Thermo Scientific Masterflex® I/P®
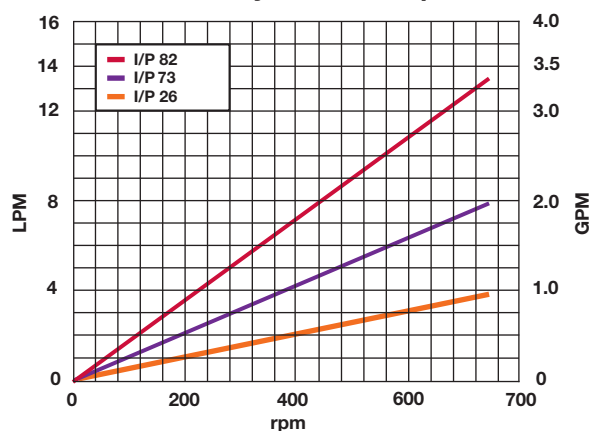
Industrial Process Pump
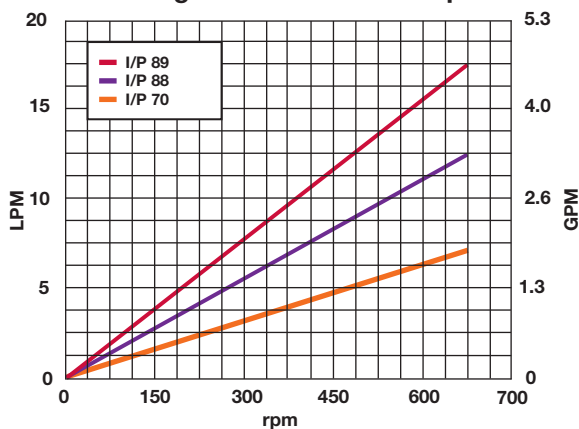
Industrial Process Pump

- Reversible, maintenance-free brushless motor with precise PWM control via a digital signal processor (DSP)

- Digital display of flow rate, dispense volume/cumulative amount per dispense, copy, and motor rpm

- Calibrate in system for accurate flow rate display

- Keypad lock feature prevents accidents or tampering

- Remote control of flow speed (4 to 20 mA), direction, on/off, and tachometer output

- Completely sealed 316 stainless steel enclosure is NEMA 4X (IP66-rated) for protection from tough process environments.

- 1.8-m (6-ft) line cord with IEC 320/CEE 22 socket

I/P 3

Thermo SCIENTIFIC

Flow Curves
I/P Easy-Load® Pump

Legend:
- I/P 82
- I/P 73
- I/P 26

Flow Curves
I/P High-Performance Pump

Legend:
- I/P 89
- I/P 88
- I/P 70

Motor rpm	Masterflex I/P precision tubing sizes			Masterflex 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
1 to 650	0.01 to 4.0 (0.002 to 1.0)	0.01 to 8.0 (0.002 to 2.1)	0.02 to 13.0 (0.005 to 3.5)	0.01 to 8.0 (0.002 to 2.1)	0.02 to 13.0 (0.005 to 3.5)	0.02 to 17.0 (0.005 to 4.5)

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

	Industrial process pump	
Catalog number	961-3000	961-3010
Included pump head	Easy-Load®	High-Performance
Number of heads accepted	2	1
rpm	1 to 650	
External control, input	0 to 20 mA, 4 to 20 mA, start/stop/CW/CCW, prime purge	
External control, output	4-20 mA "drive running" contact, 4-20 mA, 0-10 V	
Voltage (50/60 Hz)	115 or 230 VAC auto selected	
Motor type	Direct-drive brushless DC TENV†	
Speed control type	PWM microprocessor	
Speed regulation (repeatability)	±0.25% (±1 rpm)	
Digital display	6-digit microprocessor	
Operating temperature	0 to 40°C (32 to 104°F)	
Storage temperature	–45 to 65°C (–49 to 149°F)	
IP rating	IP66 (Nema 4x)	
Agency approvals	UL, cUL, CE	
Controller dimensions (L x W x H)	18 x 11 x 17 cm (7 x 4.3 x 6.7")	
Shipping weight	32 kg (70 lb)	

†Totally enclosed, non-ventilating.

www.thermo.com/fluidhandling

Barrington, IL 60010
1-800-637-3739
1-847-381-7050
1-847-381-7053 fax

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