

Model WL Series Positive-Displacement Progressing Cavity Pump

Handles a wide range of applications from shear sensitive polymers to difficult abrasive viscous liquids

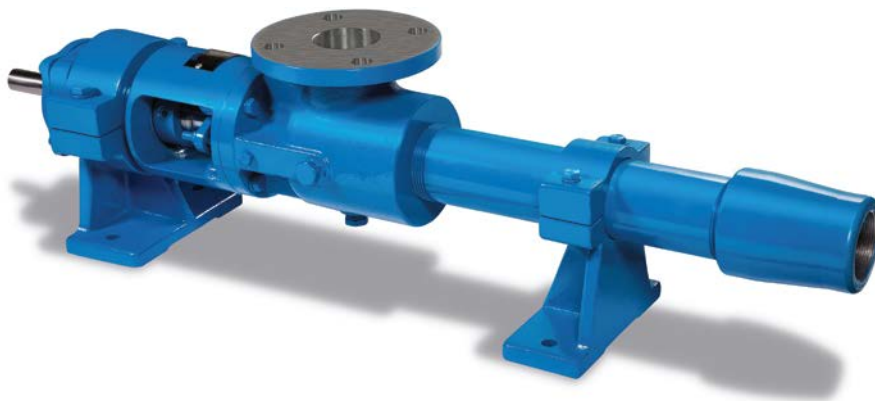
Applications

The Weatherford model WL series progressing cavity pump (PCP) is available for the most severe and extensive applications across many industries, including:

- Industrial water and wastewater
- Municipal water and wastewater
- Pulp and paper
- Oil and gas production and drilling
- Food and beverage processing
- Petrochemical and chemical
- Alternative fuels

Features and Benefits

- The model WL series of PCPs can pump fluids of varied viscosities and high temperatures.
- Rotary positive-displacement action of the pump provides a nonpulsating flow for accurate flow monitoring.
- Continuous smooth operation helps prevent and control production of undesired reservoir fluids and suspended particles of various shapes and sizes.
- Minimal degradation of shear-sensitive media prevents product altering during pumping for consistent and laminar flow.
- The highly versatile pump design eliminates the need for special maintenance or repair tools.
- Self-priming of the pump supports high lift capabilities and



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eliminates the need for suction foot valves.

- With equal efficiency, the pump provides reversible rotation for bidirectional flow.
- Model WL series pumps are equipped with a simple pin-joint drive that improves reliability and reduces maintenance costs.

Tool Description

Weatherford developed an economical drop-in-place model WL pump, designed for direct interchangeability with Moyno L-Frame and Tarby TL series pumps.

In addition to the many uses in new applications, the model WL pump offers outstanding performance and quality at a very competitive price as an aftermarket replacement.

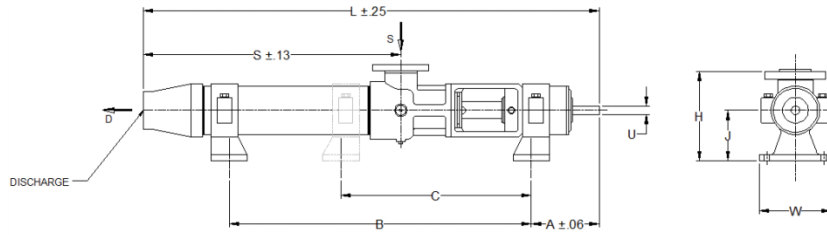
Extensive research and testing have confirmed interchangeability of the pumps and parts and that they meet or exceed the performance and longevity of the original equipment.

