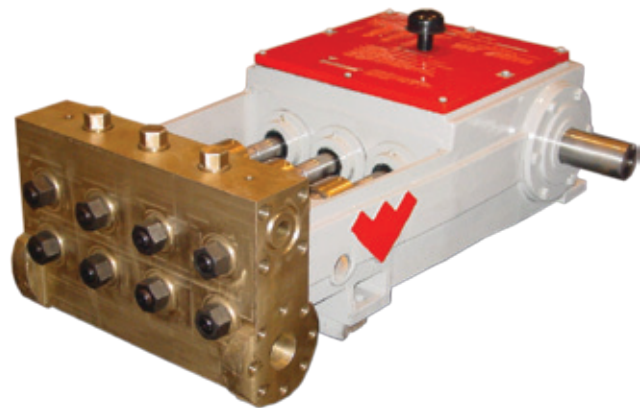




W80 Triplex Power Pump

Weatherford's W80 triplex power pumps are offered with fluid cylinders of nickel-aluminum bronze, forged carbon steel or duplex stainless steel. A variety of packing and valve arrangements are available to meet the requirements of any application. The critical components of the power end—crankshaft, connecting rods, crossheads and bearings—are comparatively larger than industry-standard components enabling them to withstand continuous-duty service and harsh operating conditions.



Applications

- Amine-gas sweetening
- Chemical injection
- Crude transfer
- Fracturing-fluid recovery
- Glycol-gas dehydration
- Horizontal directional drilling
- Hot-oil truck injection
- Hydrostatic testing
- Light-hydrocarbon transportation
- Methanol injection
- Municipal jetting
- Oil production
- Polymer flood
- Produced-water disposal
- Pulp and paper
- Reverse osmosis
- Secondary recovery
- Steam-boiler feed
- Steel mill descaling
- Water injection

Specifications

Rated power	80 HP
Stroke length (in./mm)	3.0 76.2
API-674 speed	400 rpm
Maximum speed	500 rpm
Minimum speed	200 rpm
Rated rod load (lb/kg)	6,336 2,874
Weight (lb/kg)	1,195 542
Oil capacity (gal/L)	2.0 7.6
Mechanical efficiency	90%



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Performance Ratings

Plunger Size (in.)	Displacement (gal/rev)	Rated Pressure (psi/mPa)	Cylinder Rating	Rated Capacity (gal/min, b/d)					
				200 rpm	300 rpm	350 rpm	400 rpm (API-674)	450 rpm	500 rpm
1.250	0.0478	5,000 34.5	H	9.6	14.3	16.7	19.1	21.5	23.9
				328	492	574	656	738	820
1.375	0.0579	4,270 29.4	H	11.6	17.4	20.2	23.1	26.0	28.9
				397	595	694	793	893	992
1.375	0.0579	4,270 29.4	M	11.6	17.4	20.2	23.1	26.0	28.9
1.500	0.0688	3,590 24.8		397	595	694	793	893	992
				13.8	20.7	24.1	27.5	31.0	34.4
1.625	0.0808	3,060 21.1		472	708	826	944	1,062	1,180
				16.2	24.2	28.3	32.3	36.4	40.4
1.750	0.0937	2,630 18.1		554	831	970	1,108	1,247	1,385
				18.7	28.1	32.8	37.5	42.2	46.9
2.000	0.1224	2,020 13.9	643	964	1,125	1,285	1,446	1,606	
			24.5	36.7	42.8	49.0	55.1	61.2	
2.000	0.1224	2,020 13.9	839	1,259	1,469	1,679	1,888	2,098	
			24.5	36.7	42.8	49.0	55.1	61.2	
2.250	0.1549	1,590 11.0	L	839	1,259	1,469	1,679	1,888	2,098
				31.0	46.5	54.2	62.0	69.7	77.5
2.500	0.1912	1,290 8.9		1,062	1,593	1,859	2,125	2,390	2,656
				38.2	57.4	66.9	76.5	86.1	95.6
2.750	0.2314	1,070 7.4		1,311	1,967	2,295	2,623	2,951	3,279
				46.3	69.4	81.0	92.6	104.1	115.7
3.000	0.2754	900 6.2		1,587	2,380	2,777	3,174	3,570	3,967
			55.1	82.6	96.4	110.2	123.9	137.7	
3.250	0.3232	760 5.2	1,888	2,833	3,305	3,777	4,249	4,721	
			64.6	97.0	113.1	129.3	145.4	161.6	
3.375	0.3486	710 4.9	2,216	3,324	3,879	4,433	4,987	5,541	
			69.7	104.6	122.0	139.4	156.8	174.3	
				2,390	3,585	4,183	4,780	5,378	5,975

General Notes

- Capacities shown are based on 100% volumetric efficiency. Actual capacities are lower, based on discharge pressure and fluid compressibility.
- Operating power required by the pump is calculated by the formula: $HP = (\text{psi} \times \text{gal/min}) / 1,543$, where psi is the actual operating pressure in psi units, and gal/min is the actual pumping capacity.
- API-674 and NACE-compliant designs are available upon request. Contact a Weatherford representative for specific details and exceptions to these standards.
- Standard plunger sizes are shown, however, other sizes are available upon request. Contact a Weatherford representative for performance and pressure ratings.
- Contact a Weatherford representative for assistance with pump selection on applications where actual operating inlet pressures are greater than 10% of the rated discharge pressure of the selected pump model.
- For operation below 200 rpm, an auxiliary power end lubrication system is required.
- Spherical valves are required for plungers above 3.00 in.

Technical Support

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