PUMPS FOR INDUSTRY
Watson-Marlow...Innovation in Full Flow

Industrial strength pumps with unrivalled precision
The ideal pump range for process industries

Pump perfection

Watson-Marlow is the world’s largest manufacturer of peristaltic pumps and tubing. We make nothing else.

We offer the widest range of pumps and tubes, capable of handling flows from 4µl/min to 3,300 litre/hour.

Peristaltic pumps are positive displacement pumps. They use the perfect pumping principle with none of the disadvantages of other pump types, and cost far less in maintenance and interrupted production.

They successfully handle the harshest fluids, stand up to the toughest industrial environment, and pump with extraordinary accuracy and flow control up to 875,000:1 in one pump.

Watson-Marlow 520, left, 620 and 720 pumps cater for the demands of industry, from food production to mining, from the water industry to printing.

Watson-Marlow Value for life

Value for life is a new way of looking at the cost of ownership of Watson-Marlow pumps compared with other positive displacement pumps. We prove to customers that Watson-Marlow pumps offer the lowest-cost solution over the life of a pump in comparison to competitors.

We engineer our winning performance, we don’t just turn up the speed. 60% fewer occlusions than our peristaltic competitors for the same flow means 2½ times the tube life.

Pumps, pumpheads and tubing last longer.
There’s less downtime, fewer failures, and less maintenance.
In the unlikely event of a problem, next-day delivery keeps your production rolling.
Our products are recognised for quality, reliability and performance, backed by a five-years warranty.

So the best pump really does cost less. Call us for the proof. It all adds up to Value for life.

Why Watson-Marlow makes the right pump for you

World-leading pumps...
With more than one million pumps in the field, our peristaltic pumps give our customers maximum reliability and minimum downtime.

...that eclipse the competition...
Peristaltic pump usage is growing faster than any other positive displacement pump type because they are simple in essence, but capable of sophisticated control.

• Easy to install, maintain and clean
• Nothing simpler to use
• If you can drive one, you can drive them all
• Upscale from pilot to production
• One-minute maintenance
• Self-priming to 9m (30ft)
• Dry running
• Reversible to cut waste
• No metal-to-metal contact
• The duty fluid is contained within a chemically resistant tube: there is no contamination of the pump and no contamination of the fluid

...with the key features you need...
Watson-Marlow cased pumps combine the toughness industry demands with the features vital to today’s highly tuned, economic production techniques.

• Speed control range up to 3,600:1: process flexibility
• Maintenance-free brushless DC motors
• Up to 7 bar pressure
• IP66 washdown protection

What is peristalsis?

Watson-Marlow pumps’ low-shear peristaltic action is created by compressing the tube element between rollers.

Between roller passes, the element recovers to draw in fluid.

The pump is self-priming and dry-running, with contained flow and no cross-contamination, requiring no seals or valves. No other positive displacement pump offers this separation of pump and fluid.

Watson-Marlow pumps outperform other pump types.

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Five-year warranty

Demonstrating our total confidence in reliability and our commitment to customer satisfaction, Watson-Marlow cased pumps in this brochure carry a five-year warranty against faulty materials and workmanship. It covers everything except misuse of the pump and consumable items. Your production will not stall because of us.
See www.value4life.co.uk
Serving a host of industries

Viscous cake batter is pumped from a hopper without degradation

At a remote water treatment works, chemicals are metered to balance pH levels

In a difficult lacquer handling application, close coupled pumps saved time and money

Sodium hypochlorite causes gas locking problems in many other pump types

Ceramic glaze has to be carefully metered to prevent air entrainment

In an aggressive chemical recovery application, the pump paid for itself in less than 12 months

Printing ink feed

Reduced downtime and spares costs meant that a heavy-duty corrugated box manufacturer paid for a new Watson-Marlow 720 series pump in less than a year.

Supplying ink to flexographic presses caused air-operated diaphragm pumps to fail when paper fibres and dried ink particles stopped filters and jammed ball valves. Every jam cost 90 minutes’ production, with an entire in-line operation stalled. Production also suffered from continual minor problems.

