



Lab Specialty Products Lab Ball Valves & Needle Valves

Lab Ball Valves



Pressure Rating @ 73°F (23°C), Water
 1/4" - 3/8" 150 psi
 Maximum Service Temperature
 PVC = 140°F (60°C)
 CPVC = 200°F (93°C)
 Temperature/Pressure De-ratings Apply
 Rated for Vacuum Service

Valve & Adapters includes:

- 1 - Threaded 1/4" Valve
- 2 - O-ring Sealed 1/4" MPT x Mipt Adapters
- 2 - EPDM or FKM O-rings (AS568-013 size)
- 1 - End Connector Wrench
- 2 - O-ring Sealed 1/4" MPT x 3/8" I.D.
- Tubing Barb Adapters
- OR -
- 2 - O-ring Sealed 1/4" MPT x 1/4" I.D.
- Tubing Barb Adapters



Socket/Threaded Valve Only

All Valves Assembled with Silicone-Free, Water Soluble Lubricant

Valve & Adapters

PVC

Size	EPDM	FKM	Std Pk	Mstr Pk	Disc Code
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Valve & Adapters Threaded Ends

1/4X1/4T	1529-002A 25.75	1539-002A 26.92	1	25	218
1/4X3/8T	1529-002 25.75	1539-002 26.92	1	25	218

Valve only Threaded Ends

1/4	1521-002 20.58	1531-002 22.91	50	200	218
3/8	1521-003 28.93	1531-003 32.07	50	200	218

Valve only Socket Ends

1/4	1522-002 20.58	1532-002 23.28	50	200	218
3/8	1522-003 28.93	1532-003 32.07	50	200	218

CPVC

Size	EPDM	FKM	Std Pk	Mstr Pk	Disc Code
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Valve & Adapters Threaded Ends

1/4X1/4T	1529-002CA 30.91	1539-002CA 31.51	1	25	219
1/4X3/8T	1529-002C 30.91	1539-002C 31.51	1	25	219

Valve only Threaded Ends

1/4	1521-002C 24.75	1531-002C 27.21	50	200	219
3/8	1521-003C 34.71	1531-003C 32.53	50	200	219

Valve only Socket Ends

1/4	1522-002C 24.75	1532-002C 29.45	50	200	219
3/8	1522-003C 34.71	1532-003C 38.53	50	200	219

Needle Valves



Pressure Rating @ 73°F (23°C), Water
 PVC or CPVC 235 psi
 PP 150 psi
 Maximum Service Temperature
 PVC = 140°F (60°C)
 CPVC = 200°F (93°C)
 PP = 180°F (82°C)
 Solid PTFE Stem Seals
 No Elastomer or Lubricants used
 Valves include Panel Mounting Nut

PVC Needle Valve

Size	Threaded	Socket	SR Threaded	Std Pk	Mstr Pk	Disc Code
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Globe Pattern

1/4	5591-002 71.27	5592-002 71.27	---	1	18	218
3/8	5591-003 71.27	5592-003 71.27	5591-003SR 65.01	1	18	218
1/2	5591-005 79.11	5592-005 79.11	5591-005SR 81.23	1	18	218

Angle Pattern

1/4	5691-002 71.27	5692-002 71.27	---	1	18	218
3/8	5691-003 71.27	5692-003 71.27	---	1	18	218
1/2	5691-005 79.11	5692-005 79.11	5691-005SR 81.23	1	18	218

CPVC Needle Valve

Size	Threaded	Socket	SR Threaded	Std Pk	Mstr Pk	Disc Code
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Globe Pattern

1/4	5591-002C 83.94	5592-002C 83.94	---	1	18	219
3/8	5591-003C 83.94	5592-003C 83.94	5591-003CSR 83.75	1	18	219
1/2	5591-005C 88.77	5592-005C 88.77	5591-005CSR 91.04	1	18	219

