



Lab Specialty Product
Lab Specialty Products

Lab Specialty Products



PRODUCT

Contact Spears® for any Information not found.

Lab Specialty Product
Lab Ball Valves & Needle Valves



Lab Ball Valves



Socket/Threaded Valve Only

Pressure Rating @ 73°F (23°C),
 Water

1/8" - 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

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

All Valves Assembled with Silicone-Free, Water Soluble Lubricant

Lab Valve - PVC

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

1/4X1/4T	1529-002A 30.04	1539-002A 31.40	1	25	218
1/4X3/8T	1529-002 30.04	1539-002 31.40	1	25	218

Valve only Threaded Ends

1/4	1521-002 24.00	1531-002 26.73	50	200	218
3/8	1521-003 33.74	1531-003 37.41	50	200	218

Valve Only Female x Male Thread Ends

1/8	152FM-001 30.04	153FM-001 31.40	25	200	218
1/4	152FM-002 30.04	153FM-002 31.40	25	200	218

Lab Valve - PVC

Size	EPDM	FKM	Std Pk	Mstr Pk	Prod Code
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Valve only Socket Ends

1/4	1522-002 24.00	1532-002 27.16	50	200	218
3/8	1522-003 33.74	1532-003 37.41	50	200	218

Lab Valve - CPVC

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

1/4X1/4T	1529-002CA 36.05	1539-002CA 36.76	1	25	219
1/4X3/8T	1529-002C 36.05	1539-002C 36.76	1	25	219

Valve only Threaded Ends

1/4	1521-002C 28.86	1531-002C 31.74	50	200	219
3/8	1521-003C 40.48	1531-003C 37.94	50	200	219

Valve Only Female x Male Thread Ends

1/8	152FM-001C 36.05	---	25	200	219
1/4	152FM-002C 36.05	---	25	200	219

Valve only Socket Ends

1/4	1522-002C 28.86	1532-002C 34.35	50	200	219
3/8	1522-003C 40.48	1532-003C 44.94	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	Prod Code
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Globe Pattern

1/4	5591-002 83.13	5592-002 83.13	---	1	18	218
3/8	5591-003 83.13	5592-003 83.13	5591-003SR 75.82	1	18	218
1/2	5591-005 92.26	5592-005 92.26	5591-005SR 94.75	1	18	218

Angle Pattern

1/4	5691-002 83.13	5692-002 83.13	---	1	18	218
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Lab Specialty Product
Needle Valves & Gauge Guards

Needle Valves

PVC Needle Valve (continued)

Size	Threaded	Socket	SR Threaded	Std Pk	Mstr Pk	Prod Code
Angle Pattern						
3/8	5691-003 83.13	5692-003 83.13	---	1	18	218
1/2	5691-005 92.26	5692-005 92.26	---	1	18	218

CPVC Needle Valve

Size	Threaded	Socket	SR Threaded	Std Pk	Mstr Pk	Prod Code
Globe Pattern						
1/4	5591-002C 97.91	5592-002C 97.91	---	1	18	219
3/8	5591-003C 97.91	5592-003C 97.91	5591-003CSR 97.68	1	18	219
1/2	5591-005C 103.54	5592-005C 103.54	5591-005CSR 106.18	1	18	219

Angle Pattern

1/4	5691-002C 97.91	5692-002C 97.91	---	1	18	219
3/8	5691-003C 97.91	5692-003C 97.91	---	1	18	219
1/2	5691-005C 103.54	5692-005C 103.54	5691-005CSR 106.18	1	18	219

PP Needle Valve

Size	Threaded	SR Threaded	Std Pk	Mstr Pk	Prod Code
Globe Pattern					
1/4	5591-002P 91.60	---	1	18	219
3/8	5591-003P 91.60	---	1	18	219
1/2	---	5591-005PSR 101.29	1	18	219

