

OPERATING MANUAL

MASTERflex[®] L/S[®] **FIXED FLOW PUMP DRIVES**

Model Nos.

7540-01	7540-30	7542-12
7540-02	7540-60	7542-20
7540-06	7542-01	7542-30
7540-12	7542-02	7542-60
7540-20	7542-06	



Note: Drive is shown with optional Pump Head.



Cole-Parmer Instrument Co.

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SAFETY PRECAUTIONS

WARNINGS: *To reduce risk of electrical shock, connect only to a properly grounded, grounding-type receptacle.*



Remove power from the drive before attempting any maintenance.

Remove power before any cleaning operation is started.

WARNINGS: *Tubing breakage may result in fluid being sprayed from pump. Use appropriate measures to protect operator and equipment.*



Turn drive off before removing or installing tubing. Fingers or loose clothing could be caught in the drive mechanism.



WARNING: PRODUCT USE LIMITATION

These products are not designed for, nor intended for use in, patient-connected applications, including, but not limited to, medical and dental use, and, accordingly, have not been submitted for FDA approval.

INTRODUCTION AND GENERAL DESCRIPTION

The MASTERFLEX® L/S® fixed flow drives provide continuous fixed speed pumping of fluids while power is supplied.

Different models provide various speeds as summarized:

Model#	Description	Speed (rpm)	Pump Heads Accepted
7540-01	L/S Fixed Speed, 115V AC, 60 Hz	1	2
7540-02	L/S Fixed Speed, 115V AC, 60 Hz	2	2
7540-06	L/S Fixed Speed, 115V AC, 60 Hz	6	2
7540-12	L/S Fixed Speed, 115V AC, 60 Hz	12	2
7540-20	L/S Fixed Speed, 115V AC, 60 Hz	20	2
7540-30	L/S Fixed Speed, 115V AC, 60 Hz	30	2
7540-60	L/S Fixed Speed, 115V AC, 60 Hz	60	1
7542-01	L/S Fixed Speed, 230V AC, 50 Hz	1	2
7542-02	L/S Fixed Speed, 230V AC, 50 Hz	2	2
7542-06	L/S Fixed Speed, 230V AC, 50 Hz	5	2
7542-12	L/S Fixed Speed, 230V AC, 50 Hz	10	2
7542-20	L/S Fixed Speed, 230V AC, 50 Hz	17	2
7542-30	L/S Fixed Speed, 230V AC, 50 Hz	25	2
7542-60	L/S Fixed Speed, 230V AC, 50 Hz	50	1

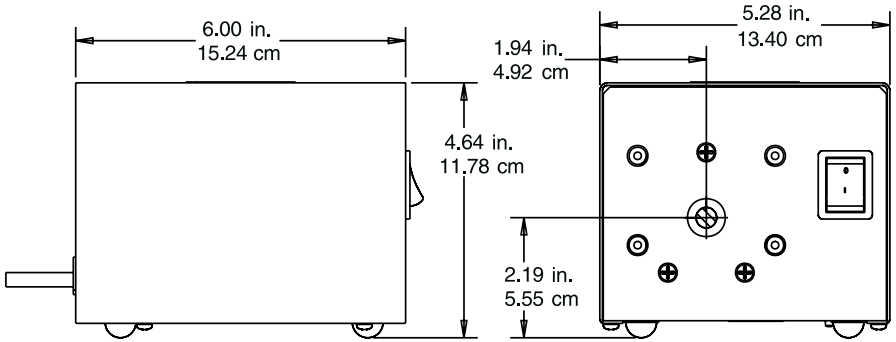
SETUP AND OPERATION

Use only MASTERFLEX precision tubing with MASTERFLEX pumps to ensure optimum performance.

Use of other tubing may void applicable warranties.

Unpack the drive and retain all packing material until proper product operation has been verified. Select the pump head and tubing according to the flow desired, while considering chemical compatibility and tubing life. Pump installation instructions are included with the pump head. Connect the line cord to a grounded three-wire AC receptacle.

