

Haskel[®]



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.

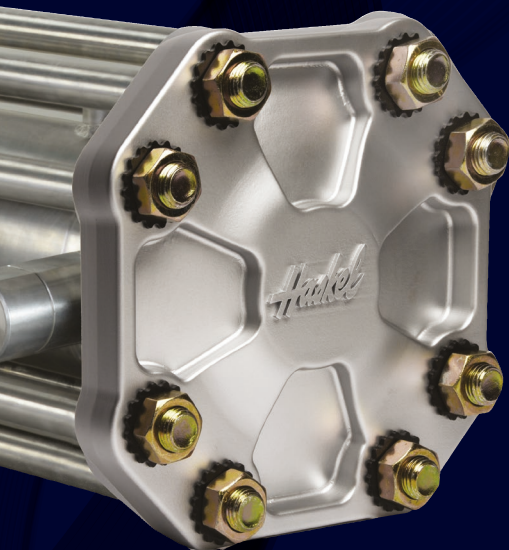
Whether working with Hydrogen, CNG, Nitrogen, Argon, Helium or other gases, from alternative vehicle fueling, to tube trailer supply and Helium blanketing, H-Drive sets the standard in reliability.

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.

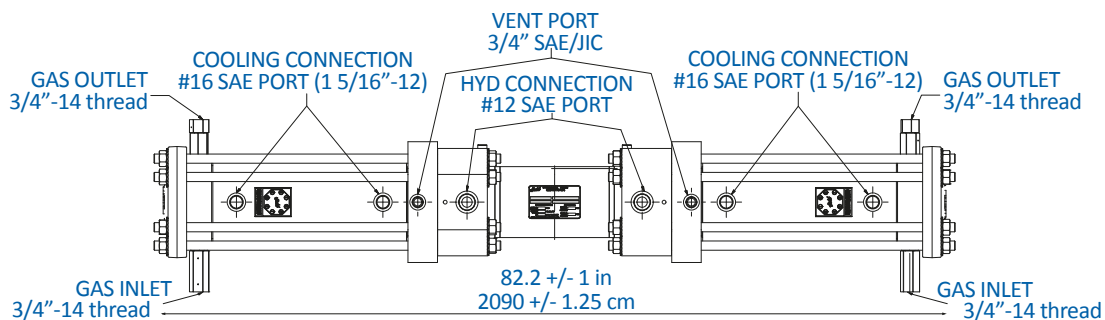
Performance Table

Model	Performance			Typical Performance Cycle (speeds between 15 and 22 cycles/min)					
	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)
HGD-150	50 (3.45)	4500 (312)	6:1	200 (14)	1000 (70)	100 (170)	800 (55)	3200 (221)	310 (487)
HGD-90	50 (3.45)	10,000 (690)	6:1	500 (35)	2900 (200)	87 (148)	1400 (97)	6400 (441)	189 (297)
HGD-63	100 (6.9)	15000 (1034)	6:1	3350 (231)	12700 (876)	205 (348)	6000 (413)	13050 (900)	400 (680)
HGT-150/90	50 (3.45)	10,000 (690)	36:1	130 (9)	4700 (324)	30 (51)	290 (20)	7500 (517)	61 (103)
HGT-150/63	50 (3.45)	15000 (1034)	36:1	290 (20)	6500 (448)	59 (100)	400 (28)	10000 (690)	80 (136)
HGT-90/63	50 (3.45)	15000 (1034)	36:1	700 (48)	12700 (876)	51 (87)	1200 (82)	13050 (900)	88 (150)

For detailed hydraulic drive requirements and cooling requirements please contact Haskel

Dimensions and Connections

Model	Connections				
	Hydraulic Inlet & Outlet Connections	Gas Inlet Connection	Gas Outlet Connection	Cooling Fluid Connections	Nominal weight – Lbs (kgs)
All Models	#12 SAE	3/4"-14 thread NPSM	3/4"-14 thread NPSM	#16 SAE	1200 (545)



Model Number Configuration

Ratio	Double Acting	Two Stage
HGD	-150	
HGD	-90	
HGD	-63	
HGT		-150/90
HGT		-150/63
HGT		-90/63

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Type

HGD = Double Acting, Single Stage
HGT = Two Stage

Ratio

-XX = Dbl. acting,
-XX/XX = Two Stage Switch

Proximity Switch - Explosion Proof Switch available as separate.
2 are required per booster.



Haskel is part of Ingersoll Rand. Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands— including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are committed to a world of sustainable progress and enduring results.

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For more information on our high-pressure products, visit Haskel.com or contact your local Haskel representative.

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