

Emergency Shut-Off & Vapor-Line Shear Valves



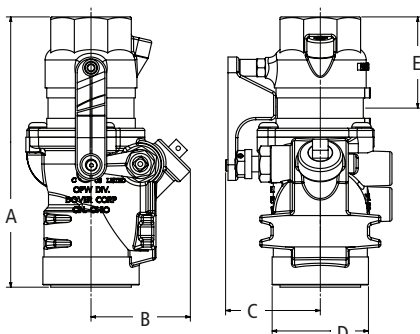
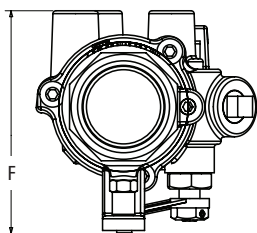
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10 Plus Series Emergency Shut-Off Valves

OPW raised the protection standard in emergency valves when it introduced the first double-poppet valve back in 1989. This industry-changing OPW innovation helped to significantly reduce the risk of fire, explosion, personal injury, property damage and environmental contamination at sites around the world. Major oil companies and jobbers agreed that providing added protection for their customers, investments and the environment were the three most convincing reasons for switching to the innovative new valves.

Dimensions

	1.5 in.	2.0 in.
A	7 ⁹ / ₁₆	8 ⁷ / ₈
B	2 ²⁵ / ₃₂	3 ¹ / ₂
C	2 ²¹ / ₃₂	
D	2 ¹¹ / ₁₆	3 ¹ / ₂
E	2 ⁹ / ₁₆	3 ³ / ₁₆
F	4 ²¹ / ₃₂	5 ³¹ / ₃₂



Listings and Certifications

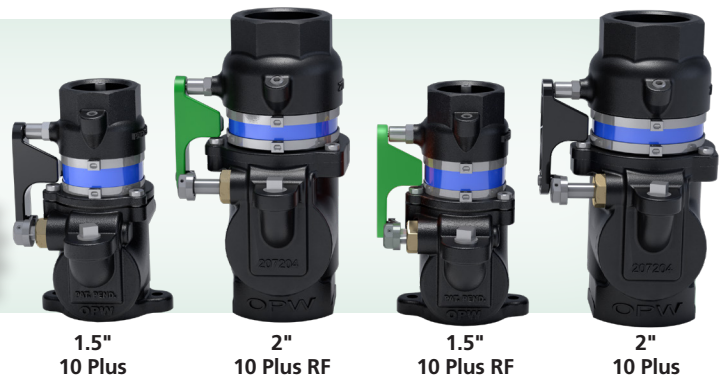


10 Plus Series Instruction Sheet Order Number: 201614

Materials

Top: Cast iron

Body: Cast iron



Features

- ◆ The ONLY emergency shut-off valve in the world designed to protect your customers, investments, and the environment against the potential hazards of undetected shear-groove leaks caused by low-impact incidents
- ◆ The patented SmartGuard™ design contains shear-groove leaks, preventing fuel from leaking into sumps to help reduce the risk of fire, explosion, personal injury, property damage, environmental contamination, product loss and costly clean-up
- ◆ Superior shear-groove design and engineering results in reliable valve shut-off in the event of a pull-over or dislodged dispenser. The 10 Plus utilizes the same time-tested field-proven design of the OPW 10 Series Emergency Shut-off Valve – the most specified emergency shut-off valve in the world
- ◆ Fusible link releases to automatically close the valve to reduce fire hazard
- ◆ Rigorously tested to meet OPW's rigid quality standards
- ◆ Renewable Fuel (RF) Shear Valve Option E85 Compatible

Ordering Specifications

Model #	Body Size		Body Weight		Connection Threads	Poppet Configuration	Application	Mounting System
	in.	cm	lb.	kg				
10P-0150	1 1/2	4	6.7	3.05	NPT	Single	Pressure	Combination
10P-0152	1 1/2	4	6.8	3.10	NPT	Double	Pressure	Combination
10P-0152RF*	1 1/2	4	6.8	3.10	NPT	Double	Pressure	Combination
10P-0200	2	5	11.2	5.12	NPT	Single	Pressure	Combination
10P-0202	2	5	11.2	5.12	NPT	Double	Pressure	Combination
10P-0202RF*	2	5	11.2	5.12	NPT	Double	Pressure	Combination

*E85/B100 Applications

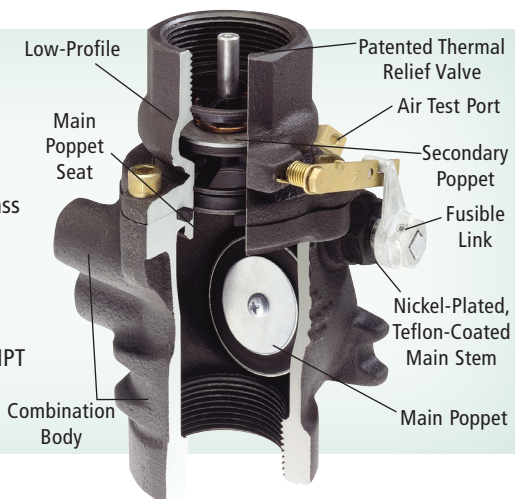


10 Plus Replacement Parts


Part #	Description
10RPLUS-0150	10 Plus 1.5" Single Poppet Replacement Top
10RPLUS-0152	10 Plus 1.5" Double Poppet Replacement Top
10RPLUS-0200	10 Plus 2" Single Poppet Replacement Top
10RPLUS-0202	10 Plus 2" Double Poppet Replacement Top
202950	1 1/2" Tetra Seal
200143	Safety Hub/Fusible Link
213273	E85 Safety Hub S/A Orange
H11361M	2" Tetra Seal

Materials

Top: Cast iron
Body: Cast iron
Disc: M-19
Carrier: Zinc-plated steel
Stem: Copper-nickel-chrome-plated brass
Poppet Spring: Stainless-steel
Seal: M-19 O-Ring
Packing nut: Brass, Teflon®-coated
 Inlet and outlet thread: 1-1/2" (4 cm) NPT
 (British threads available)
 *With black Duragard® E-Coating



Features

- ◆ **High Flow Capacity** – the primary poppet is held out of the flow stream while the secondary poppet is held normally open to minimize head loss across the valve and to protect the poppet seals from damage and erosion. True 1-1/2" (4 cm) and 2" (5 cm) body sizes ensure maximum flow.
- ◆ **Fire Protection** – a fusible link trips the valve closed at 165° F (74°C) to shut off fuel supply to the dispenser.
- ◆ **Main Poppet Seat Integral to the Top Assembly** – having the main poppet seat as an integral part of the valve top ensures a new, clean seating surface is installed each time the top is replaced. This design also ensures that the integrity of the seal between the valve top and bottom is verified during line testing and allows full inspection of the main poppet when the top is removed.
- ◆ **Duragard®-Coat Finish** – provides superior corrosion resistance.
- ◆ **Reliable Shut-off** – a stainless-steel main spring, a Teflon®-coated brass packing nut and a copper/nickel/chrome-plated brass stem are designed to prevent tar build-up and corrosion from interfering with poppet operation after long periods of normal service without activation.
- ◆ **Integral Test Port** – a 3/8" (9.5 mm) test port allows the piping system to be air-tested without breaking any piping connections.
- ◆ **Patented Thermal Relief Valve** – relieves excessive pressure over 25 psi caused by thermal expansion of fuel in the dispenser piping system in the event of fire (double-poppet models only).
- ◆ **Low-Profile Tops** – female and union-top double-poppet valves have a low-profile top to allow upgrading from OPW single-poppet valves without changing existing piping.
- ◆ **Multiple Mounting Options** – valves are boss-mounted to stabilizer bars in sumps and pans or mounted to bars embedded in the island with optional U-Bolt kits 10UBK-015 (not included). Versatile Combination Body (boss mount/ U-Bolt mount) models are available to accommodate most mounting applications with one valve style.
- ◆ **Underwriters Laboratories** –  listed for use with gasoline and 85% and 100% methanol. All OPW 10 Emergency Shut-Off Valves meet requirements of UL STANDARD 842.

10 Series Emergency Shut-Off Valves

OPW 10 Series Emergency Shut-off Valves are installed on fuel-supply lines beneath dispensers at grade-level to minimize hazards associated with collision or fire at the dispenser. If the dispenser is pulled over or dislodged by collision, the top of the valve breaks off at the integral shear groove, activating poppets and shutting off the flow of fuel. Single-poppet models shut off supply flow, while double-poppet models shut off supply as well as prevent release of fuel from the dispenser's internal piping. The base of the emergency valve is securely anchored to the concrete dispenser island through a stabilizer bar system within the dispenser sump or pan to ensure proper shearing action. The valve base is secured to the stabilizer bar using a three-point boss mount system or a U-Bolt Kit (not included) 10UBK-015 (1-1/2") and 10URK-0200 (sold separately). Valve inlet (bottom) connections are female pipe threads and outlet (top) connections are available with female threads, male threads or a union fitting. Other options include suction system models with a normally closed secondary poppet which maintains prime, and models with external threads on the inlet body which connect to secondary-containment systems.

