

C/L® Variable-Speed Tubing Pumps

Contamination-free dual- or single-channel pumping

- Stackable, compact ¼-DIN housing—mount in your equipment rack or place on your lab bench. (To mount, order optional brackets 77120-03 on facing page).
- Pumps accept continuous lengths of tubing for a clean fluid path with no fittings
- Separate single-turn speed control and cw/off/ccw switch with green LED power indicator—maintain speed setting when you turn pump on/off or reverse direction
- Reversible motor enables fluid purge before or after pumping, and pumping fluid in either direction
- Remote control connections on back of pump; start/stop pump with a contact closure
- Tubing retainers firmly grip tubing—change tubing quickly and easily with no occlusion adjustment

These easy-to-use, economical pumps feature reversible pumping, remote control capabilities, and rapid tubing changes. Ideal for consistent fluid delivery in chromatography, spectroscopy, and dispensing applications.

Maximum suction lift of 5 ft (1.5 m); max discharge head of 20 ft (6.1 m); max pressure 15 psi (1.0 bar). Self-priming pumps withstand minor back pressure, and accept all sizes of microbore tubing on facing page.

Perfect for Compact Spaces!

A

C/L single-channel pump
77122-04 shown with
Tygon® E-Lab tubing 06460-10

**B**

C/L dual-channel pump 77120-32
shown with PharMed® BPT tubing
95809-42



A Single-Channel Compact Pumps

- **New head design**—a single motion opens the cover and releases the occlusion bed for quicker and easier tubing changes
- Highest flow rate: 0.002 to 43 mL/min depending on drive rpm and tubing size
- Reversible, one-channel pumping
- Polyphenylene sulfide (PPS), acetal, and copolyester pump head with four stainless steel (SS) rollers
- Max button runs pump at 100% of maximum rpm—use to prime or to rapidly flush tubing

What's included: 5 ft (1.5 m) of 0.89-mm ID Tygon® E-LFL tubing and dual-voltage (115/230 VAC) power supply with 6-ft (1.8-m) power cord. Pumps are shipped with cord/plug assembly appropriate to destination country. Order additional microbore tubing based on chemical compatibility (pages 1221-1233) and flow rate (page 1235).

B Dual-Channel Compact Pumps

- Flow range: 0.002 to 12.3 mL/min per channel depending on drive rpm and tubing size
- One- or two-channel, reversible pumping
- Polyphenylene sulfide (PPS) and stainless steel (SS) pump head with six acetal copolymer rollers
- Max button runs pump at 100% of maximum rpm—use to prime or to rapidly flush tubing

What's included: 5 ft (1.5 m) of 0.89-mm ID Tygon E-LFL tubing and dual-voltage (115/230 VAC) power supply with 6-ft (1.8-m) power cord. Pumps are shipped with cord/plug assembly appropriate to destination country. Order additional microbore tubing based on chemical compatibility (pages 1221-1233) and flow rate (page 1235).

Low-flow
pumps for
chromatography,
filtration,
dispensing
and...



...the
ideal pump
system
for flow-
through
analyzer
applications



Flow Rates in mL/min

rpm	Microbore pump tubing size (ID)							
	0.19 mm	0.25 mm	0.51 mm	0.89 mm	1.14 mm	1.42 mm	2.06 mm	2.79 mm
A C/L single-channel compact pumps								
1.7 to 10	0.002 to 0.013	0.004 to 0.022	0.015 to 0.087	0.041 to 0.25	0.064 to 0.39	0.09 to 0.57	0.18 to 1.05	0.28 to 1.65
13 to 80	0.017 to 0.10	0.03 to 0.18	0.12 to 0.70	0.33 to 2.0	0.52 to 3.1	0.75 to 4.5	1.4 to 8.5	1.8 to 11.0
50 to 300	0.06 to 0.38	0.11 to 0.67	0.43 to 2.6	1.2 to 7.4	1.9 to 11.5	2.8 to 17.0	5.3 to 32	7.2 to 43
B C/L dual-channel compact pumps (flow rates per channel)								
1 to 6	0.002 to 0.013	0.0028 to 0.017	0.012 to 0.07	0.036 to 0.20	0.057 to 0.34	0.08 to 0.49	0.15 to 0.88	0.22 to 1.3
10 to 60	0.02 to 0.13	0.03 to 0.18	0.12 to 0.7	0.36 to 2.1	0.55 to 3.3	0.8 to 4.9	1.5 to 8.9	2.1 to 12.3

