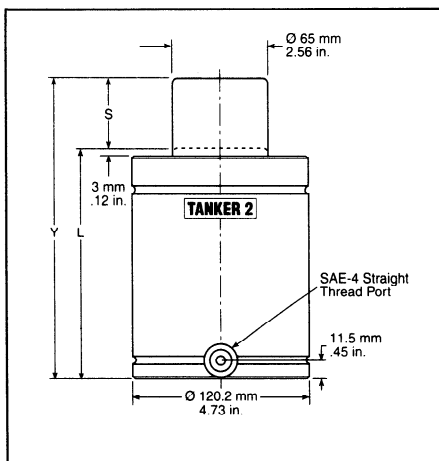




## T2B-5000 (4<sup>3/4"</sup>) DIAMETER GAS SPRINGS



### Product Specifications:

- Pressure Medium ..... Nitrogen Gas
- Charging Pressure Range ..... Max.: 150 bar/2175 psi  
Min.: 50 bar/725 psi
- Maximum Gas Spring Operating Temperature ..... 80 C°/176 F°
- Maximum Piston Rod Velocity ..... 35m/min  
115 ft./min
- Maximum Utilized Stroke ..... 100%
- Seal Kit Number ..... Part No.: T2SK-5000
- Male Quick Disconnect (Charge Fitting) ..... Part No.: T2-770-4

### T2B-5000 Stroke Lengths

Model	x	Stroke in	Contact Force lb <sub>f</sub>	Full Stroke Force lb <sub>f</sub>	L in	Y in	D in	E in	Gas Volume in <sup>3</sup>
T2B-5000	x .5		11,200	18,400	4.50	5.00	3.08	1.92	6.59
T2B-5000	x 1		11,200	18,400	5.00	6.00	3.58	2.42	13.18
T2B-5000	x 1.5		11,200	18,300	5.50	7.00	4.08	2.92	19.96
T2B-5000	x 2		11,200	18,300	6.00	8.00	4.58	3.42	26.61
T2B-5000	x 2.5		11,200	18,300	6.50	9.00	5.08	3.92	33.27
T2B-5000	x 3		11,200	18,600	7.00	10.00	5.58	4.42	38.81
T2B-5000	x 3.5		11,200	18,600	7.50	11.00	6.08	4.92	45.28
T2B-5000	x 4		11,200	18,600	8.00	12.00	6.58	5.42	51.75
T2B-5000	x 4.5		11,200	18,500	8.50	13.00	7.08	5.92	58.75
T2B-5000	x 5		11,200	18,500	9.00	14.00	7.58	6.42	65.28
T2B-5000	x 5.5		11,200	18,500	9.50	15.00	8.08	6.92	71.81
T2B-5000	x 6.0		11,200	18,500	10.00	16.00	8.58	7.42	78.34

### NOTE:

Charted force values are based on 150bar/2175 psi charge. Please contact Customer Service for optional stroke lengths. Old P/N = T2-50/T2B-50

### Force Calculations:

#### Select desired Model x Stroke

#### Pressure Rise for stroke used:

$$\text{Pressure Rise} = \frac{\text{Gas Volume (mm}^3\text{)}}{\text{Gas Volume (mm}^3\text{)} - [3318 \text{ mm}^2 \times \text{Stroke Used (mm)]}$$

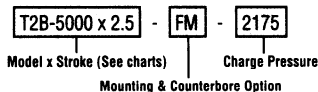
$$\text{Pressure Rise} = \frac{\text{Gas Volume (in}^3\text{)}}{\text{Gas Volume (in}^3\text{)} - [5.14 \text{ in}^2 \times \text{Stroke Used (in.)}]}$$

#### Force at stroke used:

$$\text{Force (N)} = \frac{\text{Pressure Rise} \times \text{Charge Pressure (bar)}}{0.0030}$$

$$\text{Force (lbf)} = \frac{\text{Pressure Rise} \times \text{Charge Pressure (lbf/in}^2\text{)}}{0.19}$$

### Ordering Example:



Shipped charged at 150 bar/2175 psi, unless otherwise specified. Metric (M) and English (E) mounting threads available upon request. Specify mount counterbore for LM, FM & SF style mounts.

All dimensions are nominal unless tolerance is stated.

**NOTE:** Teledyne Fluid Systems, Hyson Products recommends that all Tanker 2 gas springs are backed up at all times. All dimensions are nominal unless tolerance is stated.

