



Overview

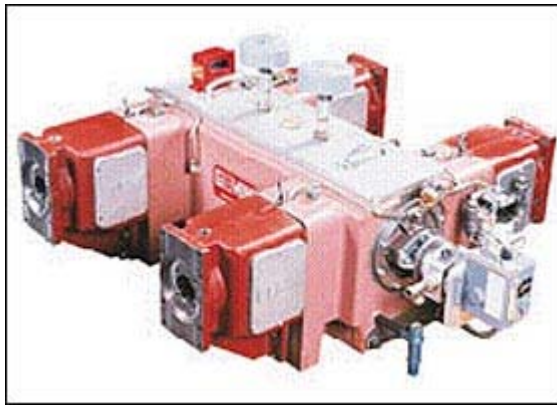
The GEMINI H Series compressors are designed to run continuously for extended periods while unattended. This high speed unit can be configured up to five stages with double-acting or stepped cylinders. A workhorse in field gas application, the H Series can also provide up to 6,000 PSIG for CNG vehicle refueling.

Available in the following models:

H301 - 1 Throw and one balancing crosshead Frame

H302 - 2 Throw Frame

H304 - 4 Throw Frame



Design Info

GEMINI H Series™ FRAME SPECIFICATIONS		
	H301, H302	H 304
Rated Speed-Max. (RPM)	1800	1800
Max HP/kW	200/149	400/298
Number of Throws	1,2	4
Max. Number of Stages	4	5
Rod Load - Tension (lb/kg)	10,000/4536	10,000/4536
Rod Load Compression (lb/kg)	10,000/4536	10,000/4536
Combined Rod Load (lb/kg)	20,000/9072	20,000/9072
Stroke (in/mm)	3.0/76.2	3.0/76.2
Piston Rod Diameter (in/mm)	1.125/28.5	1.125/28.5
Crankshaft Material	1050 F.S.	1050 F.S.

Connecting Rod Material	80 D.I.	80 D.I.
Crankpin & Main Bearing Dia. (in/mm)	3.25/82.2	3.25/82.2
Crankpin & Main Bearings - width (in/mm)	1.50/38.1	1.50/38.1
Main Bearing - Dia. (in/mm)	3.0/76.2	3.0/76.2
Main Bearing - width (in/mm)	1.88/47.7	1.88/47.7
Connecting Rod Pin Bushing - Dia. (in/mm)	1.5/38.1	1.5/38.8
Connecting Rod Pin Bushing - Length (in/mm)	2.5/63.5	2.5/63.5
Unit Length (in/mm)	24/610	52/1320
Unit Width (in/mm)	78/1981	78/1981
Unit Weight with cylinders (lb/kg)	2000/907	4000/1814

Specifications noted here may vary depending upon unit configuration. D.I. = Ductile Iron F.S. = Forged Steel.

H SERIES CYLINDER COMBINATIONS



	Cylinders for the H Frames				MAWP PSIG	Cylinder Cooling	Material	Flange Dia Inch	Flange Rating PSIG	Valves	VVCP	
	Series	Cylinder Bore - Inches										
Double Acting	H30	2.50	3.00		1440	Air	C.I.	1.5	900	4	No	
	H30	2.50	3.00		1250	Air	C.I.	1.5	600	4	No	
	H30	3.50	4.00		1250	Air	C.I.	3	600	4	Yes	a
	H30	4.50	5.00		1250	Air	C.I.	3	600	4	Yes	a
	H30	5.50			1000	Air	C.I.	3	600	4	Yes	a
	H30	6.00			700	Air	C.I.	4	300	4	Yes	b
	H30	6.50			500	Air	C.I.	4	300	4	Yes	b
	H30	7.50			500	Air	C.I.	4	300	8	Yes	b
H30	8.00	9.00	10.00	300	Air	C.I.	4	300	8	Yes	b	
Single Acting Crank End	H30	2.50	3.00		3500	Air	F.S.	1	6000	2	No	c
	H30	2.50	3.00		2500	Air	D.I.	1.5	1500	2	No	c
	H30	2.50	3.00		1250	Air	C.I.	1.5	600	2	No	c
	H30	3.50	4.00		1250	Air	C.I.	1.5	600	2	No	c
	H30	5.00			1250	Air	C.I.	1.5	600	3	No	c
	H30	5.50			750	Air	C.I.	1.5	1250	3	No	
Single Acting Head End	H30	1.25	1.50		6000	Air	F.S.	1	6000	1	No	
	H30	1.75	2.00		6000	Air	F.S.	1	6000	1	No	
	H30	1.25	1.50		4500	Air	D.I.	1	6000	1	No	
	H30	2.50	3.00		1250	Air	C.I.	1.5	600	2	No	d
	H30	4.00			1250	Air	C.I.	1.5	600	2	Yes	d
	H30	5.00			1250	Air	C.I.	1.5	600	2	Yes	d
	H30	5.50			750	Air	C.I.	1.5	600	2	Yes	d
	H30	6.50	7.50		500	Air	C.I.	3	600	3	Yes	e
	H30	8.00			300	Air	C.I.	3	300	3	Yes	e
	H30	9.00			300	Air	C.I.	3	300		Yes	

	Cylinders for the H Frames				MAWP Bar G	Cylinder Cooling	Material	Flange Dia mm	Flange Rating Bar	Valves	VVCP	
	Series	Cylinder Bore - mm										
Double Acting	H30	635	762		99	Air	C.I.	381	62	4	No	
	H30	635	762		86	Air	C.I.	381	41	4	No	
	H30	889	1016		86	Air	C.I.	762	41	4	Yes	a
	H30	1143	1270		86	Air	C.I.	762	41	4	Yes	a
	H30	1397			69	Air	C.I.	762	41	4	Yes	a
	H30	1524			48	Air	C.I.	1016	21	4	Yes	b
	H30	1651			34	Air	C.I.	1016	21	4	Yes	b
	H30	1905			34	Air	C.I.	1016	21	8	Yes	b
H30	2032	2286	2540	21	Air	C.I.	1016	21	8	Yes	b	
Single Acting Crank End	H30	635	762		241	Air	F.S.	254	414	2	No	c
	H30	635	762		172	Air	D.I.	381	103	2	No	c
	H30	635	762		86	Air	C.I.	381	41	2	No	c
	H30	889	1016		86	Air	C.I.	381	41	2	No	c
	H30	1270			86	Air	C.I.	381	41	3	No	c
	H30	1397			52	Air	C.I.	381	86	3	No	
Single Acting Head End	H30	318	381		414	Air	F.S.	254	414	1	No	
	H30	445	508		414	Air	F.S.	254	414	1	No	
	H30	318	381		310	Air	D.I.	254	414	1	No	
	H30	635	762		86	Air	C.I.	381	41	2	No	d
	H30	1016	0		86	Air	C.I.	381	41	2	Yes	d
	H30	1270			86	Air	C.I.	381	41	2	Yes	d
	H30	1397			52	Air	C.I.	381	41	2	Yes	d
	H30	1651	1905		34	Air	C.I.	762	41	3	Yes	e
	H30	2032			21	Air	C.I.	762	21	3	Yes	e
	H30	2286			21	Air	C.I.	762	21	0	Yes	

L = Nitrided Liner - Field Replaceable

NL = No Liner

a, b, c, d, e Designates Cylinders have identical XYZ Flange Dimensions to assist interchangeability

December 2003