



T5 Series

T5-500 to T5-1900

**Ultra High-Force, Compact Design,
Nitrogen Gas Springs**



Product Value

- Ideal for applications where space is limited.
- Highest force per area of any Gas Spring on market.

Product Features

- Three models with contact forces from 5100 to 19,200 N / 1,150 to 4,320 lbf.
- Stroke lengths to 80 mm / 3.15 in.
- Variety of mounting options available.
- Flexible guide absorbs lateral movement and misalignments in the die.

Advanced Safety Features

- Secondary piston stop feature for extra protection.
- Overload, Overstroke and Overpressure protection vents internal gas pressure in a controlled manner.



Product Specifications

Pressure medium Nitrogen
Min. charging pressure 25 bar/365 psi
Max. charging pressure 200 bar/2900 psi
Operating temperature 0° to 80°C/32° to 176°F
Force increase by temperature ±0.3% per °C/±0.009% per °F
Recommended max strokes/min ~70 to 200 @ 20°C
Max piston rod velocity 1.6 m/s / 315 ft./min.
Charge fitting Two pieces: T2-770-T3 | adapter 4026164

Ordering Options

T5-XXXX

X

38

Model
T5-500
T5-1000
T5-1900

STROKE (mm)
See Dimensional
Information Charts

The recommendation is to not use the last 5 mm or 10% of the nominal stroke length.

Repair Kits

Gas Spring	Order Number
T5-500	3322908
T5-1000	3322836
T5-1900	3322844

Gas Spring Model	Page		
T5-500	140	T5-1900	144
T5-1000	142	SPT5	146



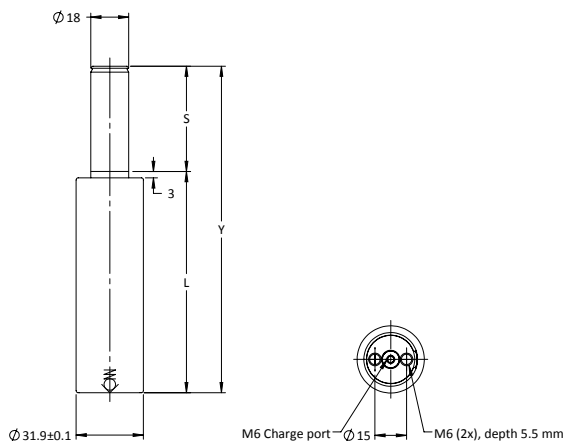
T5-500 provides full stroke force between 6,600 N (1,490 lbf) and 9,200 N (2,060 lbf) and is available in seven stroke lengths.

All strokes 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)	200 bar
Contact Force at max. pressure (N)	5100
Contact Force at max. pressure (lbf)	1150
Recommended max strokes/min (at 20°C)	~ 70-200
Cylinder diameter (mm)	32
Charge port	M6
Repair kit	3322908
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



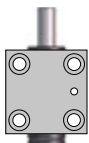
Order Number Model X Stroke	Stroke S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L				
							mm	in	mm	in			
Preferred Stroke Lengths (optimal delivery)													
T5-500x10	10	0.39	5,100	1,150	6,600	1,490	75	2.95	65	2.56	0.01	0.27	0.595
T5-500x15	15	0.59			7,100	1,610	85	3.35	70	2.76	0.02	0.29	0.639
T5-500x25	25	0.98			7,900	1,780	105	4.13	80	3.15	0.02	0.33	0.728
T5-500x38	38*	1.50			8,700	1,960	130	5.12	92	3.62	0.03	0.37	0.816
T5-500x50	50*	1.97			9,100	2,040	155	6.10	105	4.13	0.04	0.42	0.926
T5-500x63	63*	2.48			8,800	1,990	190	7.48	127	5.00	0.05	0.50	1.102
T5-500x80	80*	3.15			9,200	2,060	225	8.86	145	5.71	0.06	0.56	1.235

*For stroke lengths over 25mm / 0.98in, the spring should be attached to the tool using the threaded holes in the bottom.

**At full charge



Mounting Possibilities



Body mount
HMF



Base mount
SPT5

Recommended Flanges



HMF-150



243



SPT5-500



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Note!

