

# 501RL pumphead

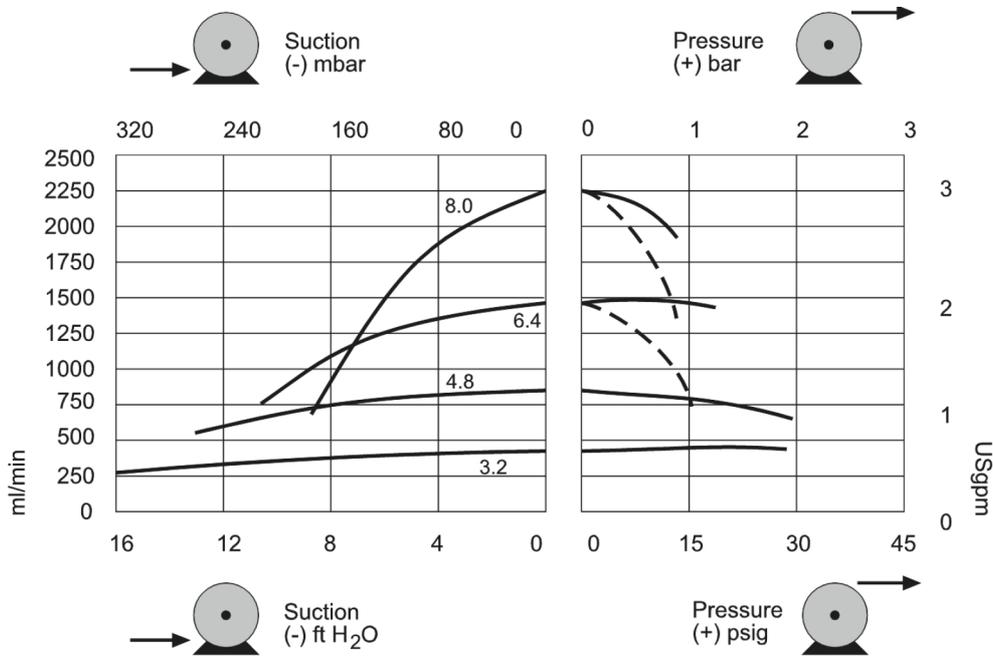
## 500 series pumpheads

- Flow rates from 0.01 ml/min (0.0002 USGPH) to 3000 ml/min (47.55 USGPH)
- Tool lockable guard
- Twin spring-loaded rollers for long tube life
- 501RL uses 1.6mm wall thickness tubing for transfer at low pressure
- 501RL2 has harder springs for use with 2.4mm wall thickness tubing and higher pressures up to 2 bar (29 psi)



## 501RL pumphead performance

Tube bore and flow rates (ml/min)							
Tube bore (mm)	0.5	0.8	1.6	3.2	4.8	6.4	8.0
Flow rate (ml/rev)	0.04	0.12	0.43	1.86	4.05	6.35	10
Max continuous flow rate (ml/min)	12	36	129	558	1215	1905	3000



## Technical specifications

	501RL pumphead
Number of channels	1
Max. flow rate continuous	3000 ml/min
Max. flow rate continuous	47.55 USGPH (180 L/h)
Operating temperature	41 °F to 104 °F (5 °C to 40 °C)
Pump type	Cased, Panel mount
Weight	2.425 lbs (1.1 kg)
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

## Materials of construction

501RL pumphead	
Pumphead body assembly	Polycarbonate (PC)
Pumphead guard	Polycarbonate (PC)
Pumphead roller assembly	Delrin, MoS2 filled Nylon 6 (Nylatron)
Pumphead rotor assembly	Mazak, chromium plated
Tube clamp assembly	Acetal copolymer (Kematal)

Information listed covers the complete range.

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

## Product codes

Description	Part code
501RL Single channel pumphead for 1.6mm wall tube	053.0001.L00
501RL2 Single channel pumphead for 2.4mm wall tube	053.0001.L20

Tubing 1.6mm wall thickness tubing for 501RL					
Tube bore	Tube	Bioprene	Marprene	Pumpsil	STA-PURE® PCS
0.5mm 1/50"	112	933.0005.016	902.0005.016	913.A005.016	
0.8mm 1/32"	13	933.0008.016	902.0008.016	913.A008.016	
1.6mm 1/16"	14	933.0016.016	902.0016.016	913.A016.016	961.0016.016
3.2mm 1/8"	16	933.0032.016	902.0032.016	913.A032.016	961.0032.016
4.8mm 3/16"	25	933.0048.016	902.0048.016	913.A048.016	961.0048.016
6.4mm 1/4"	17	933.0064.016	902.0064.016	913.A064.016	961.0064.016
8.0mm 5/16"	18	933.0080.016	902.0080.016	913.A080.016	961.0080.016

Tubing 2.4mm wall thickness for 501RL2						
Tube bore	Tube	Bioprene	Marprene	Pumpsil	STA-PURE® PCS	STA-PURE® PFL
1.6mm 1/16"	119	933.0016.024	902.0016.024	913.A016.024	961.0016.024	966.0016.024
3.2mm 1/8"	120	933.0032.024	902.0032.024	913.A032.024	961.0032.024	966.0032.024
4.8mm 3/16"	15	933.0048.024	902.0048.024	913.A048.024	961.0048.024	966.0048.024
6.4mm 1/4"	24	933.0064.024	902.0064.024	913.A064.024	961.0064.024	966.0064.024
8.0mm 5/16"	121	933.0080.024	902.0080.024	913.A080.024	961.0080.024	966.0080.024

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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