PA15 Offset Adaptor

The OPW PA15 Offset Adaptor is designed for adjusting misaligned pipes in dispenser sumps and suction stubs. The PA15 has a low-profile feature, and is designed for maximum flow.



Materials

Ductile Iron
 Black Duragard®
 E-Coating

Ordering Specifications

Part #	Thread Size		Offset		Height		Width		Body Weight	
	in.	mm	in.	mm	in.	mm	in.	mm	lb.	kg
PA15-15	1 1/2	38.1	1 1/2	38.1	2 1/4	57.2	4 1/8	104.8	2	.9
PA15-20	1 1/2	38.1	2	51	2 1/4	57.2	4 5/8	117.5	2	.9

OPW 10 Series Emergency Shut-Off Valves

Ordering Specifications

Female-Threaded Top (Outlet) Connection Valves

Model #	Body Size		Connection Threads	Poppet Configuration	Application	Replacement Top
	in.	cm				
10BF-5725	1½	4	NPT	Single	Pressure	10RFT-5750
10BFP-5726	1½	4	NPT	Double	Pressure	10FTP-5701
10RF-2001	2	5	NPT	Single	Pressure	10RFT-5742
10RFP-2002	2	5	NPT	Double	Pressure	10RFTP-5752

Male-Threaded Top (Outlet) Connection Valves

Model #	Body Size		Connection Threads	Poppet Configuration	Application	Replacement Top
	in.	kg				
10BM-5825	1½	4	NPT	Single	Pressure	10RMT-5850
10BHMP-5830	1½	4	NPT	Double	Pressure	10RMTP-5851
10SBHMP-5830	1½	4	NPT	Double	Suction	10SHMTP-5811
10RM-2003	2	5	NPT	Single	Pressure	10RMT-5842
10RMP-2004	2	5	NPT	Double	Pressure	10RMTP-5852

Union-Top (Outlet) Connection Valves

Model #	Body Size		Connection Threads	Poppet Configuration	Application	Replacement Top
	in.	kg				
10BU-5925	1½	4	NPT	Single	Pressure	10RUTC-5975
10BUP-5926	1½	4	NPT	Double	Pressure	10UTCP-5901
10SBUP-5926	1½	4	NPT	Double	Suction	10SUTCP-5911
10RU-2005	2	5	NPT	Single	Pressure	10RUTC-5962
10RUP-2006	2	5	NPT	Double	Pressure	10RUTCP-5972

NOTE: All BSPP Thread Shear Valves must be ordered through OPW's Europe or Asia office.

IMPORTANT NOTICE:

When mounting the OPW 10 Series Emergency Shut-off Valves, the anchoring system employed must withstand a force greater than 650 ft. pounds per valve. NFPA Code 30A, Automotive and Marine Service Station Code, requires that the automatic closing feature of emergency shut-off valves be checked at least once per year by manually tripping the hold-open linkage. OPW recommends the use of the FlexWorks Stabilizer Bar Support System for proper mounting of 10 Series Valves.

NOTICE:

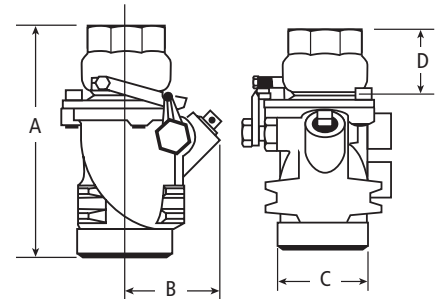
As per NFPA 30A, electrical supply to the submersible pump must always be disconnected before servicing meters, dispensers or emergency shut-off valves.

Replacement Valve Tops

Model #	Body Size		Connection Threads	Poppet Configuration	Application	Top Connection	Profile
	in.	cm					
10RFT-5750	1½	4	NPT	Single	Pressure	Female	
10RFTP-5751	1½	4	NPT	Double	Pressure	Female	
10FTP-5701	1½	4	NPT	Double	Pressure	Female	Low-Profile
10RMT-5850	1½	4	NPT	Single	Pressure	Male	
10RMTP-5851	1½	4	NPT	Double	Pressure	Male	
10SHMTP-5811	1½	4	NPT	Double	Suction	Male	
10RUTC-5975	1½	4	NPT	Single	Pressure	Complete Union	
10UTCP-5901	1½	4	NPT	Double	Pressure	Complete Union	Low-Profile
10RFT-5742	2	5	NPT	Single	Pressure	Female	
10RFTP-5752	2	5	NPT	Double	Pressure	Female	
10RMT-5842	2	5	NPT	Single	Pressure	Male	
10RMTP-5852	2	5	NPT	Double	Pressure	Male	
10RUTC-5962	2	5	NPT	Single	Pressure	Complete Union	
10RUTCP-5972	2	5	NPT	Double	Pressure	Complete Union	

1½" Dimensions

	10BF		10BFP 10SBFP		10BM		10BHMP 10SBHMP		10BU		10BUP 10SBUP	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
A	6 ²¹ / ₆₄	161	6 ²¹ / ₆₄	161	6 ¹³ / ₁₆	173	7 ¹¹ / ₁₆	195	7 ¹ / ₄	184	7 ¹ / ₄	184
B	2 ³ / ₄	70	2 ³ / ₄	70	2 ³ / ₄	70	2 ³ / ₄	70	2 ³ / ₄	70	2 ³ / ₄	70
C	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69
D	1 ³ / ₄	44	1 ³ / ₄	44	2 ¹ / ₄	57	3 ¹ / ₈	79	2 ¹¹ / ₁₆	69	2 ¹¹ / ₁₆	69



2" Dimensions

	10RF 10RFS		10RM 10RMS		10RU 10RUS		10RFP 10RFSP		10RMP 10RMSP		10RUP 10RUSP	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
A	8 ³ / ₈	213	9 ²⁷ / ₃₂	250	9 ¹³ / ₃₂	239	8 ³ / ₈	213	9 ²⁷ / ₃₂	250	9 ¹³ / ₃₂	239
B	3 ⁷ / ₆₄	79	3 ⁷ / ₆₄	79	3 ⁷ / ₆₄	79	3 ⁷ / ₆₄	79	3 ⁷ / ₆₄	79	3 ⁷ / ₆₄	79
C	3 ¹ / ₄	83	3 ¹ / ₄	83	3 ¹ / ₄	83	3 ¹ / ₄	83	3 ¹ / ₄	83	3 ¹ / ₄	83
D	3 ¹ / ₁₆	78	4 ⁹ / ₁₆	116	3 ⁷ / ₈	98	3 ¹ / ₁₆	78	4 ⁹ / ₁₆	116	3 ⁷ / ₈	98

Other Replacement Parts

Part #	Description
202950	1½" Tetra Seal
H11361M	2" Tetra Seal
H07659M	Link Spring
H07643RB	Link Retaining Screw
H04788M	Hold-Open Link (Brass)
H05361	Safety Hub S/A-Fusible Link
10UBK-015	U-Bolt Kit for 1½"
10URK-020	U-Bolt Kit for 2"

Materials

Body: Cast iron with black Duragard® E-coating

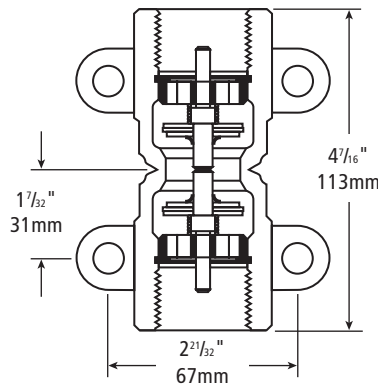
Discs: M-19 Viton®

60VP-1001



Features


- ◆ **1" Female Connection to Both Dispenser and Underground Piping**
- ◆ **Multiple Mounting Methods** – mounting boss accepts either U-Bolt or Straight-Bolt mounting kits.
- ◆ **Duragard® E-Coat Finish** – provides superior corrosion resistance.



OPW 60V Series Vapor-Line Shear Valves


OPW 60VP-1001

Poppeted Vapor Saver

- ◆ Double-poppeted design incorporated to help prevent vapor loss in the event dispenser is toppled
- ◆ CARB-approved
- ◆ UL-listed 

OPW 60VSP-1001

Poppeted Vapor Saver

- ◆ Double-poppeted design incorporated to help prevent vapor loss in the event the dispenser is toppled
- ◆ CARB-approved
- ◆ UL-listed 
- ◆ 60VSPC-1001 features additional external threads on valve outlet for connection to a secondary-containment system

Ordering Specifications

Product #	Connections	Poppeted
60V-1000	1" x 1" (3 x 3 cm) FNPT	
60VP-1001	1" x 1" (3 x 3 cm) FNPT	•
60VK-1002	U-Bolt Mounting Kit Includes: (2) 3/8" (9.5 mm) U-bolts, (4) washers, (4) nuts	
60VK-1003	Straight Bolt Mounting Kit Includes: (4) 3/8" (9.5 mm) 16 bolts, (4) washers, (4) nuts	

OPW 60VS-1000 Line Saver

- ◆ Shear section breaks on impact to minimize damage to underground piping.

