

323Dz/D & 323Dz/4D

Dispensing and Transfer Pump Auto/Manual Control IP31 Wipedown Enclosure



Technical Information and Features

- Flow rates from 0.5 to 2000 mL/min (0.009-31.7 gph)
- Operator friendly keypad offering:
 - DOSE MODE with easy programming of: Dispense, dispense interval, batch size, speed, anti-splash speed ramping, suck back (anti-drip function).
 - EASY CALIBRATION: Calibrate via actual dispense measurement or use pre-programmed theoretical values based on pumphead and tubing size. Recalibrate in dispense mode without batch interruption.
 - MANUAL MODE for fluid transfer with: Start/stop, direction, and speed control from 2-400 rpm in 1 rpm increments.
 - Large clear LCD display with accurate digital monitoring for clear RPM indication
 - "Auto-restart" function for function recovery after power interruption.
- 200:1 speed control range
- Remote control interface offering:
 - Dispense initiation via footswitch, handswitch, or TTL contact closure
- Tough metal and ABS case with broad chemical resistance and IP31 wipedown enclosure
- Brushless DC motor for excellent speed control, quiet operation, and no maintenance
- Fitted with easy loading flip-top three roller 313D, or four roller 314D pumphead for higher accuracy and lowest pulsation.
- Optional three roller 313X and four roller 314X extension pumpheads for up to 6 channels of flow
- 313D and 314D and extension heads accept thin wall tube sizes # 14, 16, 25, 17 and 18 (1.6-8.0 mm bore & 1.6 mm wall)
- 313D2 and 314D2 accept thick wall tube sizes # 119, 120, 15 and 24 (1.6-6.4 mm bore & 2.4 mm wall)
- May be fitted with optional four roller 314MC or eight roller 318MC five-channel microcassette pumpheads - stackable for up to ten channels of flow with manifold tubing

Manual Mode Flow Rate Ranges (ml/min*)

	14	16	25	17	18
1.6mm Wall Tube #	14	16	25	17	18
2.4mm Wall Tube #	119	120	15	24	N/A
Tube Bore	1.6mm 1/16"	3.2mm 1/8"	4.8mm 3/16"	6.4mm -	8.0mm 5/16"
313 Pumphead (3 roller)	0.54-110	2.0-400	4.4-880	7.2-1400	10-2000
314 Pumphead (4 roller)	0.5-100	1.7-340	3.8-760	6-1200	8-1600

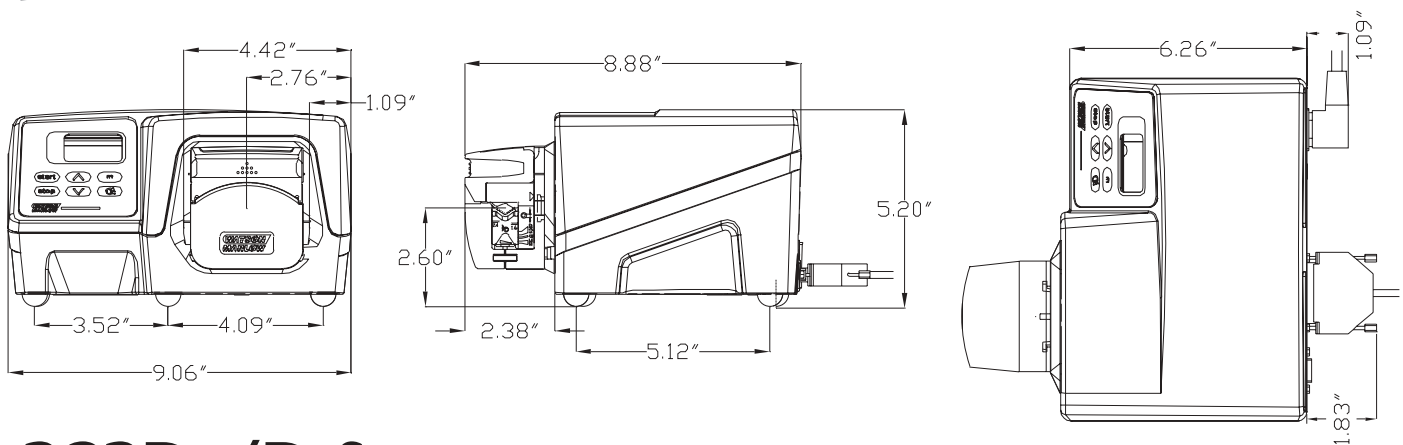
Minimum Recommended Dispense Size (mL) based on tube size

Tube #	#119	#120	#15	#24	#121
Tube Bore	1.6mm 1/16"	3.2mm 1/8"	4.8mm 3/16"	6.4mm 1/4"	8.0mm 5/16"
	1.4	5.0	11.0	18.0	25.0

Maximum Number of Channels with 1.6 mm Wall Tubing with 313 or 314 Extension Pumpheads, up to 30 psi

Tube Bore	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
Silicone	5	3	2	1	1
Other Materials	4	2	2	1	1

Note: Limitation of one pumphead per drive when using Sta-pure™ or Chemsure™ tubing or 2.4 mm wall thickness tubing



323Dz/D & 323Dz/4D

Dispensing and Transfer Pump Auto/Manual Control IP31 Wipedown Enclosure

Technical Specifications

- Shipping Weight: 9.9 lbs
- Maximum Power Consumption: 100 VA
- Supply: 100-120/200-240V, 50-60Hz (voltage selectable)
- Maximum Rotor Speed: 400 RPM
- Enclosure: IP31
- Operational Temperature Range: 4°C to 40°C
- Noise: < 70dBA at 1 meter
- Standards**
Equipment complies with all applicable CE directives.

Product Codes

323Dz Drive, 400 rpm	036.3184.00A
313D 3 roller pumphead for 1.6 mm wall	033.3411.000
313X 3 roller extension pumphead for 1.6 mm wall	033.3431.000
314D 4 roller pumphead for 1.6 mm wall	033.4411.000
314X 4 roller extension pumphead for 1.6 mm wall	033.4431.000
313D2 3 roller pumphead for 2.4 mm wall	033.3511.000
314D2 4 roller pumphead for 2.4 mm wall	033.4511.000
Complete 323Dz/D	030.3184.3DA
Complete 323Dz/4D	030.3184.4DA

Materials of Construction

- Pumphead**
- Pump Track & Lever:** IXEF
- Rollers:** Nylatron
- Spindles:** Electroless nickel plated hardened steel
- Bearings:** Bronze bush
- Drive**
- Drive Base:** Powder coated aluminum casting
- Drive Top:** ABS Plastic
- Bayonet Mounting Plate:** IXEF

Available Tubing Materials:

1.6 mm wall for 313D & 314D	2.4 mm thick wall for 313D2 & 314D2
Bioprene®	Bioprene®
Marprene®	Marprene®
Silicone	Silicone
Neoprene	Sta-Pure™
Tygon®	Chem-Sure™
Fluorel™	
Sta-Pure™	
Chem-Sure™	

The information contained in this document is believed to be correct, but Watson-Marlow Bredel Pumps accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

Sta-Pure and Chem-Sure are trademarks of W.L. Gore & Associates, Inc.

Tygon is a trademark of Saint-Gobain Corporation

Fluorel is a trademark of 3M Corporation

Watson-Marlow Bredel Pumps

37 UPTON TECHNOLOGY PARK, WILMINGTON, MA 01887-1018

TEL: 978-658-6168 / FAX: 978-658-0041

www.watson-marlow.com

support@wmbpumps.com