Options

- Stator available in Buna, fluoroelastomer, ethylene propylene diene monomer (EPDM), and high nitrile; other materials available upon request
- Rotor available in chrome-plated hardened steel or stainless steel
- Rotating and wetted parts available in steel or stainless steel
- Pump suction housing available in cast iron or stainless steel



Specifications



Pump Size	Pump Dimensions in. (mm)								
	A	B	C	H	J	L	S	W	U
1WL2	4.25 (108)	8.50 (216)	NR*	5.88 (149)	3.25 (83)	17.25 (438)	7.56 (192)	4.00 (102)	0.63 (15.86)
2WL2	4.25 (108)	10.50 (267)	NR	5.88 (149)	3.25 (83)	20.75 (527)	11.06 (281)	4.00 (102)	0.63 (15.86)
3WL2	4.25 (108)	12.00 (305)	NR	5.88 (149)	3.25 (83)	24.37 (619)	14.69 (373)	4.00 (102)	0.63 (15.86)
1WL3	5.69 (145)	10.75 (273)	NR	7.31 (186)	4.13 (105)	22.88 (581)	10.19 (259)	5.50 (140)	0.75 (19.05)
2WL3	5.69 (145)	13.00 (330)	NR	7.31 (186)	4.13 (105)	28.19 (716)	15.50 (384)	5.50 (140)	0.75 (19.05)
3WL3	5.69 (145)	16.50 (419)	NR	7.31 (186)	4.13 (105)	33.50 (851)	20.81 (529)	5.50 (140)	0.75 (19.05)
1WL4	7.00 (178)	16.00 (406)	NR	9.88 (251)	5.50 (140)	30.19 (767)	13.00 (330)	7.00 (178)	0.94 (23.81)
2WL4	7.00 (178)	22.00 (559)	NR	9.88 (251)	5.50 (140)	37.25 (946)	20.06 (510)	7.00 (178)	0.94 (23.81)
3WL4	7.00 (178)	22.88 (581)	NR	9.88 (251)	5.50 (140)	44.38 (1,127)	27.19 (691)	7.00 (178)	0.94 (23.81)
1WL6	8.56 (217)	20.00 (508)	NR	11.25 (286)	6.25 (159)	39.06 (992)	17.68 (449)	8.75 (222)	1.13 (28.58)
2WL6	8.56 (217)	26.00 (660)	NR	11.25 (286)	6.25 (159)	49.69 (1,262)	28.31 (719)	8.75 (222)	1.13 (28.58)
3WL6	8.56 (217)	20.00 (508)	18.00 (457)	11.25 (286)	6.25 (159)	60.31 (1,532)	38.93 (989)	8.75 (222)	1.13 (28.58)
1WL8	9.25 (235)	27.00 (686)	NR	14.00 (356)	8.00 (203)	45.88 (1,165)	19.98 (508)	11.56 (294)	1.38 (34.93)
2WL8	9.25 (235)	32.00 (813)	NR	14.00 (356)	8.00 (203)	58.31 (1,481)	32.41 (823)	11.56 (294)	1.38 (34.93)
3WL8	9.25 (235)	25.00 (635)	24.00 (610)	14.00 (356)	8.00 (203)	70.69 (1,796)	44.79 (1,138)	11.56 (294)	1.38 (34.93)
1WL10	13.50 (343)	30.00 (762)	NR	16.69 (424)	9.75 (248)	52.94 (1,345)	21.81 (554)	11.69 (297)	1.88 (47.63)
2WL10	13.50 (343)	35.50 (902)	NR	16.69 (424)	9.75 (248)	63.31 (1,608)	32.19 (818)	11.69 (297)	1.88 (47.63)
3WL10	13.50 (343)	30.00 (762)	18.00 (457)	16.69 (424)	9.75 (248)	73.75 (1,873)	42.63 (1,083)	11.69 (297)	1.88 (47.63)
1WL10H	13.50 (343)	32.56 (827)	NR	16.69 (424)	9.75 (248)	58.31 (1,481)	27.19 (691)	11.69 (297)	1.88 (47.63)
2WL10H	13.50 (343)	30.00 (762)	18.00 (457)	16.69 (424)	9.75 (248)	73.75 (1,873)	42.63 (1,083)	11.69 (297)	1.88 (47.63)
1WL12	18.19 (462)	36.92 (938)	NR	21.00 (533)	12.50 (318)	69.61 (1,768)	31.00 (787)	14.50 (368)	1.25 (31.75)
2WL12	18.19 (462)	34.61 (879)	20.50 (521)	21.00 (533)	12.50 (318)	85.30 (2,167)	46.69 (1,186)	14.50 (368)	1.25 (31.75)
3WL12	18.19 (462)	41.54 (1,055)	27.00 (689)	21.00 (533)	12.50 (318)	100.86 (2,562)	62.25 (1,581)	14.50 (368)	1.25 (31.75)
1WL12H	18.19 (462)	44.73 (1,136)	NR	21.00 (533)	12.50 (318)	77.43 (1,967)	38.81 (986)	14.50 (368)	1.25 (31.75)
2WL12H	18.19 (462)	41.54 (1,055)	27.00 (686)	21.00 (533)	12.50 (318)	100.86 (2,562)	62.25 (1,581)	14.50 (368)	1.25 (31.75)

