

T4 Series

T4-750 to T4-20000

Heavy Duty Gas Springs



Product Value

- High Force with ISO Standard Dimensions.
Large rod and rod seal provide higher force in the same diameter and height dimensions as ISO standard springs.
- Force Adjustability & Increased Productivity.
Our Gas Springs are adjustable simply by modifying gas pressure through a hoses control panel while the die is in the press.
- Balanced, consistent force
Our Gas Springs provide for a balanced pad and high quality parts while, as Coil Springs start to fatigue and break, the pad can become imbalanced resulting in poor quality parts.

Product Features

- Eight models with stroke lengths to 300 mm/11.81 in.
- Diameters available from 45 mm to 195 mm/1.77 in to 7.68 in.
- Variety of mounting options available with upper C-groove and lower U-groove.
- Flexible Guide: Specially engineered to absorb normal lateral movements and misalignments due to clearances in the die to prolong service life.
- Flexible Piston Ring: Mounted to the piston, this ring provides additional guidance.



Product Specifications

Pressure medium	Nitrogen
Min. charging pressure	25 bar
Max. charging pressure	150 bar
Operating temperature	0° to 80°C
Force increase by temperature	±0.3% per °C
Recommended max strokes/min	~40-100 @20 °C
Max piston rod velocity	1.6 m/s
Max utilized stroke	100%
Valve Inlet	
T4-750, T4-1000 & T4-1500	4018112
T4-2400, T4-4200, T4-6600, T4-9500 & T4-20000	56-072-5500
Charge fitting	
T4-750, T4-1000 & T4-1500	T2-770-T3
T4-2400, T4-4200, T4-6600, T4-9500 & T4-20000	T2-770-G1/8-P

Ordering Options

T4-4200	X	50	X	750 psi
Model		Stroke (mm)		Charge pressure
T4-750		See		Max=150 bar/ 2,175 psi
T4-1000		Dimensional		
T4-1500		Information		
T4-2400		Charts		
T4-4200				
T4-6600				
T4-9500				
T4-20000				

Repair Kits

Gas Spring	Repair Kit Order Number
T4-750	3326200
T4-1000	3323788
T4-1500	3326202
T4-2400	3322952
T4-4200	3322953
T4-6600	3322954
T4-9500	3322901
T4-20000	3326204

Gas Spring Model	Page	Gas Spring Model	Page
T4-750	122	T4-4200	130
T4-1000	124	T4-6600	132
T4-1500	126	T4-9500	134
T4-2400	128	T4-20000	136

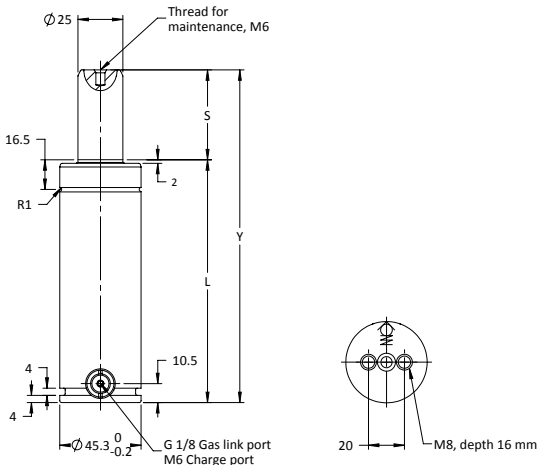
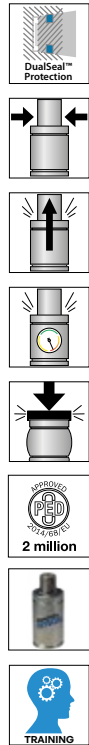
T4-750 provides full stroke force between 12,000 N (2,700 lbf) and 12,100 N (2,720 lbf) and is available in 13 stroke lengths.

