



# LAB FIXTURE INSTALLATION INSTRUCTIONS

LF-3-0425

Spears® LF series lab fixtures are available in standard PVC, CPVC (hot water) & PVC Low-Extractable (UPW) materials. Spears® lab fixtures can be Deck Mount – base configuration for horizontal surface mounting or Panel Mount – base configuration for vertical surface mounting.

Standard gooseneck unit provided with needle valve (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. Standard Turret Units offer direct flow ball valve (choice of EPDM or FKM seals) with serrated tip and base with connecting nipple and nut for mounting. Remote Valve Units (No Valve) – same as standard units less valve for use with remotely located valve.

## PRECAUTIONS AND WARNINGS

### NOT FOR DISTRIBUTION OF COMPRESSED AIR OR GAS

**CAUTION:** The LF series lab fixtures are not suitable for use in compressed air or gas systems.

**WARNING:** Lab fixtures must not be operated or flushed out at flow velocities greater than 5 feet per second.

**LUBRICATION WARNING:** Some lubricants, including vegetable oils, are known to cause stress cracking in thermoplastic materials. Lubricants are not required for installation of Spears® LF series lab fixtures. All air must be bled from pressurized systems during initial fluid fill. Pressure testing of the system must not be made until all solvent cement joints have properly cured. Initial pressure testing must be made at approximately 10% of the system hydrostatic pressure rating to identify potential problems, prior to testing at higher pressures.



Gooseneck & Turret Style  
Lab Fixtures

## SINGLE LAB FIXTURE INSTALLATION INSTRUCTIONS

Spears® LF series gooseneck and turret lab fixtures can be deck or panel-mounted to suit your specific need. All lab fixtures should be located in an area where the fixture has direct drainage access (i.e. over drain).

### Installation Procedure

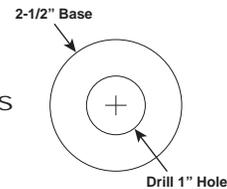
- Turn off water service.
- Unpack lab fixture from carton.
- Unthread nut from inlet shaft and put to the side.
- Make sure lab fixture base O-ring is firmly in place.
- Identify placement location for lab fixture and mock up to panel or deck to ensure proper orientation and clearance. Maximum deck/panel thickness = 2-1/2".
- Following mounting dimensions from Figure 1, use a 1" hole saw to create one (1) through-hole for fixture mounting on the deck or panel.
- Clean and deburr hole using a suitable deburring tool and clean cloth.
- Align lab fixture inlet shaft with mounting hole and carefully mount lab fixture to deck or panel.
- Secure lab fixture by threading nut on fixture inlet shaft.
- Tighten nut snug toward the underside of deck or behind panel to draw down lab fixture body to underside/backside of unit.
- Do not overtighten threaded nut.
- 3/8-18 FPT internal thread is provided to connect standard lab fixtures to supply line piping. A user-supplied male compression tubing connector can be used to connect flexible tubing supply line.

**NOTE:** Low Extractable PVC faucet connections are designed to accept a 1/2" female adapter (835-005SRBL) for connection to 1/2" LE pipe or a 1/2" coupling (830-073SRBL) for connection to user-supplied male compression flexible 3/8" tubing supply/return line. See LE MPT Detail on page 2.

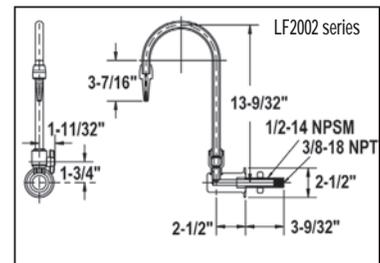
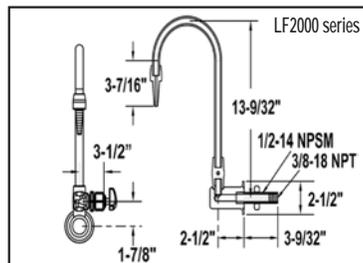
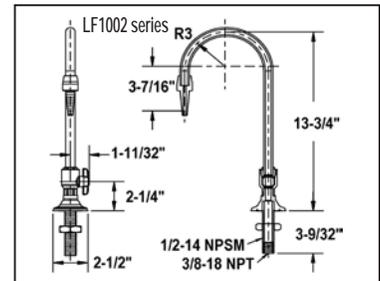
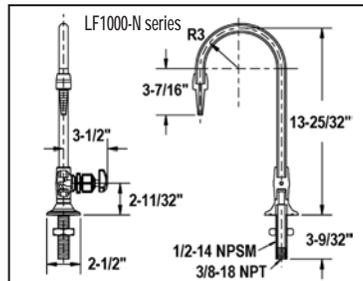
- Initial pressure testing must be made at approximately 10% of the system hydrostatic pressure rating to identify potential problems, prior to testing at higher pressures. Slowly open lab fixture valve and test for proper operation and flushing.

Figure 1.

