

621VI/R, 621V/RE, 621VI/RE4 variable speed close coupled pumps

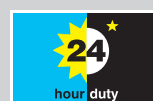
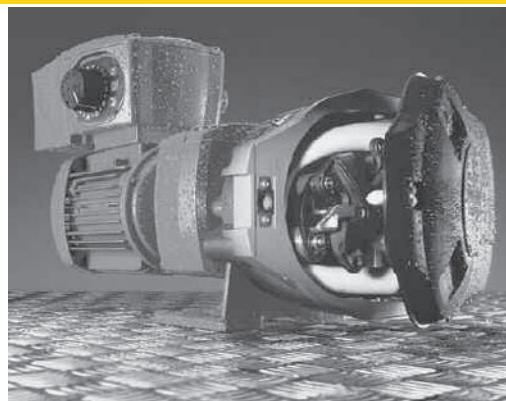
600^{series}

Watson-Marlow Pumps

FEATURES AND BENEFITS

- Flow rates from 0.09 L/min (0.02 USGPM) to 18 L/min (4.76 USGPM), pressures up to 2 bar (30psi), or 4 bar (60psi) with STA-PURE or TM Marprene/Bioprene
- IP55 integrated frequency inverter/motor gearbox, offering 10:1 manual speed control (IP65 upgrades available)
- Stop/forward/reverse control as standard, analogue or digital remote control options also available
- Pumpheads are tool unlocking with options for guard switch and leak detection*
- 620R twin-roller CIP/SIP pumphead offers rapid tube loading with four tube bore sizes
- 620RE twin-roller CIP/SIP pumphead accepts rapid snap-fit 12mm or 17mm Loadsure™ elements
- 620RE4 four-roller low pulsation CIP/SIP pumphead accepts rapid snap-fit 12mm or 17mm Loadsure™ elements

*Contact Watson-Marlow applications department

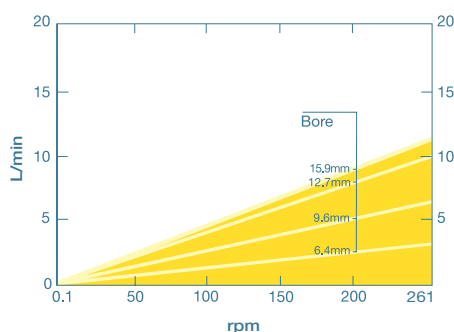


Watson-Marlow...Innovation in Full Flow

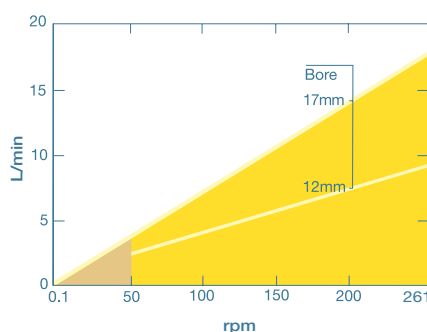
PERFORMANCE

Tube bore and flow rates (L/min)						Elements			
Material	Variable	620R continuous tubing				620RE Loadsure		620RE4 Loadsure	
	rpm	6.4mm	9.6mm	12.7mm	15.9mm	12.0mm	17.0mm	12.0mm	17.0mm
Marprene, Bioprene TM	7-78					0.26-2.9	0.41-4.6	0.22-2.5	0.29-3.2
	15-146					0.56-5.4	0.88-8.6	0.47-4.6	0.62-6.0
	27-261					1.00-9.7	1.6-15	0.85-8.2	1.1-11
Marprene, Bioprene TL	7-78	0.09-1.0	0.18-2.0	0.28-3.1	0.37-4.3	0.26-2.9	0.47-5.2	0.22-2.5	0.33-3.7
	15-146	0.20-1.9	0.38-3.7	0.60-5.8	0.80-7.8	0.56-5.4	1.0-9.8	0.47-4.6	0.71-6.9
	27-261	0.35-3.4	0.68-6.5	1.1-10	1.4-11	1.00-9.7	1.8-18	0.85-8.2	1.3-12
Pumpsil Platinum Silicone, Neoprene, STA-PURE PCS	7-78	0.08-0.9	0.19-2.1	0.29-3.3	0.38-4.8	0.27-3.0	0.43-4.8	0.23-2.6	0.30-3.3
	15-146	0.18-1.8	0.41-3.9	0.63-6.1	0.83-9.3	0.58-5.7	0.91-8.9	0.49-4.8	0.64-6.2
	27-261	0.32-3.1	0.73-7.0	1.1-11	1.5-15	1.0-10	1.6-16	0.89-8.6	1.2-11
STA-PURE PFL	7-78	0.08-0.9	0.18-2.0	0.28-3.1	0.43-4.8	0.28-3.1	0.51-5.6	0.24-2.6	0.35-3.9
	15-146	0.18-1.8	0.38-3.7	0.60-5.8	0.92-8.9	0.60-5.8	1.1-11	0.51-4.9	0.76-7.4
	27-261	0.32-3.1	0.68-6.5	1.1-10	1.6-16	1.1-10	1.9-19	0.91-8.8	1.4-13

