

Haskel
An Ingersoll Rand Business



H-Drive
Hydraulic Driven Gas Boosters

H-Drive

The Future of Gas Booster Technology

The Haskel H-Drive Booster has been designed to compress a wide range of gases safely, reliably and economically, meeting demands for high-pressure compression and other critical high-pressure gas boosting applications.

H-Drive dramatically improves the most important aspects of handling gas at high-pressures. Constructed of materials recognized by leading regulatory agencies as the best for safe lifetime continuous operation, it delivers the highest flows and lowest maintenance cost ever in a hydraulic driven gas booster. It introduces interchangeable modular gas sections, with levels of safety and reliability in line with what you would expect from the world leader in high-pressure generation and containment.

At the heart of the design is Haskel's proven experience in high pressure gas sealing and compression. The unique seal design delivers gas tight, non-contaminating compression*. The unique specially designed seals are self lubricating and need no further lubrication ensuring the cleanliness of the gas.

Delivering high-pressure exactly when and where you need it.

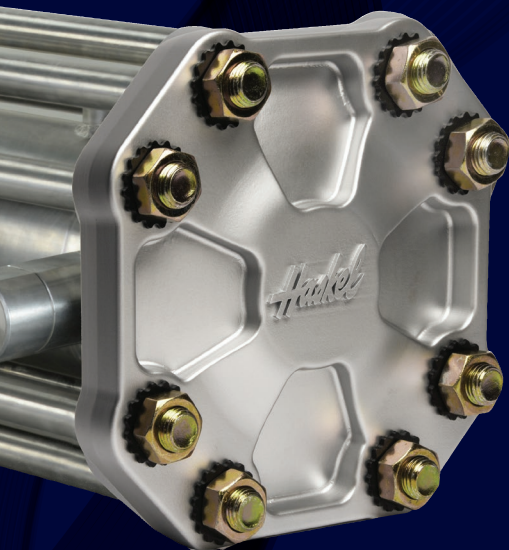
Whether working with Hydrogen, CNG, Nitrogen, Argon, Helium or other gases, from alternative vehicle fueling, to tube trailer supply and Helium blanketing, H-Drive sets the standard in reliability.

This state-of-the-art product range also sets the standard in flexibility, with a modular design that allows for greater flexibility in system design and easy upgrades to custom configurations as needs progress.

*Minor gas leakage is normal on all gas piston seals.

As the seals wear micro particles will pass into the gas outlet but these are easily trapped by installation of micronic filters.

Features and benefits



- Designed specifically for high-pressure gas applications with a wide range of gases
- Hydrogen compatible materials resist hydrogen embrittlement
- Meet Hydrogen fueling station requirements with minimum number of boosters
- Robust design suitable for continuous heavy-duty applications
- Modular design. 3 interchangeable gas sections yield 6 configurations
- Leak free, non-contaminating compression
- Ease of maintenance – Requires no lubrication and minimal cleaning
- More economical than diaphragm compressors
- No Start/Stop issues
- Available as a turnkey booster compressor station or as booster modules for seamless incorporation into OEM packages.
- Service and support available through a global service network.
- ATEX certified as standard
- CE marked

Performance

H-Drive has been designed to deliver optimum performance at a range of different operating pressures, with efficiency and serviceability in mind. Seals have been designed for extended life. The resultant technology ensures the very best performance throughout continuous heavy-duty applications.

With optimal functionality for a wide range of applications, including hydrogen gas service,

a range of modular double acting single stage and two stage models allow compression up to 15,000 psi (1,034 bar).

Available as a single unit or integrated into standard or custom engineered skids, H-Drive delivers at high pressures, without the need for diaphragm compressors, making it the smart choice for Hydrogen fuel stations.

