

# SOUR GAS COMPRESSORS

## Single-Stage

HDS162C

HDS362C

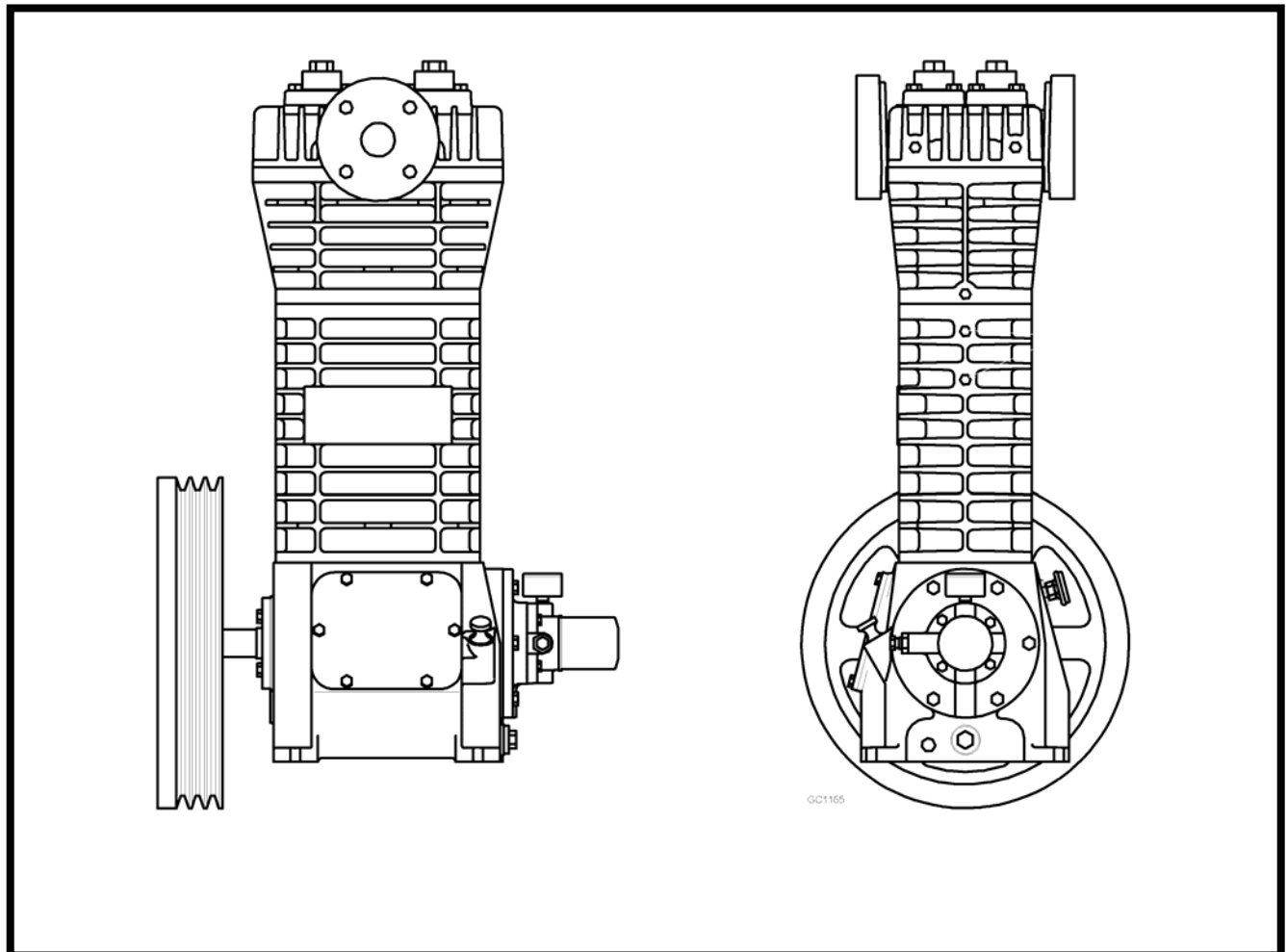
HDS602C

## Two-Stage

HDS172C

HDS372C

HDS612C



**Non-Lube**

**Air-Cooled**

# SPECIFICATIONS

## Single-Stage Models

Air-Cooled Double-Seal	HDS162C	HDS362C	HDS602C
Number of Cylinders	2	2	2
Bore - in. (mm)	3.0 (76.2)	4.0 (102)	4.625 (117)
Stroke - in. (mm)	2.5 (63.5)	3.0 (76)	4.0 (102)
MAWP - psia (kPa)	350 (2,413)	350 (2,413)	350 (2,413)
Piston rod dia. - in. (mm)	0.75 (19.1)	0.75 (19.1)	1.25 (31.8)
Minimum / Maximum RPM	350 / 825	350 / 825	350 / 825
Piston Displacement			
@ 100 rpm - CFM (m <sup>3</sup> /hr)	2.05 (3.48)	4.36 (7.41)	7.78 (13.2)
@ Min rpm - CFM (m <sup>3</sup> /hr)	7.16 (12.2)	15.3 (26.0)	27.2 (46.3)
@ Max rpm - CFM (m <sup>3</sup> /hr)	16.9 (28.7)	36.0 (61.2)	64.2 (109.0)
Max. BHP (kw)	10 (7.5)	15 (11)	40 (30)
Wt. w/ Flywheel - lb. (kg)	~225 (102)	~375 (170)	~705 (320)
Inlet & Outlet Connections	0.75" NPT	1.5" ANSI 300#	2" ANSI 300#
Maximum H <sub>2</sub> S	8%	8%	8%

