

MASTERFLEX® L/S®

precision console drives



Precision standard drive
955-1000 with Easy-Load® II
pump head



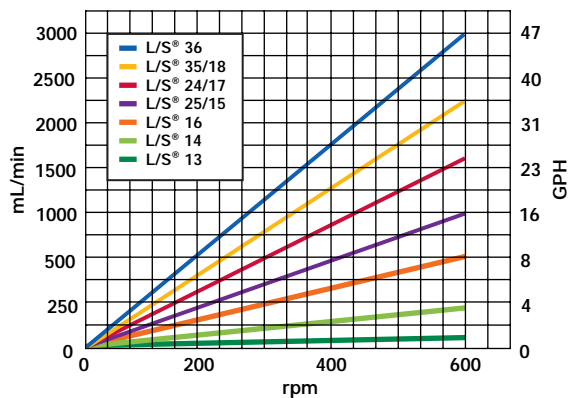
Precision standard drive
965-1000, which includes
High-Performance pump head

- Deliver flow rates from 0.06 to 3400 mL/min (up to 54 GPH) with Masterflex® L/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 (VAC) and frequency (Hz)

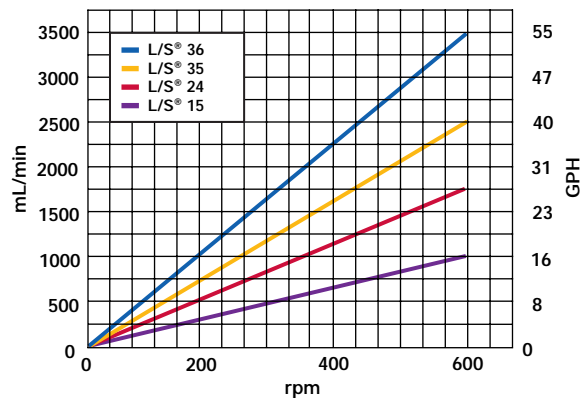
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For pressure and suction performance, see the "Specifications" on pages 3-4.

Flow Curves
L/S® Easy-Load® II Pump Head



Flow Curves
L/S® High-Performance Pump Head



Flow Ranges, mL/min (GPH)*

Motor rpm	Masterflex® L/S® precision tubing sizes (thin wall)						Masterflex® L/S® high-performance precision tubing sizes (thick wall)			
	L/S® 13	L/S® 14	L/S® 16	L/S® 25	L/S® 17	L/S® 18	L/S® 15	L/S® 24	L/S® 35	L/S® 36
6 to 600	0.36 to 36 (0.005 to 0.54)	1.3 to 130 (0.01 to 1.8)	4.8 to 480 (0.06 to 7.6)	10 to 1000 (0.12 to 16)	17 to 1700 (0.26 to 26)	23 to 2300 (0.36 to 36)	10 to 1000 (0.12 to 16)	17 to 1700 (0.26 to 26)	23 to 2300 (0.36 to 36)	29 to 2900 (0.46 to 46)
1 to 100	0.06 to 6 (0.001 to 0.06)	0.21 to 21 (0.003 to 0.33)	0.8 to 80 (0.012 to 1.25)	1.7 to 170 (0.024 to 2.4)	2.8 to 280 (0.042 to 4.2)	3.8 to 380 (0.06 to 6)	1.7 to 170 (0.024 to 2.4)	2.8 to 280 (0.042 to 4.2)	3.8 to 380 (0.06 to 6)	4.8 to 480 (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	VA-955-1000	VA-955-1005	VA-956-1000	VA-956-1005	VA-965-1000	VA-965-1005	VA-955-1500	VA-955-1505	VA-956-1500	VA-956-1505	VA-965-1500	VA-965-1505
Included pump head	Easy-Load II (thick wall)		Easy-Load II (thin wall)		High-Performance (thick wall)		Easy-Load II (thick wall)		Easy-Load II (thin 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.

MASTERFLEX® L/S® high-pressure pump systems

Continuous pressure up to 100 psi

- 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® high-pressure pump tubing
- Norprene® high-pressure tubing also available for these pumps (see page 4 to order)



High-Pressure pump system 970-1500

Specifications & Ordering Information

Catalog number	VA-970-1500	VA-970-1500
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