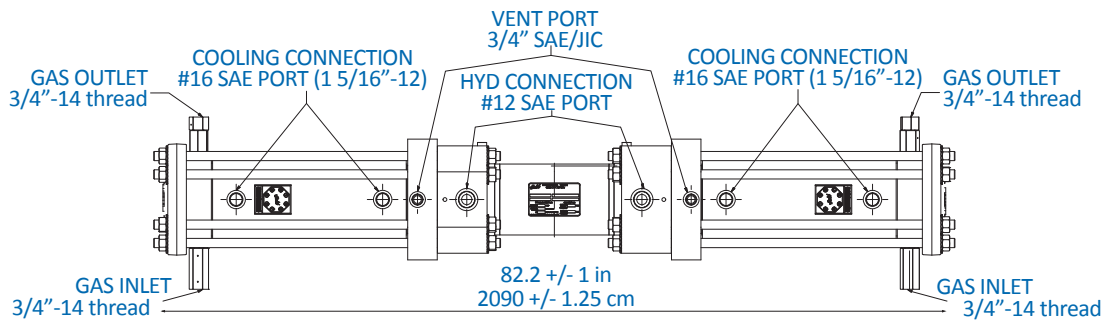
Performance Table

	Model	Performance			Max Performance at 18 cycles/min (maximum cycle rate) for Hydrogen					
		Min. Inlet	Max Outlet	Recommended	Inlet	Outlet	Flow	Inlet	Outlet	Flow
		psi (bar)	psi (bar)	Max Cr	psi (bar)	psi (bar)	scfm (m ³ /hr)	psi (bar)	psi (bar)	scfm (m ³ /hr)
Single Stage/ Double Acting	H12-150	50 (3.45)	4500 (312)	6:1	200 (14)	1000 (70)	82.5 (131)	800 (55)	3200 (221)	310 (487)
	H12-90	50 (3.45)	10,000 (690)	6:1	500 (35)	2900 (200)	70 (111)	1400 (97)	6400 (441)	189 (297)
	H12-63	100 (6.9)	15000 (1034)	6:1	3350 (231)	12700 (876)	205 (348)	6000 (413)	13050 (900)	339 (532)
Two-Stage/ Double Acting	H12-150/90	50 (3.45)	10,000 (690)	36:1	130 (9)	4700 (324)	28 (45)	290 (20)	7500 (517)	61 (103)
	H12-150/63	50 (3.45)	15000 (1034)	36:1	290 (20)	6500 (448)	59 (100)	400 (28)	10000 (690)	80 (136)
	H12-90/63	50 (3.45)	15000 (1034)	36:1	700 (48)	12700 (876)	51 (87)	1200 (82)	13050 (900)	84 (130)

For detailed hydraulic drive requirements and cooling requirements please contact a Haskel distributor. Find a Sales Rep at www.haskel.com.

Dimensions and Connections

	Gas Connections						
	Cooling Connection	Vent Port	Hydraulic Connection	Outlet A	Inlet B	Outlet C	Inlet D
H12-150	#16 SAE	#12 SAE	#20 SAE	3/4" SAE	1" SAE	3/4" SAE	1" SAE
H12-90	#16 SAE	#12 SAE	#20 SAE	3/4" MP	3/4" MP	3/4" MP	3/4" MP
H12-63	#16 SAE	#12 SAE	#20 SAE	3/4" MP	3/4" MP	3/4" MP	3/4" MP
H12-150/90	#16 SAE	#12 SAE	#20 SAE	3/4" SAE	1" SAE	9/16" MP	9/16" MP
H12-150/63	#16 SAE	#12 SAE	#20 SAE	3/4" SAE	1" SAE	9/16" MP	9/16" MP
H12-90/63	#16 SAE	#12 SAE	#20 SAE	9/16" MP	9/16" MP	9/16" MP	9/16" MP



Model Number Configuration

Ratio	Double Acting	Two Stage
H12	-150	
H12	-90	
H12	-63	
H12		-150/90
H12		-150/63
H12		-90/63

H 12-150-1-XXXX

- H**—Hydraulically Driven
- 12**—Booster Stroke Length (inches)
- 150**—Gas Piston(s) Size:
 - Single Stage: 150
 - Two Stage: 150/90
- 1**—Gas Section Construction:
 - Blank — A286 Barrel/316 Endcap
 - 83568 — A286 Barrel/A286 Endcap
- XXXX**—Proximity Switch:
 - 0 — None (Plugged)
 - 1 — Inert Gas/Non-Flammable
 - 2 — ATEX

* Alternate gas section O-ring compounds available upon request (Viton standard).

