Masterflex

PUMP SYSTEMS



L/S[®] Precision Analog Console Pump Systems

APPLICATIONS

- General transfer and metering
- Circulating bath pump
- Remote-controlled metering pump
- Acid-base feed
- Low-pressure filtration
- Small tank transfer and filling

BENEFITS

- Simple keypad controls offer operational ease
- Powerful and cost-effective pump for precision transfer and metering applications
- Control pump speed remotely with 4 to 20 mA or 0 to 10 V signal
- Three-digit LED shows motor speed (rpm) for repeatability and monitoring performance
- Reversible motor—prime/purge and easily reverse direction of flow

FEATURES

- PWM speed control for precision and efficiency; ±0.25% speed control accuracy
- Stackable ABS housing is IP33 rated for wipedown
- Duniversal voltage, 90 to 260 VAC autoselect, 50/60 Hz
- ▶ Soft-start 1/10-hp continuous-duty drive



77916-10

77916-20



	_							
Catalog number	Flow range [†] (mL/min)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<u>HL-77916-10</u>	4.8 to 480	L/S Easy-Load [®] 3 77800-60	C-Flex [®] ULTRA L/S 16 06434-16; 3 m (10-ft)	L/S 13, L/S 14, L/S 16, L/S 25, L/S 17, L/S 18	07529 10	6 to 600	IP33	90 to 130 VAC, 2.2 A;
<u>HL-77916-20</u>	17 to 1700	L/S Easy-Load II 77200-62	C-Flex ULTRA L/S 24 06434-24; 3 m (10-ft)	L/S 15, L/S 24, L/S 35, L/S 36	07528-10	0 10 000	11733	and 190 to 260 VAC, 1.1 A

[†]Flow range with included tubing; extend the flow range of these systems with additional sizes of tubing; order on pages 68–73.

HL-77595-35 Foot switch, momentary start/stop; 1.8-m (6-ft) cable.

SPECIFICATIONS & ORDERING INFORMATION

HL-07595-45 DB9 male connector, use to create your own cable.

<u>HL-17050-01</u> NIST-traceable calibration for peristaltic pump drive.

<u>HL-07595-47</u> Cable assembly, DB9 male connector and 7.9 m (25-ft) cable with stripped wire terminal ends. Use for remote control.

<u>HL-07523-98</u> Tilt bail; use to securely elevate front of drive.

Distributed by:

Fiedler Scientific Instruments, s.r.o. H. Malířové 1, 638 00 Brno, Czech Republic Telephone: (+420) 541 222 795

Email: info@lab-eu.com info@pristroje.cz

Masterflex®

L/S[®] Multichannel Pump Systems

APPLICATIONS

- Precision dispensing into multiple containers
- Transfer or meter fluids through multiple lines
- Rapid automated filling

BENEFITS

- Control of multiple channels with a single drive reduces operating cost per channel
- Powerful metering and transfer pump with accurate speed control
- Synchronous flow from all four channels ensures accuracy when dispensing into multiple containers
- Reversible motor for purge before/after pumping; pump in either direction
- Simple keypad controls; bright, three-digit display of rpm for repeatability
- Remote control of speed and start/stop
- Accepts L/S two-stop tube sets for optimal tension with no adjustment
- Stackable ABS plastic housing wipes down for easy cleaning

FEATURES

- Four-channel pump head
- 1/10-hp, continuous-duty drive with remote capability
- ▶ ±0.25% speed control accuracy



509001:2008

E CE Zyear



Specifications & Ordering Information

Catalog number	Flow range [†] (mL/min)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<u>HL-77926-10</u>	0.47 to 47	L/S four channel 07535-04	Tygon [®] E-LFL tube set, L/S 16 06447-16; pk of 8	L/S two-stop tube sets: L/S 13, L/S 14, L/S 16	07528-30	1 to 100	IP33	90 to 260 VAC
<u>HL-77927-10</u>	2.8 to 280	L/S four channel 07536-04	Tygon E-LFL tube set, L/S 24 06447-24; pk of 4	L/S two-stop tube sets: L/S 15, L/S 24, L/S 35	07528-30	1 to 100	IP33	90 to 260 VAC

[†]Flow range with included tubing; extend the flow range of these systems with additional sizes of tubing; order two-stop tube sets below and L/S extension tubing on pages 68–73.

