

# 621F with 620RE4 pumphead

600 series close-coupled pumps

## Features and benefits

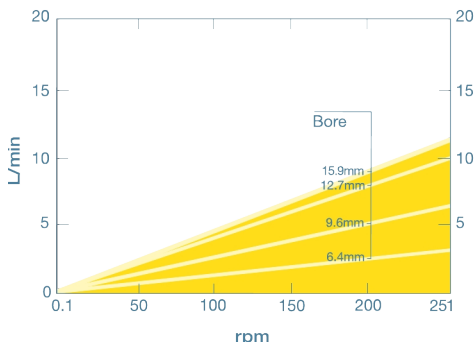
- Simplex flow rates up to 13 L/min
- Discharge pressures up to 4 bar with element style pumpheads
- 620RE two roller or 620RE4 four roller pumphead with CIP/SIP rotor and rapid snap-fit tube loading, pumphead accepts both 12 mm and 17 mm industrial and sanitary LoadSure elements
- Compact design with foot mounted gearbox
- 24-hour continuous duty with a two-year warranty
- Reversible operation
- Fixed Speed options: 230/460 VAC, 50/60 Hz 3-phase or 120/240 VAC, 50/60 Hz, 1-phase. Variable speed options supplied with 230/3/60, 460/3/60, 120/1/60 or 220/1/60 Variable frequency drive



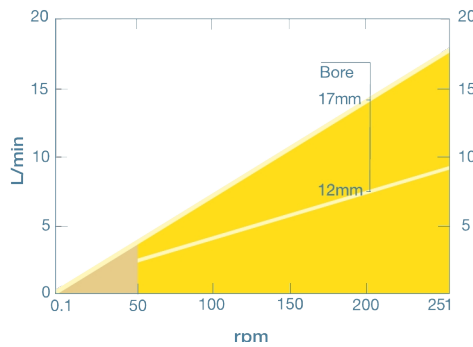
## 621F with 620RE4 pumphead performance

| Tube bore and flow rates (L/min)                 | Elements |                        |         |        |        |                |          |                 |          |
|--|----------|------------------------|---------|--------|--------|----------------|----------|-----------------|----------|
|  | Fixed    | 620R continuous tubing |         |        |        | 620RE LoadSure |          | 620RE4 LoadSure |          |
| Material   | rpm      | 6.4mm                  | 9.6mm   | 12.7mm | 15.9mm | 12.0mm         | 17.0mm   | 12.0mm          | 17.0mm   |
| Marpren, Bioprene TM                             | 77/250   |                        |         |        |        | 2.9/9.3        | 4.5/14.8 | 2.4/7.9         | 3.2/10.3 |
| Marpren, Bioprene TL                             | 77/250   | 1.0/3.3                | 1.9/6.3 | 3.1/10 | 4.2/11 | 2.9/9.3        | 4.7/16.9 | 2.4/7.9         | 3.6/11.8 |
| Pumpsil Platinum Silicone Neoprene, STA-PURE PCS | 77/250   | 0.92/3.0               | 2.1/6.8 | 3.2/11 | 4.7-14 | 3.0/9.7        | 4.7/15   | 2.5/8.3         | 3.3/11   |
| STA-PURE PFL                                     | 77/250   | 0.92/3.0               | 1.9/6.3 | 3.1/10 | 4.7-15 | 3.1/10.0       | 5.6/18   | 2.6/8.5         | 3.9/13   |

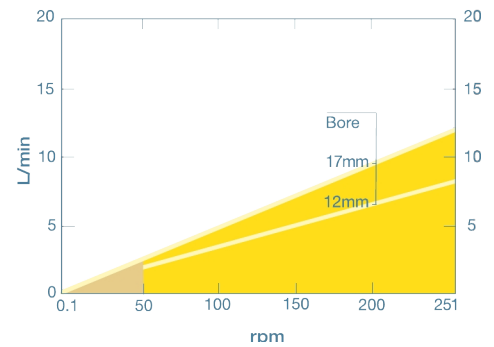
620R performance graph



620RE performance graph



620RE4 performance graph



## Technical specifications

|                           | 621F with 620RE4 pumphead |
|---------------------------|---------------------------|
| Max. flow rate            | 13 L/min                  |
| Min. flow rate            | 0.92 L/min                |
| Max. flow rate            | 3.43 USGPM                |
| Min. flow rate            | 0.24 USGPM                |
| Max. operating pressure   | 4 bar                     |
| Max. operating pressure   | 60 psi                    |
| Ambient Temperature Range | 5 to 40 °C                |
| Ambient Temperature Range | 41 to 104 °F              |
| Motor types               | Fixed speed motor         |
| Max. operating speed      | 250 rpm                   |
| Standards                 | CE                        |
| Ingress rating            | IP55                      |
| Noise                     | 75dB(A) at 1m             |
| Weight                    | 18.5 kg                   |
| Weight                    | 40.43 lbs                 |
| Power supply              | 230/400 V 3 ph, 50 Hz     |

Table lists details for fixed speed pumps. For more detail on drive, AC motor and inverter options please contact your local Watson-Marlow Fluid Technology Solutions representative.

