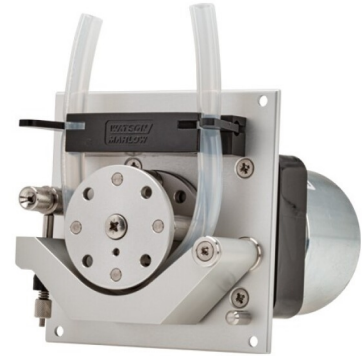


# 400 VDL R1 pump

400/R series panel mount pumps

## Features and benefits

- Precise flow control with flows to 1060 ml/min
- Four or eight rollers for higher accuracy/low pulsation
- Accepts continuous tube in seven sizes up to 6.4 mm bore



## 400 VDL R1 pump performance

Flow rates (ml/min) Tube Bore (mm)	Speed (rpm)						
	12	25	30	60	100	200	350
0.8	0.66	1.38	1.65	3.3	5.5	11	19
1.6	2.6	5.5	6.6	13	22	44	77
2.4	5.9	12	15	29	49	98	172
3.2	10	21	26	51	85	170	298
4.0	16	33	39	79	131	262	459
4.8	22	46	55	110	184	367	642
6.4	36	76	90	180	300	600	1060

## Technical specifications

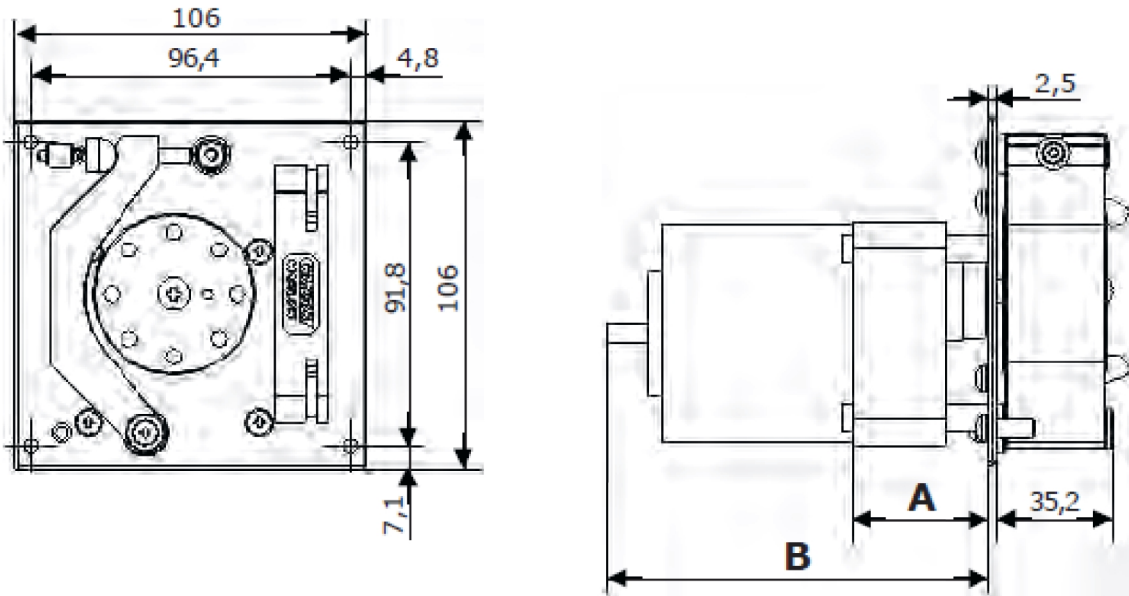
	400 VDL R1 pump
Motor types	Variable speed brushless DC motor
Pumphead options	R1
Flow rate range	0.66 ml/min to 1060 ml/min
Operating speed range	3 rpm to 350 rpm
Supply voltage	24 V DC
Operating temperature	-10 °C to 45 °C (14 °F to 113 °F)
Power consumption	35W
Weight	1.56 kg (3.439 lbs)
Gearbox ratio	Spur; 10:1, 37.5:1
Compatible tubing bore size	0.8, 1.6, 2.4, 3.2, 4, 4.8, 6.4 mm
Compatible tubing wall thickness	1.6 mm

## Materials of construction

	400 VDL R1 pump
Pumphead body assembly	Anodised aluminium
Pumphead rotor assembly	Acid resistant stainless steel, Aluminium
Pumphead roller assembly	Acid resistant stainless steel, Carbon steel
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 VDL R1 pump dimensions



<b>400VDL/R1</b>	
<b>Motor type</b>	<b>400VDL 35 W</b>
A	L=41.3 mm x Ø68.0 mm
B	L=103.4 mm* x Ø68.0 mm

\*= maximum length behind mounting plate

### Product codes

<b>Pump product codes</b>			
<b>Motor type</b>	<b>Voltage</b>	<b>Speed (rpm)</b>	<b>Product code</b>
Brushless DC 35 W	24 VDC	350	040.NU1R.01S
Brushless DC 35 W	24 VDC	100	040.NP1R.01S
Brushless DC 35 W	24 VDC	30	040.NE1R.01S

<b>Tubing product codes</b>						
<b>Bore/wall</b>	<b>Pumpsil</b>	<b>Marpene</b>	<b>Bioprene</b>	<b>STA-PURE-PFL</b>	<b>PVC</b>	<b>STA-PURE PCS</b>
0.5/1.6 mm	913.A005.016	902.0005.016	933.0005.016			
0.8/1.6 mm	913.A008.016	902.0008.016	933.0008.016			
1.6/1.6 mm	913.A016.016	902.0016.016	933.0016.016	966.0016.016	E3603.016.16	961.0016.016
2.4/1.6 mm	913.A024.016	902.0024.016	933.0024.016			
3.2/1.6 mm	913.A032.016	902.0032.016	933.0032.016	966.0032.016	E3603.032.16	961.0032.016
4.0/1.6 mm		902.0040.016	933.0040.016		E3603.040.16	
4.8/1.6 mm	913.A048.016	902.0048.016	933.0048.016	966.0048.016	E3603.048.16	961.0048.016

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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