Angle Pattern

1/4	5691-002P 91.60	---	1	18	219
3/8	5691-003P 91.60	---	1	18	219
1/2	---	5691-005PSR 101.29	1	18	219

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)
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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	Prod Code
PTFE Diaphragm					
No Gauge	G0004-002 121.09	G0004-005 121.09	1	18	624
0-30 in-Hg	G30V4-002 204.44	G30V4-005 204.44	1	18	624
0-15 psi	G0154-002 193.25	G0154-005 193.25	1	18	624
0-30 psi	G0304-002 193.25	G0304-005 193.25	1	18	624
0-60 psi	G0604-002 193.25	G0604-005 193.25	1	18	624
0-100 psi	G1004-002 193.25	G1004-005 193.25	1	18	624
0-160 psi	G1604-002 193.25	G1604-005 193.25	1	18	624
0-200 psi	G2004-002 193.25	G2004-005 193.25	1	18	624
0-300 psi	G3004-002 193.25	G3004-005 193.25	1	18	624

FKM Diaphragm

No Gauge	G0003-002 121.09	G0003-005 121.09	1	18	624
0-30 in-Hg	G30V3-002 204.44	G30V3-005 204.44	1	18	624
0-15 psi	G0153-002 193.25	G0153-005 193.25	1	18	624
0-30 psi	G0303-002 193.25	G0303-005 193.25	1	18	624
0-60 psi	G0603-002 193.25	G0603-005 193.25	1	18	624

Lab Specialty Product
Gauge Guards



Gauge Guards

PVC GAUGE GUARDS (continued)

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Prod Code
FKM Diaphragm					
0-100 psi	G1003-002 193.25	G1003-005 193.25	1	18	624
0-160 psi	G1603-002 193.25	G1603-005 193.25	1	18	624
0-200 psi	G2003-002 193.25	G2003-005 193.25	1	18	624
0-300 psi	G3003-002 193.25	G3003-005 193.25	1	18	624

EPDM Diaphragm

No Gauge	G0002-002 116.20	G0002-005 116.20	1	18	624
0-30 in-Hg	G30V2-002 196.22	G30V2-005 196.22	1	18	624
0-15 psi	G0152-002 185.59	G0152-005 185.59	1	18	624
0-30 psi	G0302-002 185.59	G0302-005 185.59	1	18	624
0-60 psi	G0602-002 185.59	G0602-005 185.59	1	18	624
0-100 psi	G1002-002 185.59	G1002-005 185.59	1	18	624
0-160 psi	G1602-002 185.59	G1602-005 185.59	1	18	624
0-200 psi	G2002-002 185.59	G2002-005 185.59	1	18	624
0-300 psi	G3002-002 185.59	G3002-005 185.59	1	18	624

GAUGE GUARDS, CPVC

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Prod Code
PTFE Diaphragm					
No Gauge	G0004-002C 157.43	G0004-005C 157.43	1	18	625
0-30 in-Hg	G30V4-002C 265.78	G30V4-005C 265.78	1	18	625
0-15 psi	G0154-002C 251.27	G0154-005C 251.27	1	18	625
0-30 psi	G0304-002C 251.27	G0304-005C 251.27	1	18	625
0-60 psi	G0604-002C 251.27	G0604-005C 251.27	1	18	625
0-100 psi	G1004-002C 251.27	G1004-005C 251.27	1	18	625
0-160 psi	G1604-002C 251.27	G1604-005C 251.27	1	18	625
0-200 psi	G2004-002C 251.27	G2004-005C 251.27	1	18	625
0-300 psi	G3004-002C 251.27	G3004-005C 251.27	1	18	625
FKM Diaphragm					
No Gauge	G0003-002C 157.43	G0003-005C 157.43	1	18	625
0-30 in-Hg	G30V3-002C 265.78	G30V3-005C 265.78	1	18	625

GAUGE GUARDS, CPVC (continued)