Angle Pattern

1/4	5691-002C 83.94	5692-002C 83.94	---	1	18	219
3/8	5691-003C 83.94	5692-003C 83.94	---	1	18	219
1/2	5691-005C 88.77	5692-005C 88.77	5691-005CSR 91.04	1	18	219

**Lab Specialty Products
Needle Valves**



PP Needle Valve

Size	Threaded	Socket	SR Threaded	Std Pk	Mstr Pk	Disc Code
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Globe Pattern

1/4	5591-002P 78.54	---	---	1	18	219
3/8	5591-003P 78.54	---	---	1	18	219
1/2	---	---	5591-005PSR 86.85	1	18	219

Angle Pattern

1/4	5691-002P 78.54	---	---	1	18	219
3/8	5691-003P 78.54	---	---	1	18	219
1/2	---	---	5691-005PSR 86.85	1	18	219



Lab Specialty Products Gauge Guards



Connections use Spears® Patented Special Reinforced (SR)
Female Threads on Pressure Inlet (1/4" or 1/2")

Pressure Rating
235 psi @ 73°F
16 BAR @ 22°C
Maximum Service Temperature
PVC = 140°F (60°C)
CPVC = 200°F (93°C)
PP = 180°F (82°C)
Temperature/Pressure De-ratings Apply
Rated for Full Vacuum Service

Gauge Guards are pre-filled with glycerin-water
on units with Factory Installed Gauges.
"No Gauge" units are to be filled by end user.

PVC GAUGE GUARDS

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
PTFE Diaphragm					
No Gauge	G0004-002 103.83	G0004-005 103.83	1	18	624
0-30 in-Hg	G30V4-002 175.28	G30V4-005 175.28	1	18	624
0-15 psi	G0154-002 165.69	G0154-005 165.69	1	18	624
0-30 psi	G0304-002 165.69	G0304-005 165.69	1	18	624
0-60 psi	G0604-002 165.69	G0604-005 165.69	1	18	624
0-100 psi	G1004-002 165.69	G1004-005 165.69	1	18	624
0-160 psi	G1604-002 165.69	G1604-005 165.69	1	18	624
0-200 psi	G2004-002 165.69	G2004-005 165.69	1	18	624
0-300 psi	G3004-002 165.69	G3004-005 165.69	1	18	624

FKM Diaphragm

No Gauge	G0003-002 103.83	G0003-005 103.83	1	18	624
0-30 in-Hg	G30V3-002 175.28	G30V3-005 175.28	1	18	624
0-15 psi	G0153-002 165.69	G0153-005 165.69	1	18	624
0-30 psi	G0303-002 165.69	G0303-005 165.69	1	18	624
0-60 psi	G0603-002 165.69	G0603-005 165.69	1	18	624
0-100 psi	G1003-002 165.69	G1003-005 165.69	1	18	624
0-160 psi	G1603-002 165.69	G1603-005 165.69	1	18	624
0-200 psi	G2003-002 165.69	G2003-005 165.69	1	18	624
0-300 psi	G3003-002 165.69	G3003-005 165.69	1	18	624

EPDM Diaphragm

No Gauge	G0002-002 99.63	G0002-005 99.63	1	18	624
0-30 in-Hg	G30V2-002 168.24	G30V2-005 168.24	1	18	624
0-15 psi	G0152-002 159.12	G0152-005 159.12	1	18	624
0-30 psi	G0302-002 159.12	G0302-005 159.12	1	18	624

PVC GAUGE GUARDS (continued)

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
EPDM Diaphragm					
0-60 psi	G0602-002 159.12	G0602-005 159.12	1	18	624
0-100 psi	G1002-002 159.12	G1002-005 159.12	1	18	624
0-160 psi	G1602-002 159.12	G1602-005 159.12	1	18	624
0-200 psi	G2002-002 159.12	G2002-005 159.12	1	18	624
0-300 psi	G3002-002 159.12	G3002-005 159.12	1	18	624

