



Improving your PERFORMANCE

313D/A three roller pumphead

Technical Information

- Flow rates from 0.01 ml/min to 1750 ml/min
- Rapid and simple tube loading flip-top pumphead
- Four roller design for higher accuracy
- Easy tube loading
- Snap-fit 313X or 314X extension pumpheads
- 314D2 pumphead accepts 2.4mm wall thickness tubing for higher pressures
- One year comprehensive warranty

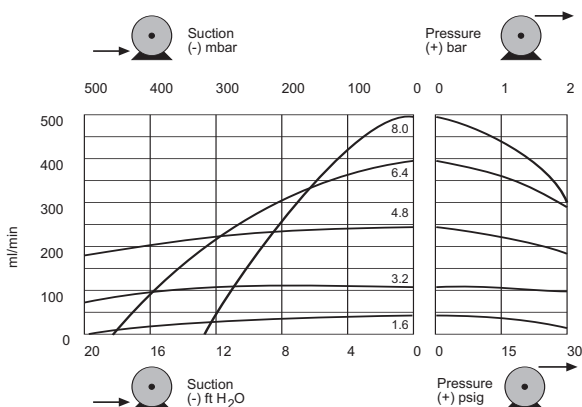
314D/A four roller pumphead attaches to any 500 series cased drive. Single channel pumphead supplied with adapter and bayonet mounting plate. 314D2 pumpheads for 2.4mm wall tubing cannot be extended.

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.



Flow rate ranges (ml/min)

	Tube bore and flow rates (ml/min)					
	Speed rpm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
520S, 520U and 520Du	2.0 - 220	0.55-60	2-220	4.4-484	7.2-792	10-1100
520Di	1.0 - 220	0.27-60	1.0-220	2.2-484	3.6-792	5-1100
520Di	2.0 - 350	0.55-95.5	2.0-350	4.4-770	7.2-1260	10-1750

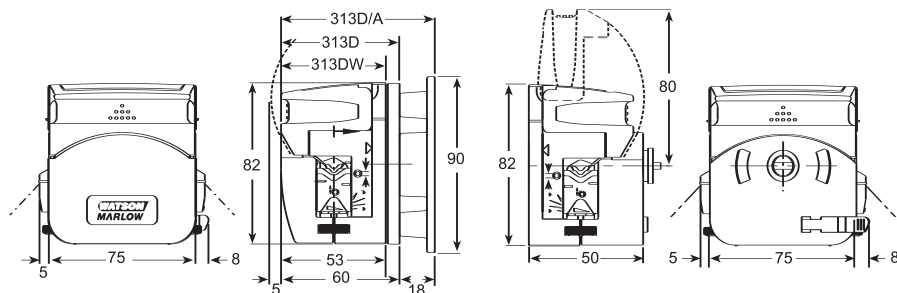


313 pumphead (3 roller)

Use these graphs as a guideline only, the figures and axis are approximate

Flow rates obtained running at 100rpm

suction curves obtained with zero output pressure, pressure curves obtained with zero lift



313D, 313DW, 313D/A

313X (Place between 313D and drive)

313D/A three roller pumphead

Product codes		
313D/A	single channel three roller pumphead for 1.6mm wall tube	033.3401.000
313D2/A	single channel three roller pumphead for 2.4mm wall tube	033.3501.000
314X	extension three roller pumphead for 1.6mm wall tube	033.3431.000

Tube ordering codes				
Bore/wall (mm)	Bioprene	Marprene	Platinum Silicone	
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	
3.2 / 1.6	903.0032.016	902.0032.016	913.A032.016	
4.8 / 1.6	903.0048.016	902.0048.016	913.A048.016	
6.4 / 1.6	903.0064.016	902.0064.016	913.A064.016	
8.0 / 1.6	903.0080.016	902.0080.016	913.A080.016	
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)	Neoprene	STA-PURE®	Tygon	Fluorel®
0.8 / 1.6	920.0008.016			970.0008.016
1.6 / 1.6	920.0016.016	960.0016.016	950.0016.016	970.0016.016
3.2 / 1.6	920.0032.016	960.0032.016	950.0032.016	970.0032.016
4.8 / 1.6	920.0048.016	960.0048.016	950.0048.016	970.0048.016
6.4 / 1.6	920.0064.016	960.0064.016	950.0064.016	970.0064.016
8.0 / 1.6	920.0080.016	960.0080.016	950.0080.016	970.0080.016

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 Please state the product code when ordering pumps and tubing.

Maximum number of 313/314 pumpheads for 520 series drives											
Silicone											
0.5 bar (7 psig)					2 bar (30 psig)						
Tube number	14	16	25	17	18	14	16	25	17	18	
Tube 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	6	4	3	6	6	5	3	3	
505Di	350rpm	5	5	3	2	2	6	5	3	2	2
Bioprene, Marprene, Tygon, Neoprene, Fluorel											
0.5 bar (7 psig)					2 bar (30 psig)						
Tube number	14	16	25	17	18	14	16	25	17	18	
Tube 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	
505Di	350rpm	5	4	3	2	2	5	4	2	2	1

Specification

Weight	313D/A	475g
	313D2/A	475g
	313X	345g
	313X2	325g

Materials of construction

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
Bearings	Carbon steel



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