

# Dresser-Rand HOS compressor

## Ratings

Model	Stroke in. (mm)	Number of Cylinders	Nominal Rated HP (kW)	Maximum Allowable Rod Load		Rated RPM
				Combined lbs. (kN)	Gas Load lbs. (kN)	
5HOS2	5 (127.0)	2	2,400 (1790)	60,000 lb. (267)	69,000 lb. (307)	1,500
5HOS4	5 (127.0)	4	4,800 (3580)	60,000 lb. (267)	69,000 lb. (307)	1,500
5HOS6	5 (127.0)	6	7,200 (5370)	60,000 lb. (267)	69,000 lb. (307)	1,500
6HOS2	6 (152.4)	2	2,000 (1492)	60,000 lb. (267)	69,000 lb. (307)	1,200
6HOS4	6 (152.4)	4	4,000 (2983)	60,000 lb. (267)	69,000 lb. (307)	1,200
6HOS6	6 (152.4)	6	6,000 (4475)	60,000 lb. (267)	69,000 lb. (307)	1,200
7HOS2	7 (177.8)	2	2,200 (1641)	60,000 lb. (267)	69,000 lb. (307)	1,000
7HOS4	7 (177.8)	4	4,400 (3281)	60,000 lb. (267)	69,000 lb. (307)	1,000
7HOS6	7 (177.8)	6	6,000 (4475)	60,000 lb. (267)	69,000 lb. (307)	1,000

## Standard Equipment

### Compressor Frame Components

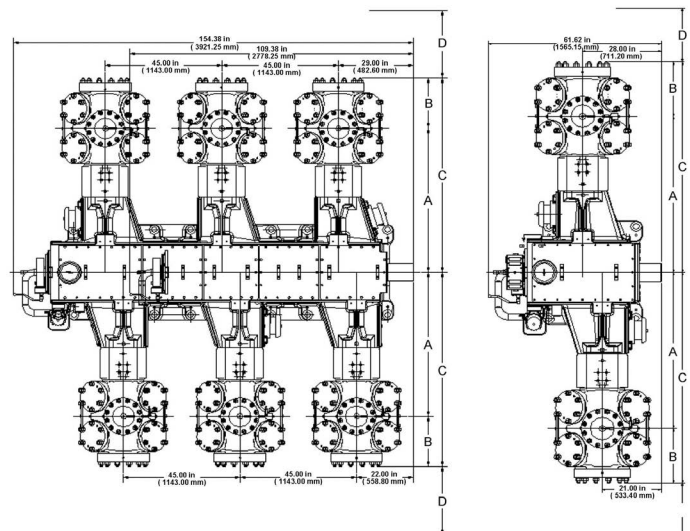
- Rigid cast gray iron frame, heavily ribbed and reinforced with integrally cast crosshead extensions; open frame top construction with steel tie rods, cast iron spacers and an individual cover over each section.
- Forged alloy steel crankshaft with passages for pressure lubrication, counterweighted to reduce horizontal moments.
- Forged alloy steel connecting rods, rifle-drilled for pressure lubrication.
- Nodular Iron crossheads, pressure lubricated, with babbitted running surfaces.
- Horizontally-split, precision-type aluminum main bearings.
- Solid bronze connecting rod bearings.
- Bronze thrust bearings.
- Crankcase filter-breather.
- Metallic oil wiper rings.
- Main lube oil pump direct driven from crankshaft with relief valve.
- Twenty five micron full-flow oil filter with cartridge-type cleanable elements and differential pressure gauge.
- Shell-and-tube oil cooler.
- Bulls-eye oil level gauge.
- Direct driven forced fed cylinder lubrication system.
- Set of special tools consisting of crosshead nut wrench and piston rod entering sleeve. One set provided per frame.

### Compressor Cylinder Components

- Cylinders are available in jacketed or non-jacketed configurations
  - cylinder bores larger than 15.00" in. (381.0 mm) are all jacketed.
- Cast nodular iron bore cylinder barrel with integral crank-end head.
- Forged steel lined cylinders.
- Iron, aluminum or steel pistons.
- Supernut piston nut.
- Magnum HammerHead valves with non-metallic PEEK elements and 17-7 PH stainless steel springs or PF-style valves complete with Hi-Temp, non-metallic PEEK plates and chrome silicon springs.
- Roll threaded AISI 4142 steel piston rods w/supernut.
- Filled Teflon® combination piston rings.
- Filled Teflon® piston rod packing rings.
- .50" NPT plugged connections for indicator ports on outer end and frame end of all cylinders.
- .75" NPT plugged connections for RTD's on each inlet and discharge cylinder connection.
- Variable Volume Clearance Pockets.
- One reproducible print of certified outline drawings or electronic DWG format.

