

# 323Dz/RL general purpose dispensing pump

# 300 series

Watson-Marlow Pumps

## FEATURES

- Flow rates from 0.04ml/min to 3000ml/min
- High-accuracy microprocessor control within  $\pm 1.0\%$
- Zero maintenance brushless DC motor
- Menu driven calibration procedure with mid-batch re-calibration possible at any time
- Adjustable speed 'ramps' reduces splashing and frothing
- Non-drip function eliminates drips at dose end
- Selectable dual voltage operation 100-120V/220-240V
- Dispensing by keypress, timed interval or a remote footswitch/handswitch
- 323Dz/RL features the simple tube loading of the 501RL pumphead, which accepts seven tube bore sizes, and provides the highest flow rates

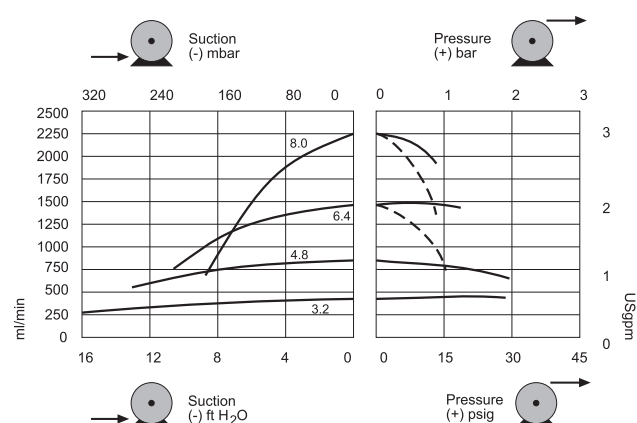


*Watson-Marlow...Innovation in Full Flow*

## PERFORMANCE

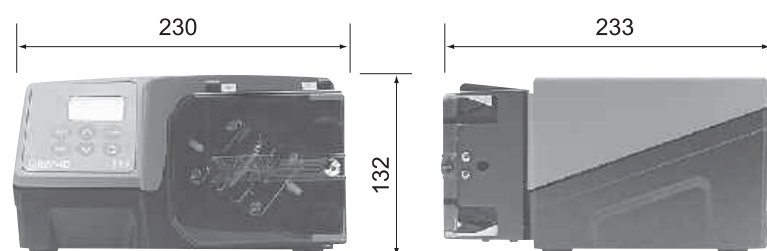
Flow rates (ml/min)								
		0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
323Dz/RL	Flow rates (ml/min)	0.04-13	1.12-37	0.43-130	1.9-560	4-1200	6.4-1900	10-3000
1.0 - 300rpm	Minimum recommended dose (ml)	0.2	0.6	2.1	9.3	20.2	31.8	50.0

Dose size - using 323Dz/RL at 300rpm						
	Accuracy	10ml	25ml	50ml	100ml	250ml
Recommended tube bore	High	1.6mm	3.2mm	4.8mm	8.0mm	8.0mm
Approximate dose time - seconds		4.7	2.7	2.5	2.0	5.0
Recommended tube bore	Normal	3.2mm	4.8mm	8.0mm	8.0mm	8.0mm
Approximate dose time - seconds		1.1	1.2	1.0	2.0	5.0



501RL pumphead performance curve (200rpm)

## TECHNICAL DRAWINGS



## TECHNICAL SPECIFICATION

Weight	5.6kg
Operational temperature range	5C to 40C
Noise	<70dBA at 1m
Control ratio	300:1
Standards	CE, EN60529 (IP31)
Supply	1ph, 100-120V, 220-240V 50/60Hz, 100VA

## MATERIALS OF CONSTRUCTION

Component	Material
<b>Drive</b>	
Drive base	Powder coated aluminium coating
Drive top	Self-coloured ABS plastic
<b>Pumphead</b>	
Rotor	Mazak, chromium plated
Tube clamps, hinges	Acetal copolymer kematal
Guide rollers	Delrin
Rollers	MoS2 filled Nylon 6 (Nylatron)
Guard	Polycarbonate
Springs, spindles	Stainless steel

## ORDER INFORMATION

Product codes		
Description		Partcode
323Dz/RL	drive + 501RL pumphead for 1.6mm wall tube	030.3183.RL0*

\* Replace last 0 with A, E or U for American, European or UK mains supply (American 110V 1ph 60Hz)  
If required for use with STA-PURE and Chem-Sure tubing, please contact Watson-Marlow Bredel technical support for drive and pumphead selection

Tube ordering codes				
Bore/wall (mm)	Bioprene	Marprene	Platinum Silicone	PVC
0.5 / 1.6	903.0005.016	902.0005.016	913.A005.016	
0.8 / 1.6	903.0008.016	902.0008.016	913.A008.016	
1.6 / 1.6	903.0016.016	902.0016.016	913.A016.016	950.0016.016
3.2 / 1.6	903.0032.016	902.0032.016	913.A032.016	950.0032.016
4.8 / 1.6	903.0048.016	902.0048.016	913.A048.016	950.0048.016
6.4 / 1.6	903.0064.016	902.0064.016	913.A064.016	950.0064.016
8.0 / 1.6	903.0080.016	902.0080.016	913.A080.016	950.0080.016
Bore/wall (mm)	Neoprene	STA-PURE®	Chem-Sure®	Fluorel®
0.8 / 1.6	920.0008.016			970.0008.016
1.6 / 1.6	920.0016.016	960.0016.016	965.0016.016	970.0016.016
3.2 / 1.6	920.0032.016	960.0032.016	965.0032.016	970.0032.016
4.8 / 1.6	920.0048.016	960.0048.016	965.0048.016	970.0048.016
6.4 / 1.6	920.0064.016	960.0064.016	965.0064.016	970.0064.016
8.0 / 1.6	920.0080.016	960.0080.016	965.0080.016	970.0080.016

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. Watson-Marlow, 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. LoadSure is a trademark of Watson-Marlow Limited.  
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Please state the product code when ordering pumps and tubing.

**WATSON  
MARLOW  
Pumps**



**Wolflabs**

# Wolf Laboratories Limited

[www.wolflabs.co.uk](http://www.wolflabs.co.uk)

Tel: 01759 301142

Fax: 01759 301143

[sales@wolflabs.co.uk](mailto:sales@wolflabs.co.uk)



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