

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

L/S® Standard Pump Heads

Features/Benefits

- Ideal for fluid transfer applications where accuracy and repeatability are important
- Tubing enters/exits on top of pump head
- Deliver flow rates from 0.06 to 2900 mL/min
- Precision molded housing and tubing cavity
- Each pump head is designed for one size of tubing—ensuring optimal occlusion and performance
- Adapts easily to OEM applications
- Interchangeable
- Stackable for multichannel pumping

Selection Criteria

1. Flow rate/tube size desired.
2. Materials of construction.
3. Compatibility with drives.

See specifications for more information.

Order tubing and drives separately.

Compatibility with Drives

- Mount on all drives accepting Masterflex L/S pump heads

Pump Housing Specifications

Clear Polycarbonate (PC)

- General-purpose applications
- Pump head operation visible through housing
- Select from CRS/Buna N or 300-series SS/PTFE shielded ball-bearing

Polyphenylene Sulfide (PPS)

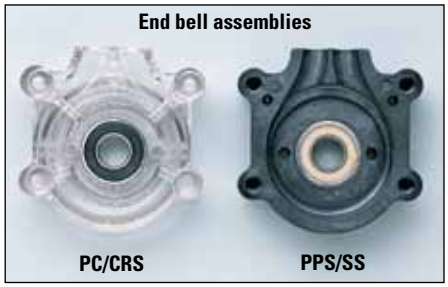
- Best protection from corrosive liquids/vapors
- 300-series stainless steel shielded ball-bearing

Watch the VIDEO!

Watch video tutorial on how to load Masterflex® L/S® Standard Pump Heads. Go to....
Masterflex.com/video

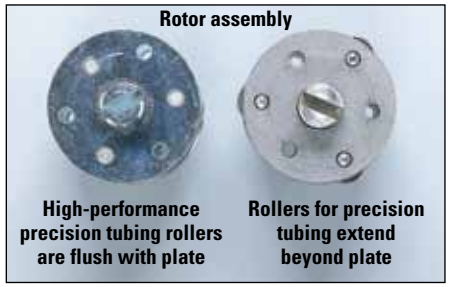


Standard pump head 07015-20



End bell assemblies

PC/CRS PPS/SS



Rotor assembly

High-performance precision tubing rollers are flush with plate

Rollers for precision tubing extend beyond plate

Roller/Rotor Specifications

Plated Cold-Rolled Steel (CRS)

- General-purpose applications
- Ball-bearing construction
- Continuous duty up to 600 rpm

300-Series Stainless Steel (SS)

- Corrosive fluids
- Shielded ball-bearing construction (highest life expectancy)
- Continuous duty up to 600 rpm

ISO 9001:2008 CERTIFIED SUPPLIER

2 year warranty

Ordering Information

Pump tubing size	PC housing		PPS housing
	CRS rotor	SS rotor	SS rotor
For Precision tubing			
L/S 13	FD-07013-20	FD-07013-21	FD-07013-52
L/S 14	FD-07014-20	FD-07014-21	FD-07014-52
L/S 16	FD-07016-20	FD-07016-21	FD-07016-52
L/S 17	FD-07017-20	FD-07017-21	FD-07017-52
L/S 18	FD-07018-20	FD-07018-21	FD-07018-52
For High-performance Precision tubing			
L/S 15	FD-07015-20	FD-07015-21	FD-07015-52
L/S 24	FD-07024-20	FD-07024-21	FD-07024-52
L/S 35	FD-07035-20	FD-07035-21	—
L/S 36	FD-07036-30	FD-07036-31	—

PC = polycarbonate PPS = polyphenylene sulfide
CRS = cold-rolled steel SS = stainless steel

L/S Pump Tubing Flow Rate Information

Order Masterflex L/S pump tubing separately on pages 66–71

Tubing cross sections	L/S Precision pump tubing					L/S High-performance Precision pump tubing			
	L/S 13	L/S 14	L/S 16	L/S 17	L/S 18	L/S 15	L/S 24	L/S 35	L/S 36
Flow rate–mL/rev	0.06	0.21	0.8	2.8	3.8	1.7	2.8	3.8	4.8
mL/min @ 600 rpm	36	130	480	1700	2300	1000	1700	2300	2900
Max pressure†	2.7 bar (40 psi)			1.4 bar (20 psi)	1.0 bar (15 psi)	2.7 bar (40 psi)		2.4 bar (35 psi)	1.4 bar (20 psi)
Max vacuum†	660 mm Hg (26" Hg)			510 mm Hg (20" Hg)		660 mm Hg (26" Hg)			
Suction lift	8.8 m H_2O (29 ft H_2O)			6.7 m H_2O (22 ft H_2O)		8.8 m H_2O (29 ft H_2O)			

†Actual performance varies depending upon tubing materials—see pages 20–23 and 172–192 for more information.

