OPW 61SO Overfill Prevention Valves

The OPW 61SO Overfill Prevention Valve is designed to prevent the overfill of underground storage tanks by providing a positive shut-off of product delivery. The shut-off valve is an integral part of the drop tube used for gravity filling. The OPW 61SO allows easy installation (without breaking concrete) and requires no special manholes.

The OPW 61SO is a two-stage shut-off valve. When the liquid level rises to about 95% of tank capacity, the valve mechanism is released, closing automatically with the flow. This reduces the flow rate to approximately 5 gpm through a bypass valve. The operator may then stop the filling process and disconnect and drain the delivery hose. As long as the liquid exceeds the 95% level, the valve will close automatically each time delivery is attempted.

If the delivery is not stopped and the liquid rises to about 98% of tank capacity, the bypass valve closes completely. No additional liquid can flow into the tank until the level drops below a reset point.

The 61SO Overfill Prevention Valve can be adjusted to shutoff at any desired tank capacity. Please contact the Authority Having Jurisdiction (AHJ) and review local, state, and national codes to determine the regulatory requirements governing shut-off capacity in your region, as well as take into account other considerations such as extreme tank tilt. In all cases, the upper tube must protrude into the tank at least 6-1/2” to ensure that the valve can shut off flow into the tank completely before the top of the tank is wetted as per EPA requirements.

Models of the 61SO are available to meet virtually any UST application including two-point, coaxial, poppeted coaxial and remote fill. Methanol approved models are also available.

The OPW 61SO is approved by the New York City Fire Department. (Approval #4902).

Materials

- **Valve Body**: Cast aluminum
- **Float**: Nitrile rubber, closed cell foam
- **Valve**: Aluminum
- **Seals**: Viton®
- **Upper & lower Drop Tube**: Aluminum
- **Plastic parts**: Acetal
- **Hardware**: Stainless steel

Features

- **Simple, Easy and Quick Installation** – no excavation or special manholes required.
- **Economical** – costs a fraction of expensive, complicated and difficult-to-install valves.
- **Furnished Complete** – supplied with new upper and lower drop tubes, mounting hardware and thorough instructions for quick job site time.
- **Completely Automatic Operation** – no prechecks to perform, no resets and no overrides to be broken or abused.
- **No Pressurization of the Tank** – operates directly from liquid level.
- **Will Accept a Dipstick for Gauging**

**Important**

In order to prevent product spillage from the Underground Storage Tank (UST), properly maintained delivery equipment and a proper connection at the tight-fill adaptor are essential. Delivery personnel should be managed and trained to inspect delivery elbows and hoses for damaged and missing parts. They should always make certain there is a positive connection between the adaptor and elbow. If delivery equipment is not properly maintained, or the elbow is not securely coupled to the adaptor, a serious spill may result when the OPW 61SO closes, causing a hazard and environmental contamination.

NOTE: The OPW 61SO is designed for use on tight-fill gravity drop applications only. Do not use for pressure fill applications.

Advantages of Overfill Prevention Compared to Overfill Warning Systems:

- **Completely Automatic Operation** – does not rely on the alertness or speed of response of the delivery attendant for certainty of overfill prevention.
- **Keeps the Top of UST “Dry,” per EPA Requirements** – eliminating possible leaks at loose bung fittings and the need for double containment on vent lines.
- **Does Not Rely on Pressure in the UST to Stop Flow** – allowing faster fill times and reducing spill risk.
- **Speeds Delivery Operations** – product flows unimpeded into the tank until the hose “kick” that accompanies the valve shut-off provides a clear signal that the liquid has reached the shut-off level.
- **Simple and Inexpensive Installation** – in both two-point and coaxial fill applications, no additional excavation, manholes or vent piping are required.

Listings and Certifications

* Test-witnessed by Bowser-Morner, Inc., an independent laboratory. Results available upon request.

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61SOR Remote-Fill

The OPW 61SOR is designed for two-point remote-fill applications, where the fill point is not directly over the UST. The valve is installed in the tank through a riser pipe directly over the tank. A window in the drop tube is aligned with the entrance of the fill pipe from the remote-fill location to allow product to flow into the drop tube and down through the valve. A riser seal prevents product from flowing into the tank from outside the drop tube. A “trap door” assembly installed in the riser above the tank provides access for a gauging stick. Trap door, adaptor and cap are included with 61SOR.

61SOC Coaxial

The OPW 61SOC is used for coaxial fill applications, tanks equipped with a single product/vapor return connection. The 61SOC replaces the standard coaxial fill drop tube in a 4" riser fill pipe.

61SO-4000 Series Instruction Sheet Order Number: H11764M
61SOC Coaxial Fill Tube Instruction Sheet Order Number: C03634PA
61SOR Remote Fill Tube Instruction Sheet Order Number: H11964M
**Typical Application Assembly**

Installation schematic typical; exact dimensions will vary with tank configuration.

*From inside wall of tank to bottom of upper tube

61SOK Float Kit Instruction Sheet Order Number: H11403PA

**Ordering Specifications**

<table>
<thead>
<tr>
<th>Product/ Suffix #</th>
<th>Description</th>
<th>A-Upper Tube Length</th>
<th>B-Lower Tube Length</th>
<th>C-Overall Length</th>
<th>Max. Riser Length</th>
<th>Max. Nominal Tank Dia.</th>
<th>Max. Actual Tank Dia.</th>
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*Remote fill applications

**Replacement Parts**

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<tr>
<td>C03632M</td>
<td>Coaxial Inlet Tube</td>
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<td>D01756</td>
<td>Inlet Tube/Adaptor Assy. for 61SOP</td>
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<tr>
<td>H11931M</td>
<td>Drop Tube O-Ring</td>
</tr>
<tr>
<td>C03749</td>
<td>Trap Door Assy. (Remote)</td>
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</table>

**Tube end cut per local requirements**

Drop tubes shall be cut at a 45° angle, with the top of cut no greater than 6" from the bottom of the tank (Or per local regulations)