### Specifications

Frame	One-piece, cast gray iron, high-strength
Crankshaft	Forged steel
Connecting rods	Forged steel
Connecting rod bolts	Alloy steel, rolled threads
Crosshead bolt-on shoes	Nodular iron, aluminum shoes
Crosshead integral shoes	Nodular iron babbitt running shoes
Crosshead pins	Hardened steel
Bearings - main	Aluminum with micro-babbitt overlay
Bushings - crankpin	Tri-metal bronze
Bushings - connecting rod & crosshead	Tri-metal bronze
Oil pump	Positive displacement gear-type
Oil filter	Full-flow, 25 micron
Oil cooler	Shell-and-tube
Cylinders	Nodular iron and gray iron
Pistons	One or two piece; iron, aluminum or steel
Piston rods	Alloy steel, rolled threads
Piston rod packing rings	Filled Teflon®



Cylinder Size in. (mm)	MAWP PSIG (bar)				Clearance to Remove Piston Rod	
	LP	HP	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)
4.75 (120.7)	1925 (133.7)		58 (1473)	18 (457)	76 (1930)	48 (1219)
6.00 (152.4)	1,925 (133.7)	2,750 (189.6)	59.62 (1,515)	21 (533)	80 (2,032)	52 (1,321)
7.00 (177.8)	1,650 (113.8)	2,750 (189.6)	58 (1,473)	18 (457)	76 (1,930)	40 (1,016)
8.00 (203.2)	1,575 (108.6)	2,200 (151.7)	59 (1,499)	20 (508)	79 (2,007)	41 (1,041)
9.00 (228.6)	1,265 (87.2)	2,400 (165.5)	57.5 (1,461)	19 (486)	76 (1930)	38 (965)
9.50 (241.3)	1,265 (87.2)	1,925 (133.7)	57.5 (1,461)	19 (486)	76 (1,930)	38 (965)
10.00 (254.0)	1,025 (70.7)	1,650 (113.8)	57.5 (1,461)	19 (486)	76 (1,930)	42 (1,067)
10.50 (266.7)	1,025 (70.7)	1,650 (113.8)	57.5 (1,461)	19 (486)	76 (1,930)	42 (1,067)
11.50 (292.1)	885 (61.0)	1,265 (87.2)	57 (1,448)	18 (457)	75 (1,905)	37 (940)
12.25 (311.1)		1,050 (72.4)	57.75 (1,467)	19 (486)	77 (1,956)	42 (1,067)
13.00 (330.2)	644 (44.4)	970 (66.9)	57.75 (1,467)	19 (486)	77 (1,956)	42 (1,067)
14.00 (355.6)		750 (51.7)	58.5 (1,486)	20 (508)	79 (2,007)	39 (991)
15.00 (381.0)	495 (34.1)	745 (51.4)	58.5 (1,486)	20 (508)	79 (2,007)	39 (991)
*16.25 (412.7)		600 (41.4)	58.75 (1,492)	20 (508)	79 (2,007)	40 (1,016)
*17.50 (444.5)		545 (37.6)	58.75 (1,492)	20 (508)	79 (2,007)	40 (1,016)
*19.00 (482.6)		470 (32.4)	59.5 (1,511)	21 (533)	80 (2,032)	41 (1,041)
*20.50 (520.7)		470 (32.4)	59.5 (1,511)	21 (533)	80 (2,032)	41 (1,041)
22.00 (558.8)		350 (24.1)	62.5 (1,588)	23 (584)	86 (2,184)	48 (1,219)
*23.00 (584.2)		350 (24.1)	62.5 (1,588)	23 (584)	86 (2,184)	48 (1,219)
*24.50 (622.3)		280 (19.3)	62.5 (1,588)	24 (610)	86 (2,184)	48 (1,219)
26.00 (660.4)		280 (19.3)	61.75 (1,570)	22 (559)	84 (2,134)	32 (813)
26.50 (673.1)		280 (19.3)	61.75 (1,570)	22 (559)	84 (2,134)	32 (813)
28.00 (711.2)		185 (12.8)	61.75 (1,570)	22 (559)	84 (2,134)	32 (813)
3.75 (95.3) To 7.00 (177.8)	6,600 (455.1) or 4,000 (275.8) 10,000 (689.5)**		Varies depending on piping needs. * Flanges are offset from piston rod centerline. ** Contact HSRC team for more information.			

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