

From the Hyson family of higher force gas springs

# T3T Series

- Same force and diameter as T3 Series
- SAE-4 (7/16-20) port for use with standard full size hoses
- Uses T2B flange mounts
- Five sizes from 1000 to 9500
- Up to 21,400 lbs. contact force



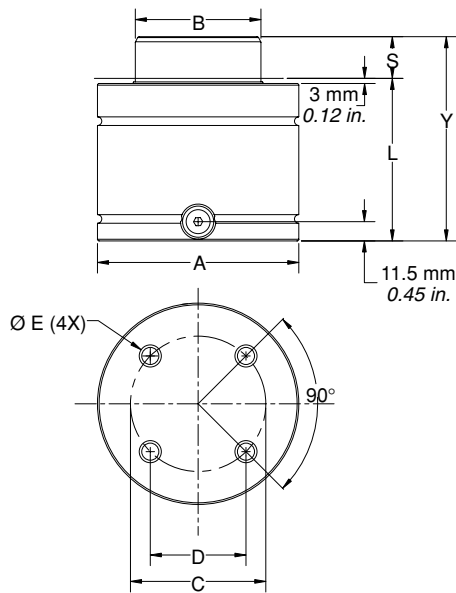
## Hyson® Products

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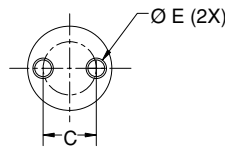
Dynamic Solutions for a Global Market™



# T3T Series



T3T-2400 through T3T-9500



T3T-1000

## Product Specifications

Pressure Medium..... Nitrogen Gas  
 Charging Pressure Range ..... Max. 150 bar/2175 psi  
 Min. 25 bar/360 psi  
 Maximum Operating Temperature..... 80°C/176°F  
 Maximum Strokes/Minute..... 30-100 (model and stroke dependent)  
 Maximum Utilized Stroke ..... 100%  
 Max. Piston Rod Velocity ..... 96 mm/min  
 315 ft/min  
 Repair Kits ..... T3SK-1000, T3SK-2400, T3SK-4200, T3SK-6600, T3SK-9500  
 Inlet Valve ..... 56-072-5500  
 Charge Fitting..... T2-770-4

### T3T-1000 Dimensional Information\*

Order Number	Stroke S		Contact Force		Full Stroke Force		L		Y		A		B		C		E
	mm	in.	N	lbs.	N	lbs.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
T3T-1000X13	13	0.51	9200 2070		13800	3105	65	2.56	78	3.07	50.2	1.98	28	1.10	31.7	1.25	M10 (2X) depth 16mm 0.63 in.
T3T-1000X16	16	0.63			13800	3105	68	2.68	84	3.31							
T3T-1000X19	19	0.75			14000	3145	71	2.80	90	3.54							
T3T-1000X25	25	0.98			14200	3190	77	3.03	102	4.02							
T3T-1000X32	32	1.26			14300	3215	84	3.31	116	4.57							
T3T-1000X38	38	1.50			14500	3260	90	3.54	128	5.04							
T3T-1000X50	50	1.97			14600	3280	102	4.02	152	5.98							
T3T-1000X63	63	2.48			14700	3305	115	4.53	178	7.01							
T3T-1000X75	75	2.95			14700	3305	127	5.00	202	7.95							
T3T-1000X80	80	3.15			14800	3325	132	5.20	212	8.35							
T3T-1000X100	100	3.94			14800	3325	152	5.98	252	9.92							
T3T-1000X125	125	4.92			14800	3325	177	6.97	302	11.89							

