

500 FDM heavy duty pump



500 series panel mount pumps

- Rugged peristaltic pumps for industrial applications
- Outstanding performance high flow pumphead
- Spring-loaded stainless steel rollers with ball bearings provided gentle pumping and long tube life
- Stainless steel face plate
- Flow rates up to 3450 ml/min



500 FDM heavy duty pump performance

Marprene tubing 2.4 mm (3/32in) wall, zero pressure and no suction height									
ml/min tubing dimensions		0.5 mm	0.8 mm	1.6 mm	3.2 mm	4.8 mm	6.4 mm	8.0 mm	9.6 mm
FDM 12/24 VDC	45 rpm	1.8	4.7	19	76	170	310	470	670
	90 rpm	3.7	9.4	38	150	340	610	940	1350
	175 rpm	7.2	18	73	290	660	1190	1830	2620
	230 rpm	9.4	24	96	390	870	1570	2400	3450

For Pumpsil, Tygon, Sta-Pure and Chem-Sure flowrates, add 5% to the above figures.

For pressure performance see pumphead datasheet.

Technical specifications

	500 FDM heavy duty pump
Motor types	Fixed speed DC motor
Pumphead options	520R, 520R2, 520REH, 520REL, 520REM
Pumphead number of rollers	2
Pumphead number of channels	1
Flow rate range	1.8 ml/min to 3450 ml/min
Operating speed range	45 rpm to 230 rpm
Supply voltage	12 V DC, 24 V DC
Operating temperature ranges	-10 °C to 40 °C (14 °F to 104 °F)
Power consumption	30W
Ingress Protection	IP41
Gearbox ratio	Spur; 10:1, Spur; 20:1, Spur; 40:1, Spur; 7.5:1
Compatible tubing bore size	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8, 9.6 mm
Compatible tubing wall thickness	1.6, 2.4 mm

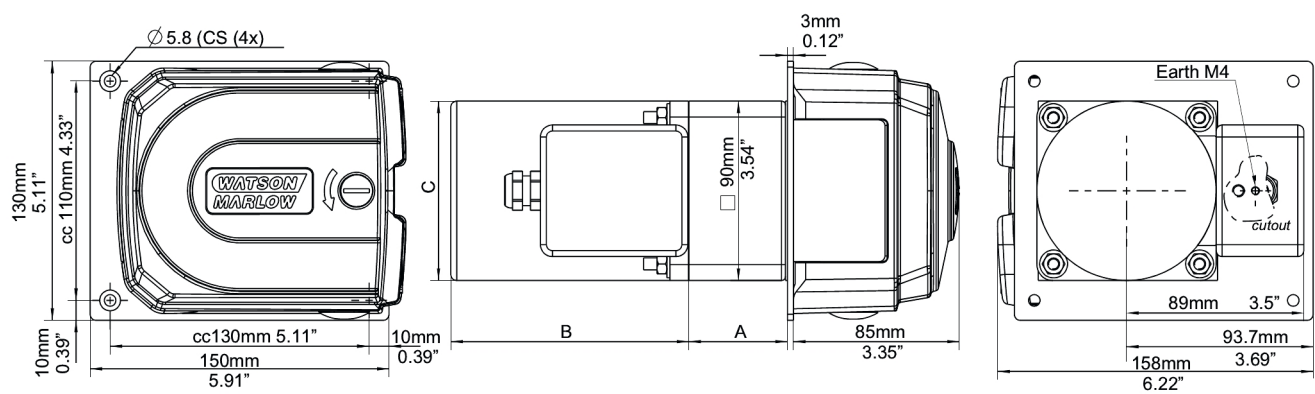
For detailed specifications of individual models refer to product reference manual or contact WMFTS representative.

Materials of construction

	500 FDM heavy duty pump
Pumphead body assembly	Acetal, Aluminium, Aluminium alloy, Brass, Polycarbonate (PC), Polyphenylene sulphide (PPS)
Pumphead rotor assembly	Polyphenylene sulphide (PPS), Stainless steel 316
Pumphead roller assembly	MoS2 filled Nylon 6 (Nylatron), Polyphenylene sulphide (PPS), Stainless steel 316
Tube clamp assembly	Acetal copolymer (Kematal)

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

500 FDM heavy duty pump dimensions



	A	B	C
FDM 45 rpm	68 mm (2.68 in)	110 mm (4.33 in)	ø 80
FDM 90, 175, 230 rpm	50 mm (1.97 in)	110 mm (4.33 in)	ø 80

Product codes

520 FDM product codes		
Supply Voltage	Speed (rpm)	520 FDM/R2
12 VDC	45	040.CH22.210
24 VDC	45	040.DH22.210
12 VDC	90	040.CP22.210
24 VDC	90	040.DP22.210
12 VDC	175	040.CR22.210
24 VDC	175	040.DR22.210
12 VDC	230	040.CT22.210
24 VDC	230	040.DT22.210

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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