

# 323 Peristaltic Drives 300 Series Cased Pump

## Features and Benefits

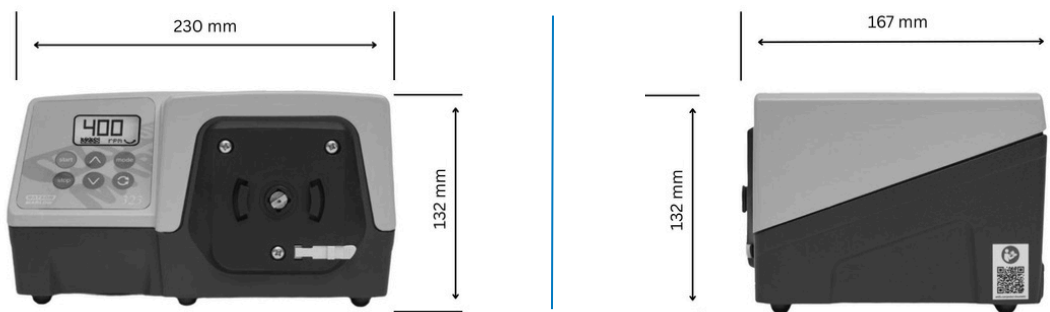
- Five models with increasing degrees of functionality
- Control and view speed on backlit LCD
- Instantly reversible
- Speed can be adjusted while the pump is stopped or running
- Chemically resistant ABS top and IP31-rated housing
- Dispense a set quantity each time using MemoDose feature on select models
- Choose from multiple pump head options for flexible system configurations—pump heads sold separately



### WARNING

This product is not approved or intended for, and should not be used for, medical, clinical, surgical, or other patient-oriented applications.

## 323 Drive Dimensions



USA	+1.800.323.4340
	+1.847.549.7600
Canada	+1.800.363.5900
China	+86.21.5109.9909
India	+1.800.266.1244

UK	+44 (0) 1480.272279
	+33 (0) 1.87.170142*
	+49 (0) 937.792030*
Italy	+39.02.84349215
All others	+1.847.549.7600

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\*Inquiries from Germany and France are now handled in our St. Neots office by native-speaking experts.

### 323 Drive Features

Functionality	323E	323S	323U	323Du	323Dz
<b>Manual Control</b>					
Keypad speed control	✓	✓	✓	✓	✓
MemoDose for accurate single shot dosing		✓	✓	✓	
<b>Remote Control</b>					
Run/Stop via contact closure or 5V TTL			✓	✓	✓
Remote operation of hand/foot switch			✓	✓	✓
<b>Analog Speed Control</b>					
Inputs; 0-10V or 4-20mA			✓	✓	
<b>RS-232 Digital Communication</b>					
Digital serial control				✓	
<b>Dispensing</b>					
Single dose, batch, or timed sequence. Ramp and drip control.					✓
<b>Pump Head Compatibility</b>					
313D and 314D rapid load pump heads	✓	✓	✓	✓	✓
314MC and 318MC multichannel pump heads		✓	✓	✓	
501RL and 501RL2 pump heads		✓	✓	✓	✓

### Materials of Construction

Component	Material
Bearings	Carbon steel, Sintered bronze
Drive casework	Acrylonitrile butadiene styrene (ABS), Powder coated aluminum LM24
Guide roller assembly	Delrin
Mounting plate assembly	Glass filled Nylon, IXEF (Polyarylamide)

Information listed covers the complete range. For detailed specifications of individual models/components, refer to user manual or contact Cole-Parmer representative.

