



## Model 530 Industrial process pumps

Robust, accurate, intuitive



## Accurate, reliable and flexible "drop-in" metering pumps

No metal to metal contact and no contamination of the pump or the fluid



# Why Watson-Marlow makes the right pump for you

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 flocculent addition or chemical metering, we have a solution which can cut pump downtime and reduce chemical costs.

In continuous use in water treatment and manufacturing industries globally, extremely low maintenance requirements and complete containment of the pumped fluid, ensures there is no risk to operators or the environment.

- Flexible and scalable fluid handling with low cost of ownership
- Superior flow stability up to 3.5 litres per minute, providing accurate and repeatable process control
- Extensive product portfolio enables adaptation to meet varying process needs

#### Confident controllability

Watson-Marlow pumps integrate seamlessly into your process control system. Pumps are self-contained and easily configurable, so there is no need for separate variable frequency drives or complex control devices.

#### 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.





## Select your pump control features

# 530

# Where we keep industry productive

Chemical metering and transfer in environmental, galvanics, construction and paper/pulp industries

**Chemical metering and transfer:** corrosive acids and bases

**Water and waste water treatment:** sodium hypochlorite, hydrofluorosilic 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 floccullants

**Construction:** cement, brick and roof tiles; metering and spraying of colourant, coatings and additives

**Printing and packaging:** varnishes, inks, coatings and adhesives, with no colour cross-contamination or aeration

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















Feature	530Du/ 530DuN	530U/ 530UN	530S/ 530SN	530Bp/ 530BpN
Manual control				
Intuitive keypad and colour display. Choice of flow rate or speed display	•	•	•	•
Full calibration with choice of flow units	•	•	•	•
Remote control				
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	•	•		
Analog speed control				
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	•	•		
Digital communication				
RS485 network control (530DuN only)	•			
RS232 network control (530Du only)	•			
Fieldbus technology				
PROFIBUS DP V0				•
Security				
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.



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

### LoadSure® pumpheads guarantee correct tube loading

Watson-Marlow LoadSure technology offers snap-fit one minute maintenance. LoadSure elements offer greater reliability, easy installation and increased productivity.



#### **520REH**

- 7bar Pressures
- Flow rates up to 450 ml/min
- LoadSure® elements are available in Marprene TH



#### **520REM**

- 4bar Pressures
- Flow rates up to 1500 ml/min
- LoadSure® elements are available in Marprene TM



#### **520REL**

- 2bar Pressures
- Flow rates up to 3500 ml/min
- LoadSure® elements are available in Marprene TL

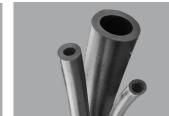
Tubing features	Marprene	Neoprene
LoadSure® elements	•	•
Continuous tubing	•	•
ISO 10993	•	
Low gas permeability	•	
Wide chemical resistance	•	
High pressure capability 2-7bar	•	
Up to 10,000 hours pumping life	•	



#### Marprene®

Industrial grade thermoplastic elastomer tubing

- Wide chemical compatibility and long life
- Low gas permeability
- Highly resistant to oxidising agents

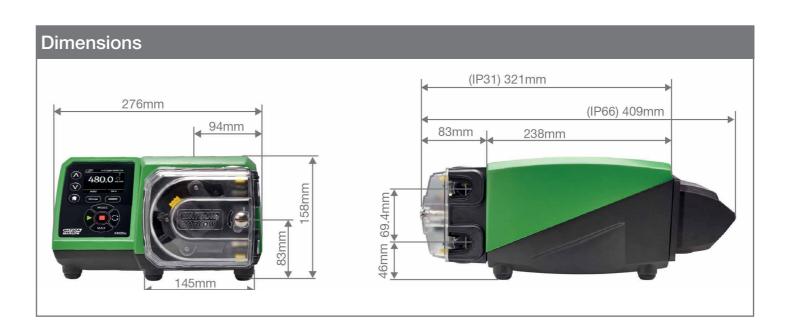


#### Neoprene

Industrial grade thermoplastic elastomer tubing

- Excellent performance with abrasive slurries
- Good suction and pressure capabilities

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



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#### Fluid Technology Group

A Spirax-Sarco Engineering Compan

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



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

#### **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