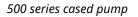
530 Drive with 520REL Pumphead



Features and benefits

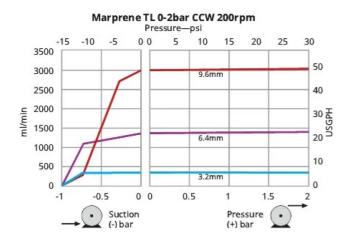
- Color display and intuitive menu structures provide visual status indication and minimal key presses
- Flow rates from 0.0006 GPH (0.004 ml/min) to 55.48 GPH (3.5 L/min)
- 520R, 520R2, 520REL, 520REM, 520REH, 520RET and 505L pumpheads available as standard, others available on request
- 2,200:1 speed 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

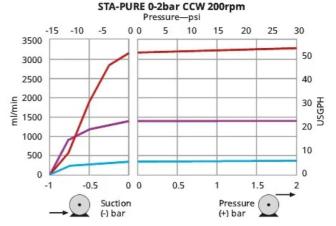




530 Drive with 520REL Pumphead performance

520REL twin-roller pumphead for LoadSure® element tubing — flow rates — ml/min (USGPH)										
Tube material	Speed	3.2mm	6.4mm	9.6mm						
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)	1.60-3500 (0.03-55.5)						
Marprene® TL, Bioprene® TL	0.1 to 220rpm	0.17-370 (0-5.86)	0.67-1500 (0.01–23.8)	1.50-3300 (0.02-52.3)						









Technical specifications

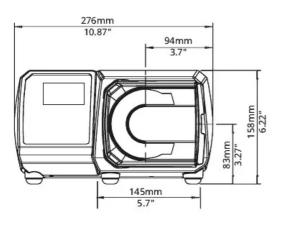
	530 Drive with 520REL Pumphead
Pumphead number of rollers	2
Pumphead number of channels	1
Max. flow rate	3500 ml/min
Min. flow rate	0.17 ml/min
Max. flow rate	56 USGPH
Min. flow rate	0.0027 USGPH
Drive speed control ratio	2200:1
Drive speed	0.1 - 220 rpm
Operating temperature range	5 to 40 °C
Operating 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, 6.4, 9.6 mm

