

 **WHEATON** | **Peristaltic Pumps**
Proven Tools for Life Science Research



Wheaton Peristaltic Pump Dispensers

Help with Your Most Complex Filling Tasks

Wheaton peristaltic pumps allow dispensing of liquid used in a variety of applications such as filling plates and tubes, transferring reagents, dispensing additives, and general filling applications. Wheaton peristaltic pumps are compact and perfect for use in a sterile environment. They will fit conveniently in a laminar flow hood.

Wheaton peristaltic pumps operate by using rotating rollers that are attached to a head. The head presses special flexible tubing and rotates, enabling the tubing to recover to its original shape and size, drawing liquid within the tubing. The liquid is forced along the tubing by the pump head. As the pump head rotates, liquid is then forced through the tubing from one end to the other.

The Wheaton pump dispenser can replace a variety of other pumps in your lab due to its versatility and range of features. It can dispense solvents ranging in viscosity from organic solvents to medium syrups. The liquid being dispensed remains in the tubing allowing for quick, non-contaminating changes and easy clean-up.

The Peristaltic Pump comparison chart listed below gives you a comparison of the two pumps offered by Wheaton.

Peristaltic Pump Comparison



Model Pump	Omnispense® Plus	Unispense® μP
Electrical	100 - 240 VAC, 50 / 60 Hz, 37 watts	120 - 240 VAC, 50 / 60 Hz, 140 watts
Operating Speed	41 - 417 RPM	100 RPM
Available Tubing Sizes	2, 3, 6, and 8 mm ID	2, 3, 6, and 8 mm ID
Dispense Ranges for Tubing Size:		
2mm	1 - 2,400,000 mL	—
3mm	1.5 - 3,300,000 mL	1.0 - 900 mL
6mm	2.2 - 10,500,000 mL	2.5 - 3,000 mL
8mm	3.5 - 17,000,000 mL	4.0 - 5,000 mL
Flow Rate Ranges for Tubing Size:		
2mm	0.34 - 2.9 mL/sec	—
3mm	0.67 - 5.9 mL/sec	2.0 mL/sec
6mm	2.19 - 19.6 mL/sec	9.0 mL/sec
8mm	3.34 - 29.1 mL/sec	18 mL/sec
Accuracy	As high as ±1% midrange	As high as ±1% midrange
Delay Time	0.5 to 25.5 seconds in automatic mode	0.5 to 60 seconds in automatic mode
Optional Pump Head Support:		
	Stack up to 3 pump heads	—
	Stacking Pump Head for 2.3 mm Wall Tubing	
	Pump Head for 1.6 mm Wall Tubing	
	Stacking Pump Head for 1.6 mm Wall Tubing	
	5-channel Pump Head for Small-Bore Tubing with Fixed Stops	
Weight	17 lb (7.7 kg)	11 lb (5 kg)
Dimensions with Pumphead (H x W x D)		
	12.75 x 7.75 x 15 inches	6.5 x 12.5 x 10 inches
	32.4 x 19.7 x 38.1 cm	16.5 x 32 x 25.4 cm



Specifications

Electrical	120 - 240 VAC, 50 / 60 Hz, 140 watts
Operating Speed	100 RPM
Available Tubing Sizes.....	3, 6, and 8 mm ID
Dispense Ranges for Tubing Size:	
3 mm.....	1.0 - 900 mL
6 mm.....	2.5 - 3,000 mL
8 mm.....	4.0 - 5,000 mL
Flow Rate Ranges for Tubing Size:	
3 mm.....	2.0 mL/sec
6 mm.....	9.0 mL/sec
8 mm.....	18 mL/sec
Accuracy	As high as $\pm 1\%$ midrange
Delay Time	0.5 to 60 seconds in automatic mode
Weight.....	11 lb (5 kg)
Dimensions with Pumphead (H x W x D)	6.5 x 12.5 x 10 inches
.....	16.5 x 32 x 25.4 cm

- Accuracy as high as $\pm 1\%$ midrange
- Operating speed fixed at 100 RPM
- Compact size; easily fits on bench-tops and flow-hoods
- Self-prompting LCD display
- 1 year warranty

The Unispense μ P is an accurate “easy-2-use” peristaltic pump that accommodates liquids ranging from aqueous solutions to medium syrups. With its small footprint, this pump fits well on bench-tops, in flow hoods and cabinets. Fluid is confined to the tube, which eliminates the need for cleaning. Pump chemical compatibility is limited to the chemical compatibility of the tubing.