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Prod Code
FKM Diaphragm					
0-15 psi	G0153-002C 251.27	G0153-005C 251.27	1	18	625
0-30 psi	G0303-002C 251.27	G0303-005C 251.27	1	18	625
0-60 psi	G0603-002C 251.27	G0603-005C 251.27	1	18	625
0-100 psi	G1003-002C 251.27	G1003-005C 251.27	1	18	625
0-160 psi	G1603-002C 251.27	G1603-005C 251.27	1	18	625
0-200 psi	G2003-002C 251.27	G2003-005C 251.27	1	18	625
0-300 psi	G3003-002C 251.27	G3003-005C 251.27	1	18	625
EPDM Diaphragm					
No Gauge	G0002-002C 151.16	G0002-005C 151.16	1	18	625
0-30 in-Hg	G30V2-002C 255.13	G30V2-005C 255.13	1	18	625
0-15 psi	G0152-002C 241.33	G0152-005C 241.33	1	18	625
0-30 psi	G0302-002C 241.33	G0302-005C 241.33	1	18	625
0-60 psi	G0602-002C 241.33	G0602-005C 241.33	1	18	625
0-100 psi	G1002-002C 241.33	G1002-005C 241.33	1	18	625
0-160 psi	G1602-002C 241.33	G1602-005C 241.33	1	18	625
0-200 psi	G2002-002C 241.33	G2002-005C 241.33	1	18	625
0-300 psi	G3002-002C 241.33	G3002-005C 241.33	1	18	625

EPDM Diaphragm

No Gauge	G0002-002C 151.16	G0002-005C 151.16	1	18	625
0-30 in-Hg	G30V2-002C 255.13	G30V2-005C 255.13	1	18	625
0-15 psi	G0152-002C 241.33	G0152-005C 241.33	1	18	625
0-30 psi	G0302-002C 241.33	G0302-005C 241.33	1	18	625
0-60 psi	G0602-002C 241.33	G0602-005C 241.33	1	18	625
0-100 psi	G1002-002C 241.33	G1002-005C 241.33	1	18	625
0-160 psi	G1602-002C 241.33	G1602-005C 241.33	1	18	625
0-200 psi	G2002-002C 241.33	G2002-005C 241.33	1	18	625
0-300 psi	G3002-002C 241.33	G3002-005C 241.33	1	18	625

GAUGE GUARDS, PP

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Prod Code
PTFE Diaphragm					
No Gauge	G0004-002P 141.73	G0004-005P 141.73	1	18	626
0-30 in-Hg	G30V4-002P 217.72	G30V4-005P 217.72	1	18	626
0-15 psi	G0154-002P 207.07	G0154-005P 207.07	1	18	626
0-30 psi	G0304-002P 207.07	G0304-005P 207.07	1	18	626
0-60 psi	G0604-002P 207.07	G0604-005P 207.07	1	18	626
0-100 psi	G1004-002P 207.07	G1004-005P 207.07	1	18	626
0-160 psi	G1604-002P 207.07	G1604-005P 207.07	1	18	626
0-200 psi	G2004-002P 207.07	G2004-005P 207.07	1	18	626
0-300 psi	G3004-002P 207.07	G3004-005P 207.07	1	18	626



Lab Specialty Product
Gauge Guards & Lab Fixtures

Gauge Guards

GAUGE GUARDS, PP

Size	1/4" Inlet Connection	1/2" Inlet Connection	Std Pk	Mstr Pk	Prod Code
FKM Diaphragm					
No Gauge	G0003-002P 141.73	G0003-005P 141.73	1	18	626
0-30 in-Hg	G30V3-002P 217.72	G30V3-005P 217.72	1	18	626
0-15 psi	G0153-002P 207.07	G0153-005P 207.07	1	18	626
0-30 psi	G0303-002P 207.07	G0303-005P 207.07	1	18	626
0-60 psi	G0603-002P 207.07	G0603-005P 207.07	1	18	626
0-100 psi	G1003-002P 207.07	G1003-005P 207.07	1	18	626
0-160 psi	G1603-002P 207.07	G1603-005P 207.07	1	18	626
0-200 psi	G2003-002P 207.07	G2003-005P 207.07	1	18	626
0-300 psi	G3003-002P 207.07	G3003-005P 207.07	1	18	626

EPDM Diaphragm

No Gauge	G0002-002P 136.13	G0002-005P 136.13	1	18	626
0-30 in-Hg	G30V2-002P 208.99	G30V2-005P 208.99	1	18	626
0-15 psi	G0152-002P 198.87	G0152-005P 198.87	1	18	626
0-30 psi	G0302-002P 198.87	G0302-005P 198.87	1	18	626
0-60 psi	G0602-002P 198.87	G0602-005P 198.87	1	18	626
0-100 psi	G1002-002P 198.87	G1002-005P 198.87	1	18	626
0-160 psi	G1602-002P 198.87	G1602-005P 198.87	1	18	626
0-200 psi	G2002-002P 198.87	G2002-005P 198.87	1	18	626
0-300 psi	G3002-002P 198.87	G3002-005P 198.87	1	18	626

