



Improving your PERFORMANCE

## 323E/D and 323E/4D manual control variable speed pumps

### Technical Information

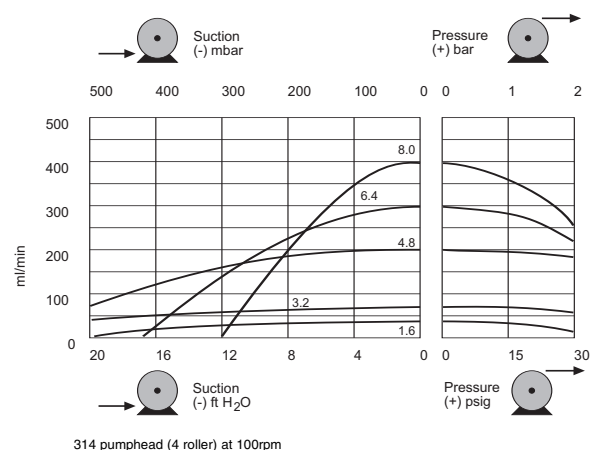
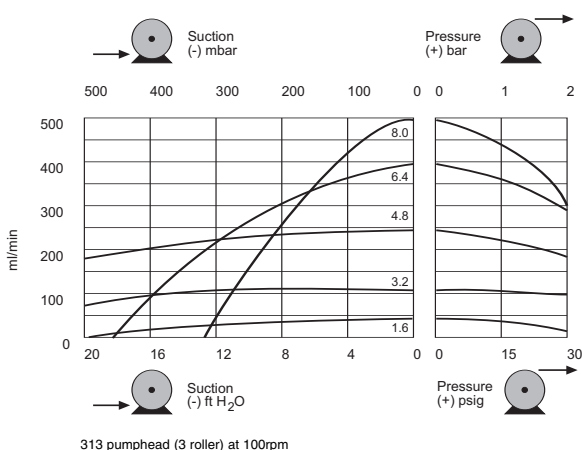
- The 323E/D gives higher flows, the 323E/4D lower pulsation
- Up to 2000 ml/min from three-roller 323E/D
- Up to 1600 ml/min from four-roller 323E/4D
- Digital speed control from 15 to 400rpm in 5rpm steps, 133:1 control ratio
- High visibility digital display and membrane keypad
- Compact design, chemical resistant case, contemporary styling
- Zero maintenance, quiet brushless DC motor
- Rapid and simple tube loading flip-top pumphead
- Snap fit extension pumpheads for up to 6 channels of flow
- MemoDose facility for accurate single shot dosing
- Alternative pumpheads

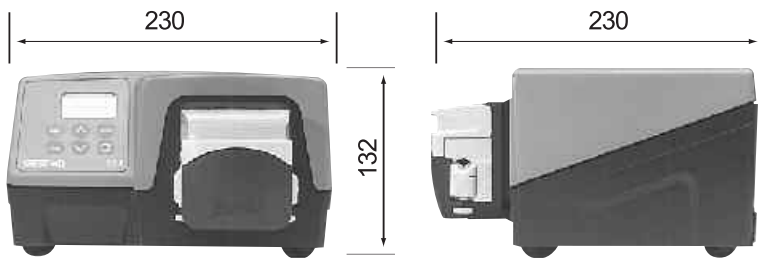


314DW four roller pumphead for lower pulsation, 1.6mm wall thickness tube for transfer duties up to 300rpm  
 313DW2 three roller pumphead, 2.4mm wall tube for higher suction and delivery pressure up to 2 bar  
 314DW2 four roller pumphead, 2.4mm wall tube for higher suction and delivery pressure up to 2 bar  
 313X three roller and 314X four roller extension pumpheads for 1.6mm wall tube for transfer duties

### Flow rate ranges (ml/min)

	Tube bore and flow rates (ml/min)					
	Speed rpm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
323E/D (3 roller pumphead)	3.0 - 400	0.81-110	3.0-400	6.6-880	11-1400	1-2000
323E/4D (4 roller pumphead)	3.0 - 300	0.75-75	2.6-260	5.7-570	9.0-900	12-1200





## 323E/D and 323E/4D manual control variable speed pumps

Product codes		
323E/D 15-400rpm	drive + 313D three roller pumphead	030.3124.3D0*
323E 15-400rpm	drive only	036.3134.00U*
313DW	3 roller pumphead for 1.6mm wall tube	033.3451.000
313X	3 roller extension pumphead for 1.6mm wall tube (maximum five)	033.3431.000
313DW2	3 roller pumphead for 2.4mm wall tube	033.3551.000
314DW	4 roller pumphead for 1.6mm wall tube	033.4451.000
314X	4 roller extension pumphead for 1.6mm wall tube (maximum five)	033.4431.000
314DW2	4 roller pumphead for 2.4mm wall tube	033.4551.000

\*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
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	
Bore/wall (mm)	Néoprene	STA-PURE®	Chem-Sure®	Fluorel®
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	

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© STA-PURE and Chem-Sure are registered trademarks of W.L Gore & Associates Inc.  
Please state the product code when ordering pumps and tubing.

### Specification

<b>Weight</b>	4.7kg
<b>Operational temperature range</b>	5°C to 40°C
<b>Noise</b>	<70dBA at 1m
<b>Control ratio</b>	27:1
<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>Body rear</b>	Glass filled polypropylene
<b>Body front, body front extension</b>	IXEF
<b>Mounting plate, track and lever</b>	IXEF
<b>Rotor, tube clamp</b>	Glass filled Nylon
<b>Mounting plate, locking tab</b>	Glass filled Nylon
<b>Rollers</b>	MoS2 filled Nylon 6 (Nylatron)
<b>Spindles</b>	Electroless nickel plated, hardened steel
<b>Fixings</b>	Stainless steel
<b>Bearings</b>	Carbon steel - main shaft Sintered bronze - rollers



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