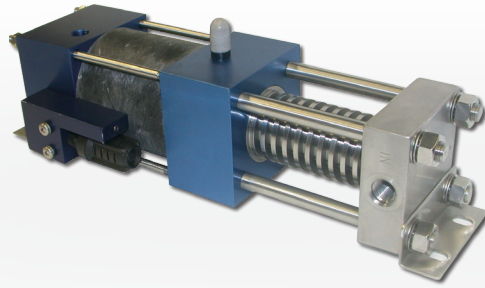




Hydraulics International, Inc.

# AIR-DRIVEN GAS BOOSTER

## MODEL 3G-SS-20



Hydraulics International, Inc. (HII) gas booster is designed to boost oxygen, breathing air and nitrogen directly from a cascading 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 of cylinders even if the supply source of gas drops to as low as 300-psi (20 bar). Ideal for General Aviation, Municipal Fire, Rescue, Dive Shop, 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.
- May be **Driven** manually, by means of its integral hand pump assembly; a low pressure conventional air compressor, (install airline filtration/water trap); or Regulated high-Pressure air storage supply (SCUBA, SCBA or NITROGEN bottles). Maximum 150-psi air supply.

### Optional Controls:

- Integral hand pump assembly (2000 psi MAX. outlet pressure)
- High pressure air controls (HP regulator, relief valve and on/off valve)
- Oxygen fill accessory kit (inlet CGA-540 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)

### Specifications:

Dimensions:	13.25L x 3.25"D x 3.25"H
Weight:	10.5-pounds (4.8 Kg)
Pressure Ratio:	23:1
Maximum outlet pressure:	3,450-psi (238 Bar)
Max/min drive air pressure:	150/12-psi (10/0.8 Bar)

### Specifications:

#### PORT SIZES

Air drive:	¼" NPTF
Gas inlet:	-6 SAE (9/16" x 18 straight threads)
Gas outlet:	-6 SAE (9/16" x 18 straight threads)
Exhaust:	¼" NPTF
Remote pilot:	1/8" NPTF



**HYDRAULICS INTERNATIONAL, INC.**

9201 Independence Ave., Chatsworth, CA 91311, USA

Tel: (818) 407-3400 (888) 780-7867 Fax: (818) 407-3428 E-Mail: sales@hiipumps.com www.hiipumps.com

# AIR-DRIVEN GAS BOOSTER MODEL 3G-SS-20

## Performance:

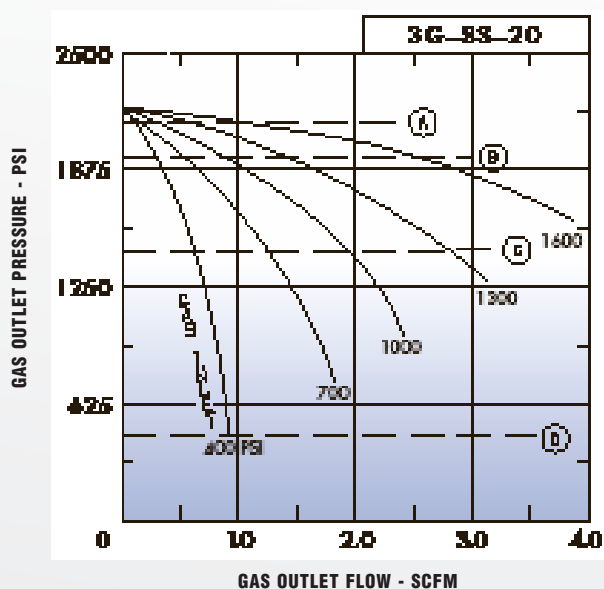
Approximate fill-time\* for a 19 cu-ft O<sub>2</sub> Bottle to 2,400-psi

SYSTEM PRESSURE AFTER EQUALIZATION	APPROX. FILL-TIME	APPROX. FILL RATES
2000 psi	1.0 minutes	3.0 scfm
1500 psi	3.1 minutes	2.3 scfm
1000 psi	7.3 minutes	1.5 scfm
500 psi	20 minutes	0.8 scfm

\*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.

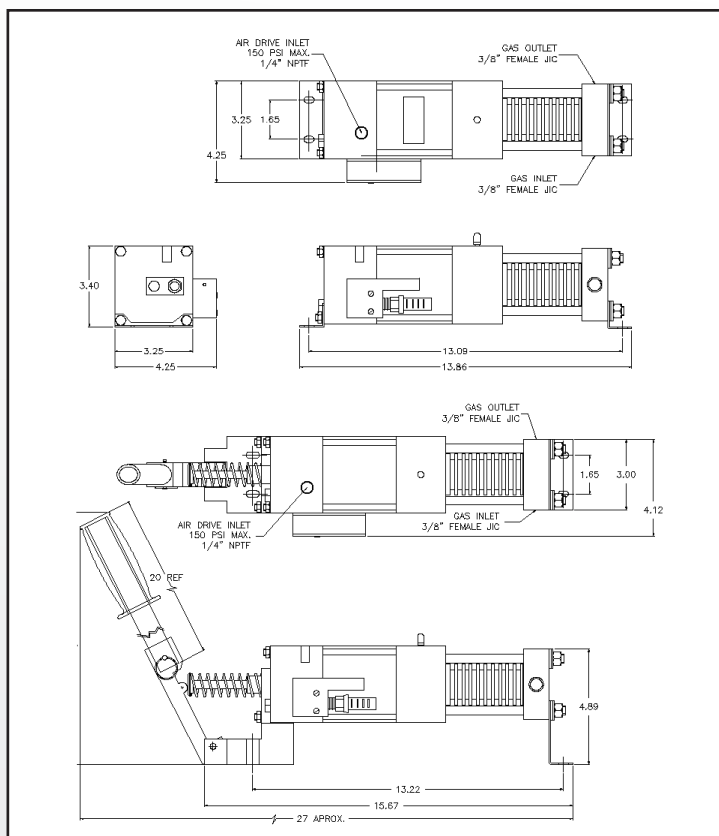
## PERFORMANCE CURVE

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

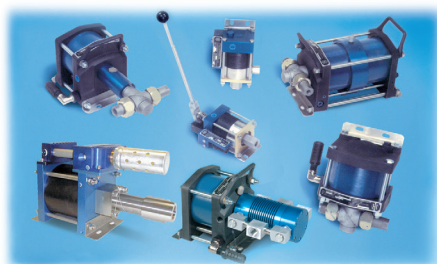


Dashed lines represent approximate air consumption:  
(A): 2 SCFM (B): 4 SCFM (C): 6 SCFM (D): 9 SCFM

## DIMENSIONAL DATA



Other HII Quality Products: 100% **USA** Made



Air Driven Liquid Pumps



Pneumatic and Hydraulic Test Equipment



Fluid Power Components



**HYDRAULICS INTERNATIONAL, INC.**

9201 Independence Ave., Chatsworth, CA 91311, USA

Tel: (818) 407-3400 (888) 780-7867 Fax: (818) 407-3428 E-Mail: sales@hiipumps.com www.hiipumps.com

HYD-3238