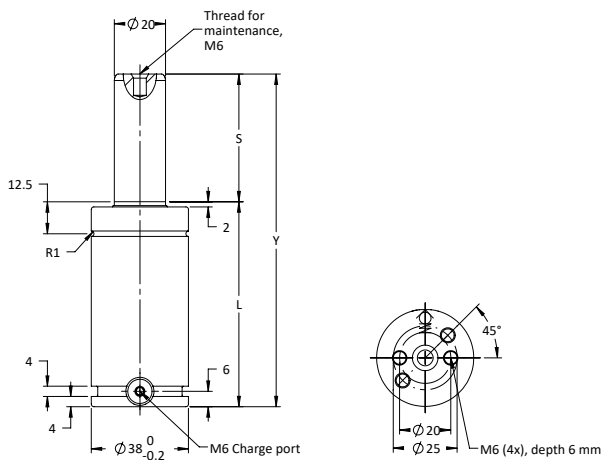
For dimensions on all mounting flanges, refer to “Flanges” in chapter 3.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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)	~ 50-100
Cylinder diameter (mm)	38
Charge port	M6
Repair kit	T3SK-500
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T3-500x25	25	0.98	4,700	1,055	7,300	1,640	80	3.15	55	2.17	0.03	0.31	0.683
T3-500x38	38	1.50			7,200	1,620	106	4.17	68	2.68	0.04	0.36	0.794
T3-500x50	50	1.97			7,200	1,620	130	5.12	80	3.15	0.05	0.41	0.904
T3-500x63	63	2.48			7,200	1,620	156	6.14	93	3.66	0.06	0.46	1.014
Alternative Stroke Lengths													
T3-500x10	10	0.39	4,700	1,055	7,200	1,620	50	1.97	40	1.57	0.01	0.25	0.551
T3-500x13	13	0.51			7,100	1,600	56	2.20	43	1.69	0.01	0.26	0.573
T3-500x16	16	0.63			7,200	1,620	62	2.44	46	1.81	0.02	0.27	0.595
T3-500x19	19	0.75			7,400	1,660	68	2.68	49	1.93	0.02	0.29	0.639
T3-500x32	32	1.26			7,200	1,620	94	3.7	62	2.44	0.03	0.34	0.750
T3-500x75	75	2.95			7,100	1,600	180	7.08	105	4.13	0.07	0.50	1.102
T3-500x80	80	3.15			7,100	1,600	190	7.48	110	4.33	0.08	0.52	1.146
T3-500x100	100	3.94			7,100	1,600	230	9.06	130	5.12	0.10	0.60	1.323
T3-500x125	125	4.92			7,100	1,600	280	11.02	155	6.10	0.12	0.69	1.521

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



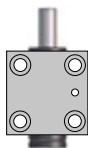
Mounting Possibilities



Body $\varnothing_{\pm 0.5}^{+0.5}$
Top mount
FC, FCS



Foot mount
FFC, LM-lug,
L



Body mount
HMF

Recommended Flanges



FC-250

235



FCS-250

238



FFC-250

240



HMF-250

243

Note!

