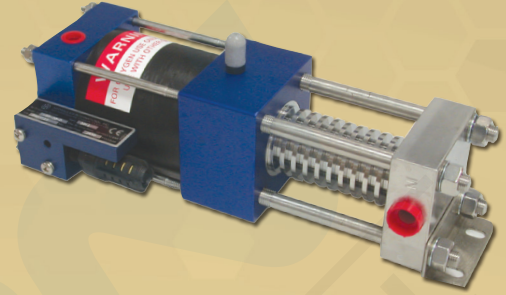




AIR DRIVEN GAS BOOSTER MODEL 3G-SS-20

Hydraulics International, Inc. (HII) gas booster is designed to boost gas directly from a cascade system, a gas generation system, a cryogenic system or a high pressure compressor to outlet pressures of 3450-psi (238-bar). The unit ensures full fills even if the supply storage pressure drops as low as 300-psi (20 bar). The unit may be Driven manually, by means of its integral hand pump assembly (optional); a low pressure conventional air compressor; or Regulated high-Pressure air storage supply (SCUBA, SCBA or NITROGEN bottles). Maximum 150psi (10 bar) air supply.



The high-pressure sections of the booster are cooled by the drive exhaust air and operate dry, non-lubricated. In the shop air drive mode, non-contaminated outlet gas is assured because of complete dual vented separation from the drive section.

**IDEAL FOR GENERAL AVIATION, MUNICIPAL FIRE, RESCUE,
RECREATIONAL & TECHNICAL DIVERS, DIVE SHOPS, YACHTS AND RESCUE SERVICES**

KEY BENEFITS:

- **Increase System Capacity:** Up to 50% more fills
- **Eliminate Cascading:** Allows you to fill or top-off from storage as low as 300 psi (20 bar)

KEY FEATURES:

- **Boost** gas pressure from 300 psi to 3450 psi
- **Hold Pressure.** Can be controlled to stop at any predetermined pressure and hold that pressure indefinitely without consuming power, and restart under full load
- **Intrinsically Safe.** Compressed air reduces risk of heat, flame, spark, or electrical shock
- **Contamination FREE.** Separation between drive and gas section uses three static seals with dual vents

OPTIONAL CONTROLS:

- **Manually Driven with Integral Hand Pump Assembly**
2000 psi (138 bar) MAX. outlet pressure
- **High Pressure Air Controls**
(HP regulator, relief valve and on/off valve)
- **Oxygen Fill Accessory Kit**
(inlet CGA connector, 60" inlet & outlet hoses, outlet filter, outlet on/off valve, gauge, and DIN connector with bleeder)
- **Watertight Protective Case with Wheels**
22"L x 14"W x 9"H (559 mm x 356 mm x 229 mm)
- **Safety Low & High Pressure Cutoff Valves**
(set to automatically stop & restart the booster)
- **Outlet Pressure Relief Valve**

PERFORMANCE:

Approximate fill-time* for a 19 cu-ft (0.54 cu- m³) O₂ Bottle to 2,400-psi (165 bar)

| SYSTEM PRESSURE AFTER EQUALIZATION | APPROX. FILL-TIME | APPROX. FILL RATES |
|---------------------------------------|-------------------|----------------------|
| 2000 psi (138 bar) | 1.0 minutes | 3.0 scfm (85 nl/min) |
| 1500 psi (103 bar) | 3.1 minutes | 2.3 scfm (65 nl/min) |
| 1000 psi (69 bar) | 7.3 minutes | 1.5 scfm (42 nl/min) |
| 500 psi (34 bar) | 20 minutes | 0.8 scfm (23 nl/min) |

*Based on 105-psi shop air and 60 cycles per minute. NOTE: DO NOT exceed 200 psi/min. transfer rate for pure oxygen and 50-70 psi/min. during mixing.



HYDRAULICS INTERNATIONAL, INC.

