



# HL42 series booster

Air / Inert Gas Pressure Booster

1.5 HP

115V AC / 230V AC

Electric motor

24/7 operation

40 - 100 psi gas  
inlet pressure

2,500 psi max gas  
discharge pressure

10,000 hours of seal life

Air-cooled / Oil free

Touchscreen  
control panel



# Booster Specifications: HL42 series

Gas Connections & dimensions		
	HL42-1500	HL42-2500
Gas supply connection	1/4 NPT	
Gas discharge connection	1/4 NPT	
Gas vent connection <sup>1</sup>	1/8 NPT	
Stage 1 Bore diameter and stroke length	4" (102 mm) & 4.2" (107 mm)	
Stage 2 Bore diameter and stroke length	2" (51 mm) & 4.2" (107 mm)	
Operating speed <sup>2</sup>	7.8 cycles per minute (CPM)	6.4 cycles per minute (CPM)
Gas displacement per cycle	0.038 cubic feet (1.08 liters)	
Overall dimensions (W x D x H)	16" x 27" x 50" (41 cm x 69 cm x 127 cm)	
Overall weight <sup>3</sup>	180 (82)	
Hydraulic Specifications		
Recommended fluid	Mobil DTE 24 (or equal)	
Oil volume	3.5 Gallons	
Electrical Specifications		
Rated voltage	115V ±10%, Single phase, 60 Hz	230V ±10%, Single phase, 60 Hz
Power consumption	1.5 HP	1.5 HP
Max current	13.0 Amps	6.5 Amps
Supply cable	3 wire x 12 AWG	User supplied <sup>4</sup>
Plug	NEMA 5-15	User supplied <sup>4</sup>
Pressure, Temperature & Noise Specifications		
Gas supply pressure range	40 psig to 100 psig (2.8 bar to 6.9 bar)	
Gas discharge pressure range	500 psig to 1500 psig (35.5 barg to 103 barg)	1000 psig to 2500 psig (69 barg to 172 barg)
Ambient temperature range - °F (°C)	38 to 122 (3 to 50)	
Noise Emission <sup>5</sup>	75 dB(A)	
Duty cycle	100% (Can operate 24/7)	

**Note 1:** Breather installed at the factory

**Note 2:** A cycle consists of a 1st stage and 2nd stage stroke

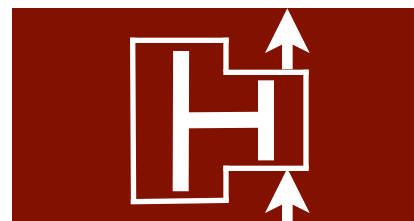
**Note 3:** The weight listed is the maximum weight of the system after hydraulic oil has been added

**Note 4:** Due the wide variety of 230V plug styles, the end user will need to supply their own power cable to the unit

**Note 5:** Measurement distance: 1 meter, Uncertainty: ±3 dB(A)



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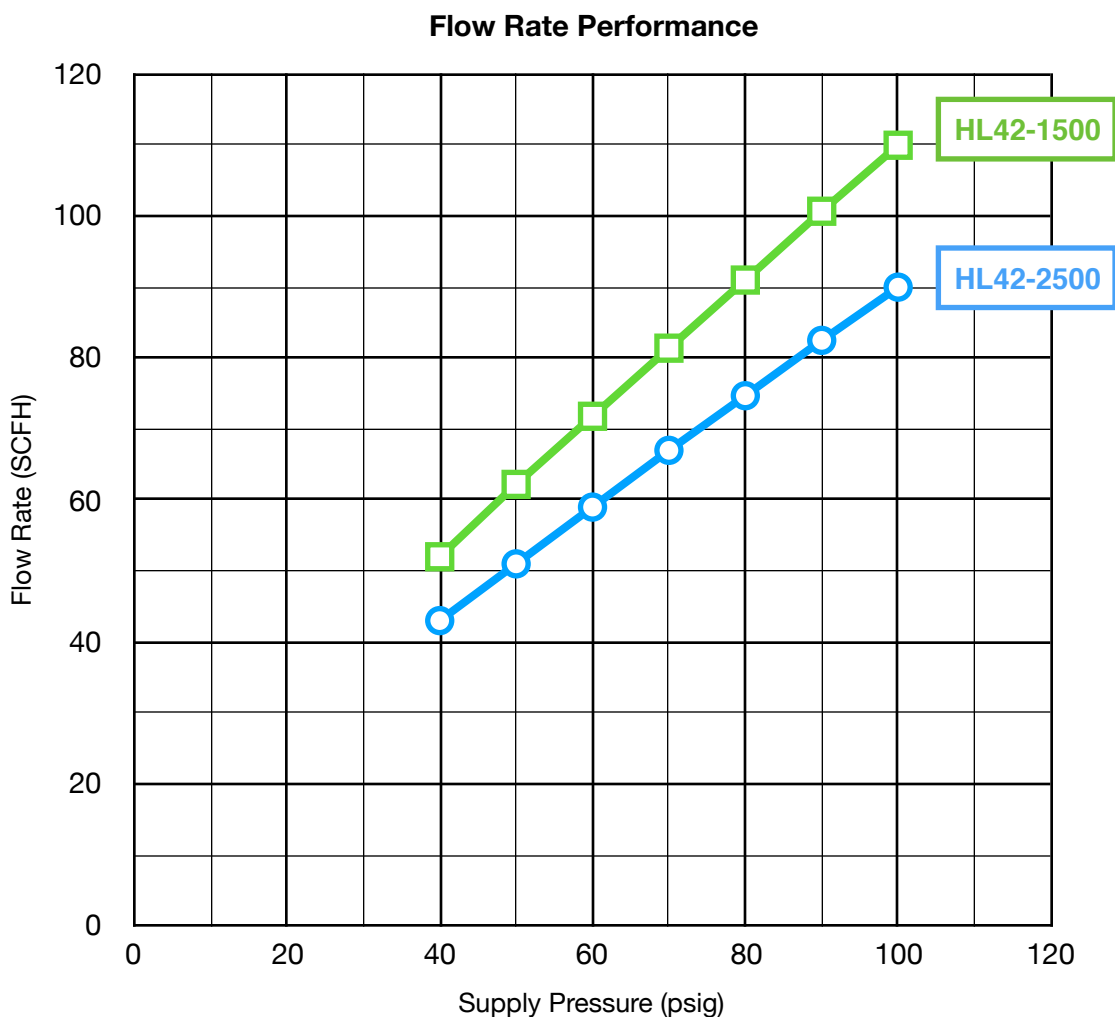


