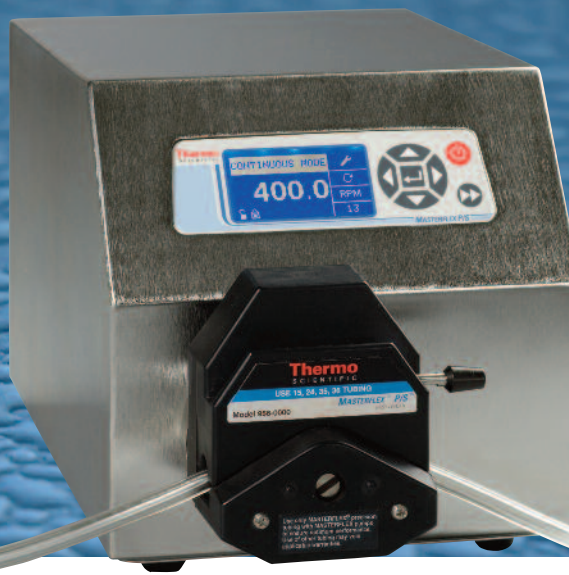


Thermo Scientific Masterflex

P/S Process Digital Pump Systems



Masterflex® P/S Pump Systems

Transfer, dispense, and meter in lab, process and washdown environments

- IP66 and NEMA 4X rated. Sealed 316 stainless steel housing and sealed keypad are protected from dust, water, and chemicals in the wash down environment—simply hose down to clean.
- Flow rate: 0.006 to 3400 mL/min (0.0001 to 54 GPH) with P/S® tubing. Flow rate depends on drive rpm and tubing size.
- Graphical LCD display shows six different parameters: motor rpm, flow rate, dispense volume, cumulative volume, dispense interval time, and copy number.
- Brushless, maintenance-free motor with improved 0.1% speed control accuracy between cycles for convenient,

automated dispensing

- Dispense by: volume—in milliliters (0.001 to 99,999), liters, and gallons; copy—1 to 99,999 dispense cycles. Set time interval (SEC) between dispense cycles from 1 to 99,999 seconds.
- 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.



ISO9001:2000
SUPPLIER CERTIFIED

2 year
warranty

P/S 5

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)

* 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	1302-3600-955	1302-3600-956	1302-3600-965
Included pump head	Easy-Load II (thin wall)	Easy-Load II (thick wall)	High-Performance (thick wall)
Number of heads accepted	2	2	1
RPM	0.1 to 600		
External control – input	4 to 20 mA, 0 to 10V; 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	24V, 100 mA		
Voltage (50/60 Hz)	115/230 VAC (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		
Operating temperature	0 to 40°C (32 to 104°F)		
Storage temperature	–45 to 65°C (–13 to 149°F)		
IP rating	IP 31		
Agency approvals	ETL, cETL, CE		
Controller dimensions (L x W x H)	13.0 x 8 x 8		
Shipping weight	22 lbs.		

P/S 6

www.thermo.com/fluidhandling

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