OPW 60V-1000 Line Saver

- ◆ Shear section breaks on impact to minimize damage to underground piping.

60V Instruction Sheet
Order Number: **H12133M**

OPW 60VS Series Vapor-Line Shear Valves

OPW 60 Series Vapor-Line Shear Valves are installed on vapor-return lines beneath dispensers at grade-level to minimize hazards associated with collision or fire at the dispenser. If the dispenser is pulled over or dislodged by collision, the top of the valve breaks free at the integral shear groove to minimize damage to the dispenser piping. Poppeted models afford additional protection by preventing the release of vapors from the dispenser's internal piping and the vapor line to the tank. The base of the Vapor-Line Shear Valve is securely anchored to the concrete dispenser island through a stabilizer bar system within the dispenser sump or pan while the valve top is secured to the dispenser structure to ensure proper shearing action. OPW Vapor-Line Shear Valves are designed to meet the requirements of NFPA-30A Section 4-3.7. Poppeted models are UL-listed and CARB-approved.

Materials

Body: Cast iron with black Duragard® E-Coating

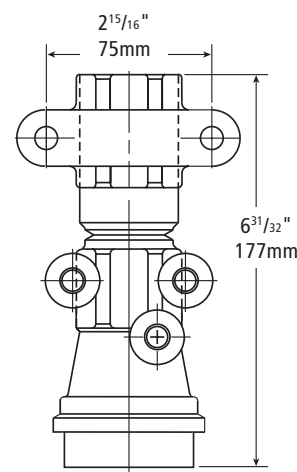
Discs: M -19 Viton®

60VSPC-1001



Features

- ◆ 1-1/2" female connection to underground piping.
- ◆ 1" female connection to dispenser piping.
- ◆ Air-test port to enable vapor-line testing without breaking pipe connections.
- ◆ Choice of top or side inlet connection.
- ◆ Three-Point Boss Mount stabilizer bar lower mounting connection; U-Bolt upper mounting connection.



Ordering Specifications

Product #	Connections	Poppeted	Containment Threads
60VS-1000	1" x 1 1/2" (3 x 4 cm) FNPT		
60VSP-1001	1" x 1 1/2" (3 x 4 cm) FNPT	•	
60VSPC-1001	1" x 1 1/2" (3 x 4 cm) FNPT	•	•
60VSK-1002	Mounting Kit Includes: (2) Lockwashers, (2) Nuts, (3) Hex Screws, (3) Washers		

60VS Instruction Sheet
Order Number: **H12291M**

**Listings and
Certifications**



Materials

Body: Stainless-Steel
Discs: M -19 Viton®

60V-DEF-SS



Features & Benefits:

- ◆ Proprietary design of fully stainless-steel valve-body construction
- ◆ Utilizes a 1" NPT Connection on the top and a 1.5" on the bottom for easy installation with a DEF-approved thread sealant
- ◆ PEI RP1100-recommended materials used for double-poppet internals to contain product in the event of impact collision
- ◆ Machined shear groove for reliable shear performance
- ◆ Standard OPW mounting design, to be installed with any of our Stabilizer Bar Kits (SBK)
- ◆ Loop body version is designed to include easy use with DEF-recirculation systems.

60V-DEF-SS Stainless-Steel Diesel Exhaust Fluid (DEF) Shear Valve

Starting with 2010 models, DEF is required in diesel-powered trucks utilizing Selective Catalytic Reduction (SCR) to meet federal emissions standards. The dispensing infrastructure at travel centers and fleet-refueling sites continues to evolve as DEF-compatible equipment is installed.

OPW's new 60V-DEF-SS Shear Valve body is made of 100% stainless construction, for unmatched compatibility. This double-poppet shear valve is third-party tested to ensure compatibility with the ISO 22241 Standard. With NPT connections on the top and bottom of the valve, our 60V-DEF-SS valve provides peace of mind and minimizes damage to your DEF-dispensing equipment in the case of impact collision, while preventing product loss.

Ordering Specifications

Product #	Connections	Poppeted
60V-DEF-SS	Stainless-Steel DEF Valve with 1.5" NPT lower connection and 1" NPT upper connection	✓

See DEF Loop Product Page 32 for additional information on DEF Loop Shear Valves

OPW Island Forms & Protective Curbing

OPW is the world leader in commercial and industrial protective curbing products. The company designs, engineers and manufactures island forms, curb fascia and pipe to meet virtually any protective curbing application.

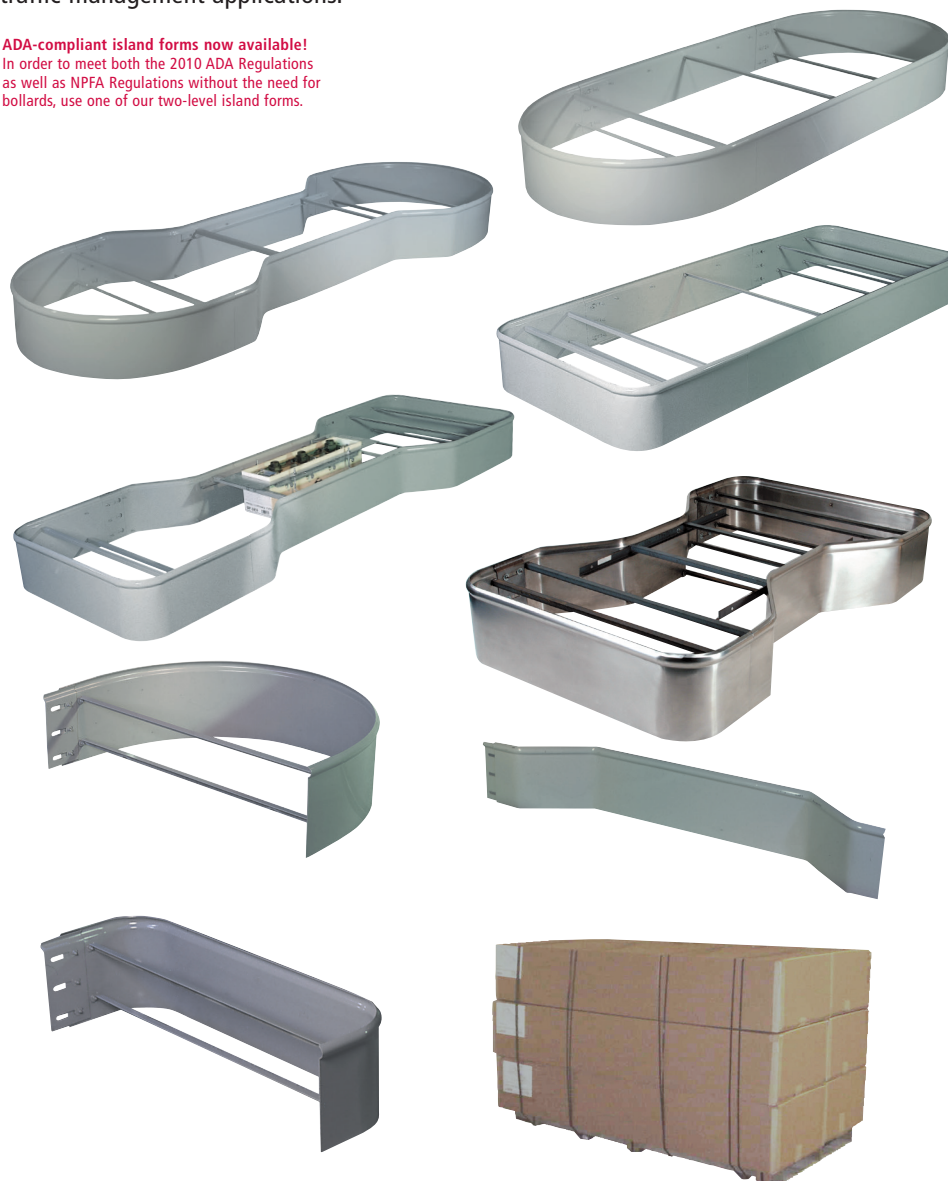
OPW Island Forms Feature:

- ◆ **Variety of End Sections, Lengths, Widths and Styles** – allows for a customized fit to site constraints and requirements.
- ◆ **Spacious Mid-Section** – provides ample room to install standard and wide-access dispenser sumps from the top of the island.
- ◆ **Unique Sump Mounting System** – ensures the dispenser sump is anchored to the Island Form and adjustable to accommodate various width sumps.
- ◆ **Convenient Shipping and Storage** – revolutionary threaded-stud bracing system allows forms to stack together and enables boxing of the island assembly.
- ◆ **Easy Installation** – cross braces bolt onto threaded studs. Field welding is not required.
- ◆ **Attractive Appearance** – link plates impart a crisp, clean exterior joint between sections for a smooth, finished presentation.
- ◆ **Material** – Standard models are 12-gauge steel powder-coated gray and stainless-steel models are 304 stainless.