<u>HL-77595-35</u> Foot switch, DB9 male. Use for start/stop operation. <u>HL-07595-45</u> Connector, DB9 male. Use for 4–20 mA remote control. <u>HL-17050-01</u> NIST-traceable calibration for peristaltic pump drive.

Complete System Includes:

PUMP HEAD + TUBING + DRIVE

Additional L/S Two-Stop Precision Pump Tube Sets

Pump tubing		L	/S Precision pump tubin	g	L/S High-performance precision pump tubing				
		L/S 13	L/S 14	L/S 16	L/S 15	L/S 24	L/S 35		
Flow rate per channel	@ 1 to 100 rpm	0.045 to 4.5	0.16 to 16	0.47 to 47	1.6 to 160	2.8 to 280	3.8 to 380		
(mL/min)	@ 6 to 600 rpm	0.27 to 27	0.96 to 96	2.8 to 280	10 to 1000	17 to 1700	23 to 2300		
Tygon® E-LFL	Masteafter	<u>HL-06447-13</u>	<u>HL-06447-14</u>	<u>HL-06447-16</u>	<u>HL-06447-15</u>	<u>HL-06447-24</u>	<u>HL-06447-35</u>		
Silicone (platinum-cured)	Masterflex	<u>HL-06421-13</u>	<u>HL-06421-14</u>	<u>HL-06421-16</u>	<u>HL-06421-15</u>	<u>HL-06421-24</u>	<u>HL-06421-35</u>		
	MASTERFLEX	<u>HL-96116-13</u>	<u>HL-96116-14</u>	<u>HL-96116-16</u>	<u>HL-96116-15</u>	<u>HL-96116-24</u>	<u>HL-96116-35</u>		
PharMed [®] BPT	Marmatha	<u>HL-96114-13</u>	<u>HL-96114-14</u>	<u>HL-96114-16</u>	<u>HL-96114-15</u>	<u>HL-96114-24</u>	<u>HL-96114-35</u>		
Chem-Durance [®] Bio	Manualta	<u>HL-96117-13</u>	<u>HL-96117-14</u>	<u>HL-96117-16</u>	<u>HL-96117-15</u>	<u>HL-96117-24</u>	<u>HL-96117-35</u>		
Viton®	Masmatlex	<u>HL-96428-13</u>	<u>HL-96428-14</u>	<u>HL-96428-16</u>	<u>HL-96428-15</u>	<u>HL-96428-24</u>	<u>HL-96428-35</u>		
Qty/pk		8	8	8	4	4	4		

Distributed by:

Fiedler Scientific Instruments, s.r.o. H. Malířové 1, 638 00 Brno, Czech Republic Telephone: (+420) 541 222 795

Email: info@lab-eu.com info@pristroje.cz

Masterflex®

L/S[®] PTFE-TUBING PUMP SYSTEM

Applications

- Transfer of aggressive chemicals
- Filtration
- High-purity pumping
- Chemical injection

BENEFITS

- Excellent chemical compatibility for metering aggressive chemicals
- Higher pressures up to 6.9 bar (100 psi), low pulsation
- Inert PTFE tubing maintains fluid purity
- Adjustable occlusion
- Low maintenance

FEATURES

- ▶ 1⁄10-hp, 3 to 300 rpm continuous-duty drive
- 2.4-m (8-ft) suction lift; 6.9 bar (100 psi) pressure capability



Additional Tubing

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

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

HL-31321-64 Straight connector; 6 mm, 9.2 bar (135 psi) max

2		

SPECIFICATIONS & ORDERING INFORMATION									
Catalog number	Flow range (mL/min)	Pump head included	Tubing included [†]	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)	
<u>HL-77912-10</u>	0.75 to 65	L/S PTFE-tubing 77390-00	6-mm OD PTFE tubing set 77390-60	—	07528-20	3 to 300‡	IP33	90 to 260 VAC	

[†]Also includes two ¹/4" pipe adapters. [‡]Recommended drive speed operating range for included pump head.

