

MASTERFLEX®

L/S® ANALOG VARIABLE-SPEED PUMP SYSTEMS

SIMPLIFY YOUR GENERAL FLUID TRANSFER ECONOMICALLY

These pumps offer easy-to-use controls and robust construction for general fluid transfer applications. The range of available tubing sizes and formulations ensures widely variable flow rates and compatibility with the fluid you need to pump.

SIMPLE CONTROLS AND VARIABLE FLOW

- Achieve $\pm 5\%$ speed control with soft start and back EMF $\frac{1}{20}$ -hp unidirectional motor
- Get long service life with safe and reliable continuous-duty motor
- Maintain your speed setting when powering down—speed control is separate from power switch
- Know when the pump is on with green power-on indicator
- Deliver flow rates from 1.2 to 2900 mL/min with available tubing sizes
- Improved pressure performance and smoother flow via four-roller pump head



EFFICIENT DESIGN

- Portable—motor and controller in one convenient package
- Save space—efficient, stackable design has a small footprint
- Load tubing quickly without adjustments—Easy-Load® II pump head features automatic tubing retention

Flow rates in mL/min

RPM	Precision pump tubing						High-performance precision pump tubing			
	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
	Easy-Load II						Easy-Load II and High-Performance			
20 to 600	1.2 to 36	4.2 to 130	16 to 480	34 to 1000	56 to 1700	76 to 2300	34 to 1000	56 to 1700	76 to 2300	96 to 2900

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

CATALOG NUMBER	MK-77713-80	MK-77713-82	MK-77713-84	MK-77713-86
Includes pump head	Easy-Load® II (thin wall)	Easy-Load® II (thin wall)	Easy-Load® II (thick wall)	Easy-Load® II (thick wall)
Max number of pump heads	1	1	1	1
PERFORMANCE				
Flow capacity (mL/min)	1.2 to 2300		34 to 2900	
RPM	20 to 600			
Reversible	No			
ELECTRICAL SPECIFICATIONS				
Voltage (AC) 60/50 (Hz)	115 V	230 V	115 V	230 V
Current	1.5 A	0.8 A	1.5 A	0.8 A
Motor type	Continuous-duty, permanent magnet DC			
Motor size	37 W (1/2 hp)			
Control type	Single-turn potentiometer, solid-state			
Speed regulation (accuracy)	± 5%			
PHYSICAL SPECIFICATIONS				
Materials of construction (drive)	Painted steel			
IP rating	IP22			
Agency approvals	UL, cUL, CE			
Operating temperature	0 to 40°C (32 to 104°F)			
Storage temperature	-25 to 65°C (-13 to 149°F)			
Noise rating	<70 dBA @ 1 meter			
Controller dimensions (L x W x H)	22.9 x 18.1 x 13.3 cm (9" x 7.13" x 5.25")			
Shipping weight (drive only)	5.9 kg (13 lb)			



For more information:
 800-637-3739 or 847-381-7050
ColeParmer.com/fluidhandling
fluidhandling@coleparmer.com

Cole-Parmer®
 fluid handling and analysis