Set-up parameters are stored in memory for easy recall. The LCD display and one-step volume calibration ensure quick and easy setup. The pump operating speed is approximately 100 RPM. Pump is supplied with (1) 3 mm and (1) 6 mm ID Silicone tubing assembly. Each assembly is 5 feet (1.5 m) long with a borosilicate glass sinker on one end and a polypropylene nozzle on the other end. The silicone tubing assemblies are fully autoclavable. For replacement tubing assemblies see page 5.



Ordering Information

Cat. No.	Voltage	Qty/Case
Unispense® with Standard Pump Head		
374301	110 VAC	1
374302	220 VAC	1

Omnispense® Plus Peristaltic Pump



Specifications

Electrical.....	100 - 240VAC, 50/60 Hz, 37 watts
Operating Speed.....	41 - 417 RPM
Available Tubing Sizes.....	2, 3, 6, and 8 mm ID
Dispense Ranges for Tubing Size:	
2 mm.....	1 - 2,400,000 mL
3 mm.....	1.5 - 3,300,000 mL
6 mm.....	2.2 - 10,500,000 mL
8 mm.....	3.5 - 17,000,000 mL
Flow Rate Ranges for Tubing Size:	
2 mm.....	0.34 - 2.9 mL/sec
3 mm.....	0.67 - 5.9 mL/sec
6 mm.....	2.19 - 19.6 mL/sec
8 mm.....	3.34 - 29.1 mL/sec
Accuracy.....	As high as 1% midrange
Delay Time.....	0.5 to 25.5 seconds
Optional Pump Head Support.....	See Below
Weight.....	17 lb (7.7 kg)
Dimensions with Pumphead:	
(H x W x D).....	12.75 x 7.75 x 15 in
	32.4 x 19.7 x 38.1 cm

Omnispense® Plus Peristaltic Pump

- Dual use pump can operate as a constant flow pump or a programmed dose dispenser
- Self prompting LCD display
- External connection for remote start/stop
- Operating speeds from 41 to 417 RPM
- Store up to 100 settings
- Lightweight design
- Attach up to 3 pump heads
- Conformance to UL, CSA and CE standards
- 1 year warranty

The Omnispense Plus is a premium automatic dispenser known for its versatility and variable speed. This pump features a reverse-flow option for various dispensing and aspirating operations. It is perfectly suited for accurately dispensing liquids ranging in viscosity from aqueous solutions to medium syrups. The built-in constant flow rate dispenser is fully programmable for delivery of a preset volume over a specific period of time with a display of the cumulative volume delivered. With its lightweight design, this pump can be easily moved between work stations. Integrated tubing support conveniently holds the tubing for filling containers.

Ordering Information

Cat. No.	Plug Style	Voltage	Qty/Case
W375020-A	North America	120 VAC	1
W375020-B	Japan	100 VAC	1
W375020-C	Continental Europe	230 VAC	1
W375020-D	United Kingdom	230 VAC	1
W375020-F	Australia/China	240 VAC	1
W375020-G	Italy/Chile	230 VAC	1
W375020-J	India	230 VAC	1

Optional Pump Head

Cat. No.	Description	Qty/Case
W375022	Optional Stacking Pump Head for 2.3 mm Wall Tubing	1
W375023	Optional Pump Head for 1.6 mm Wall Tubing (tubing not available from Wheaton)	1
W375024	Optional Stacking Pump Head for 1.6 mm Wall Tubing (tubing not available from Wheaton)	1
W375025	Optional 5-Channel Pump Head for use with Small Bore Tubing with fixed stops (tubing not available from Wheaton)	1

For a footswitch, silicone tubing and other pump accessories see pages 5 and 6.

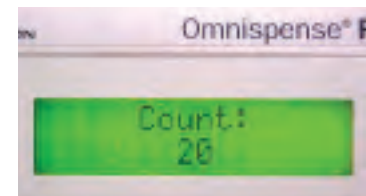


Hand held tubing holder

The hand held tubing holder with a start and stop switch is excellent for remote filling or for use when working in a fume hood. The pump can accommodate operating speeds up to 417 RPM. There are bright, self-prompting LCD displays in English, French, German, Italian, Portuguese, or Spanish.