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

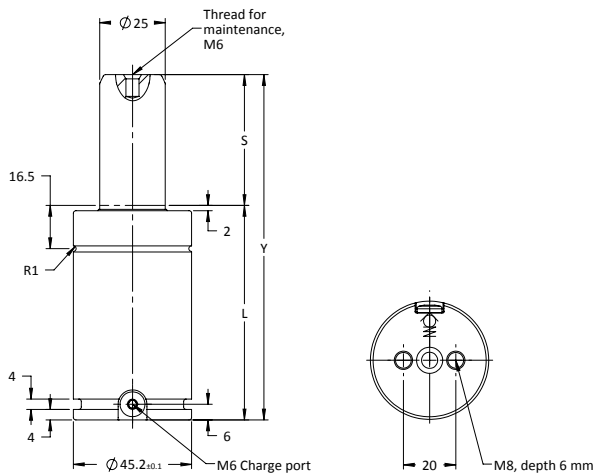
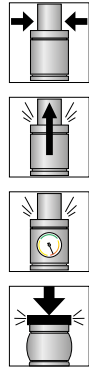
T3-750 provides full stroke force between 11,700 N (2630 lbf) and 12,100 N (2720 lbf) and is available in 13 stroke lengths.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	~ 50-100
Cylinder diameter (mm)	45
Charge port	M6
Repair kit	T3SK-750
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L			ℓ	kg
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T3-750x25	25	0.98	7,400	1,665	11,800	2,650	82	3.23	57	2.24	0.04	0.45	0.992
T3-750x38	38	1.50			11,800	2,650	108	4.25	70	2.76	0.05	0.53	1.168
T3-750x50	50	1.97			11,800	2,650	132	5.20	82	3.23	0.07	0.61	1.345
T3-750x63	63	2.48			11,800	2,650	158	6.22	95	3.74	0.09	0.69	1.521
Alternative Stroke Lengths													
T3-750x10	10	0.39	7,400	1,665	12,100	2,720	52	2.05	42	1.65	0.02	0.37	0.816
T3-750x13	13	0.51			12,100	2,720	58	2.28	45	1.77	0.02	0.39	0.860
T3-750x16	16	0.63			12,100	2,720	64	2.52	48	1.89	0.03	0.41	0.904
T3-750x19	19	0.75			11,700	2,630	70	2.76	51	2.01	0.03	0.41	0.904
T3-750x32	32	1.26			11,800	2,650	96	3.78	64	2.52	0.05	0.50	1.102
T3-750x75	75	2.95			11,900	2,675	182	7.17	107	4.21	0.10	0.77	1.698
T3-750x80	80	3.15			11,900	2,675	192	7.56	112	4.41	0.11	0.80	1.764
T3-750x100	100	3.94			11,900	2,675	232	9.13	132	5.20	0.13	0.93	2.050
T3-750x125	125	4.92			11,900	2,675	282	11.10	157	6.18	0.17	1.09	2.403

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



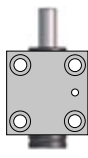
Mounting Possibilities



Body $\varnothing \begin{smallmatrix} +0.5 \\ -0.0 \end{smallmatrix}$
Top mount
FC, FCS
FCSC



Foot mount
FFC, LM-lug,
L



Body mount
HMF

Recommended Flanges



FC-500

235



FCS-500

238



FFC-500

240



HMF-500

243

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.

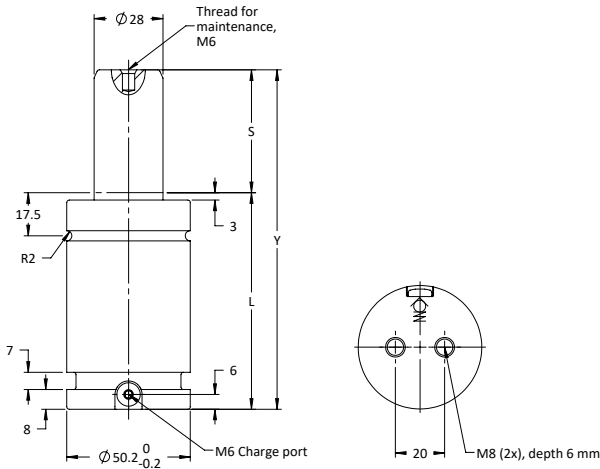
T3-1000 provides full stroke force between 13,800 N (3105 lbf) and 14,800 N (3325 lbf) and is available in 12 stroke lengths.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	9200
Contact Force at max. pressure (lbf)	2068
Recommended max strokes/min (at 20°C)	~ 50-100
Cylinder diameter (mm)	50
Charge port	M6
Repair kit	T3SK-1000
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L			kg	lb
	mm	in	N	lbf.	N	lbf.			mm	in	mm		
Preferred Stroke Lengths (optimal delivery)													
T3-1000x25	25	0.98	9,200	2,070	14,200	3,190	88	3.46	63	2.48	0.05	0.59	1.301
T3-1000x38	38	1.50			14,500	3,260	114	4.49	76	2.99	0.07	0.70	1.543
T3-1000x50	50	1.97			14,600	3,280	138	5.43	88	3.46	0.09	0.79	1.742
T3-1000x63	63	2.48			14,700	3,305	164	6.46	101	3.96	0.11	0.89	1.962
Alternative Stroke Lengths													
T3-1000x13	13	0.51	9,200	2,070	13,800	3,105	64	2.53	51	2.01	0.03	0.50	1.102
T3-1000x16	16	0.63			13,800	3,105	70	2.76	54	2.13	0.04	0.52	1.146
T3-1000x19	19	0.75			14,000	3,145	76	2.99	57	2.24	0.04	0.54	1.190
T3-1000x32	32	1.26			14,300	3,215	102	4.02	70	2.76	0.06	0.64	1.411
T3-1000x75	75	2.95			14,700	3,305	188	7.40	113	4.45	0.13	0.99	2.183
T3-1000x80	80	3.15			14,800	3,325	198	7.80	118	4.65	0.14	1.03	2.271
T3-1000x100	100	3.94			14,800	3,325	238	9.37	138	5.43	0.17	1.19	2.624
T3-1000x125	125	4.92			14,800	3,325	288	11.34	163	6.41	0.21	1.39	3.064