Watson-Marlow peristaltic pumps have no valves to clog and can handle suspended solids, so they need no filters, and simple, planned maintenance. A one-minute tube change at extended intervals avoids production-line stoppages.

Putting diaphragms into the shade

Accurate and repeatable metering of process fluids into dispersion mills is critical in achieving uniformity from one batch of paint pigments to another. Because of their ability to provide consistent, reproducible flows at low volumes, Watson-Marlow peristaltic pumps were chosen to replace double diaphragm pumps at BASF’s Michigan paint mixing plant.

The pumps require minimal set-up time and maintenance. The seamless design eliminates the need to clean the pumps, thereby avoiding the costs, health risks, and environmental issues associated with cleaning solvents.

“It is essential for colour consistency that flow rates to five mills be stable and reproducible,” says the production manager. “The double diaphragm pumps we had been using were apt to stall at low flow rates. We no longer have that problem since we installed the Watson-Marlow peristaltic pumps.”

Where are our 1 million pumps keeping industry productive?

Watson-Marlow pumps save time and money worldwide by successfully handling the toughest applications in a broad range of industries including:

- Chemical metering and transfer: corrosive acids and bases
- Water and waste water treatment: sodium hypochlorite, hydrofluorosilicic acid and ferric chloride
- Paint and pigments: dispersion mill feed, pigment and latex transfer
- Pulp and paper: dyes, brighteners, sizing agents, retention aids and titanium dioxide
- Mining and mineral separation: reagents, polymers and flocculants
- Construction: cement, brick and roof tiles; metering and spraying of colorants, coatings and additives
- Brewing: metering and transfer of yeast, flocculants, stabilisers and finings
- Printing and packaging: varnishes, inks, coatings and adhesives, with no colour cross-contamination or aeration
- Food and beverage: Clean-in-place applications, dairy, bakery, flavourings and additives
- Textiles: fibre coatings, dyes and acids
- Fine chemicals production: metering of process chemicals
- Engineering: spray coating and waste recovery
- OEM: versions available for system suppliers

Watson-Marlow. Innovation in Full Flow
How to pick a winner

Watson-Marlow’s tough industrial cased pumps are a team, and they’re on your side. 520, 620 and 720, using continuous tubing or elements, cover flows from 4µ/min to 3,300 litres/hour, with high accuracy and industrial compatibility.

The 720 is a powerful pump which can be fitted with one or two pumpheads: twin channels increase the flow for high-flow metering or transfer.

The versatile, medium-flow 620 is available with two rollers, for maximum throughput, or four rollers, for minimum pulsation. Other pumpheads are available.

With its eight tubing sizes, the 520 range has a flow ratio of 875,000:1, giving superb control. As well as standard metering duties, the 520 offers specialist pumping such as multi-channel and minimal pulsation.

All share the same technology, the same human-machine interface, and the same space-saving design concept. The controls are the same, allowing process scale-up and easy operator training: if you know one pump, you know them all.

changing a LoadSure® element

As easy as...

No simpler maintenance

Maintenance costs, in cash and downtime, are unavoidable for all pumps – except peristaltic pumps. Stators and rotors wear, valves jam, gas causes breakdowns – every one cutting production. Peristaltic pumps need new tubes at long, predictable intervals. Changing them takes moments – truly, one-minute maintenance.

The same principle applies to 520, 620 and 720 pumpheads:
1. Open the tool-unlockable safety guard (or track); remove the old tube or element, helped by ergonomic features such as the 520’s clutched rotor and the 620’s retractable rollers
2. Fit another tube or element
3. Close the guard; and (if you have an element model) connect up to your system

Pick the pump you need

Choosing the perfect pump from our many options is easy. Just answer four questions:

1. How much fluid?
2. What pumphead characteristics?
3. Which control option?
4. Which tubing or element?

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LoadSure® pumpheads guarantee correct tube loading