OPW Island Forms

Designed to protect gasoline dispensers, electronic equipment, kiosks, bank teller and ATM equipment, as well as to restrict or route material-handling equipment in warehouses, OPW Island Forms and Protective Curbing streamline traffic flows in toll booths and quick-serve restaurants and various other commercial traffic-management applications.

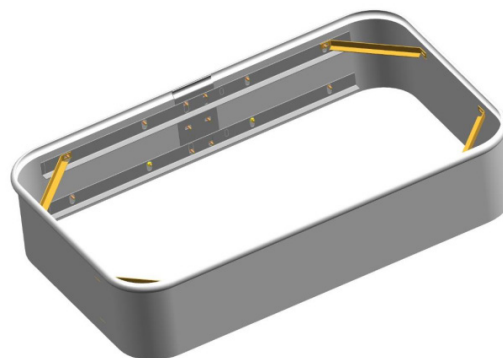
ADA-compliant island forms now available!
In order to meet both the 2010 ADA Regulations as well as NPFA Regulations without the need for bollards, use one of our two-level island forms.



Pre-Assembled Island Forms

Model #	Comments	Width	Length	Radius Corner
6013-SFR6W3L5-ASSY	Steel Island Form, Assembled	3'	5'	6"
6013-SFR6W4L5-ASSY	Steel Island Form, Assembled	4'	5'	6"
6013SS-SFR6W3L5-ASSY	Stainless-Steel Island Form, Assembled	3'	5'	6"
6013SS-SFR6W4L5-ASSY	Stainless-Steel Island Form, Assembled	4'	5'	6"

Can pre-assemble islands max 4' wide, 5' long.

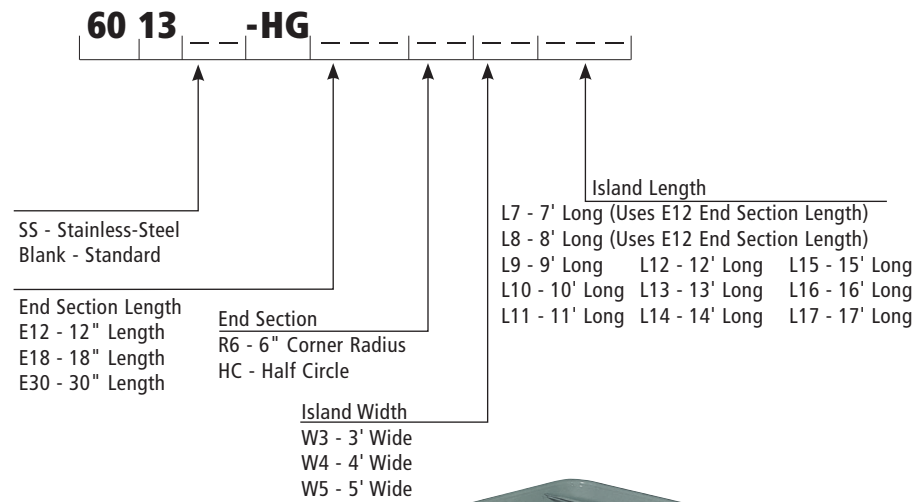


Listings and Certifications

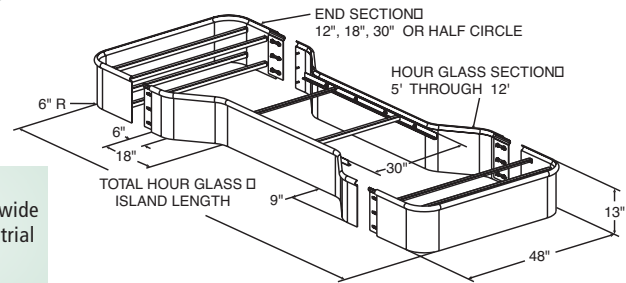


2005 UL Standard for safety for non-metallic underground piping for flammable liquids, UL971.

Hourglass Island Form Specification/Ordering Guide



Specify Standard Island Form configurations designed by OPW for a wide variety of retail, commercial and industrial traffic-management applications.



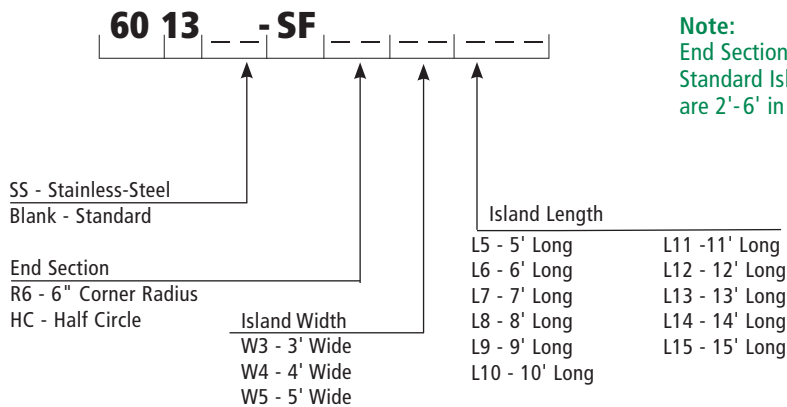
OPW Standard Island Forms

Specify Standard Island Form configurations designed by OPW for a wide variety of retail, commercial and industrial traffic-management applications. Available in hot-rolled 12-gauge primed gray steel and stainless-steel models are 304-grade stainless.

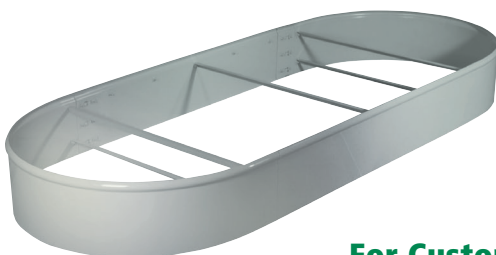
Hourglass Island Forms

Hourglass Island Forms are designed with side sections integrating a double-reverse 9" taper to provide easy access to multi-product gasoline dispensers while protecting expensive electronic equipment. Ends of these islands can be extended to wrap around canopy columns, hose bibs or trash receptacles by simply adding straight sections.

Standard (Straight) Island Form Specification/Ordering Guide

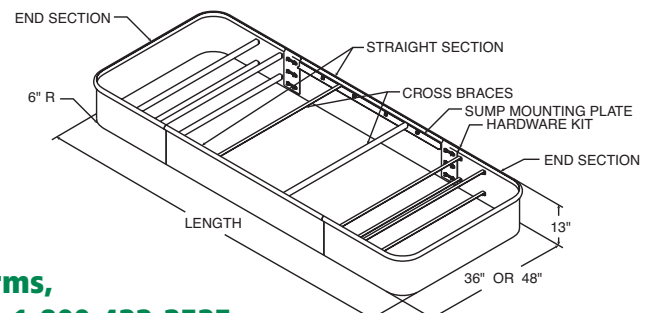


Note:
End Sections on
Standard Island Forms
are 2'-6' in length.



Standard (Straight) Island Forms

Straight Island Forms are designed with straight side sections to provide a convenient means of installing multiple dispensers on a single island. Straight Island Forms are also used to protect teller and ATM equipment at banks, restrict or route material-handling equipment in warehouses, streamline traffic flows in toll booths and quick-serve restaurants and various other commercial traffic-routing applications. Standard models are steel and stainless-steel models are 304 stainless.



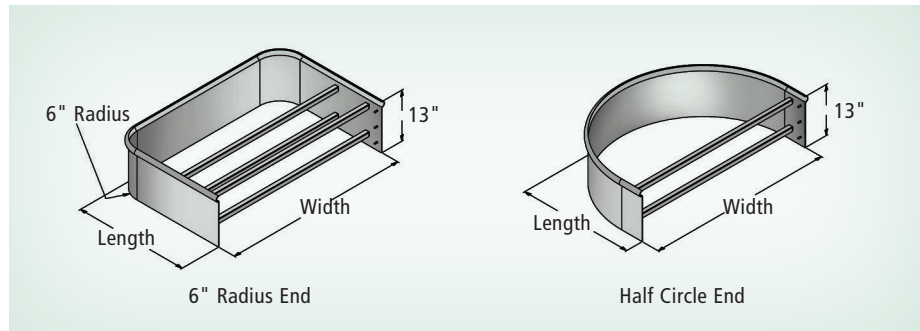
**For Custom Island Forms,
Contact OPW Customer Service at 1-800-422-2525**

Build Your Own Island Form Or Curbing From Individual Sections

Build your own Island Forms and Protective Curbing to fit your particular application from standard sections. Standard models are steel and stainless-steel models are 304 stainless.