Strokes 10,16 and 25 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) ~ 15-100
- Cylinder diameter (mm) 45
- Charge port M6, G 1/8”
- Repair kit 3326200
- 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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	mm	lbf.	Y ±0.25		L			ℓ	kg
							N	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-750X150	150	5.91	7,400	1,665	12,100	2,720	385	15.16	235	9.25	0.22	1.72	3.79
T4-750X160	160	6.30			12,100	2,720	405	15.94	245	9.65	0.23	1.79	3.95
T4-750X175	175	6.89			12,000	2,720	435	17.13	260	10.24	0.25	1.88	4.14
T4-750X200	200	7.87			12,100	2,720	485	19.09	285	11.22	0.28	2.04	4.50
Alternative Stroke Lengths													
T4-750X13	12.7	.50	7,400	1,665	12,000	2,700	110.4	4.35	97.7	3.85	0.04	0.85	1.87
T4-750X25	25	.98			12,000	2,700	135	5.31	110	4.33	0.06	0.93	2.05
T4-750X38	38.1	1.50			12,000	2,700	161.2	6.35	123.1	4.85	0.07	1.01	2.23
T4-750X50	50	1.97			12,000	2,700	185	7.28	135	5.31	0.09	1.09	2.40
T4-750X63	63.5	2.50			12,000	2,700	212	8.35	148.5	5.85	0.11	1.17	2.58
T4-750X75	75	2.95			12,000	2,700	235	9.25	160	6.30	0.12	1.25	2.76
T4-750X80	80	3.15			12,000	2,700	245	9.65	165	6.50	0.13	1.28	2.82
T4-750X100	100	3.94			12,000	2,700	285	11.22	185	7.28	0.15	1.41	3.11
T4-750X125	125	4.92			12,100	2,720	335	13.19	210	8.27	0.19	1.56	3.44

** At full charge



Mounting Possibilities

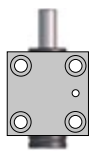


Body $\varnothing_{+2.0}^{+0.5}$

Top mount
FC, FCS,
FCSC



Foot mount
FFC, LM-lug,
L



Body mount
HMF, S



Base mount
MP

Recommended Flanges



FC-500



235



FCS-500



238



FFC-500



240



HMF-500



243



MP-500



246



S-500



248

Additional Flanges



FCSC-500



239



LM-LUG-500



242



L-500



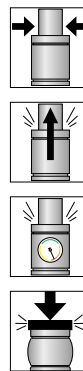
244

Note!

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

T4-1000 provides full stroke force between 11,200 N (2,525 lbf) and 14,900 N (3,350 lbf) and is available in 15 stroke lengths.

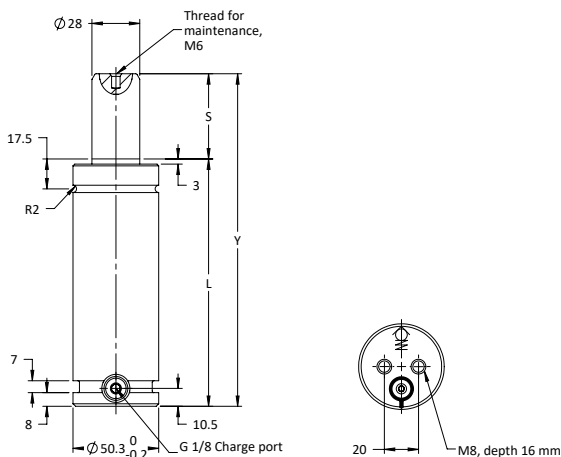
Strokes 10,16 and 25 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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) 2075
- Recommended max strokes/min (at 20°C) ~ 50-100
- Cylinder diameter (mm) 50
- Charge port G 1/8”
- Repair kit 3323788
- 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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	mm	lbf.	Y ±0.25	Y ±0.010	L			ℓ	kg
							N	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-1000X150	150	5.91	9,200	2,075	14,400	3,237	395	15.55	245	9.65	0.27	2.32	5.11
T4-1000X160	160	6.30			14,500	3,250	415	16.34	255	10.04	0.28	2.40	5.29
T4-1000X175	175	6.89			14,600	3,275	445	17.52	270	10.63	0.30	2.53	5.58
T4-1000X200	200	7.87			14,700	3,300	495	19.49	295	11.61	0.34	2.74	6.04
Alternative Stroke Lengths													
T4-1000X13	12.7	0.50	9,200	2,075	11,200	2,525	121	4.76	108	4.25	0.06	1.17	2.58
T4-1000X25	25	0.98			12,100	2,725	145	5.71	120	4.72	0.07	1.27	2.80
T4-1000X38	38.1	1.50			12,800	2,875	171	6.73	133	5.24	0.09	1.32	2.91
T4-1000X50	50	1.97			13,200	2,975	195	7.68	145	5.71	0.11	1.37	3.02
T4-1000X63	63.5	2.50			13,500	3,056	221	8.70	158	6.22	0.13	1.58	3.48
T4-1000X75	75	2.95			13,700	3,075	245	9.65	170	6.69	0.15	1.71	3.77
T4-1000X80	80	3.15			13,800	3,100	255	10.04	175	6.89	0.16	1.73	3.81
T4-1000X100	100	3.94			14,100	3,175	295	11.61	195	7.68	0.19	1.90	4.19
T4-1000X125	125	4.92			14,300	3,225	345	13.58	220	8.66	0.23	2.11	4.65
T4-1000X250	250	9.84			14,800	3,325	595	23.43	345	13.58	0.42	3.16	6.97
T4-1000X300	300	11.81			14,900	3,350	695	27.36	395	15.55	0.49	3.58	7.89

