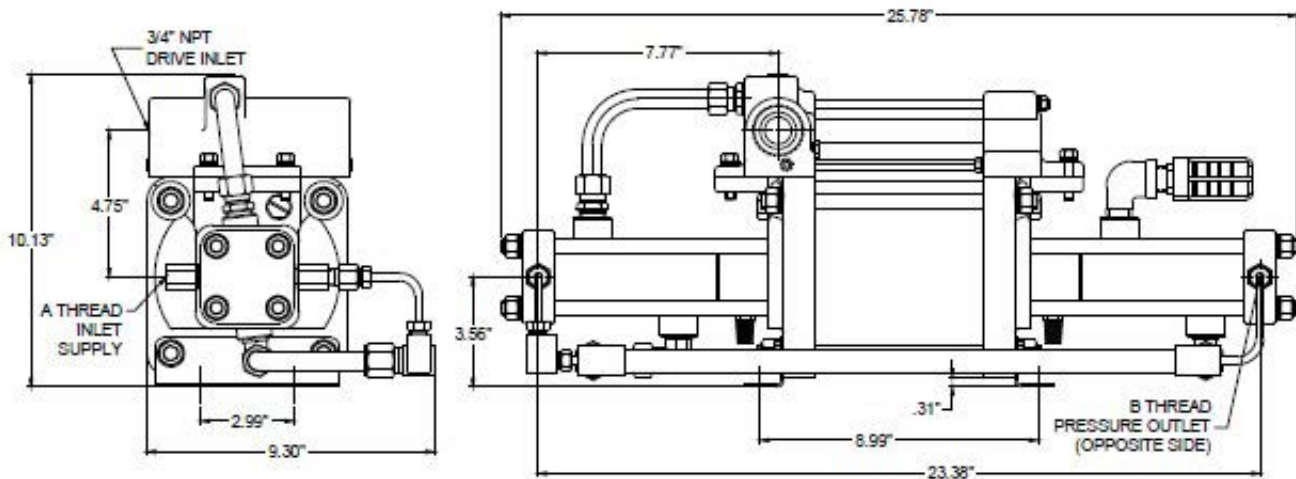


GBT SERIES

Two Stage-Double Acting Booster

The GBT series is able to achieve higher compression ratios by combining the first and second stage with an interconnected hydraulic (gas) piston. Maximum outlet pressure is the supply pressure plus the drive area ratio times the area ratio of both hydraulic (gas) pistons.



Model No.	Maximum Material Rated Gas Supply Pressure (Ps)	Maximum Material Rated Gas Outlet Pressure (Po)	Inlet Port (A) Outlet Port (B)	Static Outlet Stall Pressure	Minimum Inlet Gas Pressure (Ps)	Displacement Per Stroke (in3 per cycle)
GBT-15/30	15 Pa to 2500 psig ⁽²⁾ 172 bar	9,000 psig 620 bar	1/4" NPT 1/4" NPT	30 Pa + 2 Ps	50 psig (3.5 bar)	7.05
GBT-15/75	3.5 Pa to 5000 psig ⁽²⁾ 345 bar	20,000 psig 1,380 bar	1/4" NPT 9/16"-18 ⁽¹⁾	75 Pa + 5 Ps	50 psig (3.5 bar)	7.05
GBT-30/75	20 Pa to 6000 psig ⁽²⁾ 410 bar	20,000 psig 1,380 bar	1/4" NPT 9/16"-18 ⁽¹⁾	75 Pa + 2.5 Ps	100 psig (7 bar)	3.1

- (1) Coned and Threaded High Pressure Connection for 1/4" O.D. Tubing.
- (2) GBT Series Gas Boosters: Limit maximum gas supply pressure by formula $P_s \text{ max} = \text{factor} \cdot P_a$ to avoid interstage stall (for example, for gas booster model GBT-15/30 the formula is: $P_s \text{ max} = 15 \cdot P_a$).
3. Refer to corresponding gas booster performance curve for operating pressures (see page 9 to 20).
4. Maximum material rated outlet pressures can be reached under special operating conditions. Do not use air drive on/and gas supply pressures that equate to higher outlet pressures than those "maximum material rated outlet pressures" shown on table. Refer to Static Outlet Stall Pressure formula shown on table (for example, for gas booster model GBT-30 the formula is: $\text{Static Outlet Stall Pressure} = 30 \cdot P_a + P_s$).
5. Maximum recommended air drive operating pressure: 100-psi.
6. Maximum rated air drive pressure: 150-psi (only for static outlet stall pressure).
7. Maximum allowed working pressure for oxygen service boosters: 5,000-psi max.
8. Maximum allowed working pressure for hydrogen service boosters: 6,000-psi max.
9. Oxygen & hydrogen service boosters not available on all models. Contact factory for more information.