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



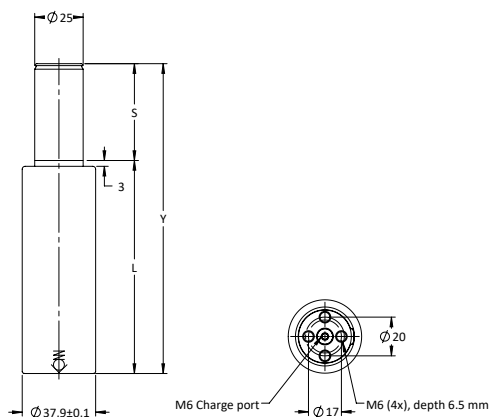
T5-1000 provides full stroke force between 13,300 N (2,980 lbf) and 17,300 N (3,880 lbf) and is available in 7 stroke lengths.

All strokes 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)	200 bar
Contact Force at max. pressure (N)	9800
Contact Force at max. pressure (lbf)	2200
Recommended max strokes/min (at 20°C)	~ 70-200
Cylinder diameter (mm)	38
Charge port	M6
Repair kit	3322836
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



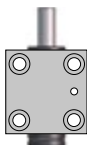
Order Number Model X Stroke	Stroke S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L				
							mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T5-500x10	10	0.39	9,800	2,200	13,300	2,980	75	2.95	65	2.56	0.03	0.36	0.794
T5-500x15	15	0.59			14,400	3,240	85	3.35	70	2.75	0.03	0.39	0.860
T5-500x25	25	0.98			16,100	3,620	105	4.13	80	3.15	0.04	0.43	0.948
T5-500x38	38*	1.50			16,900	3,800	135	5.31	97	3.82	0.06	0.50	1.102
T5-500x50	50*	1.97			17,700	3,990	160	6.30	110	4.33	0.07	0.56	1.235
T5-500x63	63*	2.48			16,500	3,710	205	8.07	142	5.60	0.10	0.67	1.477
T5-500x80	80*	3.15			17,300	3,880	240	9.44	160	6.30	0.12	0.75	1.653

*For stroke lengths over 25mm / 0.98in, the spring should be attached to the tool using the threaded holes in the bottom.

**At full charge



Mounting Possibilities



Body mount
HMF



Base mount
SPT5

Recommended Flanges



HMF-250



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SPT5-1000



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Note!

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



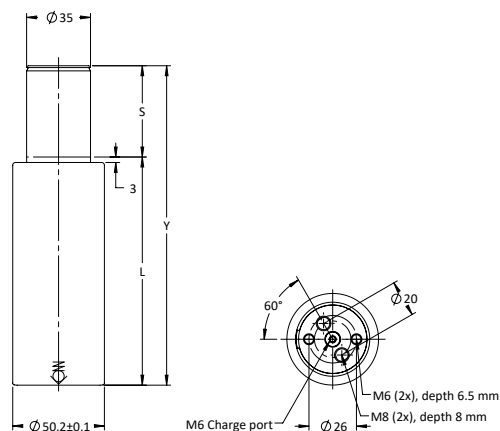
T5-1900 provides full stroke force between 26,300 N (5,920 lbf) and 35,600 N (8,000 lbf) and is available in 7 stroke lengths.

All strokes 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)	200 bar
Contact Force at max. pressure (N)	9800
Contact Force at max. pressure (lbf)	2200
Recommended max strokes/min (at 20°C)	~ 70-200
Cylinder diameter (mm)	38
Charge port	M6
Repair kit	3322836
Operating temperature	0 to +80°C
Max piston rod velocity	1.6 m/s
Force increase by temperature	±0.3%/°C
Pressure medium	Nitrogen