CPVC GAUGE GUARDS

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
PTFE Diaphragm					
No Gauge	G0004-002C 134.98	G0004-005C 134.98	1	18	625
0-30 in-Hg	G30V4-002C 227.88	G30V4-005C 227.88	1	18	625
0-15 psi	G0154-002C 215.43	G0154-005C 215.43	1	18	625
0-30 psi	G0304-002C 215.43	G0304-005C 215.43	1	18	625
0-60 psi	G0604-002C 215.43	G0604-005C 215.43	1	18	625
0-100 psi	G1004-002C 215.43	G1004-005C 215.43	1	18	625
0-160 psi	G1604-002C 215.43	G1604-005C 215.43	1	18	625
0-200 psi	G2004-002C 215.43	G2004-005C 215.43	1	18	625
0-300 psi	G3004-002C 215.43	G3004-005C 215.43	1	18	625

FKM Diaphragm

No Gauge	G0003-002C 134.98	G0003-005C 134.98	1	18	625
0-30 in-Hg	G30V3-002C 227.88	G30V3-005C 227.88	1	18	625
0-15 psi	G0153-002C 215.43	G0153-005C 215.43	1	18	625
0-30 psi	G0303-002C 215.43	G0303-005C 215.43	1	18	625
0-60 psi	G0603-002C 215.43	G0603-005C 215.43	1	18	625
0-100 psi	G1003-002C 215.43	G1003-005C 215.43	1	18	625

**Lab Specialty Products
Gauge Guards**



CPVC GAUGE GUARDS (continued)

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
FKM Diaphragm					
0-160 psi	G1603-002C 215.43	G1603-005C 215.43	1	18	625
0-200 psi	G2003-002C 215.43	G2003-005C 215.43	1	18	625
0-300 psi	G3003-002C 215.43	G3003-005C 215.43	1	18	625

EPDM Diaphragm

No Gauge	G0002-002C 129.60	G0002-005C 129.60	1	18	625
0-30 in-Hg	G30V2-002C 218.74	G30V2-005C 218.74	1	18	625
0-15 psi	G0152-002C 206.91	G0152-005C 206.91	1	18	625
0-30 psi	G0302-002C 206.91	G0302-005C 206.91	1	18	625
0-60 psi	G0602-002C 206.91	G0602-005C 206.91	1	18	625
0-100 psi	G1002-002C 206.91	G1002-005C 206.91	1	18	625
0-160 psi	G1602-002C 206.91	G1602-005C 206.91	1	18	625
0-200 psi	G2002-002C 206.91	G2002-005C 206.91	1	18	625
0-300 psi	G3002-002C 206.91	G3002-005C 206.91	1	18	625

PP GAUGE GUARDS

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
PTFE Diaphragm					
No Gauge	G0004-002P 121.51	G0004-005P 121.51	1	18	626
0-30 in-Hg	G30V4-002P 186.67	G30V4-005P 186.67	1	18	626
0-15 psi	G0154-002P 177.54	G0154-005P 177.54	1	18	626
0-30 psi	G0304-002P 177.54	G0304-005P 177.54	1	18	626
0-60 psi	G0604-002P 177.54	G0604-005P 177.54	1	18	626
0-100 psi	G1004-002P 177.54	G1004-005P 177.54	1	18	626
0-160 psi	G1604-002P 177.54	G1604-005P 177.54	1	18	626
0-200 psi	G2004-002P 177.54	G2004-005P 177.54	1	18	626
0-300 psi	G3004-002P 177.54	G3004-005P 177.54	1	18	626

FKM Diaphragm

No Gauge	G0003-002P 121.51	G0003-005P 121.51	1	18	626
0-30 in-Hg	G30V3-002P 186.67	G30V3-005P 186.67	1	18	626
0-15 psi	G0153-002P 177.54	G0153-005P 177.54	1	18	626
0-30 psi	G0303-002P 177.54	G0303-005P 177.54	1	18	626
0-60 psi	G0603-002P 177.54	G0603-005P 177.54	1	18	626
0-100 psi	G1003-002P 177.54	G1003-005P 177.54	1	18	626
0-160 psi	G1603-002P 177.54	G1603-005P 177.54	1	18	626
0-200 psi	G2003-002P 177.54	G2003-005P 177.54	1	18	626
0-300 psi	G3003-002P 177.54	G3003-005P 177.54	1	18	626

