

# 520Di/L IP31 and 520DiN/L IP66 high accuracy dispensers

# 500 series

## Flexicon Liquid Filling

### FEATURES

- Dispensing accuracy to  $\pm 0.5\%$
- Single or twin channel flows
- Flow rates up to 4400 ml/min (69.74 USGPH)
- Full calibration by weight or by volume with choice of units
- "Suck-back" facility eliminates drips at dose end, plus ramps ensure soft start and end of dose
- Up to 50 dispensing programs including dose parameters and calibration can be stored in the memory with full file name
- 505L pumphead features low inertia stainless steel rollers and twin offset track to provide smoothed flows.
- One 505LX extension pumphead can be used to double the flow



Flexicon...Filled with experience

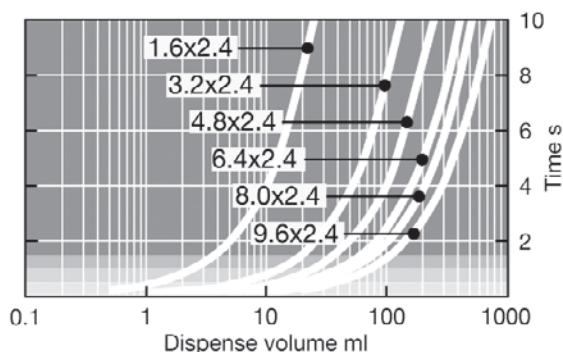
### TECHNICAL DATA

Pump drives	520Di	520DiN
Enclosure		
Ingress protection rating	IP31	IP66
Manual control		
Digital speed control with full calibration to display flow	•	•
Choice of flowrate or speed display	•	•
Numerical keypad for entry of speed	•	•
Remote control		
Run/Stop, direction change, auto/manual toggle, leak detector input (via contact closure or 5V TTL or 24V industrial logic)	•	•
Remote operation of Dosestart with instantaneous switch	•	•
Four programmable digital status outputs through 24V, 30W relays		•
Digital communication		
Digital network serial control	RS232	RS485
Security		
Security code to protect set-up, programs and dose parameters	•	•

### PERFORMANCE

520 Di/L flow rates (ml/min)						
Tube bore	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm	9.6mm
0.1 to 350rpm	0.04-150	0.23-800	0.42-1500	0.70-2500	0.90-3200	1.3-4400
Marprene TL, Bioprene TL	0.04-130	0.17-500	0.38-1100	0.67-2000	1.1-3200	1.5-4500

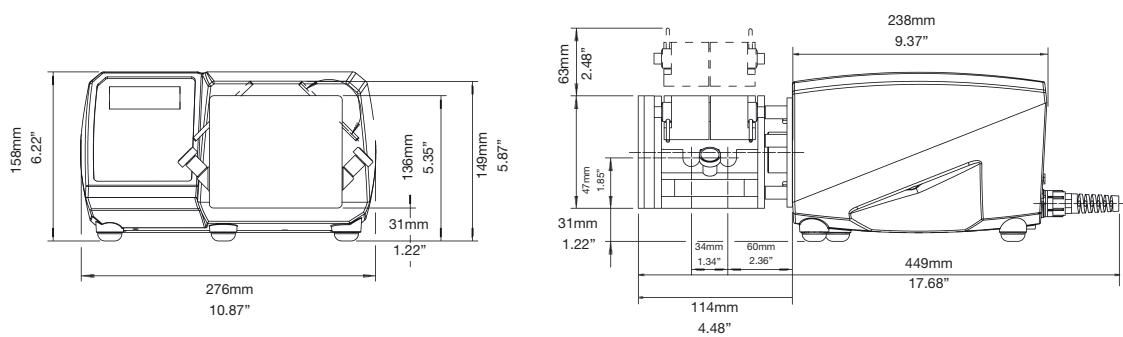
520 Di/L recommended dose sizes							
	Tube bore	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm	9.6mm
maximum speed 350rpm	Minimum dose	0.9ml	4.5ml	8.5ml	14ml	18ml	25ml
	Maximum dose	15ml	75ml	150ml	250ml	300ml	400ml