7 bar pressures (100 psi) with the 520REH

Flow rates up to 450 ml/min. LoadSure® elements are available in Marprene TH

2 bar pressures (30 psi) with the 520REL

Flow rates up to 3500 ml/min. LoadSure® elements are available in Marprene TL, Pumpsil, Neoprene

Continuous tubing for clear flow from source to discharge

Choose 520R for 1.6mm thin wall tubing or 520R2 for 2.4mm thick wall tubing

No tube joins, and the widest tube material choice with the 520R and 520R2

Flow rates up to 3500 ml/min. Pressures up to 2 bar. Continuous tubing in Marprene, Neoprene and Pumpsil

Pumphead benefits

• Large track diameter and two rollers give long tube life: 2½ times the competition
• Sprung rollers give low-shear pumping
• Tough, chemically resistant construction

Turn to Page 14 to Select Your Drive

A water company in Washington State, US, has replaced a diaphragm pump with a 520DuN/REH to inject sodium hypochlorite into a mains supply at 4.5 bar (65 psi), via an 18m (60ft) carrier water line at 4.8 bar (70 psi). The flow rate varies between 1.1 litre/hr and 7.6 litre/hr. The pump is in the open air, under a shelter. It endures ambient temperatures of -7C-32C.

Initially set up to operate manually, it is now analogue-controlled. During testing after installation, water company engineers confirmed that the pump would hold its pressure at up to 6.6 bar (95 psi), well above the pressure actually required. They found the pump easy to install, and were delighted with the quick-connect element connectors.

Water treatment
Pumpheads: choose a 620 for flows up to 18 litre/min, with pressures to 4 bar (60 psi).

LoadSure® pumpheads guarantee correct tube loading

- Maximum throughput and longer tube life with the 620RE’s two rollers
- Highest accuracy and minimal pulsation with the 620RE4’s four rollers

Continuous tubing for joint-free flow from source to discharge

- No tube joins, and the widest tube material choice with the 620R

LoadSure® pumpheads

- Tough, chemically resistant construction
- Large track diameter and two rollers for long tube life: up to 2½ times the competition
- Sprung rollers give low-shear pumping

Pumphead benefits

- Tough, chemically resistant construction
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Chemical process

A major British aluminum supplier uses a 620 pump to scavenge excess lacquer from a sheet aluminum colouring process.

The Watson-Marlow pump has solved a host of problems associated with the diaphragm pump which was in use previously. The lacquer to be pumped varies in quantity. When the diaphragm pump was required to run dry, it clogged, and the corrosive lacquer spilled from its holding reservoir, coating the production machinery and becoming soiled and unusable.

When a colour change was required, the pump had to be stripped down for complete cleaning.

The self-priming 620 can run dry; it is not affected by corrosive duty fluids; and when a colour change is required, its tube can be changed in less than a minute.

Pumpheads: choose a 720 for flows to 2,000 litre/hour, with pressures to 2 bar (30 psi)

High-flow pumpheads for metering or transfer applications. The 720 delivers a lot for its size. Five sizes of continuous tubing and elements in four sizes give optimum performance over a wide flow range.

Extension pumpheads double the available flow to 4,000 l/hr.

**LoadSure® pumpheads ensure correct tube loading**

2 bar pressures (30 psi) with the 720RE

Flow rates up to 2,000 litre/hr. Pressures up to 2 bar (30 psi). LoadSure® elements are available in Marprene TL, Pumpsil and Neoprene. Industrial Cam-and-Groove connectors allow universal drop-in fitting

**Continuous tubing for joint-free flow from source to discharge**

No tube joins, and the widest tube material choice with the 720R

Flow rates up to 2,000 litre/hr. Pressures to 2 bar (30 psi). Employs tube clamps to secure the tubing. Continuous tubing in Marprene TL, Neoprene and Pumpsil

**Pumphead benefits**

- Four driven rollers and sprung track for long tube life and low pulsation
- Tough, chemically resistant powder coating inside and out

**720 performance graph**

An optional second pumphead increases pump flow to 3,300 litre/hour or provides two separate flows.

**Abrasive slurry**

With 50% solids, the oxide-water mix that a major roof tile manufacturer uses to colour his products is highly abrasive.

