

**NEW!**  
**530**  
Pumps

## Model 530 Sanitary process pumps

Secure, accurate, intuitive



- Maintain product integrity
- Versatile system integration
- Minimise costly mistakes



Unrivalled accuracy with simple-to use HMI requiring minimal key presses to reduce chances of costly errors

Maintaining product integrity with visual status indication and an intuitive user-interface

Flow proportional to pump speed over 2,200:1 control range

USP Class VI and FDA approved tube materials

Ultimate process security with a 3 level PIN lock

Easy to install and incredibly simple to use

Ultimate controllability with manual, remote, Analog and digital communication, plus PROFIBUS

Low shear with no moving parts in the flow path

Optimum product integrity – only the tube contacts the fluid

## Why Watson-Marlow makes the right pump for your process

Watson-Marlow Fluid Technology Group is unique in being able to work with you at every process step to ensure your fluid transfer requirements are achieved. Whether performing gentle transfer of live cells or flavour addition, we have a solution.

We provide accuracy, reliability and purity for all your fluid handling needs. In continuous daily use throughout bioprocessing and food/beverage manufacturing, Watson-Marlow peristaltic pumps provide flow accuracy, ensuring process stability, cGMP compliance and final product quality.

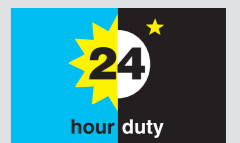
Maintaining quality and protecting product integrity with flows from microlitres up to 3.5 litres per minute. Reduce the risk and time for batch/product changeover at every stage of manufacture.

### Low shear

The extremely low-shear pump action allows you to move product without degradation or damage. There is no need to worry about the high velocities and arduous flow paths associated with impellers, vanes, lobes or valves in other pump types that can damage the product.

### Reliability

We know that pump failure during production cannot be tolerated due to the intrinsic value of the product. That is why we design our drives to be maintenance-free. We utilise spring-loaded rollers and tracks to provide long and repeatable tube life too.



### Where we keep biopharm and food/beverage processes going

From media preparation, nutrient feed and harvesting in biotechnology, to flavourings addition and vitamin dosing in food and beverage production

**Pharmaceutical:** tablet coating, metering or dosing of pharmaceutical products

**Biotechnology:** bioreactors/fermenters - nutrient feed, harvesting, anti-foam, perfusion, pH adjustment, ultrafiltration and diafiltration, chromatography, media preparation

**Brewing and beverage:** metering and transfer of yeast, flocculants, stabilisers, finings and cleaning solutions

**Food:** metering food dyes, flavourings, nutrients, vitamins, extracts and other additives, spray coating

**Cosmetics and healthcare products:** metering perfume, dyes and fragrance oils, feed PVA adhesive, bottle filling, soap - dosing liquid coal tar

**OEM:** panel mount or stand alone pump versions available for system suppliers



Front cover and application photos supplied courtesy of the National Institute for Bioprocessing Research and Training (NIBRT), showing their world-class facility in Dublin and © Sartorius Stedim Biotech S.A.

Feature	530Du/ 530DuN	530U/ 530UN	530S/ 530SN	530Bp/ 530BpN
<b>Manual control</b>				
Intuitive keypad and colour display. Choice of flow rate 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 (530DuN/530UN only)	•	•		
Software configurable IP31 outputs	•	•		
<b>Analog speed control</b>				
Fully configurable inputs; 0-10V or 4-20mA. Analog outputs; 0-10V, 4-20mA	•	•		
Keypad/Analog input scaling (replacement of diaphragm pumps)	•	•		
Tacho frequency output; 0-991Hz	•	•		
<b>Digital communication</b>				
RS485 network control (530DuN only)	•			
RS232 network control (530Du only)	•			
<b>Fieldbus technology</b>				
PROFIBUS DP V0				•
<b>Security</b>				
3-level security PIN lock	•	•	•	•