SPECIFICATIONS for L/S Standard Pump Heads

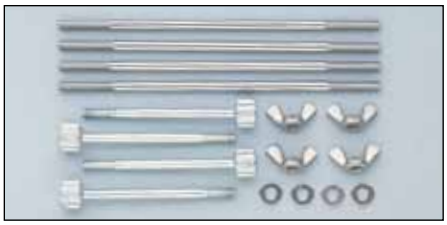
Catalog number		FD-070XX-20 and -30 Series	FD-070XX-21 and -31 Series	FD-070XX-52 Series
Performance Specifications				
Flow capacity		0.001 to 2900 mL/min (0 to 46 GPH)†		
Max rpm		600		
Number of rollers		3		
Torque Specifications‡ [a single head pumping water at 0 psi, 21°C (70°F)]				
Norprene®, PharMed® BPT	Starting torque	18.0 kg-cm (250 oz-in)		
	Running torque	5.8 kg-cm (80 oz-in)		
Tygon®, Viton®	Starting torque	27.7 kg-cm (385 oz-in)		
	Running torque	4.6 kg-cm (64 oz-in)		
C-FLEX®, Silicone	Starting torque	5.8 kg-cm (80 oz-in)		
	Running torque	2.2 kg-cm (30 oz-in)		
Physical Specifications				
Housing material		Clear polycarbonate		Polyphenylene sulfide
Rotor material		Cold-rolled steel	Stainless steel	
Operating temperature		0 to 40°C (32 to 104°F)		
Shipping weight		0.54 kg (1.18 lb)		

†Depending on pump head selected.
‡Actual torque depends on tubing size formulation. For complete torque data, please see pages 172–192.

MULTICHANNEL CAPABILITIES

Mount up to four pump heads depending on the drive. Order hardware based on the number of pump heads to be mounted.





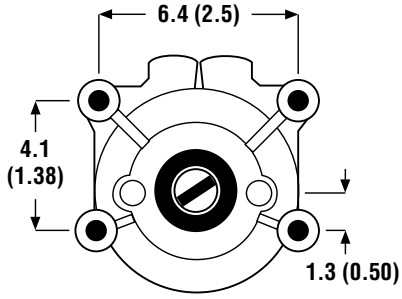
Mounting hardware

MOUNTING HARDWARE

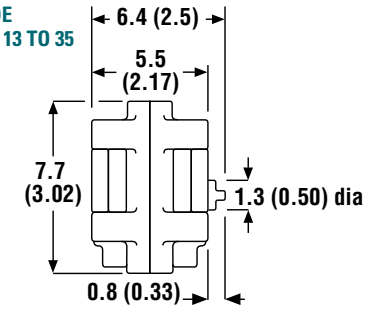
Heads to be mounted	Catalog number/set
	Stainless steel
L/S 13 to 35 Standard pump heads	
One	FD-07013-04
Two	FD-07013-05
Three	FD-07013-08
Four	FD-07013-09
L/S 36 Standard pump head	
One	FD-07036-01
Two	FD-07036-02

Dimensional Drawings cm (in.)
070XX-series

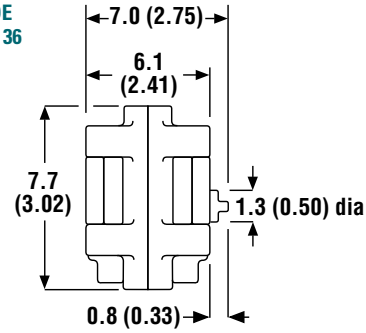
FRONT



SIDE
L/S 13 TO 35



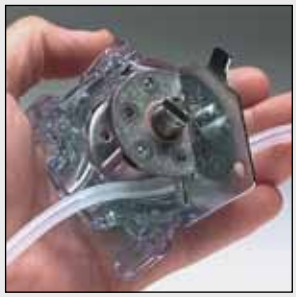
SIDE
L/S 36



NOTES

The design of the Standard pump head enables the most precise dispensing accuracy of any Masterflex pump head.

HOW TO LOAD YOUR PUMP HEAD



1. Disassemble pump head. Load tubing.



2. Use the loading key (included) to ensure proper tubing alignment and tension.



3. Reassemble two halves and mount on drive.

L/S® TUBING 66–71
L/S® DRIVES 72–107
L/S® PUMP SYSTEMS.....108–117
ACCESSORIES.....160–171
TECHNICAL DATA.....172–206

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP