## **OPW 71SO Overfill Prevention Valves**

The CARB-certified OPW 71SO vapor-tight 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 71SO allows easy installation (without breaking concrete) and requires no special manholes.

The OPW 71SO is a vapor-tight twostage 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.

NOTE: The 71SO 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.

71SO Instruction Sheet Order Number: **H15524PA** 

#### Listings and Certifications





#### **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 71SO closes, causing a hazard and environmental contamination.

NOTE: The OPW 71SO is designed for use on tight-fill gravity drop applications only. Do not use for pressure fill applications.

- Retrofits Directly for both new and existing tanks with 4" fill risers.
- Quick Drain Feature automatically drains hose when head pressure is relieved.
- Best Flow Rate in The Industry\*
- \* OPW Test Lab results

### 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.



Look for this label for authentic OPW EVR Approved products.

**OPW 71SOM is EVR Approved for E85** 



#### **Raising The Standard In Overfill Prevention**

From the company that brought you the industry standard OPW 61SO, OPW raises the standard with the introduction of the **71SO Overfill Prevention Valve** – breakthrough innovation that takes overfill prevention to a whole new level of overfill perfection.

- Eliminates curing issues due to hot or cold temperatures
- Easier, guicker, installation
- Higher quality, more reliable installation
- Lower costs
- Greater protection against fugitive emissions and pressure decay
- Fastest flow rate in the industry

The new 71SO is a two-stage, positive shut-off valve, providing completely automatic operation with no pre-checks to perform, no resets, and no overrides to be broken or abused. The valve closes when the tank level rises to 95% capacity and provides a special bypass valve so the tank can be filled to a maximum capacity of 98%. The 71SO is available for direct-bury and remote applications.



All Vapor-Tight Overfill Valves are CARB EVR Certified

# Prevention Valve evention to a whole new level of ew 71SO is a two-stage, positive shut-off providing completely automatic operation propre-checks to perform, no resets, and

## Direct-Bury Remote-Fill

**No Epoxy** 

Sealants Required!

#### **Replacement Parts**

Part #	Description								
61SOK-0001	Replacement Float Kit								
H11931M	Drop Tube Seal								
H14840M	Lower Tube Seal								
C05117	Lower Tube								
D02508	Vapor-Tight Inlet Tube								
C03899M	Non-Vapor-Tight Inlet Tube								
D02508	Vapor-Tight Inlet Tube (Blue)								