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

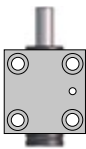
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HM, HMF,
S



Base mount
MP

Recommended Flanges



FC-750

235



FCS-750

238



FFC-750

240



HMF-750

243



MP-750

246



S-750

248

Additional Flanges



FCSC-750

239



SF-750

249



HM-750

242



LM-LUG-750

242



L-750

244

Note!

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

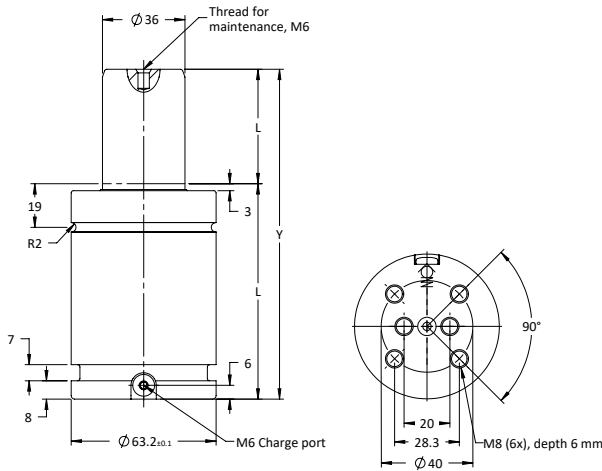
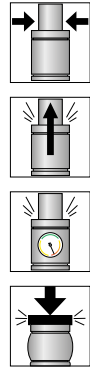
T3-1500 provides full stroke force between 23,800 N (5355 lbf) and 24,300 N (5465 lbf) and is available in 12 stroke lengths.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	15000
Contact Force at max. pressure (lbf)	3375
Recommended max strokes/min (at 20°C)	~ 50-100
Cylinder diameter (mm)	63
Charge port	M6
Repair kit	T3SK-1500
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.			mm	in	mm	in	ℓ
Preferred Stroke Lengths (optimal delivery)													
T3-1500x25	25	0.98	15,000	3,375	24,300	5,365	94	3.70	69	2.72	0.08	1.03	2.271
T3-1500x38	38	1.50			23,900	5,375	120	4.72	82	3.23	0.12	1.15	2.535
T3-1500x50	50	1.97			24,000	5,395	144	5.67	94	3.70	0.15	1.28	2.822
T3-1500x63	63	2.48			24,100	5,420	170	6.69	107	4.21	0.19	1.43	3.153
Alternative Stroke Lengths													
T3-1500x13	13	0.51	15,000	3,375	24,000	5,395	70	2.76	57	2.24	0.05	0.89	1.962
T3-1500x16	16	0.63			24,100	5,420	76	2.99	60	2.36	0.06	0.93	2.050
T3-1500x19	19	0.75			24,200	5,440	82	3.23	63	2.48	0.07	0.96	2.116
T3-1500x32	32	1.26			23,800	5,355	108	4.25	76	2.99	0.11	1.08	2.381
T3-1500x75	75	2.95			24,200	5,440	194	7.64	119	4.69	0.22	1.57	3.461
T3-1500x80	80	3.15			24,200	5,440	204	8.03	124	4.88	0.24	1.63	3.594
T3-1500x100	100	3.94			24,300	5,465	244	9.61	144	5.67	0.29	1.86	4.101
T3-1500x125	125	4.92			24,300	5,465	294	11.57	169	6.65	0.36	2.15	4.740

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



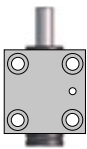
Mounting Possibilities



Top mount
FCS, FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HMF



Base mount
MP

Recommended Flanges



FCSX-1500

249



FFX-1500

240



HMF-1500

243



MPX-1500

246

Additional Flanges



FCSCX-1500

239



SFX-1500

249



LMX-1500

244



L-T3-1500

245

Note!

