



W435 Quintuplex Pump

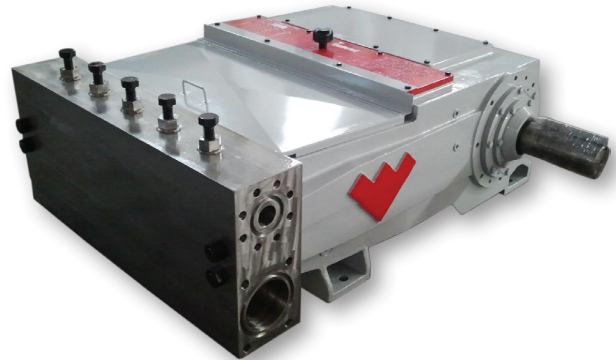
Pump Specifications

Rated (HP, kW)	437	325
Stroke length (in., mm)	5.25	133
Maximum discharge pressure (psi, bar)		
W435H	6170	425
W435M	3,020	208
W435L	1,660	114
Rated rod load (lb, kg)	14,838	6,730
API-674 speed (rpm)	300	
Maximum speed (rpm)	400	
Minimum speed (rpm)	50	
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	14	53
Reducer (varies with ratio)	3.5 to 6.5	13 to 25
Estimated weight (lb, kg)		
Pump		
W435H	7,010	3,186
W435M	7,060	3,209
W435L	7,150	3,250
Reducer	1,100	499
Mechanical efficiency	90%	

Flange Connections

Pump Model	Discharge Connection Sizes (in., mm)	Suction Connection Sizes (in., mm)
W435H	2 (50.8) ANSI 2500 RJ	6 (152.4) NSD 600 RJ*
W435M	3 (76.2) NSD 5000 RJ*	6 (152.4) NSD 600 RJ*
W435L	4 (101.6) API 2000 RJ	8 (203.2) ANSI 150 FF

*One blind and one weld neck flange provided



Standard Equipment

- Cast aluminum-bronze, forged duplex stainless steel, or forged carbon steel fluid ends
- Aluminum-bronze or duplex stainless steel stuffing boxes
- Various valve designs offered per fluid end style
- Tungsten carbide coated plungers over stainless steel base or solid ceramic plungers
- Double extended crankshaft
- Multiple plunger packing arrangements offered

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
- Packing lubricators
- Customized plunger packing arrangements
- Complete pump packages

Technical Support

pumps@weatherford.com

+1.713.836.4000



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Performance Ratings

Model (standard)	Plunger Diameter (in.)	Gallons Per Revolution	Maximum Pressure PSI	50 RPM		150 RPM		200 RPM		300 RPM*		350 RPM		400 RPM	
				GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD	GPM	BPD
W435H	1.750	0.2733	6,170	13.7	469	41.0	1,406	54.7	1,874	82.0	2,811	95.7	3,280	109.3	3,748
	1.875	0.3138	5,370	15.7	538	47.1	1,614	62.8	2,152	94.1	3,227	109.8	3,765	125.5	4,303
	2.000	0.3570	4,720	17.8	612	53.5	1,836	71.4	2,448	107.1	3,672	124.9	4,284	142.8	4,896
	2.250	0.4518	3,730	22.6	775	67.8	2,324	90.4	3,098	135.5	4,647	158.1	5,422	180.7	6,196
W435M	2.500	0.5578	3,020	27.9	956	83.7	2,869	111.6	3,825	167.3	5,737	195.2	6,694	223.1	7,650
	2.750	0.6750	2,500	33.7	1,157	101.2	3,471	135.0	4,628	202.5	6,942	236.2	8,099	270.0	9,256
	3.000	0.8032	2,100	40.2	1,377	120.5	4,131	160.6	5,508	241.0	8,262	281.1	9,639	321.3	11,016
	3.250	0.9427	1,790	47.1	1,616	141.4	4,848	188.5	6,464	282.8	9,696	329.9	11,312	377.1	12,928
W435L	3.375	1.0166	1,660	50.8	1,743	152.5	5,228	203.3	6,971	305.0	10,457	355.8	12,199	406.6	13,942
	3.500	1.0933	1,540	54.7	1,874	164.0	5,623	218.7	7,497	328.0	11,245	382.7	13,120	437.3	14,994
	3.750	1.2551	1,340	62.8	2,152	188.3	6,455	251.0	8,606	376.5	12,909	439.3	15,061	502.0	17,212
	4.000	1.4280	1,180	71.4	2,448	214.2	7,344	285.6	9,792	428.4	14,688	499.8	17,136	571.2	19,584
	4.250	1.6121	1,050	80.6	2,764	241.8	8,291	322.4	11,054	483.6	16,581	564.2	19,345	644.8	22,108
	4.500	1.8073	930	90.4	3,098	271.1	9,295	361.5	12,393	542.2	18,589	632.6	21,688	722.9	24,786