** At full charge



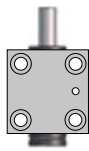
Mounting Possibilities



Body $\varnothing_{+0.5/-2.0}$
Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HM, HMF



Base mount
MP, RM

Recommended Flanges



FC-750



235



FCS-750



238



FFC-750



240



HMF-750



243



MP-750



246

Additional Flanges



FCSC-750



239



SF-750



249



HM-750



242



LM-750



242



L-750



244



RM-750



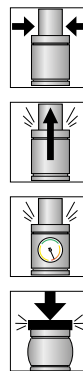
247

Note!

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

T4-1500 provides full stroke force between 17,700 N (3,975 lbf) and 23,200 N (5,215 lbf) and is available in 15 stroke lengths.

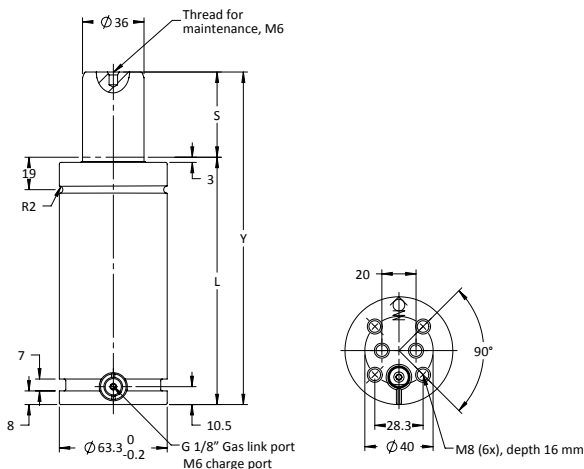
Strokes 10, 16 and 25 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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) 2075
- Recommended max strokes/min (at 20°C) ~ 50-100
- Cylinder diameter (mm) 50
- Charge port M6, G 1/8"
- Repair kit 3323788
- 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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume ℓ	Weight	
	mm	in	N	lbf.	mm	lbf.	Y ±0.25 N	Y ±0.010 in	L			kg	lb
Preferred Stroke Lengths (optimal delivery)													
T4-1500X150	150	5.91	15,000	3,375	22,500	5058	395	15.55	245	9.65	0.47	3.33	7.34
T4-1500X160	160	6.30			22,600	5081	415	16.34	255	10.04	0.50	3.44	7.58
T4-1500X175	175	6.89			22,700	5103	445	17.52	270	10.63	0.54	3.61	7.96
T4-1500X200	200	7.87			22,800	5126	495	19.49	295	11.61	0.60	3.90	8.60
Alternative Stroke Lengths													
T4-1500X13	12.7	0.50	15,000	3,375	17,700	3979	121	4.76	108	4.25	0.10	1.76	3.88
T4-1500X25	25	0.98			19,100	4294	145	5.71	120	4.72	0.13	1.89	4.17
T4-1500X38	38.1	1.50			20,000	4496	171	6.73	133	5.24	0.17	2.04	4.50
T4-1500X50	50	1.97			20,600	4631	195	7.68	145	5.71	0.20	2.18	4.81
T4-1500X63	63.5	2.50			21,100	4743	221	8.70	158	6.22	0.23	2.33	5.14
T4-1500X75	75	2.95			21,500	4833	245	9.65	170	6.69	0.27	2.47	5.45
T4-1500X80	80	3.15			21,600	4856	255	10.04	175	6.89	0.28	2.52	5.56
T4-1500X100	100	3.94			21,700	4878	295	11.61	195	7.68	0.33	2.76	6.08
T4-1500X125	125	4.92			22,400	5036	345	13.58	220	8.66	0.40	3.04	6.70
T4-1500X250	250	9.84			23,000	5171	595	23.43	345	13.58	0.74	4.47	9.85
T4-1500X300	300	11.81			23,200	5216	695	27.36	395	15.55	0.87	5.05	11.13

