BOOSTER PUMPS

ScubAmp Breathing Air Amplifier

28153

The Model 28153 ScubAmp provides 2,500 PSI up to 4,400 PSI scuba tank fills. The ScubAmp boosts medium pressure storage air straight into dive tanks to requested higher pressures rapidly. With the ScubAmp, existing air compressor systems can stay within their 2,000 PSI to 2,500 PSI. New systems can be set back to medium pressure.

Benefits include cooler operation on medium pressure compressors which extends time between overhauls by thousands of hours regardless of compressor rating. Cooler operation lowers the cost of storage cylinders, purifier units, compressors, motors and piping.



Specifications				
Booster	Air Driven, Balanced Opposed Double Acting Piston Type			
High Pressure Section	Non-Lube, Contaminant Free, Triple Sealed and Vented from Air Dive Section - Materials are Stainless Steel			
Drive Section	Silicone Lubed at Assembly, Corrosion Resistant, Exhaust Muffler			
Standard Controls	All Pneumatic Automatic Stop at adjusted Maximum Pressure Independent Manual Stop Valve and High Pressure Safety Relief Valve			
Gauges	Input Pressure (from Storage): 0-3000 PSI Drive Pressure: 0-3000 PSI			
Air Power Consumption	From approximately 1/3 cu.ft. at 2,200 PSI Boost for Each cu.ft. of Air Boosted			
Maximum Output Flow	70 SCFM (nominal at 2,500 PSI Input, 3,000 Output)			
Cooling	With Air Exhaust, Integral, Fully Jacketed			
Noise	80 dB Range Pulses, depending on Working Pressure (measured at 30 in. from Booster)			
Maintenance	Simple Seal Kit Replacement (Rarely Required)			
Dimensions	15 in. H x 15 in. W x 20 in. L			

ScubAmp 28153 - Typical Fill Times					
From Pressure in Storage (after Equalizing in Dive Tank)	To Nominal Tank Size and Pressure				
	83 cu.ft. to 3,000 PSI	71.2 cu.ft. to 2,475 PSI	71.2 cu.ft. to 2,250 PSI	80 cu.ft to 4,400 PSI	
2,500 PSI	12 sec.	-	-	60 sec.	
2,250 PSI	28 sec.	14 sec.	-	90 sec.	
2,000 PSI	39 sec.	22 sec.	12 sec.	-	
1,500 PSI	75 sec.	50 sec.	35 sec.	-	

Weight (approximate) 50 lbs

Gas Booster Pumps

SEE BELOW

The selection of the proper Gas Booster for any application starts with determining which booster "series" will provide the amount of flow required. This can be determined by the chart information provided on page 159. The possible ratios for the application are determined by examination of the performance data for the booster using the air pressure and air flow available. The ability of the booster to generate pressure is a function of the drive pressure, the nominal ratio, and the maximum compression ratio. The ability to generate flow is a function of the quantity of air available to drive it, the displacement per cycle of the pump, and the volumetric efficiency. Within each booster series, there are standard materials of construction available. For applications involving aggressive gases, some material substitutions may be possible.

SINGLE ACTING SINGLE STAGE MODEL "AG"

Single Acting Single Stage Model "AG" boosters provide economical means of boosting pressure for testing of small components and similar applications where volume is small and efficiency is not important. They also permit control of maximum pressure by means of an inexpensive air drive pressure regulator. Maximum outlet pressure is drive area ratio times air pressure.

