

400 FD D2 pump

400/B series panel mount pumps

Features and benefits

- Flow rates up to 82 ml/min
- Wide range of Brushless, DC and AC motors available
- Supports a wide range of applications with the multiple channel, continuous tubing, tube element and manifold tubing options.



400 FD D2 pump performance

Flow rates (ml/min) 1.0 mm wall tubing														
Tube bore (mm)	Speed (rpm)													
	4	5	10	12	15	20	25	40	50	75	100	130	200	250
0.5	0.05	0.07	0.13	0.16	0.20	0.26	0.33	0.52	0.65	1.0	1.3	1.7	2.6	3.3
1.0	0.20	0.25	0.50	0.60	0.75	1.0	1.3	2.0	2.5	3.8	5.0	6.5	10	12
2.0	0.72	0.90	1.8	2.2	2.7	3.6	4.5	7.2	9.0	13	18	23	36	45
3.0	1.3	1.7	3.3	4.0	5.0	6.6	8.3	12.7	16	25	33	43	66	82

Technical specifications

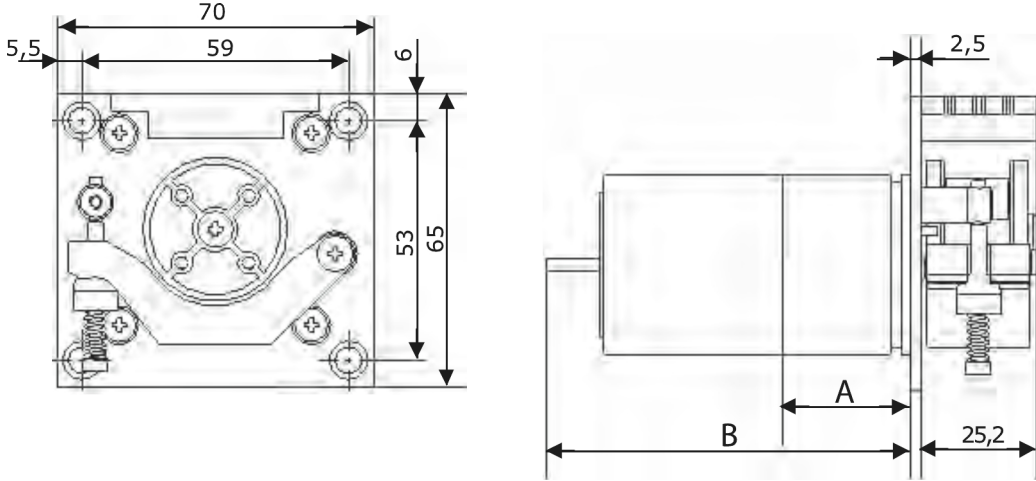
	400 FD D2 pump
Motor types	Fixed speed DC motor
Pumphead options	D2
Pumphead number of channels	2
Flow rate range	0.05 ml/min to 82 ml/min
Supply voltage	12 V DC, 24 V DC
Operating temperature	14 °F to 113 °F (-10 °C to 45 °C)
Power consumption	5 W
Gearbox ratio	Spur; 30:1, 75:1, 250:1
Compatible tubing bore size	0.5, 1, 2, 3 mm
Compatible tubing wall thickness	1 mm

Materials of construction

	400 FD D2 pump
Pumphead body assembly	Acetal (black)
Pumphead rotor assembly	Acetal (black), Acid resistant stainless steel
Pumphead roller assembly	Acetal (black)
Face plate	Anodised aluminium
Driveshaft	Acid resistant stainless steel
Springs	Acid resistant stainless steel

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

400 FD D2 pump dimensions



All dimensions in mm

Motor Type	400FD/D2 5 W
Dimensions A	L=26.5 mm x Ø39.6 mm
Dimensions B	L=81.0 mm* x Ø39.6 mm

*=maximum length behind mounting plate

Product codes

Pump product codes			
Motor type	Voltage	Speed (rpm)	Product code
Economy DC 5 W	24 VDC	200	040.BS1D.N2C
Economy DC 5 W	24 VDC	75	040.BN1D.N2C
Economy DC 5 W	24 VDC	25	040.BC1D.N2C
Brushless DC 5 W	24 VDC	250	040.FT1D.N2C
Brushless DC 5 W	24 VDC	130	040.FQ1D.N2C
Brushless DC 5 W	24 VDC	50	040.FK1D.N2C
Brushless DC 5 W	24 VDC	15	040.F91D.N2C
Synchronous AC 2 W	110 VAC (60 Hz)	25	040.HC1D.N2C
Synchronous AC 2 W	220 VAC (50 Hz)	20	040.JA1D.N2C
Synchronous AC 2 W	110 VAC (60 Hz)	12	040.H81D.N2C
Synchronous AC 2 W	220 VAC (50 Hz)	10	040.J71D.N2C
Synchronous AC 2 W	110 VAC (60 Hz)	5	040.H41D.N2C
Synchronous AC 2 W	220 VAC (50 Hz)	4	040.J31D.N2C

Tubing product codes			
Standard 430 tube elements for 400F/D2 pumpheads			
Bore/Wall	Bioprene	Peroxide cured Silicone	Connects to
0.5/1.0 mm	049.EF6D.N05	-	Tube bore 3.0
1.0/1.0 mm	049.EF6D.N10	049.EH6D.N10	Tube bore 3.0
2.0/1.0 mm	049.EF6D.N20	049.EH6D.N20	Tube bore 3.0
3.0/1.0 mm	-	049.EH6D.N30	Tube bore 3.0

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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10 July 2025