** At full charge



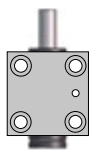
Mounting Possibilities



Body $\varnothing_{+2.0}^{+0.5}$
Top mount
FCS, FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HMF



Base mount
MP

Recommended Flanges



FCSX-1500



238



FFX-1500



240



HMF-1500



243



MPX-1500



246

Additional Flanges



FCSCX-1500



239



SFX-1500



249



LMX-1500



242



L-T3-1500



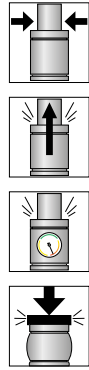
244

Note!

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

T4-2400 provides full stroke force between 37,100 N (8,350 lbf) and 39,100 N (8,800 lbf) and is available in 14 stroke lengths.

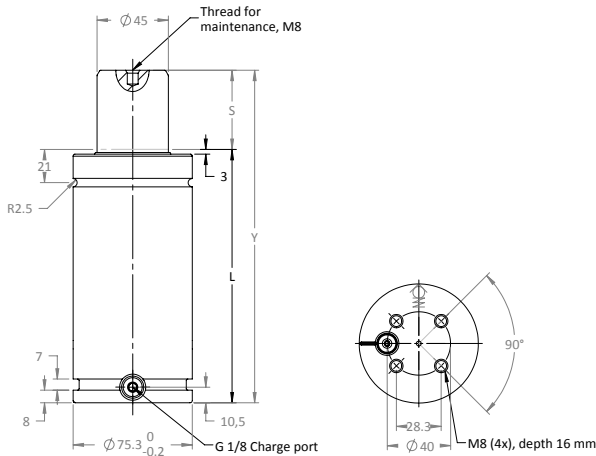
Strokes 25, 38.1, 50, 100, 125, and 160 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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)	2075
Recommended max strokes/min (at 20°C)	~ 50-100
Cylinder diameter (mm)	50
Charge port	G 1/8”
Repair kit	3323788
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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25		L			ℓ	kg
							mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-2400X150	150	5.91	24,000	5,400	38,700	8,713	410	16.14	260	10.24	0.73	5.07	11.18
T4-2400X160	160	6.30			38,800	8,725	430	16.93	270	10.63	0.77	5.23	11.53
T4-2400X175	175	6.89			38,900	8,750	460	18.11	285	11.22	0.83	5.47	12.06
T4-2400X200	200	7.87			38,900	8,763	510	20.08	310	12.20	0.93	5.86	12.92
Alternative Stroke Lengths													
T4-2400X25	25	0.98	24,000	5,400	37,100	8,350	160	6.30	135	5.31	0.23	3.10	6.83
T4-2400X38	38.1	1.50			37,600	8,450	186	7.32	148	5.83	0.28	3.31	7.30
T4-2400X50	50	1.97			37,900	8,525	210	8.27	160	6.30	0.33	3.50	7.72
T4-2400X63	63.5	2.50			38,100	8,575	236	9.29	173	6.81	0.38	3.70	8.16
T4-2400X75	75	2.95			38,300	8,625	260	9.84	185	7.28	0.43	3.89	8.58
T4-2400X80	80	3.15			38,400	8,637	270	10.60	190	7.48	0.45	3.97	8.75
T4-2400X100	100	3.94			38,500	8,650	310	12.20	210	8.27	0.53	4.29	9.46
T4-2400X125	125	4.92			38,600	8,700	360	14.17	235	9.25	0.63	4.68	10.32
T4-2400X250	250	9.84			39,000	8,775	610	24.02	360	14.17	1.17	6.65	14.66
T4-2400X300	300	11.81			39,100	8,800	710	27.95	410	16.14	1.33	7.44	16.40

** At full charge



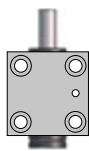
Mounting Possibilities



Body $\varnothing_{+2.0}^{+0.5}$
Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HM, HMF,
S



Base mount
MP, RM

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



RM-1500



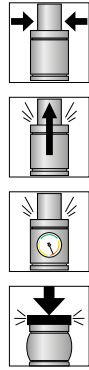
247

Note!

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

T4-4200 provides full stroke force between 52,100 N (11,725 lbf) and 68,700 N (15,450 lbf) and is available in 14 stroke lengths.

