

701DFB with REA (ATEX) pumphead



700 series close-coupled pumps

Features and benefits

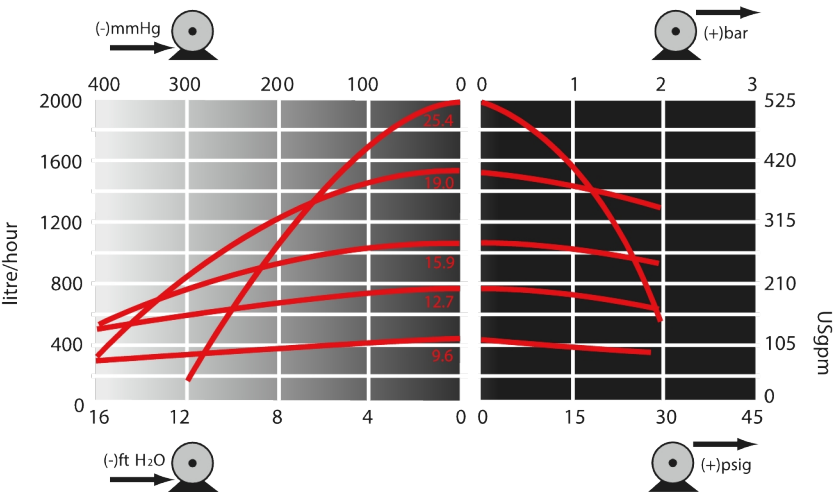
- Flow rates up to 1,900L/h (8.4GPM) and up to 2 bar (30psi) peak pressure
- A choice of fixed speeds: 45 rpm, 134 rpm, 232 rpm and 348 rpm. Other speeds on request
- LoadSure tubing elements in four sizes and five materials, with industrial cam-and-groove connectors or sanitary Tri-clamp-style connectors
- Rugged, chemical and knock-resistant finish; tool-unlockable track
- Driven occlusion rollers for longer tube life



701DFB with REA (ATEX) pumphead performance

| Typical flow rates per pumphead (L/h) | | | | | | | | |
|---------------------------------------|-------------------------|--------|--------|--------|--------|--------------------------|--------|--------|
| | 701RA continuous tubing | | | | | 701REA LoadSure elements | | |
| Fixed speeds | 9.6mm | 12.7mm | 15.9mm | 19.0mm | 25.4mm | 12.7mm | 15.9mm | 19.0mm |
| 112rpm | 130 | 240 | 340 | 470 | 620 | 240 | 340 | 470 |
| 360rpm | 420 | 780 | 1100 | 1500 | 2000 | 780 | 1100 | 1500 |

Flow rates by tube bore sizes for various pressure conditions.



For critical applications determine flow under operating conditions. Flow can vary due to tube tolerances and system configuration

Flow rates per pumphead at 360rpm, clockwise, water 20C

Technical specifications

| | 701DFB with REA (ATEX) pumphead |
|---------------------------|--|
| Max. flow rate | 2000 L/h |
| Min. flow rate | 130 L/h |
| Ambient Temperature Range | 5 to 40 °C |
| Ambient Temperature Range | 41 to 104 °F |
| Motor types | Fixed speed motor |
| Max. operating speed | 360 rpm |
| Standards | ATEX 2014/34/EU, ATEX II 2G Ex h IIB T4 Gb X, CE |
| Ingress rating | IP55 |
| Noise | <85dB(A) at 1m |
| Weight | 41 kg |
| Power supply | 230/400 V 3 ph, 50 Hz |

