

# 530 Drive with 520REM Pumphead

500 series cased pump

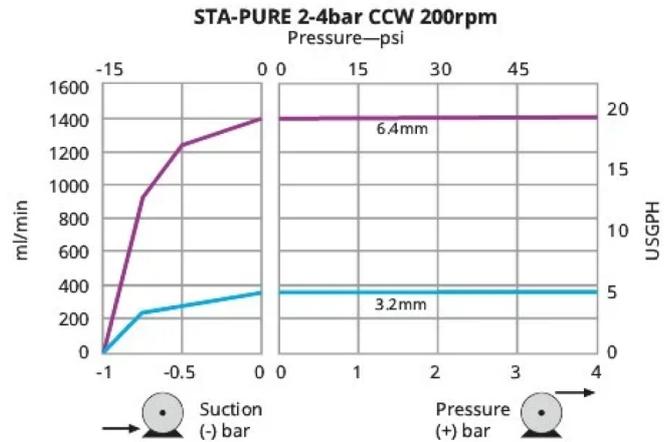
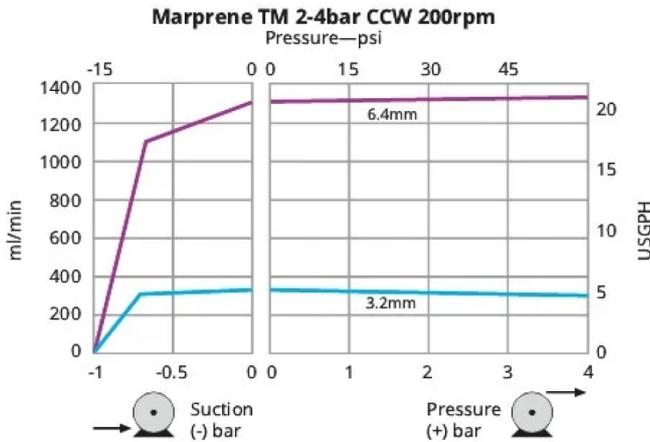
## Features and benefits

- Colour display and intuitive menu structures provide visual status indication and minimal key presses
- Flow rates from 0.17 ml/min (0.0027 USGPH) to 1500 ml/min (24 USGPH)
- 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
- IP31 (NEMA 2) and IP66 (NEMA 4X) 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 520REM Pumphead performance

520REM twin-roller pumpheads for LoadSure® element tubing – flow rates – ml/min (USGPH)			
Tube material	Speed	3.2mm	6.4mm
Pumpsil®, GORE® STA-PURE® Pump Tubing - Series PCS, GORE® STA-PURE® Pump Tubing - Series PFL	0.1 to 220rpm	0.18-390 (0-6.18)	0.70-1500 (0.01-23.8)
Marpren® TM, Biopren® TM	0.1 to 220rpm	0.17-370 (0-5.86)	0.67-1500 (0.01-23.8)



## Technical specifications

	530 Drive with 520REM Pumphead
Pumphead number of rollers	2
Pumphead number of channels	1
Flow rate	0.17 ml/min to 1500 ml/min
Flow rate	0.0027 USGPH to 24 USGPH
Drive speed control ratio	2200:1
Drive speed	0.1 - 220 rpm
Operating temperature	5 °C to 40 °C (40 °F to 104 °F)
Weight	10.5 - 11.4 kg (23.2 - 25.1 lbs)
Drive weight	9.82, 10.7 kg (21.6, 23.6 lbs)
NEMA module weight	0.9 kg (1.9 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
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 40 °C (104 °F)
Drive noise	<70dBA at 1m
Max. altitude	2000 m (6562 ft)
Drive power supply	115/230 V 1ph 50/60 Hz 135 VA
Compatible tubing bore size	3.2, 6.4 mm