Dispense volume against time for the 520Di/L pump with a selection of tubes. Dispensing accuracy is indicated by the background shade

- within  $\pm 5.0\%$
- within  $\pm 2\%$
- within  $\pm 1.0\%$
- within  $\pm 0.5\%$

## DIMENSIONS



## SPECIFICATIONS

	520Di	520DiN
Ingress rating	IP31 / NEMA 2	IP66 / NEMA 4X
Enclosure	Wipedown	Watertight, dustproof
Suitability	Dry industrial environments with noncorrosive atmospheres	Corrosion resistant for heavy industrial environments
Humidity	(Non-condensing) 80% to 31C, 88F, decreasing linearly to 50% at 40C, 104F	(Condensing) 10-100% RH
Temperature	5C to 40C (40F to 104F)	5C to 40C (40F to 104F)
Pump weight	9.82kg (21lb 10oz)	10.7kg (23lb 9oz)
Speed control ratio	2200:1	2200:1
Torque rating	2.2Nm, continuous duty	2.2Nm, continuous duty
Noise	< 70dB(A) at 1m	< 70dB(A) at 1m
Standard	CE, cETLus	CE, cETLus

## MATERIALS OF CONSTRUCTION

Component	Material
Keypad	Polyester
Switch-plate	Glass filled ABS plastic
Rear blanking plate	Stainless steel 304
Drive casework	Pressure die-cast aluminium LM24
Case work coating	Alocrom pre-treatment, exterior grade polyester powder coat
Drive shaft	Electroless nickel plated carbon steel
Pumphead track	PPS (polyphenylene sulphide)
Guard	Polycarbonate
Guard seal	Neoprene
Rotor hub	Stainless steel 316
Roller arms, rotor cover	PPS (polyphenylene sulphide)
Rollers – main/ guide	Stainless steel 316
Main roller bearings	Stainless steel with PTFE seals
Drain port and nut	PP (polypropylene)
Drain plug	Hytrel

## ORDER INFORMATION

Pump and pumphead product codes			
Description	Partcode	Description	Partcode
505L Low pulse twin channel pumphead	053.4001.000	520Di (IP31) drive only	056.7171.000*
505LX Low pulse twin channel extension pumphead	053.4011.000	520DiN (IP66) drive only	056.717N.000**
505LG Low pulse twin channel pumphead for STA-PURE® tubing	053.4010.00G	505LTC Tube clamp set for 505L pumphead	059.4001.000

\* Supplied as 2.4m mains lead without plug. To specify American, European, United Kingdom, Australian, Argentinian or Swiss 2.8m mains lead please specify A, E, U, K, R or C respectively. Replace the last zero with the mains lead code. For example - 050.7131.10A is a 520S/R pump with American mains lead. \*\* Supplied as 2.4m mains cable without a plug. To specify American mains lead please replace the last zero with A.

Tube ordering codes						
Double 'Y' tubing elements for 520Di/L dispenser						
Bore (mm)	Bioprene TL	Marprene TL	Pumpsil	Pumpsil-D	STA-PURE® PCS	STA-PURE® PFL
1.6	933.E016.K24	902.E016.K24	913.AE16.K24	913.DE16.K24	960.E016.K24	965.E016.K24
3.2	933.E032.K24	902.E032.K24	913.AE32.K24	913.DE32.K24	960.E032.K24	965.E032.K24
4.8	933.E048.K24	902.E048.K24	913.AE48.K24	913.DE48.K24	960.E048.K24	965.E048.K24
6.4	933.E064.K24	902.E064.K24	913.AE64.K24	913.DE64.K24	960.E064.K24	965.E064.K24
8	933.E080.K24	902.E080.K24	913.AE80.K24	913.DE80.K24	960.E080.K24	965.E080.K24
9.6	933.E096.K24	902.E096.K24	913.AE96.K24	913.DE96.K24		

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. Watson-Marlow, Bioprene and Marprene are trademarks of Watson-Marlow Limited. Disclaimer: 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. LoadSure is a trademark of Watson-Marlow Limited. © STA-PURE PFL and © STA-PURE PCS are registered trademarks of W.L. Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

**Flexicon**  
Liquid Filling

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