

**630SN/RE, 630UN/RE, 630DuN/RE, 630S/RE,  
630U/RE, 630Du/RE pumps fitted with 620RE pumphead  
for LoadSure™ elements**

# 600 series

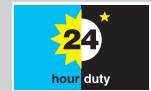
Watson-Marlow Pumps

## FEATURES AND BENEFITS

- Colour display and intuitive menu structures provide visual status indication and minimal key presses
- Flow rates from 0.004 L/min (0.001 USGPM) to 19 L/min (5 USGPM)
- 620RE twin roller pumphead for LoadSure™ elements
- 2650:1 speed control range from 0.1 to 265rpm in 0.1rpm increments
- Keypad incorporates 3-level security PIN lock
- IP31 (NEMA 2) and IP66 (NEMA 4X) cased pumps
- Dual voltage, 115V/230V 50/60Hz



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



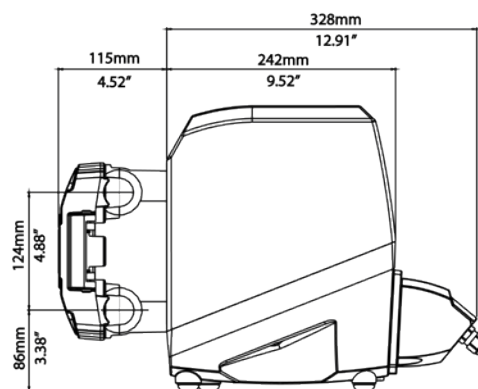
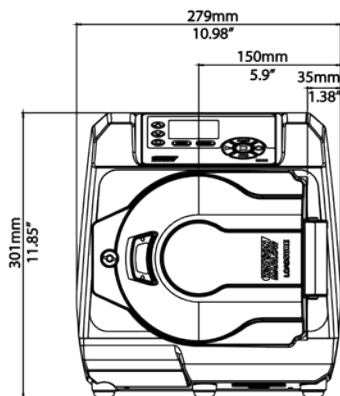
## TECHNICAL DATA

Pump drives	630SN	630UN	630DuN	630S	630U	630Du
<b>Manual control</b>						
Intuitive keypad and colour display	•	•	•	•	•	•
Choice of flowrate or speed display	•	•	•	•	•	•
Full calibration with choice of flow units	•	•	•	•	•	•
<b>Remote control</b>						
Configurable Start/Stop, leak detector and pressure switch input (via contact closure or 5V TTL or 24V industrial logic)		•	•		•	•
Direction change and auto/manual toggle input (via contact closure or 5V TTL or 24V industrial logic)		•	•		•	•
Remote operation of MemoDose (foot/hand-switch or logic input)		•	•		•	•
Four configurable digital status outputs through 24V, 30W relays		•	•			
Software configurable logic outputs					•	•
<b>Analogue speed control</b>						
Fully configurable inputs; 0-10V or 4-20mA		•	•		•	•
Analogue outputs; 0-10V, 4-20mA		•	•		•	•
Keypad/analogue input scaling (replacement of diaphragm pumps)			•			•
Tacho frequency output; 0-1478Hz		•	•		•	•
<b>Digital communication</b>						
RS485 network control			•			
RS232 network control						•
<b>Security</b>						
3-level Security PIN lock	•	•	•	•	•	•

## PERFORMANCE

Tube bore and flow rates (L/min)	Speed	LoadSure™ elements, 620RE (2 rollers)	
		12mm	17mm
Marprene® TM, Bioprene® TM	0.1 to 265rpm	0.004-11	0.01-19
Marprene® TL, Bioprene® TL	0.1 to 265rpm	0.004-11	0.01-16
Pumpsil®	0.1 to 265rpm	0.004-10	0.01-16
GORÉ® STA-PURE® Pump Tubing – Series PFL, Neoprene	0.1 to 265rpm	0.004-11	0.01-19

## DIMENSIONS



## TECHNICAL SPECIFICATION

	630SN, 630UN, 630DuN	630S, 630U, 630Du
Ingress rating	IP66 / NEMA 4X	IP31 / NEMA 2
Enclosure	Watertight/dustproof	Wipe-down
Suitability	Corrosion-resistant for heavy industrial environments	Dry industrial environments with non-corrosive atmosphere
Humidity	(Non-condensing) 80% to 31C (88F), decreasing linearly to 50% at 40C (104F)	(Non-condensing) 80% to 31C (88F), decreasing linearly to 50% at 40C (104F)
Temperature	5C to 40C (41F to 104F)	5C to 40C (41F to 104F)
Pump weight	20.5kg (45lb 3oz)	19.6kg (43lb 3oz)
Speed control ratio	2650:1	2650:1
Torque rating	6Nm, continuous duty	6Nm, continuous duty
Noise	<70dB(A) at 1m	<70dB(A) at 1m
Standard	CE, cETLus	CE, cETLus
Power supply	100-120V/200-240V 1ph 50/60Hz 250VA	100-120V/200-240V 1ph 50/60Hz 250VA

## MATERIALS OF CONSTRUCTION

Component	Material
Keypad	Polyester
Switch-plate	ABS PA-765
Rear blanking plate	Stainless steel 316
Drive casework	Pressure die-cast aluminium (top - LM6, base - LM24)
Case work and guard coating	Exterior grade polyester powder coat
Drive shaft	Stainless steel 440C
Pumphead track	Powder coated aluminium LM24
Guard	Pressure die-cast aluminium LM24
Rotor hub, roller arms	Fortron 1140L4 (PPS)
Rotor cover	Dupont Hytrel G5544
Rollers – main/guide	Stainless steel 303/Nylatron
Main roller bearings	Carbon steel
Tube clamp sets	Polypropylene

## ORDER INFORMATION

0	6	0	9	1	•	•	•	•	•
<b>Model</b> 3: S 4: U 5: Du 6: Bp			<b>Ingress Protection</b> 1: IP31 / NEMA 2 N: IP66 / NEMA 4X			<b>Pumphead</b> 02: 620R E2: 620RE E4: 620RE4 5L: 620L 5G: 620LG		<b>Plug options</b> U: UK mains plug E: EU mains plug A: American mains plug K: Australia mains plug R: Argentina mains plug C: Swiss mains plug D: India/South Africa mains plug B: Brazilian mains plug	

	Sanitary LoadSure™ elements		Industrial LoadSure™ elements	
	(3/4" Tri-clamp PVDF connectors)		(3/4" Cam and groove PP connectors)	
	12mm	17mm	12mm	17mm
GORE® STA-PURE® Pump Tubing – Series PFL	965.0120.SST**	965.0170.SST**		
GORE® STA-PURE® Pump Tubing – Series PCS	960.0120.PFT*	960.0170.PFT*		
Bioprene® TM	933.P120.PFT*	933.P170.PFT*		
Bioprene® TL	933.0120.PFT	933.0170.PFT		
Marpene® TM			902.P120.PPC	902.P170.PPC
Marpene® TL			902.0120.PPC	902.0170.PPC
Pumpsil®	913.A120.PFT	913.A170.PFT	913.A120.PPC	913.A170.PPC
Neoprene			920.0120.PPC	920.0170.PPC

\*4 bar pressure capability with STA-PURE, Bioprene® and Marprene® TM

\*\*SST = sanitary stainless steel connectors

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. Watson-Marlow, Pumpsil, PureWeld XL, 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. GORE and STA-PURE are trademarks of W. L. Gore & Associates. Please state the product code when ordering pumps and tubing.

**WATSON  
MARLOW  
Pumps**

wmftg.com  
info@wmftg.com  
+44 (0) 1326 370370