# **530 Drive with 520R2 Pumphead**



500 series cased pump

#### **Features and benefits**

- Color display and intuitive menu structures provide visual status indication and minimal key presses
- Flow rates from 0.0006 GPH (0.004 ml/min) to 55.48 GPH (3.5 L/min)
- 520R, 520R2, 520REL, 520REM, 520REH, 520RET and 505L pumpheads available as standard, others available on request
- 2,200:1 speed control range from 0.1 rpm to 220 rpm in 0.1 rpm increments
- Keypad incorporates 3-level security PIN lock
- NEMA 2 (IP31) and NEMA 4X (IP66) cased pumps
- Dual voltage, 115 V/230 V 50/60 Hz
- Remote Analogue/Digital, RS232, RS485, PROFIBUS®, PROFINET®, SCADA and EtherNet/IP™ control options









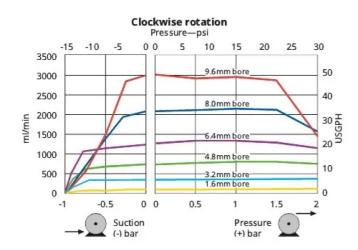


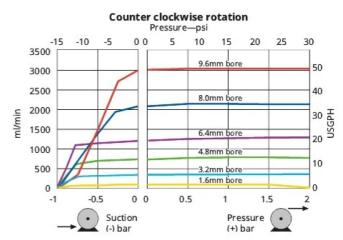




## 530 Drive with 520R2 Pumphead performance

520R2 twin sprung roller pumpheads for continuous 2.4 mm wall thickness tubing— Tube bore and flow rates — ml/min (USGPH)												
Tube material         Speed         0.5mm         1.6mm         3.2mm         4.8mm         6.4mm         8.0mm         9.6mm												
Pumpsil®, GORE® STA-PURE® Pump Tubing – Series PCS, GORE® STA- PURE® Pump Tubing – Series PFL	0.1– 220rpm	NA		0.18-390 (0- 6.18)	0.40-870 (0.01- 13.8)	,	` ·	1.60-3500 (0.03- 55.5)				
Marprene®/Bioprene®, PureWeld XL®	0.1– 220rpm	NA	0.04-92 (0- 1.46)	0.17-370 (0- 5.86)	0.38-830 (0- 13.2)	,	,	1.50-3300 (0.02- 52.3)				





# **Technical specifications**

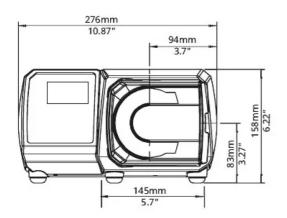
	530 Drive with 520R2 Pumphead
Pumphead number of rollers	2
Pumphead number of channels	1
Max. flow rate	3500 ml/min
Min. flow rate	0.04 ml/min
Max. flow rate	56 USGPH
Min. flow rate	0.0006 USGPH
Drive speed control ratio	2200:1
Drive speed	0.1 - 220 rpm
Operating temperature range	5 to 40 °C
Operating temperature range	40 to 104 °F
Weight	10.6 - 11.5 kg
Weight	23.4 - 25.4 lbs
Drive weight	9.82, 10.7 kg
Drive weight	21.6, 23.6 lbs
NEMA module weight	0.9 kg
NEMA module weight	2 lbs
Control types	EtherNet/IP™, PROFIBUS®, PROFINET®, Remote Analogue/Digital, RS232, RS485, SCADA
Drive control options	Bp, BpN, Du, DuN, DuS, En, EnN, Pn, PnN, S, SN, U, UN, US
Drive standards	CE, cETLus, C-Tick, IRAM, NSF/ANSI 61 (for Marprene tubing and loadsure elements), RoHS
Drive ingress protection	IP31, IP66, NEMA 2, NEMA 4X
Drive humidity	(Non-condensing) 80% up to 31°C (88°F), decreasing linearly to 50% at 40C (104F)
Drive noise	<70dBA at 1m
Max. altitude	2000 m
Drive power supply	115/230 V 1ph 50/60 Hz 135 VA
Compatible tubing bore size	1.6, 3.2, 4.8, 6.4, 8, 9.6 mm