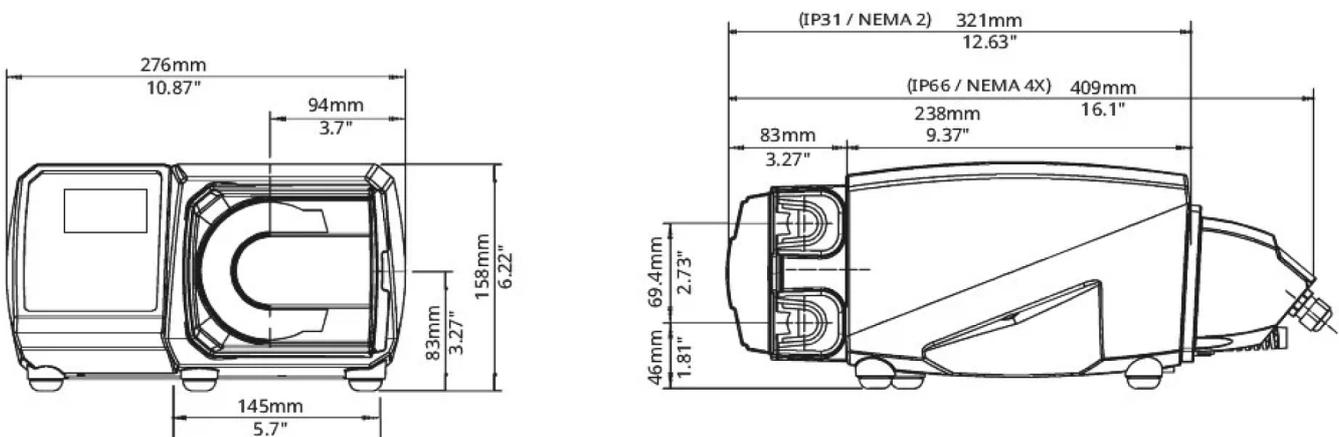
## Materials of construction

	530 Drive with 520REM Pumphead
Bearings	Stainless steel
Driveshaft	Electroless nickel plated carbon steel
Drain port assembly	Hytrel, PP (polypropylene)
Drive casework	Pressure die-cast aluminium 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	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)
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

Key to pump drive models													
530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN
Standard	Standard IP66 / NEMA 4X	Universal	Universal IP66 / NEMA 4X	Digital Universal	Digital Universal IP66 / NEMA 4X	Bus Pump / Profibus	Bus Pump / Profibus IP66 / NEMA 4X	Universal SCADA / IP66 / NEMA 4X	Digital Universal SCADA / IP66 / NEMA 4X	EtherNet/IP	EtherNet/IP / IP66 / NEMA 4X	PROFINET®	PROFINET® / IP66 / NEMA 4X

Manual control																
Pump drive	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
Intuitive keypad and colour display	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Choice of flowrate or speed display	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Full calibration with choice of flow units	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
MemoDose function	✓	✓	✓	✓	✓	✓			✓	✓						
Auto restart facility	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Leak detection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dispensing (Network Control)											✓	✓	✓	✓	✓	

Remote control																
Pump drives	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
Configurable Start/Stop and leak detector, via contact closure or 5V TTL or 24V industrial logic***				✓	✓	✓	✓					✓	✓	✓	✓	
Pressure switch input, via contact closure or 5V TTL or 24V industrial logic***				✓		✓										
Configurable Start/Stop, leak detector and pressure switch input via 110 V industrial logic										✓	✓					
Direction change and auto/manual toggle input via contact closure or 5 V TTL or 24 V industrial logic				✓	✓	✓	✓									
Direction change and auto/manual toggle input via 110 V industrial logic										✓	✓					
Remote operation of MemoDose (foot/hand-switch or logic input)				✓	✓	✓	✓									
Four configurable digital status outputs through 24 V, 30 W relays					✓		✓									
Four configurable digital status outputs through 110 V relays										✓	✓					
Menu configurable logic outputs				✓		✓										
Remote pressure/flow sensors											✓	✓	✓	✓	✓	

Analogue speed control																
Pump drives	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
Fully configurable inputs; 0-10 V or 4-20 mA			✓	✓	✓	✓			✓	✓						
Analogue outputs; 0-10 V, 4-20 mA			✓	✓	✓	✓			✓	✓						
Keypad/analogue input scaling (replacement of diaphragm pumps)					✓	✓				✓						
Tacho frequency output; 0-991 Hz			✓	✓	✓	✓										
2x sensor inputs 4-20 mA or 0-1000Hz*											✓	✓	✓	✓	✓	

Security																
Pump drives	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
3-level Security PIN lock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Network communication																
Pump drives	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
RS485 network control						✓				✓						
RS232 network control					✓											

Digital pump commands (Profibus / EtherNet/IP)																
Pump drives	530S	530SN	530U	530UN	530Du	530DuN	530Bp	530BpN	530US	530DuS	530En	530EnN	530Pn	530PnN		
PROFIBUS® DP V0							✓	✓								
PROFINET® (CC-B & Netload Class III)														✓	✓	
EtherNet/IP™											✓	✓				
Communication speeds from 9.6 kbits/s up to 12000 kbits/s							✓	✓								
Network speed: 10/100 Mbps - Full Duplex Operation											✓	✓				
Network speed: 100 Mbps - Full Duplex Operation													✓	✓		
Auto-detect bus speed							✓	✓								
Speed set point							✓	✓			✓	✓	✓	✓	✓	
Speed feedback							✓	✓			✓	✓	✓	✓	✓	
Flow calibration function							✓	✓			✓	✓	✓	✓	✓	
Hours run							✓	✓			✓	✓	✓	✓	✓	
Revolution counter							✓	✓			✓	✓	✓	✓	✓	
Leak detection							✓	✓			✓	✓	✓	✓	✓	
Low fluid level alarm							✓	✓			✓	✓	✓	✓	✓	
Diagnostic feedback							✓	✓			✓	✓	✓	✓	✓	
Flow Totaliser											✓	✓	✓	✓	✓	
Sensor scaling											✓	✓	✓	✓	✓	
Dispensing (Network Control)**											✓	✓	✓	✓	✓	

\*Range of 3rd party pressure/flow sensors supported—see compatible sensor list

\*\*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.

\*\*\*If you can't see the option you need, contact the engineered products team at WML to discuss