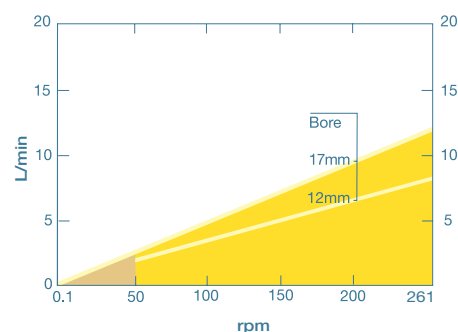
621R performance graph



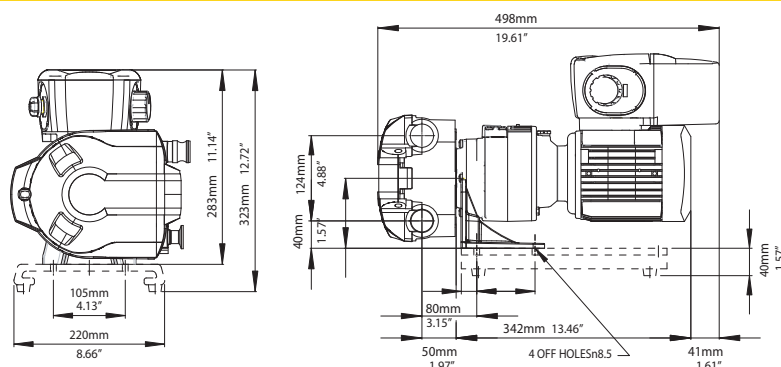
621RE performance graph



621RE4 performance graph



DIMENSIONS



TECHNICAL SPECIFICATION

	621VI/R, 621VI/RE, 621VI/RE4
Weight	27kg max (59lb 5oz max)
Ingress protection	IP55
Operational temperature range	5C to 40C (40F to 104F)
Noise	75dBA at 1m
Standards	CE
Supply	230V 50Hz 1 ph or 110V 50/60Hz 1ph

MATERIALS OF CONSTRUCTION

Component	Material
Motor	Cast aluminium alloy
Gearbox	Cast iron
Track	Aluminium alloy - powder coated
Rotor hub, roller arms	Fortron 1140L4 (PPS)
Link arm	Polyphenylene Sulfide (PPS)
Tube clamps	Polypropylene
Main roller assembly and springs	Stainless steel 303S31
Roller spindles, pins, thrust washer	Stainless steel 303S31
Follower rollers	MOS2 filled Nylon
Guard	Powder coated aluminium LM24
Guard seal	Closed-cell Neoprene

ORDER INFORMATION

Product codes				
Pump	rpm	Pressure	230V 1ph 50Hz 0.37kW	110V 50/60Hz 1ph 0.37kW
621VI/R	7-78	Maximum 2 bar peak pressure*	060.8822.020	060.8823.020
	15-146	Maximum 2 bar peak pressure*	060.8852.020	060.8853.020
	27-261	Maximum 2 bar peak pressure*	060.8872.020	060.8873.020
621VI/RE	7-78	Maximum 4 bar peak pressure*	060.8822.E20	060.8823.E20
	15-146	Maximum 4 bar peak pressure*	060.8852.E20	060.8853.E20
	27-261	Maximum 4 bar peak pressure*	060.8872.E20	060.8873.E20
621VI/RE4	7-78	Maximum 4 bar peak pressure*	060.8822.E40	060.8823.E40
	15-146	Maximum 4 bar peak pressure*	060.8852.E40	060.8853.E40
	27-261	Maximum 4 bar peak pressure*	060.8872.E40	060.8873.E40

*Contact Watson-Marlow applications department for 3 ph or alternative motor options

Pumphead ordering codes		
Pumphead	Description	Product code
620R	Two roller continuous tubing pumphead for maximum 2 bar peak pressure	064.0211.000
620RE	Two roller LoadSure element pumphead for maximum 4 bar peak pressure	064.0231.000
620RE4	Four roller LoadSure element pumphead for maximum 4 bar peak pressure	064.0431.000

Tubing 3.2mm wall tubing ordering codes				
Bore/wall (mm)	Bioprene	Marpene	Platinum Silicone	PureWeld XL
6.4x3.2	933.0064.032	903.0064.032	913.A064.032	
9.6x3.2	933.0096.032	903.0096.032	913.A096.032	941.0096.032
12.7x3.2	933.0127.032	903.0127.032	913.A127.032	941.0127.032
15.9x3.2	933.0159.032	903.0159.032	913.A159.032	
Bore/wall (mm)	Neoprene	STA-PURE	STA-PURE PFL	
6.4x3.2	920.0064.032	960.0064.032	965.0064.032	
9.6x3.2	920.0096.032	960.0096.032	965.0096.032	
12.7x3.2	920.0127.032	960.0127.032	965.0127.032	
15.9x3.2	920.0159.032	960.0159.032	965.0159.032	

LoadSure elements				
Material	12mm Tri-Clamp 3/4" PVDF connectors	17mm Tri-Clamp 3/4" PVDF connectors	12mm C and G with PP 3/4" connectors	12mm C and G with PP 3/4" connectors
Bioprene TL 0-2 bar (peak)	933.0120.PFT	933.0170.PFT		
Bioprene TM 0-4 bar (peak)	933.P120.PFT	933.P170.PFT		
STA-PURE PCS 0-4 bar (peak)	960.0120.PFT	960.0170.PFT		
Pumpsil (0-2 bar peak)	913.A120.PFT	913.A170.PFT		
Marpene TL 0-2 bar (peak)			902.0120.PPC	902.0170.PPC
Marpene TM 0-4 bar (peak)			902.P120.PPC	902.P170.PPC
Pumpsil 0-2 bar (peak)			913.A120.PPC	913.A170.PPC
Neoprene 0-2 bar (peak)			920.0120.PPC	920.0170.PPC

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.

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Pumps**

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