He tried piston pumps, but abandoned them when he found that the slurry was effectively being de-watered: the pumps pumped the water, but left the solids to clog the cylinders. He tried centrifugal pumps, but poor flow control led to inconsistent colouring.

Then he bought a Watson-Marlow 720 series pump. The slurry remained uniform and could be applied in precise quantities. Since the fluid is contained within the tube, the pump cannot clog. In addition, the pump is small enough to be conveniently set up in various parts of the factory, and its impervious casing protects the pump in a very messy environment.

**720 pumpheads: flow ranges, litre/hr**

<table>
<thead>
<tr>
<th>Tube or element bore (mm, in, #)</th>
<th>720R (continuous tubing)</th>
<th>720RE (LoadSure elements)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.6 (3/8)</td>
<td>0.1-360 rpm</td>
<td>0.12-200 rpm</td>
</tr>
<tr>
<td>12.7 (1/2)</td>
<td>0.12-780 rpm</td>
<td>0.12-600 rpm</td>
</tr>
<tr>
<td>15.9 (5/8)</td>
<td>0.22-1100 rpm</td>
<td>0.22-800 rpm</td>
</tr>
<tr>
<td>19 (3/4)</td>
<td>0.30-1500 rpm</td>
<td>0.30-1250 rpm</td>
</tr>
<tr>
<td>25.4 (1)</td>
<td>0.42-2000 rpm</td>
<td>0.42-1500 rpm</td>
</tr>
</tbody>
</table>

Flow rate varies with tube material, discharge pressure, suction and viscosity.

**Construction materials:** All 720 pumpheads are designed for strength and durability. Pumphead track: aluminium; drive shaft: stainless steel 440C; rotor and plates: aluminium; cradle assembly, track: aluminium; central shaft: EN24 steel; rollers: MOS2 filled Nylon 6 (Nylatron); springs, spindle: stainless steel; coating: Alocrom pre-treatment with polyester powder coating.
Choose the Watson-Marlow drive to suit your control needs: 520, 620 and 720

**A family of pumps that perfectly fit all production line needs**

The latest generation of Watson-Marlow peristaltic pumps offers a complete range to suit industrial and process application needs:

- Efficient and reliable through a clean and brushless DC motor consuming up to 36% less power with minimal maintenance
- Tough, powder-coated housing and IP66 water-tight enclosure: perfect for industrial environments and wash-down
- Speed control up to 3600:1 and eight tubing sizes give metering capability of 875,000:1. Comprehensive calibration and precise speed adjustment ensure metering accuracy
- Comprehensive functionality and control. Manual control for plug-and-go; auto control for straightforward set-up of analogue remote control; digital control using RS485
- Pump scaling has never been easier. The 520, 620 and 720 drives have the same footprint: they are interchangeable on the line. Similar keypad layout and menu options. No further operator training is required; use one pump, use them all
- Value for life: the tube is the only consumable; unbeatable tube life; no installation; minimal maintenance; and a five-years warranty
- Tubing is the only consumable. No crystallisation and no gassing problems; no dismantling; no headaches
- Simple and easy installation
- Software-calibrated remote analogue speed control plus a second analogue input for flow scaling. A facility which renders redundant the stroke control adjustment included in some diaphragm or piston pumps
- Minimal maintenance means less downtime, less downtime means more profit. A cost effective solution for production
- Efficient motors means less power consumption

**DuN: the ultimate pump for production process**

520DuN, 620DuN and 720DuN offer full industrial connectivity and process control through PC, PLC or other plant controller. 16-key numeric keypad makes manual control truly simple, too: just type in the flow rate or speed you need

- Digital network control with RS485
- Comprehensive calibration with a choice of flow units
- PIN-secure process protection with two PIN levels

**BpN: PROFIBUS DP pumps**

- Fast communication for all pump functions
- No additional gateways or I/O converters required reducing cable needs and costs
- Predictive maintenance