Standard Island Form End Sections

End Sections are available to build customized Island Forms from standard OPW Island Form components. Sections are available in Half Circle or 6" Radius configurations. Each End Section is pre-braced and includes all required hardware for assembly.

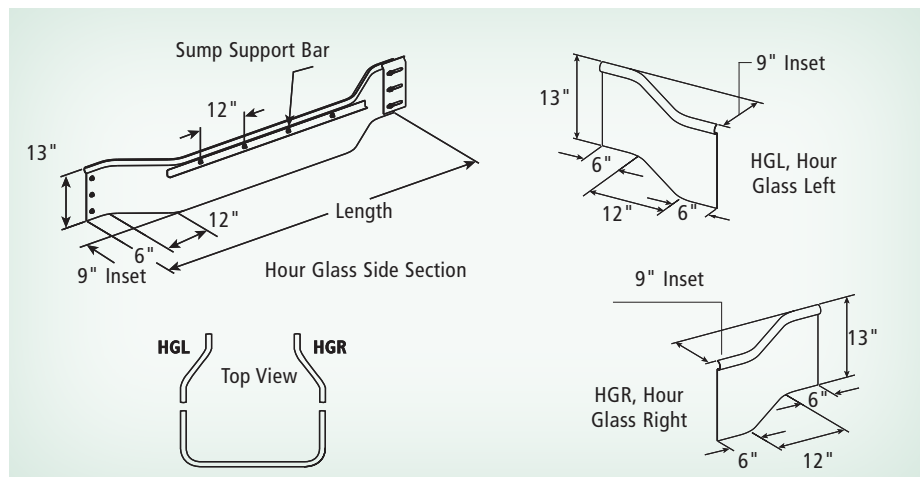


Ordering Specifications (Standard End Sections)

Model #	Radius (in.)	Width (ft)	Length	Weight
6013P-EHCW3L30	Half Circle	3	2' 6"	37 lbs.
6013P-EHCW4L30	Half Circle	4	2' 6"	40 lbs.
6013P-ER6W3L18	6	3	1' 6"	37 lbs.
6013P-ER6W3L30	6	3	2' 6"	45 lbs.
6013P-ER6W4L12	6	4	1'	35 lbs.
6013P-ER6W4L18	6	4	1' 6"	40 lbs.
6013P-ER6W4L30	6	4	2' 6"	52 lbs.

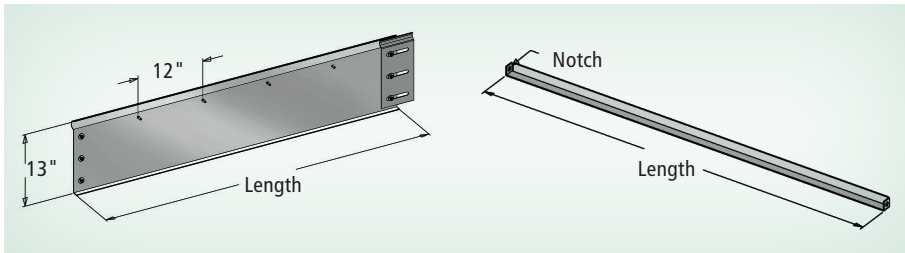
Hourglass Sections

Hourglass Sections are designed with double-reverse 9" tapers to provide easy access to multi-product gasoline dispensers. One-piece Hourglass Sections are available from 5' through 9'. Sump Support Bars are included with individual Hourglass Sections. HGL and HGR sections can be used in conjunction with Straight Sections when designing longer Hourglass Islands, or for use in Protective Curbing applications.



Ordering Specifications (Hourglass)

Model #	Length	Comments	Wgt (lbs.)
6013P-HGL	2'	Hourglass Left Side Section	13
6013P-HGR	2'	Hourglass Right Side Section	13
6013P-HG05	5'	Hourglass Side Section	35
6013P-HG06	6'	Hourglass Side Section	40
6013P-HG07	7'	Hourglass Side Section	45
6013P-HG08	8'	Hourglass Side Section	50



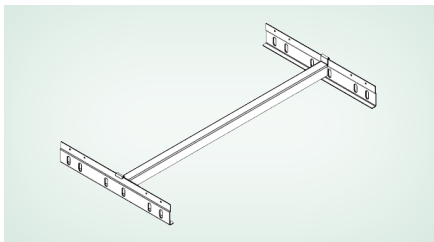
Straight Sections

Straight Sections are designed with a 1" bottom flange to add rigidity for accurate alignment of sections. Island Form End Sections are easily extended with various-length Straight Sections. Sump Support Bars are not included with individual Straight Sections. Straight Sections are key to the design of Protective Curbing.

Ordering Specifications

Model #	Length	Weight
6013P-S01	1'	6 lbs.
6013P-S015	1' 6"	9 lbs.
6013P-S02	2'	12 lbs.
6013P-S025	2' 6"	15 lbs.
6013P-S03	3'	18 lbs.
6013P-S035	3' 6"	21 lbs.
6013P-S04	4'	24 lbs.
6013P-S05	5'	30 lbs.
6013P-S06	6'	36 lbs.
6013P-S07	7'	42 lbs.

13" Mounting Plate
(Includes Hardware)



Sump Loop Mounting Bracket

Ordering Specifications

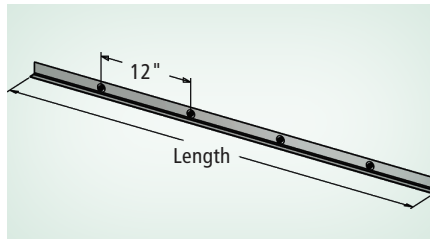
Model #	Mounting Kit Length
6000-SMK3	3 Foot
6000-SMK4	4 Foot
6000-SMK5	5 Foot

Cross Braces

Cross Braces are notched on both ends for use with Sump Support Bars. Holes punched in both ends slide over threaded studs to bolt the brace to the island. Bracing is recommended every 2 feet along the inside of Hour Glass and Straight Sections.

Ordering Specifications

Model #	Length (in.)	Weight
6000P-B24	24	1 lbs.
6000P-B30	30	2 lbs.
6000P-B36	36	2 lbs.
6000P-B42	42	2 lbs.
6000P-B48	48	3 lbs.
6000P-B60	60	3 lbs.



Sump Support Bars

Sump Support Bars are designed to allow OPW Island Forms to accept various-width sumps. The bars are positioned to locate the top of OPW Dispenser Sump Frames 1/2" above finished island grade to direct water drainage away from the sump. Sump Support Bars must be specified when designing Island Forms from individual Straight Sections.

Ordering Specifications

Model #	Length (in.)	Weight
6000P-SMP	54	3 lbs.

Build Your Own Island Form Or Curbing

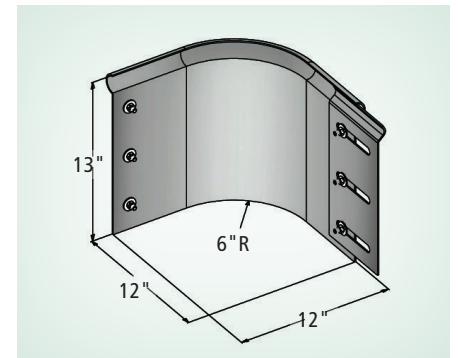
Build your own Island Forms and Protective Curbing to fit your particular application from standard sections. Standard models are steel and stainless-steel models are 304 stainless.

Corner Sections

Corner Sections are designed for use in various Island Form widths, or for use in Protective Curbing applications.

Ordering Specifications

Model #	Length (in.)	Weight
6013P-R6C	12	10 lbs.



Curb Fascia Brackets

Curb Fascia Brackets replace cross braces and are designed to brace sections when utilized as protective curb fascia. The brackets are hole-punched for bolting to threaded studs, and allow for 1/2" diameter #4 reinforcement bars to secure the sections in place.