*NR - not required



Specifications

Pump Size	Pump Weight lb (kg)	Suction Flat Face (FF)	Discharge National Pipe Thread (NPT)	Rated Pressure psi (kgF/cm ²)	Flow Rate per 100 rpm at 0 psi gal/min (m ³ /hr)	Maximum rpm	Motor Horsepower at Maximum rpm
1WL2	22 (10)	1	0.75	60 (4.1)	0.26 (0.06)	1200	0.5
2WL2	25 (11)	1	0.75	120 (8.3)	0.26 (0.06)	1200	0.5
3WL2	31 (14)	1	0.75	180 (12.4)	0.26 (0.06)	1200	0.75
1WL3	47 (21)	1.5	1.25	75 (5.2)	0.86 (0.20)	1000	1
2WL3	51 (23)	1.5	1.25	150 (10.3)	0.86 (0.20)	1000	1.5
3WL3	55 (25)	1.5	1.25	225 (15.5)	0.86 (0.20)	1000	2
1WL4	85 (39)	2.5	2	75 (5.2)	2.02 (0.46)	1000	1.5
2WL4	91 (41)	2.5	2	150 (10.3)	2.02 (0.46)	1000	2
3WL4	97 (44)	2.5	2	225 (15.5)	2.02 (0.46)	1000	3
1WL6	141 (64)	3	2.5	75 (5.2)	5.20 (1.18)	900	3
2WL6	159 (72)	3	2.5	150 (10.3)	5.20 (1.18)	900	5
3WL6	192 (87)	3	2.5	225 (15.5)	5.20 (1.18)	900	7.5
1WL8	303 (137)	4	3	75 (5.2)	11.70 (2.66)	750	5
2WL8	332 (150)	4	3	150 (10.3)	11.70 (2.66)	750	7.5
3WL8	372 (169)	4	3	225 (15.5)	11.70 (2.66)	750	10
1WL10	412 (187)	6	4	75 (5.2)	18.80 (4.27)	600	5
2WL10	500 (227)	6	4	150 (10.3)	18.80 (4.27)	600	10
3WL10	545 (247)	6	4	225 (15.5)	18.80 (4.27)	600	10
1WL10H	424 (192)	6	6	75 (5.2)	27.70 (6.29)	600	5
2WL10H	545 (247)	6	6	150 (10.3)	27.70 (6.29)	600	10
1WL12	880 (399)	8	6	75 (5.2)	43.50 (9.88)	600	10
2WL12	1,075 (488)	8	6	150 (10.3)	43.50 (9.88)	600	20
3WL12	1,200 (544)	8	6	225 (15.5)	43.50 (9.88)	600	25
1WL12H	945 (429)	8	6	75 (5.2)	65.20 (14.81)	600	15
2WL12H	1,205 (546)	8	6	150 (10.3)	65.20 (14.81)	600	25

Pressure, flow, and horsepower values based on pumping water at 68°F (20°C).
Flanges to ANSI B16.1 and NPT pipe thread.