**UN with analogue and remote control**

520UN, 620UN and 720UN offer keypad and remote control with analogue speed inputs and status outputs. The drives are configurable in software, and password-protected

- Analogue speed control
- Industrial logic remote control
- Analogue speed feedback

**SN with manual control**

520SN, 620SN and 720SN are plug-and-play pumps: Just plug in and switch on. They offer low cost of ownership, simple, accurate metering and one-key keypad access to all major controls

- Manual control: 9-key display pad
- Calibration to display flow rate
- MemoDose for easy one-shot dispensing

**Drop-in diaphragm pump replacement**

- Tubing is the only consumable. No crystallisation and no gassing problems; no dismantling; no headaches
- Simple and easy installation
- Software-calibrated remote analogue speed control plus a second analogue input for flow scaling. A facility which renders redundant the stroke control adjustment included in some diaphragm or piston pumps
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- Efficient motors means less power consumption

**Coping with chemicals**

Watson-Marlow peristaltic pumps are helping leading fine paper manufacturer, Arjo Wiggins, to improve product quality and overall production efficiency at Europe’s leading business stationery plant.

Arjo Wiggins operates 14 Watson-Marlow peristaltic pumps as replacements for lobe and progressive cavity pumps. Twelve 500 and 600 series pumps add sizing agents, retention aids and optical brightening agents. Two larger 700 series pumps transfer bleach.

Commented the process engineer, “Accurate pumping is very important to minimise waste. When we went to Watson-Marlow pumps I had concerns about tube life, which has not been an issue. The pumps have proven extremely durable, despite the harsh chemicals used in paper making.”
Select your pump control features

Drives

Your choice of

16

17

Sophisticated, but simplicity itself to set-up

We have the technology

Robust and resilient

Advanced technology and good design underlie Watson-Marlow industrial pumps’ long life of quality service. Our admirable reliability record is maintained by features such as brushless DC motors, a toughened LCD screen and a tough membrane keypad. The chemical resistance of the whole range outlasts our competition; the powder-coated casings outperform stainless steel when exposed to aggressive fluids such as ferric chloride or sodium hypochlorite.

PROFIBUS cased pumps

No point-to-point wiring and a simple 9-pin PROFIBUS connector means real-time, two-way communication for pump control and status feedback, including a full range of diagnostic information. The 520, 620 and 720 series pumps run from the same GSD file which enables true process scaling. Pumps communicate at the full PROFIBUS bus speed range, automatically detecting and adjusting to fit your network.

Easy wiring

Wiring-up all the cased pumps in this brochure is standard and easy. The TPM module at the rear of the pump has four watertight glands providing simple access for whatever control system connections you require. Inside: no soldering, no D-connectors, no folding – just large, clearly-marked screw terminals. With clear instructions in product documentation, you will be up and running in minutes.

Speed scaling

Programmable twin analogue inputs to allow flow pacing to be coupled with downstream quality feedback. The second input over-rides the main speed control, allowing stroke adjustment on a diaphragm pump redundant. Drop-in diaphragm pump replacement could not be simpler.

Accuracy

Class-leading flow control up to 3,600 l/h and simple, accurate configuration mean that your flow will match your needs precisely. Coupled that with tube bores from 0.8mm to 25.4mm, and you have a range of unbeaten versatility.

Specifications

Control range

520: 0.1-220 rpm; 620: 0.1-220 rpm; 720: D.1-360rpm

Voltage/frequency

Filtered 100-120V/200-240V 50/60Hz 1ph

Maximum voltage fluctuation

±10% of nominal voltage. A well regulated electrical mains supply is required along with cable connections conforming to the best practice of noise immunity

Installation category

II

Power consumption

520: 12VA; 620: 18VA; 720: 30VA

Full load current

520: <0.8A at 230V; <1.0A at 115V; 620: <1.2A at 230V; <2.2A at 115V; 720: <1.8A at 230V; <3.0A at 115V

Eeprom version

Accessiable through pump software

BpN 520DU 620DU 720DU 520UN 620UN 720UN

Manual control

Run/Stop; speed adjustment; forward/reverse; max key for rapid priming and purging; auto-restart