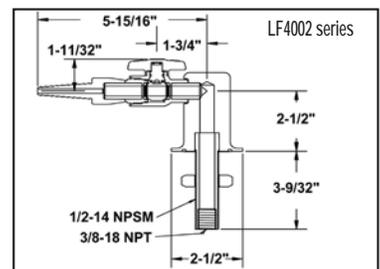
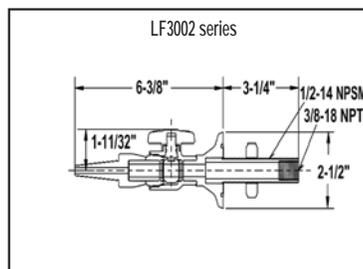
Mounting Dimensions



## Gooseneck Style Dimensions



## Turret Style Dimensions



# RECIRCULATING LAB FIXTURES

Spears® LFR1000 series recirculating lab fixtures combine the ability to maintain high water quality with a very compact, space-saving deck-mounted design profile. Available in Standard PVC, CPVC (hot water) & PVC Low-Extractable (UPW) materials. 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.



Recirculating Lab Fixture

## PRECAUTIONS AND WARNINGS

### NOT FOR DISTRIBUTION OF COMPRESSED AIR OR GAS

**CAUTION:** The LFR1000 series lab fixtures are not suitable for use in compressed air or gas systems.

**WARNING:** Lab fixtures must not be operated or flushed out at flow velocities greater than 5 feet per second.

**LUBRICATION WARNING:** Some lubricants, including vegetable oils, are known to cause stress cracking in thermoplastic materials. Lubricants are not required for installation of Spears® LFR1000 series lab fixtures.

All air must be bled from pressurized systems during initial fluid fill. Pressure testing of the system must not be made until all solvent cement joints have properly cured. Initial pressure testing must be made at approximately 10% of the system hydrostatic pressure rating to identify potential problems, prior to testing at higher pressures.

## RECIRCULATING LAB FIXTURE INSTALLATION INSTRUCTIONS

The Spears® LFR1000 series lab fixture is designed for horizontal deck-mounted service and should be located in an area where the fixture has direct drainage access (i.e. over drain).

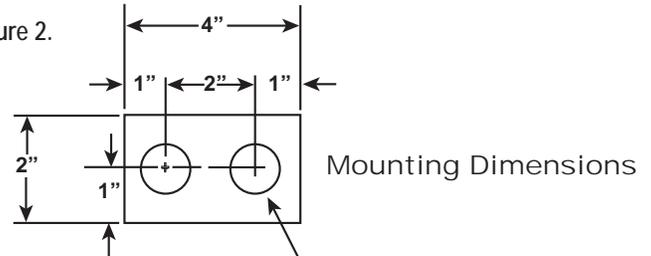
### Installation Procedure

- Turn off water service.
- Unpack lab fixture from carton.
- Unthread nuts from inlet and outlet shafts and put to the side.
- Make sure lab fixture base O-ring is firmly in place.
- Identify placement location for lab fixture and mock up to deck to ensure proper orientation and clearance. Maximum deck thickness = 2-1/2".
- Following mounting dimensions from Figure 2, use a 1" hole saw to create two (2) through-holes for fixture mounting. Be sure to properly align hole centers side-to-side.
- Clean and deburr holes using a suitable deburring tool and clean cloth.
- Align lab fixture inlet/outlet shafts with drilled holes and carefully mount lab fixture to deck.
- Secure lab fixture by threading (2) nuts on inlet/outlet shafts.
- Tighten nuts snug toward underside of deck to draw down lab fixture body to deck.
- Do not overtighten.
- 3/8"-18 FPT internal thread is provided to connect standard lab fixtures to supply line piping. A user-supplied male compression tubing connector can be used to connect flexible tubing supply line.

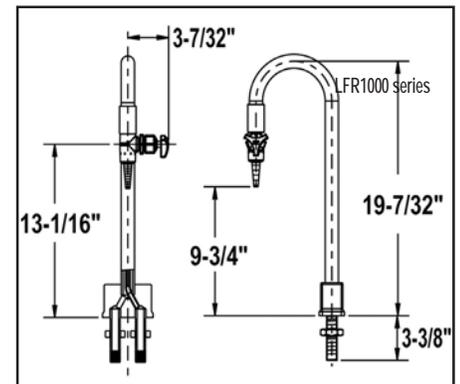
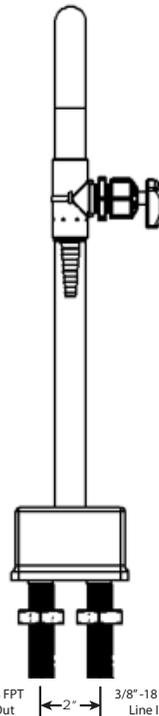
**NOTE:** Low Extractable PVC faucet connections are designed to accept a 1/2" female adapter (835-005SRBL) for connection to 1/2" LE pipe or a 1/2" coupling (830-073SRBL) for connection to user-supplied male compression flexible 3/8" tubing supply/return line. See LE MPT Detail on this page.

- Initial pressure testing must be made at approximately 10% of system hydrostatic pressure rating to identify potential problems, prior to testing at higher pressures. Slowly open lab fixture valve and test for proper operation and flushing.

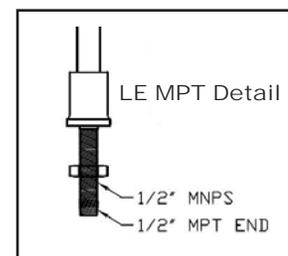
Figure 2.



Drill 1" Hole  
2 Places



Dimensional Information



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