The following sketch shows the dimensional outline of the drive:

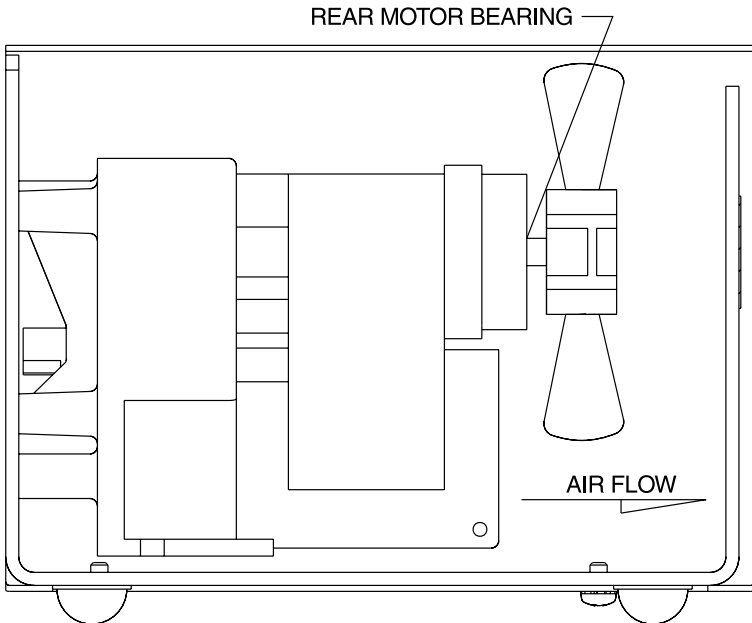


MAINTENANCE

WARNING: Remove power from the drive before attempting any maintenance.



The rear motor bearing should be given two drops of #20 non-detergent oil every three months. **Do not over oil.** Clean off any accumulated dust or dirt. The drive gear/motor assembly can be replaced if necessary. Exact “life” will depend on the number of heads and the speed used.



Cleaning

WARNING: Remove power before any cleaning operation is started.



Keep the drive enclosure clean by using a mild detergent solution. Never immerse or use excessive fluid when cleaning the drive.

SPECIFICATIONS

Output:

Model#	Speed (rpm)	Torque (in-oz) (kg-cm)		Pump Heads	Current (Amps)
7540-01	1	180	16	2	.3
7540-02	2	180	16	2	.3
7540-06	6	180	16	2	.5
7540-12	12	180	16	2	.5
7540-20	20	180	16	2	.6
7540-30	30	180	16	2	.9
7540-60	60	90	8	1	.9

Model#	Speed* (rpm)	Torque (in-oz) (kg-cm)		Pump Heads	Current (Amps)
7542-01	1	180	16	2	.2
7542-02	2	180	16	2	.2
7542-06	5	180	16	2	.2
7542-12	10	180	16	2	.2
7542-20	17	180	16	2	.4
7542-30	25	180	16	2	.4
7542-60	50	90	8	1	.4

***Note:** Speed for the 7542 series drives is 5/6 that of the 7540 series due to operation at 50 Hz. All motors are thermally protected.

Input:

Operating Voltage/Frequency:

7540 Series 115V AC ± 10%, 60 Hz

7542 Series 230V AC ± 10%, 50 Hz

SPECIFICATIONS (Cont.)

Environment:

Operating Temperature:	0°C to 40°C
Storage Temperature:	-25°C to 65°C
Humidity:	10% to 90% non-condensing
Altitude:	Less than 2000 meters
Pollution Degree:	Pollution degree 2 (indoor usage—lab,office)

Construction:

Dimensions (L x W x H):	15.2 cm x 13.4 cm x 11.8 cm (6 in x 5.3 in x 4.6 in)
Weight:	3 kgs (6.5 lbs)
Color:	Ghost Gray and black
Material:	Painted steel housing
Enclosure Rating:	IP22 per IEC 60529
Compliance:	115 V UL778, CSA C22.2 No. 108-01 230V (For CE Mark): EN61010-1 (EU Low Voltage Directive) and EN61326 (EU EMC Directive)



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