

314D/A four roller pumphead

300 series
Watson-Marlow Pumps

FEATURES

- Flow rates from 0.25 ml/min to 1400 ml/min
- Four roller design for higher accuracy
- Snap-fit 313X or 314X extension pumpheads
- 314D2 pumphead accepts 2.4mm wall thickness tubing for higher pressures
- Rapid and simple tube loading flip-top pumphead
- 314D/A four roller pumphead attaches to any 520 series cased drive. Single channel pumphead supplied with adapter and bayonet mounting plate
- 314X four roller extension pumphead attaches to 314D/A or 313D2/A pumpheads by bayonet fitting. Can provide up to five additional channels depending on drive torque

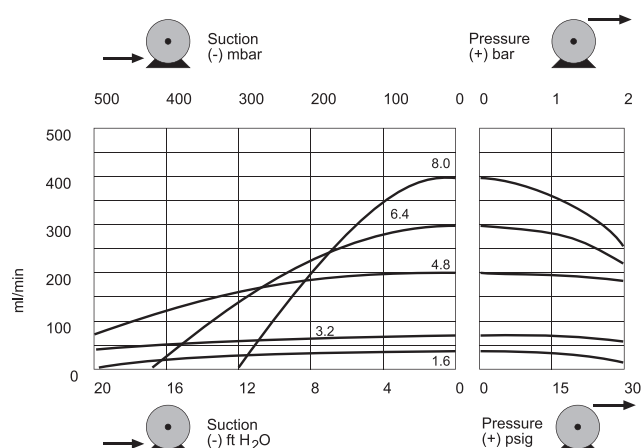


Watson-Marlow...Innovation in Full Flow

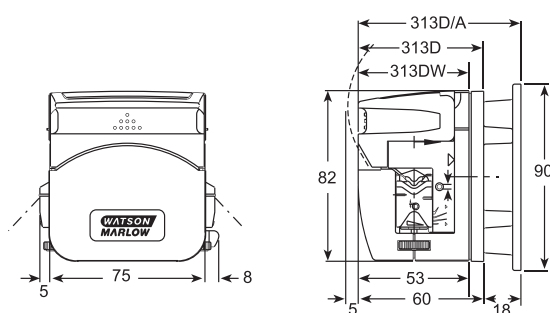
PERFORMANCE

Tube bore and flow rates (ml/min)						
	Speed	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
520S, 520U and 520Du	2.0 - 220	0.50 - 55	1.7 - 186	3.8 - 418	6.0 - 660	8.0 - 880
520Di	1.0 - 220	0.25 - 55	0.85 - 186	1.9 - 418	3.0 - 660	4.0 - 880
520Di	2.0 - 350	0.5 - 87.5	1.7 - 296	3.8 - 665	6.0 - 1050	8.0 - 1400

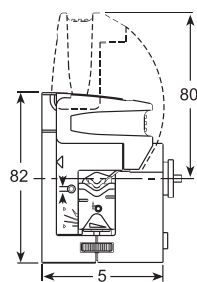
Tubing							
Bore/wall(mm)	Bioprene	Marprene	Pumpsil	PVC	Neoprene	STA-PURE®	Fluorel®
1.6/1.6	933.0016.016	902.0016.016	913.A016.016	950.0016.016	920.0016.016	960.0016.016	970.0016.016
3.2/1.6	933.0032.016	902.0032.016	913.A032.016	950.0032.016	920.0032.016	960.0032.016	970.0032.016
4.8/1.6	933.0048.016	902.0048.016	913.A048.016	950.0048.016	920.0048.016	960.0048.016	970.0048.016
6.4/1.6	933.0064.016	902.0064.016	913.A064.016	950.0064.016	920.0064.016	960.0064.016	970.0064.016
8.0/1.6	933.0080.016	902.0080.016	913.A080.016	950.0080.016	920.0080.016	960.0080.016	970.0080.016
4.8/2.4	933.0048.024	902.0048.024	913.A048.024				
6.4/2.4	933.0064.024	902.0064.024	913.A064.024				



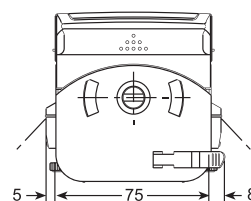
TECHNICAL DRAWINGS



314D, 314DW, 314D/A



314X (Place between 314D and drive)



All dimensions in mm

TECHNICAL SPECIFICATION

314D/A	
Weight	314D/A - 490g 314D2/A - 505g 314X - 320g 314X2 - 320g

MATERIALS OF CONSTRUCTION

Component	Material
Body rear	Glass filled polypropylene
Body front, body front extension	IXEF
Mounting plate, track and lever	IXEF
Rotor, tube clamp, locking tab	Glass filled Nylon
Rollers	MoS2 filled Nylon 6 (Nylatron)
Spindles	Electroless nickel plated, hardened steel
Fixings	Stainless steel
Sealed bearings	Carbon steel

ORDER INFORMATION

Product codes		
Description		Partcode
314D/A	Single channel four roller pumphead for 1.6mm wall tube with mounting plate	033.4401.000*
314D2/A	Single channel four roller pumphead for 2.4mm wall tube with mounting plate	033.4501.000*
314X	Extension four roller pumphead for 1.6mm wall tube	033.4431.000*

*For small bore tubing, pumpheads are available with large rollers. Contact Watson-Marlow technical support for details.

Maximum number of 313/314 pumpheads for 500 series drives												
			0.5 bar (7 psig)					2 bar (30 psig)				
Silicone	Tubing number		14	16	25	17	18	14	16	25	17	18
	Tubing bore (mm)		1.6	3.2	4.8	6.4	8.0	1.6	3.2	4.8	6.4	8.0
	Drive	Speed										
	520Di	220rpm	6	6	6	4	3	6	6	5	3	3
	520Di	350rpm	5	5	3	2	2	6	5	3	2	2
Bioprene Marprene Tygon Neoprene Viton	Tubing number		14	16	25	17	18	14	16	25	17	18
	Tubing bore (mm)		1.6	3.2	4.8	6.4	8.0	1.6	3.2	4.8	6.4	8.0
	Drive	Speed										
	520S, 520U, 520Du	220rpm	6	6	5	3	3	6	6	4	3	3
	520Di	350rpm	5	4	3	2	2	5	4	2	2	1

All flow rates shown were obtained pumping water at 20°C (68°F) 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. © STA-PURE PFL and © STA-PURE PCS are registered trademarks of W.L. Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

**WATSON
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Pumps**

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