### Pump and tubing have equal importance

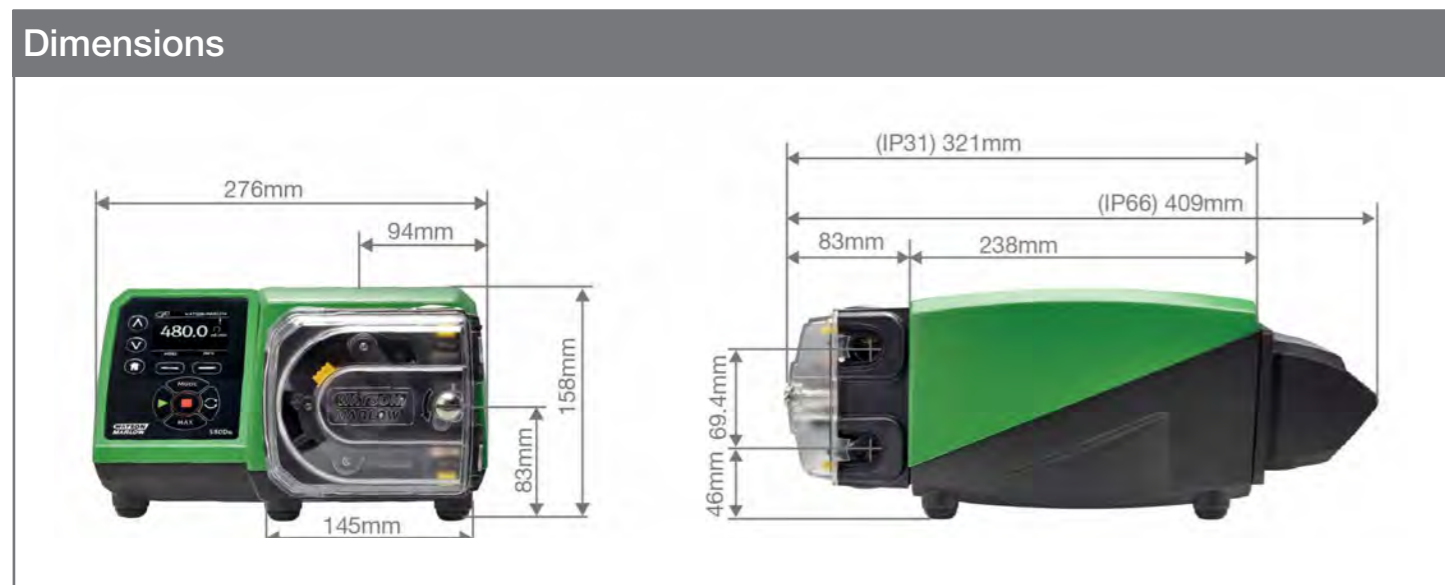
It is important to recognise that the pump and tubing combination are selected to match your specific application criteria.

Watson-Marlow is the only company that manufactures both the cased pumps and peristaltic tubing, which is a real advantage for customers that want to be certain that their peristaltic pump will work right first time and every time.



520 pumpheads: flow ranges, 0.1-220rpm. ml/min		0.5	0.8	1.6	3.2	4.8	6.4	8.0	9.6
Tube bore (mm, #)		112	13	14	16	25	17	18	193
520R and 520R2 (continuous tubing)	Pumpsil PureWeld XL STA-PURE PCS STA-PURE PFL	0.0040 -9.5	0.01 -24	0.04 -97	0.18 -390	0.40 -870	0.70 -1500	1.1 -2400	1.6 -3500
	Bioprene/64 shore tubing Marprene/64 shore tubing	0.0040 -9.0	0.01 -23	0.04 -92	0.17 -370	0.38 -830	0.67 -1500	1.1 -2300	1.5 -3300
520REL (LoadSure elements to 2bar)	Pumpsil STA-PURE PCS				0.18 -390		0.70 -1500		1.6 -3500
	Bioprene TL Marprene TL				0.17 -370		0.67 -1500		1.5 -3300
520REM (LoadSure elements to 4bar)	STA-PURE PCS STA-PURE PFL				0.18 -390		0.70 -1500		
	Bioprene TM Marprene TM				0.17 -370		0.67 -1500		
520REH (LoadSure elements to 7bar)	Bioprene TH Marprene TH STA-PURE PCS				0.20 -450				

Product weight		
530 Drive only	+ 520R, 520R2	+ 520REL, 520REM, 520REH
IP31 9.70kg	10.60kg	10.52kg
IP66 10.58kg	11.48kg	11.40kg



