

# 114 pumphead

# 114 series

Watson-Marlow Pumps

## FEATURES AND BENEFITS

- Small size, compact and robust design
- Trouble-free continuous tube loading in seconds
- Reliable performance without any operator adjustments
- Automatic tube stretch for high accuracy and repetitive flow
- Safe and closed with visible rotor movement
- Spring-loaded operation for good pressure control
- No maintenance - low friction materials and ball bearings
- Four roller pumphead, low pulsation
- Up to 340 ml/min continuous flow
- Up to 510 ml/min intermittent flow
- Universal drive connection for drive shafts from Ø6mm to Ø10mm



*Watson-Marlow... Innovation in Full Flow*

## PERFORMANCE

Flow rates (ml/min) Tubing 1.6mm wall

Tube bore (mm)	Speed (rpm)			
	(ml/rev)	100	400	600 (intermittent)
0.5	0.02	2.2	9.1	13.5
0.8	0.04	4.3	17	26
1.6	0.14	14	56	84
2.4	0.29	29	115	175
3.2	0.47	47.5	190	285
4.0	0.67	67	270	405
4.8	0.85	85	340	510

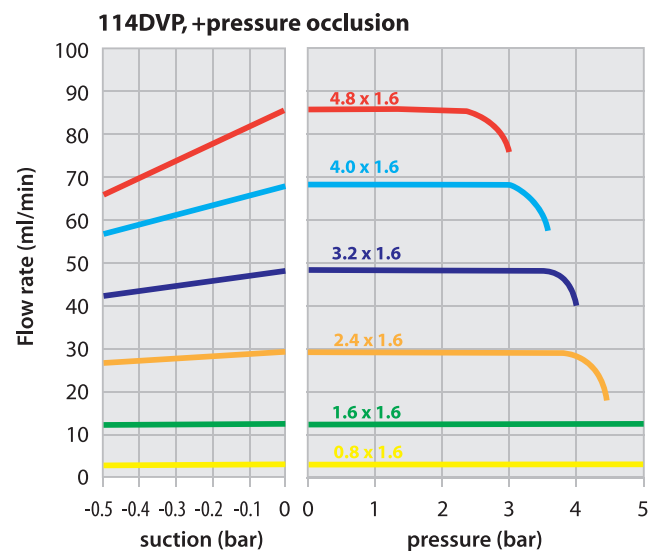
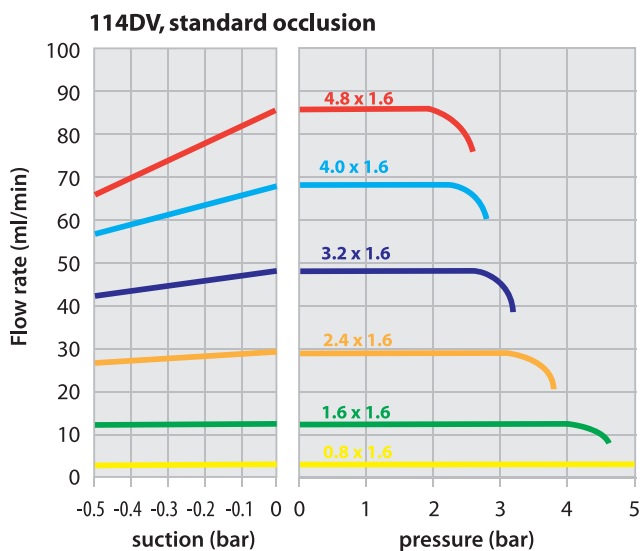
### Custom options

#### Pumphead options

- No visible rotation - covered holes
- Logic off switch and rotation sensor
- Custom colours
- Models for thin wall tubing
- Custom occlusion settings

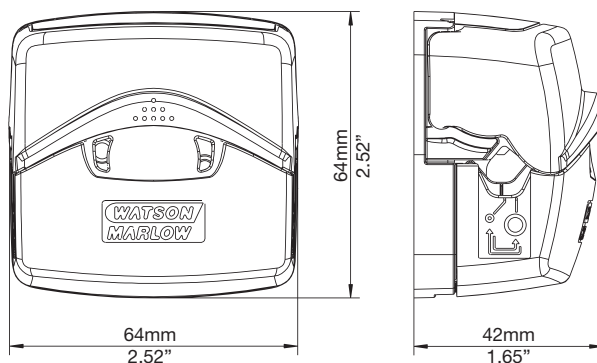
If you do not find exactly what you are looking for in this datasheet, we will make you a custom solution.

## Pressure and flow performance



Flows obtained pumping water at 100rpm CCW-rotation

## DIMENSIONS



## TECHNICAL SPECIFICATION

Pump type	Single channel peristaltic pumphead
Tubing	1.6mm wall, continuous tubing
Operating Torque	<250 mNm
Operating temperature	-10 to +45C Please consider the tubing temperature range. Refer to www.wmpg.com
Weight	0.1kg
Max speed	400rpm continous, 600rpm intermittent
114DV standard pumphead	Optimised for tube life
114DVP +pressure pumphead	Optimised for pressure performance

## MATERIALS OF CONSTRUCTION

Component	Material
Housing	IXEF PARA, Grilamid PA12
Rotor	IXEF PARA
Rollers	PTFE filled PBT
Bearings	Stainless steel ball bearings
Shafts	Stainless steel
Springs	Stainless steel

## ORDER INFORMATION

Product codes	
Description	Partcode
114DV standard pumphead	013.5000.00A
114DVP +pressure pumphead	013.5000.P0A

Tube ordering codes for 114DV and 114DVP pumpheads					
Bore/wall	Pumpsil	Marprene	Bioprene	STA-PURE PFL	PVC*
0.5/1.6mm	913.A005.016	902.0005.016	933.0005.016		
0.8/1.6mm	913.A008.016	902.0008.016	933.0008.016		
1.6/1.6mm	913.A016.016	902.0016.016	933.0016.016	965.0016.016	E3603.016.16
2.4/1.6mm	913.A024.016	902.0024.016	933.0024.016		
3.2/1.6mm	913.A032.016	902.0032.016	933.0032.016	965.0032.016	E3603.032.16
4.0/1.6mm			933.0040.016		E3603.040.16
4.8/1.6mm	913.A048.016	902.0048.016	933.0048.016	965.0048.016	E3603.048.16
Bore/wall	Neoprene*	STA-PURE PCS			
0.5/1.6mm					
0.8/1.6mm	920.0008.016				
1.6/1.6mm	920.0016.016	960.0016.016			
2.4/1.6mm					
3.2/1.6mm	920.0032.016	960.0032.016			
4.0/1.6mm					
4.8/1.6mm	920.0048.016	960.0048.016			

\*recommended for 114DVP +pressure pumphead only

All flow rates shown were obtained pumping water at 20C (68F) 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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