

Thermo Scientific Masterflex

P/S Digital Networking Pump Systems



Masterflex® P/S Pump Systems



Interface these brushless digital drives to a computer for automated lab and process applications

- Flow rate: 0.001 to 3400 mL/min with L/S tubing. Flow rate depends on drive rpm and tubing size.
- Graphical LCD shows four operating modes: continuous run, time dispense, copy dispense, and volume dispense. View pump performance continually.
- Dispense by: mL—volume in mL of each dispense, 0.001 to 9999 mL; Copy—1 to 9,999 dispense cycles; or SEC—time interval between each dispense cycle: 1 to 9,999 secs.
- Interface drive to your PC via DB9 serial or USB connector; valve control via auxiliary output contact.
- Menu driven interface—select one of seven languages for programming and operation.
- Remote control capabilities via fluid-resistant input/output connector on back of drive:
 - Speed control input: scalable 0 to 20 mA, 4 to 20 mA, 0 to 10 V;
 - Pumping direction: requires open collector or contact closure;
 - Start/stop/purge: requires open collector or contact closure;
 - Tachometer output: scalable 0 to 20 mA, 4 to 20 mA, 0 to 10 V, or open collector.

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ISO9001:2000
SUPPLIER CERTIFIED

2 year
warranty

P/S 7 9/1/09

Flow rates in mL/min for P/S Digital Console Process Drive

| 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 |
| | Standard*, EASY-LOAD, EASY-LOAD II, EASY-LOAD 3 | | | | | | Multichannel† Standard*, EASY-LOAD, EASY-LOAD II, EASY-LOAD 3 | | | |
| Cartridge, Multichannel | | | Cartridge | | | EASY-LOAD | | | | |
| 0.1 to 600 | 0.006 to 36 | 0.022 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) | 0.38 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 †Multichannel head is not available for P/S 36. Multichannel and Cartridge heads are available for microbore tubing.

Specifications & Ordering Information

| Catalog number | 1300-3640-955 | 1300-3640-956 | 1300-3640-965 | 1300-3140-955 | 1300-3140-956 | 1300-3140-965 |
|-----------------------------------|--|------------------------------|----------------------------------|-----------------------------|------------------------------|----------------------------------|
| 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 10 V; 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 @ 24 V) | | | | | |
| Tachometer output | 5 V, 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 x W x H) | 13.0 x 8 x 8 | | | | | |
| Shipping weight | 20 lbs. | | | | | |



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