LOW PRESSURE SWITCH

DESCRIPTION
Fike offers an optional Low Pressure Switch (LPS) for the purpose of continuously monitoring the container pressure for a low-pressure condition.

If the pressure inside the container drops below 288 psig (1986 kPa), the switch contacts will transfer and invoke a “supervisory” indication on the control panel.

The LPS is an optional item for Impulse Valve containers. It may be ordered along with a configured Impulse Valve container or as a separate item.

The design of the Impulse Valve allows a LPS to be installed on a fully pressurized container without loss of agent or pressure.

SPECIFICATIONS
- Part Number: 02-12533
- Temperature Limits: 32 to 130°F (0 to 54.4°C)
- Enclosure Classification: NEMA 4
- Contact Rating: Single pole, double throw; 5 amps resistive, 3 amps inductive @ 30VDC (can be wired for normally open or normally closed operation)
- Body Material: Aluminum with irridite finish
- Weight: 6.5 ounces
- Pressure Connection: M10 x 1-6G
- Electrical Connection: 1/2” NPT (15 mm)
- LPS Length (approx): 4 3/8” (111 mm) long (including both connectors)
- Wire Leads: (3) 18 gauge x 4.0 ft. (1.2m) long Violet (common), Blue (N.O.), Black (N.C.)
- Pressure Setting: 288 psig (20 bar) (decreasing)

INSTALLATION
The LPS is an optional item and must be ordered separately. This device can be installed in the Fill Port on a container that is charged by using the following steps:

Step 1: Prior to Assembly; lubricate the LPS O-Ring with Molycoat 55 or equal. Use care not to get lubricant into pressure port.

Notes:
- DO NOT apply Teflon Tape to LPS threads.
- DO NOT cross thread the LPS during installation.

Step 2: Remove and retain Plug from Fill Port. (see Figure 1)

Step 3: Remove rubber cap and screw in the LPS (Hand Tight) until the switch bottoms out. Screwing the switch in to this point will open an internal check valve and applies pressure the switch.

Note: “NO TOOLS” are required to install LPS.

Step 4: Leak check around the pressure gauge port using Snoop leak test fluid or equivalent.

If a leak is detected; remove the LPS from the fill port and remove the lubricant and contaminants from the O-Ring, threads and valve port using isopropyl alcohol and a soft clean cloth.

Lubricate the O-Ring with Molycoat 55 or equal and reinstall. Leak test around the fill port.

If a leak is detected; remove the LPS from the fill port, remove the O-Ring, install a new O-Ring, lubricate the O-ring with Molycoat 55 or equal, install the LPS in the fill port, and leak test around the fill port.

Note: When installing conduct connector to LPS secure “Hand Tight”. Over tightening may cause damage to the LPS or to the Impulse valve fill port threads.
WIRING DIAGRAM – LOW PRESSURE SWITCH

The LPS should be wired into a supervised circuit in the control panel used to provide a supervisory signal if the container pressure drops below 288 psig (1986 kPa). The switch is wired as a normally closed contact (open under pressure). (see Figure 2)

Note: Refer to the Installation, Operation & Maintenance for the control panel being used for specific wiring criteria.