

# Reduce risk

with **fluid path solutions** from  
Watson-Marlow Fluid Technology Group



# Market specific solutions for biotechnology and pharmaceutical applications

Watson-Marlow Fluid Technology Group delivers total connectivity along your fluid path. Whether in single-use or stainless process, our range of Watson-Marlow peristaltic pumps, ASEPCO valves, FlowSmart gaskets, BioPure single-use fluid path components, Aflex PTFE hoses, and Flexicon aseptic fill/finish systems all work together to reduce risk while optimising the repeatability of your process. All products offer traceability through LOT numbers or serial numbers.

**WATSON  
MARLOW  
Pumps**

Watson-Marlow peristaltic pumps and OEM solutions provide total process confidence and security, and scale from the benchtop to full production. Watson-Marlow's extensive product portfolio offers superior flow stability and metering accuracy ensuring process stability, GMP compliance and the highest final product quality.

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## Quantum

A step change in single-use bioprocessing capabilities, providing flow linearity to 20 L/min at 3 bar, with 0.12 bar pulsation and low shear.

Quantum is the first pump to provide integrated 4000:1 control ratio and validation in-line with BPOG/BPSA/USP/ISO guidelines.



### 100 series

Flow rates up to 190 ml/min. Single, twin or three channels of flow. Manual, remote or auto control.



### 200 series

Flow rates from 6 µl/min to 22 ml/min. Cassettes accept standard manifold tubing. Up to 32 channels of flow.



### 300 series

Flow rates from 2 µl/min to 2000 ml/min. Flip-top pumphead for easy tube loading. Single or multi-channel pumpheads.



### 500 series

Flow rates from 0.4 µl/min to 3.5 L/min. Four drive and five pumphead options. Up to 7 bar pressure.



### 600 series

Flow rates from 0.001 ml/min to 18 L/min. Up to 4 bar pressure. 2650:1 control ratio.



### 700 series

Flow rates from 0.12 L/min to 55 L/min. Up to 2 bar pressure. Single or twin channels of flow.



### 800 series

Flow rates to 8000 litre/hr. 3.5 bar pressure. Clean-in-place (CIP) and steam-in-place (SIP).



### 114DV panel mount pump

Flow rates up to 340 ml/min. 5 bar pressure. Available with a number of drive options or as pumphead only.



### 313D panel mount pump

Flow rates up to 2000 ml/min. 2 bar pressure. Available with a number of drive options or as pumphead only.



### Bench top fillers and cappers

Stand-alone units for manual aseptic filling and capping.



### Semi-automatic systems

Semi-automatic highly flexible filling systems. Ideal for small batch production.



### Automatic filling and capping

For clinical trial or contract filling. For bottles with screw caps or vials with crimp caps.



### OEM filling units

Peristaltic solutions for high capacity filling machines. Replacements for piston fillers.



### asepticu® single-use assemblies

Single-use fluid paths for Flexicon fillers. Rapid product change-over.



### Accusil® tubing and filling nozzles

Platinum-cured silicone tubing for accurate filling.



### Weirless Radial diaphragm in-line valve family

Our family of Weirless Radial in-line valves are designed for a host of applications. In addition to the standard in-line valve, our sterile access valve and block-and-bleed valves are designed to eliminate the need for additional equipment and reduce cleaning and contamination risk. Our simple Tri-Clamp assembly allows for 80% faster maintenance.



### Weirless Radial diaphragm tank bottom valve family

ASEPCO tank valves are also built around our patented radial diaphragm, and benefit from a simple Tri-Clamp assembly for faster maintenance. Tank valves can be welded truly flush to the bottom of your tank with no need for gaskets, bolts or seams. With our flexible design and manufacturing approach, we can customise valves to suit your needs.



### Weirless Radial diaphragm sample valve

Our hydrodynamic design gives you clean, consistent sampling every time and allows for enhanced temperature control and sample system cleanability. The behind-the-seat flow path allows for easy CIP/SIP between samples. The design of the sample valve allows for closer jacketing to the tank with the fittings angled away from the vessel at a quicker rate.



BioPure produces a range of innovative bioprocessing fluid path components that simplify production operations, lower cGMP manufacturing costs and reduce process validation. All BioPure products are supported by class-leading validation guides detailing test protocols including ISO, USP and extractables, enabling customers to quickly assess suitability for their manufacturing process.

[www.wmftg.com/biopure](http://www.wmftg.com/biopure)



### Q-Clamp™ sanitary Tri-Clamp™

Single-handed tool free operation. Unique tamper evident identification technology. Pressure rated up to 7 bar.



### Platinum-cured silicone gaskets

Precision engineered to achieve a smooth bore, contamination free fluid path. Cleanroom manufactured and packed. Flanged and unflanged options.



### Platinum-cured silicone braided hose

High pressure flexible hose, single and double braided options. Cleanroom manufactured and packed.



### Single-use fluid path components

Tri-Clamps, flow control valves, end caps and connectors. Cleanroom manufactured and packed.