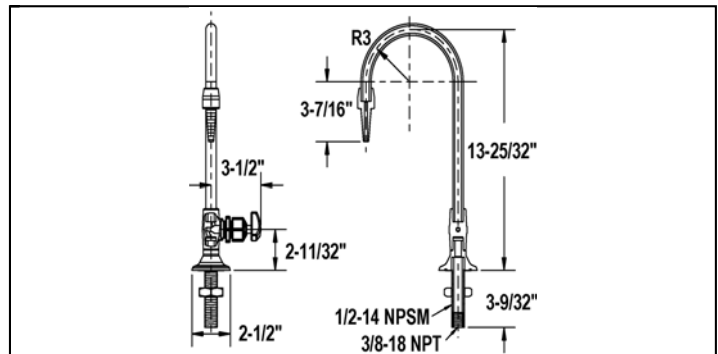
Lab Fixtures

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



Gooseneck Units - Deck Mount Lab Fixture w/Needle Valve

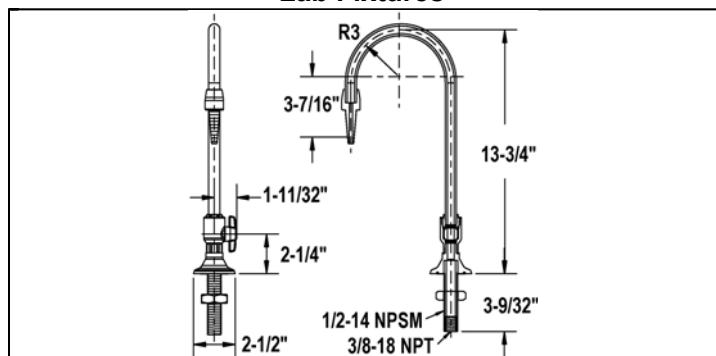
Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip with Needle Valve-Metered Flow

LF1000-N	PVC, PTFE Seal	1	0	218	220.73
LF1000-CN	CPVC, PTFE Seal	1	0	219	275.59
LF1000-BLN	LE, PTFE Seal	1	0	066	438.98



Lab Fixtures

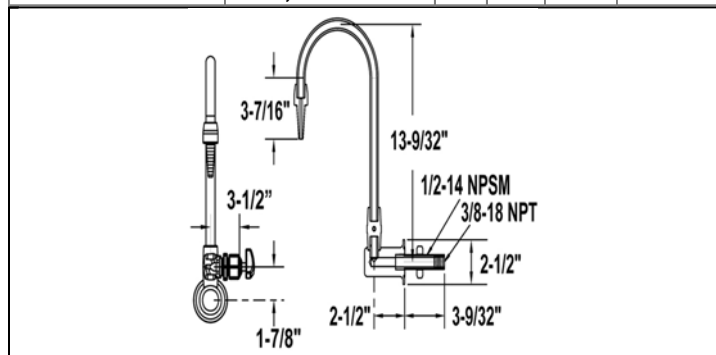


Gooseneck Units - Deck Mount Lab Fixture w/Ball Valve

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip with Ball Valve-Direct Flow

LF1002	PVC, EPDM Seal	1	0	218	184.38
LF1003	PVC, FKM Seal	1	0	218	204.85
LF1002-C	CPVC, EPDM Seal	1	0	219	230.47
LF1003-C	CPVC, FKM Seal	1	0	219	256.07
LF1002-BL	LE, EPDM Seal	1	0	066	367.11
LF1003-BL	LE, FKM Seal	1	0	066	407.91

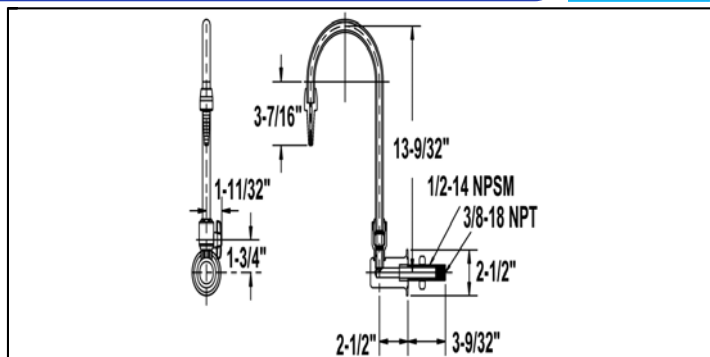


Gooseneck Units - Panel Mount Lab Fixture w/Needle Valve

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip with Needle Valve-Metered Flow

