- Dual voltage, 115 V/230 V 50/60 Hz

530 Drive with 520REH Pumphead performance

520REH twin-roller pumpheads for LoadSure® element tubing — flow rates — ml/min (USGPH)											
Tube material	Speed rpm	3.2mm									
Marprene® TH, Bioprene® TH, GORE® STA-PURE® Pump Tubing – Series PCS	0.1 to 220	0.20-450 (0-7.13)									

45

3.2mm

60

75

90

7

6

5

3

2

1

7

6

USGPH 4

To achieve 7bar

(100psi) pressure the

pump must rotate counter-clockwise

24

Marprene TH/ STA-PURE PCS 4-7bar CCW 200rpm Pressure-psi

> 15 30

0 0

00

1 2 3 4 5



530 Drive with 520REH 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 ٠
- Remote Analogue/Digital, RS232, RS485, PROFIBUS®, PROFINET®, SCADA and • EtherNet/IP[™] control options



-15

450

400

350

300

250

200

150

100

50

0

-1

-0.5

•

ml/min





Technical specifications

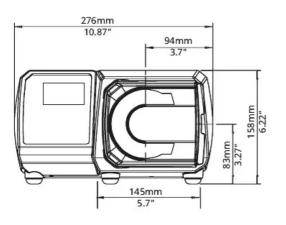
	530 Drive with 520REH Pumphead											
Pumphead number of rollers	2											
Pumphead number of channels	1											
Max. flow rate	450 ml/min											
Min. flow rate	0.2 ml/min											
Max. flow rate	7.2 USGPH											
Min. flow rate	0.0031 USGPH											
Drive speed control ratio	2200:1											
Drive speed	0.1 - 220 rpm											
Operating temperature range	5 to 40 °C											
Operating temperature range	40 to 104 °F											
Weight	10.5 - 11.4 kg											
Weight	23.2 - 25.1 lbs											
Drive weight	9.82, 10.7 kg											
Drive weight	21.6, 23.6 lbs											
NEMA module weight	0.9 kg											
NEMA module weight	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											
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	3.2 mm											

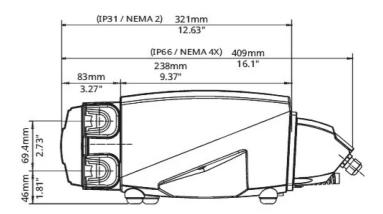
Materials of construction

	0 Drive with 520REH 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	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