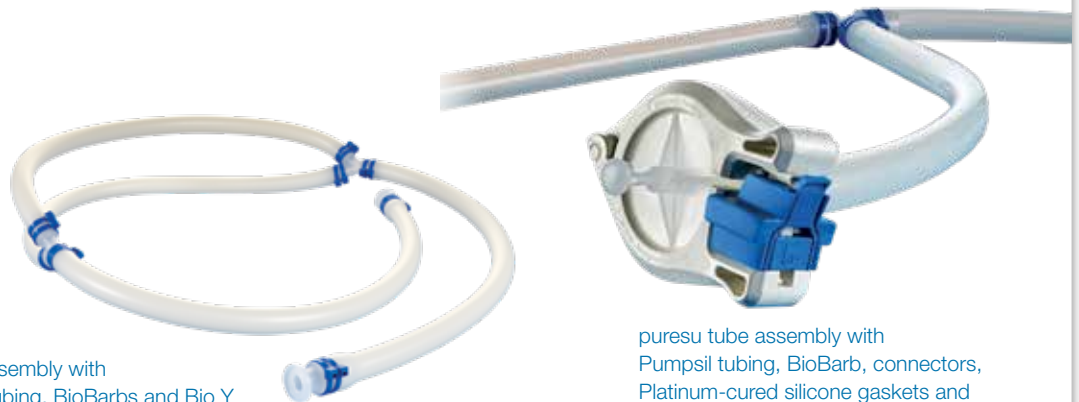
### BioTube Applicator

Allows automation of tube to hose barb assembly. Increases quality and reduces risk of junction failure.

### puresu® single-use fluid paths

Single-use fluid path assemblies that are cleanroom manufactured and packed. Offering a broad range of validated components and configurations, with no minimum order quantity and simple, repeatable ordering to support a continuous supply chain.

Work with us to design you a perfect customised fluid path solution for your application.



puresu tube assembly with PureWeld XL tubing, BioBarbs and Bio Y

puresu tube assembly with Pumpsil tubing, BioBarb, connectors, Platinum-cured silicone gaskets and Q-Clamp sanitary Tri-Clamp



FlowSmart design and manufacture fluid path components which guarantee product consistency and process security. FlowSmart gasket technology improves sterility within production processes, reducing validation risks for contamination-free applications.

[www.wmftg.com/flowsmart](http://www.wmftg.com/flowsmart)

### PolyClamp EPDM sanitary gaskets

SIP compatible with geometric stability after repeat cycles. USP Class VI validated. Flanged and unflanged options.

PolyClamp EPDM gaskets are the perfect solution for connecting ASEPCO Weirless Radial diaphragm valves in your process.





# WATSON MARLOW Tubing

Watson-Marlow's range of high purity platinum-cured silicone, weldable and long life thermoplastic elastomer tubing is designed specifically for applications throughout biotechnology and pharmaceutical processes. Matching Watson-Marlow tubing with our peristaltic pumps enables customers to build easy-to-validate, end-to-end fluid path solutions from a single, reliable source.

[www.wmftg.com/tubing](http://www.wmftg.com/tubing)



### Pumpsil®

Platinum-cured silicone with absolute traceability. Single-use tubing for biotechnology and pharmaceutical applications.



### PureWeld XL®

Providing secure, cost effective pumping and transfer. Weldable, with low particulate generation.



### Bioprene®

Thermoplastic elastomer tubing ideal for higher pressure applications with excellent chemical resistance.



### GORE STA-PURE Series PCS

PTFE-reinforced silicone tubing with very low particulate generation. Delivers long term performance and repeatable accuracy.



### GORE STA-PURE Series PFL

PTFE-reinforced fluoroelastomer tubing handles nearly all aggressive chemicals including organic solvents.



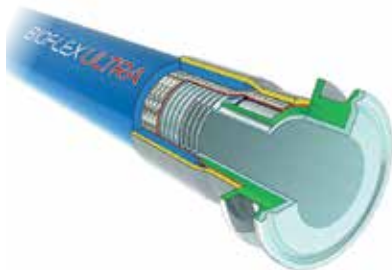
### Sanitary LoadSure® Fluid Path Kit

LoadSure elements now include pre-validated BioPure Q-Clamps, and appropriate gaskets from a single source.



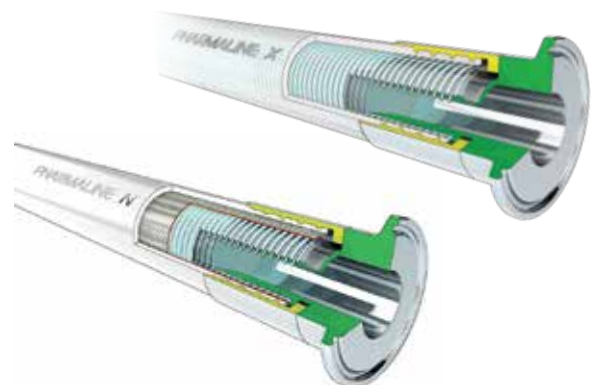
Aflex hose manufacture the widest, most technically advanced range of PTFE lined flexible hose products. Performance features include excellent chemical resistance, a smooth bore that ensures a clean fast fluid flow, resistance to high pressures and vacuum resistant and unmatched flexibility and kink resistance.

[www.wmftg.com/aflex](http://www.wmftg.com/aflex)



### Bioflex Ultra

Design for process fluid transfer, Bioflex Ultra smooth bore hose has a patented liner that offers unmatched flexibility and kink resistance. Bioflex Ultra provides a clean, fast flow of high purity fluids. Bores available up to 3 inch (80mm) bore with a range of PTFE lined and non lined end fittings and design options.



### Pharmaline N&X

Pharmaline N&X hose is designed to replace conventional silicone rubber hose for process fluid transfer. Pharmaline offers improved autoclave life cycle performance, chemical resistance and internal cleanability. Bores are available up to 3 inch (80mm) bore (Pharmaline N only) with a range of non lined end fittings and design options.

## BIOTECHNOLOGY AND PHARMACEUTICAL



### Watson-Marlow Fluid Technology Group

Watson-Marlow Fluid Technology Group supports its customers locally through an extensive global network of direct sales operations and distributors

[wmftg.com/global](http://wmftg.com/global)

