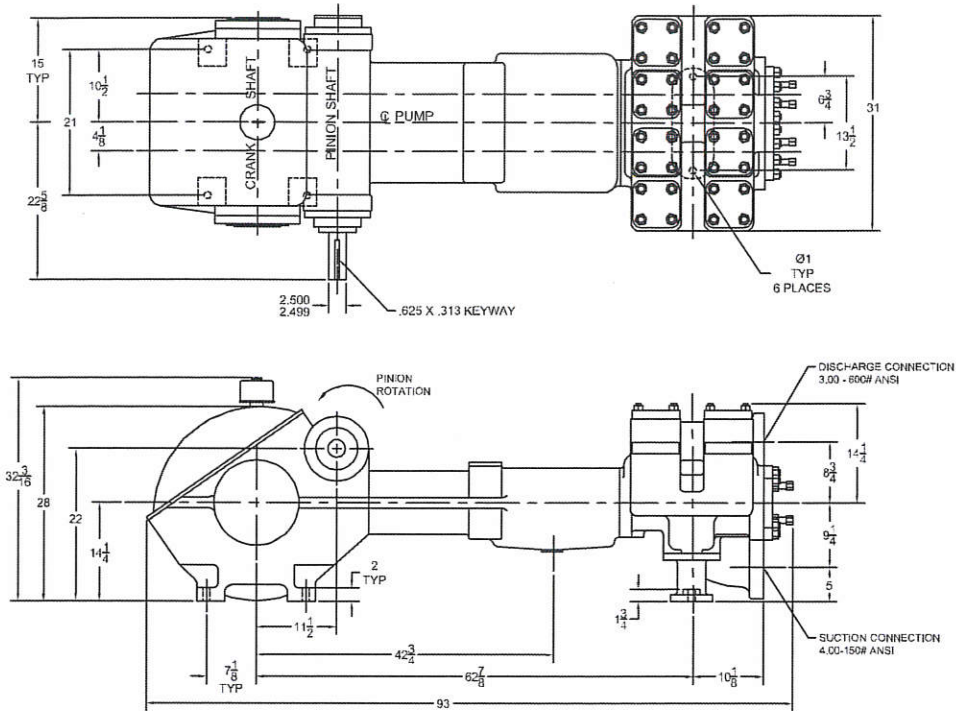


1550 Duplex Double-Acting Piston Pump



Specifications

Pump Size:

maximum piston size x stroke length, in.(mm):
5 x 10 (127.0 x 254.0)

Rated BHP (kW) at 85 RPM (Crankshaft speed):
74 (55)

Rated piston load, pounds (kg): 7475 (3391)

Maximum discharge pressure, psi (kPa):
1440 (9929)

Pinion gear ratio: 5.92:1

Pinion shaft extension:

Diameter, in.(mm): 2.500 (61.35)

Length, in.(mm): 6.813 (173.0)

Keyway: Width x Depth, in.(mm):

5/8 x 5/16 (15.9 x 7.9)

Maximum recommended sheave diameter,
in.(mm): 44 (1118)

For larger sheave diameters:

Contact Factory

Oil Capacity, gallons (L): 10.0 (37.85)

Weight, pump only on
wood shipping skids, pounds (kg): 3705 (1681)

Standard Materials for Fluid End Bodies:

Cast Carbon Steel

Cast Ductile Iron

Pump Model	Flange Connections	
	Discharge Connection Sizes	Suction Connection Sizes
1550	3 (76.2) ANSI 600 FF	4 (101.6) ANSI 150 FF

1550 Duplex Double-Acting Piston Pump

Performance Data

PUMP	English Units					25 RPM		40 RPM		55 RPM		70 RPM		85 RPM	
	Piston Dia.	Piston Area	BPD per RPM	GPM per RPM	Max. Press. PSI	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM
	In.	Sq. In.													
1550	2.500	4.9087	26.1908	0.7639	1400	655	19.1	1048	30.6	1441	42.0	1834	53.5	2227	64.9
	3.000	7.0686	39.0137	1.1379	1057	976	28.4	1561	45.5	2146	62.6	2731	79.7	3317	96.7
	3.500	9.6211	54.1680	1.5799	777	1355	39.5	2167	63.2	2980	86.9	3792	110.6	4605	134.3
	4.000	12.5664	71.6537	2.0899	595	1792	52.2	2867	83.6	3941	114.9	5016	146.3	6091	177.6
	4.500	15.9043	91.4708	2.6679	470	2287	66.7	3659	106.7	5031	146.7	6403	186.8	7776	226.8
	5.000	19.6349	113.6194	3.3139	381	2841	82.8	4545	132.6	6250	182.3	7954	232.0	9658	281.7
Brake Horsepower Required						22		35		48		61		74	

PUMP	Metric Units					25 RPM		40 RPM		55 RPM		70 RPM		85 RPM	
	Plunger Dia.	Plunger Area	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.
	mm	cm ²													
1550	64	31.669	0.1735	0.0482	9929	4.3	1.2	6.9	1.9	9.5	2.7	12.1	3.4	14.7	4.1
	76	45.604	0.2584	0.0718	7291	6.5	1.8	10.3	2.9	14.2	3.9	18.1	5.0	22.0	6.1
	89	62.072	0.3588	0.0997	5357	9.0	2.5	14.4	4.0	19.7	5.5	25.1	7.0	30.5	8.5
	102	81.073	0.4746	0.1319	4101	11.9	3.3	19.0	5.3	26.1	7.3	33.2	9.2	40.3	11.2
	114	102.608	0.6059	0.1683	3241	15.1	4.2	24.2	6.7	33.3	9.3	42.4	11.8	51.5	14.3
	127	126.677	0.7526	0.2091	2625	18.8	5.2	30.1	8.4	41.4	11.5	52.7	14.6	64.0	17.8
Kilowatts Required						16		26		36		45		55	

For operation below 54 RPM, an auxiliary lubrication system is required.

RPM shown is Crankshaft speed. For Pinion Shaft speed, multiply RPM by Gear Ratio. Volumetric Rate is based on 100% Volumetric Efficiency. Brake Horsepower/Kilowatts Required is based on 85% Mechanical Efficiency.

The information and data on this sheet is accurate to the best of our knowledge and belief, but are intended for general information only. Applications suggested for the materials are described only to help readers make their own evaluations and decisions, and are neither guarantees nor to be construed as express or implied warranties of suitability for these or other applications. National Oilwell makes no warranty either express or implied beyond that stipulated in National Oilwell Standard Terms and Conditions of Sale.