

# 520R2 pumphead

500 series pumpheads



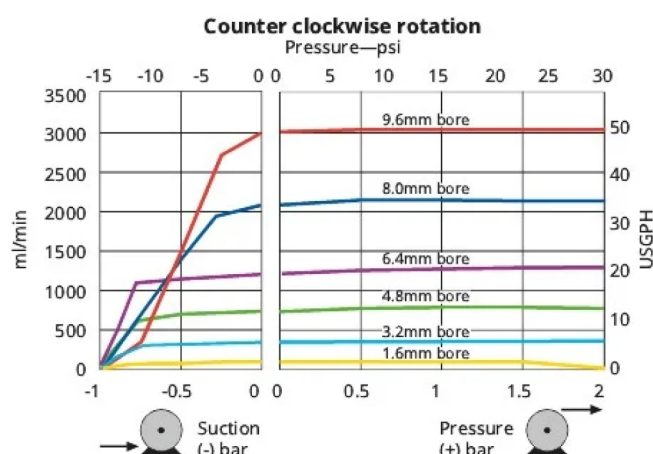
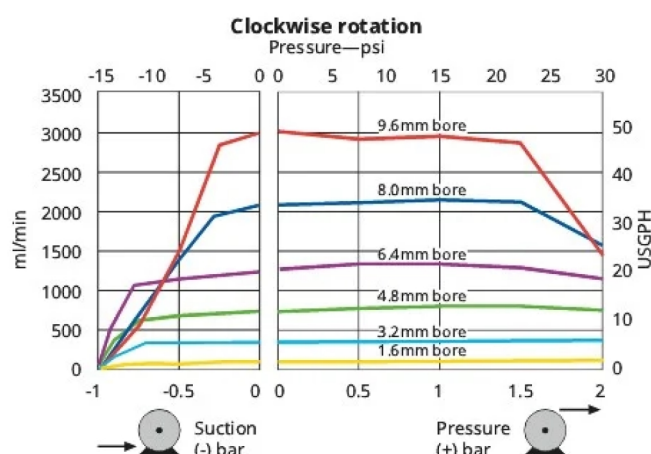
## Features and benefits

- Flow rates from 0.04 ml/min (0.0006 USGPH) to 3.5 L/min (55.48 USGPH) using 2.4mm 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



## 520R2 pumphead performance

| 520R2 twin sprung roller pumpheads for continuous 2.4 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 | NA    | 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)   | 1.60-3500 (0.03–55.5) |  |
| Marprene®/Bioprene®, PureWeld XL®                                                                                         | 0.1–220rpm | NA    | 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) | 1.50-3300 (0.02–52.3) |  |



## Technical specifications

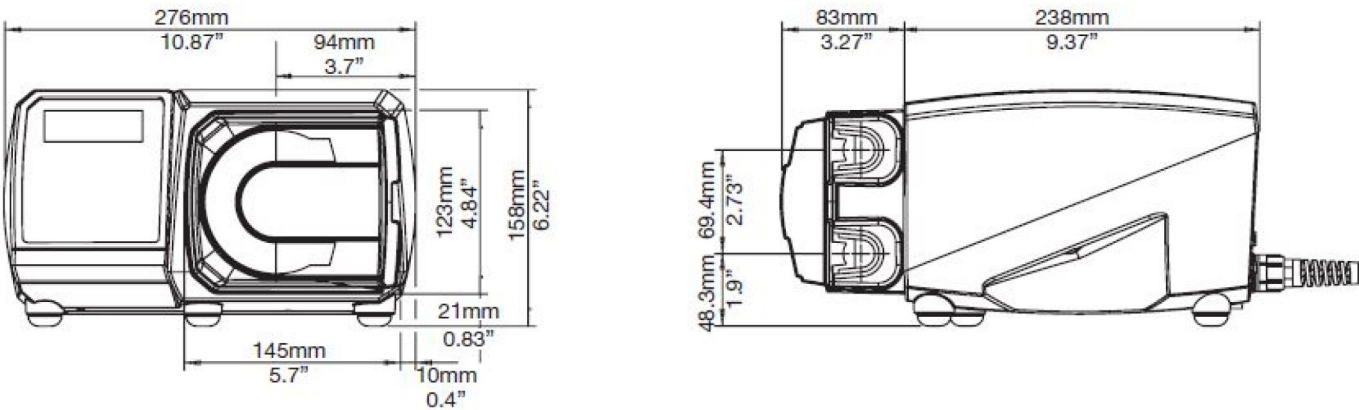
|                                  | 520R2 pumphead                |
|----------------------------------|-------------------------------|
| Number of channels               | 1                             |
| Number of rollers                | 2                             |
| Max. flow rate continuous        | 3500 ml/min                   |
| Max. flow rate continuous        | 210 L/h (55.48 USGPH)         |
| Pump type                        | Cased, Panel mount            |
| Compatible tubing bore size      | 1.6, 3.2, 4.8, 6.4, 8, 9.6 mm |
| Compatible tubing wall thickness | 2.4 mm                        |

Materials of construction

|                          | 520R2 pumphead                                                                              |
|--------------------------|---------------------------------------------------------------------------------------------|
| Pumphead body assembly   | Acetal, Aluminium, Aluminium 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.

520R2 pumphead dimensions



Product codes

| Description                                   |      |              |              |              | Part code     |               |              |
|-----------------------------------------------|------|--------------|--------------|--------------|---------------|---------------|--------------|
| 520R2 Pumphead                                |      |              |              |              | 053.1011.2L0  |               |              |
| Tubing 2.4 mm wall thickness tubing for 520R2 |      |              |              |              |               |               |              |
| Tube bore                                     | Tube | Pumpsil®     | PureWeld XL® | Bioprene®    | STA-PURE® PCS | STA-PURE® PFL | Marprene®    |
| 1.6mm (1/16in)                                | 119  | 913.A016.024 | 942.0016.024 | 933.0016.024 | 961.0016.024  | 966.0016.024  | 902.0016.024 |
| 3.2mm (1/8in)                                 | 120  | 913.A032.024 | NA           | 933.0032.024 | 961.0032.024  | 966.0032.024  | 902.0032.024 |
| 4.8mm (3/16in)                                | 15   | 913.A048.024 | 942.0048.024 | 933.0048.024 | 961.0048.024  | 966.0048.024  | 902.0048.024 |
| 6.4mm (1/4in)                                 | 24   | 913.A064.024 | 942.0064.024 | 933.0064.024 | 961.0064.024  | 966.0064.024  | 902.0064.024 |
| 8.0mm (5/16in)                                | 121  | 913.A080.024 | 942.0080.024 | 933.0080.024 | 961.0080.024  | 966.0080.024  | 902.0080.024 |
| 9.6mm (3/8in)                                 | 122  | 913.A096.024 | 942.0096.024 | 933.0096.024 | 961.0096.024  | 966.0096.024  | 902.0096.024 |

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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