



## 520Di/R2 & 520Di/R

### Dispensing and Transfer Pump Digital/Auto/Manual Control IP31 Wipedown Enclosure

#### Technical Information and Features

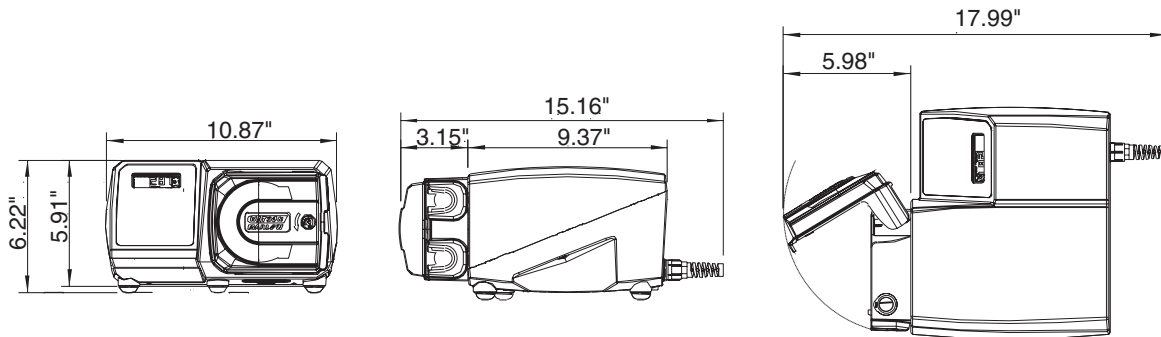
- Flow rates from 0.004 to 4,800 mL/min (0.00006-76 gph) and dispensing accuracy of  $\pm 1\%$  or better
- Discharge pressures up to 30 psi
- Operator friendly keypad offering:
  - Dose mode with easy programming of: Dispense, dispense interval, batch size, interval, speed, ramp of start and/or finish, suck back (anti-drip function)
  - Easy on the fly calibration by weight or volume allowing dose recalibration without batch interruption
  - Dose program storage: Ability to store up to 50 dispensing programs
  - Manual mode for fluid transfer with: Start/stop, direction, and speed control from 0.1 - 300 rpm in 0.1 rpm increments
  - Easy navigation through menu via up/down arrows through 4 lines of text with on-screen help
  - Large clear LCD display during dose with accurate digital monitoring for batch progress indicating program name, number of doses completed and remaining. Display can also toggle from rpm or flowrate (with choice of 10 vol or 10 mass flow units)
  - Option of security code protection for set functions, with a higher level to safe guard dispensing and calibration values
- Flow totalizer, auto re-start, speed limit setting, date/time functions also available
- Remote control interface offering:
  - Outputs: 4 configurable status outputs with choice of run/stop, direction, leak detected, network/manual, dose, batch or general alarm
  - Inputs: 24V industrial logic, 5VTTL or dry contact for run/stop, pause dispense, direction, leak detected, and dose input
  - RS232 control interface, allowing computer display and networking of multiple drives
  - Dispense initiation via footswitch, handswitch, or other remote device
- Tough metal and ABS case with broad chemical resistance and IP31 enclosure
- Quiet, continuous duty and maintenance free closed loop microprocessor controlled brushless DC motor
- Fitted with twin-sprung roller, easy loading 520R or 520R2 pumpheads for high accuracy and gentle pumping. Made from corrosion resistant materials with a tough tool unlockable guard
  - 520R2 accepts tube sizes #105, 108, 119, 120, 15, 24, 121 and 122 (0.5-9.6mm bore & 2.4mm wall)
- Optional 520R for low pressure applications accepts tube sizes #112, 13, 14, 16, 25, 17, 18 (0.5-8.0mm bore & 1.6mm wall)
- Optional pumpheads include 313/314 easy loading flip top, 505L low pulse and 505CA low flow multi-channel

#### Flow Rate Ranges (ml/min) and Minimum Recommended Dispense Sizes (ml)

<b>2.4 mm Thick Wall Tube #</b>	105	108	119	120	15	24	121	122
<b>1.6 mm Thin Wall Tube #</b>	112	13	14	16	25	17	18	N/A
	1/50"	1/32"	1/16"	1/8"	3/16"	1/4"	5/16"	3/8"
<b>Speed range</b>	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm	9.6mm
0.1 to 300rpm	0.004-13	0.01-33	0.04-130	0.18-530	0.40-1200	0.70-2100	1.1-3300	1.6-4800
<b>Min. Dispense size</b>	0.09	0.22	1.0	3.5	8.0	14.1	22	32

\* 1 gal = 3785.4 ml

Note: Flowrates are based on Silicone and Sta-pure™ tubing and may alter slightly if using other materials.



## 520Di/R2 & 520Di/R

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#### Technical Specifications

Shipping Weight: 21 lbs

Maximum Power Consumption: 135 VA

Supply: 100-120/200-240V, 50-60Hz (voltage selectable)

Maximum Rotor Speed: 350 RPM

Enclosure: IP31

Operational Temperature Range: 5°C to 40°C

Noise: max 70dBA at 1 meter

#### Standards

Meets all applicable CE and American ETL Standards  
UL610101A-1

#### Product Codes

520Di Drive, 350 rpm	056.7171.00A
520R2 Pumphead	053.1011.2L0
520R Pumphead	053.1011.100
Complete 520Di/R2	050.7171.2LA
Complete 520Di/R	050.7171.10A

#### Materials of Construction

##### Pumphead

Track, Rotor Body, Rotor Arms: PPS (polyphenylene sulfide) high performance engineering plastic

Rollers and Bearings: 316SS rollers, low friction stainless steel bearings with PTFE seals

##### Drive

Casework: Pressure die-cast Aluminum LM24

Coating: Alocrom Pre-treatment, exterior grade polyester powder coat

Keypad: Polyester

Feet: Santoprene

Switch Plate: Glass filled ABS plastic

Rear Blanking Plate: Stainless steel 304

Gearbox nose: Aluminum LM24M

Drive Shaft: Electroless nickel plated carbon steel

##### Available Tubing Materials:

2.4 mm thick wall for 520R2

Bioprene® (excl. 0.5 & 0.8mm)

Marprene® (excl. 0.5 & 0.8mm)

Silicone

Sta-Pure™ (excl. 0.5, 0.8 & 9.6mm)

Chem-Sure™ (excl. 0.5, 0.8 & 9.6mm)

1.6 mm thin wall for 520R (all excl. 9.6mm)

Bioprene®

Marprene®

Silicone

Neoprene (excl. 0.5 mm)

Butyl (excl. 0.5 & 0.8 mm)

Tygon® (excl. 0.5 & 0.8mm)

Fluorel™ (excl. 0.5 & 0.8mm)

Sta-Pure™ (excl. 0.5 & 0.8 mm)

Chem-Sure™ (excl. 0.5 & 0.8 mm)

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Fluorel is a trademark of 3M Corporation

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