

## L/S® MULTICHANNEL CARTRIDGE PUMP HEADS

### FEATURES/BENEFITS

- ▶ Synchronous multichannel pumping
- ▶ Deliver flow rates from 0.005 to 1700 mL/min per channel with Masterflex L/S® or microbore tubing (flow rates depend on drive rpm and tubing size)
- ▶ Use 4 large cartridges, 8 small cartridges, or any combination of both
- ▶ Up to eight channels with a single head
- ▶ Use one cartridge or fill the pump head
- ▶ Each cartridge is individually adjustable
- ▶ Precision molded housing and tubing cavity
- ▶ Adapts easily to OEM applications

### COMPATIBILITY WITH DRIVES

- ▶ Mount on most drives accepting Masterflex L/S pump heads

For more information, see specific drive pages.

### SELECTION CRITERIA

1. Flow rate, tubing size desired.
  2. Number of channels needed.
  3. Drive compatibility.
- See specifications for more information.

Order tubing and drives separately.

### PUMP HOUSING SPECIFICATIONS

#### Molded Polysulfone Body

- ▶ General-purpose applications
- ▶ Adjustable foot provided for head support

### ROLLER/ROTOR SPECIFICATIONS

#### 300-Series Stainless Steel (SS) for 07519-06

#### Anodized Aluminum for 07519-05

- ▶ General-purpose applications
- ▶ Buna N shielded ball-bearing construction
- ▶ Continuous duty up to 600 rpm

See specifications for maximum drive rpm.

### CARTRIDGE SPECIFICATIONS

#### Polycarbonate and Glass-Filled Nylon

- ▶ No tools required/mechanically stable
- ▶ Anodized aluminum occlusion knob

#### Tangential Occlusion

- ▶ Better flow performance
- ▶ Fine tune flow rates  $\pm 5\%$
- ▶ Flow characteristics virtually the same in each direction of rotation
- ▶ Increase occlusion for priming/greater pressure
- ▶ Decrease occlusion to extend tubing life
- ▶ Index scale on cartridge to reference set occlusion
- ▶ Use microbore and Masterflex L/S Precision tubing sizes

ISO 9001:2000  
CERTIFIED SUPPLIER

2 year  
warranty

### ORDERING INFORMATION

#### Pump Heads

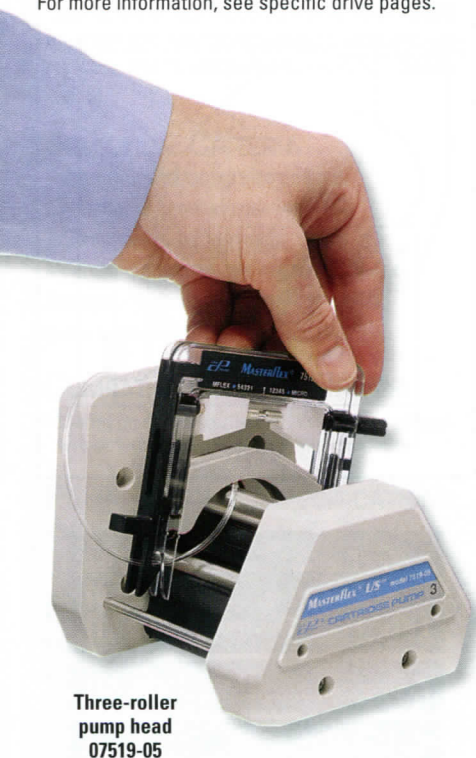
Catalog number	Max number of cartridges accepted <sup>1</sup>	Gear reduction	Max drive speed
<b>Three-roller pump head</b>			
RX-07519-05	4 large or 8 small	1:1	600
<b>Four-roller pump head</b>			
RX-07519-06	4 large or 8 small	1:1	600

<sup>1</sup>Pump heads accept both large and small cartridges — one large cartridge occupies the same space as two small ones. Use 4 large cartridges, 8 small cartridges, or any combination of both.

#### Cartridges

Catalog number	Tubing sizes accepted
<b>Large cartridge</b>	
RX-07519-70	Masterflex L/S 14, 16, 25, 17 <sup>†</sup>
<b>Small cartridge</b>	
RX-07519-80	Microbore two-stop tubing sets, 0.89 mm and larger; or Masterflex tubing sizes L/S 13 and L/S 14

<sup>†</sup>Only C-FLEX® and silicone tubing formulations are recommended for L/S 17.



Three-roller pump head  
07519-05



Four-roller pump head  
07519-06

### NOTES

Use only Masterflex pump tubing with Masterflex pumps to ensure optimal performance. Use of other tubing may void applicable warranties.