#### 71SO Ordering Specifications

					Upper Tube		Lower Tube		Overall		Max. Riser		Max. Nominal		Max. Actual			
	<b>Bury Depth</b>		<b>Tank Diameter</b>		Length		Length		Length		Length		Tank Dia.		Tank Dia.		Weight	
Description	ft.	m	ft.	m	in.	m	in.	m	in.	m	in.	m	in.	m	in.	m	lbs.	kg
Vapor-Tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155³/4	3.9	53 <sup>1</sup> / <sub>2</sub>	1.4	96	2.4	107	2.7	16	7
Vapor-Tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	2343/4	5.9	113 <sup>1</sup> / <sub>2</sub>	2.9	120	3.1	126	3.2	25	11
Vapor-Tight Overfill Valve	10	3.0	12	3.6	120	3.1	126	3.2	258 <sup>3</sup> / <sub>4</sub>	6.5	113 <sup>1</sup> / <sub>2</sub>	2.9	144	3.7	150	3.8	26	12
Non Vapor-tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155³/ <sub>4</sub>	3.9	53 <sup>1</sup> / <sub>2</sub>	1.4	96	2.4	107	2.7	16	7
Non Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	2343/4	5.9	113 <sup>1</sup> / <sub>2</sub>	2.9	120	3.1	126	3.2	25	11
E85 Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	2343/4	5.9	113 <sup>1</sup> / <sub>2</sub>	2.9	120	3.1	126	3.2	38	17.3
1SO-TOOLCT 71SO Installation Tool												2.5	1					
C-4RMT Jack Screw Kit For Vapor-Tight Remote Applications												1.5	0.7					
C-4410 Jack Screw Kit For Composite Base Spill Bucketst											1	0.5						
14CB Jack Screw Kit For Cast Iron Base Spill Buckets												1	0.5					
RMT E85 Jack Screw for Remote-Fill Applications											1	0.5						
MA E85 Jack Screw for Direct-Fill Applications										1.5	0.7							
	Vapor-Tight Overfill Valve Vapor-Tight Overfill Valve Non Vapor-tight Overfill Valve Non Vapor-tight Overfill Valve E85 Vapor-tight Overfill Valve 71SO Installation Tool Jack Screw Kit For Vapor-T Jack Screw Kit For Compos Jack Screw Kit For Cast Iro E85 Jack Screw for Remote	Poscription ft.  Vapor-Tight Overfill Valve 5  Vapor-Tight Overfill Valve 10  Vapor-Tight Overfill Valve 10  Non Vapor-tight Overfill Valve 5  Non Vapor-tight Overfill Valve 10  E85 Vapor-tight Overfill Valve 10  71SO Installation Tool  Jack Screw Kit For Vapor-Tight Results Screw Kit For Composite Bass Jack Screw Kit For Cast Iron Base E85 Jack Screw for Remote-Fill Approximation 10  Vapor-Tight Overfill Valve 10  Approximation Tool  Jack Screw Kit For Cast Iron Base E85 Jack Screw for Remote-Fill Approximation 10  Non Vapor-Tight Overfill Valve 10  Non Vapor-Tight Ove	Description     ft.     m       Vapor-Tight Overfill Valve     5     1.5       Vapor-Tight Overfill Valve     10     3.0       Vapor-Tight Overfill Valve     10     3.0       Non Vapor-tight Overfill Valve     5     1.5       Non Vapor-tight Overfill Valve     10     3.0       E85 Vapor-tight Overfill Valve     10     3.0       71SO Installation Tool       Jack Screw Kit For Vapor-Tight Remote Alack Screw Kit For Composite Base Spill Back Screw Kit For Cast Iron Base Spill Back Screw Kit For Cast Iron Base Spill Back Screw For Remote-Fill Application	Descriptionft.mft.Vapor-Tight Overfill Valve51.58Vapor-Tight Overfill Valve103.010Vapor-Tight Overfill Valve103.012Non Vapor-tight Overfill Valve51.58Non Vapor-tight Overfill Valve103.010E85 Vapor-tight Overfill Valve103.01071SO Installation ToolJack Screw Kit For Vapor-Tight Remote ApplicationJack Screw Kit For Composite Base Spill BucketsJack Screw Kit For Cast Iron Base Spill BucketsE85 Jack Screw for Remote-Fill Applications	Description         ft.         m         ft.         m           Vapor-Tight Overfill Valve         5         1.5         8         2.4           Vapor-Tight Overfill Valve         10         3.0         10         3.0           Vapor-Tight Overfill Valve         10         3.0         12         3.6           Non Vapor-tight Overfill Valve         5         1.5         8         2.4           Non Vapor-tight Overfill Valve         10         3.0         10         3.0           E85 Vapor-tight Overfill Valve         10         3.0         10         3.0           71SO Installation Tool         Jack Screw Kit For Vapor-Tight Remote Applications           Jack Screw Kit For Cast Iron Base Spill Buckets           Jack Screw Kit For Cast Iron Base Spill Buckets	Description         Bury Depth ft.         Tank Diameter ft.         Len ft.           Vapor-Tight Overfill Valve         5         1.5         8         2.4         60           Vapor-Tight Overfill Valve         10         3.0         10         3.0         120           Vapor-Tight Overfill Valve         10         3.0         12         3.6         120           Non Vapor-tight Overfill Valve         5         1.5         8         2.4         60           Non Vapor-tight Overfill Valve         10         3.0         10         3.0         120           E85 Vapor-tight Overfill Valve         10         3.0         10         3.0         120           71SO Installation Tool         Jack Screw Kit For Vapor-Tight Remote Applications           Jack Screw Kit For Cast Iron Base Spill Buckets           Jack Screw Kit For Cast Iron Base Spill Applications	Description         Bury berthft.         