

Pump Aggregat HPS THE with CAT C9/Hydraulic Drive



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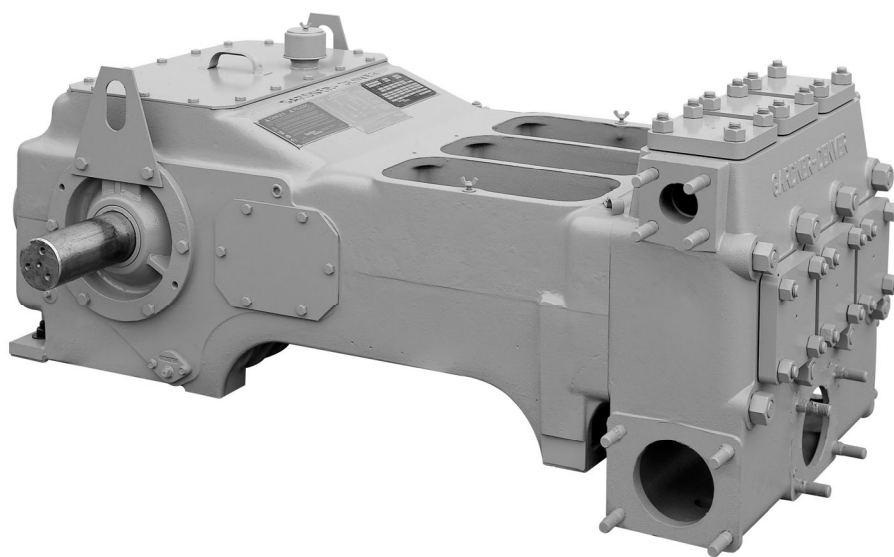
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Model THE HORIZONTAL DRILLING DUTY PUMP

SPECIFICATIONS:

Maximum BHP: 215 (160 kw)
Maximum RPM: 300
No. of Plungers: 3
Stroke Length: 5 in. (127 mm)
Plunger Load: 37,000 lbs. (16,965 kg)
Discharge Hydrostatic Test Pressure
3,600 psi (1,633 kg/cm²)
Oil Capacity: 12 gal. (45 liters)
Pump Weight: 3,990 lbs. (1,810 kg)



PERFORMANCE RATINGS

Piston/Liner Size		Displacement per Revolution		Displacement at Pump RPM											
				50				100				150			
in.	mm	GPR	LPR	GPM	LPM	PSI	kg/cm ²	GPM	LPM	PSI	kg/cm ²	GPM	LPM	PSI	kg/cm ²
5" Cast Fluid End															
4	102	0.816	3.089	41	154	2944	206	82	309	2944	206	122	463	2718	191
4.5	114	1.032	3.907	52	195	2326	163	103	391	2326	163	155	588	2100	148
5	127	1.274	4.824	64	241	1884	132	127	482	1884	132	191	724	1700	120
5.5	140	1.542	5.837	77	292	1557	109	154	584	1557	109	231	876	1435	100
Input Power:		BHP		79				156				215			
		kW		59				116				160			
Piston/Liner Size		Displacement per Revolution		Displacement at Pump RPM											
				200				250				300			
in.	mm	GPR	LPR	GPM	LPM	PSI	kg/cm ²	GPM	LPM	PSI	kg/cm ²	GPM	LPM	PSI	kg/cm ²
5" Cast Fluid End															
4	102	.816	3.089	163	618	2034	143	204	772	1625	114	245	927	1354	95
4.5	114	1.032	3.907	206	781	1600	112	258	977	1280	90	310	1173	1070	75
5	127	1.274	4.824	255	965	1300	91	319	1206	1040	73	383	1448	870	61
5.5	140	1.542	5.837	308	1167	1076	76	386	1460	860	60	462	1752	720	51
Input Power:		BHP		215				215				215			
		kW		160				160				160			

A lubrication system supplying oil at 50 psi, 12 gpm and 200 SUS (44cSt) minimum values is required. Oil cooling is recommended and may be required to maintain these values.

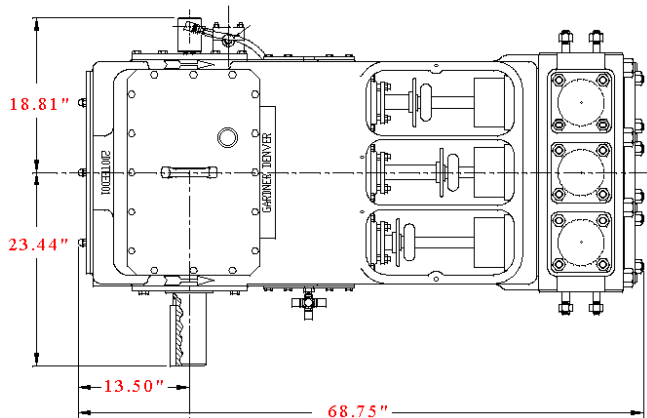
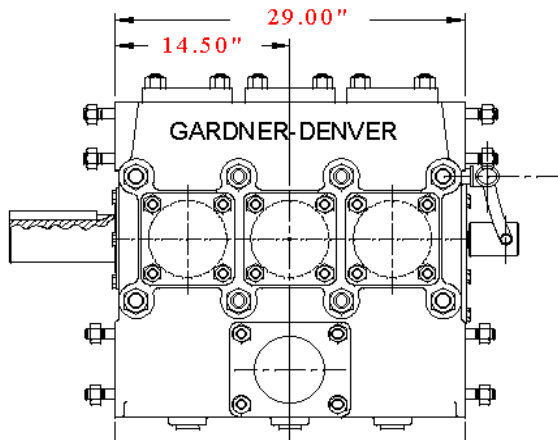
For operation in the Yellow shaded area expendable part life decreases and excellent NPSH is required to prevent cavitation.