EPDM Diaphragm

No Gauge	G0002-002P 116.71	G0002-005P 116.71	1	18	626
0-30 in-Hg	G30V2-002P 179.18	G30V2-005P 179.18	1	18	626
0-15 psi	G0152-002P 170.51	G0152-005P 170.51	1	18	626

PP GAUGE GUARDS (continued)

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Disc Code
EPDM Diaphragm					
0-30 psi	G0302-002P 170.51	G0302-005P 170.51	1	18	626
0-60 psi	G0602-002P 170.51	G0602-005P 170.51	1	18	626
0-100 psi	G1002-002P 170.51	G1002-005P 170.51	1	18	626
0-160 psi	G1602-002P 170.51	G1602-005P 170.51	1	18	626
0-200 psi	G2002-002P 170.51	G2002-005P 170.51	1	18	626
0-300 psi	G3002-002P 170.51	G3002-005P 170.51	1	18	626



Lab Specialty Products Lab Fixtures

100% Corrosion Resistance - No Metal Parts

Spears® Lab Fixtures have *no metal parts*; this provides full resistance to internal or environmental corrosion. These fixtures are compatible with all laboratory service lines. Lab Fixtures are produced from PVC (gray) and CPVC (for hot water), or special Low-Extractable PVC for high purity applications, and are available in a variety of types and configurations.

- **Deck Mount** – base configuration for horizontal surface mounting.
- **Panel Mount** – base configuration for vertical surface mounting.
- **Standard Gooseneck Units** – select all-plastic needle valve unit (no elastomer seals) for metered flow or ball valve unit (choice of EPDM or FKM seals) for direct flow. Unit includes valve, gooseneck with serrated tip, and base with nut for mounting. Select Deck or Panel Mount style.
- **Standard Turret Units** – direct flow ball valve (choice of EPDM or FKM seals) with serrated tip and base with connecting nipple and nut for mounting. Select Deck or Panel Mount style.
- **Remote Valve Units (No Valve)** – same as standard units less valve for use with remotely located valve.
- **Recirculating Units** – Special design provides continuous water motion without dead-leg areas of contamination and potential bacteria build-up. Internal supply tube fully circulates water through the entire fixture when connected to circulating water supply. Unit features gooseneck with terminally mounted all-plastic needle valve and serrated tip (no elastomer seals) for metered flow. Base is Deck Mount only with inlet and outlet connecting nipples with mounting nuts.

NPT - American National Standard Tapered Pipe Thread • NPSM - American National Standard Straight Thread For Free Fitting Mechanical Joints

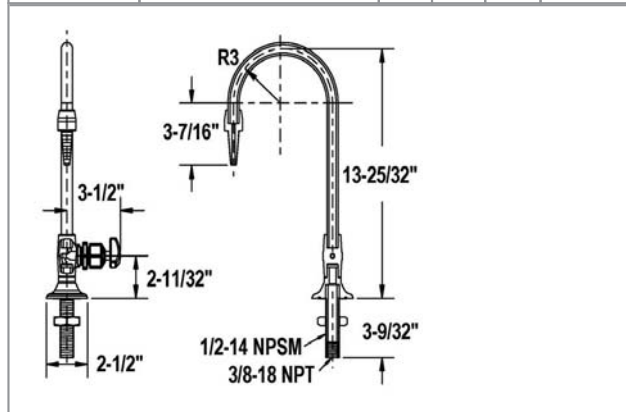
For information on Spears® Low Extractable PVC see publication LXT-4

