

BD-30 Forged Fluid End Triplex Plunger Pump

SPECIFICATIONS:

Max. Plunger Size, in. (mm):
2.250 (57.2)

Stroke Length, in. (mm):
2.750 (69.9)

Rated BHP at 500 rpm (kW):
33 (25)

Rated plunger load, pounds (N):
2,825 (12,566)

Maximum discharge working pressure:
psi(kPa):

- "L" model: 1,362 (9,391)
- "M" model: 3,597 (24,800)

Crankshaft extension, in.(mm):
Diameter: 1.875 (47.6)
Length: 3.750 (95.3)
Key (width x depth): 1/2 X 1/2 (12.7 X 12.7)

Oil Capacity, gallons (L):
Crankcase: 1.5 (5.7)

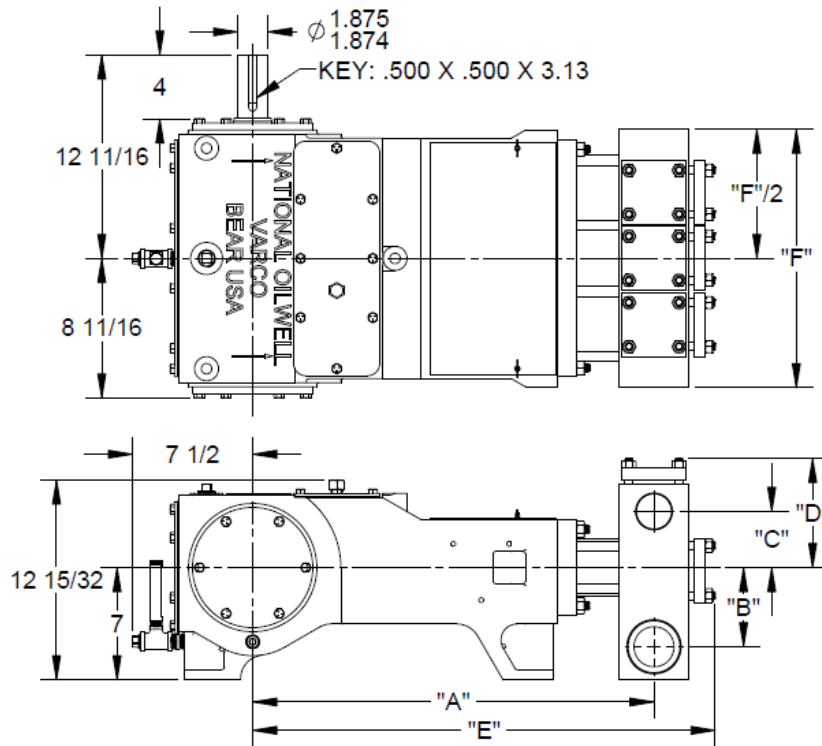
Weight, pump w/ wood skids pounds (Kg):
• "L": 655 (297)
• "M": 600 (272)

Standard Materials Fluid End:

- Carbon Steel
- Stainless Steel

Crankshaft Options:

- Right Hand Drive
- Left Hand Drive



Pump Model	Fluid End Connections		Dimensions in inches (mm)					
	Discharge Connection	Suction Connection	A	B	C	D	E	F
BD-30L	2" NPT	3" NPT	25-1/32 (636)	4-15/16 (125)	3-1/2 (89)	6-13/16 (173)	28-27/32 (733)	16-1/8 (410)
BD-30M	1-1/4" NPT	2" NPT	24-27/32 (631)	4-3/16 (106)	2-11/16 (68)	6-1/16 (154)	28-31/32 (736)	13-7/8 (352)

BD-30 Forged Fluid End Triplex Plunger Pump

Performance Data:

Pump	English Units					100 RPM		200 RPM		300 RPM		350 RPM		400 RPM		500 RPM	
	Plunger Dia. In.	Plunger Area Sq. In.	BPD per RPM	GPM per RPM	Max Press. PSI	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
BD-30L (2-1/4")	2.250	3.9761	4.8687	0.1420	710	487	14.2	974	28.4	1,461	42.6	1,704	49.7	1,947	56.8	2,434	71.0
	2.125	3.5466	4.3427	0.1267	797	434	12.7	869	25.3	1,303	38.0	1,520	44.3	1,737	50.7	2,171	63.3
	2.000	3.1416	3.8468	0.1122	899	385	11.2	769	22.4	1,154	33.7	1,346	39.3	1,539	44.9	1,923	56.1
	1.875	2.7612	3.3810	0.0986	1,023	338	9.9	676	19.7	1,014	29.6	1,183	34.5	1,352	39.4	1,691	49.3
	1.750	2.4053	2.9452	0.0859	1,174	295	8.6	589	17.2	884	25.8	1,031	30.1	1,178	34.4	1,473	43.0
	1.625	2.0739	2.5395	0.0741	1,362	254	7.4	508	14.8	762	22.2	889	25.9	1,016	29.6	1,270	37.0
BD-30M (1-1/2")	1.500	1.7671	2.1638	0.0631	1,599	216	6.3	433	12.6	649	18.9	757	22.1	866	25.2	1,082	31.6
	1.375	1.4849	1.8182	0.0530	1,902	182	5.3	364	10.6	545	15.9	636	18.6	727	21.2	909	26.5
	1.250	1.2272	1.5027	0.0438	2,302	150	4.4	301	8.8	451	13.1	526	15.3	601	17.5	751	21.9
	1.125	0.9940	1.2172	0.0355	2,842	122	3.6	243	7.1	365	10.7	426	12.4	487	14.2	609	17.8
	1.000	0.7854	0.9617	0.0280	3,597	96	2.8	192	5.6	289	8.4	337	9.8	385	11.2	481	14.0
Brake Horsepower Required						7		13		20		23		26		33	