## Two-Stage Models

Air-Cooled Double-Seal	HDS172C	HDS372C	HDS612C
Number of Cylinders	2	2	2
Bore - in. (mm)	3.0 (76.2) x 1.75 (44.5)	4.63 (117) x 2.69 (68)	6 (152) x 3.25 (83)
Stroke - in. (mm)	2.5 (63.5)	3.0 (76)	4.0 (102)
MAWP - psia (kPa)	615 (4,241)	615 (4,241)	415 (2,862)
Piston rod dia. - in. (mm)	0.75 (19.1)	0.75 (19.1)	1.25 (31.8)
Minimum / Maximum RPM	350 / 825	350 / 825	350 / 825
Piston Displacement			
@ 100 rpm - CFM (m <sup>3</sup> /hr)	1.02 (1.73)	2.92 (4.96)	6.54 (11.1)
@ Min rpm - CFM (m <sup>3</sup> /hr)	3.57 (6.07)	10.2 (17.3)	22.9 (38.9)
@ Max rpm - CFM (m <sup>3</sup> /hr)	8.42 (14.3)	24.1 (40.8)	53.7 (91.2)
Max. BHP (kw)	10 (7.5)	15 (11)	40 (30)
Wt. w/ Flywheel - lb. (kg)	~245 (111)	~405 (184)	~775 (352)
Inlet & Outlet Connections	0.75" NPT	1.25" x 1" NPT	2" x 1.5" NPT or Weld
Maximum H <sub>2</sub> S	8%	8%	8%

# MATERIALS of CONSTRUCTION

Cylinder, Head & Guide	Ductile Iron (A536 65-45-12 Nodular)
Pistons	Steel
Piston Rings	Glass & Moly Filled PTFE
Piston Rods	BSR Annealed Alloy Steel
Valves	Ductile Iron with PEEK Plates
Rod Packing	PTFE
Packing Springs	Stainless Steel
Packing Box	Steel
Crankshaft	Ductile Iron (A536 100-70-03 Nodular)
Connecting Rods	Ductile Iron (A536 60-40-18 Nodular)
Wrist Pin	Steel
Bearing, Wrist Pin	Steel Needle Bearing
Bearings, Rod	Babbitt Lined Steel Backed
Bearings, Crank	Tapered Roller
O-rings	PTFE
Cylinder & Head Fasteners	Stainless Steel
Retainer Rings	Stainless Steel
Metal Gaskets	Iron
Other Gaskets	Fiber (non Asbestos)
Crankcase, Crosshead	Gray Iron

