

# 520R pumphead

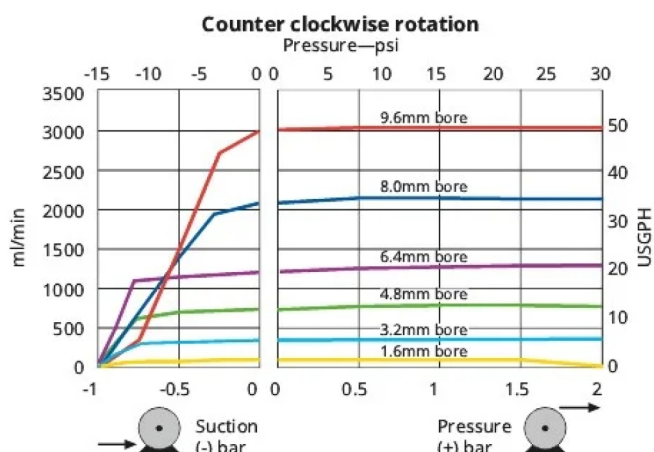
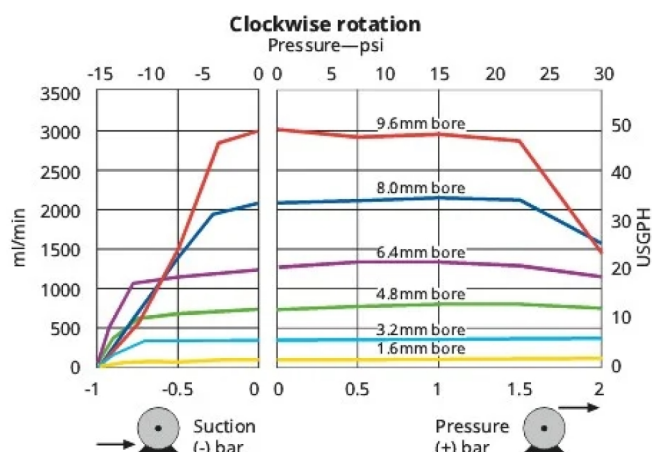
## 500 series pumpheads

- 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                        |

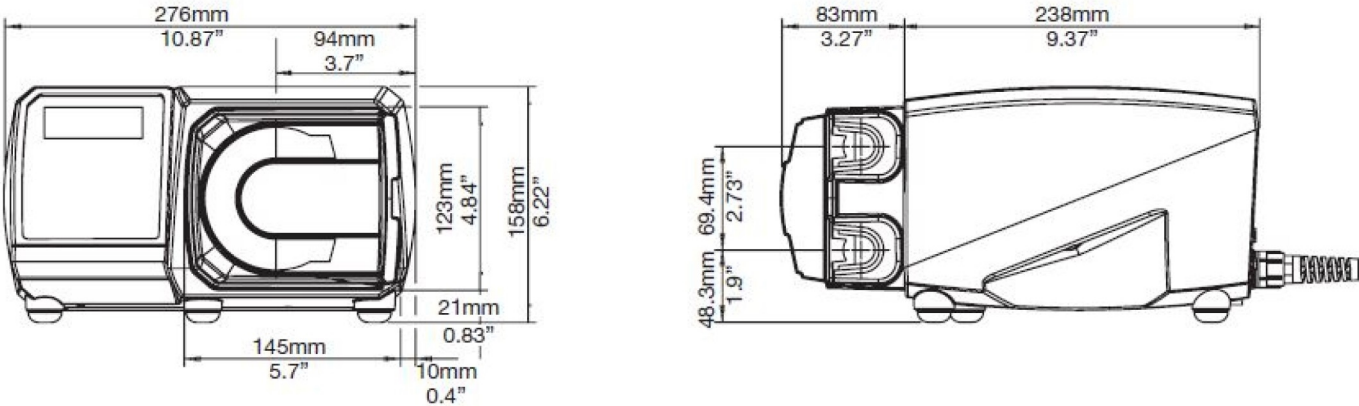
Materials of construction

|                          | 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 | Marprene®    |
| 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 | 942.0080.016 | 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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