Nitrogen Gas Booster System (DGB-150)

DADCO's Nitrogen Gas Booster System (DGB-150) is an all-in-one solution to the problems of low pressure supply tanks and lost nitrogen gas during discharge.

The DGB-150 may be used to boost low pressure nitrogen gas to a higher pressure while filling a nitrogen gas spring or system, enabling complete usage of nitrogen gas supply tanks. The booster may also be used to drain nitrogen gas into a DADCO surge tank allowing for reuse, refer to page 2 for more information.

Features

Operating Specifications

Pump Ratio:	30:1 (nitrogen gas : air)
Maximum Nitrogen Output:	180 bar *(2600 psi)*
Maximum Air Input:	145 psi
Weight:	85 lbs.
Height:	669 mm *(26.3 inches)*
Width:	381 mm *(15 inches)*

Permits use of nitrogen gas supply tank to 218 psi.

Examples: 73 psi air input = 150 bar (2175 psi) nitrogen output
87 psi air input = 180 bar (2600 psi) nitrogen output

CAUTION

- Use Only for Nitrogen Gas.
- Only Discharge into a DADCO surge tank. Refer to page 2 for surge tank information.
- Do Not Exceed Maximum Nitrogen Gas Output of 180 bar *(2600 psi).*

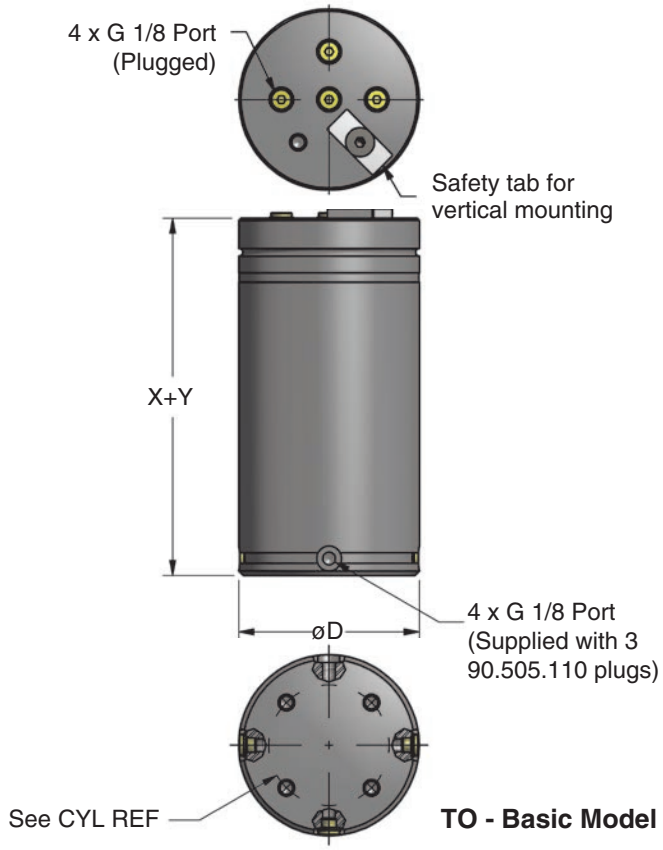
B07101

Surge Tank

DADCO surge tanks are used to store nitrogen gas during system discharge and are used with open-flow systems to increase the volume in the system thereby reducing the pressure rise when cylinders are stroked. Both ends have multiple open ports supplied as standard for maximum flexibility when piping. Gauges and shut-off ball valves are available upon request.

For assistance in determining appropriate surge tank size for your system, contact DADCO with the cylinder size, length of stroke being used, and amount of pressure rise desired. *The 90.700 (Y-700) hose is generally not recommended for use with surge tanks due to restricted flow capability.*

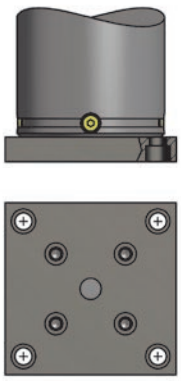
ST.50.150.B29



TO - Basic Model

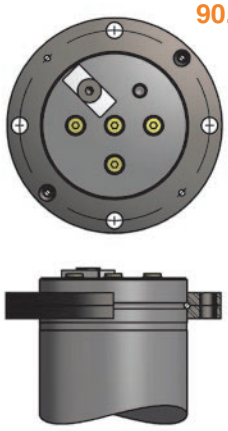
Preferred Mounts for Surge Tanks.
Refer to Catalog C06111 for mount details.

B11 **90.11**

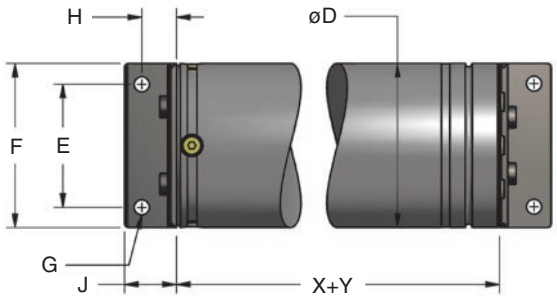


NOTE: B11 mount available with ST.30-ST.75 models only

B21 **90.21**



B29 **90.29**



ST	30	50	75	100
X	117 *4.61*	137 *5.39*	152 *5.98*	157 *6.18*
Y	Volume of Tank L *(in³)*			
50 *1.97*	0.59 *36*	0.99 *60.4*	1.62 *98.8*	2.89 *176.2*
100 *3.94*	0.84 *51.4*	1.38 *84.4*	2.23 *136.3*	3.96 *241.5*
150 *5.91*	1.09 *66.7*	1.78 *108.4*	2.85 *173.8*	5.03 *306.9*
200 *7.87*	1.34 *82.1*	2.17 *132.4*	3.46 *211.3*	6.10 *372.2*
250 *9.84*	1.60 *97.4*	2.56 *156.4*	4.08 *248.8*	7.17 *437.6*
300 *11.81*	1.85 *112.7*	2.96 *180.4*	4.69 *286.3*	8.24 *503*
400 *15.74*	NA —	3.74 *228.4*	5.92 *361.3*	10.38 *633.7*

Ex. ST.30.150 Vol. = 1.09L (*67 in³*)

ST	30	50	75	100
CYL REF	3000	5000	7500	10000
D	95 *3.74*	120 *4.72*	150 *5.91*	195 *7.67*
E	50 *1.97*	90 *3.54*		100 *3.94*
F	75 *2.95*	120 *4.72*		150 *5.91*
G	4 x M10 *3/8*	4 x M10 *3/8*	4 x M10 *3/8*	4 x M12 *1/2*
H	25.4 *1.00*	25.4 *1.00*	25.4 *1.00*	31.8 *1.25*
J	38 *1.50*	38 *1.50*	38 *1.50*	50.8 *2.00*

Ordering Example: **ST.30. 150. *TO***

Size:
30, 50, 75, 100

Length (Y):
50,100,150, 200, 250, 300, 400

Mount Option:
TO = Basic Model. *When not specified, default is TO.* Mount ordered with cylinder will be attached at factory. ***NOTE:*** *B11 mount is only available with ST.30-ST.75 models.*

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