



# HL2540 series booster

Air / Inert Gas Pressure Booster

1.5 HP

115V AC / 230V AC

Electric motor

24/7 operation

20 - 140 psi gas  
inlet pressure

450 psi max gas  
discharge pressure

10,000 hours of seal life

Air-cooled / Oil free

Touchscreen  
control panel



# Booster Specifications: HL2540 series

## Gas Connections & dimensions

Gas supply connection	1/4 NPT
Gas discharge connection	1/4 NPT
Gas vent connection <sup>1</sup>	1/8 NPT
Bore diameter and stroke length	4" (102 mm) & 4.2" (107 mm)
Operating speed <sup>2</sup>	7.8 cycles per minute (CPM)
Gas displacement per cycle	0.061 cubic feet (1.73 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	20 psig to 140 psig (1.4 bar to 9.7 bar)
Gas discharge pressure range	200 psig to 450 psig (13.8 bar to 31 bar)
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 forward and reverse stroke

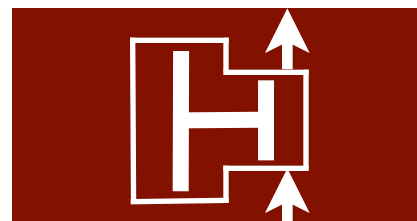
**Note 3:** The weight listed is the maximum weight of the system after hydraulic oil has been added

**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)



**Midwest Pressure Systems, Inc.**  
850 Transport Drive, Valparaiso, IN 46383  
Phone 219-462-0070 Fax 219-318-2277  
[www.midwestpressuresystems.com](http://www.midwestpressuresystems.com)

