



# MASTERFLEX®

## I/P® PUMP SYSTEMS

### COMPLETE PUMPING SYSTEMS FOR EASIER ORDERING AND INSTALLATION!

- Flow rates from 0.01 to 17.0 LPM with a single pumping channel
- Modular designs offer flexible placement of system components—use wall-mount controllers for wet or hostile environments
- Options include IP-rated systems, air-powered drives for hazardous environments, and washdown models
- Choose from systems designed both for reliable high-flow transfer pumping and for precision dispensing
- Include pump head, tubing, and drive



 **Cole-Parmer®**  
scientific experts

## MASTERFLEX I/P MODULAR PUMPS

### Applications

- Polishing/lapping
- Chemical recirculation
- Sterile fluid transfer
- Pump detergent from shipping drums
- filtration
- pH control
- Food flavoring injection
- Dispensing cell culture media
- Ink or dye dispensing
- Plating
- Corrosive fluid transfer
- Slurry pumping

### Benefits

- Modular design allows separation of components by up to 1.8 meters (6 feet); drive speed may be controlled remotely by 4 to 20 mA signal
- Easy tubing changes
- Purge tubing before or after pumping
- Forward/off/reverse switch lets you reverse while maintaining speed setting
- Choose wall-mount controller units for wet or hostile environments



77962-00



Catalog number	Flow range (LPM)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<b>Standard modular pump systems</b>								
<a href="#">MK-77962-00</a>	0.2 to 8.0	I/P Easy-Load® 77601-10	Tygon® LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	07591-00	20 to 650	Controller: IP22 Motor: IP34	90 to 130 VAC, 3.0 A
<a href="#">MK-77962-07</a>					07591-07			180 to 260 VAC, 1.5 A
<b>Modular pump systems with wall-mount controller</b>								
<a href="#">MK-77962-10</a>	0.2 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	07591-10	20 to 650	Controller: IP55 Motor: IP34	90 to 130 VAC, 3.0 A
<a href="#">MK-77962-15</a>					07591-15			180 to 260 VAC, 1.5 A

## MASTERFLEX I/P PROCESS PUMPS

### Applications

- Media transfer
- Filling/emptying large carboys
- Pumping dyes and pigments
- Pumping fermentation chemicals
- Sludge sampling
- Purification/filtration/media transfer
- Chemical feed and metering
- Wastewater processing
- Pumping antifoaming agents

### Benefits

- Maintenance-free motor for continuous-duty applications
- Light enough to carry with one hand
- Displays percent speed from 5 to 100% for repeatable control
- Sealed, IP55-rated housing sprays or wipes down for easy cleaning
- Powerful enough to drive two pump heads for twice the flow rate
- Remote control capability via fluid-resistant I/O connector on back of drive (77965-00 and 77965-10; requires 77300-32 remote cable kit)
- Analog outputs include "pump ready" signal



77965-10



Catalog number	Flow range (LPM)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<b>Standard process pump systems</b>								
<a href="#">MK-77963-10</a>	0.4 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	77410-10	33 to 650	IP55	90 to 130 VAC, 4.5 A; 180 to 260 VAC, 2.6 A
<a href="#">MK-77963-20</a>	0.7 to 17.0	I/P High-Performance 77600-62	Tygon LFL I/P 88 06429-88; 1 m (3 ft)	I/P 70, I/P 88, I/P 89				
<b>Process pump systems with remote control capability</b>								
<a href="#">MK-77965-00</a>	0.4 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	77411-00	33 to 650	IP55	90 to 130 VAC, 4.5 A; 180 to 260 VAC, 2.6 A
<a href="#">MK-77965-10</a>	0.7 to 17.0	I/P High-Performance 77600-62	Tygon LFL I/P 88 06429-88; 1 m (3 ft)	I/P 70, I/P 88, I/P 89				

[MK-07595-43](#) Washdown foot switch for 77965-00, -10

[MK-77300-32](#) Remote cable kit for 77965-00, -10

## MASTERFLEX I/P DIGITAL MODULAR PUMPS

### Applications

- Yogurt dispensing ■ Flavor concentrate/food additive dispenser ■ Photochemical dispenser
- Shampoo dispenser ■ Transfer of cell culture media

### Benefits

- Modular format lets you separate drive and controller up to 7.6 meters (25 feet)
- Easy to integrate into a system (order connector 07595-52 below)
- Repeat dispensing
- Reverse pumping
- Start/stop foot switch or handheld remote control operation
- Unit with wall-mount controller offers analog remote of speed/start/stop and direction (requires 77300-32; order below)



Catalog number	Flow range (LPM)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<b>Digital modular pump systems</b>								
<a href="#">MK-77970-20</a>	0.2 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	07592-20	20 to 650	Controller: IP22 Motor: IP34	90 to 130 VAC, 4.4 A
<a href="#">MK-77970-27</a>					07592-27			180 to 260 VAC, 2.2 A
<b>Digital modular pump systems with wall-mount controller</b>								
<a href="#">MK-77970-30</a>	0.2 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	07592-30	20 to 650	Controller: IP56 Motor: IP34	90 to 130 VAC, 4.4 A
<a href="#">MK-77970-37</a>					07592-35			180 to 260 VAC, 2.2 A

