



Improving your PERFORMANCE

## 323Du/RL and 323Du/RL2 RS232/analogue/manual control high flow pumps

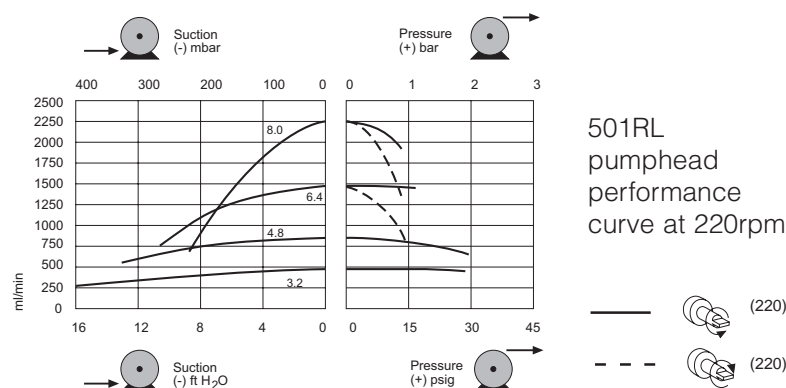
### Technical information and features

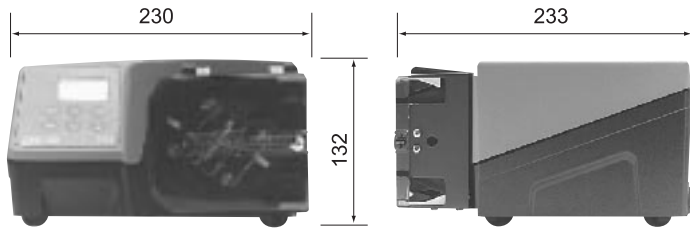
- RS232 serial communication
- High-performance microprocessor controlled pumps
- Single channel flow rates from 0.06ml/min to 2200ml/min
- Precision digital speed control 220 steps from 1.5 to 200rpm, 147:1 control ratio
- Digital TTL or remote switch inputs for run/stop and direction
- Rear panel 25D socket accepts analogue auto-control signal input for speed control 4-20mA, 0-10V
- High visibility digital display and keypad lock
- Compact design, chemical resistant case, contemporary styling
- Zero maintenance, quiet brushless DC motor
- Rapid and simple tube loading 501RL pumphead accepts seven tube bore sizes.
- For higher suction, viscosity or delivery pressure operation, order 501RL2 pumphead which accepts 2.4mm wall thickness tubing
- MemoDose facility for accurate single shot dosing
- Auto-restart for mains failure recovery and timer control



### Flow rate ranges (ml/min)

	Tube bore and flow rates (ml/min)							
	Speed rpm	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
323Du/RL	1.5-220	0.06-9.2	0.18-27	0.84-94	2.8-410	6.1-890	9.5-1400	15-2200





## 323Du/RL and 323Du/RL2 RS232/ analogue/manual control high flow pumps

Product codes		
323Du/RL 1.5-220rpm	drive + 501RL pumphead for 1.6mm wall tube	030.3152.RL0*
323U 1.5-220rpm	drive only	036.3152.000*
501RL	pumphead for 1.6mm wall tube	053.0001.L00
501RL2	pumphead for 2.4mm wall tube	053.0001.L20

\*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 for 501RL				
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
1.6 / 2.4	903.0016.024	902.0016.024	913.A016.024	
3.2 / 2.4	903.0032.024	902.0032.024	913.A032.024	
4.8 / 2.4	903.0048.024	902.0048.024	913.A048.024	
6.4 / 2.4	903.0064.024	902.0064.024	913.A064.024	
8.0 / 2.4	903.0080.024	902.0080.024	913.A080.024	
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
1.6 / 2.4		960.0016.024	965.0016.024	
3.2 / 2.4		960.0032.024	965.0032.024	
4.8 / 2.4		960.0048.024	965.0048.024	
6.4 / 2.4		960.0064.024	965.0064.024	
8.0 / 2.4		960.0080.024	965.0080.024	

## Specification

<b>Weight</b>	5.6kg
<b>Dimensions</b>	H132 x W230 x L225
<b>Control ratio</b>	147:1
<b>Standards</b>	CE, IEC335-1, EN60529 (IP31)
<b>Supply</b>	1ph, 100-120V, 220-240V 50/60Hz, 100VA

## Materials of construction

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



Watson-Marlow-Bredel Pumps  
Falmouth  
Cornwall  
England  
TR11 4RU  
Tel: +44 (0) 1326 370370  
Fax: +44 (0) 1326 376009  
www.watson-marlow.com  
Email support4gb@watson-marlow.co.uk

® Fluorel is a registered trademark of Dyneon LLC, a 3-M Hoechst Enterprise  
® STA-PURE and Chem-Sure are registered trademarks of W.L Gore & Associates Inc.  
Please state the product code when ordering pumps and tubing.