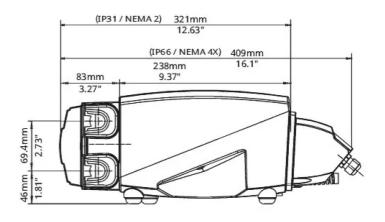
## **Materials of construction**

	530 Drive with 520R2 Pumphead
Bearings	Stainless steel
Driveshaft	Electroless nickel plated carbon steel
Drain port assembly	Hytrel, PP (polypropylene)
Drive casework	Pressure die-cast aluminum LM24
Drive casework coating	Alocrom pre-treatment, Exterior grade polyester powder coat
Guide roller assembly	MoS2 filled Nylon 6 (Nylatron)
Drive keypad/HMI	Polyester
Drive rear blanking plate	Stainless steel 304
Pumphead body assembly	Acetal, Aluminum, Aluminum alloy, Brass, Polycarbonate (PC), Polyphenylene sulphide (PPS)
Pumphead guard	Polycarbonate (PC)
Pumphead roller assembly	MoS2 filled Nylon 6 (Nylatron), Polyphenylene sulphide (PPS), Stainless steel 316
Pumphead rotor assembly	Polyphenylene sulphide (PPS), Stainless steel 316
Pumphead track	Polyphenylene sulphide (PPS)
Seals	Neoprene, PTFE
Pumphead seals	Neoprene, PTFE
Switch-plate	Glass filled ABS plastic

Information listed covers the complete range.
For detailed specifications of individual models/components refer to user manual or contact WMFTS representative.

## **Dimensions**





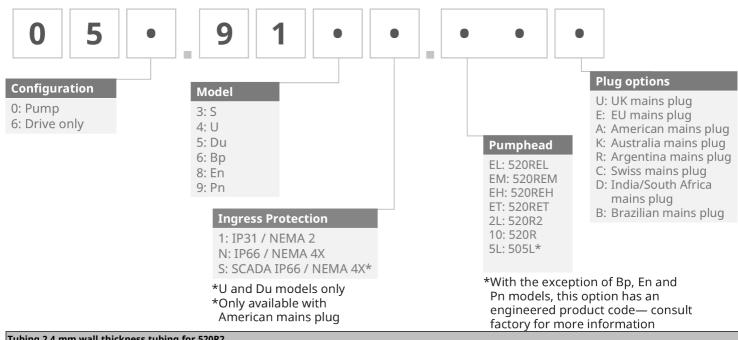
Control options	
	4/6

Key to p	oump drive	models																					
530S	530SN	530U	530U	N 5	30Du	530	DuN	5	30Bp	530B	pN	530	us	530D	uS	53	0En	530En	N.	530F	'n	5301	PnN
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Speed set point														<b>✓</b>	<b>✓</b>	Ţ			✓	✓	_	✓	<b>✓</b>
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 $<sup>{\</sup>tt *Range\ of\ 3rd\ party\ pressure/flow\ sensors\ supported-see\ compatible\ sensor\ list\ on\ www.wmftg.com/literature}$ 

<sup>\*\*</sup>Dispensing (Network/Manual) - Store up to 100 recipes locally or via network control. Features include volume, flow rate, anti-drip, ramp and time delays. Run these as batches using local, network or manual keypad control.

### **Product codes**



Tubing 2.4 mm wall thickness tubing for 520R2												
Tube bore	Tube	Pumpsil®	PureWeld XL®	Bioprene®	STA-PURE® PCS	STA-PURE® PFL	Marprene®					
1.6mm (1/16in)	119	913.A016.024		933.0016.024	961.0016.024	966.0016.024	902.0016.024					
3.2mm (1/8in)	120	913.A032.024	NA	933.0032.024	961.0032.024	966.0032.024	902.0032.024					
4.8mm (3/16in)	15	913.A048.024	]	933.0048.024	961.0048.024	966.0048.024	902.0048.024					
6.4mm (1/4in)	24	913.A064.024	941.0064.024	933.0064.024	961.0064.024	966.0064.024	902.0064.024					
8.0mm (5/16in)	121	913.A080.024	- NA	933.0080.024	961.0080.024	966.0080.024	902.0080.024					
9.6mm (3/8in)	122	913.A096.024	INA	933.0096.024	961.0096.024	966.0096.024	902.0096.024					

Disclaimer: All flow rates shown were obtained pumping water at 20 °C (68 °F) with zero suction and delivery heads. 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. It is the users responsibility to ensure product suitability for use within their application. Watson-Marlow, LoadSure, Pumpsil, PureWeld XL, Bioprene, Marprene are registered trademarks of Watson-Marlow Limited. Tri-Clamp is a registered trademark of Alfa Laval Corporate AB. GORE and STA-PURE are registered trademarks of W.L. Gore and Associates. Please state the product code when ordering pumps and tubing.

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