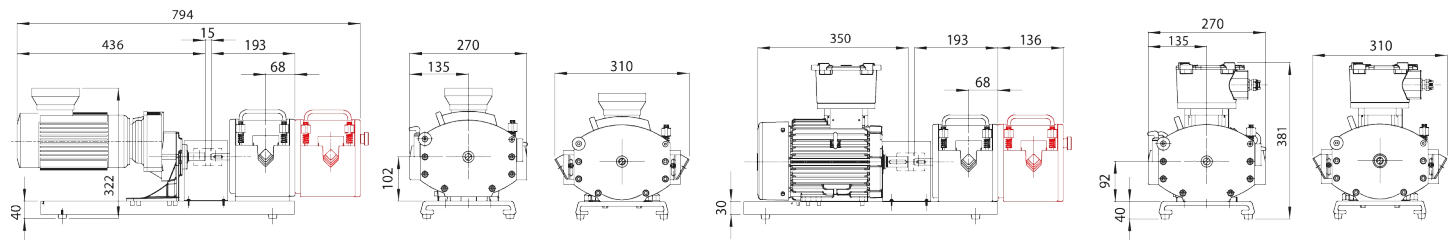
Table lists details for fixed speed pumps. For more detail on drive, AC motor and inverter options please contact your local Watson-Marlow Fluid Technology Solutions representative.

Materials of construction

| | 701DFB with REA (ATEX) pumphead |
|--------------------------|---|
| Gearbox | Aluminium, Cast iron |
| Motor | Cast iron |
| Pumphead body assembly | Aluminium alloy with epoxy polyester powder coat finish |
| Pumphead roller assembly | MoS2 filled Nylon 6 (Nylatron), Polyamide |
| Pumphead rotor assembly | Aluminium alloy LM24, Stainless steel |
| Pumphead track | Aluminium alloy with epoxy polyester powder coat finish |
| Fixings | Stainless steel |
| Tube clamp assembly | Glass filled Nylon |

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.

701DFB with REA (ATEX) pumphead dimensions



Measurements shown in millimetres (mm)

Dual pumphead versions

Product codes

| Pump | rpm | Supply | Product code |
|------------------------------|-----|--------------------------------|--------------|
| 701DFB/REA (Single pumphead) | 112 | 230/400V 50Hz 3ph 0.37kW *10:1 | 070.1012.E00 |
| | 360 | 230/400V 50Hz 3ph 1.1kW *10:1 | 070.1032.E00 |

*10:1 speed reduction available using VFD. Geared units fitted with PTC thermistors

| Pumphead | Description | Product code |
|----------|--|--------------|
| 701RBEA | Four roller LoadSure element ATEX pumphead | 073.0104.A00 |

4.8mm wall tubing

| Bore/wall (mm) | Bioprene | Marprene | Pumpsil | PureWeld XL |
|----------------|--------------|--------------|--------------|--------------|
| 9.6/4.8 | 933.0096.048 | 902.0096.048 | 913.A096.048 | 942.0096.048 |
| 12.7/4.8 | 933.0127.048 | 902.0127.048 | 913.A127.048 | 942.0127.048 |
| 15.9/4.8 | 933.0159.048 | 902.0159.048 | 913.A159.048 | |
| 19.0/4.8 | 933.0190.048 | 902.0190.048 | 913.A190.048 | 942.0190.048 |
| 25.4/4.8 | 933.0254.048 | 902.0254.048 | | 942.0254.048 |
| Bore/wall (mm) | STA-PURE PCS | STA-PURE PFL | | |
| 9.6/4.8 | 961.0096.048 | 966.0096.048 | | |
| 12.7/4.8 | 961.0127.048 | 966.0127.048 | | |
| 15.9/4.8 | 961.0159.048 | 966.0159.048 | | |
| 19.0/4.8 | 961.0190.048 | 966.0190.048 | | |

LoadSure elements

| Bore/wall (mm) | 12.7 x 4.8mm C&G with PP 3/4" connectors | 15.9 x 4.8mm C&G with PP 3/4" connectors | 19.0 x 4.8mm C&G with PP 3/4" connectors |
|----------------|--|--|--|
| Marprene | 902.0127.PPC | 902.0159.PPC | 902.0190.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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