Choice of flow rate display; metric and imperial units

Numeric keypad for entry of speed, flow or PIN

Cumulative flow display

Remote control

Run/Stop direction change; auto/manual mode; leak detector input

Digital switch operation of MemoDose

Analogue speed control

Software programmable inputs; 0-10V, 1-5V or 4-20mA

Second analogue or keypad scaling of primary input

Digital network control

Full RS485 network connectivity for process control through PC or PLC

PROFIBUS DP network communication

Process security

Keypad lock

Basic security code to protect set-up

PIN-secure process protection, two-level PIN access

Pump status outputs

Analogue frequency (and 0-10V analogue) output of pump speed

Four 24V change-over relay pump status outputs, software-configurable

4-20mA and 0-10V analogue output of pump speed

MemoDose

Easy single-shot dispensing

Calibration

Simple calibration to display the flow rate as well as the rotation speed

Comprehensive calibration for precise metering. Choice of flow units

Robust and resilient

Our admirable reliability record is maintained by features such as brushless DC motors, a toughened LCD screen and a tough membrane keypad. The chemical resistance of the whole range outlasts our competition; the powder-coated casings outperform stainless steel when exposed to aggressive fluids such as ferric chloride or sodium hypochlorite.

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Accessiable through pump software

Enclosure rating

IP66 to BS EN 60529; Equivalent to NEMA 4X to NEMA 250* (indoor use). Suitable for heavy industrial, process and harsh environments. The drive uses a Gore membrane vent to equalise the pressure inside the enclosure and to prevent ingress of water and corrosive vapours.

Operating temperature

5C to 40C; -4F to 104F

Storage temperature

520: -40C to 70C; -40F to 158F; 620, 720: -25C to 65C, -13F to 149F

Maximum altitude

2,000m, 6,560ft

Humidity (condensing)

10% - 100% RH

Noise

520, 620: <60dB(A) at 1m; 720: <65dB(A) at 1m
ATEX and dosing pumps

 Directive 94/9/EC, commonly known as the ATEX directive, carries obligations to the person who places equipment on the market in EU territory for use in potentially explosive environments. All of Watson-Marlow’s ATEX pumps in close-coupled or baseplate formats have been rated as Group II, Category 2, intended for use in gas-based environments only. ATEX pumps are available in 501, 621 and 701 ranges.

All close coupled pumps are 24 hour duty rated, have IP55 enclosures and carry a two year warranty.

501DF/RLA
- Fixed speed: 62 rpm, 223 rpm or 281 rpm
- 501RLA pumphead for 1.6mm wall thickness tubing and pressures up to 2 bar.
- Flow rates from 2.4 ml/min to 2810 ml/min

501DF/RL2A
- As 501DF/RLA
- 501RL2CA pumphead for higher pressures using 2.4mm wall continuous tubing in seven bore sizes

501DV/RL2A
- Variable speed ball drive variator: 7 rpm – 250 rpm
- 501RL2A pumphead for 2.4mm wall thickness tubing and better pressure performance
- Flow rates from 0.29 ml/min to 2500 ml/min

620DF/R and 621DF/REA
- Fixed speed: 77 rpm or 251 rpm
- Flow rates from 0.92 litres/min to 16 litres/min
- Pressures to 2 bar with continuous tubing and 620DF/R pumpheads and up to 4 bar with LoadSure elements in 620REA pumpheads

621DF/RA and 621DVF/REA
- Variable speed ball drive variator: 7 rpm – 250 rpm
- ATEX II 2G (Zone 1) 0.25kW 6-pole 230V/400V 5-phase 50Hz TEFC electric motor
- Pressures to 2 bar with continuous tubing and 620DF/R pumphead and up to 4 bar with LoadSure elements in 620REA pumpheads
- Flow rates from 0.09 litres/min to 18 litre/min

701DFB/RA
- Fixed speed: 112 rpm or 360 rpm
- Three-phase ATEX II 2G (Zone 1) motor
- Continuous tubing in five sizes and seven materials
- Flow rates to 2 bar with continuous tubing
- pressures up to 2 bar
- Two-year warranty