For assistance in selecting the proper Gas Booster complete and fax the data work sheet or e-mail inquires to service@schydraulic.com

GBT SERIES

Two Stage-Double Acting Booster

Legend
 PA = Drive Pressure
 PO = Gas Outlet Pressure
 PS = Gas Inlet Pressure
 VO = Output Gas Flow

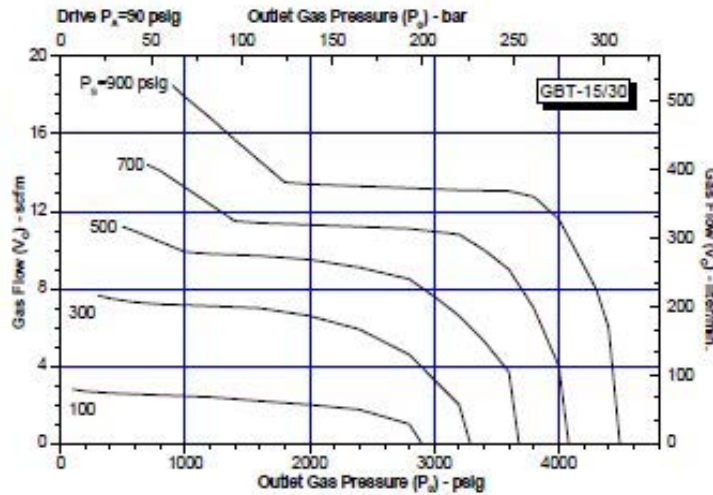
NOTE:

Performance charts are for reference only.

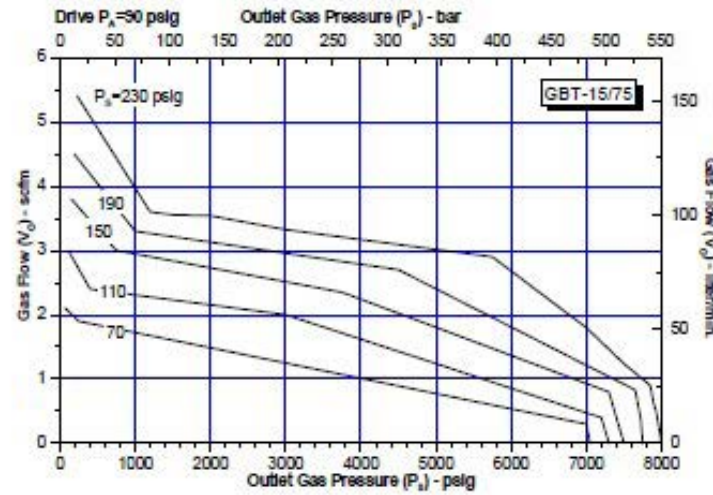
The curves are based on an Air Drive (Pa) of 90 psig and a maximum air consumption of 72-scfm. If the Pa is higher or lower, the Outlet gas pressure (Po) can change significantly.

Also, the supply pressures (Ps) shown in the graphs are based on constant pressure being supplied as the pressure is boosted. A supply from cylinders or bottles will affect the pressure outlet (Po) and flow (Vo) as the supply pressure (Ps) is depleted.

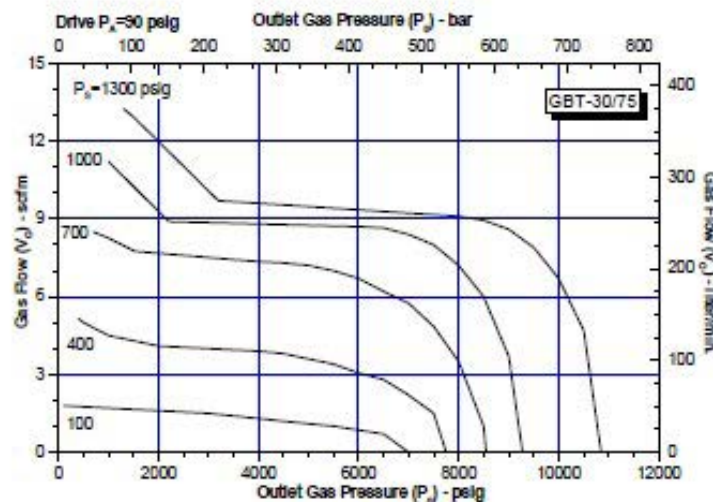
Contact SC Hydraulic Engineering for detailed performance data on any



GBT-15/30



GBT-15/75



GBT-30/75