ENGINEERING TOMORROW

Data Sheet

Rugid
Cast Iron Group 2.5 XD Pump



The XD Series Cast Iron Gear Pump is specifically designed for high flow applications demanding peak performance and long life in extreme operating conditions.

Displacement:

34 to 90cc (2.04 – 5.40 cir)

Pressure:

Rated - 276 bar (4000 psi)

Peak - 303 bar (4400 psi)

Temperature:

Continuous - 104°C (220°F)

Intermittent - 115°C (239°F)

The XD pump utilizes many of the rugged design features of the D Series product line, including durable cast iron construction, advanced pressure plate design, Viton seals and high capacity journal bearings.

Typical applications for the XD include: mining, construction, agriculture, material handling, forestry, the marine industry, transportation and the petroleum industry.

The XD Cast Iron Gear Pump is ideal for mobile equipment applications with aggressive duty cycles, severe temperatures and demanding performance requirements.

Features

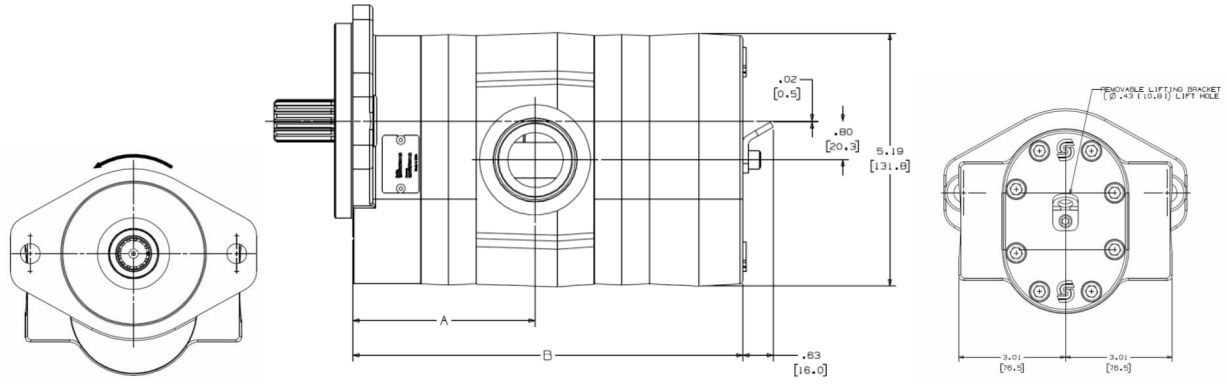
- High strength, cast iron construction offers thermal stability, contamination resistance, and strength for consistent performance and durability in severe duty cycle applications.
- Advanced pressure-balanced load plates optimize volumetric efficiency across the range of operating speeds and pressures.
- Heavy duty, low friction bearings provide long life in low viscosity, high pressure conditions.
- Forward located bearings integrated into the front flange increase radial and axial load capacity, eliminating the need for a typical bolt-on outrigger assembly.

Comprehensive technical literature is online at *www.danfoss.com*

Technical Specifications

Parameters	Unit	34	38	41	45	51	58	64	72	76	82	90
Displacement	cm^3/rev	34.0	38.0	41.0	45.0	50.8	58.0	63.6	72.2	76.0	82.0	90.2
	in^3/rev	2.08	2.32	2.50	2.74	3.10	3.54	3.88	4.40	4.64	5.00	5.50
Rated Pressure	bar	276	276	276	276	276	276	255	226	215	200	180
	psi	4000	4000	4000	4000	4000	4000	3700	3275	3100	2880	2620
Peak Pressure	bar	303	303	303	303	303	303	285	250	235	220	200
	psi	4400	4400	4400	4400	4400	4400	4130	3625	3400	3200	2900
Maximum Speed	rpm	3400	3400	3400	3400	3400	3200	3000	2750	2700	2500	2275
Theoretical flow at max speed	l/min	116	129	139	153	173	186	191	199	205	205	205
	US gal/min	31	34	37	40	46	49	50	52	54	54	54
Dimension A	mm	82.9	85	86.5	88.3	91.3	94.9	97.7	102	104	106.8	111.1
	in	3.27	3.35	3.41	3.48	3.6	3.74	3.85	4.02	4.1	4.21	4.38
Dimension B	mm	179.1	183.1	186.2	189.7	195.8	202.9	208.5	217.2	221.2	226.8	235.5
	in	7.05	7.21	7.33	7.47	7.71	7.99	8.21	8.55	8.71	8.93	9.27

Schematic



Product features

Construction	Heavy duty ductile iron
Displacements	34 to 90 cm^3/rev
	[2.04 to 5.40 in^3/rev]
Pressure	276 bar [4000 psi]
Speed	600-3400 rpm
Operating Temperature	-30°C [-20°F] minimum cold start
	104°C [220°F] normal conditions
	113°C [235°F] peak intermittent
Fluid Viscosity	10 mm^2/sec (cSt) [60 SUS] min
	1600 mm^2/sec (cSt) [7500 SUS] max

Mounting	SAE-B, 2- bolt
Shaft	Spline - SAE 15 tooth
	Straight key - 25mm (1 inch)
Optional Shaft(Reduced torque)	Spline – SAE 13
	Straight key – 22 (7/8 inch)
	1:8 Taper – 22mm (7/8) with key
Inlet Ports	SAE 1.25 SAE split flange, 1 5/8-12 ORB
	1.50 inch (38mm) beaded tube
Outlet Ports	SAE 1.25 SAE split flange, 1 5/8-12 ORB
Filtration	22/18/13 ISO 4406 at pump inlet

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