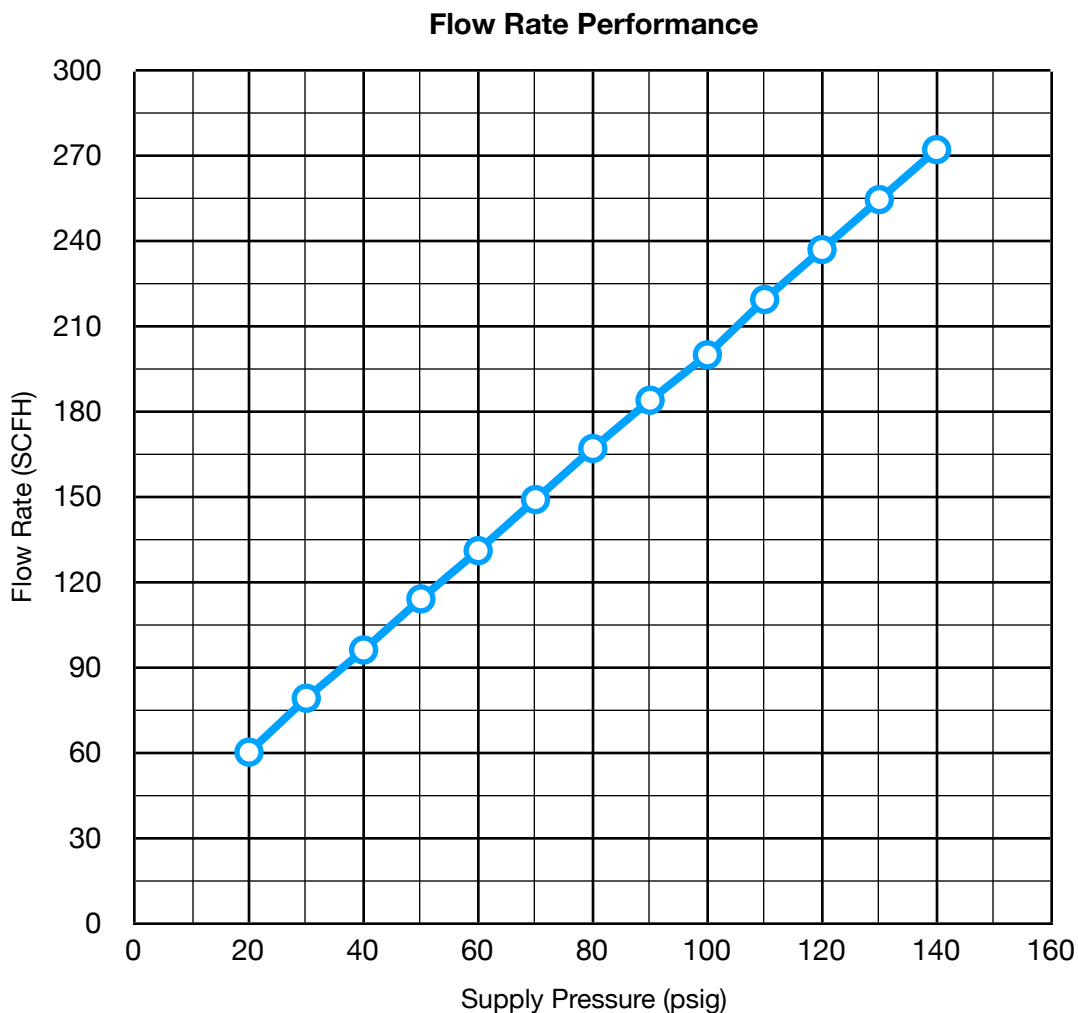


# Performance Data: HL2540

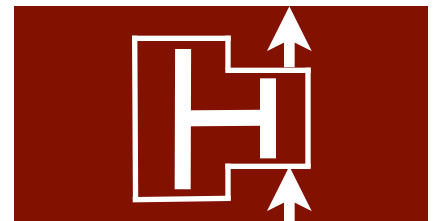
The HL2540 gas pressure booster provides flow rates between 60 SCFH and 270 SCFH depending on the gas supply pressure. Installing a regulator upstream of the booster allows the operator to set the desired flow rate.

Example: A nitrogen generator is capable of delivering 99% nitrogen at 130 SCFH and 80 psig. However with an 80 psig supply the booster will produce over 160 SCFH. 160 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 60 psig. A 60 psig supply will produce a discharge flow rate of 130 SCFH matching the nitrogen generator's output.

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



**Midwest Pressure Systems, Inc.**  
850 Transport Drive, Valparaiso, IN 46383  
Phone 219-462-0070 Fax 219-318-2277  
[www.midwestpressuresystems.com](http://www.midwestpressuresystems.com)



# Touchscreen Control Panel: HL2540

The HL2540 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

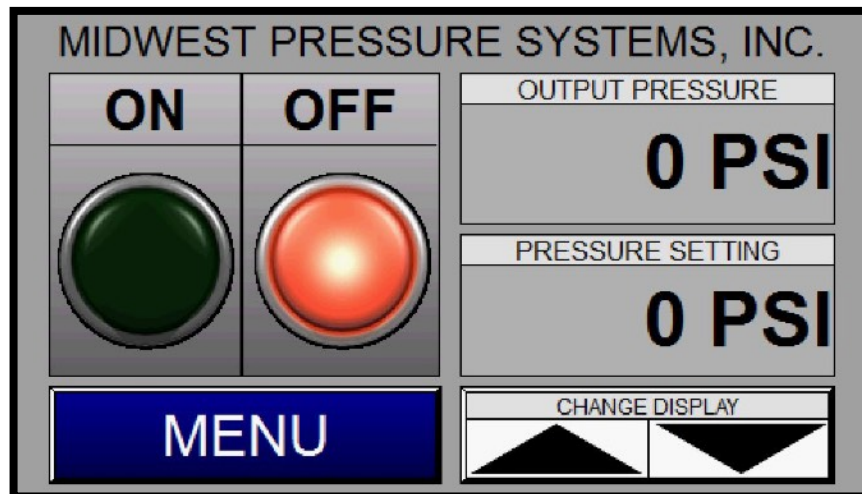
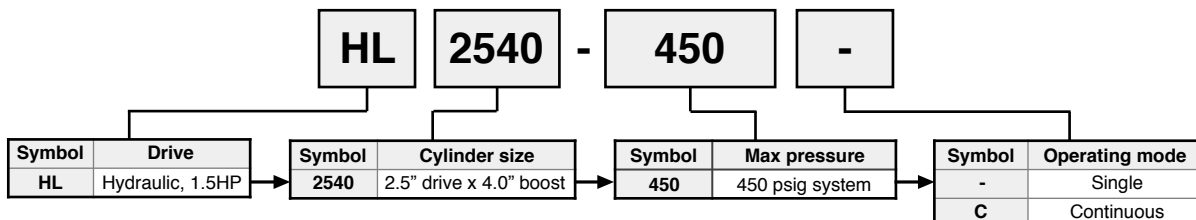


Image 1: Example of the HOME Screen

## Part Number: HL2540

### Booster Model Numbers



**Midwest Pressure Systems, Inc.**  
 850 Transport Drive, Valparaiso, IN 46383  
 Phone 219-462-0070 Fax 219-318-2277  
[www.midwestpressuresystems.com](http://www.midwestpressuresystems.com)