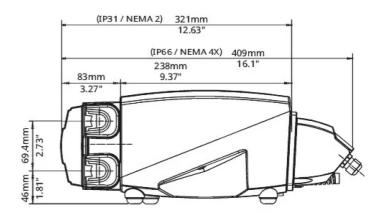
Materials of construction

	530 Drive with 520REL 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





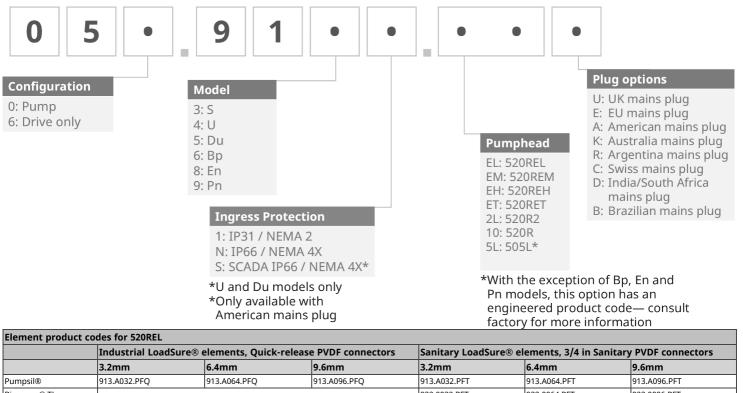
Control options

Kev to r	oump drive	models																				
5305	530SN	530U	530UN	5	530Du	530	DuN	5	30Bp	530B	pN	530	ous	530DuS 530E		in	530EnN		530Pn		530PnN	
Standard	NEMA 4X	Universa	Universa I IP66 / NE 4X		Digital Universa		tal /ersal IP :MA 4X		us Pump Profibus		us IP66 /	/ SCA	versal ADA / IP66 MA 4X	/ Digital Univer SCADA NEMA	sal / IP66	/ Ether	Net/IP	EtherNe IP66 / N		PROFINI	- I (R) I	FINET® / 5 / NEMA 4X
Manual	control																					
Pump d				!		530SN	530U	53	0UN	530Du	530Di	uN	530Bp	530Bpl	N 53	DUS 5	30DuS	530E	n 530	DEnN 5	30Pn	530PnN
	keypad and co				✓	✓	✓	_	✓	√	✓		✓	✓		✓	✓	✓		✓	✓	√
	flowrate or s		-		✓	✓	✓	_	✓	✓ 	✓		√	√		✓ /	✓	✓		✓ /	✓	✓ ✓
	ration with ch	oice of flo	w units		✓	✓	_ √	_	✓ ✓	✓	✓		√	✓		✓ /	✓		_	✓	✓	✓
	se function				✓ ✓	∕	✓ ✓	_	✓ ✓	✓ ✓	✓			· ·		✓ ✓	✓ ,	<u> </u>			,	
Auto rest Leak dete	art facility				✓ ✓	✓ ✓		+-	✓ ✓	✓ ✓			✓ ✓	✓ ✓		✓ ✓	✓ ✓	✓ ✓		✓ ✓	✓ ✓	✓ ✓
	ng (Network C	Control)			- v	v	v	+-	• •	v	- v		v	v		<u> </u>	v			✓ ✓	✓ ✓	 ✓
	control	.011(101)						_					<u> </u>							×	•	~
								E 200	EDOCA	E2011	E 201 I NI	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	able Start/Sto 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										~	~				
	peration of N	/lemoDose	(foot/har	d-sw	itch or l	ogic inp	out)			✓	√	- 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 53		30DuN	I 530	ОВр	530Bpl			530Du	S 5	30En 530En)Pn 5	30PnN
	curity PIN loc		✓	~	·	/	✓		✓	1		✓	✓		✓	√		✓	√		✓	✓
Networ	k commun	ication																				
Pump d		-	30S 53	OSN	530	J 530	DUN	530	Du 5	30DuN	530	Вр	530BpN	N 53	OUS	530Du	S 53	30En	530En	N 530)Pn 5	30PnN
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 se	t point											+		~	√				√	~	√	√
Speed feedback												~	√				✓	~	~	√		
Flow calibration function												~	√				✓	~	√	✓		
Hours run											√	√				✓	~	✓	√			
Revolution counter											V	√				✓	~	✓	~			
Leak detection											√	√				✓	~	✓	✓			
	level alarm													~	√				✓	~	✓	✓
Diagnostic feedback							_					~	√				√	✓ 	✓	✓ ✓		
Flow Tota									_		_	-+				_			✓ ✓	✓ ✓	✓ ✓	✓ ✓
Sensor so	5	ontrol**					\vdash		_		_	-+				_	_		✓ ✓	✓ ✓	✓ ✓	✓ ✓
Dipensing (Network Control)**																		v		· ·	*	

*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.

Product codes



	3.2mm	6.4mm	9.6mm	3.2mm	6.4MM	9.6mm
Pumpsil®	913.A032.PFQ	913.A064.PFQ	913.A096.PFQ	913.A032.PFT	913.A064.PFT	913.A096.PFT
Bioprene® TL				933.0032.PFT	933.0064.PFT	933.0096.PFT
Marprene® TL	902.0032.PFQ	902.0064.PFQ	902.0096.PFQ			
STA-PURE® Series PCS				961.0032.PFT	961.0064.PFT	961.0096.PFT
STA-PURE® Series PFL	966.0032.PFQ	966.0064.PFQ	966.0096.PFQ	966.0032.PFT	966.0064.PFT	966.0096.PFT

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.

wmfts.com/global



06 June 2024