### T3T-2400 Dimensional Information\*

Order Number	Stroke S		Contact Force		Full Stroke Force		L		Y		A		B		C		D		E
	mm	in.	N	lbs.	N	lbs.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
T3T-2400X16	16	0.63	24000 5395		38300	8610	75	2.95	91	3.58	75.2	2.96	45	1.77	53.9	2.12	38.1	1.50	M12 (4X) depth 16mm 0.63 in.
T3T-2400X19	19	0.75			38500	8655	78	3.07	97	3.82									
T3T-2400X25	25	0.98			38700	8700	84	3.31	109	4.29									
T3T-2400X32	32	1.26			38600	8680	91	3.58	123	4.84									
T3T-2400X38	38	1.50			38400	8635	97	3.82	135	5.32									
T3T-2400X50	50	1.97			39200	8815	109	4.29	159	6.26									
T3T-2400X63	63	2.48			39200	8815	122	4.80	185	7.28									
T3T-2400X75	75	2.95			39200	8815	134	5.28	209	8.23									
T3T-2400X80	80	3.15			39200	8815	139	5.47	219	8.62									
T3T-2400X100	100	3.94			39300	8835	159	6.26	259	10.20									
T3T-2400X125	125	4.92			39300	8835	184	7.24	309	12.17									

# Hyson® Products

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## T3T-4200 Dimensional Information\*

Order Number	Stroke S		Contact Force		Full Stroke Force		L		Y		A		B		C		D		E
	mm	in.	N	lbs.	N	lbs.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
T3T-4200X16	16	0.63	42000 9440		61700	13870	78	3.07	94	3.70	95.2	3.75	60	2.36	76.2	3.00	53.9	2.12	M12 (4X) depth 16mm 0.63 in.
T3T-4200X19	19	0.75			63700	14320	81	3.19	100	3.94									
T3T-4200X25	25	0.98			60800	13670	87	3.43	112	4.41									
T3T-4200X32	32	1.26			64300	14555	94	3.70	126	4.96									
T3T-4200X38	38	1.50			65800	14795	100	3.94	138	5.43									
T3T-4200X50	50	1.97			67000	15065	112	4.41	162	6.38									
T3T-4200X63	63	2.48			67800	15245	125	4.92	188	7.40									
T3T-4200X75	75	2.95			68000	15290	137	5.39	212	8.35									
T3T-4200X80	80	3.15			68600	15425	142	5.59	222	8.74									
T3T-4200X100	100	3.94			69100	15535	162	6.38	262	10.32									
T3T-4200X125	125	4.92			69600	15645	187	7.36	312	12.28									

## T3T-6600 Dimensional Information\*

Order Number	Stroke S		Contact Force		Full Stroke Force		L		Y		A		B		C		D		E
	mm	in.	N	lbs.	N	lbs.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
T3T-6600X16	16	0.63	66300 14905		89000	20010	88	3.46	104	4.09	120.2	4.73	75	2.95	80.8	3.18	57.1	2.25	M12 (4X) depth 16mm 0.63 in.
T3T-6600X19	19	0.75			91000	20460	91	3.58	110	4.33									
T3T-6600X25	25	0.98			93900	21110	97	3.82	122	4.80									
T3T-6600X32	32	1.26			96100	21605	104	4.09	136	5.35									
T3T-6600X38	38	1.50			98200	22075	110	4.33	148	5.83									
T3T-6600X50	50	1.97			100600	22615	122	4.80	172	6.77									
T3T-6600X63	63	2.48			102400	23020	135	5.32	198	7.80									
T3T-6600X75	75	2.95			103400	23245	147	5.79	222	8.74									
T3T-6600X80	80	3.15			104100	23405	152	5.98	232	9.13									
T3T-6600X100	100	3.94			105400	23695	172	6.77	272	10.71									
T3T-6600X125	125	4.92			106500	23945	197	7.76	322	12.68									