[MK-07595-42](#) **Foot switch** for 77970-20, -27; momentary start/stop; 1.8-m (6-ft) cable

[MK-07595-52](#) **DB15 male connector** for 77970-20, -27; use to create your own cable

[MK-07592-83](#) **Handheld remote** for 77970-30, -37

[MK-07595-43](#) **Washdown foot switch** for 77970-30, -37

[MK-77300-32](#) **Remote cable kit** for 77970-30, -37

## MASTERFLEX I/P DIGITAL PROCESS PUMPS

### Applications

- Pharma and cosmetics transfer ■ Sanitary food/dairy process pump ■ Automated process pump
- Dosing/metering additives ■ Pilot-scale fermentation ■ Bulk media transfer and dispensing
- Large-volume buffer transfer

### Benefits

- Motor is virtually maintenance free
- Full-featured digital dispense with programmed calibration for accuracy
- Four-digit display shows rpm, flow rate, dispense volume, and copy number
- Programmable dispense interval for automated dispensing
- Analog remote control of speed, start/stop, and direction (remote accessories required)
- Sealed, stainless steel housing is IP66, NEMA 4X rated for easy washdown in sanitary process environments
- Tach output for precise speed control and feedback



77964-10



Catalog number	Flow range (LPM)	Pump head included	Tubing included	Tubing sizes accepted	Drive included	Drive speed range (rpm)	Drive IP rating	Power (50/60 Hz)
<b>Digital process pump systems</b>								
<a href="#">MK-77964-00</a>	0.01 to 8.0	I/P Easy-Load 77601-10	Tygon LFL I/P 73 06429-73; 3 m (10 ft)	I/P 26, I/P 73, I/P 82	77420-00	1 to 650	IP66	90 to 130 VAC, 4.5 A; 220 to 260 VAC, 2.5 A
<a href="#">MK-77964-10</a>	0.02 to 17.0	I/P High-Performance 77600-62	Tygon LFL I/P 88 06429-88; 1 m (3 ft)	I/P 70, I/P 88, I/P 89				

## ADDITIONAL MASTERFLEX I/P PUMP SYSTEMS

Masterflex I/P pump systems are also available with air-powered pumps and for hazardous-duty uses. Options include ATEX-approved/compliant systems. **Contact us for more information.**



**In the U.S.**

625 E. Bunker Court  
 Vernon Hills, IL 60061  
 Call toll-free 800-323-4340  
 Phone: 847-549-7600  
 Fax: 847-247-2929  
[www.coleparmer.com](http://www.coleparmer.com)

**In Canada**

Call toll-free 800-363-5900  
 Phone: 514-355-6100  
 Fax: 514-355-7119  
[www.coleparmer.ca](http://www.coleparmer.ca)

**In the United Kingdom**

Free phone: 0500-345-300  
 Phone: 020-8574-7556  
 Fax: 020-8574-7543  
[www.coleparmer.co.uk](http://www.coleparmer.co.uk)

**In India**

Phone: 91-22-6716-2222  
 Fax: 91-22-6716-2211  
[www.coleparmer.in](http://www.coleparmer.in)

**International customers**

Call 847-549-7600 to reach our  
 International Sales Department  
 or contact your local dealer.



**FREE TECHNICAL  
 APPLICATIONS ASSISTANCE!**

## MASTERFLEX I/P PRECISION AND HIGH-PERFORMANCE PRECISION PUMP TUBING

Masterflex I/P pump tubing is manufactured to tight tolerances to ensure repeatable performance, higher accuracy, and longer tubing life. Our tubing is visually inspected and factory tested to obtain the best performance from your Masterflex I/P pump system.