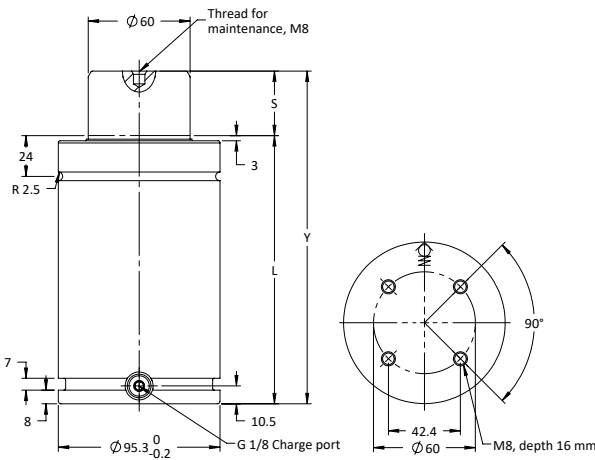
Strokes 25, 38, 50, 80, 100, 125, and 160 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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)	42000
Contact Force at max. pressure (lbf)	9440
Recommended max strokes/min (at 20°C)	~ 40-100
Cylinder diameter (mm)	95
Charge port	G 1/8"
Repair kit	3322953
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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	mm	lbf.	Y ±0.25	Y ±0.010	L			kg	lb
							mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-4200X150	150	5.91	42,000	9,440	65,100	14,650	420	16.54	270	10.63	1.27	8.27	18.23
T4-4200X160	160	6.30			65,500	14,750	440	17.32	280	11.02	1.33	8.53	18.81
T4-4200X175	175	6.89			66,000	14,850	470	18.50	295	11.61	1.43	8.91	19.64
T4-4200X200	200	7.87			66,800	15,025	520	20.47	320	12.60	1.60	9.55	21.05
Alternative Stroke Lengths													
T4-4200X25	25	0.98	42,000	9,440	52,100	11,725	170	6.69	145	5.71	0.43	5.08	11.20
T4-4200X38	38.1	1.50			55,100	12,387	196	7.72	158	6.22	0.52	5.41	11.93
T4-4200X50	50	1.97			57,200	12,875	220	8.66	170	6.69	0.60	5.71	12.59
T4-4200X63	63.5	2.50			59,000	13,275	246	9.69	183	7.20	0.68	6.05	13.34
T4-4200X75	75	2.95			60,300	13,575	270	10.63	195	7.68	0.76	6.35	14.00
T4-4200X80	80	3.15			60,800	13,700	280	11.02	200	7.87	0.80	6.48	14.29
T4-4200X100	100	3.94			62,500	14,050	320	12.60	220	8.66	0.93	6.99	15.41
T4-4200X250	250	9.84			67,900	15,275	620	24.41	370	14.57	1.93	11.08	24.43
T4-4200X300	300	11.81			68,700	15,450	720	28.35	420	16.54	2.27	12.11	26.70

** At full charge



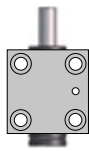
Mounting Possibilities



Body $\varnothing_{+2.0}^{+0.5}$
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-3000



242



L-3000



244



RM-3000



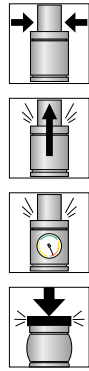
247

Note!

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

T4-6600 provides full stroke force between 79,500 N (17,900 lbf) and 105,300 N (23,700 lbf) and is available in 14 stroke lengths.