## 323 Drive with Pump Heads Performance

	323 Drive with 313D Rapid Load Pump Head	323 Drive with 313D2 Rapid Load Pump Head	323 Drive with 314D Rapid Load Pump Head	323 Drive with 314D2 Rapid Load Pump Head	323 Drive with 314MC Multichannel Pump Head	323 Drive with 318MC Multichannel Pump Head	323 Drive with 501RL Pump Head	323 Drive with 501RL2 Pump Head
Number of Rollers	3	3	4	4	4	8	—	—
Number of Channels	1	1	1	1	5	5	1	1
Flow Rate Range	0.06 to 2000 mL/min	0.06 to 2000 mL/min	0.06 to 1600 mL/min	0.06 to 1600 mL/min	0.002 to 53 mL/min	0.002 to 36 mL/min	0.04 to 3000 mL/min	0.04 to 3000 mL/min
Speed Range	2 to 400 rpm	2 to 400 rpm	2 to 400 rpm	2 to 400 rpm	3 to 110 rpm	3 to 110 rpm	1 to 300 rpm	1 to 300 rpm
Drive Control Options	E, S, U, Du, Dz	E, S, U, Du, Dz	E, S, U, Du, Dz	E, S, U, Du, Dz	S, U, Du	S, U, Du	S, U, Du, Dz	S, U, Du, Dz
Compatible Tubing Bore Sizes	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm	0.13, 0.19, 0.25, 0.38, 0.5, 0.63, 0.76, 0.88, 1.02, 1.14, 1.29, 1.42, 1.52, 1.65, 1.85, 2.05, 2.29, 2.54, 2.79 mm	0.13, 0.19, 0.25, 0.38, 0.5, 0.63, 0.76, 0.88, 1.02, 1.14, 1.29, 1.42, 1.52, 1.65, 1.85, 2.05, 2.29, 2.54, 2.79 mm	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm
Compatible Tubing Wall Thickness	1.6 mm	2.4 mm	1.6 mm	2.4 mm	—	—	1.6 mm	2.4 mm

## Technical Specifications

Specifications	323 Drive
Reversible	Yes
Operating Temperature Range	5 to 40 °C (40 to 104 °F)
Weight	4.2 kg (9.3 lbs)
Drive Standards	CE, cETLus
Ingress Rating	IP31
Humidity	80 % up to 31 °C, 88 °F, decreasing linearly to 50 % at 40 °C, 104 °F
Noise	<70dB(A) at 1 m
Max. Altitude	2000 m (6562 ft)
Power	1ph, 100 V to 120 V, 220 V to 240 V 50/60 Hz, 100 VA

Information listed covers the complete range. For detailed specifications of individual models/components refer to user manual or contact Cole-Parmer representative.

## Ordering Information

Drives					
Model	Control Type	Speed Range (rpm)	Flow Rate Range (mL/min)	Plug	Item Number
323E	Manual	15 to 400	0.45 to 2000	US	<a href="#">50142-15</a>
323S	Manual	3 to 400	0.002 to 3000	US	<a href="#">50130-20</a>
323S	Manual	3 to 400	0.002 to 3000	UK	<a href="#">50131-90</a>
323S	Manual	3 to 400	0.002 to 3000	EU	<a href="#">50131-80</a>
323U	Manual/Remote/Analog	3 to 400	0.002 to 3000	US	<a href="#">50142-16</a>
323Du	Manual/Remote/Analog/RS-232	3 to 400	0.002 to 3000	US	<a href="#">50130-21</a>
323Du	Manual/Remote/Analog/RS-232	3 to 400	0.002 to 3000	UK	<a href="#">50131-82</a>
323Du	Manual/Remote/Analog/RS-232	3 to 400	0.002 to 3000	EU	<a href="#">50131-81</a>
323 Dz	Manual/Remote/Dispensing	2 to 400	0.04 to 3000	US	<a href="#">50142-17</a>

Accessories		
Model	Description	Item Number
520AF	Footswitch for 323Du Pump with 25-Pin D-Connector	<a href="#">50135-06</a>
520AH	Handswitch for 323Du Pump with 25-Pin D-Connector	<a href="#">50135-07</a>



All flow rates shown were obtained pumping water at 20 °C (68 °F) with zero suction and delivery heads. The information contained in this document is believed to be correct but Cole-Parmer accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the user's responsibility to ensure product suitability for use within their application. Watson-Marlow Pumpsil, and Bioprene are registered trademarks of Watson-Marlow Limited. Please state the item number when ordering pumps and tubing.

5540-1125

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