

Thermo Scientific Masterflex® I/P Digital Metering Pump Systems

Both wall-mount controller and separate motor are washdown rated—providing protection in harsh environments.

Product Benefits

- Modular design lets you place system components where they are most convenient.
- Deliver flow rates from 0.12 to 17 LPM (0.03 to 4.5 GPM).
- Digital readout displays exact flow rate, dispense volume, copy number, or drive rpm.
- Store one calibration value per tubing size.
- Calibrate in system for accurate flow rate display.
- Reversible motor allows pumping in either direction or purging when changing tubing.
- Remote control capabilities via weather-resistant connection cable.
- Keypad lockout feature prevents accidents or tampering.
- 7.6 m (25-ft) cable connects motor and controller.



Metering System 950-2010 includes an EASY-LOAD® pump head



Metering System 960-2010 includes a High Performance pump head



Flow ranges, LPM (GPM)

Motor rpm	Masterflex I/P Precision Tubing Sizes			I/P High-Performance Precision Tubing Sizes*		
	I/P 26	I/P 73	I/P 82	I/P 70	I/P 88	I/P 89
20 to 650	0.12 to 4 (0.03 to 1.0)	0.2 to 8 (0.05 to 2.1)	0.4 to 13 (0.01 to 3.5)	0.24 to 8 (0.07 to 2.1)	0.5 to 15 (0.11 to 3.4)	0.52 to 17 (0.14 to 4.5)

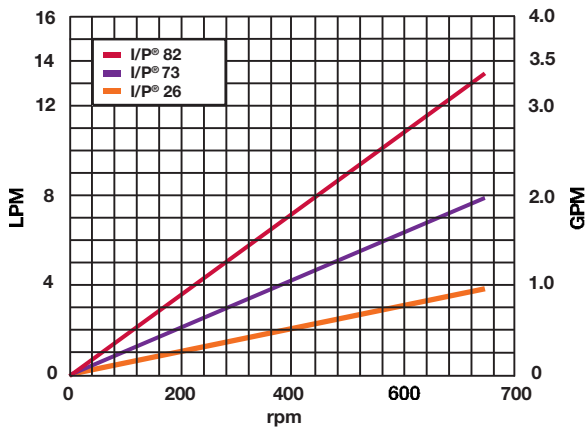
* Use High-Performance precision tubing with High-Performance pump head only.

Specifications & Ordering Information

Catalog Number	950-2010	950-2015	960-2010	960-2015
Includes pump head	EASY-LOAD		High-Performance	
Number of heads accepted	2		1	
rpm	20 to 650			
External control, input	0 to 20 mA, 4 to 20 mA, or 0 to 10 V DC/Contact closure: direction/start/stop			
External control, output	0 to 20 mA, 4 to 20 mA, or 0 to 10 VDC, or TTL pulse			
Voltage (50/60 Hz)	90 to 130 V AC	190 to 260 V AC	90 to 130 V AC	190 to 260 V AC
Motor type	Continuous duty, TENV ¹ , permanent magnet DC			
Speed control type	Membrane keypad/microprocessor			
Speed regulation (repeatability)	±0.3% (±2 rpm)			
Digital display	4-digit, 7-segment LED display			
Operating temperature	0 to 40°C (32 to 104°F)			
Storage temperature	-45 to 65°C (-49 to 149°F)			
IP rating	IP56 controller, IP 34 motor			
Agency approvals	UL, cUL, CE			
Controller dimensions (L x W x H)	35.9 x 14.1 x 15.2 cm (14 7/8 x 5 1/16 x 6")			
Motor footprint dimensions (L x W x H)	35.9 x 14.1 x 15.2 cm (14 7/8 x 5 1/16 x 6")			
Shipping weight	12.8 kg (27 lb)		14.3 kg (32 lb)	

Totally enclosed, non-ventilating.

Flow Curves
I/P® Easy-Load® Pump



Flow Curves
I/P® High-Performance Pump