Tank Diameter ft.         Length m           Vapor-Tight Overfill Valve         5         1.5         8         2.4         60         1.5           Vapor-Tight Overfill Valve         10         3.0         10         3.0         120         3.1           Vapor-Tight Overfill Valve         10         3.0         12         3.6         120         3.1           Non Vapor-tight Overfill Valve         5         1.5         8         2.4         60         1.5           Non Vapor-tight Overfill Valve         10         3.0         10         3.0         120         3.1           E85 Vapor-tight Overfill Valve         10         3.0         10         3.0         120         3.1           71SO Installation Tool         Jack Screw Kit For Vapor-Tight Remote Applications           Jack Screw Kit For Cast Iron Base Spill Buckets           Jack Screw Kit For Cast Iron Base Spill Applications	Description         Bury Depth ft.         Tank Diameter ft.         Length in.         Streeth in.         Length in.         Length in.         Length in.         Length in.         Streeth in.         Streeth in.         Streeth in.         Streeth in.         Streeth in.         S	Non Vapor-tight Overfill Valve   10   3.0   12   3.6   3.2   3.1   102   2.6	Non Vapor-tight Overfill Valve   10   3.0   12   3.6   120   3.1   102   2.6   234³/4	Non Vapor-tight Overfill Valve   10   3.0   12   3.6   1.5   83   2.1   155³/4   3.9	Non Vapor-tight Overfill Valve   10   3.0   12   3.6   1.5   83   2.1   1553/4   3.9   531/2	Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9	Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   120   3.1   125   3.9   53   2.9   131   2.9   144	Non Vapor-tight Overfill Valve   10   3.0   10   3.0   12   3.6   3.1   120   3.1   125   3.4   3.9   531/2   1.4   96   2.4     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4     Non Vapor-tight Overfill Valve   10   3.0   12   3.6   120   3.1   126   3.2   2583/4   5.9   1131/2   2.9   140   3.7     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4     Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1     E85 Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1     TISO Installation Tool  Jack Screw Kit For Vapor-Tight Remote Applications  Jack Screw Kit For Composite Base Spill Buckets  Jack Screw Kit For Cast Iron Base Spill buckets  E85 Jack Screw for Remote-Fill Applications	Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   126   3.2   2583/4   5.9   1131/2   2.9   120   3.1   126	Napor-Tight Overfill Valve   S   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4   107   2.7     Napor-Tight Overfill Valve   10   3.0   12   3.6   120   3.1   126   3.2   2583/4   5.9   1131/2   2.9   144   3.7   150   3.8     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   2.9   140   3.0   120   3.1   2.0     Napor-Tight Overfill Valve   10   3.0   12   3.6   120   3.1   126   3.2   2583/4   6.5   1131/2   2.9   144   3.7   150   3.8     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4   107   2.7     Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2     E85 Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2     TISO Installation Tool    Jack Screw Kit For Vapor-Tight Rootests Spill Buckets    Jack Screw Kit For Composite Base Spill Buckets    Jack Screw Kit For Cast Iron Base Spill Buckets    Spill S	Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   3.1   102   3.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2   25     Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2   25     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4   107   2.7   16     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   2.9   144   3.7   150   3.8   26     Non Vapor-tight Overfill Valve   5   1.5   8   2.4   60   1.5   83   2.1   1553/4   3.9   531/2   1.4   96   2.4   107   2.7   16     Non Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2   25     E85 Vapor-tight Overfill Valve   10   3.0   10   3.0   120   3.1   102   2.6   2343/4   5.9   1131/2   2.9   120   3.1   126   3.2   25     Jack Screw Kit For Vapor-Tight Remote Applications   3.0   3.

61JSK-4410 AND 61JSK-44CB Instruction Sheet Order Number: H15289M

\*ULC B100 Compatible

#### 71SO Vapor-Tight Remote Fill

The OPW Vapor-Tight Remote Fill is designed for two-point vapor-tight remote-fill applications, where the fill point is not directly over the UST. A CARB approved vapor-tight 71SO overfill valve is installed in the sump through a riser pipe directly over the tank.