Pump	Metric Units					100 RPM		200 RPM		300 RPM		350 RPM		400 RPM		500 RPM	
	Plunger Dia. cm	Plunger Area cm ²	M ³ /Hr per RPM	L/Sec. Per RPM	Max Press. kPa	M ³ /Hr.	L/Sec.	M ³ /Hr.	L/Sec.	M ³ /Hr.	L/Sec.	M ³ /Hr.	L/Sec.	M ³ /Hr.	L/Sec.	M ³ /Hr.	L/Sec.
BD-30L (2-1/4")	57	25.6520	0.0321	0.0090	4,899	3.21	0.90	6.43	1.79	9.64	2.69	11.25	3.14	12.85	3.58	16.07	4.48
	54	22.8810	0.0287	0.0080	5,492	2.87	0.80	5.73	1.60	8.60	2.40	10.03	2.80	11.46	3.20	14.33	4.00
	51	20.2683	0.0254	0.0071	6,200	2.54	0.71	5.08	1.42	7.62	2.12	8.89	2.48	10.16	2.83	12.69	3.54
	48	17.8139	0.0223	0.0062	7,054	2.23	0.62	4.46	1.24	6.69	1.87	7.81	2.18	8.93	2.49	11.16	3.11
	44	15.5179	0.0194	0.0054	8,098	1.94	0.54	3.89	1.08	5.83	1.63	6.80	1.90	7.78	2.17	9.72	2.71
	41	13.3802	0.0168	0.0047	9,392	1.68	0.47	3.35	0.93	5.03	1.40	5.87	1.64	6.70	1.87	8.38	2.34
BD-30M (1-1/2")	38	11.4009	0.0143	0.0040	11,022	1.43	0.40	2.86	0.80	4.28	1.19	5.00	1.39	5.71	1.59	7.14	1.99
	35	9.5799	0.0120	0.0033	13,117	1.20	0.33	2.40	0.67	3.60	1.00	4.20	1.17	4.80	1.34	6.00	1.67
	32	7.9173	0.0099	0.0028	15,872	0.99	0.28	1.98	0.55	2.98	0.83	3.47	0.97	3.97	1.11	4.96	1.38
	29	6.4130	0.0080	0.0022	19,595	0.80	0.22	1.61	0.45	2.41	0.67	2.81	0.78	3.21	0.90	4.02	1.12
	25	5.0671	0.0063	0.0018	24,800	0.63	0.18	1.27	0.35	1.90	0.53	2.22	0.62	2.54	0.71	3.17	0.88
Kilowatts Required						5		10		15		17		19		25	

Volumetric Rate based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 90% mechanical Efficiency.

Volumetric Rate is based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 90% Mechanical Efficiency. For Operation below 100 RPM, an auxiliary lubrication system is required. Not all plunger sizes are shown. Contact National Oilwell Varco for additional information.

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Authorized Distributor:



6750 S 57th W Ave
Tulsa, OK 74131
Phone: 918-447-4600

BD-30 Cast Fluid End Triplex Plunger Pump

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2.250 (57.2)

Stroke Length, in. (mm):
2.750 (69.9)

