

# 520R pumphead

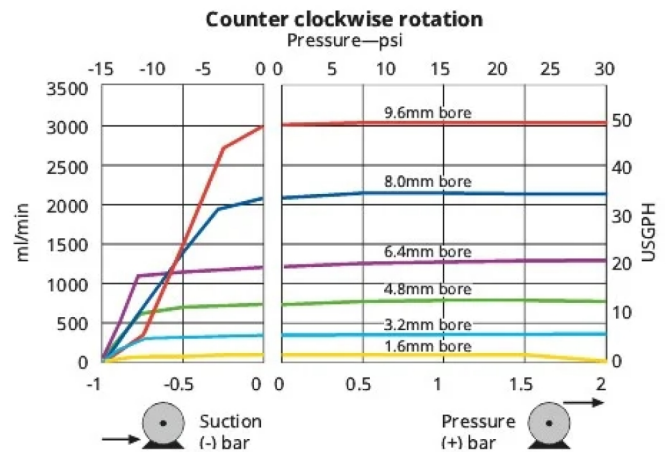
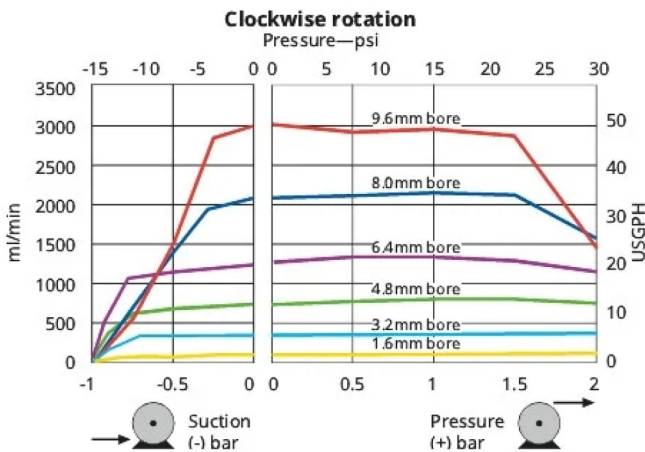
## 500 series pumpheads

- Flow rates from 0.004 ml/min (0.00006 USGPH) to 2.4 L/min (38.04 USGPH) using 1.6mm wall thickness tubing
- Features large swept volume with sprung rollers for high accuracy, gentle pumping of shear-sensitive fluids
- Robust pumphead construction with PPS (polyphenylene sulphide) track and rotor and stainless steel rollers and bearings



## 520R pumphead performance

520R twin sprung roller pumpheads for continuous 1.6 mm wall thickness tubing – Tube bore and flow rates – ml/min (USGPH)									
Tube material	Speed	0.5mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm	9.6mm	
Pumpsil®, GORE® STA-PURE® Pump Tubing - Series PCS, GORE® STA-PURE® Pump Tubing - Series PFL	0.1-220rpm	0.004-9.5 (0-0.15)	0.04-97 (0-1.54)	0.18-390 (0-6.18)	0.40-870 (0.01-13.8)	0.70-1500 (0.01-23.8)	1.10-2400 (0.02-38)		NA
Marprene®, Bioprene®, PureWeld XL®	0.1-220rpm	0.004-9.0 (0-0.14)	0.04-92 (0-1.46)	0.17-370 (0-5.86)	0.38-830 (0-13.2)	0.67-1500 (0.01-23.8)	1.10-2300 (0.02-36.5)		NA



## Technical specifications

	520R pumphead
Number of channels	1
Number of rollers	2
Max. flow rate continuous	2400 ml/min
Max. flow rate continuous	38.04 USGPH (144 L/h)
Pump type	Cased, Panel mount
Compatible tubing bore size	0.5, 1.6, 3.2, 4.8, 6.4, 8 mm
Compatible tubing wall thickness	1.6 mm

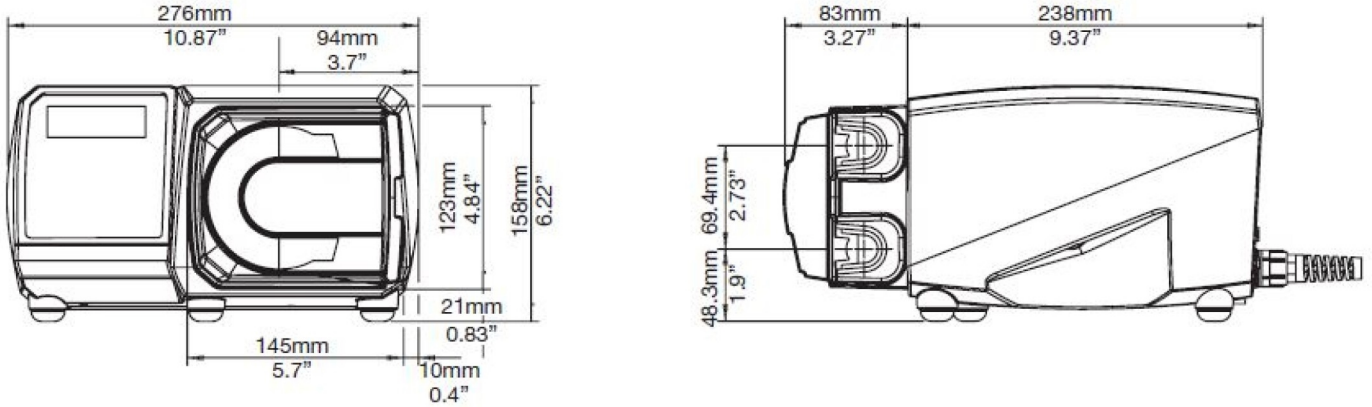
## Materials of construction

520R pumphead	
Pumphead body assembly	Acetal, Aluminum, Aluminum alloy, Brass, Polycarbonate (PC), Polyphenylene sulphide (PPS)
Pumphead guard	Polycarbonate (PC)
Pumphead track	Polyphenylene sulphide (PPS)
Pumphead roller assembly	MoS2 filled Nylon 6 (Nylatron), Polyphenylene sulphide (PPS), Stainless steel 316
Pumphead rotor assembly	Polyphenylene sulphide (PPS), Stainless steel 316

Information listed covers the complete range.

For detailed specifications of individual models/components refer to user manual or contact WMFTS representative.

## 520R pumphead dimensions



## Product codes

Description		Part code					
520R	Pumphead 1.6 wall for continuous tubing	053.1011.100					
Tubing 1.6 mm wall thickness tubing for 520R							
Tube bore	Tube	Pumpsil®	PureWeld XL®	Bioprene®	STA-PURE® PCS	STA-PURE® PFL	Marpene®
0.5mm (1/50in)	112	913.A005.016	942.0005.016	933.0005.016			902.0005.016
0.8mm (1/32in)	13	913.A008.016	942.0008.016	933.0008.016			902.0008.016
1.6mm (1/16in)	14	913.A016.016	942.0016.016	933.0016.016	961.0016.016	966.0016.016	902.0016.016
3.2mm (1/8in)	16	913.A032.016	942.0032.016	933.0032.016	961.0032.016	966.0032.016	902.0032.016
4.8mm (3/16in)	25	913.A048.016	942.0048.016	933.0048.016	961.0048.016	966.0048.016	902.0048.016
6.4mm (1/4in)	17	913.A064.016	942.0064.016	933.0064.016	961.0064.016	966.0064.016	902.0064.016
8.0mm (5/16in)	18	913.A080.016	942.0800.016	933.0080.016	961.0080.016	966.0080.016	902.0080.016

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. Disclaimer: 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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