Pump is supplied with (1) 3 mm and (1) 6 mm ID Silicone tubing assembly. Each assembly is 5 feet (1.5 m) long with a borosilicate glass sinker on one end and a polypropylene nozzle on the other end. The silicone tubing assemblies are fully autoclavable.

Easy Calibration and Setup!



Pump Tubing & Accessories



Footswitch

Utilize the convenience of hands free pump operation by installing the optional footswitch for the Unispense® and Omnispense®. The footswitch enables better control with its start and stop feature. The footswitch can remotely start and/or stop the dispense cycle when used with the Unispense® Pump Dispenser.

Cat. No	Description	Qty/Case
I050694	Footswitch	1



Tubing Compatibility

	Silicone	FKM
Acids	No	Yes
Bases	No	Yes
Organic Solvents	No	Yes
Sterile Fluids	Yes	No
Concentrated Solvents	No	Yes
Oils	No	Yes
Low Temperature	Yes	Yes
Autoclaving	Yes	No
Gas Permeability	High	Low
Other Characteristics	Excellent biocompatibility	Extremely chemical resistant



Tubing Assembly

The tubing assembly consists of 1.5 m (5-foot) section silicone or FKM tubing with a wall thickness of 2.3 mm and borosilicate glass sinker on one end and a polypropylene delivery nozzle on the other end.

Cat. No.	Description	Qty/Case
Silicone Tubing Assembly, 2.3 mm wall thickness		
374310	2 mm ID, 5-ft section (1.5 m)	1
374311	3 mm ID, 5-ft section (1.5 m)	1
374313	6 mm ID, 5-ft section (1.5 m)	1
374314	8 mm ID, 5-ft section (1.5 m)	1
FKM Tubing Assembly, 2.3 mm wall thickness		
374315	2 mm ID, 5-ft section (1.5 m)	1
374316	3 mm ID, 5-ft section (1.5 m)	1
374318	6 mm ID, 5-ft section (1.5 m)	1
374319	8 mm ID, 5-ft section (1.5 m)	1



Tubing, Bulk

Cat. No.	Description	Qty/Case
Silicone Tubing, 2.3 mm wall thickness		
374304	2 mm ID, 25 ft (7.62 m)	1
374305	3 mm ID, 25 ft (7.62 m)	1
374306	6 mm ID, 25 ft (7.62 m)	1
374308	8 mm ID, 25 ft (7.62 m)	1
FKM Tubing*, 2.3 mm wall thickness		
I054342	2 mm ID, 25 ft (7.62 m)	1
I054343	3 mm ID, 25 ft (7.62 m)	1
I054346	6 mm ID, 25 ft (7.62 m)	1
I054348	8 mm ID, 25 ft (7.62 m)	1

*FKM tubing is for use with caustic reagents, organic solvents and scintillation cocktails. FKM tubing is sold in 1 foot (0.3 m) increments.



Glass Sinker



Hose Barb/Luer Adapter



Polypropylene Nozzle



Tube Support Stand

Tubing Accessories

Cat. No.	Description	Qty/Case
374320	Small Glass Sinker (fits 2 and 3 mm ID tubing)	6
374321	Large Glass Sinker (fits 6 and 8 mm ID tubing)	6
374322	Hose Barb/Luer Adapter for attaching manifold (2 mm and 3 mm)	1
374324	2 and 3 mm Polypropylene Nozzle	6
374326	6 mm Polypropylene Nozzle	6
374328	8 mm Polypropylene Nozzle	6

Tubing Support Stand

Optional tubing support conveniently holds the tubing in place for filling operations.

Cat. No.	Description	Qty/Case
I054106	Tubing Support Stand	1

I.V. Additive Pump Chamber Assemblies

- For use with Unispense® and Omnispense® Plus Pump Dispensers

Cat. No. 374325 includes silicone tubing with female Luer and male Luer lock fitting on opposing ends. Sterile, individually packaged. Length: 42" (106.7 cm). (Vented spike not included).

Cat. No. 374330 includes high volume silicone and PVC tubing with vented spike and drip chamber and male Luer lock fitting on opposing ends. Sterile, individually packaged. Length: 5 ft. (1.5 m).

Cat. No.	Description	Qty/Case
374325	3 mm I.V. Additive Pump Chamber Assembly	10
374330	6 mm I.V. Additive Pump Chamber Assembly	10



Cat. No. 374325



Cat. No. 374330



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