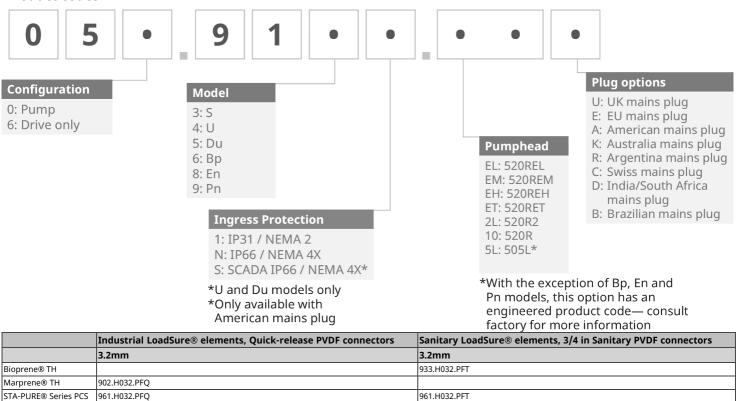
Control options

Kev to r	oump drive	models																					
5305	530SN	530U	530UN	5	530Du	530	30DuN		30Bp	530B	pN	530	ous	530D	530DuS		in	530EnN		530Pn	530	530PnN	
Standard	NEMA 4X	Universa	Universa I IP66 / NE 4X		Digital Universa		tal /ersal IP :MA 4X		us Pump Profibus	Bus Pump / Profibus IP66 / NEMA 4X		/ SCA	versal ADA / IP66 MA 4X	Digital / Universal SCADA / IP66 / NEMA 4X		/ Ether			EtherNet/IP / IP66 / NEMA 4X		- I (R) I	® PROFINET® / IP66 / NEMA 4X	
Manual	control																						
					530SN			0UN	530Du	530Di	uN	530Bp	530Bpl	N 53	DUS 5	30DuS	530E	n 530	DEnN 5	30Pn	530PnN		
Intuitive keypad and colour display					✓			_	✓	✓ ✓			✓	✓		✓ ✓		✓	+		✓	√	
Choice of flowrate or speed display					✓	✓	√		✓	✓ ✓			√	√		✓ ✓		✓	✓ ✓		✓	✓ ✓	
Full calibration with choice of flow units					✓	✓	✓ ✓		✓ ✓	✓ ✓			√	✓		V V			_	✓	✓	✓	
MemoDose function					✓ ✓	∕	✓ ✓			✓ ✓				· ·				<u> </u>	_	✓ ✓			
Auto restart facility Leak detection					✓ ✓	✓ ✓		+-	✓ ✓									✓			✓ ✓	✓ ✓	
	ng (Network C	Control)			- v	v	v			v	<u> </u>		v	v					 ✓		✓ ✓	 ✓	
	control	.011(101)						_					<u> </u>							✓	•	~	
								E 200	EDOCA	E2011	E 2011N	520	D., 520D		Bm 53	ODWAL	20116	E20D	5 5205	n 5205m	NI 5200	n 530PnN	
Pump d		n look dot	ostor ond			ich inni		5305	530SN	5300	530UN	530	Du 530D	UN 530	вр 53	оври :	5005	530DU:	5 53UE	n 530En	N 530P		
contact c	losure or 5 V	TTL or 24 V	/ industria	logic						~	√	√	' '						✓	~	~	~	
110 V ind	able Start/Sto ustrial logic																~	~					
	change and a r 24 V industri		ual toggle	input	via con	act clos	sure or			~	~	v	' v										
Direction logic	change and a	auto/manı	ual toggle	input	via 110	V indus	trial										~	~					
Remote operation of MemoDose (foot/hand-switch or logic input)										v	√	- V	/ /										
Four conf	igurable digit	tal status o	outputs th	ough	24 V, 3) W rela	ys				√		- V										
Four conf	igurable digit	tal status o	outputs th	ough	110 V r	elays	-										√	~					
Menu cor	nfigurable log	ic outputs								✓		✓	'										
Remote p	oressure/flow	sensors																	✓	√	√	✓	
Analogi	ue speed co	ontrol																					
Pump d	rives						5	30S	530SN	530U 5	30UN 5	530D	u 530Du	IN 530E	p 530	BpN 53	30US	530DuS	530En	1 530Eni	V 530Pi	n 530PnN	
Fully cont	figurable inpu	ıts; 0-10 V	or 4-20 m	4						✓	✓	√	✓				✓	√					
Analogue	outputs; 0-10	0 V, 4-20 m	۱A							✓	✓	√	√				✓	√					
Keypad/a	inalogue inpu	it scaling (replaceme	nt of o	diaphra	gm pur	nps)					√	✓					√					
	quency outpu		Z							✓	✓	√	✓										
2x sensor	inputs 4-20 r	nA*																	1	✓	✓	✓	
Security	/																						
Pump d				BOSN	530	U 53	OUN	530Du 5		530DuN 530		ОВр	530Bpl					30En 530En)Pn 5		
	curity PIN loc		✓	~	·	/	✓	✓		✓		✓ ✓		✓		✓		✓ ✓			✓	/ /	
Networ	k commun	ication																					
Pump d		-	30S 53	OSN	530	J 530	DUN	530Du 53		30DuN 530I		Вр	530BpN	1 530US 5				80En 530En		N 530)Pn 5	Pn 530PnN	
RS485 ne	twork control				_	_				√						1							
	twork control																						
	pump com	mands (Profibus	/ Eth	herNe																1	1	
Pump d							530S	530S	N 530L	5300	N 530I	Du 5	30DuN	•		N 530	US 53	ODuS !	o30En	530EnN	530Pn	530PnN	
	S® DP VO		***)											~	√								
PROFINE EtherNet	T® (CC-B & N /ɪp™	euoad Cla	55 111)				\vdash			-				1					~	~	√	~	
	ication speed	s from 9 6	khits/s ur	to 12	000 66	ts/s	\vdash		_	-	_	+		~	~				v	- V			
	speed: 10/100					,	\vdash			-	_	+			v				~	√			
	speed: 10/100 speed: 100 M			- · · ·						1		+								-	√	√	
	ect bus speed	-										+		~	~								
Speed set point												+		~	√				√	~	√	√	
Speed feedback														~	√				✓	~	~	√	
Flow calibration function														~	√				✓	~	√	✓	
Hours run														√	√				✓	~	✓	√	
Revolution counter													~	√				✓	~	✓	~		
Leak detection						$ \vdash $							√	√				✓	~	✓	✓		
Low fluid level alarm												~	√				✓	~	✓	✓			
Diagnostic feedback								_		_			~	√				√	✓ 	√	✓ ✓		
Flow Tota									_		_	-+				_			✓ ✓	✓ ✓	✓ ✓	✓ ✓	
Sensor scaling Dipensing (Network Control)**						\vdash		_		_	-+				_	_		✓ ✓	✓ ✓	✓ ✓	✓ ✓		
																			v		· ·	l *	

*Range of 3rd party pressure/flow sensors supported—see compatible sensor list on www.wmftg.com/literature

**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.





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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