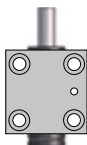
Order Number Model X Stroke	Stroke S		Contact Force**		Full Stroke Force**		Cylinder Height		Body Height		Gas Volume	Weight	
	mm	in	N	lbf.	N	lbf.	Y ±0.25	Y ±0.010	L				
							mm	in	mm	in	ℓ	kg	lb
Preferred Stroke Lengths (optimal delivery)													
T5-1900x10	10	0.39	19,200	4,320	26,300	5,920	80	3.15	70	2.76	0.05	0.69	1.521
T5-1900x15	15	0.59			31,800	7,140	95	3.74	80	3.15	0.05	0.76	1.676
T5-1900x25	25	0.98			30,900	6,950	115	4.53	90	3.54	0.08	0.84	1.852
T5-1900x38	38*	1.50			31,900	7,160	150	5.91	112	4.41	0.12	0.98	2.161
T5-1900x50	50*	1.97			33,800	7,600	175	6.89	125	4.92	0.14	1.08	2.381
T5-1900x63	63*	2.48			34,800	7,820	205	8.07	142	5.59	0.17	1.21	2.668
T5-1900x80	80*	3.15			35,600	8,000	245	9.65	165	6.50	0.21	1.37	3.020

*For stroke lengths over 25mm / 0.98in, the spring should be attached to the tool using the threaded holes in the bottom.

**At full charge



Mounting Possibilities



Body mount
HMF



Base mount
SPT5

Recommended Flanges



HMF-500



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SPT5-1900



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Note!

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



SPT5 Adapter plates

To utilize T5 Gas Spring series in hoses systems, Hyson offers side port adapter plate SPT5. SPT5 is available as an add-on or pre-assembled solution.

Ordering Options

ADD-ON

SPT5-XXXX

Model
SPT5-500
SPT5-1000
SPT5-1900

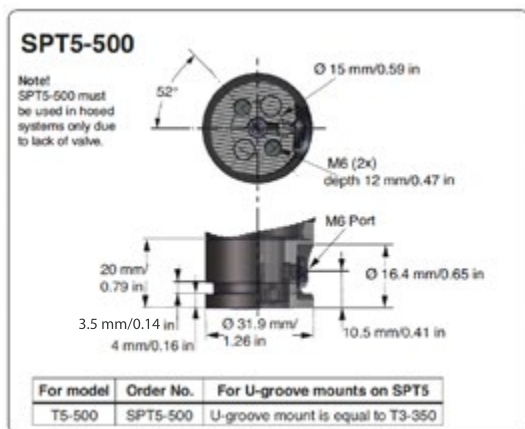


PRE-ASSEMBLED



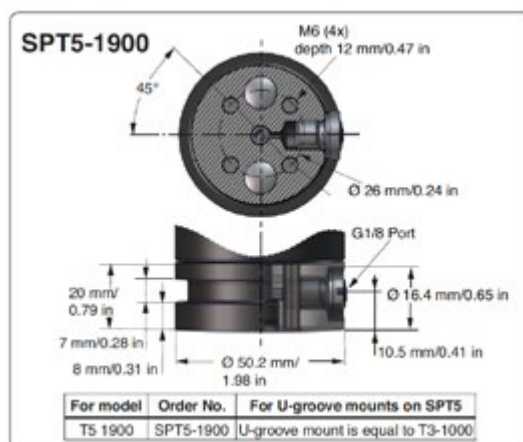
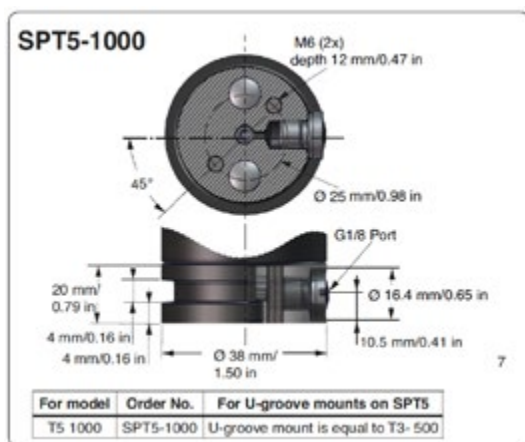


SPT5-500 can only be used in hoses systems because of lack of valve, however SPT5-1000 and SPT5-1900 can operate in both hoses systems and as self contained solutions. For use in hoses systems, we recommend using our Micro EO24TM Hose System in combination with our high-pressure control block (4717241).



To foot mount T5 Gas Spring series when using SPT5 side port adapter plate, use FFC flange:

- * SPT5-500 use FFC - 350
- * SPT5-1000 use FFC - 250
- * SPT5-1900 use FFC - 750



Note!

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