Standard Gooseneck Units - Deck Mount Lab Fixture -

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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Base with Valve, Gooseneck & Serrated Tip with Needle Valve-Metered Flow

LF1000-N	PVC, PTFE Seal	1	0	218	189.25
LF1000-CN	CPVC, PTFE Seal	1	0	219	236.28
LF1000-BLN	LXT, PTFE Seal	1	0	066	376.37



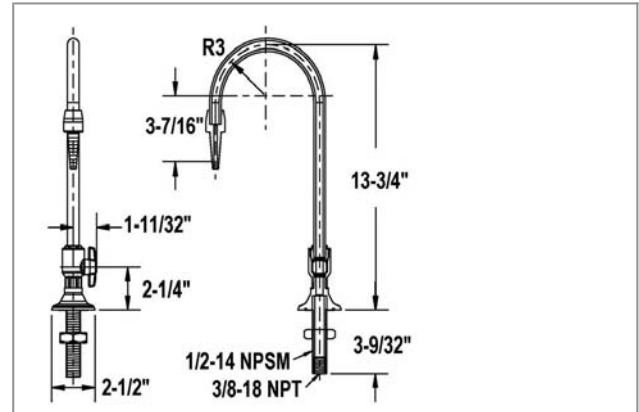
with Ball Valve Direct Flow

LF1002	PVC, EPDM Seal	1	0	218	158.08
LF1003	PVC, FKM Seal	1	0	218	175.64
LF1002-C	CPVC, EPDM Seal	1	0	219	197.60
LF1003-C	CPVC, FKM Seal	1	0	219	219.55
LF1002-BL	LXT, EPDM Seal	1	0	066	314.74
LF1003-BL	LXT, FKM Seal	1	0	066	349.72

Standard Gooseneck Units - Deck Mount Lab Fixture - (continued)

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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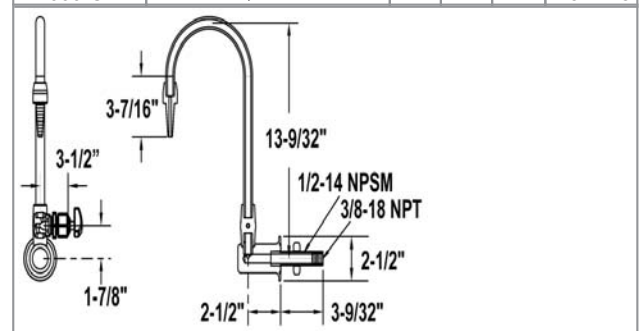
with Ball Valve Direct Flow