# Performance Data: HL42

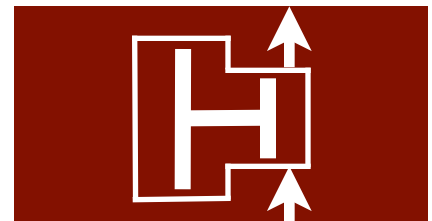
The HL42 gas pressure boosters provide flow rates between 50 SCFH and 110 SCFH for the “1500” series unit and between 45 SCFH and 90 SCFH for the “2500” series unit depending on the gas supply pressure. Installing a regulator upstream of the booster allows the operator to set the desired flow rate.

Example: A nitrogen generator is capable of delivering 99% nitrogen at 60 SCFH and 80 psig. However with an 80 psig supply the HL42-2500 booster will produce approximately 75 SCFH. 75 SCFH is more than the nitrogen generator is capable of providing so a loss in purity may occur as the nitrogen generator attempts to provide more flow. This can be remedied by regulating the 80 psig nitrogen to about 60 psig. A 60 psig supply will produce a discharge flow rate of 60 SCFH matching the nitrogen generator’s output.

The graph below shows the flow rate of the booster verses the supply pressure.



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# Touchscreen Control Panel: HL42

The HL42 gas pressure booster uses a touchscreen control panel. The touchscreen allows the operator to turn ON and OFF the system, view & change various operating parameters and review error codes. An example of the Home Screen is shown below along with a list of the viewable/modifiable parameters.

Viewable Parameters	
Output Pressure	The current discharge pressure of the system
High Pressure Setting	The pressure at which the system will automatically turn OFF (Modifiable by the operator)
Low Pressure Setting <sup>1</sup>	The pressure at which the system will automatically turn ON (Modifiable by the operator)
Hours on Seals	The accumulated hours on the seals (Can be reset after rebuild)
Total Hours Run	The total hours the unit has operated over its life time
Estimated Cylinder Fill Time <sup>2</sup>	Predicts the amount of time remaining to pressurize the discharge line
Last Run Time	The most recent time it took the booster system to pressurize the discharge line

**Note 1:** Low pressure setting is only available in the Continuous Fill operation mode

**Note 2:** Estimated cylinder fill time is only available in the Single Fill operation mode

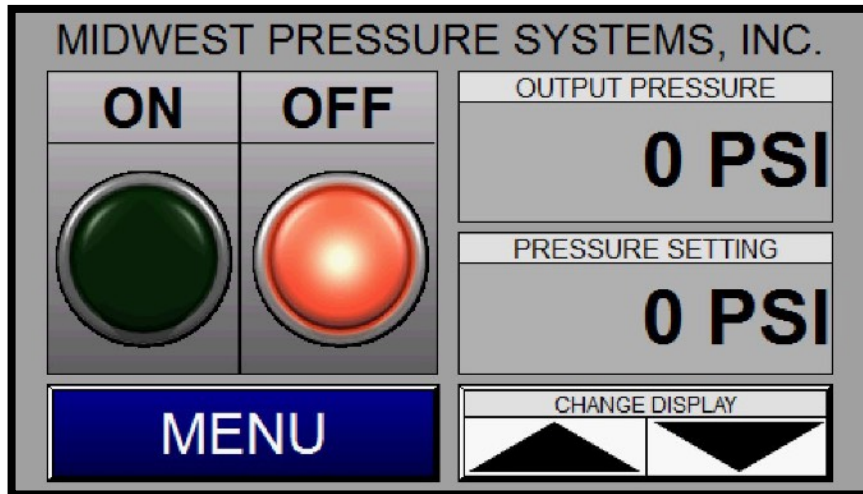
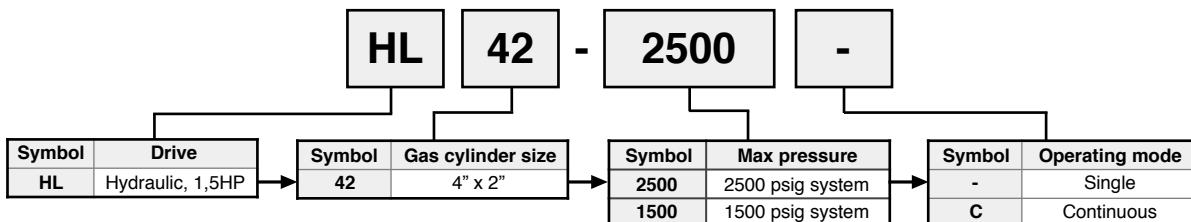


Image 1: Example of the HOME Screen

## Part Number: HL42

### Booster Model Numbers



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