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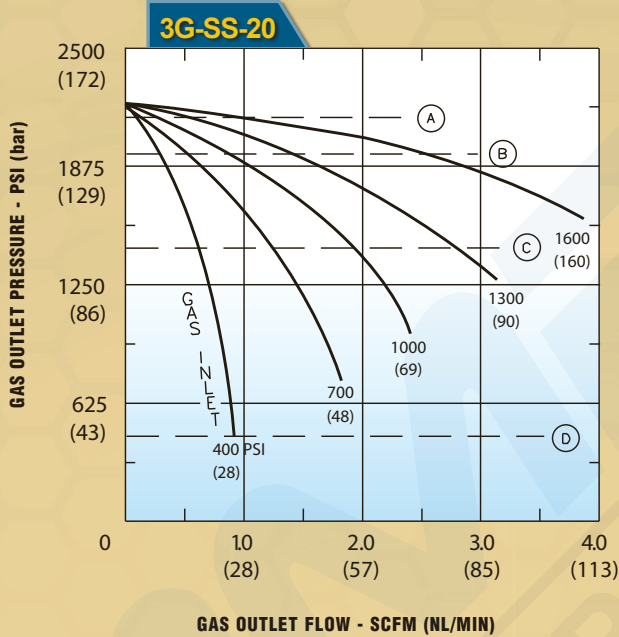
AIR DRIVEN GAS BOOSTER MODEL 3G-SS-20

SPECIFICATIONS:

- | | | | |
|--------------------------------------|----------------------------|------------------------|--|
| ▪ Dimensions: | 12.05" L x 4.9" D x 3.4" H | ▪ Air Drive: | 1/4" NPTF |
| ▪ Weight: | 11.6-pounds (5.2 Kg) | ▪ Gas Inlet: | 3/8" Female JIC. (9/16" x 18 straight threads) |
| ▪ Pressure Ratio: | 23:1 | ▪ Gas Outlet: | 3/8" Female JIC. (9/16" x 18 straight threads) |
| ▪ Maximum Outlet Pressure: | 3,450-psi (238 Bar) | ▪ Exhaust: | 1/4" NPTF |
| ▪ Max/Min Drive Air Pressure: | 150/12-psi (10/0.8 Bar) | ▪ Remote Pilot: | 1/8" NPTF |

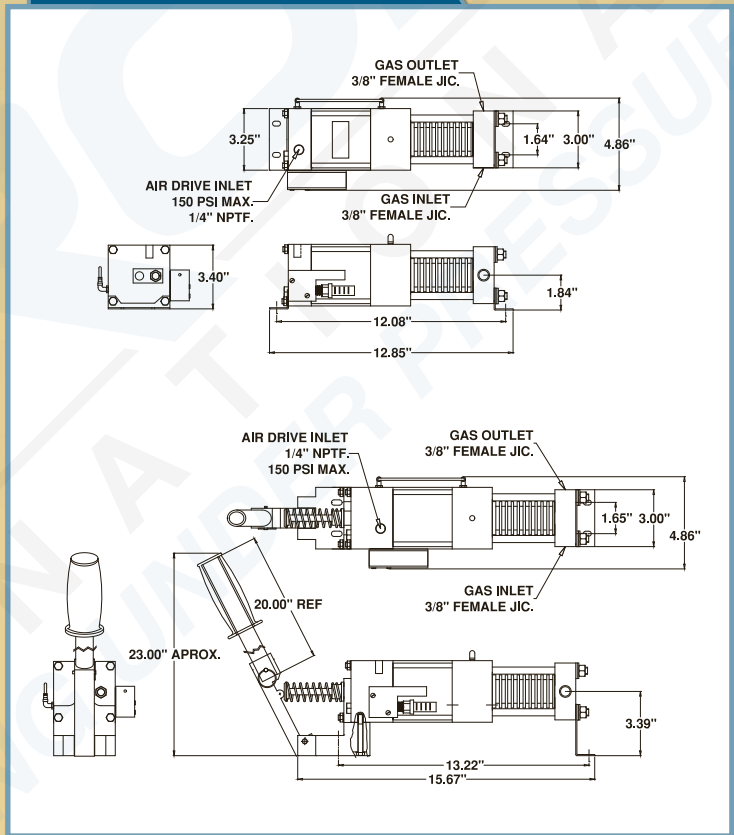
PERFORMANCE CURVE

(Assume an air drive source of approximately 100 psi from 1/4" I.D. piping)



Dashed lines represent approximate air consumption:
Ⓐ: 2 SCFM **Ⓑ: 4 SCFM** **Ⓒ: 6 SCFM** **Ⓓ: 9 SCFM**
 (57 NL/MIN) (113 NL/MIN) (170 NL/MIN) (255 NL/MIN)

DIMENSIONAL DATA



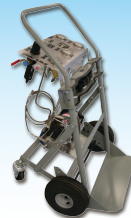
Other HII Quality Products: 100% USA Made



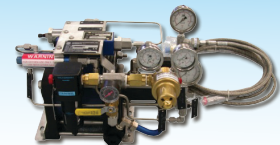
Booster mounted on a
Watertight Protective Case



Electric Driven Booster Packages



2-Bottle Hand Truck with Booster



Portable Booster
System with Safety Valves



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