701DFB/REA
- As 701DFB/RA
- Tubing elements in four sizes and three materials

701DFB/RXA and REXA
- As 701DFB/RA
- Extension pumpheads for 701DFB drive

Tubing immersion samples

A tubing sample pack is available which contains the full range of materials for chemical compatibility testing. For critical applications, we recommend that customers carry out an immersion test using the duty fluid and the intended tubing material. A short length of tube is immersed in the duty fluid for a period of 48 hours and then examined for signs of swelling, embrittlement or deterioration.

To request a tube sample pack please order 999.0002.000 for Marprene or 999.0013.000 for Pumpsil.
Choosing the PERFECT tube for all of your applications

Watson-Marlow is the only peristaltic pump manufacturer in the world to manufacture its own tubing, optimising our tubing tolerances and formulation to deliver the best process pump performance. In a peristaltic pump, the tubing largely dictates pump and system performance: Its restitution creates suction, its strength resists pressure, its flex resistance determines pumping life, its bore defines the flow rate, its wall thickness controls pumping efficiency and its purity protects your product from contamination. Watson-Marlow offers tubing in three materials and over 40 sizes, giving an extraordinary range of chemical and application capability.

Neoprene offers excellent performance with abrasive slurries and sustained pressure applications. Good suction and pressure capabilities. Working temperature range 0°C to 80°C. Black.

Marprene is our high-performance general-purpose tube. This thermoplastic elastomer provides chemical compatibility, long pumping life and pressure handling. Marprene® is ideal for general-purpose pumping or food handling and is highly resistant to acids, alkalis and oxidising agents such as ozone, peroxides and sodium hypochlorite. Meets FDA requirements 21 CFR 177.2600 for aqueous foods. Working temperature range 5°C to 80°C. Autoclavable.

Secure linking up
Watson-Marlow tubing elements for 520, 620 and 720 pumps link to the rest of your system using secure instant connectors: industrial-standard Cam-and-Groove connectors for 620 and 720, left; and quick-release push-fit connectors for 520 pumps, above. Both guarantee a secure seal and immediate release when required.

Pumpsil platinum-cured silicone tubing is manufactured by Watson-Marlow in our own silicone-dedicated ISO1644-1 class 7 (class J/10,000) cleanroom. Developed specifically for biopharmaceutical application, Pumpsil carries full biopharmaceutical certification USP Class VI and ISO10993. It also complies with EU1935/2004 and FDA 21CFR177.2600 for food contact. Pumpsil is entirely free of 2,4 DCBA and other leachables associated with peroxide-cured silicone and is post-cured to remove linear and cyclic siloxanes, cytotoxic materials which can leach out of other manufacturers’ non-post-cured platinum-cured tubing. Pumpsil® has an ultra-smooth bore to control protein binding and bacterial growth, making it ideal for production applications where there is long-term contact with the process fluid. Our LaserTraceability™ provides an ink-free, indelibly etched record of part number, lot number and use-by date right on the tube. This means that lot traceability is carried through from box to bag to the tube itself. Working temperature range: 20°C to 80°C. Translucent. Autoclavable.

Neoprene offers excellent performance with abrasive slurries and sustained pressure applications. Good suction and pressure capabilities. Working temperature range 0°C to 80°C. Black.

 Pipes and accessories
A range of interface pipework is available for our LoadSure™ element pumps with industrial-valved or non-valved connectors. Leak detection sensors are also available for most of our pump range.

Make reel savings
Many of our tubes are available in bulk, as well as in the standard shorter lengths - up to 152m at a time, depending on the bore size. Bulk buying gives important benefits in convenience, and huge cost savings: 36% less per metre than the metre price for 3m and 5m cut lengths. Further discounts are available on orders for multiple reels. Ask for our reel leaflet for the tube material of your choice.
Watson-Marlow online

Our engineers around the world can help you choose the perfect pump and tubing for your needs.

More information? Our brochures are on our website - www.wmpg.com