Standard Gooseneck Units - Panel Mount Lab Fixture -

Base with Valve, Gooseneck & Serrated Tip with Needle Valve-Metered Flow

LF2000-N	PVC, PTFE Seal	1	0	218	275.81
LF2000-CN	CPVC, PTFE Seal	1	0	219	344.75



Standard Gooseneck Units - Panel Mount Lab Fixture -

with Ball Valve-Direct Flow

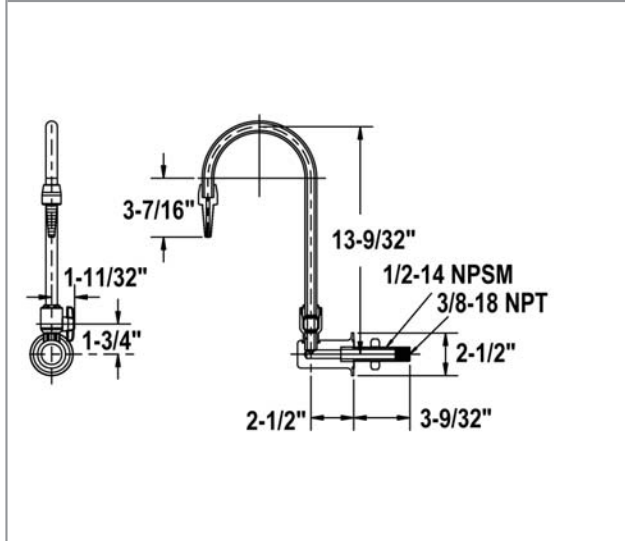
LF2002	PVC, EPDM Seal	3	0	218	237.77
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Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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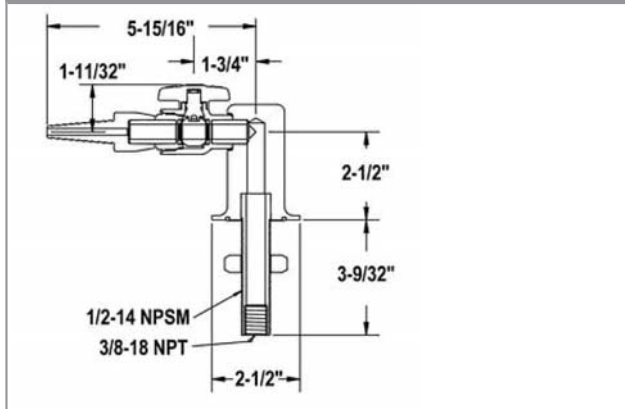
Standard Gooseneck Units - Panel Mount Lab Fixture - (continued)
with Ball Valve-Direct Flow

LF2003	PVC, FKM Seal	3	0	218	264.20
LF2002-C	CPVC, EPDM Seal	1	0	219	297.23
LF2003-C	CPVC, FKM Seal	1	0	219	330.23



Standard Turret Units - Deck Mount Turret Lab Fixtures Base -
with Valve & Serrated Tip with Ball Valve-Direct Flow

LF4002	PVC, EPDM Seal	1	0	218	200.62
LF4003	PVC, FKM Seal	1	0	218	222.91
LF4002-C	PVC, EPDM Seal	1	0	219	250.77
LF4003-C	PVC, FKM Seal	1	0	219	278.64

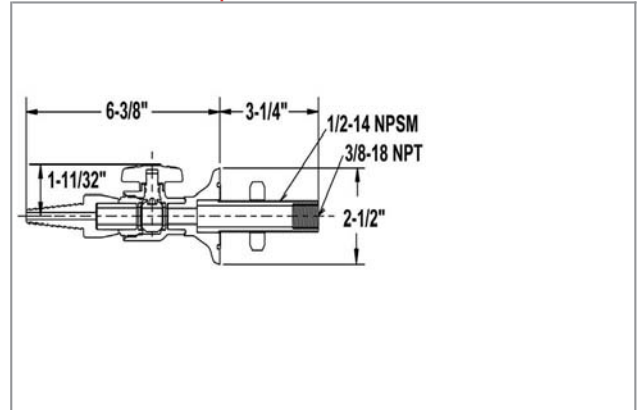


Standard Turret Units - Panel Mount Turret Lab Fixture Base -
with Valve & Serrated Tip with Ball Valve-Direct Flow

LF3002	PVC, EPDM Seal	1	0	218	155.49
LF3003	PVC, FKM Seal	1	0	218	172.79
LF3002-C	PVC, EPDM Seal	1	0	219	194.39
LF3003-C	PVC, FKM Seal	1	0	219	215.99
LF3002-BL	PVC, EPDM Seal	1	0	066	309.60
LF3003-BL	PVC, FKM Seal	1	0	066	344.04

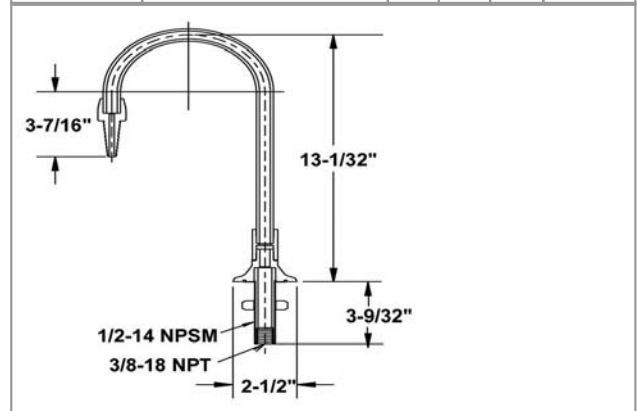
Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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Standard Turret Units - Panel Mount Turret Lab Fixture Base - (continued)
with Valve & Serrated Tip with Ball Valve-Direct Flow