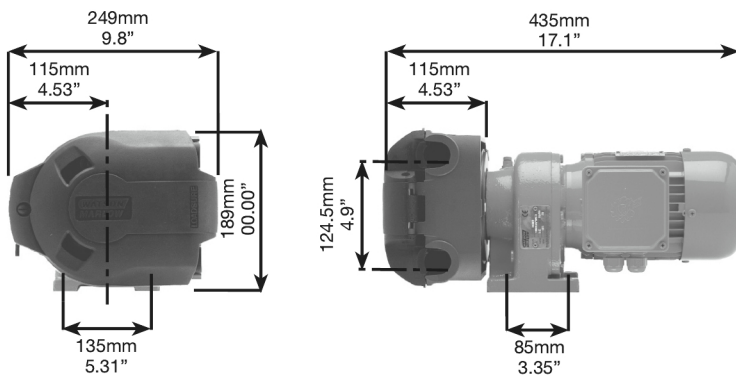
## Materials of construction

|                          | 621F with 620RE4 pumphead  |
|--------------------------|--|
| Gearbox                  | Cast iron  |
| Motor                    | Cast aluminium alloy   |
| Pumphead guard           | Powder coated aluminium LM24   |
| Pumphead roller assembly | Fortron 1140L0 (PPS), MoS2 filled Nylon 6 (Nylatron), Stainless steel 303S31 |
| Pumphead rotor assembly  | Fortron 1140L0 (PPS)   |
| Pumphead track           | Powder coated aluminium LM24   |
| Seals                    | Neoprene   |
| Tube clamp assembly      | PP (polypropylene)   |

Information listed covers the complete range of fixed speed pumps.

For detailed specifications of individual models/components and other drive/pumphead options, refer to user manual or contact WMFTS representative.

## 621F with 620RE4 pumphead dimensions



## Product codes

| Pump     | rpm | Supply                   | Product code         |
|----------|-----|--------------------------|----------------------|
| 621F/RE4 | 77  | 230/400V 50Hz 3ph 0.37kW | 060.8122.E40 - *10:1 |
|          | 250 | 230/400V 50Hz 3ph 0.37kW | 060.8152.E40 - *5:1  |

\*10:1 or 5:1 speed reduction available using VFD

\*ATEX pumps 10:1 speed reduction available using VFD from geared units fitted with PTC thermistors

For alternative speeds and motor options contact Watson-Marlow Applications Engineering Department.

| Pumphead | Description   | Product code |
|----------|---|--------------|
| 620RE4   | Four roller LoadSure element pumphead for maximum 4 bar peak pressure | 064.0431.000 |

| Tubing         |              |              |                   |              |
|----------------|--------------|--------------|-------------------|--------------|
| Bore/wall (mm) | Bioprene     | Marprene     | Platinum Silicone | PureWeld XL  |
| 6.4x3.2        | 933.0064.032 | 902.0064.032 | 913.A064.032      |              |
| 9.6x3.2        | 933.0096.032 | 902.0096.032 | 913.A096.032      | 942.0096.032 |
| 12.7x3.2       | 933.0127.032 | 902.0127.032 | 913.A127.032      | 942.0127.032 |
| 15.9x3.2       | 933.0159.032 | 902.0159.032 | 913.A159.032      |              |
| Bore/wall (mm) | STA-PURE     | STA-PURE PFL |                   |              |
| 6.4x3.2        | 961.0064.032 | 966.0064.032 |                   |              |
| 9.6x3.2        | 961.0096.032 | 966.0096.032 |                   |              |
| 12.7x3.2       | 961.0127.032 | 966.0127.032 |                   |              |
| 15.9x3.2       | 961.0159.032 | 966.0159.032 |                   |              |

| Loadsure Elements           |                                     |                                     |                                  |                                  |
|-----------------------------|-------------------------------------|-------------------------------------|----------------------------------|----------------------------------|
| Material                    | 12mm Tri-Clamp 3/4" PVDF connectors | 17mm Tri-Clamp 3/4" PVDF connectors | 12mm C&G with PP 3/4" connectors | 12mm C&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.M120.PFT                        | 933.M170.PFT                        |                                  |                                  |
| STA-PURE PCS 0-4 bar (peak) | 961.0120.PFT                        | 961.0170.PFT                        |                                  |                                  |
| Pumpsil (0-2 bar peak)      | 913.A120.PFT                        | 913.A170.PFT                        |                                  |                                  |
| Marprene TL 0-2 bar (peak)  |                                     |                                     | 902.0120.PPC                     | 902.0170.PPC                     |
| Marprene TM 0-4 bar (peak)  |                                     |                                     | 902.P120.PPC                     | 902.P170.PPC                     |
| Pumpsil 0-2 bar (peak)      |                                     |                                     | 913.A120.PPC                     | 913.A170.PPC                     |

Disclaimer: All flow rates shown were obtained pumping water at 20 °C (68 °F) 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.

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