**Pumpsil®**  
Platinum-cured silicone tubing

- Single-use biopharm tubing
- Laser-etched lot traceability
- Excellent flow stability



**Bioprene®**  
Pharmaceutical grade thermoplastic elastomer tubing

- Long pump life
- Excellent chemical compatibility
- Fully autoclavable



**PureWeld XL®**  
Thermoplastic elastomer tubing

- Weldable and heat sealable
- Animal derived component free
- Consistent pump performance



**Marprene®**  
Industrial grade thermoplastic elastomer tubing

- Wide chemical compatibility and long life
- Low gas permeability
- Meets FDA regulations for handling aqueous foods



**GORE® STA-PURE® Pump Tubing - Series PCS**  
PTFE-reinforced silicone tubing

- Pressure rated up to 7bar
- Longest available tube life
- Spallation virtually eliminated



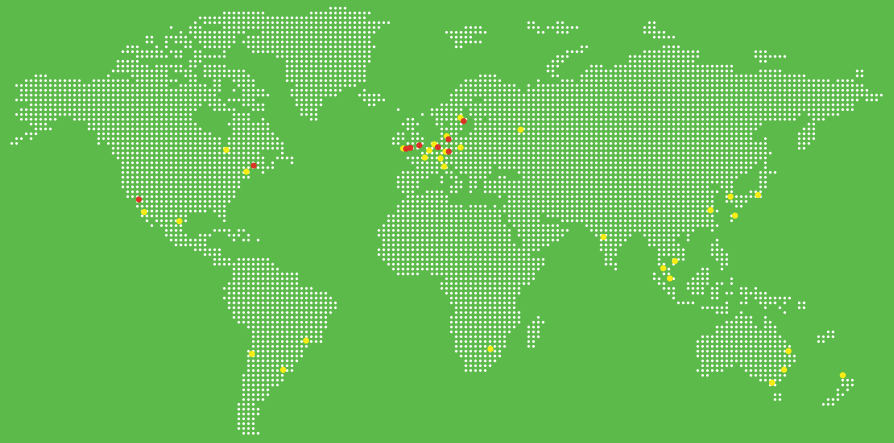
**GORE® STA-PURE® Pump Tubing - Series PFL**  
PTFE-reinforced fluoroelastomer tubing

- High resistance to aggressive chemicals
- Pressure rated up to 4bar
- 50 times longer life than other fluoroelastomers

Tubing features	Pumpsil	Bioprene	PureWeld XL	Marprene	STA-PURE PCS	STA-PURE PFL
LoadSure® elements	•	•		•	•	•
Continuous tubing	•	•	•	•		
Meets USP Class VI requirements	•	•	•		•	•
European Pharmacopoeia 3.1.9	•				•	
ISO 10993	•	•		•	•	
Lot traceable from raw material to finished product	•	•	•		•	•
Low gas permeability		•	•	•		
Sterilisation by autoclave	•	•			•	•
Sterilisation by gamma irradiation	•	•	•			
FDA regulations 21CFR 177.XXXX for food contact	•	•	•	•		
EC 1935/2004 for food contact in the EU	•		•			
Wide chemical resistance		•	•	•		•
High pressure capability 2-7bar		•		•	•	
High dispensing accuracy	•				•	•
Up to 10,000 hours pumping life		•		•	•	•

Watson-Marlow Fluid Technology Group has nine world-class factories supported by direct sales operations in 29 countries and distributors in more than 50 countries. For contact details visit our website:

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



Watson-Marlow Bredel Alitea Flexicon MasoSine BioPure Asepco Flow Smart



## 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.wmftg.com](http://www.wmftg.com)

## Global support

For many companies, global coverage will be a key consideration in their choice of equipment. Customers should assess the supplier's ability to supply certified spares, components, service and support on a truly global basis. Watson-Marlow Fluid Technology Group has direct sales operations in 29 countries and a worldwide network of distributors. These factors combine to give customers confidence that their pumps and systems can be supported, maintained and optimised on a global basis.

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

Tel: +44 (0) 1326 370370  
[info@wmftg.co.uk](mailto:info@wmftg.co.uk)

Watson-Marlow Fluid Technology Group  
Falmouth, Cornwall, TR11 4RU, UK  
[www.wmftg.co.uk](http://www.wmftg.co.uk)

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