Pump tubing formulation			Precision pump tubing			High-performance precision pump tubing		
			I/P 26	I/P 73	I/P 82	I/P 70	I/P 88	I/P 89
Silicone (platinum cured)	7.6 m (25 ft) per pack		<a href="#">MK-96410-26</a>	<a href="#">MK-96410-73</a>	<a href="#">MK-96410-82</a>	<a href="#">MK-96510-70</a> 3 m (10 ft) per pk	<a href="#">MK-96510-88</a> 3 m (10 ft) per pk	<a href="#">MK-96510-89</a> 3 m (10 ft) per pk
Silicone (peroxide cured)	7.6 m (25 ft) per pack		<a href="#">MK-96400-26</a>	<a href="#">MK-96400-73</a>	<a href="#">MK-96400-82</a>	<a href="#">MK-96400-70</a> 3 m (10 ft) per pk	<a href="#">MK-96400-88</a> 3 m (10 ft) per pk	<a href="#">MK-96400-89</a> 3 m (10 ft) per pk
BioPharm silicone (platinum)	7.6 m (25 ft) per pack		<a href="#">MK-96420-26</a>	<a href="#">MK-96420-73</a>	<a href="#">MK-96420-82</a>	<a href="#">MK-96421-70</a> 3 m (10 ft) per pk	<a href="#">MK-96421-88</a> 3 m (10 ft) per pk	<a href="#">MK-96421-89</a> 3 m (10 ft) per pk
BioPharm Plus silicone (platinum)	7.6 m (25 ft) per pack		<a href="#">MK-96440-26</a>	<a href="#">MK-96440-73</a>	<a href="#">MK-96440-82</a>	<a href="#">MK-96441-70</a> 3 m (10 ft) per pk	<a href="#">MK-96441-88</a> 3 m (10 ft) per pk	<a href="#">MK-96441-89</a> 3 m (10 ft) per pk
C-FLEX®	7.6 m (25 ft) per pack		<a href="#">MK-06424-26</a>	<a href="#">MK-06424-73</a>	<a href="#">MK-06424-82</a>	<a href="#">MK-06424-70</a> 3 m (10 ft) per pk	<a href="#">MK-06424-88</a> 3 m (10 ft) per pk	<a href="#">MK-06424-89</a> 3 m (10 ft) per pk
PharMed® BPT	7.6 m (25 ft) per pack		<a href="#">MK-06508-26</a>	<a href="#">MK-06508-73</a>	<a href="#">MK-06508-82</a>	<a href="#">MK-06508-70</a>	<a href="#">MK-06508-88</a>	<a href="#">MK-06508-89</a>
PharmaPure® <sup>tt</sup>	7.6 m (25 ft) per pack		<a href="#">MK-06435-26</a>	<a href="#">MK-06435-73</a>	<a href="#">MK-06435-82</a>	—	—	—
STA-PURE® PCS	61 cm (24") per pack		<a href="#">MK-96200-26</a>	<a href="#">MK-96200-73</a>	<a href="#">MK-96200-82</a>	—	—	—
STA-PURE® PFL	61 cm (24") per pack		<a href="#">MK-96210-26</a>	<a href="#">MK-96210-73</a>	<a href="#">MK-96210-82</a>	—	—	—
Tygon® LFL	7.6 m (25 ft) per pack		<a href="#">MK-06429-26</a>	<a href="#">MK-06429-73</a>	<a href="#">MK-06429-82</a>	<a href="#">MK-06429-70</a>	<a href="#">MK-06429-88</a>	<a href="#">MK-06429-89</a>
Tygon® Food (B-44-4X)	15.2 m (50 ft) per pack		<a href="#">MK-06419-26</a>	<a href="#">MK-06419-73</a>	<a href="#">MK-06419-82</a>	—	—	—
Tygon® lab (R-3603)	15.2 m (50 ft) per pack		<a href="#">MK-06409-26</a>	<a href="#">MK-06408-73</a>	<a href="#">MK-06408-82</a>	<a href="#">MK-06409-70</a>	<a href="#">MK-06409-88</a>	<a href="#">MK-06409-89</a>
Tygon® fuel & lubricant (F-4040-A)	15.2 m (50 ft) per pack		<a href="#">MK-06401-26</a>	<a href="#">MK-06401-73</a>	<a href="#">MK-06401-82</a>	—	—	—
Tygon® chemical (2001) <sup>tt</sup>	15.2 m (50 ft) per pack		<a href="#">MK-06475-26</a>	<a href="#">MK-06475-73</a>	<a href="#">MK-06475-82</a>	—	—	—
Norprene® (A 60 G)	15.2 m (50 ft) per pack		<a href="#">MK-06404-26</a>	<a href="#">MK-06404-73</a>	<a href="#">MK-06404-82</a>	<a href="#">MK-06404-70</a> 7.6 m (25 ft) per pk	<a href="#">MK-06404-88</a> 7.6 m (25 ft) per pk	<a href="#">MK-06404-89</a> 7.6 m (25 ft) per pk
Norprene® Food (A 60 F)	15.2 m (50 ft) per pack		<a href="#">MK-06402-26</a>	<a href="#">MK-06402-73</a>	<a href="#">MK-06402-82</a>	<a href="#">MK-06402-70</a> 7.6 m (25 ft) per pk	<a href="#">MK-06402-88</a> 7.6 m (25 ft) per pk	<a href="#">MK-06402-89</a> 7.6 m (25 ft) per pk
Chem-Durance® Bio	15.2 m (50 ft) per pack		<a href="#">MK-06442-26</a> <sup>tt</sup>	<a href="#">MK-06442-73</a> <sup>tt</sup>	<a href="#">MK-06442-82</a> <sup>tt</sup>	<a href="#">MK-06442-70</a> 7.6 m (25 ft) per pk	<a href="#">MK-06442-88</a> 7.6 m (25 ft) per pk	<a href="#">MK-06442-89</a> 7.6 m (25 ft) per pk
GORe® Style 400	61 cm (24") per pack		—	<a href="#">MK-06439-73</a>	—	—	—	—
FDA Viton®	7.6 m (25 ft) per pack		<a href="#">MK-96412-26</a>	<a href="#">MK-96412-73</a>	—	—	—	—

<sup>tt</sup>Recommended for use with Easy-Load® pump head only.