

Thermo Scientific Masterflex® P/S

Variable-Speed Brushless Digital Pumps



Standard Brushless Digital Pump

- Wide flow ranges; durable, powerful motors; and easy-to-read digital displays
- Maintenance-free reversible motor—quiet operation and no brushes to replace
- Precise PWM speed control maximizes accuracy and efficiency
- Dual voltage: 115 VAC and 230 VAC
- Four-digit LED display shows four different parameters: flow rate, dispense volume, copy, and motor rpm
- Reversible flow, remote control, and tachometer feedback
- Keypad lock feature prevents accidents or tampering
- Field calibration function allows more accurate flow when installed in system
- 1.8-m (6-ft) line cord features IEC 320/CEE22 socket



Washdown Brushless Digital Pump with Wall-Mount Controller

- Designed for accurate metering and low maintenance operations
- Feature a IP56-rated wall-mount controller and full-featured remote control capabilities
- Maintenance-free brushless motor operates quietly
- Precise PWM speed control maximizes accuracy and efficiency
- Dual voltage: 115 VAC and 230 VAC
- IP56 controller/motor—washdown rated
- 7.6-m (25-ft) cable connects motor and controller
- Field calibration function allows more accurate flow when installed in system
- Reversible—purge before or after pumping
- Keypad lock feature prevents accidents or tampering
- Remote control capabilities via weather-resistant connection on controller (use remote cable 77300-32)
- Four-digit LED display shows four different parameters: flow rate, dispense volume, copy, and motor rpm
- 1.8-m (6-ft) line cord features IEC 320/CEE22 socket



Motor rpm	Masterflex® P/S precision tubing sizes (thin wall)						Masterflex® P/S precision tubing sizes (thick wall)			
	P/S 13	P/S 14	P/S 16	P/S 25	P/S 17	P/S 18	P/S 15	P/S 24	P/S 35	P/S 36
10 to 600	0.6 to 36 (0 to 0.54)	2.1 to 130 (0.03 to 1.8)	8 to 480 (0.12 to 7.6)	17 to 1000 (0.24 to 16)	28 to 1700 (0.42 to 26.4)	38 to 2300 (0.6 to 36)	17 to 1000 (0.24 to 1.6)	28 to 1700 (0.42 to 26.4)	38 to 2300 (0.6 to 36.4)	48 to 2900 (0.72 to 46)
1.6 to 100	0.1 to 6 (0 to 0.06)	0.4 to 21 (0 to 0.33)	1.4 to 80 (0.01 to 1.3)	3 to 170 (0.04 to 2.5)	5 to 280 (0.06 to 4.3)	6 to 380 (0.06 to 6)	3 to 160 (0.04 to 2.4)	4.5 to 280 (0.06 to 4.3)	6.5 to 380 (0.10 to 6)	9.5 to 560 (0.15 to 8.8)

Note: Flow ranges were determined using water at room temperature with zero back pressure and zero suction lift.

*Up to 3400 mL/min (54 GPH) with High-Performance pump head.

Catalog number	Benchtop digital pump						Washdown digital pump		
	975-2000	975-2100	975-2500	975-2600	975-2700	975-2800	975-3000	975-3100	975-3500
Included pump head	Easy-Load II (thin wall)	Easy-Load II (thick wall)	High-Performance (thick wall)	Easy-Load II (thin wall)	Easy-Load II (thick wall)	High-Performance (thick wall)	Easy-Load II (thin wall)	Easy-Load II (thick wall)	High-Performance (thick wall)
Number of heads accepted	2	2	1	4	4	1	2	2	1
rpm	10 to 600	10 to 600	10 to 600	1.6 to 100	1.6 to 100	1.6 to 100	10 to 600	10 to 600	10 to 600
External control—input	0 to 20 mA, 4 to 20 mA, 0 to 10V; START/STOP, DIR. (CW/CC), PRIME via contact closure								
External control—output	0 to 20 mA, 4 to 20 mA, 0 to 10 V, or TTL pulse								
Voltage (50/60 Hz)	115/230 VAC (auto selected)								
Motor type	Brushless continuous duty, TENV*, DC, permanent lubricated bearings								
Digital display (if applicable)	4-digit, 7-segment LED								
Motor/speed control type	PWM (Pulse Width Modulated)								
Speed regulation (repeatability)	±0.25%; ±1 rpm			±0.1 rpm			±0.25%; ±1 rpm		
Operating temperature	0 to 40°C (32 to 104°F)								
Storage temperature	-25 to 65°C (-13 to 149°F)								
IP rating	IP23						IP56		
Agency approvals	UL, cUL, CE								
Dimensions (L x W x H)	29.2 x 20.3 x 18.4 cm (11½" x 8" x 7¼")						22.9 x 29.8 x 11.4 cm (9" x 11¾" x 4½")		
Shipping weight	17 lb (7.7 kg)		22 lb (10 kg)		17 lb (7.7 kg)		22 lb (10 kg)	18.5 lb (8.4 kg)	24 lb (11 kg)

*Totally enclosed, non-ventilating.

