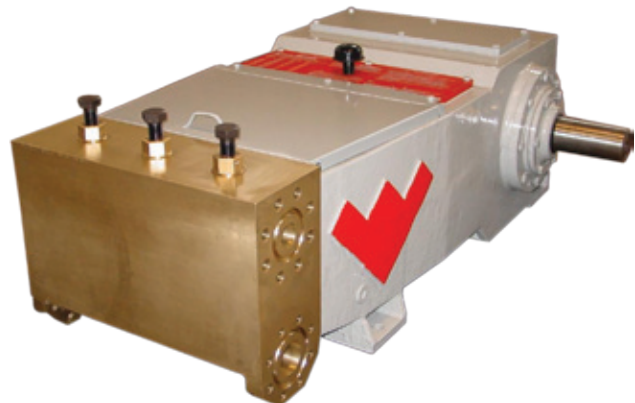




W165 Triplex Power Pump

Weatherford's W165 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	165 HP
Stroke length (in./mm)	5.0 127.0
API-674 speed	310 rpm
Maximum speed	400 rpm
Minimum speed	100 rpm
Rated rod load (lb/kg)	9,800 4,445
Weight (lb/kg)	4,000 1,814
Oil capacity (gal/L)	8.0 30.3
Mechanical efficiency	90%



W165 Triplex Power Pump

Performance Ratings

Plunger Size (in.)	Displacement (gal/rev)	Rated Pressure (psi/mPa)	Cylinder Rating	Rated Capacity (gal/min, b/d)					
				100 rpm	200 rpm	250 rpm	310 rpm (API-674)	350 rpm	400 rpm
1.500	0.1147	5,000	H	11.5	22.9	28.7	35.6	40.2	45.9
		34.5		393	787	984	1,220	1,377	1,574
1.625	0.1347	4,730		13.5	26.9	33.7	41.7	47.1	53.9
		32.6		462	923	1,154	1,431	1,616	1,847
1.750	0.1562	4,070		15.6	31.2	39.0	48.4	54.7	62.5
		28.1		535	1,071	1,339	1,660	1,874	2,142
1.875	0.1793	3,550		17.9	35.9	44.8	55.6	62.8	71.7
		24.5		615	1,229	1,537	1,906	2,152	2,459
2.000	0.2040	3,120		20.4	40.8	51.0	63.2	71.4	81.6
		21.5		699	1,399	1,749	2,168	2,448	2,798
2.000	0.2040	3,120		20.4	40.8	51.0	63.2	71.4	81.6
		21.5		699	1,399	1,749	2,168	2,448	2,798
2.125	0.2303	2,760	23.0	46.1	57.6	71.4	80.6	92.1	
		19.0	790	1,579	1,974	2,448	2,764	3,158	
2.250	0.2582	2,460	25.8	51.6	64.5	80.0	90.4	103.3	
		17.0	885	1,770	2,213	2,744	3,098	3,541	
2.375	0.2877	2,210	28.8	57.5	71.9	89.2	100.7	115.1	
		15.2	986	1,973	2,466	3,058	3,452	3,945	
2.500	0.3187	2,000	31.9	63.7	79.7	98.8	111.6	127.5	
		13.8	1,093	2,186	2,732	3,388	3,825	4,371	
2.625	0.3514	1,810	35.1	70.3	87.9	108.9	123.0	140.6	
		12.5	1,205	2,410	3,012	3,735	4,217	4,819	
2.750	0.3857	1,650	38.6	77.1	96.4	119.6	135.0	154.3	
		11.4	1,322	2,645	3,306	4,099	4,628	5,289	
2.750	0.3857	1,650	38.6	77.1	96.4	119.6	135.0	154.3	
		11.4	1,322	2,645	3,306	4,099	4,628	5,289	
3.000	0.4590	1,390	45.9	91.8	114.7	142.3	160.6	183.6	
		9.6	1,574	3,147	3,934	4,879	5,508	6,295	
3.250	0.5387	1,180	53.9	107.7	134.7	167.0	188.5	215.5	
		8.1	1,847	3,694	4,617	5,725	6,464	7,388	
3.500	0.6247	1,020	62.5	124.9	156.2	193.7	218.7	249.9	
		7.0	2,142	4,284	5,355	6,640	7,497	8,568	
3.750	0.7172	890	71.7	143.4	179.3	222.3	251.0	286.9	
		6.1	2,459	4,918	6,147	7,623	8,606	9,836	
4.000	0.8160	780	81.6	163.2	204.0	253.0	285.6	326.4	
		5.4	2,798	5,595	6,994	8,673	9,792	11,191	

General Notes

1. Capacities shown are based on 100% volumetric efficiency. Actual capacities are lower, based on discharge pressure and fluid compressibility.
2. Operating power required by the pump is calculated by the formula: HP = (psi × gal/min) / 1,543, where psi is the actual operating pressure in psi units, and gal/min is the actual pumping capacity.
3. API-674 and NACE-compliant designs are available upon request. Contact a Weatherford representative for specific details and exceptions to these standards.
4. Standard plunger sizes are shown, however, other sizes are available upon request. Contact a Weatherford representative for performance and pressure ratings.
5. 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.
6. For operation below 200 rpm, an auxiliary power end lubrication system is required.

Technical support

pumps@weatherford.com
 weatherford.com/pumps
 +1-281-252-7867