Performance figures based on 100% volumetric efficiency and 90% mechanical efficiency. These figures are for use in directional drilling duty cycle.

*This equals full rod load 33% of the time, 60% rod load 50% of the time and 25% rod load 17% of the time, for a total of 1456 hours per year.



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Note: All installations must contain a pressure relief valve in the discharge line near the pump to help prevent breakage.

STANDARD EQUIPMENT

- Eccentric construction
- Left or right side suction and discharge connections
- Left or right hand keyed shaft extension
- Pressure lubricated power end (via engine driven oil pump – not supplied)
- Bronze rod and eccentric bearings
- Fluid end, cast nodular iron
- Solid connecting rods
- Stainless steel, abrasion resistant, wing-guided valves
- Piston and liner construction
- Clamp style connections between piston rod and crosshead extensions
- Chrome liners in 4, 4.5, 5 and 5.5 inch sizes
- Rod wash spray bar and baffles

OPTIONAL EQUIPMENT

- Splined drive shaft:
O.D. 3.833", Class 5 fit, 6/12 pitch, 22 teeth
- Flange for gear reducer
- Ceramic sleeved liners

Suction Flange Size 6" ▪ Discharge Flange Size 3"

Dimensions: Length 36.50", Width 38.75", Height 17.375"

**Gardner
Denver**



For additional information contact your local representative or
Gardner Denver Pump Division,
1800 Gardner Expressway, Quincy, Illinois 62301
Customer Service Department
Telephone: (800) 682-9868 FAX: (217) 224-7814
Sales and Service in all major cities.

Gerätepass

Serien Nr.:

Baujahr:



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1 Technische Daten

1.1 Maße des Pumpcontainers

Schallgedämpter 20-ft.-Container mit folgenden Maßen:

- Länge: 6100 mm
- Breite: 2460 mm
- Höhe : 2700 mm
- Gewicht: 10500 KG

1.2 Leistungsdaten Motor

Caterpillar Model C-9, 242 kW, Ser.Nr.:

- Zertifiziert nach EU Stufe IIIa
- Leistung: 242 KW bei 2100 r/min

1.3 Leistungsdaten Getriebe/Hydraulikantrieb

Radialkolbenmotor Hägglunds CA 50 32 SA0N00 02 00

Ser.Nr.: K50P24438

Axialkolbenpumpe Bosch A4VG180EP4DM1/32L-NSD02F021DP

Ser.Nr.: 91148736

Axialkolbenpumpe Bosch A4VG180EP4DM1/32L-NSD02F011DP

Ser.Nr.: 91148740

Pumpenverteilergetriebe Technodrive AM 345 B

Ser.Nr.: 2372892

- Untersetzung: i=1:1
- Eingangsdrehmoment:max. max. 1620Nm
- Abtriebsmoment: max. 810 Nm je Pumpe

1.2.2 Leistungsdaten Hochdruckpumpe

Gardner Denver Hochdruckpumpe Typ THE, Serien-Nr.:

- Antriebsflansch: Spicer Serie 1800
- Eingangsdrehrichtung: Uhrzeigersinn auf Flansch gesehen
- Eingangsdrehzahl: max. 300 min⁻¹
- Kurbelwelle: Kugelgrafitgusseisen
- Kreuzköpfe: Gusseisen mit Bronze Bolzenhülsen
- Gehäuse: Gusseisen
- Ölsystem: Zahnradpumpe mit Antrieb vom E-Motor
- Ölfilter: Auswechselbare Filterelemente
(System Schröder, 2 Elemente)
- Ölmenge: 50 L.
- Öltyp: Mobil SHC-632
- Öldruck: 80-116 psi (5,5-8 bar)
- Gewicht trocken: 1810 kg

1.2.3 Leistungsdaten Fluid End

Fluid End Typ:	(Flüssigkeitshochdruckteil)
Ausführung:	Kugelgrafitgusseisen
Liner:	Chrom
Piston:	Chrom
Ventiltyp:	Geführte Ventile aus rostfreien Stahl
Hochdruckdichtung:	Spezial Packung
Hochdruckanschluß:	2“ Weco 602 Female bzw: 2“ Gewinde Weco 1502 Female
Plungerölsystem:	ca. 100L. Wasservorrat durch Tauchpumpe beaufschlagt

Arbeitsdruck max. 4“-5-1/2“: 720-2944 psig

Fördervolumen max: 41-462 gpm (je nach Piston Größe)