Model (metric)	Plunger Diameter (in.)	Liters Per Revolution	Maximum Pressure BAR	50 RPM		150 RPM		200 RPM		300 RPM*		350 RPM		400 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
W435H	1.750	1.0345	425	51.7	3.1	155.2	9.3	206.9	12.4	310.4	18.6	362.1	21.7	413.8	24.8
	1.875	1.1876	370	59.4	3.6	178.1	10.7	237.5	14.3	356.3	21.4	415.7	24.9	475.0	28.5
	2.000	1.3512	325	67.6	4.1	202.7	12.2	270.2	16.2	405.4	24.3	472.9	28.4	540.5	32.4
	2.250	1.7102	257	85.5	5.1	256.5	15.4	342.0	20.5	513.0	30.8	598.6	35.9	684.1	41.0
W435M	2.500	2.1113	208	105.6	6.3	316.7	19.0	422.3	25.3	633.4	38.0	739.0	44.3	844.5	50.7
	2.750	2.5547	172	127.7	7.7	383.2	23.0	510.9	30.7	766.4	46.0	894.1	53.6	1,021.9	61.3
	3.000	3.0403	145	152.0	9.1	456.0	27.4	608.1	36.5	912.1	54.7	1,064.1	63.8	1,216.1	73.0
	3.250	3.5681	123	178.4	10.7	535.2	32.1	713.6	42.8	1,070.4	64.2	1,248.8	74.9	1,427.2	85.6
W435L	3.375	3.8479	114	192.4	11.5	577.2	34.6	769.6	46.2	1,154.4	69.3	1,346.8	80.8	1,539.1	92.3
	3.500	4.1382	106	206.9	12.4	620.7	37.2	827.6	49.7	1,241.5	74.5	1,448.4	86.9	1,655.3	99.3
	3.750	4.7505	93	237.5	14.3	712.6	42.8	950.1	57.0	1,425.1	85.5	1,662.7	99.8	1,900.2	114.0
	4.000	5.4050	81	270.2	16.2	810.7	48.6	1,081.0	64.9	1,621.5	97.3	1,891.7	113.5	2,162.0	129.7
	4.250	6.1017	72	305.1	18.3	915.3	54.9	1,220.3	73.2	1,830.5	109.8	2,135.6	128.1	2,440.7	146.4
	4.500	6.8407	64	342.0	20.5	1,026.1	61.6	1,368.1	82.1	2,052.2	123.1	2,394.2	143.7	2,736.3	164.2

*API speed

General Notes

- Capacities shown are based on 100 percent volumetric efficiency. Actual capacities are lower, based on discharge pressure and fluid compressibility.
- API-674 and NACE-compliant designs are available; consult Weatherford for details and exceptions to these standards.
- Standard plunger sizes are shown, however, other sizes may be available upon request.
- A 4-GPM filtered power end lube system is required. The internal plumbing is included with the pump. Weatherford offers two optional systems, external electric driven and internal change driven.