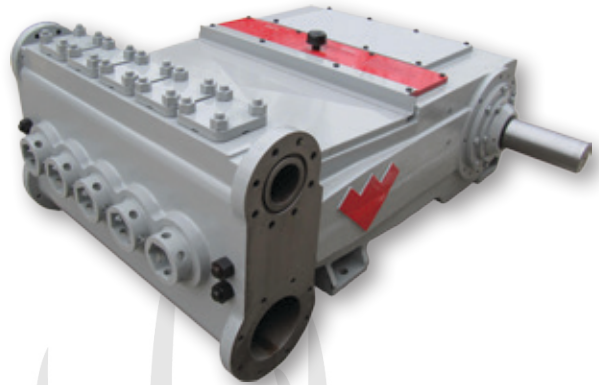




WDD550 Quintuplex HDD Pump

Pump Specifications

Rated (HP, kW)	550	410
Stroke length (in., mm)	5	127
Maximum discharge pressure (PSI, Bar)	2,000	138
Rated rod load (lb, kg)	21,000	9,525
Maximum speed, RPM	350	
Minimum speed, RPM	25	
Crankshaft dimensions (in., mm)		
Diameter	4.875	124
Length (long)	11.69	297
Length (short)	5.62	143
Keyway, width × depth (in., mm)	1.25 × .62	32 × 16
Oil capacity (gal, l)		
Pump	12	46
Reducer	3.5 to 6.5	13 to 25
Weight (lb, kg); estimates only		
Pump	7,800	3,538
Bolt on reducer	1,100	499
Mechanical efficiency	90%	



Standard Equipment

- All fluid cylinders are made from cast ductile iron material for increased durability and extended life
- Pistons are easily removed through the front of the cylinder and do not require the fluid cylinder or even the liners to be removed
- 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 to insure proper lubrication even at low speeds and non-level operating locations
- Premium extension rold oil seal with four seals to keep power end oil clean
- Abrasion resistant valves

Flange Connections

Discharge Connection Sizes (in., mm)	Suction Connection Sizes (in., mm)
4 (101.6) API 2000 RJ	8 (203.2) ANSI 150 FF

Optional Accessories

- Weatherford bolt on gear reducers (ratios)
 - 2.27:1
 - 2.89:1
 - 3.25:1
 - 3.36:1
 - 3.69:1
 - 4.38:1
 - 4.84:1
 - 5.56:1

Technical Support

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WDD550 Quintuplex HDD Pump Intermittent Duty Performance Ratings

Piston Size (in.)	Displacement (Gal/Rev)	Rated Pressure (PSI)	Rated Capacity											
			25 RPM		100 RPM		200 RPM		250 RPM		300 RPM		350 RPM	
			GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD
3	0.7650	2,000	19.1	656	76.5	2,623	153.0	5,246	191.2	6,557	229.5	7,869	267.7	9,180
3.5	1.0412	2,000	26.0	892	104.1	3,570	208.2	7,140	260.3	8,925	312.4	10,710	364.4	12,495
4	1.3600	1,670	34.0	1,166	136.0	4,663	272.0	9,326	340.0	11,657	408.0	13,989	476.0	16,320
4.5	1.7212	1,320	43.9	1,475	172.1	5,901	344.2	11,803	430.3	14,754	516.4	17,704	602.4	20,655

Piston Size (in.)	Displacement (L/Rev)	Rated Pressure (Bar)	Rated Capacity											
			25 RPM		100 RPM		200 RPM		250 RPM		300 RPM		350 RPM	
			LPM	M³Hr	LPM	M³Hr	LPM	M³Hr	LPM	M³Hr	LPM	M³Hr	LPM	M³Hr
3	2.8955	138	72.4	4.3	289.6	17.4	579.1	34.7	723.9	43.4	868.7	52.1	1,013.4	60.8
3.5	3.9411	138	98.5	5.9	394.1	23.6	788.2	47.3	985.3	59.1	1,182.3	70.9	1,379.4	82.8
4	5.1476	115	128.7	7.7	514.8	30.9	1,029.5	61.8	1,286.9	77.2	1,544.3	92.7	1,801.7	108.1
4.5	6.5149	91	162.9	9.8	651.5	39.1	1,303.0	78.2	1,628.7	97.7	1,954.5	117.3	2,280.2	136.8

General Notes

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