## T3T-9500 Dimensional Information\*

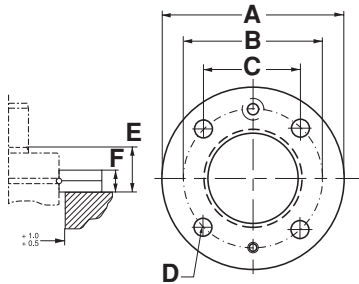
Order Number	Stroke S		Contact Force		Full Stroke Force		L		Y		A		B		C		D		E
	mm	in.	N	lbs.	N	lbs.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	
T3T-9500X19	19	0.75	95000 21360		135000	30350	97	3.82	116	4.57	150.2	5.91	90	3.54	100	3.94	70.7	2.78	M12 (4X) depth 16mm 0.63 in.
T3T-9500X25	25	0.98			139000	31250	103	4.06	128	5.04									
T3T-9500X32	32	1.26			142000	31925	110	4.33	142	5.59									
T3T-9500X38	38	1.50			143000	32150	116	4.57	154	6.06									
T3T-9500X50	50	1.97			146000	32825	128	5.04	178	7.01									
T3T-9500X63	63	2.48			148000	33275	141	5.55	204	8.03									
T3T-9500X75	75	2.95			149000	33500	153	6.02	228	8.98									
T3T-9500X80	80	3.15			150000	33725	158	6.22	238	9.37									
T3T-9500X100	100	3.94			151000	33950	178	7.01	278	10.94									
T3T-9500X125	125	4.92			152000	34175	203	7.99	328	12.91									

\*Longer stroke lengths available for all sizes. Contact Hyson Customer Service at 440-526-5900.

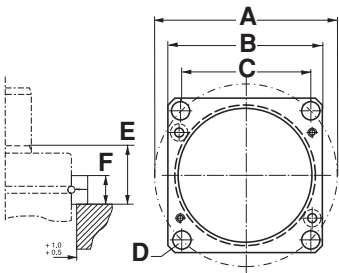
**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.

# T3T Series

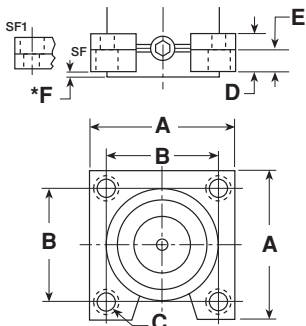
## Mounting Options



FC							
Gas Spring	Order No.	A mm/in.	B mm/in.	C mm/in.	D mm/in.	E mm/in.	F mm/in.
T3T-1000	T2-750-FC	95/3.74	80/3.15	56.5/2.22	9/.35	24/.94	13/.51
T3T-2400	T2-1500-FC	122/4.80	104/4.09	73.5/2.89	11/.43	29/1.14	16/.63
T3T-4200	T2-3000-FC	150/5.91	130/5.12	92/3.62	13.5/.53	33/1.30	18/.71
T3T-6600	T2-5000-FC	175/6.89	155/6.10	109.5/4.31	13.5/.53	36/1.42	21/.83
T3T-9500	T2-7500-FC	220/8.66	195/7.68	138/5.43	17.5/.69	41/1.61	27/1.06

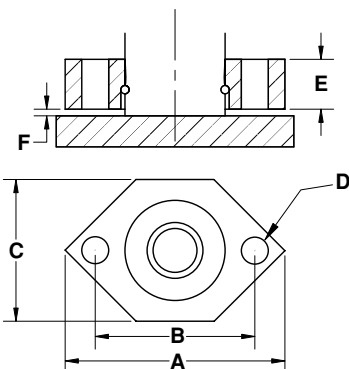


FCS							
Gas Spring	Order No.	A mm/in.	B mm/in.	C mm/in.	D mm/in.	E mm/in.	F mm/in.
T3T-1000	T2-750-FCS	80/3.15	70/2.76	56.5/2.22	9/.35	24/.94	13/.51
T3T-2400	T2-1500-FCS	104/4.09	90/3.54	73.5/2.89	11/.43	29/1.14	16/.63
T3T-4200	T2-3000-FCS	130/5.12	110/4.33	92/3.62	13.5/.53	33/1.30	18/.71
T3T-6600	T2-5000-FCS	155/6.10	130/5.12	109.5/4.31	13.5/.53	36/1.42	21/.83
T3T-9500	T2-7500-FCS	195/7.68	162/6.38	138/5.43	17.5/.69	41/1.61	27/1.06