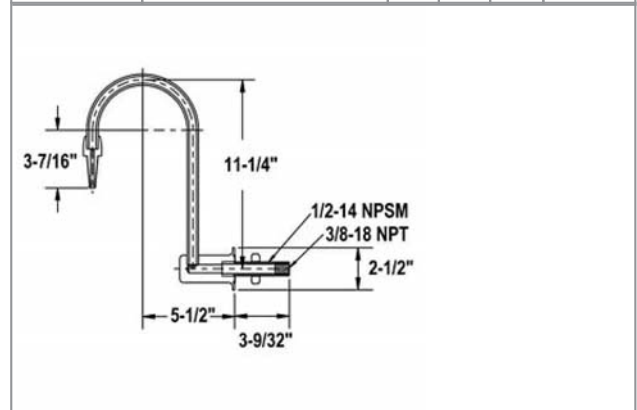
Remote Valve Units (No Valve) - Deck Mount Gooseneck -
Base with Gooseneck & Serrated Tip

LF100	PVC	1	0	218	129.73
LF100-C	CPVC	1	0	219	162.17
LF100-BL	LXT	1	0	066	258.28



Remote Valve Units (No Valve) - Panel Mount Gooseneck -
Base with Gooseneck & Serrated Tip

LF104	PVC	1	0	218	160.24
LF104-C	CPVC	1	0	219	200.31





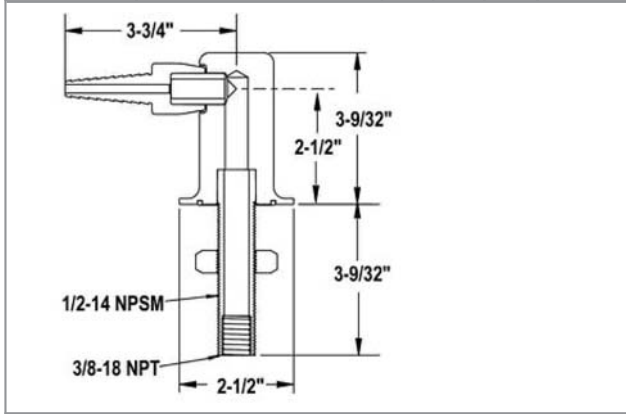
**Lab Specialty Products
Lab Fixtures**

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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**Remote Valve Units (No Valve) - Deck Mount
Turret -**

Base with Serrated Tip

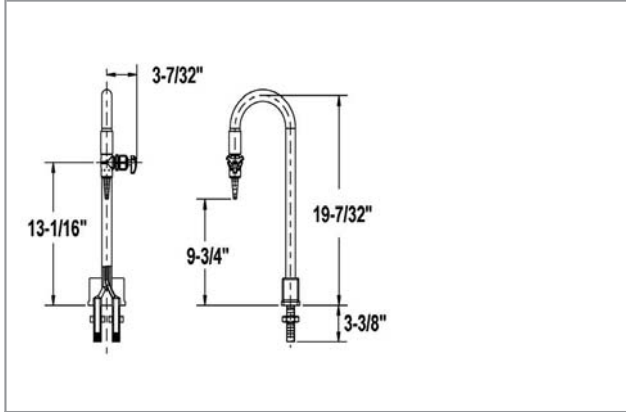
LF300	PVC	1	0	218	42.75
LF300-C	CPVC	1	0	219	53.44