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

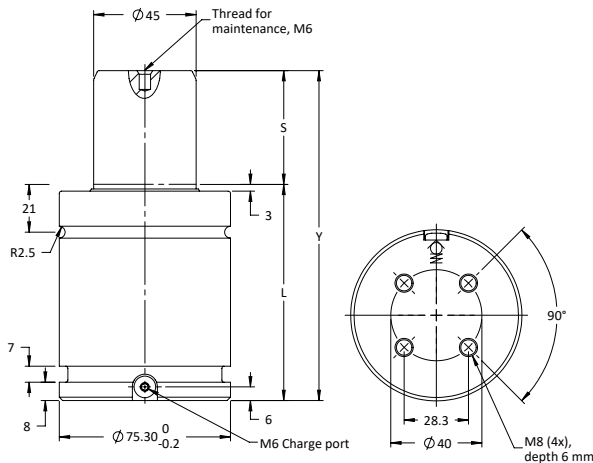
T3-2400 provides full stroke force between 38,300 N (8610 lbf) and 39,300 N (8835 lbf) and is available in 11 stroke lengths.

Strokes 25, 38, 50, and 63 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	24000
Contact Force at max. pressure (lbf)	5396
Recommended max strokes/min (at 20°C)	~ 40-100
Cylinder diameter (mm)	75
Charge port	M6
Repair kit	T3SK-2400
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L			kg	lb
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T3-2400x25	25	0.98	24,000	5,395	38,700	8,700	95	3.74	70	2.76	0.13	1.45	3.197
T3-2400x38	38	1.50			38,400	8,635	121	4.76	83	3.27	0.18	1.65	3.638
T3-2400x50	50	1.97			39,200	8,815	145	5.71	95	3.74	0.23	1.84	4.057
T3-2400x63	63	2.48			39,200	8,815	171	6.73	108	4.25	0.28	2.20	4.850
Alternative Stroke Lengths													
T3-2400x16	16	0.63	24,000	5,395	38,300	8,610	77	3.03	61	2.40	0.09	1.34	2.954
T3-2400x19	19	0.75			38,500	8,655	83	3.27	64	2.52	0.10	1.38	3.042
T3-2400x32	32	1.26			38,600	8,680	109	4.29	77	3.03	0.16	1.56	3.439
T3-2400x75	75	2.95			39,200	8,815	195	7.68	120	4.72	0.33	2.26	4.982
T3-2400x80	80	3.15			39,200	8,815	205	8.07	125	4.92	0.35	2.32	5.115
T3-2400x100	100	3.94			39,300	8,835	245	9.65	145	5.71	0.43	2.66	5.864
T3-2400x125	125	4.92			39,300	8,835	295	11.61	170	6.69	0.54	3.05	6.724

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



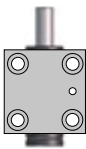
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HM, HMF,
S



Base mount
MP

Recommended Flanges



FC-1500

235



FCS-1500

238



FFC-1500

240



HMF-1500

243



MP-1500

246



S-1500

248

Additional Flanges



FCSC-1500

239



SF-1500

249



HM-1500

242



LM-LUG-1500

242



L-1500

244

Note!

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



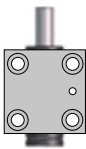
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HM, HMF,
S



Base mount
MP, RM

Recommended Flanges



FC-3000

235



FCS-3000

238



FFC-3000

240



HMF-3000

243



MP-3000

246



S-3000

248

Additional Flanges



FCSC-3000

239



SF-3000

249



HM-3000

242



LM-LUG-3000

242



L-3000

244



RM-3000

247

Note!

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

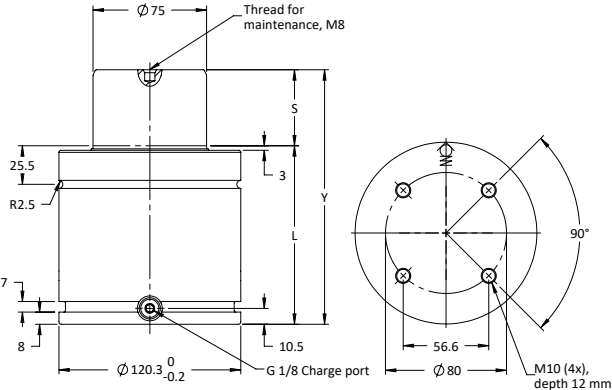
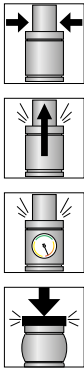
T3-6600 provides full stroke force between 89,000 N (20,010 lbf) and 106,500 N (23,945 lbf) and is available in 11 stroke lengths.