Ordering Specifications

Model #	Length (in.)	Weight
6000P-CFB	11	1 lbs.
6013P-Link Steel (12K Plate)		
6013SSP-Link Stainless-Steel Link		

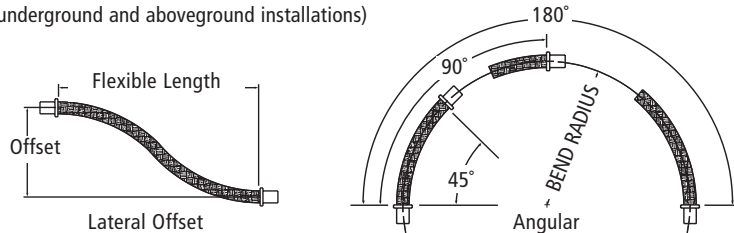
Materials:

Hose: 322 Stainless-Steel
Wire Braid: 304 Stainless-Steel
Pipe Nipples: SCH. #80 Stainless-Steel
Swivel: Viton®/Buna Seals

Features:

- ◆ Maximum working pressure: 150 PSIG (10 bar)
- ◆ Service temperature range: -320°F to 1,500°F (-196°C to 816°C)
- ◆ Minimum burst pressure 750 PSIG (52 bar)
- ◆ Inherent hoop strength of convoluted hose allows full vacuum service

ULC/ORD-C536-1998
(underground and aboveground installations)

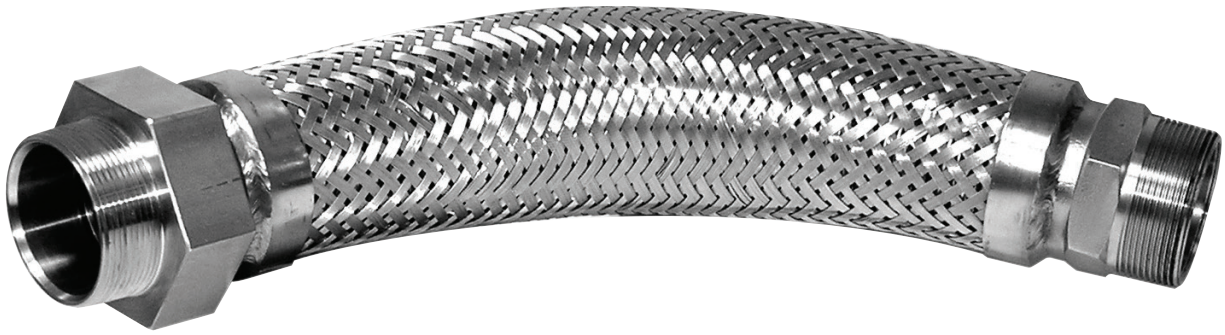


OPW Stainless-Steel Flexible Connectors

Stainless-Steel Flexible Connectors provide flexibility in the installation and operation of fuel-piping systems. Flexible Connectors can be used as a convenient means of connecting piping to pumps and dispensers and throughout the piping systems where connections and changes of direction are necessary. Flexible Connectors dampen the effect of ground and/or piping movement. All stainless-steel construction ensures long service life and corrosion protection. Flexible Connectors are rated for 150 psig (10 bar) working pressure, as well as for full vacuum service. Compatible with diesel, gasoline, methanol, ethanol and MTBE. Available as Male by Male and Male Swivel by Male, Male 90° and Easy Clamp Connectors.

Ordering Specifications and Dimensions

MALE x MALE							Max. Angular Bending (Degree)		Max. Lateral Offset				Min. Bend Radius			
Model #	NPT Thread Size		Length		Hose O.D.		Static Position	Intermittent Flexing	Static Installation		Intermittent Flex-ing		Static Installation		Intermittent Flex-ing	
	in.	mm	in.	mm	in.	mm			in.	mm	in.	mm	in.	mm		
FC075-MM12	.75	19.1	12	304.8	1.0	25.4	100°	55°	2.0	50.8	1.2	30.5	4.5	114.3	8	203.2
FC10-MM12	1	25.4	12	304.8	1.3	33.0	70°	45°	1.4	35.6	0.9	22.9	5.5	139.7	9	228.6
FC10-MM18	1	25.4	18	457.2	1.3	33.0	135°	85°	4.5	114.3	2.1	53.3	5.5	139.7	9	228.6
FC10-MM24	1	25.4	24	609.6	1.3	33.0	180°	125°	8.6	218.4	2.1	53.3	5.5	139.7	9	228.6
FC15-MM12	1.5	38.1	12	304.8	2.25	57.2	90°	35°	1.5	38.1	.75	19.1	4	101.6	11	279.4
FC15-MM14	1.5	38.1	14	355.6	2.25	57.2	90°	35°	1.5	38.1	.75	19.1	4	101.6	11	279.4
FC15-MM18	1.5	38.1	18	457.2	2.25	57.2	150°	55°	4.0	101.6	1.5	38.1	4	101.6	11	279.4
FC15-MM24	1.5	38.1	24	609.6	2.25	57.2	180°	85°	8.0	203.2	2.75	69.9	4	101.6	11	279.4
FC15-MM30	1.5	38.1	30	762.0	2.25	57.2	180°	115°	12.0	304.8	2.75	69.9	4	101.6	11	279.4
FC20-MM12	2	50.8	12	304.8	2.72	69.1	75°	30°	1.5	38.1	0.60	15.2	5	127.0	12	304.8
FC20-MM14	2	50.8	14	355.6	2.72	69.1	75°	30°	1.5	38.1	0.60	15.2	5	127.0	12	304.8
FC20-MM18	2	50.8	18	457.2	2.72	69.1	120°	50°	3.0	76.2	1.5	38.1	5	127.0	12	304.8
FC20-MM24	2	50.8	24	609.6	2.72	69.1	180°	75°	7.0	177.8	3.0	76.2	5	127.0	12	304.8
FC20-MM36	2	50.8	36	914.4	2.72	69.1	180°	105°	12.0	304.8	3.0	76.2	5	127.0	12	304.8
FC30-MM18	3	76.2	18	457.2	3.97	100.8	70°	35°	2.0	50.8	1.0	25.4	8	203.2	16	406.4
FC30-MM24	3	76.2	24	609.6	3.97	100.8	110°	55°	4.8	121.9	2.5	63.5	8	203.2	16	406.4



Integral Swivel Flexible Connector

Ordering Specifications and Dimensions

MALE SWIVEL x MALE							Max. Angular Bending (Degree)		Max. Lateral Offset				Min. Bend Radius			
Model #	NPT Thread Size		Length		Hose O.D.		Static Position	Intermittent Flexing	Static Installation		Intermittent Flexing		Static Installation		Intermittent Flexing	
	in.	mm	in.	mm	in.	mm										
FC15-SWM12	1.5	38.1	12	304.8	2.25	57.2	90°	35°	1.5	38.1	0.75	19.1	4	101.6	11	279.4
FC15-SWM14	1.5	38.1	14	355.6	2.25	57.2	90°	35°	1.5	38.1	0.75	19.1	4	101.6	11	279.4
FC15-SWM18	1.5	38.1	18	457.2	2.25	57.2	150°	55°	4.0	101.6	1.50	38.1	4	101.6	11	279.4
FC15-SWM24	1.5	38.1	24	609.6	2.25	57.2	180°	85°	8.0	203.2	2.75	69.9	4	101.6	11	279.4
FC20-SWM12	2	50.8	12	304.8	2.72	69.1	75°	30°	1.5	38.1	0.60	15.2	5	127.0	12	304.8
FC20-SWM14	2	50.8	14	355.6	2.72	69.1	75°	30°	1.5	38.1	0.60	15.2	5	127.0	12	304.8
FC20-SWM18	2	50.8	18	457.2	2.72	69.1	120°	50°	3.0	76.2	1.50	38.1	5	127.0	12	304.8
FC20-SWM24	2	50.8	24	609.6	2.72	69.1	180°	75°	7.0	177.8	3.0	76.2	5	127.0	12	304.8

Suction-System Accessories

OPW 70 Vertical Check Valves (with Shear Groove)

Materials

Body: Cast iron with black Duragard® E-coating
Disc: M-19 Viton

Features

- ◆ **Low Pressure Drop**
- ◆ **M-19 Viton® Seals** – on main poppet for compatibility with methanol-blended fuels and reliable sealing
- ◆ **Protective Shear Groove** – designed to reduce the possibility of damage to buried piping in the event the dispenser is knocked over
- ◆ **Thermal Relief Valve** – to reduce pressure build-up in suction pumps. Opens between 25 & 35 PSI (1.7 & 2.4 bar)
- ◆ **Compatible with 85% Ethanol (E85) or Methanol (M85)**



70

70S

Additional Features (70S Model)

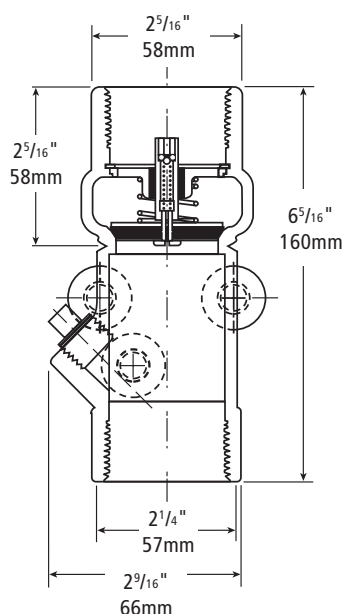
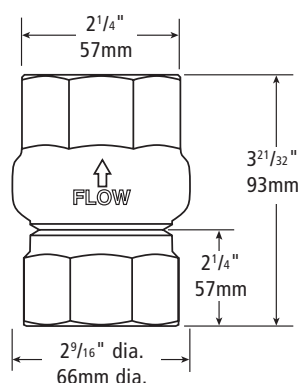
- ◆ **Stabilizer Mounting Bosses** – three bosses in the lower portion of the valve body allow for rigid mounting to stabilizer bars. Use FlexWorks mounting plate with appropriate stabilizer bar kit
- ◆ **Built-In Air-Test Port** – allows air testing of the entire pumping system without breaking the line. Also allows line to be drained from the valve to the tank (assuming there are no other check or foot valves below the 70S)

OPW Vertical Check Valves

OPW Vertical Check Valves are installed on suction-system fuel lines directly below the inlet to the pump in the dispenser island to maintain prime. The 70 Series Valves feature a built-in shear groove, which helps minimize piping damage if the dispenser is pulled over or dislodged by collision. The single-poppet provides redundant protection from losing prime and are also available without shear grooves. OPW Vertical Check Valves are recommended for use on suction-lines where the pressure does not exceed 34 feet of head (approximately 15 psi [1 bar]). 70 Series valves need 1/2" of mercury to activate the poppet.

Ordering Specifications

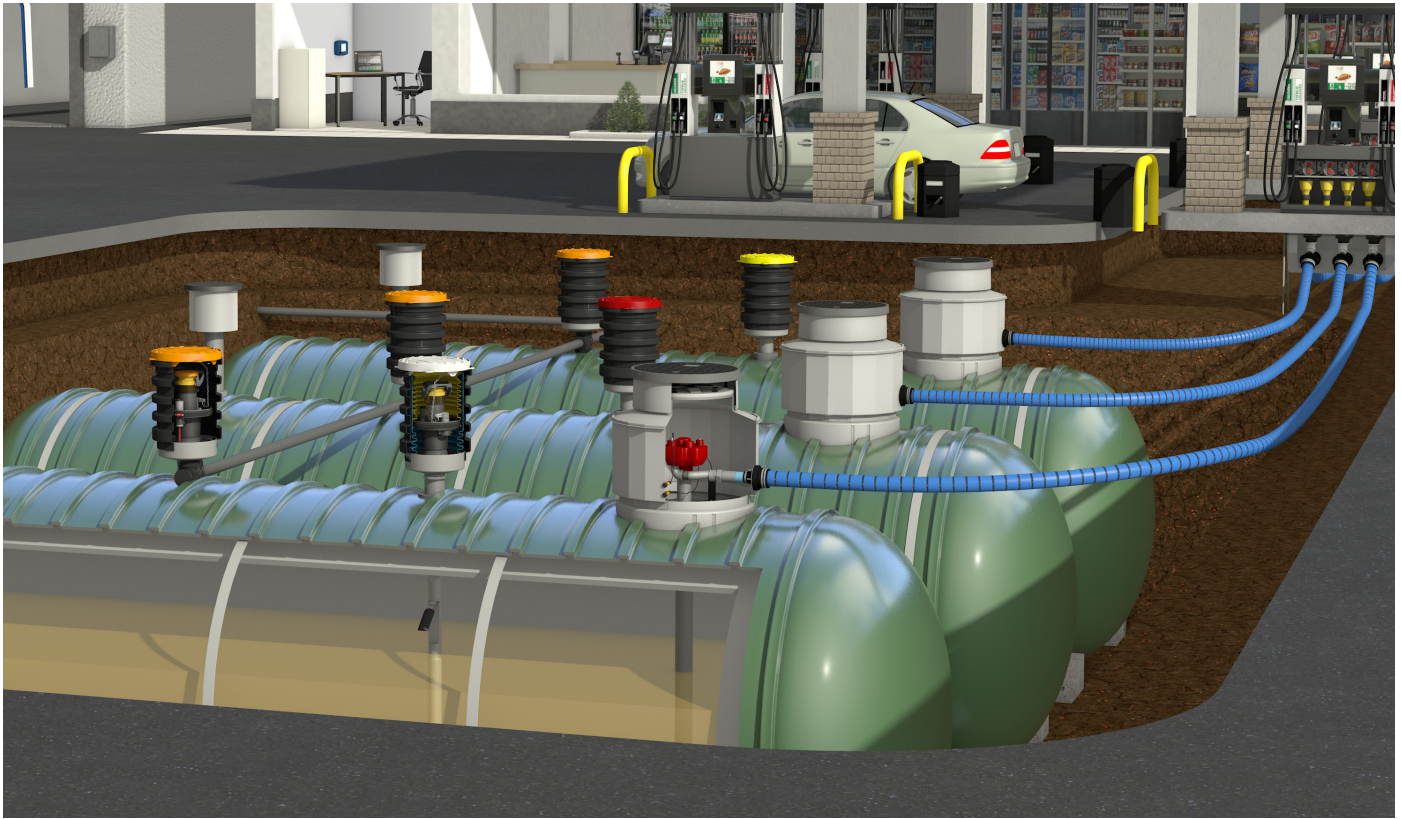
Model #	in.	mm	lbs.	kg
70-0070	1 1/2" NPT	38 mm	1.80	.8
70S-0075	1 1/2" NPT	38 mm	2.9	1.3



70 and 70S Vertical Check
Valve Instruction Sheet
Order Number: **H11055PA**

Warning: The valve body must be rigidly anchored to a structural member within the island to ensure breakage at the shear groove in the event of severe impact. The shear groove must be at the same level or a maximum of 1/2" above or below the top of the pedestal island. Failure to provide rigid mounting or install the shear groove at the proper level may result in a failure of the valve to close or shear, resulting in an excessive loss of product and a hazardous condition.

Underground Storage Tank Equipment



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Listings and Certifications

CARB
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Phase I CARB-Certified Enhanced Vapor Recovery (EVR) Product Overview

Tank-Venting Equipment

- ◆ Pressure Vacuum – 523V and 623V Series (pgs. 126 & 127)
- ◆ Open Atmospheric – 23 Series (pg. 128)

Monitoring Well Manholes

- ◆ 104AOW (pg. 138)

Vapor Recovery Caps and Adaptors

- ◆ 1711T (pg. 110)
- ◆ 61VSA (pg. 108)
- ◆ 1611AV (pg. 109)
- ◆ 633TC (pg. 104)
- ◆ 1711LPC (pg. 110)

Monitoring Well-Caps

- ◆ 62PMC (pg. 112)

Extractor Fittings

- ◆ 233 Series (pg. 122)

Ball-Float Vent Valves

- ◆ 53VML (pg. 121)

Slotted Monitoring Well Pipe

- ◆ 61SPVC (pg. 112)

Tank-Bottom Protectors

- ◆ 61TP (pg. 124)

Drop Tubes

- ◆ 61T (pg. 123)

Overfill-Prevention Valves

- ◆ 61SO (pg. 118)
- ◆ Testable 71SO (pg. 114)
- ◆ 71SO (pgs. 114 - 116)

Spill-Containment Manholes

1-2200 Series 1-2100-EVR, EDGE 1™ and 101BG Series (pgs. 81 - 91)

- ◆ Thread-On (pg. 85)
- ◆ Slip-On (pg. 89)
- ◆ Below Grade (pg. 91)
- ◆ Sealable Cover (pg. 101)
- ◆ Secondary Contained (pgs. 78 - 80)
- ◆ Replaceable Direct Bury (pg. 84)
- ◆ Multiport (pgs. 93 - 99)

Tight-Fill Caps and Adaptors

- ◆ 634TT (pg. 105)
- ◆ 633T (pg. 103)
- ◆ 61SALP (pg. 103)
- ◆ 634LPC (pg. 106)
- ◆ 634TE (pg. 106)

Small-Diameter Manholes

- ◆ Cast-Iron – 104A (pg. 136)
- ◆ Steel – 6110 (pg. 137)
- ◆ Composite (pgs. 130, 138)

Monitoring Probe Caps

- ◆ 62M (pg. 111)
- ◆ 116M (pg. 111)
- ◆ 634TTM (pg. 112)

Large-Diameter Manholes

- ◆ Fibrelite Composite Manholes (pg. 130)
- ◆ Composite – 39CD & 44CD (pg. 133)
- ◆ Steel – 6110 (pg. 137)

Tank Sumps, Tank Sump Systems and Accessories

- ◆ Fiberglass Sumps and Components – (pgs. 16 - 19)
- ◆ Polyethylene Tank Sumps – (pg. 20)
- ◆ Tank Sump Systems – (pgs. 16 - 21)
- ◆ Transition Sumps – (pg. 54)
- ◆ Special Application Sumps – (pg. 55)
- ◆ Mounting Flanges – (pg. 21)