## SPECIFICATIONS & FLOW RATE INFORMATION (mL/MIN PER CHANNEL)

Pump head model	No. of rollers	Maximum no. of cartridges accepted	Gear ratio	Drive rpm	Pump tubing sizes (Order microbore two-stop tubing sets on page 53 and Masterflex pump tubing on pages 64–69.**)					
Using microbore two-stop tubing sets					0.19 mm ID	0.25 mm ID	0.89 mm ID	1.42 mm ID	2.06 mm ID	2.79 mm ID
RX-07519-05	3	4 large or 8 small	1:1	6 to 600	Not recommended		0.44 to 44	1.0 to 100	2.2 to 220	3.8 to 380
				0.1 to 100	Not recommended		0.007 to 7.4	0.017 to 17	0.037 to 37	0.063 to 63
RX-07519-06	4	4 large or 8 small	1:1	6 to 600	Not recommended		0.44 to 44	1.0 to 100	2.2 to 220	3.8 to 380
				0.1 to 100	Not recommended		0.007 to 7.4	0.017 to 17	0.037 to 37	0.063 to 63
Using Masterflex precision pump tubing					L/S 13	L/S 14	L/S 16	L/S 25	L/S 17 <sup>††</sup>	—
RX-07519-05	3	4 large or 8 small	1:1	6 to 600	0.30 to 30	1.3 to 130 <sup>†††</sup>	4.6 to 460	10 to 1000	17 to 1700	—
				0.1 to 100	0.005 to 5	0.021 to 21	0.076 to 76	0.17 to 170	0.28 to 280	—
RX-07519-06	4	4 large or 8 small	1:1	6 to 600	0.28 to 28	1.2 to 120	3.8 to 380	8.3 to 830	14 to 1400	—
				0.1 to 100	0.005 to 4.7	0.020 to 20	0.063 to 63	0.14 to 140	0.23 to 230	—

††Only C-FLEX® and silicone formulations are recommended for L/S 17.

†††Tygon® Food and Viton (L/S sizes) are not recommended for multichannel cartridge pump heads.

†††Use a maximum of six 07519-70 cartridges when using L/S 14 Norprene®, PharMed® BPT, or Tygon tubing formulations at higher speeds with pump head 07519-05.



## SPECIFICATIONS for L/S Multichannel Cartridge Pump Heads

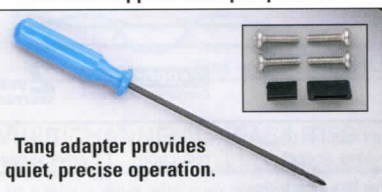
Catalog number	RX-07519-05	RX-07519-06
Performance Specifications		
Flow capacity per channel	0.005 to 1700 mL/min (0 to 27 GPH)+++	
Max rpm	600	
Number of rollers	3	4
Maximum vacuum/suction lift	660 mm Hg (26" Hg)/8.8 m H2O (29 ft H2O)	
Torque data	Please see pages 172–192	
Physical Specifications		
Housing/Rotor material	Stainless steel/anodized aluminum	Stainless steel
Operating temperature	0 to 40°C (32 to 104°F)	
Shipping weight	1.5 kg (3.3 lb)	

\*\*\*Depending on drive, pump head, and tubing size selected.

## MULTICHANNEL CAPABILITIES

- Mount one pump head with up to eight cartridges on a single drive
- No tools required to insert, remove, or adjust the cartridges
- Change tubing without disturbing other cartridges—eliminates lost time

Mounting hardware  
and tool supplied with pump head.



## MORE INFO



Tubing size settings on our cartridges allow you to simply select your tubing size for exact tubing retention every time!

Shown: Large cartridge 07519-70 (order separately on page 52).

## ORDERING INFORMATION

### Microbore Two-Stop Pump Tubing Sets (for 07519-80 small cartridge)

Tubing ID (mm)	Platinum-cured silicone	Santoprene	PVC	Viton®
0.89	RX-06421-26	RX-06431-26	RX-06416-26	RX-06428-26
1.42	RX-06421-34	RX-06431-34	RX-06416-34	RX-06428-34
2.06	RX-06421-42	RX-06431-42	RX-06416-42	RX-06428-42
2.79	RX-06421-48	RX-06431-48	RX-06416-48	RX-06428-48
Qty/pk	6	12	12	12

## HOW TO LOAD YOUR PUMP HEAD

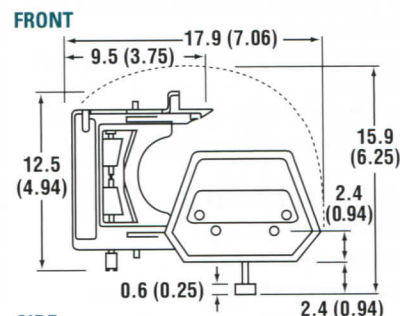


1. Select tubing, load tubing into cartridge, and set tubing retainers.

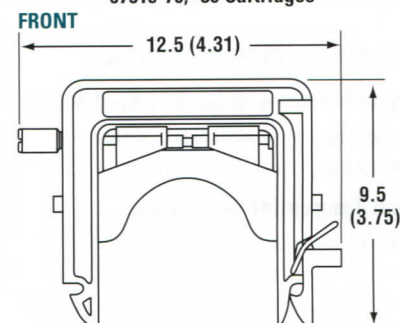
2. Snap cartridge into place on pump head.

3. Adjust occlusion using index scale on cartridge.

### Dimensional Drawings cm (in.) 07519-05, -06 Pump Heads



### 07519-70, -80 Cartridges



L/S® TUBING ..... 64-69  
L/S® DRIVES ..... 70-107  
L/S® PUMP SYSTEMS..... 108-117

ACCESSORIES..... 160-171

TECHNICAL DATA..... 172-206