Strokes 50, 63, 80 and 100 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	66300
Contact Force at max. pressure (lbf)	14905
Recommended max strokes/min (at 20°C)	~ 30-100
Cylinder diameter (mm)	120
Charge port	G 1/8"
Repair kit	T3SK-6600
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L			kg	lb
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in	ℓ		
Preferred Stroke Lengths (optimal delivery)													
T3-6600x50	50	1.97	66,300	14,905	100,600	22,615	168	6.61	118	4.65	0.69	6.31	13.911
T3-6600x63	63	2.48			102,400	23,020	194	7.64	131	5.16	0.83	6.81	15.013
T3-6600x80	80	3.15			104,100	23,405	228	8.98	148	5.83	1.01	7.46	16.446
T3-6600x100	100	3.94			105,400	23,695	268	10.55	168	6.61	1.23	8.23	18.144
Alternative Stroke Lengths													
T3-6600x16	16	0.63	66,300	14,905	89,000	20,010	100	3.94	84	3.31	0.32	5.00	11.023
T3-6600x19	19	0.75			91,000	20,460	106	4.17	87	3.43	0.35	5.11	11.266
T3-6600x25	25	0.98			93,900	21,110	118	4.65	93	3.66	0.42	5.34	11.773
T3-6600x32	32	1.26			96,100	21,605	132	5.20	100	3.94	0.49	5.61	12.368
T3-6600x38	38	1.50			98,200	22,075	144	5.67	106	4.17	0.56	5.84	12.875
T3-6600x75	75	2.95			103,400	23,245	218	8.58	143	5.63	0.90	7.27	16.028
T3-6600x125	125	4.92			106,500	23,945	318	12.52	193	7.60	1.50	9.19	20.260

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



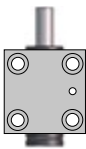
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug



Body mount
HMF, S



Base mount
MP, RM

Recommended Flanges



FC-5000
235



FCS-5000
238



FFC-5000
240



HMF-5000
243



MP-5000
246



S-5000
248

Additional Flanges



FCSC-5000
239



SF-5000
249



LM-LUG-5000
242



RM-5000
247

Note!

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

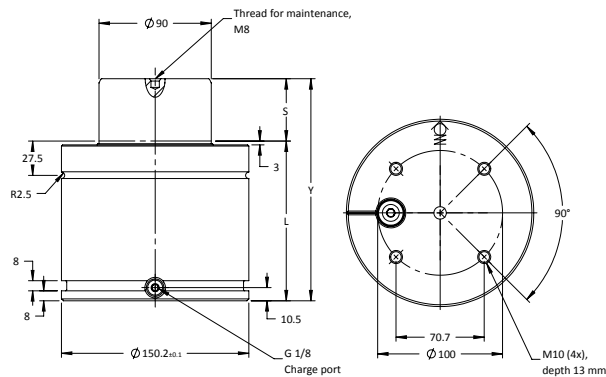
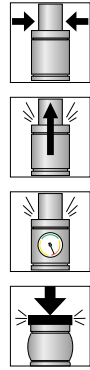
T3-9500 provides full stroke force between 135,000 N (30,350 lbf) and 152,000 N (34,175 lbf) and is available in 10 stroke lengths.

Strokes 50, 63, 80 and 100 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	95000
Contact Force at max. pressure (lbf)	21400
Recommended max strokes/min (at 20°C)	~ 30-100
Cylinder diameter (mm)	150
Charge port	G 1/8"
Repair kit	T3SK-9500
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L				
	mm	in	N	lbf.	N	lbf.			mm	in	mm	in	ℓ
Preferred Stroke Lengths (optimal delivery)													
T3-9500x50	50	1.97	95,000	21,360	146,000	32,825	178	7.01	128	5.04	0.99	11.79	25.993
T3-9500x63	63	2.48			148,000	33,275	204	8.03	141	5.55	1.20	12.60	27.778
T3-9500x80	80	3.15			150,000	33,725	238	9.37	151	6.22	1.47	13.66	30.115
T3-9500x100	100	3.94			151,000	33,950	278	10.94	178	7.01	1.79	14.91	32.871
Alternative Stroke Lengths													
T3-9500x19	19	0.75	95,000	21,360	135,000	30,350	116	4.57	97	3.82	0.49	9.86	21.738
T3-9500x25	25	0.98			139,000	31,250	128	5.04	103	4.06	0.58	10.23	22.553
T3-9500x32	32	1.26			142,000	31,925	142	5.59	110	4.33	0.70	10.67	23.523
T3-9500x38	38	1.50			143,000	32,150	154	6.06	116	4.57	0.80	11.04	24.339
T3-9500x75	75	2.95			149,000	33,500	228	8.98	153	6.02	1.39	13.35	29.432
T3-9500x125	125	4.92			152,000	34,175	328	12.91	203	7.99	2.20	16.47	36.310
T3-6600x125	125	4.92			106,500	23,945	318	12.52	193	7.60	1.50	9.19	20.260

