

Thermo Scientific Masterflex® P/S

Precision Control Drives

Economical, 10 turn potentiometer
for speed control.



Product Benefits

- Deliver flow rates from 0.06 to 3400 mL/min (up to 54 GPH) with Masterflex P/S Pump Heads.
- Motor and controller in one convenient package.
- Molded handle for one-handed portability.
- Precise reset of speed control with lockable 10-turn potentiometer and separate on/off.
- Reversible motor.
- 4 to 20 mA remote speed control, START/STOP via open collector or contact closure.
- Speed not affected by minor variations in power line voltage (V AC) and frequency (Hz).

Masterflex P/S High-Pressure Pump Systems

- Same features as precision drives 965-1500 and 965-1505
- Feed chemicals continuously at up to 100 psi
- Convenient package comes complete with motor, High Performance Pump Head, and 10 feet of PharMed® BPT high pressure pump tubing
- NORPRENE® high-pressure tubing also available for these pumps (see pump section to order)



High-Pressure pump system 970-1500



Specifications & Ordering Information

Catalog Number	970-1500	970-1505
Motor rpm		100
Max flow rate	80 mL/min (1.25 GPH)	170 mL/min (2.4 GPH)
Tubing size	16	15
Tubing	06485-16	06485-15

Flow Ranges, mL/min (GPH)*

Motor rpm	Masterflex® P/S Precision Tubing Sizes (thin wall)						Masterflex® P/S High-Performance Precision Tubing Sizes (thick wall)			
	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
6 to 600	0.36 to 36	1.3 to 130	4.8 to 480	10 to 1000	17 to 1700	23 to 2300	10 to 1000	17 to 1700	23 to 2300	29 to 2900
	(0.005 to 0.54)	(0.01 to 1.8)	(0.06 to 7.6)	(0.12 to 16)	(0.26 to 26)	(0.36 to 36)	(0.12 to 16)	(0.26 to 26)	(0.36 to 36)	(0.46 to 46)
1 to 100	0.06 to 6	0.21 to 21	0.8 to 80	1.7 to 170	2.8 to 280	3.8 to 380	1.7 to 170	2.8 to 280	3.8 to 380	4.8 to 480
	(0.001 to 0.06)	(0.003 to 0.33)	(0.012 to 1.25)	(0.024 to 2.4)	(0.042 to 4.2)	(0.06 to 6)	(0.024 to 2.4)	(0.042 to 4.2)	(0.06 to 6)	(0.08 to 8)

Note: Flow ranges were determined using water at room temperature with zero back pressure and zero suction lift.

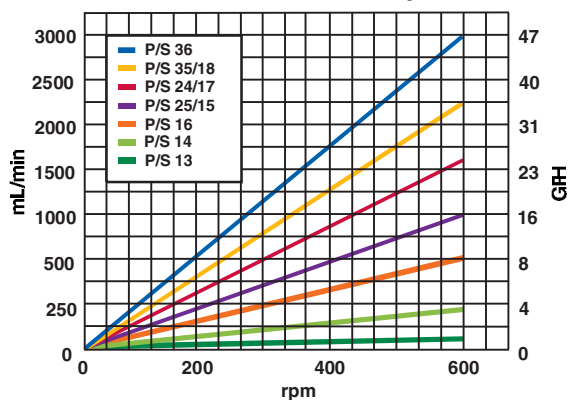
*Up to 3400 mL/min (54 GPH) with High-Performance pump head.

Specifications & Ordering Information

Catalog Number	955-1000	955-1005	956-1000	956-1005	965-1000	965-1005	955-1500	955-1505	956-1500	956-1505	965-1500	965-1505
Includes 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	6 to 600		6 to 600		6 to 600		1 to 100		1 to 100		1 to 100	
External control—input	4 to 20 mA, 2 to 10 V, TTL, signal for remote stop											
External control—output	Not applicable											
Voltage/VAC (50/60 Hz) Frequency	90-130	190-260	90-130	190-260	90-130	190-260	90-130	190-260	90-130	190-260	90-130	190-260
Motor type	Continuous duty, TENV*, permanent magnet DC; permanent lubrication bearings											
Speed control type	10-turn potentiometer, SCR, 100:1 turndown											
Speed regulation (Repeatability)	1% (10-turn potentiometer settable to 1%)											
Operating temperature	0 to 40°C (32 to 104°F)											
Storage temperature	-45 to 65°C (-49 to 149°F)											
IP rating	IP23											
Agency approvals	UL, cUL, CE (230 V units)											
Dimensions (L x W x H)	29.2 cm x 20.3 cm x 18.4 cm (8" x 7 1/4") (11.5" x 8.0" x 7.25" without pump)											
Shipping weight	7.7 kg (17 lb)		7.7 kg (17 lb)		8.4 kg (18.5 lb)		7.1 kg (15.75 lb)		7.1 kg (15.75 lb)		8.4 kg (18.5 lb)	

*Totally enclosed, non-ventilating.

Flow Curves
P/S EASY-LOAD® II Pump Head



Flow Curves
P/S High-Performance Pump Head