Rated BHP at 500 rpm (kW):
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 • "LCF" model: 1,362 (9,392)
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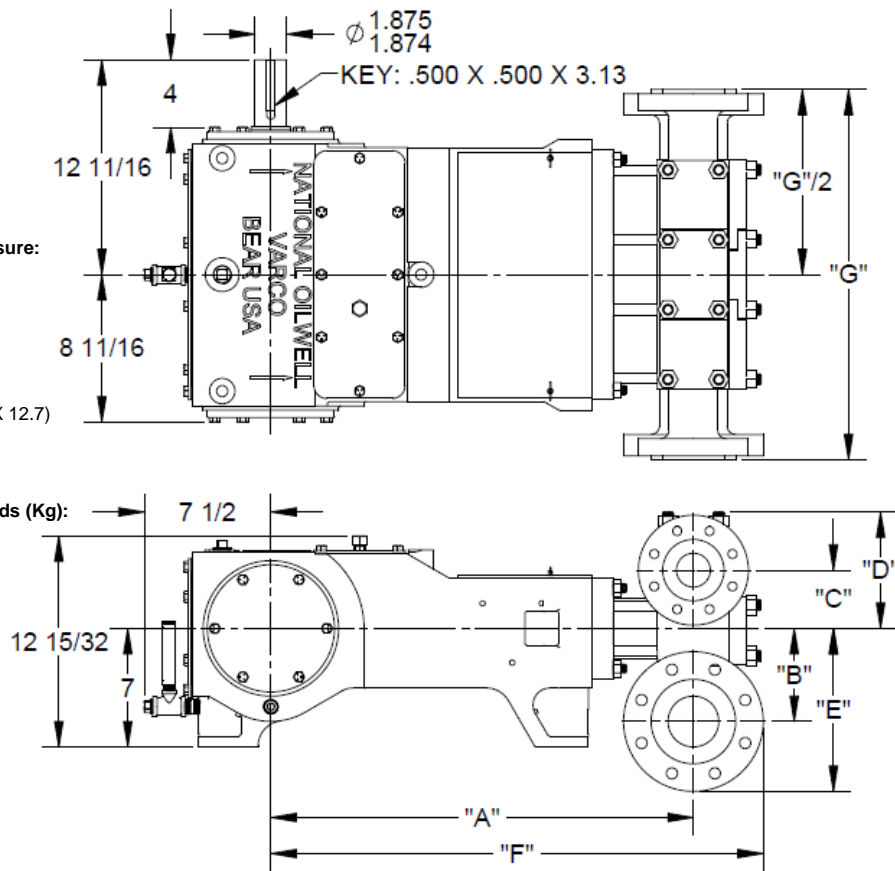
Crankshaft extension, in.(mm):
Diameter: 1.875 (47.6)
Length: 3.750 (95.3)
Key (width x depth): 1/2 X 1/2 (12.7 X 12.7)

Oil Capacity, gallons (L):
Crankcase: 1.5 (5.7)

Weight, pump w/ wood skids pounds (Kg):
 • "LCF": 655 (297)
 • "MCF": 600 (272)

Standard Materials Fluid End:
 • Alloy Steel
 • Super Duplex Stainless Steel

Crankshaft Options:
 • Right Hand Drive
 • Left Hand Drive



Pump Model	Fluid End Connections		Dimensions in inches (mm)						
	Discharge Connection	Suction Connection	A	B	C	D	E	F	G
BD-30LCF	2" FLANGE 600#-300#	3" FLANGE 600#-150#	24-15/16 (633)	5-1/2 (140)	3-7/16 (87)	6-7/8 (175)	9-5/8 (244)	29-1/16 (738)	21-7/8 (556)
BD-30MCF	1-1/4" FLANGE 600#-300#	2" FLANGE 600#-150#	25 (635)	4-3/8 (111)	2-15/16 (75)	5-9/16 (141)	7-5/8 (194)	28-1/4 (716)	20-3/4 (527)

BD-30 Cast Fluid End Triplex Plunger Pump

Performance Data:

Pump	English Units					100 RPM		200 RPM		300 RPM		350 RPM		400 RPM		500 RPM	
	Plunger Dia. In.	Plunger Area Sq. In.	BPD per RPM	GPM per RPM	Max Press. PSI	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
BD-30LCF (2-1/4")	2.250	3.9761	4.8687	0.1420	710	487	14.2	974	28.4	1,461	42.6	1,704	49.7	1,947	56.8	2,434	71.0
	2.125	3.5466	4.3427	0.1267	797	434	12.7	869	25.3	1,303	38.0	1,520	44.3	1,737	50.7	2,171	63.3
	2.000	3.1416	3.8468	0.1122	899	385	11.2	769	22.4	1,154	33.7	1,346	39.3	1,539	44.9	1,923	56.1
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	29	6.4130	0.0080	0.0022	19,595	0.80	0.22	1.61	0.45	2.41	0.67	2.81	0.78	3.21	0.90	4.02	1.12
	25	5.0671	0.0063	0.0018	24,800	0.63	0.18	1.27	0.35	1.90	0.53	2.22	0.62	2.54	0.71	3.17	0.88
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With flanged fluid ends, the max pressure for the flange rating supersedes the max pressure from the performance date.

Max Pressure per Flange Rating					
Rating	1500#	900#	600#	300#	150#
Max Pressure (psi)	3,525	2,113	1,409	704	200

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