SF							
Gas Spring	Order No.	A mm/in.	B mm/in.	C	D mm/in.	E mm/in.	F mm/in.
T3T-1000	T2-750-SF	76.2/3.00	53.9/2.12	M10 / 3/8 SHCS	25/.98	11/.43	.635/.025
T3T-2400	T2-1500-SF	101.6/4.00	76.2/3.00	M12 / 1/2 SHCS	25/.98	13/.51	.635/.025
T3T-4200	T2-3000-SF	127/5.00	98.3/3.87	M12 / 1/2 SHCS	25/.98	13/.51	.635/.025
T3T-6600	T2-5000-SF	139.7/5.50	114.3/4.50	M12 / 1/2 SHCS	25/.98	13/.51	.635/.025
T3T-9500	T2-7500-SF	177.8/7.00	139.7/5.50	M16 / 5/8 SHCS	25/.98	17/.67	.635/.025

\*Approximate value

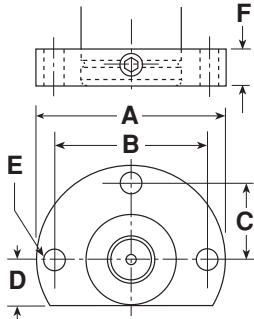


BFT							
Gas Spring	Order No.	A mm/in.	B mm/in.	C mm/in.	D	E mm/in.	F mm/in.
T3T-1000	T2-750-BFT	110/4.33	80/3.15	71/2.80	M12 / 1/2 SHCS	25/.98	.635/.025
T3T-2400	T2-1500-BFT	134/5.28	104/4.09	96/3.78	M12 / 1/2 SHCS	25/.98	.635/.025
T3T-4200	T2-3000-BFT	170/6.69	130/5.12	116/4.57	M16 / 5/8 SHCS	25/.98	.635/.025
T3T-6600	T2-5000-BFT	205/8.07	155/6.10	141/5.55	M16 / 5/8 SHCS	25/.98	.635/.025
T3T-9500	T2-7500-BFT	245/9.65	195/7.68	180/7.09	M20 / 3/4 SHCS	25/.98	.635/.025

\*Approximate value

**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.

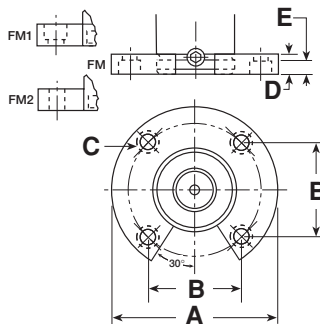
**Mounting Options**



**NOTE:** This is a welded flange and not sold separately. Gas springs with welded flanges are not returnable.

**FMCW**

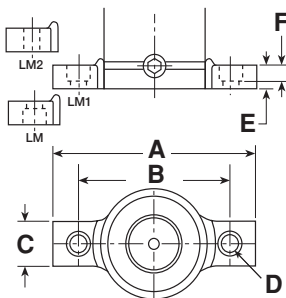
Gas Spring	Order No.	A mm/in.	B mm/in.	C mm/in.	D mm/in.	E mm/in.	F mm/in.
T3T-1000	FMCW	108/4.25	88.9/3.50	44.5/1.75	16/.63	11/.43	19/.75
T3T-2400	FMCW	152.4/6.00	120.6/4.74	60.3/2.37	28/1.10	14/.55	19/.75
T3T-4200	FMCW	171/6.73	140/5.51	70/2.76	41/1.61	14/.55	25/.98
T3T-6600	FMCW	197/7.76	165.2/6.50	82.6/3.25	54/2.13	18/.71	25/.98
T3T-9500	FMCW	229/9.02	196.9/7.75	98.5/3.88	68/2.68	M16 / 5/8 SHCS	25/.98



