

# 520Di IP31 high accuracy dispenser fitted with 313 or 314 pumpheads

# 500<sup>series</sup>

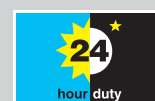
Flexicon Liquid Filling

## FEATURES

- Up to six channel dispensing using three roller 313 or 314 flip-top pumpheads
- Note 314 pumpheads can only be run up to 300rpm
- +/-2% flow accuracy per channel
- Calibration by weight or by volume
- "Suck-back" facility eliminates drips at dose end
- Up to 50 dispensing programs including dose parameters and calibration, can be stored in the memory with full file name



*Flexicon...Filled with experience*



## TECHNICAL DATA

Pump drives	520Di
Enclosure	
Ingress protection rating	IP31
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
Security	
Security code to protect set-up, programs and dose parameters	•

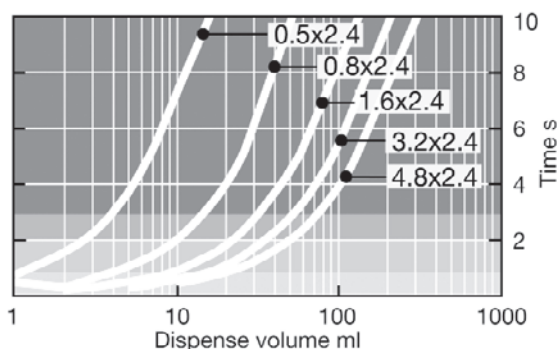
## PERFORMANCE

520Di/D3 recommended dose sizes (ml)								
Maximum speed	Tube bore	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
350rpm	Minimum dose	0.1ml	0.2ml	0.5ml	2.0ml	5.0ml	7.5ml	10ml
	Maximum dose	1.0ml	2.5ml	10ml	30ml	70ml	150ml	200ml

520Di/D4 recommended dose sizes (ml)								
Maximum speed	Tube bore	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
300rpm	Minimum dose	0.1ml	0.2ml	0.5ml	2ml	4ml	6ml	8.0ml
	Maximum dose	1.0ml	2.5ml	7.5ml	25ml	55ml	100ml	150ml

313 pumphead flow rates							
Tube bore	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
Speed range 0.1 to 350rpm	0.00-11	0.01-25	0.03-95	0.10-350	0.22-770	0.36-1300	0.50-1800

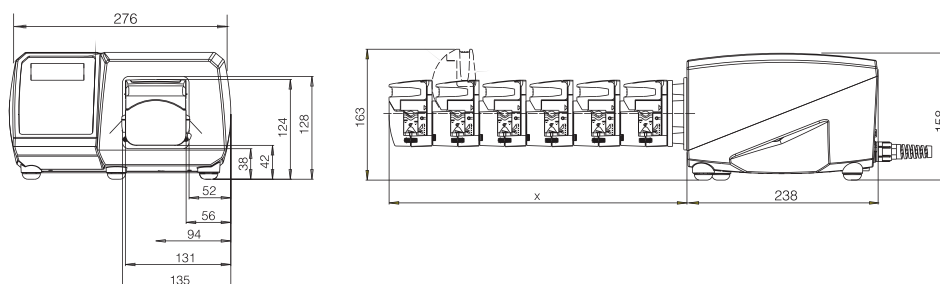
314 pumphead flow rates							
Tube bore	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
Speed range 0.1 to 300rpm	0.00-9.0	0.01-18	0.03-75	0.09-260	0.19-570	0.30-900	0.40-1200



- within ±5.0%
- within ±2%
- within ±1.0%
- within ±0.5%

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

## DIMENSIONS



All dimensions in mm

## TECHNICAL SPECIFICATIONS

Weight	10.7kg (23lb 9oz)
Operational Temperature range	5C to 40C (40F to 104F)
Noise	<70dBb(A) at 1m
Control ratio	2200:1
Standards	CE, CETL US
Supply	110V/230V 1ph, 50/60Hz

## MATERIALS OF CONSTRUCTION

Component	Material
Drive casework	Pressure die-cast aluminium LM24
Casework coating	Alocrom pre-treatment, exterior grade polyester powder coat
Keypad	Polyester
Switch plate	Glass filled ABS plastic
Rear blanking plate	Stainless Steel 304
Gearbox nose	Aluminium LM24M
Drive shaft	Electroless nickel plated carbon steel
Body rear	Glass filled polypropylene
Body front, body front extension	IXEF
Mounting plate, track and lever	IXEF
Rotor, tube clamp, locking tab	Glass filled nylon
Rollers	Nylatron
Spindles	Electroless nickel plated hardened steel
Fixings	Stainless steel
Sealed bearings	Carbon steel

## ORDER INFORMATION

520Di drive and 313/314 pumphead ordering information		
Pump	Specification	Product code
520Di 350rpm IP31drive	100-120V/220-240V 50/60Hz 1ph 100VA	056.7171.000*
313D/A	Three roller pumphead	033.3401.000
313X	Three roller extension pumphead	033.3431.000
314D/A	Four roller pumphead	033.4401.000
314X	Four roller extension pumphead	033.4431.000

Replace 0 with A, E or U for American, European or UK mains lead

Tube ordering codes				
Bore/wall (mm)	Bioprene	Marprene	Pumpsil	PVC
1.6 / 1.6	933.0016.016	902.0016.016	913.A016.016	950.0016.016
3.2 / 1.6	933.0032.016	902.0032.016	913.A032.016	950.0032.016
4.8 / 1.6	933.0048.016	902.0048.016	913.A048.016	950.0048.016
6.4 / 1.6	933.0064.016	902.0064.016	913.A064.016	950.0064.016
8.0 / 1.6	933.0080.016	902.0080.016	913.A080.016	950.0080.016
1.6 / 2.4	933.0016.024	902.0016.024	913.A016.024	
3.2 / 2.4	933.0032.024	902.0032.024	913.A032.024	
4.8 / 2.4	933.0048.024	902.0048.024	913.A048.024	
6.4 / 2.4	933.0064.024	902.0064.024	913.A064.024	
Bore/wall (mm)	Neoprene	STA-PURE® PCS	STA-PURE® PFL	
1.6 / 1.6	920.0016.016	960.0016.016	965.0016.016	
3.2 / 1.6	920.0032.016	960.0032.016	965.0032.016	
4.8 / 1.6	920.0048.016	960.0048.016	965.0048.016	
6.4 / 1.6	920.0064.016	960.0064.016	965.0064.016	
8.0 / 1.6	920.0080.016	960.0080.016	965.0080.016	
1.6 / 2.4		960.0016.024	965.0016.024	
3.2 / 2.4		960.0032.024	965.0032.024	
4.8 / 2.4		960.0048.024	965.0048.024	
6.4 / 2.4		960.0064.024	965.0064.024	

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

wmftg.com  
info@wmftg.com  
+44 (0) 1326 370370