

520Di and 520DiN

520 series dispensing pumps

Flexicon
Liquid Filling

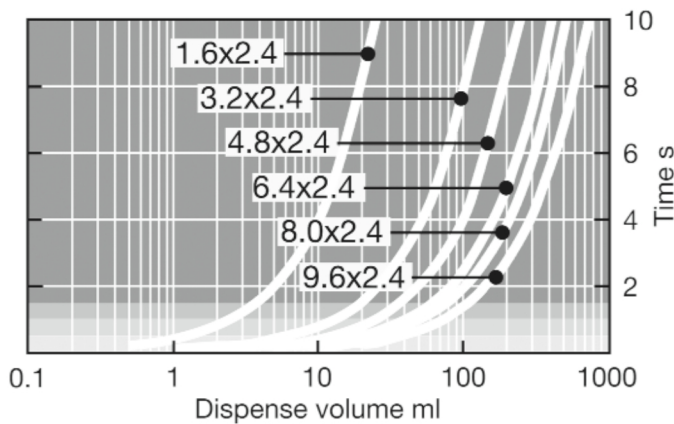
Features and benefits

- 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®, GORE® STA-PURE® Pump Tubing-Series PCS, GORE® STA-PURE® Pump Tubing - Series PFL | 0.1-350rpm | 0.04-150 | 0.23-800 | 0.42-1500 | 0.70-2500 | 0.90-3200 | NA |
| Marprenne®, Bioprene® | 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 |



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 $\pm 0.5\%$

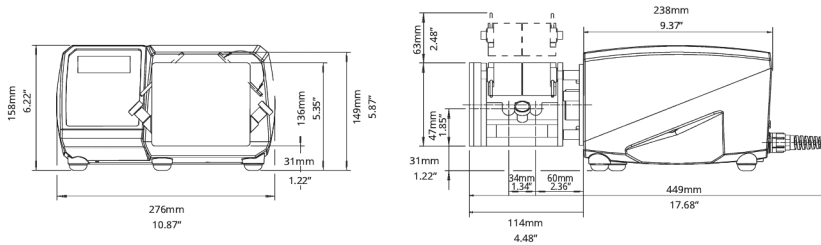
Technical specifications

| | 520Di and 520DiN |
|-----------------------------|---|
| Accuracy | ±0.5 % |
| Ingress rating | IP31, IP66, NEMA 2, NEMA 4X |
| Operating temperature range | 5 to 40 °C |
| Operating temperature range | 40 to 104 °F |
| Speed control ratio | 2200:1 |
| Humidity | (Condensing) 10-100 % 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 |
| Weight | 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 | | | |
| * 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 520DiL 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 | | |

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