

520Di and 520DiN

520 series dispensing pumps

Features and benefits

- Fully automated aseptic fill/finish in biopharmaceutical and pharmaceutical drug manufacturing
- Benchtop media or reagent preparation in laboratory suites – filling or inoculating bottles, vials, Petri dishes and media bags
- Five-year warranty NEMA2 and NEMA4X (IP66 and IP31) enclosure for high-pressure washdown environments
- Addition of colours, dyes, flavours, vitamins, and other ingredients in food production



520Di and 520DiN performance

505L pumphead — Flow rates (ml/min)								
Tube Material	Speed	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm	9.6mm	
Pumpsil®reg, GORE®reg STA-PURE®reg Pump Tubing-Series PCS, GORE®reg STA-PURE®reg Pump Tubing - Series PFL	0.1-350rpm	0.04-150	0.23-800	0.42-1500	0.70-2500	0.90-3200	NA	
Marprene®reg, Bioprene®reg	0.1-350rpm	0.04-130	0.17-500	0.38-830	0.67-2000	1.10-3200	NA	
505L pumphead 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	

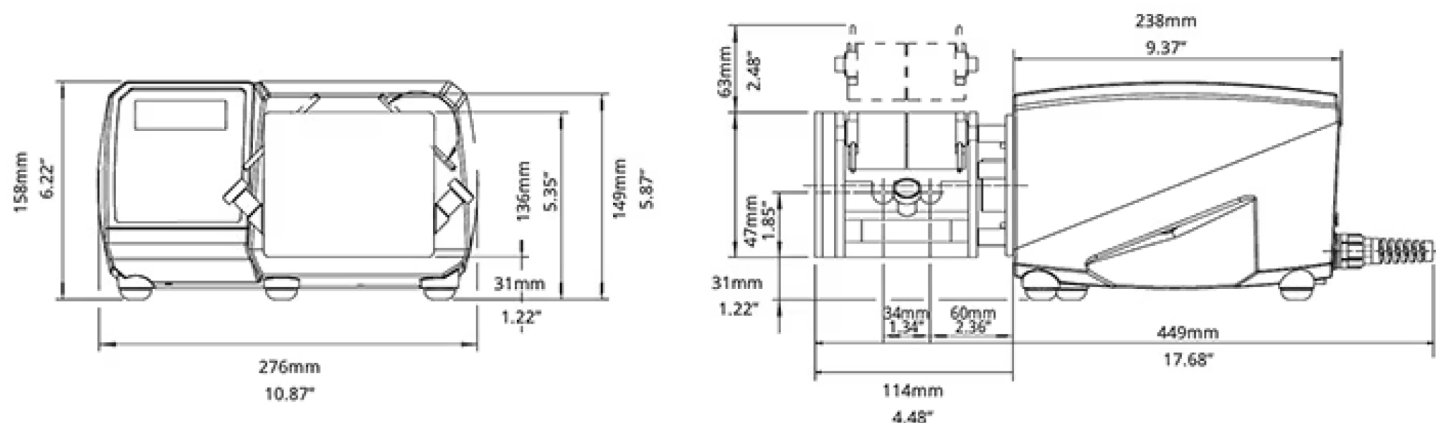
Technical specifications

	520Di and 520DiN
Accuracy	±0.5 %
Ingress Protection	IP31, IP66, NEMA 2, NEMA 4X
Operating temperature	5 °C to 40 °C (40 °F to 104 °F)
Speed control ratio	2200:1
Humidity	(Condensing) 10 to 100 % RH, (Non-condensing) 80 % up to 31 °C (88 °F) decreasing linearly to 50 % at 40 °C (104 °F)
Noise	<70dBb(A) at 1m
Standards	CE, cETLus
Power supply	110/230 V, 50/60 Hz, Single-phase
Weight	9.82 - 10.7 kg (21.63 - 23.56 lbs)
Compatible tubing size	1.6 mm ID, 3.2 mm ID, 4.8 mm ID, 6.4 mm ID, 8.0 mm ID, 9.6 mm ID

Materials of construction

	520Di and 520DiN
Bearings	Stainless steel
Casework	Pressure die-cast aluminium LM24
Keypad/HMI	Polyester
Pumphead roller assembly	Stainless steel 316
Seals	PTFE

520Di and 520DiN dimensions



Control options

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	✓	✓

Product codes

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				
* Replace last zero with A, E, U, K, R, D, Z or C for 2.8m American, European, United Kingdom, Australian, Argentinian, South African, Chinese or Swiss mains plug. For example - 056.7171.00A is a 520Di drive with American mains lead.** Replace last zero with A, K, R, Z or C plug type.							
Tube ordering codes							
Double Y tubing elements for 520DiL dispenser							
Bore (mm)	Bioprene TL	Marprene TL	Pumpsil	Accusil	STA-PURE® PCS	STA-PURE® PFL	PureweldXL
1.6	933.E016.K24	902.E016.K24	913.AE16.K24	84-510-016	961.E016.K24	966.E016.K24	
3.2	933.E032.K24	902.E032.K24	913.AE32.K24	84-510-032	961.E032.K24	966.E032.K24	
4.8	933.E048.K24	902.E048.K24	913.AE48.K24	84-510-048	961.E048.K24	966.E048.K24	
6.4	933.E064.K24	902.E064.K24	913.AE64.K24	84-510-064	961.E064.K24	966.E064.K24	942.E064.K24
8	933.E080.K24	902.E080.K24	913.AE80.K24	84-510-080	961.E080.K24	966.E080.K24	942.E080.K24
9.6	933.E096.K24	902.E096.K24	913.AE96.K24	84-510-096			942.E096.K24

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01 June 2026