LF2000-N	PVC, PTFE Seal	1	0	218	321.69
LF2000-CN	CPVC, PTFE Seal	1	0	219	402.09

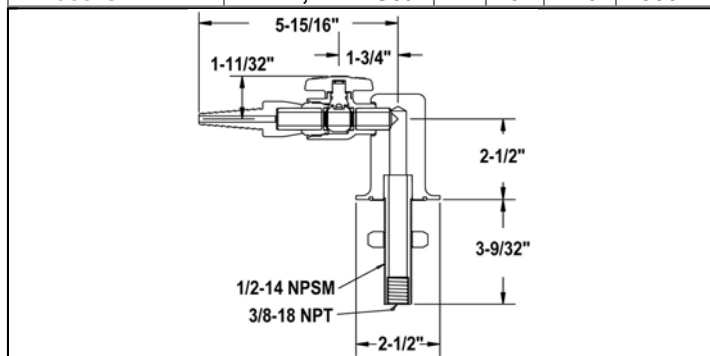


Standard Gooseneck Units - Panel Mount Lab Fixture -

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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with Ball Valve-Direct Flow

LF2002	PVC, EPDM Seal	3	0	218	277.32
LF2003	PVC, FKM Seal	3	0	218	308.16
LF2002-C	CPVC, EPDM Seal	1	0	219	346.67
LF2003-C	CPVC, FKM Seal	1	0	219	385.17



Turret Units - Deck Mount Turret Lab Fixtures Base w/Ball Valve

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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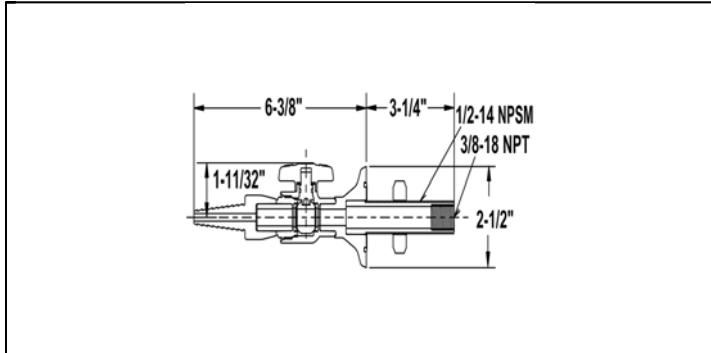
Turret Base & Serrated Tip with Ball Valve-Direct Flow

LF4002	PVC, EPDM Seal	1	0	218	233.99
LF4003	PVC, FKM Seal	1	0	218	259.99
LF4002-C	CPVC, EPDM Seal	1	0	219	292.48
LF4003-C	CPVC, FKM Seal	1	0	219	325.00



Lab Specialty Product
Lab Fixtures

Lab Fixtures

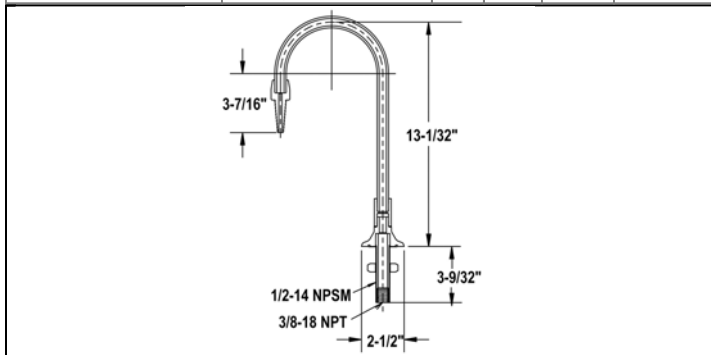


Turret Units - Panel Mount Turret Lab Fixture Base w/Ball Valve

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Turret Base, Serrated Tip with Ball Valve-Direct Flow

