

L/S® PTFE-TUBING PUMP HEAD

FEATURES/BENEFITS

- ▶ Flow range: 0.06 to 65 mL/min
- ▶ Transfer aggressive organic solvents and maintain fluid purity
- ▶ Transfer liquid containing small particulates
- ▶ Excellent chemical compatibility
- ▶ Deliver a wide range of flow rates at pressures up to 100 psi
- ▶ Adjustable occlusion
- ▶ Use precision-molded tubing sets

SELECTION CRITERIA

- ▶ Flow rate desired.
 - ▶ Tube size required.
 - ▶ Compatibility with drives.
- See specifications for more information.

Order tubing and drives separately.

COMPATIBILITY WITH DRIVES

- ▶ Mount on all Masterflex L/S drives that accept two or more pump heads

PUMP HOUSING SPECIFICATIONS

- ▶ Pump body, bearing support, and rotor plates are anodized aluminum
- ▶ Rotor shaft, bearing, rollers, and hardware are stainless steel
- ▶ Occlusion bed: acetal
- ▶ ABS plastic occlusion knob

ROLLER/ROTOR SPECIFICATIONS

- ▶ 300-Series Stainless Steel (SS)
- ▶ Humidity from 0% to 100%
- ▶ Operating temperature from 0 to 40°C (32 to 104°F)
- ▶ Fluid temperature from 0 to 100°C (32 to 212°F)
- ▶ Ball-bearing construction
- ▶ Continuous duty up to 300 rpm

PTFE-tubing pump head 77390-00



PTFE tubing pump head 77390-00 shown on L/S variable-speed console drive 07520-40 is ideal for transferring aggressive organic solvents.

ISO9001:2000
CERTIFIED SUPPLIER

2 year
warranty

ORDERING INFORMATION

Catalog number	Description
RX-77390-00	L/S PTFE-tubing pump head only

NOTES

Use only Masterflex PTFE-tubing sets with the Masterflex PTFE-tubing pump head to ensure optimal performance. Use of other tubing may void applicable warranties.

PTFE-TUBING SETS AND ACCESSORIES

PTFE-Tubing Sets include two 38 cm (15") lengths and cannot be substituted with ordinary PTFE tubing. Choose compression fittings below to adapt tubing sets to your system.

RX-77390-50 PTFE-tubing set, 4-mm OD, 2-mm ID. Set of two 38-m (15") lengths.

RX-77390-60 PTFE-tubing set, 6-mm OD, 4-mm ID. Set of two 38-m (15") lengths.

For 4-mm OD PTFE-Tubing Sets

RX-31321-61 Straight connector, 2.8 bar (40 psi) max pressure

RX-31321-62 Male pipe adapter with 1/8" NPT(M) connection

RX-31321-63 Male pipe adapter with 1/4" NPT(M) connection

RX-06605-53 PTFE extension tubing, 4-mm OD. Pack of 7.6 m (25 ft)

For 6-mm OD PTFE-Tubing Sets

RX-31321-64 Straight connector, 9.2 bar (135 psi) max pressure

RX-31321-43 Male pipe adapter with 1/4" NPT(M) connection

RX-06605-54 PTFE extension tubing, 6-mm OD. Pack of 7.6 m (25 ft)

RX-31321-49 Tubing grooving tool. Use when connections must withstand 40 psi (2.8 bar) or greater



PTFE tubing sets, PTFE extension tubing, and straight connectors.

SPECIFICATIONS for L/S PTFE-Tubing Pump Head

Catalog number		RX-77390-00
Performance Specifications		
Flow capacity	4-mm OD tubing	0.06 to 17 mL/min (0 to 0.27 GPH)
	6-mm OD tubing	0.25 to 65 mL/min (0 to 1.1 GPH)
Max rpm		300
Number of rollers		6
Vacuum lift		2.4 m H2O (8 ft H2O)
Maximum Torque [pumping water at 0 psi, 21°C (70°)]		
PTFE tubing		12.9 kg-cm (180 oz-in)
Physical Specifications		
Pump body, bearing support, and rotor plates material		Anodized aluminum
Rotor shaft, bearings, rollers, and hardware material		Stainless steel
Reversible		Yes
Run dry		No†
Operating temperature		0 to 40°C (32 to 104°F)
Shipping weight		1.5 kg (3.3 lb)

†Do not pump gases or run dry for long periods of time; run dry to prime only.

COMPLETE L/S PTFE-TUBING PUMP SYSTEM

One catalog number simplifies the process

To make it easier to order a complete pump, purchase a pump head, tubing, and drive with just one catalog number.

Complete system includes one PTFE-tubing pump head 77390-00, one PTFE tubing set 77390-60, a 300-rpm variable-speed drive 07520-60 (115 VAC) or 07520-67 (230 VAC), two ¼" NPT (M) pipe adapters, and a tubing grooving tool.

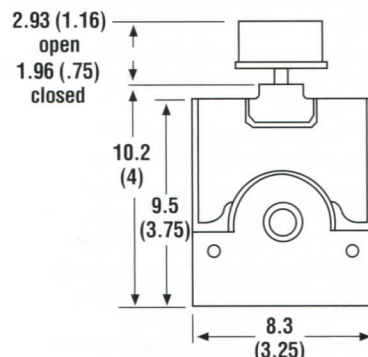


Catalog number	Power
RX-77912-00	115 VAC, 50/60 Hz
RX-77912-07	230 VAC, 50/60 Hz

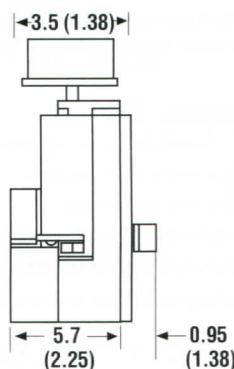
Drive is
UL US CE

Dimensional Drawings cm (in.)
77390-00

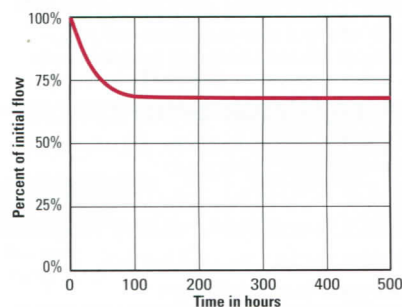
FRONT



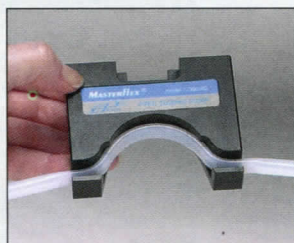
SIDE



Decay of Initial Flow vs. Time at 300 rpm



HOW TO LOAD YOUR PUMP HEAD



1. Rotate locking ring then rotate the knob on top of the pump counterclockwise. Lift occlusion bed by sliding it out the front of the body assembly.

2. Install the PTFE tubing assembly in the occlusion bed groove.

3. Slide the occlusion assembly back onto the body assembly and tighten knob.

L/S® TUBING64-69
L/S® DRIVES 70-107
L/S® PUMP SYSTEMS.....108-117

ACCESSORIES.....160-171

TECHNICAL DATA.....172-206