



Improving your PERFORMANCE

314D/A four roller pumphead

Technical information and features

- Flip-top pumphead
- Flow rates from 0.01 ml/min to 1750 ml/min
- 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
- Rapid and simple tube loading flip-top pumphead

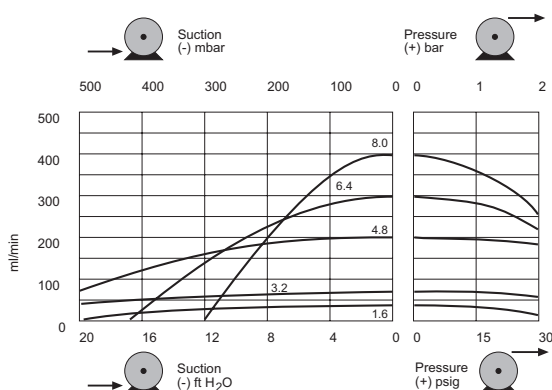
314D/A four roller pumphead attaches to any 500 series cased drive. Single channel pumphead supplied with adapter and bayonet mounting plate. 314D2 pumpheads for 2.4mm wall tubing cannot be extended.

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)

	Speed rpm	Tube bore and flow rates (ml/min)						
		0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
505S, 504S, 505U and 504U	0.5-55	0.01-1.5	0.03-3.3	0.12-13	0.42-46	0.95-104	1.5-165	2.0-220
505S, 504S, 505U and 504U	7.0-170	0.20-5.1	0.48-12	1.84-46	6.8-170	15-374	24-612	34-850
505S, 504S, 505U and 504U	2.0-220	0.06-6.6	0.12-13	0.50-55	1.7-186	3.8-418	6.0-660	8.0-880
505Du, 504Du and 505Di	0.5-55	0.007-1.6	0.015-3.3	0.06-13	0.21-46	0.47-104	0.75-165	1-220
505Du, 504Du and 505Di	1.0-220	0.03-6.6	0.06-13	0.25-55	0.85-186	1.9-418	3.0-660	4.0-880
505Du, 504Du and 505Di	2.0-350	0.06-10.5	0.14-24.5	0.55-95.5	2.0-350	4.4-770	7.2-1260	10-1750

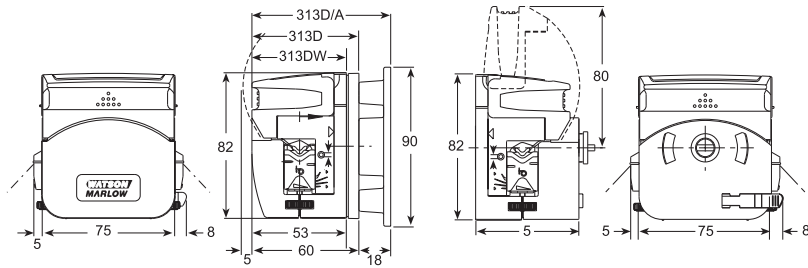


314 pumphead (4 roller)

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

Flow rates obtained running at 100rpm.

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



314D, 314DW, 314D/A

314X (Place between 314D and drive)

314D/A four roller pumphead

Product codes		
314D/A	single channel four roller pumphead for 1.6mm wall tube	033.4401.000
314D2/A	single channel four roller pumphead for 2.4mm wall tube	033.4501.000
314X	extension four roller pumphead for 1.6mm wall tube	033.4431.000

Specification

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

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
Sealed bearings	Carbon steel

Tube ordering codes				
Bore/wall (mm)	Bioprene	Marprene	Peroxide Silicone	Platinum Silicone
0.5 / 1.6	903.0005.016	902.0005.016	910.0005.016	913.0005.016
0.8 / 1.6	903.0008.016	902.0008.016	910.0008.016	913.0008.016
1.6 / 1.6	903.0016.016	902.0016.016	910.0016.016	913.0016.016
3.2 / 1.6	903.0032.016	902.0032.016	910.0032.016	913.0032.016
4.8 / 1.6	903.0048.016	902.0048.016	910.0048.016	913.0048.016
6.4 / 1.6	903.0064.016	902.0064.016	910.0064.016	913.0064.016
8.0 / 1.6	903.0080.016	902.0080.016	910.0080.016	913.0080.016
0.5 / 2.4			910.0005.024	
0.8 / 2.4			910.0008.024	
1.6 / 2.4	903.0016.024	902.0016.024	910.0016.024	913.0016.024
3.2 / 2.4	903.0032.024	902.0032.024	910.0032.024	913.0032.024
4.8 / 2.4	903.0048.024	902.0048.024	910.0048.024	913.0048.024
6.4 / 2.4	903.0064.024	902.0064.024	910.0064.024	913.0064.024
Bore/wall	Neoprene (mm)	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

® Fluorel is a registered trademark of Dyneon LLC, a 3-M Hoechst Enterprise

® STA-PURE is a registered trademark of W.L Gore & Associates Inc.

Please state the product code when ordering pumps and tubing.

Maximum number of 313/314 pumpheads for 500 series drives														
Silicone														
Tubing number	0.5 bar (7 psig)							2 bar (30 psig)						
	112	13	14	16	25	17	18	112	13	14	16	25	17	18
Tubing bore (mm)	0.5	0.8	1.6	3.2	4.8	6.4	8.0	0.5	0.8	1.6	3.2	4.8	6.4	8.0
Drive	Speed													
505S, 505U, 505Du, 504S, 504U, 504Du														
55rpm	6	6	6	6	6	4	3	6	6	6	6	5	3	3
504S 170rpm	6	6	5	3	2	2	1	6	6	5	3	2	1	1
505S, 505U, 505Du, 504S, 504U, 504Du, 505Di														
220rpm	6	6	6	6	6	4	3	6	6	6	6	5	3	3
505Di 350rpm	6	6	5	5	3	2	2	6	6	6	5	3	2	2
Bioprene, Marprene, Tygon, Neoprene, Viton														
Tubing number	0.5 bar (7 psig)							2 bar (30 psig)						
	112	13	14	16	25	17	18	112	13	14	16	25	17	18
Tubing bore (mm)	0.5	0.8	1.6	3.2	4.8	6.4	8.0	0.5	0.8	1.6	3.2	4.8	6.4	8.0
Drive	Speed													
505S, 505U, 505Du, 504S, 504U, 504Du														
55rpm	6	6	6	6	5	3	3	6	6	6	6	4	3	3
504S 170rpm	6	6	4	2	2	1	1	6	6	4	2	2	1	1
505S, 505U, 505Du, 504S, 504U, 504Du, 505Di														
220rpm	6	6	6	6	5	3	3	6	6	6	6	4	3	3
505Di 350rpm	6	6	5	4	3	2	2	6	6	5	4	2	2	1



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