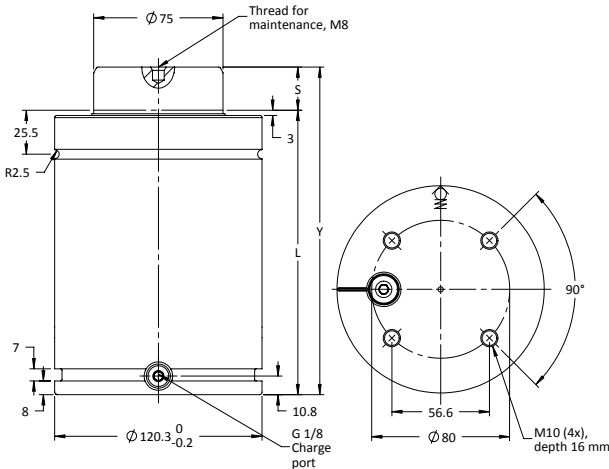
Strokes 25, 38, 50, 80, 100, and 125 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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)	14925
Recommended max strokes/min (at 20°C)	~30-100
Cylinder diameter (mm)	120
Charge port	G 1/8"
Repair kit	3322954
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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume ℓ	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25		L			kg	lb
							mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-6600X150	150	5.91	66,300	14,925	99,500	22,375	440	17.32	290	11.42	2.05	14.36	31.66
T4-6600X160	160	6.30			100,100	22,525	460	18.11	300	11.81	2.16	14.77	32.56
T4-6600X175	175	6.89			101,000	22,725	490	19.29	315	12.40	2.32	15.38	33.91
T4-6600X200	200	7.87			102,200	23,000	540	21.26	340	13.39	2.58	16.40	36.16
Preferred Stroke Lengths (optimal delivery)													
T4-6600X25	25	0.98	66,300	14,925	79,500	17,900	190	7.48	165	6.50	0.73	9.28	20.46
T4-6600X38	38.1	1.50			83,900	18,875	216	8.50	178	7.01	0.87	9.81	21.63
T4-6600X50	50	1.97			87,000	19,600	240	9.45	190	7.48	1.00	10.30	22.71
T4-6600X63	63.5	2.50			89,700	20,200	266	10.47	203	7.99	1.13	10.83	23.88
T4-6600X75	75	2.95			91,800	20,650	290	11.42	215	8.46	1.26	11.32	24.96
T4-6600X80	80	3.15			92,600	20,825	300	11.81	220	8.66	1.31	11.52	25.40
T4-6600X100	100	3.94			95,100	21,500	340	13.39	240	9.45	1.53	12.33	27.18
T4-6600X125	125	4.92			97,600	21,950	390	15.35	265	10.43	1.79	13.35	29.43
T4-6600X250	250	9.84			104,000	23,400	640	25.20	390	15.35	3.11	18.43	40.63
T4-6600X300	300	11.81			105,300	23,700	740	29.13	440	17.32	3.64	20.46	45.11

** At full charge



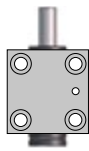
Mounting Possibilities



Top mount
FC, FCS,
FCSC



Foot mount
FFC, SF,
LM-lug, L



Body mount
HMF, S



Base mount
MP, RM

Recommended Flanges



FC-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



L-5000



244



RM-5000



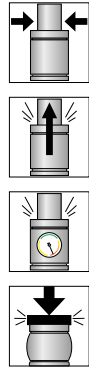
247

Note!

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

T4-9500 provides full stroke force between 113,200 N (25,500 lbf) and 148,200 N (33,340 lbf) and is available in 14 stroke lengths.

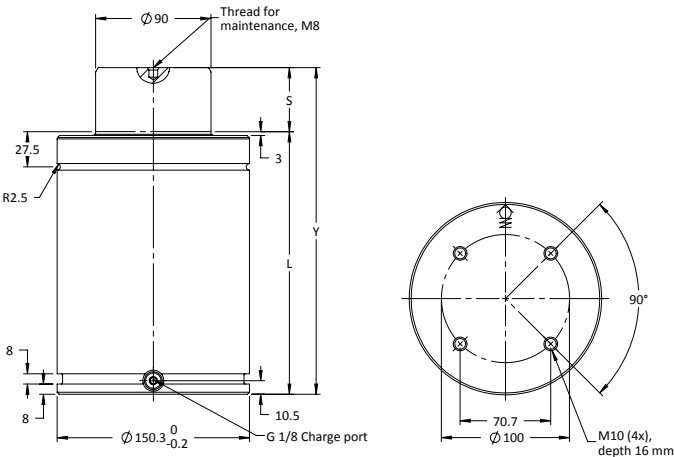
Strokes 25, 50, 80, 100, 125, and 160 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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	3322901
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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume ℓ	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L			kg	lb
							mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T4-9500X150	150	5.91	95,000	21,400	140,200	31,530	455	17.91	305	12.01	3.07	24.97	55.05
T4-9500X160	160	6.30			141,000	31,730	475	18.70	315	12.40	3.23	25.62	56.48
T4-9500X175	175	6.89			142,200	31,990	505	19.88	330	12.99	3.47	26.59	58.62
T4-9500X200	200	7.87			143,800	32,360	555	21.85	355	13.98	3.86	28.21	62.19
Alternative Stroke Lengths													
T4-9500X25	25	0.98	95,000	21,400	113,200	25,500	205	8.07	180	7.09	1.09	16.86	37.17
T4-9500X38	38.1	1.50			119,000	26,800	231	9.09	193	7.60	1.30	17.70	39.02
T4-9500X50	50	1.97			123,300	27,730	255	10.04	205	8.07	1.49	18.48	40.74
T4-9500X63	63.5	2.50			127,000	28,550	281	11.06	218	8.58	1.69	19.32	42.59
T4-9500X75	75	2.95			129,700	29,200	305	12.01	230	9.06	1.88	20.10	44.31
T4-9500X80	80	3.15			130,800	29,430	315	12.40	235	9.25	1.96	20.42	45.02
T4-9500X100	100	3.94			134,300	30,200	355	13.98	255	10.04	2.28	21.72	47.88
T4-9500X125	125	4.92			137,600	31,000	405	15.94	280	11.02	2.67	23.35	51.48
T4-9500X250	250	9.84			146,300	32,930	655	25.79	405	15.94	4.65	31.46	69.36
T4-9500X300	300	11.81			148,200	33,340	755	29.72	455	17.91	5.44	34.70	76.50

