

300 VDL variable speed pump



300 series panel mount pumps

Key Features

- High quality brushless 24VDC Pump with built in controller for precise speed adjustment, and low electrical and audible noise
- Very long service life due to no internal wearing components
- Flow rates up to 1760 ml/min
- Iconic flip-top design for fast and error-free tube loading
- Available with 313X extension pumpheads for multi-channel applications



300 VDL variable speed pump performance

313/314 VDL pumps – Flow rates (ml/min)		
Tube bore (mm)	VDL 24VDC	
	Speed (rpm)	
	100	350
0.5	3.0	10.5
0.8	6.0	21
1.6	26	91
3.2	100	350
4.8	220	770
6.4	360	1260
8.0	500	1760

314 flowrates are approximately 85 % of 313 flow rates

Marprene tubing 1.6 mm wall, zero pressure and no suction lift

Nominal flow rates may vary +/-10 %

Technical specifications

	300 VDL variable speed pump
Motor types	Variable speed brushless DC motor
Pumphead options	313D, 314D
Pumphead number of rollers	3, 4
Pumphead number of channels	1
Flow rate range	3 ml/min to 1760 ml/min
Operating speed range	4 rpm to 350 rpm
Supply voltage	24 V DC
Operating temperature	-10 °C to 40 °C (23 °F to 104 °F)
Rated Power	35 W
Control options	0-4 V
Alarms	Cover-open
Outputs	Tacho
Weight	1 kg (2.204 lbs)
Gearbox ratio	Spur; 10:1, Spur; 100:1, Spur; 15:1, Spur; 37.5:1
Compatible tubing bore size	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm
Compatible tubing wall thickness	1.6 mm

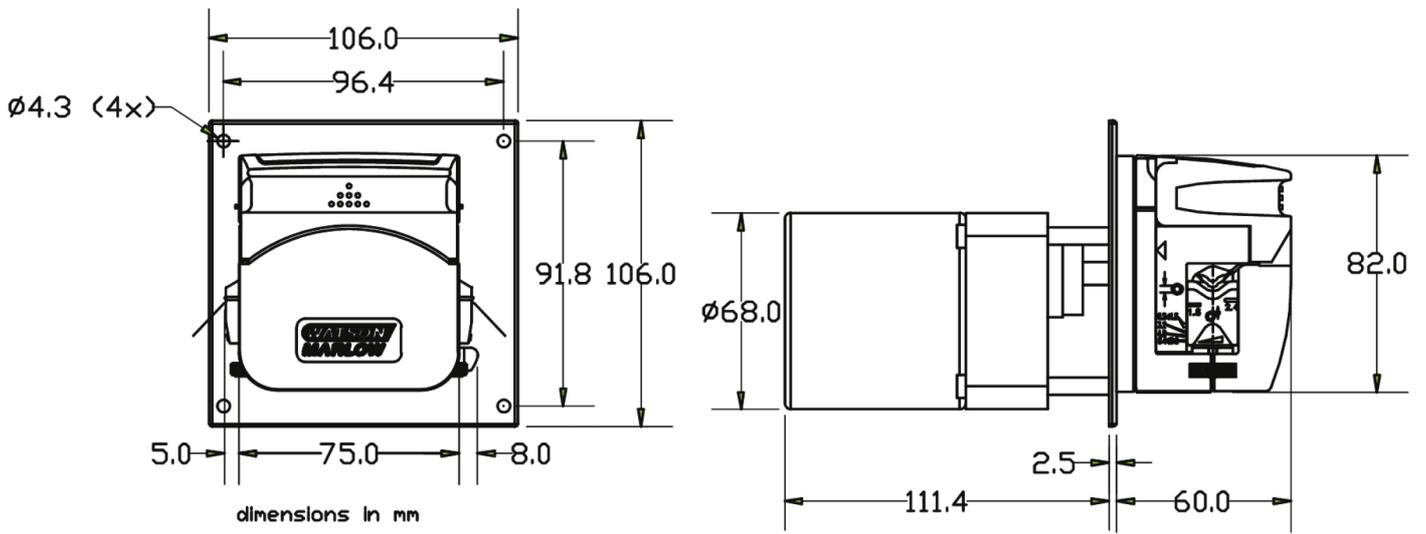
For detailed specifications of individual models refer to product reference manual or contact WMFTS representative.

Materials of construction

	300 VDL variable speed pump
Pumphead body assembly	Glass filled polypropylene, Polyacrylamide-IXEF (PARA), Stainless steel
Pumphead rotor assembly	Electroless nickel plated hardened steel, Glass filled Nylon
Pumphead roller assembly	MoS2 filled Nylon 6 (Nylatron)

Information listed covers the complete range. For detailed specifications of individual models/components refer to product reference manual or contact WMFTS representative.

300 VDL variable speed pump dimensions



Product codes

Pump product codes			
Description	Supply voltage	Speed (rpm)	Product code
313VDL/D	24 VDC	100	040.NP10.3D0
	24 VDC	350	040.NU10.3D0

Silicone 8.0 mm no backpressure

Marprene max 6.4 mm no backpressure

Disclaimer: All flow rates shown were obtained pumping water at 20 °C (68 °F) with zero suction and delivery heads. Watson-Marlow, Pumpsil, PureWeld XL, Bioprene and Marprene are trademarks of Watson-Marlow Limited. The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. GORE and STA-PURE are trademarks of W. L. Gore & Associates. Please state the product code when ordering pumps and tubing.



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