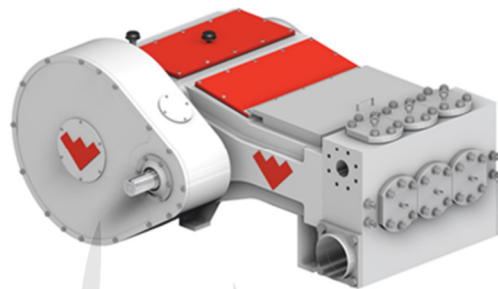




WDD-650 Triplex Piston Pump



Pump Specifications

Rated (HP, kW)	650	485
Stroke length (in., mm)	7.5	191
Maximum discharge pressure (psi, bar)		
WDD-650	5,120	353
Rated rod load (lb, kg)	42,500	19,278
Maximum speed (rpm)	250	
Minimum speed (rpm)	50	
Input shaft dimensions (in., mm)		
Diameter	4.000	102
Oil capacity (gal, l)		
Pump	TBD	TBD
Reducer (varies with ratio)	TBD	TBD
Estimated weight (lb, kg)		
Pump		
WDD-650	13,000	5,897
Reducer	3,400	1,542
Mechanical efficiency	90%	

Standard Equipment

- All fluid cylinders are made from forged, alloy steel for increased durability and extended life.
- Pistons are easily removed through the front of the cylinder and do not require removal of the fluid cylinder or liners.
- Chrome iron liners
- Premium oilfield style pistons
- Fully supported crankshaft with double taper main and cylindrical center roller bearings for long life and durability.
- Built-in power end lube system provides proper lubrication even at low speeds and non-level operating locations.
- Premium extension rod oil seal with four seals to keep power end oil clean.
- Abrasion resistant valves.

Flange Connections

Pump Model	Discharge Connection Sizes (in., mm)	Suction Connection Sizes (in., mm)
WDD-650	4-1/16 (103.2) API-5K	8 (203.2) CL150 FF

Optional Accessories

- Complete motor or engine driven pump packages
- Packing lubricators
- Custom, plunger, packing, and valve arrangements

Technical Support

pumps@weatherford.com

713-36-4000



WDD-650 Triplex Piston Pump

Performance Ratings

Model (standard)	Piston Diameter (in.)	Gallons Per Revolution	Maximum Pressure PSI	25 RPM		100 RPM		150 RPM		175 RPM *		225 RPM		250 RPM	
				GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD
WDD-650	3.250	0.8080	5,120	20.2	693	80.8	2770	121.2	4155	141.4	4848	181.8	6,233	202	6,926
	3.500	0.9371	4,420	23.4	802	93.7	3213	140.6	4821	164	5623	210.9	7,231	234.3	8,033
	4.000	1.2240	3,380	30.6	1049	122.4	4197	183.6	6295	214.2	7344	275.4	9,442	306	10,491
	4.500	1.5491	2,670	38.7	1327	154.9	5311	232.4	7968	271.1	9295	348.6	11,952	387.3	13,279
	5.000	1.9125	2,160	47.8	1639	191.2	6555	286.9	9837	334.7	11475	430.3	14,753	478.1	16,392
	5.500	2.3141	1,790	57.9	1985	231.4	7934	347.1	11901	405	13886	520.7	17,853	578.5	19,834
	6.000	2.7540	1,500	68.8	2359	275.4	9442	413.1	14163	481.9	16522	619.6	21,243	688.5	23,606

Model (standard)	Piston Diameter (in.)	Liters Per Revolution	Maximum Pressure BAR	25 RPM		100 RPM		150 RPM		175 RPM *		225 RPM		250 RPM	
				LPM	M ³ /hr	LPM	M ³ /hr	LPM	M ³ /hr	LPM	M ³ /hr	LPM	M ³ /hr	LPM	M ³ /hr
WDD-650	3.250	3.0584	353	76	5	306	18	459	28	535	32	688	41	765	46
	3.500	3.5470	305	89	5	355	21	532	32	621	37	798	48	887	53
	4.000	4.6328	233	116	7	463	28	695	42	811	49	1042	63	1158	69
	4.500	5.8634	184	146	9	586	35	880	53	1026	62	1319	79	1466	88
	5.000	7.2388	149	181	11	724	43	1086	65	1267	76	1629	98	1810	109
	5.500	8.7589	123	219	13	876	53	1314	79	1533	92	1971	118	2190	131
	6.000	10.4250	103	260	16	1042	63	1564	94	1824	109	2345	141	2606	156

*Continuous duty speed

General Notes

1. Capacities shown are based on 100 percent volumetric efficiency. Actual capacities are lower, based on discharge pressure and speed, typically 95 percent.
2. Operating power required by the pump is calculated by the formula: HP = (psi × gpm)/1,543, where psi is the actual operating pressure in psi units and gpm is the actual pumping capacity in gpm.
3. Maximum operating speeds are reduced for increased expendable life in HDD service.
4. Standard piston sizes are shown; however, other sizes may be available on request. Consult Weatherford for performance and pressure ratings.
5. Various power inlet options are available, including hydraulic adaption's, bolt on gear reducer, and planetary gear reducer with SAE flange