**NOTE:** This is a welded flange and not sold separately. Gas springs with welded flanges are not returnable.

**FMW**

Gas Spring	Order No.	A mm/in.	B mm/in.	C	D mm/in.	E mm/in.
T3T-1000	FMW	116/4.57	63/2.48	M10 / 3/8 SHCS	19/.75	11/.43
T3T-2400	FMW	152/5.98	85/3.35	M12 / 1/2 SHCS	19/.75	11/.43
T3T-4200	FMW	172/6.77	99/3.90	M12 / 1/2 SHCS	25/.98	13/.51
T3T-6600	FMW	196/7.72	117/4.61	M16 / 5/8 SHCS	25/.98	17/.67
T3T-9500	FMW	234/9.21	138/5.43	M20 / 3/4 SHCS	25/.98	17/.67



**NOTE:** This is a welded flange and not sold separately. Gas springs with welded flanges are not returnable.

**LMW**

Gas Spring	Order No.	A mm/in.	B mm/in.	C mm/in.	D	E mm/in.	F mm/in.
T3T-1000	LMW	116/4.57	89/3.50	32/1.26	M10 / 3/8 SHCS	19/.75	11/.43
T3T-2400	LMW	152/5.98	121/4.75	38/1.50	M12 / 1/2 SHCS	19/.75	13/.51
T3T-4200	LMW	178/7.01	146/5.75	38/1.50	M12 / 1/2 SHCS	19/.75	13/.51
T3T-6600	LMW	196/7.72	165/6.50	38/1.50	M12 / 1/2 SHCS	19/.75	13/.51
T3T-9500	-	-	-	-	-	-	-

**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.

# T3T Accessories

## Service Gauge Assembly Part No.: MGA-3000

Charging and discharging the T3T for use in the self-contained mode is simple, when the MGA-3000 is used.

**NOTE:** Male quick disconnect charge fitting (T2-770-4) sold separately.



## Male Quick Disconnect (Charge Fitting) Part No. T2-770-4

The T2-770-4 quick disconnect is used along with the MGA-3000 service gauge assembly when charging and discharging T3T Series gas springs in the self-contained mode.



7/16-20 Port

## Nitrogen Charging Assembly Part Nos. NCA-2600 & NCA-2600-HP

The NCA-2600 charging assembly is used to transfer nitrogen from a commercial bottle to T3T gas springs. The charging assembly includes a CGA-580 bottle fitting, regulator with bottle and system pressure gauges, shut-off valve and 10 feet of high pressure hose with a fitting for the control panel quick disconnect inlet or to the MGA-3000 service gauge assembly.

**NOTE:** The NCA-2600-HP is available for use with 3000-5000 psi bottles. CGA-680 bottle fitting provided with HP Series.



## Seal Kits and Tool Kits

T3T gas springs are field repairable. There is a seal kit with detailed instructions for each size gas spring. Tool kits are also available.

Gas Spring	Seal Kit Number	Tool Kit Number	Inlet Valve Removal Tool
T3T-1000	T3SK-1000	T2TK-250-750	T2TK-IN
T3T-2400	T3SK-2400	T2TK	
T3T-4200	T3SK-4200		
T3T-6600	T3SK-6600		
T3T-9500	T3SK-9500		

**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.



## T3T Ordering Options

T3T-2400	X	63	–	FCS	–	2175
<b>Model</b>		<b>Stroke</b>		<b>Mounting</b>		<b>Charge Pressure*</b>
T3T-1000		See		FC		Max. 2175 psi
T3T-2400		Dimensional		FCS		
T3T-4200		Information		SF		
T3T-6600				BFT		
T3T-9500				FMCW**		
				FMW**		
				LMW**		

\*All T3T gas springs shipped at maximum charge pressure unless otherwise specified.

\*\*Counterbore must be specified.

**NOTE:** All dimensions are nominal. Data shown are typical. Actual data for any particular unit may vary.





Tanker<sup>®</sup>T and Tanker<sup>®</sup>S Gas Springs



Nitro-Dyne<sup>®</sup> XP Manifolds



Mini Manifolds



Force Manager<sup>™</sup> Systems



T3 Gas Springs



Adaptive Cams



Mechanical Cams



T2 Standard Gas Springs



Controllable Gas Springs



Delay Return Manifolds



Mini Gas Springs



Accessories

# Hyson<sup>®</sup> Products

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