

Thermo Scientific Masterflex

P/S Standard Digital Pump Systems



Masterflex® P/S Pump Systems

Thermo Fisher Scientific combines digital control with peristaltic pump technology to provide high-accuracy, maintenance and worry free performance to your chemical feed applications.

- Menu-driven LCD graphical interface provides easy system set-up.
- Loaded with a broad range of remote control options—ideal for automated process applications.
- The brushless motor driven by a PWM control is capable of a flow range turndown of 380,000:1.
- Other control capabilities include programmable dispensing by volume, time, or copy modes with a programmable delay between cycles for convenient, automated dispensing.
- Precise PWM speed control ($\pm 0.1\%$) maximizes accuracy and efficiency while the brushless motor gives you quiet, maintenance-free reliability.
- Optimize system accuracy by calibrating the pump system in process. The calibration is stored in memory—one calibration value per tubing size.
- Program the drive via the simple membrane keypad and multi-language display.
- Reversible motor so you can purge tubing before or after pumping.
- IP33 rated ABS housing for improved splash and dust resistance.

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ISO9001:2000
SUPPLIER CERTIFIED

2 year
warranty



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Flow rates in mL/min (flow rates in parentheses can only be obtained with the High-Performance Pump Head)

| RPM | Precision pump tubing | | | | | | High-performance precision pump tubing* | | | |
|-------------|-----------------------|--------------|-------------|--------------|--------------|--------------|---|--------------------------------|--------------------------------|--------------------------------|
| | 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 |
| 0.1 to 600 | 0.006 to 36 | 0.021 to 130 | 0.08 to 480 | 0.17 to 1000 | 0.28 to 1700 | 0.38 to 2300 | 0.17 to 1000 (0.18 to 1100) | 0.28 to 1700 (0.30 to 1800) | .38 to 2300 (0.43 to 2600) | 0.48 to 2900 (0.57 to 3400) |
| 0.02 to 100 | 0.001 to 6 | 0.004 to 21 | 0.016 to 80 | 0.033 to 170 | 0.057 to 280 | 0.077 to 380 | 0.033 to 170 (0.033 to 180) | 0.057 to 280 (0.057 to 300) | 0.077 to 380 (0.077 to 430) | 0.096 to 480 (0.096 to 580) |

* Values in parentheses are with high-performance Pump Heads

Specifications & Ordering Information

| Catalog number | 1300-3600-955 | 1300-3600-956 | 1300-3600-965 | 1300-3100-955 | 1300-3100-956 | 1300-3100-965 |
|-----------------------------------|---|------------------------------|----------------------------------|-----------------------------|------------------------------|----------------------------------|
| 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) |
| Number of heads accepted | 2 | 2 | 1 | 4 | 4 | 1 |
| RPM | 0.1 to 600 | | | 0.02 to 100 | | |
| External control – input | 0 to 20 mA, 0 to 10V; Scaleable START/STOP, DIR. (CW/CC), PRIME via contact closure Remote / Local Enable Contact Secondary Speed Control 0-20mA or 4-20mA Auxiliary Contact (Limit Switch) | | | | | |
| External control – output | 4 to 20 mA, or 0 to 10 V | | | | | |
| Motor running logic | N.O. or N.C. (1A @ 24V) | | | | | |
| Tachometer output | 5V, TTL pulse | | | | | |
| Power supply output | 24 V, 150 mA | | | | | |
| Voltage (50/60 Hz) | 115/230 V AC (auto selected) | | | | | |
| Motor type | Brushless continuous duty, TENV*, DC, permanent lubricated bearings | | | | | |
| Control type | PWM (Pulse Width Modulated) | | | | | |
| Speed regulation (repeatability) | ±0.1%; ±0.1 rpm @ 600 rpm; %; ±0.21 rpm @ 100 rpm | | | | | |
| Operating temperature | 0 to 40°C (32 to 104°F) | | | | | |
| Storage temperature | –25 to 65°C (–13 to 149°F) | | | | | |
| Housing materials | ABS, Powder-coated aluminum | | | | | |
| IP rating | IP33 | | | | | |
| Agency approvals | ETL, cETL, CE | | | | | |
| Controller dimensions (L × W × H) | 13.0 × 8 × 8 | | | | | |
| Shipping weight | 20 lbs. | | | | | |

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