LF3002	PVC, EPDM Seal	1	0	218	181.35
LF3003	PVC, FKM Seal	1	0	218	201.53
LF3002-C	CPVC, EPDM Seal	1	0	219	226.73
LF3003-C	CPVC, FKM Seal	1	0	219	251.93
LF3002-BL	LE, EPDM Seal	1	0	066	361.09
LF3003-BL	LE, FKM Seal	1	0	066	401.27

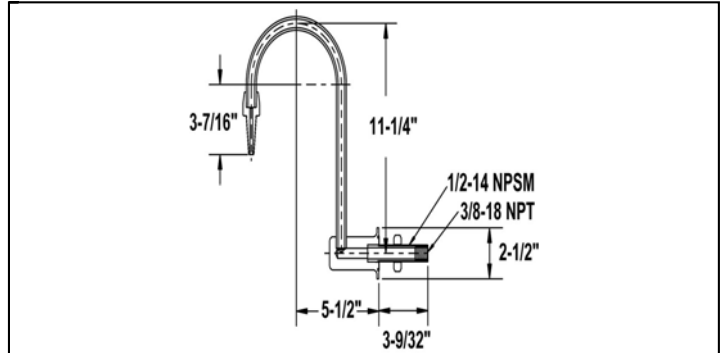


Remote Valve Units (No Valve) - Deck Mount Gooseneck -

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip

LF100	PVC	1	0	218	151.32
LF100-C	CPVC	1	0	219	189.15
LF100-BL	LE	1	0	066	301.24

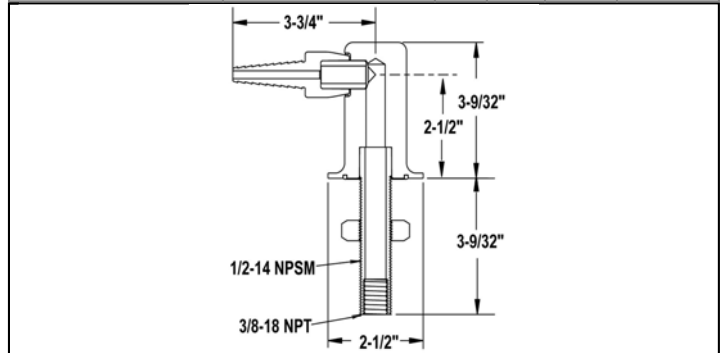


Remote Valve Units (No Valve) - Panel Mount Gooseneck -

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip

LF104	PVC	1	0	218	186.89
LF104-C	CPVC	1	0	219	233.63

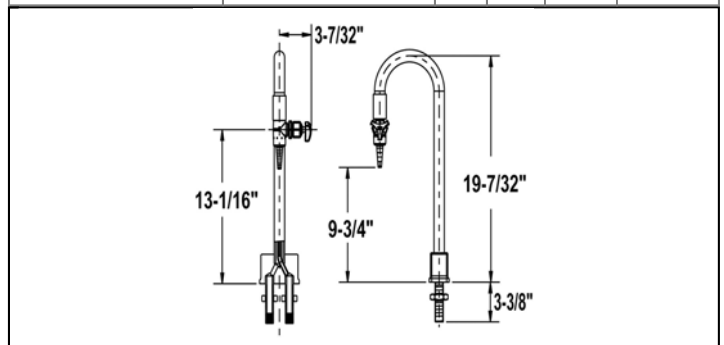


Remote Valve Units (No Valve) - Deck Mount Turret

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Turret Base & Serrated Tip

LF300	PVC	1	0	218	49.86
LF300-C	CPVC	1	0	219	62.33



Gooseneck Recirculating Units -Deck Mount Lab Fixture w/Needle Valve

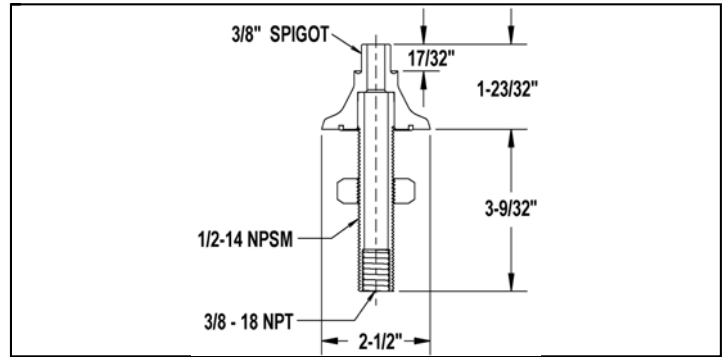
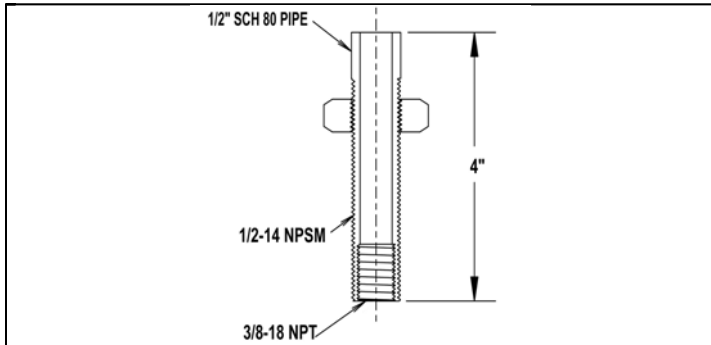
Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