Specifications & Ordering Information for C/L® Pumps

ISO 9001:2008
CERTIFIED SUPPLIER

Power supplies are:



1 year warranty

Catalog number	rpm	Speed control (repeatability)	Number of channels	Number of rollers	Reversible motor	IP rating	Dimensions—¼ DIN (L x W x H)	Power		Price
								VAC, Hz	Amps	
A C/L single-channel compact pumps										
TW-77122-04	1.7 to 10	±5%	1	4	Yes	IP22	7" x 3¾" x 3½" (17.8 x 9.5 x 8.9 cm)	90 to 260, 50/60	110 mA at 115 VAC	
TW-77122-06								12 VDC†	—	
TW-77122-14	13 to 80							90 to 260, 50/60	175 mA at 115 VAC	
TW-77122-16								12 VDC†	—	
TW-77122-24	50 to 300							90 to 260, 50/60	400 mA at 115 VAC	
TW-77122-26								12 VDC†	—	
B C/L dual-channel compact pumps										
TW-77120-32	1 to 6	±5%	2	6	Yes	IP22	7½" x 3¾" x 3½" (19 x 9.5 x 8.9 cm)	90 to 260, 50/60	110 mA at 115 VAC	
TW-77120-52								12 VDC†	—	
TW-77120-42	10 to 60							90 to 260, 50/60	175 mA at 115 VAC	
TW-77120-62								12 VDC†	—	

†Power supply not included with 12 VDC models. 90 to 260 VAC models include power supply 77120-11.

TW-77120-03 Brackets for panel mounting. Set of 2

TW-77120-11 Replacement power supply, 115/230 VAC, for pumps 77122-04, -14, -24; 77120-32 and -42. Use this power supply to adapt 12 VDC models to 90 to 260 VAC input power

TW-06473-00 Straight connector, for connecting microbore tubing of 1- to 4-mm OD (sizes -10 through -42). Pack of 3



Order brackets
77120-03 to mount
your C/L® pump to
an equipment rack.

Microbore Pump Tubing Ordering Information

Tube ID (mm)	Tygon® E-lab	Silicone, platinum-cured	Silicone, peroxide-cured	PharMed® BPT	Tygon E-LFL (long flex life)	Viton®	Puri-Flex™	C-FLEX®	Solvent/hydrocarbon
0.19	TW-06460-10	—	—	—	—	—	TW-96418-10	TW-95718-10	TW-95712-10
0.25	TW-06460-12	—	—	—	—	—	TW-96418-12	TW-95718-12	TW-95712-12
0.51	TW-06460-18	TW-95590-18	—	TW-95809-18	TW-06449-18	—	TW-96418-18	TW-95718-18	TW-95712-18
0.89	TW-06460-26	TW-95590-26	TW-07625-26	TW-95809-26	TW-06449-26	TW-97632-26	TW-96418-26	TW-95718-26	TW-95712-26
1.14	TW-06460-30	TW-95590-30	TW-07625-30	TW-95809-30	TW-06449-30	TW-97632-30	TW-96418-30	TW-95718-30	TW-95712-30
1.42	TW-06460-34	TW-95590-34	TW-07625-34	TW-95809-34	TW-06449-34	TW-97632-34	TW-96418-34	TW-95718-34	TW-95712-34
2.06	TW-06460-42	TW-95590-42	TW-07625-42	TW-95809-42	TW-06449-42	TW-97632-42	TW-96418-42	TW-95718-42	TW-95712-42
2.79	TW-06460-48	TW-95590-48	TW-07625-48	TW-95809-48	TW-06449-48	TW-97632-48	TW-96418-48	TW-95718-48	TW-95712-48
Quantity/pk	100 ft (30.4 m)	50 ft (15.2 m)	50 ft (15.2 m)	100 ft (30.4 m)	100 ft (30.4 m)	50 ft (15.2 m)	50 ft (15.2 m)	50 ft (15.2 m)	50 ft (15.2 m)
Price/pk									