** At full charge

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



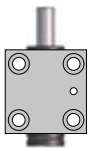
Mounting Possibilities



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



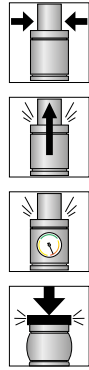
247

Note!

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

T4-20000 provides full stroke force between 242,000 N (54,404 lbf) and 330,600 N (72,322 lbf) and is available in 11 stroke lengths.

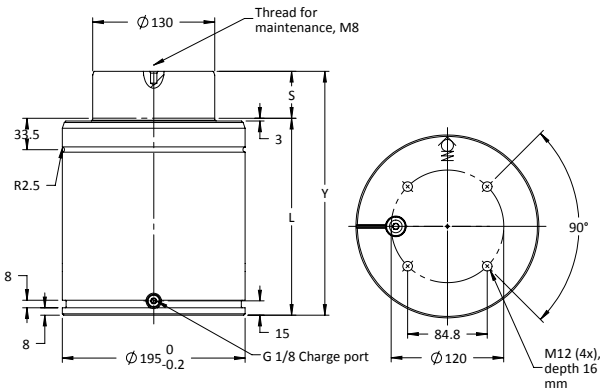
Strokes 50, 80, 100, 125, 160, 200, and 250 are offered as a part of the Hyson Preferred Program which provides optimal delivery.



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)	44960
Recommended max strokes/min (at 20°C)	~15-100
Cylinder diameter (mm)	195
Charge port	G 1/8"
Repair kit	3326204
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 S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L			ℓ	kg
Preferred Stroke Lengths (optimal delivery)													
T4-20000X160	160	6.30	200,000	45,000	312,000	70,140	480	18.90	320	12.60	6.0	42.39	93.45
T4-20000X200	200	7.87			319,000	70,950	560	22.05	360	14.17	7.2	46.60	102.74
Alternative Stroke Lengths													
T4-20000X25	25	0.98	200,000	45,000	242,000	54,404	210	8.27	185	7.28	2.0	28.20	62.17
T4-20000X38	38.1	1.50			256,400	57,640	236	9.30	198	7.80	2.4	29.57	65.19
T4-20000X50	50	1.97			266,800	59,980	260	10.24	210	8.27	2.8	30.83	67.97
T4-20000X63.5	63.5	2.50			276,000	62,048	286	11.30	223	8.80	3.1	32.20	70.99
T4-20000X80	80	3.15			285,700	64,228	320	12.60	240	9.45	3.7	33.98	74.91
T4-20000X100	100	3.94			294,600	66,229	360	14.17	260	10.24	4.2	36.09	79.56
T4-20000X125	125	4.92			303,100	68,140	410	16.14	285	11.22	5.0	38.71	85.34
T4-20000X250	250	9.84			325,600	73,198	660	25.98	410	16.14	8.7	51.85	114.31
T4-20000X300	300	11.81			330,600	72,322	760	29.92	460	18.11	10.2	57.11	125.91

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

Mounting Possibilities



Body $\varnothing_{+2.0}^{+2.5}$
Top mount
FCS



Foot mount
FFC, LM-lug



Base mount
MP

Recommended Flanges



FCS-10000

238



FFC-10000

240



MP-10000

246

Additional Flanges



LM-LUG-10000

242

Note!

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