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Base, Gooseneck & Serrated Tip with Needle Valve-Metered Flow

LFR1000-N	PVC, PTFE Seal	1	0	218	384.15
LFR1000-CN	CPVC, PTFE Seal	1	0	219	574.13
LFR1000-BLN	LE, PTFE Seal	1	0	066	914.48



Lab Fixtures

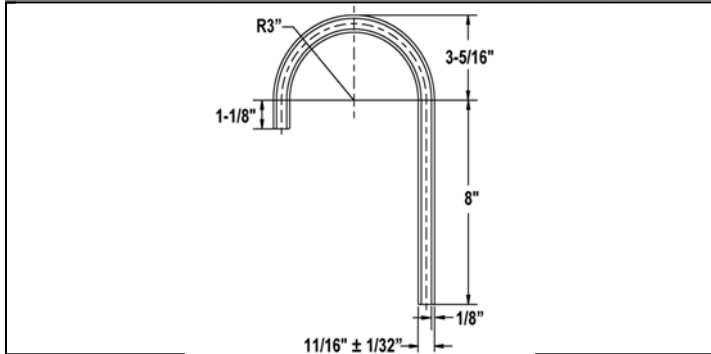


Accessory/ Replacement - Fixture Connection Nipple -

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
(included on all fixtures above) with Locknut					
LF500	PVC	1	0	218	25.03
LF500-C	CPVC	1	0	219	31.31
LF500-BL	LE	1	0	066	49.89

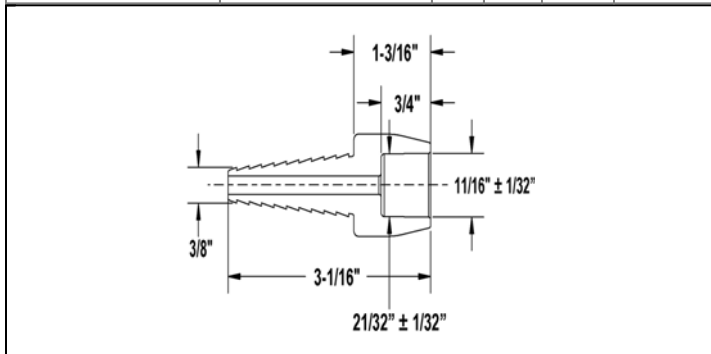
Accessory/ Replacement - Base

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
Deck Mount					
LFB	PVC	1	0	218	9.18
LFB-C	CPVC	1	0	219	10.96
LFB-BL	LE	1	0	066	6.27



Accessory/ Replacement - Gooseneck (3/8")

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
LFGN	PVC	1	0	218	21.27
LFGN-C	CPVC	1	0	219	26.62
LFGN-BL	LF	1	0	066	42.40



Accessory/ Replacement - Straight Serrated Tip

Part Number	Material	Std Pk	Mstr Ctn	Prod Code	MSRP
LF400	PVC	600	0	218	4.49
LF400-C	CPVC	600	0	219	5.66
LF400-BL	LE	600	0	066	8.97