## FEATURES

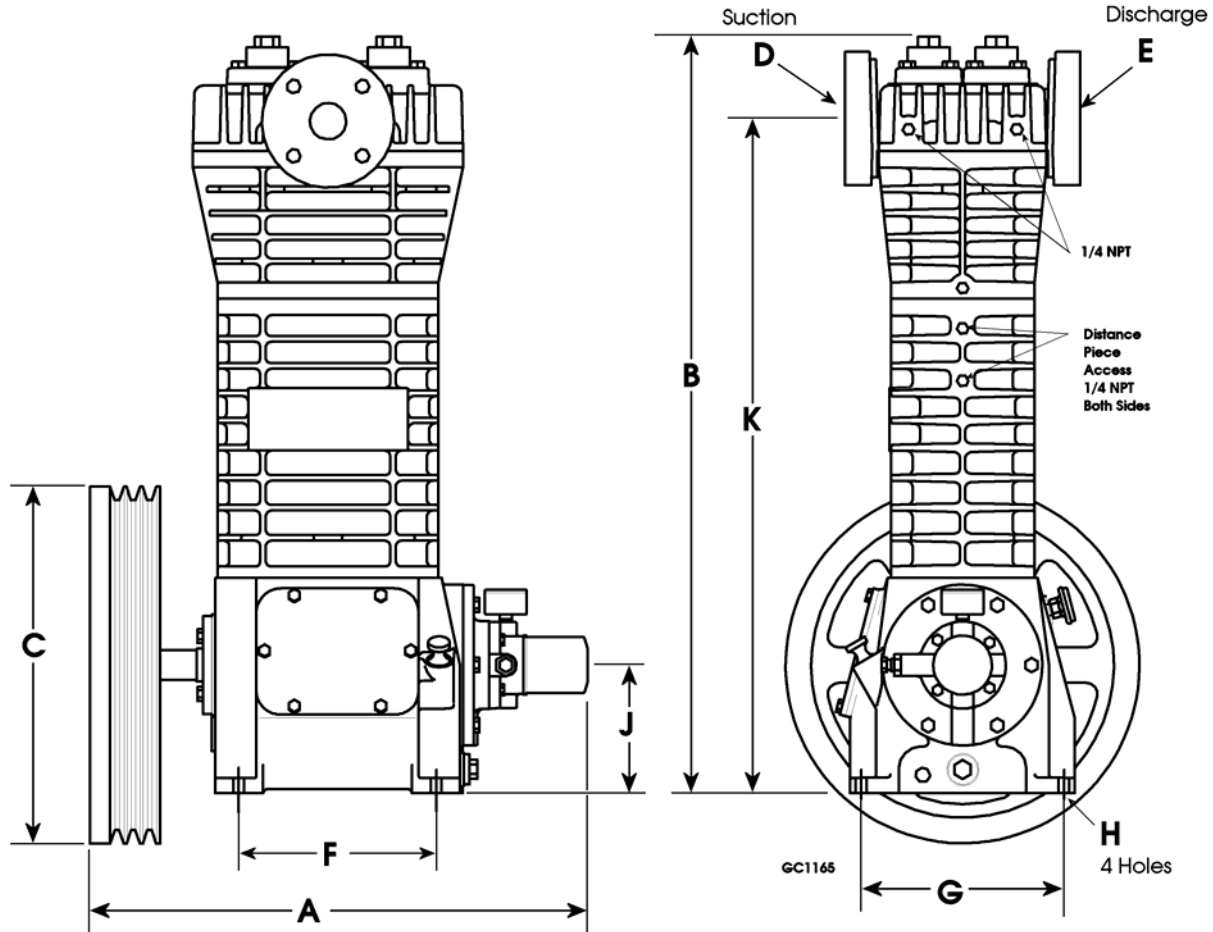
- Stainless Steel fasteners in all gas containment areas.
- Select parts of reduced hardness material for sour gas application compatibility.
- Ductile Iron Head & Cylinder provide toughness & strength unmatched by cast iron.
- Extra thick piston rings provide more wear surface to provide greater ring life.
- O-ring head gaskets provide positive sealing under all operating conditions. No asbestos to worry about, and materials are available to suit any application.
- Double-Seal (single distance piece) construction.
- One piece steel pistons are attached to the piston rod via one positive locking nut.
- Flanged Connections (most models) allow maximum piping flexibility.
- Self-adjusting PTFE piston rod seals provide maximum sealing & minimum friction.
- Steel wrist pins ride on steel needle bearings for extra life under severe conditions.
- Iron crossheads feature special machined lube channels and porting for maximum lubrication and wear resistance.
- Pressure lubricated crankcase via a self reversing oil pump directly driven by the crankshaft. Oil is fed to all bearing surfaces, including the crosshead. A spin-on oil filter is standard.

## OPTIONS

- TNT-12 Corrosion/Wear Resistant Treatment
- Stainless Steel Hoerbiger Valves
- Oversized Flywheels
- Extended crankshaft
- Baseplates – Formed or Structural Steel
- Belt guards: Steel, Aluminum or Stainless
- Epoxy paint systems
- Repair tool kits



# DIMENSIONS



In. (mm)

Model	A	B	C	D	E	F	G	H	J	K
HDS162C	21.9 (556)	29.7 (755)	16.35 (415)	3/4" NPT	3/4" NPT	7.5 (191)	7.38 (187)	0.44 (11)	5.37 (136)	27.34 (694)
HDS362C	23.4 (594)	34.7 (880)	16.35 (415)	1.5" ANSI 300#	1.5" ANSI 300#	9.12 (232)	9.37 (238)	0.5 (12.7)	5.88 (149)	30.79 (782)
HDS602C	25.6 (650)	41.0 (1,042)	20.35 (517)	2" ANSI 300#	2" ANSI 300#	10.5 (267)	12.0 (305)	0.56 (14.2)	8.25 (210)	37.0 (940)
HDS172C	21.9 (556)	29.7 (755)	16.35 (415)	3/4" NPT	3/4" NPT	7.5 (191)	7.38 (187)	0.44 (11)	5.37 (136)	27.37 (695)
HDS372C	23.4 (594)	34.7 (880)	16.35 (415)	1 1/4" NPT	1" NPT	9.12 (232)	9.37 (238)	0.5 (12.7)	5.88 (149)	30.79 (782)
HDS612C	26.4 (671)	41.3 (1,204)	20.35 (517)	2**	1.5**	10.5 (267)	12.0 (305)	0.56 (14.2)	8.25 (210)	37.22 (1,101)

\*\* 2"NPT, 1.5"NPT, 2"WELD, & 1.5"WELD Available

