MASTERFLEX®

LS 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

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.

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









ORDERING INFORMATION

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

PTFE tubing pump head 77390-00 shown on L/S variable-speed console drive 07528-20 is ideal for transferring aggressive organic solvents.

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.

<u>HL-77390-50</u> PTFE-tubing set, 4-mm OD, 2-mm ID. Set of two 38-m (15") lengths.

HL-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

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

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

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

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

For 6-mm OD PTFE-Tubing Sets

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

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

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

HL-31321-49 Tubing grooving tool. Use when connections must withstand

40 psi (2.8 bar) or greater





Pump Heads



SPECIFICATIONS for L/S PTFE-Tubing Pump Head

Catalog number		HL-77390-00
Performance Specific	ations	
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 H ₂ 0 (8 ft H ₂ 0)
Maximum Torque [pur	nping water at 0 psi, 21°C (70°)]	
PTFE tubing		12.9 kg-cm (180 oz-in)
Physical Specification	ns	
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

Applications

- ▶ Pumping high-purity fluids
- ▶ Transfer of aggressive chemicals
- Chemical feed and metering
- ▶ Filtration

Benefits

- Flow rate: 0.75 to 65 mL/min; pressure up to 100 psi (6.9 bar)
- ▶ Low-pulsation, six-roller pump head
- Continuous-duty drive displays speed (rpm) and direction

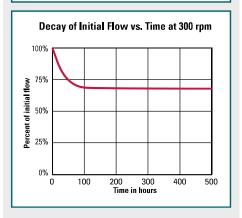
Complete system includes: L/S PTFE tubing pump head 77390-00, 6-mm OD PTFE tube set 77390-60, L/S 300 rpm variable-speed console drive 07528-20, and two ¼" NPT(M) pipe adapters.

Catalog number	Power
HL-77912-10	90 to 260 VAC, 50/60 Hz



Drive is

Dimensional Drawings cm (in.) 77390-00 FRONT 2.93 (1.16) open 1.96 (0.75) closed 10.2 (4) 9.5 (3.75)8.3 (3.25)SIDE **|-**3.5 (1.38)**>**| 0.95 - 5.7 (2.25)(1.38)



How to Load Your Pump Head



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° TUBING
Accessories160–171
TECHNICAL DATA