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

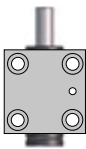
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HMF, S



Base mount
MP, RM

Recommended Flanges



FC-7500

235



FCS-7500

238



FFC-7500

240



HMF-7500

243



MP-7500

246



S-7500

248

Additional Flanges



FCSC-7500

239



SF-7500

249



LM-LUG-7500

242



L-7500

244



RM-7500

247

Note!

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

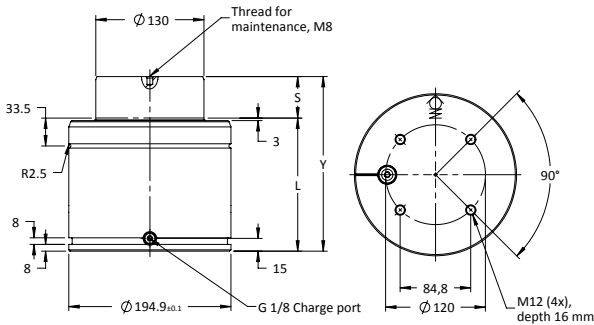
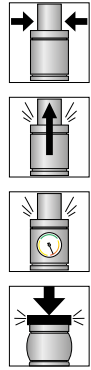
T3-20000 provides full stroke force between 259,000 N (58,200 lbf) and 330,000 N (74,250 lbf) and is available in 10 stroke lengths.

Strokes 50, 63, 80 and 100 are offered as a part of the Hyson Preferred Program which provides optimal delivery.

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)	200000
Contact Force at max. pressure (lbf)	45000
Recommended max strokes/min (at 20°C)	~ 15-40
Cylinder diameter (mm)	195
Charge port	G 1/8"
Repair kit	T3SK-20000
Operating temperature	20 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		Full Stroke Force		Cylinder Height		Body Height		Gas vol.	Weight	
	S		2610 psi				Y ±0.25	Y ±0.010	L			ℓ	kg
	mm	in	N	lbf.	N	lbf.	mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T3-20000x50	50	1.97	200,000	45,000	298,000	67,000	210	8.27	160	6.30	2.12	24.87	54.829
T3-20000x63	63	2.48			307,000	69,100	236	9.29	173	6.81	2.50	26.28	57.937
T3-20000x80	80	3.15			315,000	70,900	270	10.63	190	7.48	3.00	28.13	62.016
T3-20000x100	100	3.94			323,000	72,700	310	12.20	210	8.27	3.58	30.30	66.800
Alternative Stroke Lengths													
T3-20000x19	19	0.75	95,000	21,360	259,000	58,200	148	5.83	129	5.08	1.21	21.50	47.399
T3-20000x25	25	0.98			270,000	60,750	160	6.30	135	5.31	1.38	22.16	48.854
T3-20000x32	32	1.26			280,000	63,000	174	6.85	142	5.59	1.59	22.92	50.530
T3-20000x38	38	1.50			287,000	64,600	186	7.32	148	5.83	1.77	23.57	51.963
T3-20000x75	75	2.95			313,000	70,500	260	10.24	185	7.28	2.85	27.59	60.826
T3-20000x125	125	4.92			330,000	74,250	360	14.17	235	9.25	4.31	33.02	72.797

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



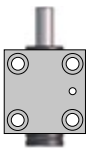
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HMF, S



Base mount
MP, RM

Recommended Flanges



FC-7500
235



FCS-7500
238



FFC-7500
240



HMF-7500
243



MP-7500
246



S-7500
248

Additional Flanges



FCSC-7500
239



SF-7500
249



LM-LUG-7500
242



L-7500
244



RM-7500
247

Note!

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