**Recirculating Units - Recirculating Deck Mount
Lab Fixture -**

**Base with Gooseneck, Valve & Serrated Tip with Needle
Valve**

LFR1000-N	PVC, PTFE Seal	1	0	218	329.36
LFR1000-CN	CPVC, PTFE Seal	1	0	219	492.24
LFR1000-BLN	LXT, PTFE Seal	1	0	066	784.05



Accessory/ Replacement - Fixture Connection Nipple -

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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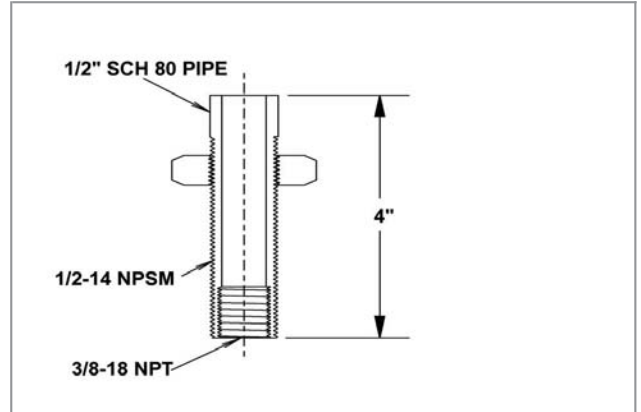
(included on all fixtures above) with Locknut

LF500	PVC	1	0	218	21.46
LF500-C	CPVC	1	0	219	26.84
LF500-BL	LXT	1	0	066	42.78

**Accessory/ Replacement - Fixture Connection Nipple -
(continued)**

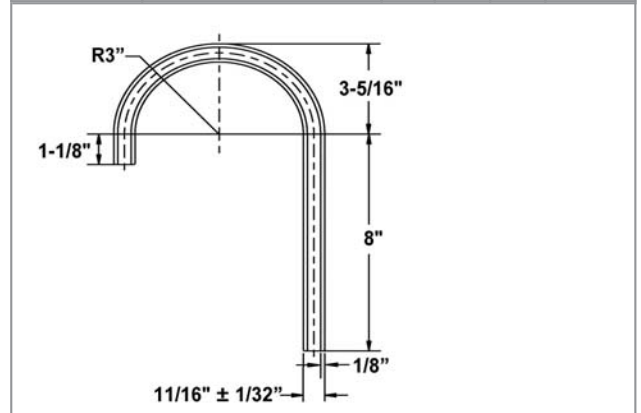
Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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(included on all fixtures above) with Locknut



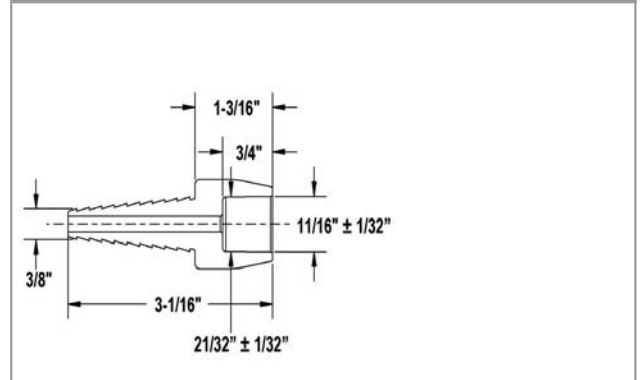
Accessory/ Replacement - Gooseneck (3/8")

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
LFGN	PVC	1	0	218	18.24
LFGN-C	CPVC	1	0	219	22.83
LFGN-BL	LXT	1	0	066	36.36



Accessory/ Replacement - Straight Serrated Tip

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
LF400	PVC	600	0	218	3.86
LF400-C	CPVC	600	0	219	4.85
LF400-BL	LXT	600	0	066	7.69





Accessory/ Replacement - Base

Part Number	Size	Std Pk	Mstr Ctn	Disc Code	Price Each
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Deck Mount

LFB	PVC	1	0	218	7.87
LFB-C	CPVC	1	0	219	9.40
LFB-BL	LXT	1	0	066	5.38

