

L/S® VARIABLE-SPEED ECONOMY DRIVES

FEATURES/BENEFITS

- Perfect upgrade from a fixed-speed drive to a variable-speed system
- Deliver flow rates from 0.42 to 2900 mL/min with Masterflex® L/S pump heads
- Deliver flow rates from 0.0035 to 1700 mL/min with cartridge pump heads
- Wide flow control range (30:1 turndown)
- Long-lasting, stackable steel housing
- Ideal for low-flow metering or general fluid transfer
- Safe, reliable continuous-duty motor
- Unidirectional operation
- Multichannel pumping

DRIVE CONTROLS

- All manual controls are on the front panel
- Single-turn potentiometer for speed control
- On/off switch, green power-on indicator

SETUP

- Mount pump head and load tubing.
- Turn pump on.
- Adjust flow rate with potentiometer.

SELECTION CRITERIA

- Motor rpm/flow rate.
- Voltage required.
- Pump heads accepted.

Order pump heads and tubing separately.

SPEED CONTROL/CIRCUITRY

- Single-turn potentiometer
- Solid-state circuit
- Soft-start for no power surges
- Speed not affected by minimum variations in line voltage or frequency
- Switch: ON/OFF
- Meets or exceeds UL, CSA, EN, and selected IEC limits



L/S variable-speed console drive 07554-90
with L/S Easy-Load pump head 07518-12

MOTOR SPECIFICATIONS

- Permanently lubricated
- Designed around a 90 or 180 VDC motor

PUMP HEADS ACCEPTED

- Drive accepts nine different pump heads:

Standard	High-Performance
Easy-Load® 3	PTFE-Tubing
Easy-Load II	Multichannel
Easy-Load	Multichannel Cartridge
PTFE-Diaphragm	

NOTES

Use drives 07554-90 and 07554-95 with High-Performance, Multichannel, and Cartridge pump heads only when loaded with C-FLEX® or silicone tubing. Do not use these 600-rpm drives with the PTFE-tubing or PTFE-diaphragm pump heads.

ISO 9001:2008
CERTIFIED SUPPLIER

UL US

CE

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ORDERING INFORMATION

Catalog number	rpm	Power (50/60 Hz)
MK-07554-90	20 to 600	90 to 130 VAC
MK-07554-95		180 to 260 VAC
MK-07554-80	7 to 200	90 to 130 VAC
MK-07554-85		180 to 260 VAC

ACCESSORIES

MK-17050-01 NIST-traceable calibration for peristaltic pump drive.

L/S PUMP TUBING FLOW RATE INFORMATION (mL/min)

Order Masterflex L/S pump tubing separately.

Tubing cross sections	L/S Precision pump tubing						L/S 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
Flow range @ 20 to 600 rpm	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
Flow range @ 7 to 200 rpm	0.42 to 12	1.4 to 43	5.6 to 160	12 to 330	20 to 570	27 to 770	12 to 330 (13 to 370)	20 to 570 (21 to 600)	27 to 770 (30 to 870)	34 to 970 (41 to 1130)

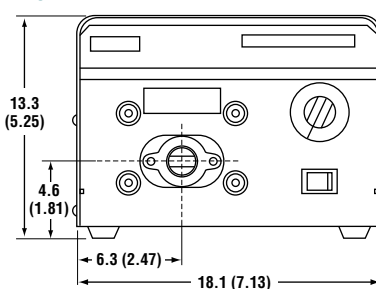
Note: Flow rates in parentheses can be obtained only with L/S High-Performance pump heads.

SPECIFICATIONS for L/S Variable-Speed Economy Drives

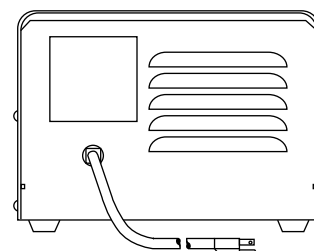
Catalog number		MK-07554-90	MK-07554-95	MK-07554-80	MK-07554-85
Performance Specifications					
Flow capacity		1.2 to 2900 mL/min (0 to 46 GPH)		0.42 to 970 mL/min (0 to 15 GPH)	
rpm		20 to 600		7 to 200	
Number of heads accepted		1		2	
Maximum torque	Starting	191 N-cm (270 oz-in)		381 N-cm (540 oz-in)	
	Running	64 N-cm (90 oz-in)		127 N-cm (180 oz-in)	
Reversible		No			
External control – Input		Not applicable			
External control – Output		Not applicable			
Electrical Specifications					
Voltage/frequency VAC (50/60 Hz)		90 to 130	180 to 260	90 to 130	180 to 260
Current		1.5 A	0.8 A	1.5 A	0.8 A
Fuse rating		2.0 A / 250 V	1.0 A / 250 V	2.0 A / 250 V	1.0 A / 250 V
Motor type		Continuous-duty, permanent magnet DC			
Motor size		37 W (½ hp)			
Motor/speed control type		Single-turn potentiometer, solid-state			
Speed regulation (repeatability)		±5% (±3%)			
Soft start/Electronic brake		Yes/No			
Physical Specifications					
Housing materials		Painted steel			
IP rating		IP22			
Agency listings		UL, cUL, CE			
Operating temperature		0 to 40°C (32 to 104°F)			
Storage temperature		–25 to 65°C (–13 to 149°F)			
Dimensions (L x W x H)		22.9 x 18.1 x 13.3 cm (9" x 7¼" x 5¼")			
Shipping weight		3.7 kg (8 lb)			

Dimensional Drawings cm (in.)
07554- Series

FRONT



BACK



24-HOUR PROTECTION

The Liqui-Sense® emergency cut-off system protects you from pumping problems 24 hours a day. Detection of a leak or a high/low liquid level in a tank signals the Liqui-Sense controller to turn off your pump and turn on a back-up.



MORE INFO

Request your FREE Masterflex Tubing Test Kit to test compatibility of your chemicals against different tubing formulations. Request item MK-00101-10.

Call today!



STANDARD

0.42 to 2900 mL/min



HIGH-PERFORMANCE

12 to 3400 mL/min



MULTICHANNEL CARTRIDGE

3- or 4-roller;
up to 8 channels
0.33 to 1700 mL/min



EASY-LOAD® 3

0.42 to 2900 mL/min



PTFE-TUBING

0.42 to 65 mL/min



6- or 8-roller;
up to 12 channels
0.0035 to 350 mL/min

EASY-LOAD® II

0.42 to 2900 mL/min



MULTICHANNEL

4- or 8-channel
for microbore tubing
0.02 to 200 mL/min



PTFE-DIAPHRAGM

10 to 800 mL/min



EASY-LOAD®

0.42 to 2300 mL/min



2-, 4-, or 8-channel
for L/S® Precision
tubing
0.32 to 2300 mL/min

For more information:

800-637-3739 or 847-381-7050
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Delivering Solutions You Trust