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

Complete System Includes:							
PUMP HEAD +	TUBING	+[DRIVE				

L/S[®] PTFE-DIAPHRAGM PUMP SYSTEM

APPLICATIONS

- Chemical feed and metering
- Chemical injection
- High-purity fluid transfer
- Pumping aggressive chemicals
- High-pressure pumping

BENEFITS

- Continuous pressure up to 3.4 bar (50 psi); 5.2 bar (75 psi) intermittent
- Excellent chemical compatibility
- High metering accuracy
- Self-priming

Catalog

number

HL-77915-10

PTFE fluid path maintains fluid purity

Flow range

(mL/min)

80 to 800

FEATURES

- ▶ 1⁄10-hp, 6 to 600 rpm continuous-duty drive
- ▶ ±0.25% speed control accuracy
- ABS plastic housing

06605-15: 3.6 m (12 ft)

DB9 female connection on back for remote control

77915-10

Specifications & Ordering Infor

MATION			CER		
Tubing included [†]	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
1⁄4" ID x ¾" OD PTFE tubing		07529 10	40 to 400 [±]	1022	00 to 260 \/A C

40 to 400[‡]

07528-10

[†]Also includes pipe adapters and check valve. *Recommended drive speed operating range for included pump head.

HL-07090-43 Service kit includes diaphragm, check valves, installation tool and instructions.

Pump head

included L/S PTFE diaphragm

07090-42

HL-07090-45 Check valve.

Distributed by:

Fiedler Scientific Instruments, s.r.o. H. Malířové 1, 638 00 Brno, Czech Republic Telephone: (+420) 541 222 795

Email: info@lab-eu.com info@pristroje.cz

IP33

90 to 260 VAC

Masterflex®

L/S[®] Precision Modular Pump Systems

APPLICATIONS

- Sterile fluid transfer
- Carboy or small tank pumping
- Chemical recirculation
- Printing
- Laboratory research
- Filtration
- Polishing/lapping

BENEFITS

- Modular format lets you place drive and controller up to 1.8 meters (6 feet) apart
- Easy tubing changes
- Three-digit LED shows motor speed (rpm) for easy repeatability
- Reversible motor lets you purge tubing before or after pumping
- Optional remote control of speed, start/stop. and direction

FFATURES

- Controller and chemicalresistant drive connected by 1.8-m (6-ft) cable
- Soft-start. 1/10-hp continuous-duty drive
- ▶ ±0.25% speed control

400 💢 77913-70

S09001:2008

Lyear



77913-60

SPECIFICATIONS & ORDERING INFORMATION

Catalog number	Flow range [†] (mL/min)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)		
Precision modular pumps with benchtop controller										
<u>HL-77913-60</u>	4.8 to 480	L/S Easy-Load® 3 77800-60	C-Flex® ULTRA L/S 16 06434-16; 3 m (10 ft)	L/S 13, L/S 14, L/S 16, L/S 25, L/S 17, L/S 18	07577 00	6 to 600	1000	90 to 130 VAC, 2.2 A; and 190 to 260 VAC, 1.1 A		
<u>HL-77913-70</u>	17 to 1700	L/S Easy-Load II 77200-62	C-Flex ULTRA L/S 24 06434-24; 3 m (10 ft)	L/S 15, L/S 24, L/S 35, L/S 36	07577-00		IP33			
Precision modular pump with washdown wall-mount controller										
<u>HL-77913-80</u>	17 to 1700	L/S Easy-Load II 77200-62	C-Flex ULTRA L/S 24 06434-24; 3 m (10 ft)	L/S 15, L/S 24, L/S 35, L/S 36	07577-60	6 to 600	IP66	90 to 130 VAC, 2.2 A; and 190 to 260 VAC, 1.1 A		

[†]Flow range with included tubing; extend the flow range of these systems with additional sizes of tubing; order on pages 68–73.

Distributed by:

Fiedler Scientific Instruments, s.r.o. H. Malířové 1, 638 00 Brno, Czech Republic Telephone: (+420) 541 222 795

Email: info@lab-eu.com info@pristroje.cz