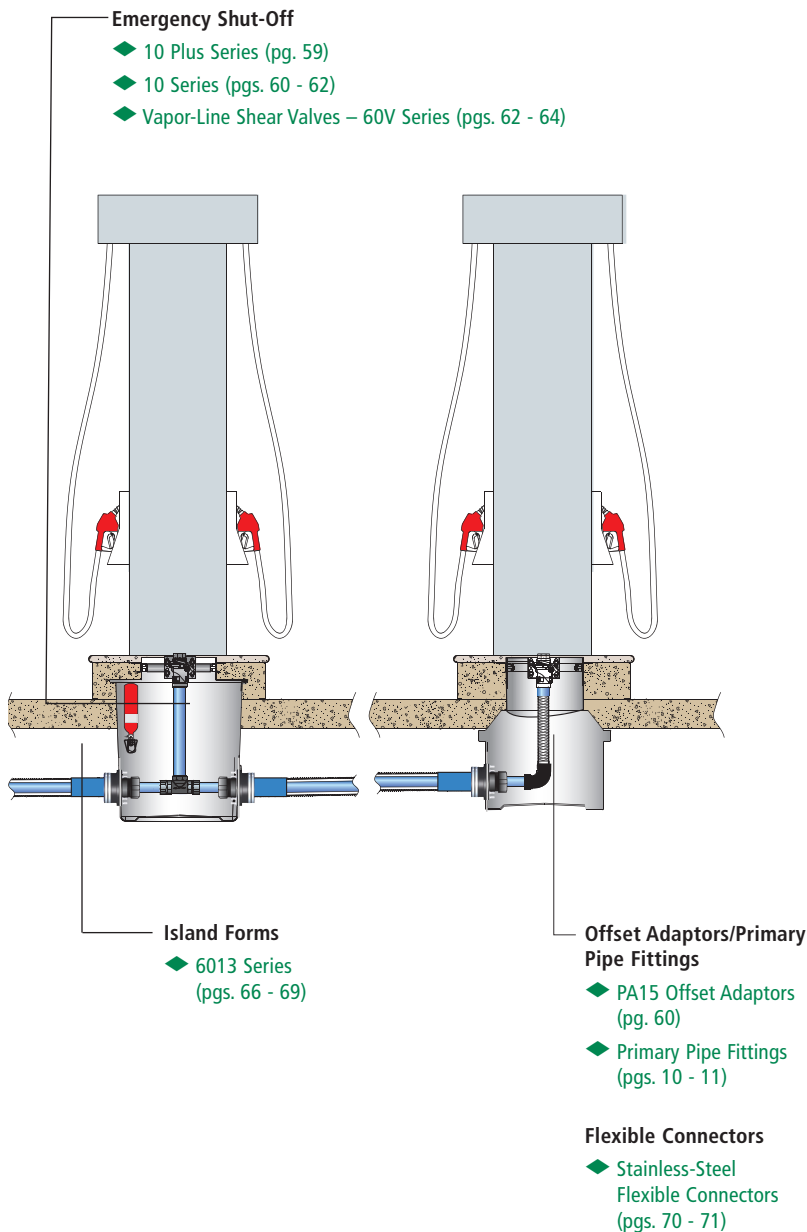
Listings and Certifications

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NOTE: See OPW's Website at www.opwglobal.com for product instruction sheets, troubleshooting guides, how-to-use guides and to view the Do's & Don'ts at the Gas Pump video.

OPW Underground and Aboveground Storage Tank Fuel-Transfer and Containment Systems

OPW offers a wide selection of underground storage tank equipment. This equipment is designed to help protect the environment by providing fuel operations with spill-containment manholes, manholes and monitoring equipment, fill-pipe connection equipment, overfill-prevention equipment and tank-venting equipment.

OPW offers a wide variety of different spill-containment products, including innovative double-wall spill-containment and Phase 1 Enhanced Vapor Recovery (EVR) products, designed to prevent spilled product from entering the soil near the fill and vapor-return riser connections on USTs during normal tank-filling operation, or in the event of tank overfill. OPW spill-containers are designed to catch spillage to help prevent soil contamination and groundwater pollution.

OPW manholes provide access from grade-level to underground equipment including tank sumps, tank riser pipes, monitoring equipment, submersible pumps, valves and piping connections. OPW also offers a wide selection of tight-fill adaptors and caps, Stage I adaptors and caps and monitoring probe and well caps.

OPW overfill-prevention valves are designed to help prevent the overfill of USTs during product drops. OPW offers a wide selection, including 6150 and vaportight and testable 7150 positive shut-off valves, and ball-float vent valves.

OPW Phase 1 Enhanced Vapor Recovery (EVR)/ Torque Specifications

In March 2000, The California Air Resources Board adopted new, more stringent vapor recovery requirements for gasoline-dispensing facilities. The new program, titled "Enhanced Vapor Recovery" (EVR), was developed to promote enhanced vapor recovery system reliability and to seek further reductions to meet both California and Federal Air Quality Requirements. Phase I EVR is now enforced in California.

For the purpose of reducing fugitive vapor emissions at gasoline-dispensing facilities, the California Air Resources Board has formally adopted new compliance requirements and certification procedures for vapor recovery equipment. These new requirements, know as Enhanced Vapor Recovery (EVR), define the most stringent and comprehensive performance and reliability requirements for Phase I Vapor Recovery Systems. Some important new requirements for a certified EVR Phase I system include:

- ◆ **EVR System Certification Test Protocol** – all components must now be installed and tested as a complete integral Phase I system
- ◆ **EVR System Efficiency** – must now exceed 98% versus 95% previously allowed
- ◆ **EVR System Performance** – allowable leak rates for components such as spill-container drain valves, overfill valves, and pressure vacuum vents have been cut by 50%
- ◆ **EVR System Reliability** – operating test period for a complete system increased from 90 days to 180 days

EVR Phase I Components Installation Torque Specifications (Oct 26, 2004)

Component	Torque Specification Foot Pounds (Inch Pounds)
All 4" NPT pipe. See note 1	125 to 250 ft.lb.
FSA-400, FSA-400-S. See note 1	125 to 250 ft.lb.
Spill-containment bucket. See note 1	125 to 250 ft.lb.
Spill bucket cover perimeter bolts/nuts	20 to 25 ft.lb.
Drain valve retaining bolts/nuts	11 to 13 ft.lb.
61SO Inlet adaptor	11 to 13 ft.lb.
61JSK-4400	3 to 4 ft.lb. (36 to 52 in.lb.)
61JSK-4410	3 to 5 ft.lb. (42 to 60 in.lb.)
61JSK-44CB	3 to 5 ft.lb. (42 to 60 in.lb.)
61VSA Swivel Vapor Adaptor	90 to 110 ft.lb.
61SALP Low-Profile Swivel Fill Adaptor	90 to 110 ft.lb.
623V Pressure Vacuum Vent base	30 to 35 ft.lb.
233V Extractor Fitting. See note 1	125 to 250 ft.lb.
3" NPT	125 to 300 ft.lb.
2" NPT	100 to 150 ft.lb.
53VML Ball-Float Vent Valve and extractor cage - 3 3/4" threads	75 to 150 ft.lb.

Note 1: All 4" NPT threads are to be torqued progressively lower from the tank up.

Listings and Certifications



NOTE: See OPW's Website at www.opwglobal.com for product instruction sheets, troubleshooting guides, how-to-use guides and to view the Do's & Don'ts at the Gas Pump video.

On September 17, 2003, OPW received a second EVR certification for the Phase I Enhanced Vapor Recovery System. The new approval provides the option of using the ball-float with a straight drop tube or the positive shut-off overfill-prevention valve. OPW can offer the flexibility for installing an appropriately certified EVR system to meet the regulations in any jurisdiction for virtually any Phase I UST application. To review the EVR requirements visit: www.arb.ca.gov/vapor/vapor.htm

OPW Multiports and Spill-Containment Manholes

OPW Spill-Containment Manholes are designed to prevent spilled product from entering the soil near the fill and vapor-return riser connections on underground storage tanks during normal tank-filling operation, or in the event of tank overflow. The spill-containers catch spillage to help prevent soil contamination and groundwater pollution.

Single-Wall Spill-Containment Manholes

The new OPW 1-2200 Series Single-Wall Spill-Containers are advanced, rugged, easier to install and service, upgrades to a double-wall and are more reliable than current single-wall spill-containers available today. Never break concrete again with our new EPA Compliant UST Solution for today, tomorrow and the future.

Double-Wall Spill-Containment Manholes

The new OPW EDGE™ 3100 Series Double-Wall Spill-Container is leading-edge spill-containment technology. Designed to help prevent spilled product from entering the backfill in the event the primary spill-container is damaged, the new OPW EDGE™ is dimensionally identical to single-wall spill buckets (from riser to grade), making single-to-double-wall upgrades quick, easy and affordable. No need to break concrete or replace riser pipes. Florida and North Carolina compliant.

Thread-On Spill-Containment Manholes

OPW Thread-On Spill-Containment Manholes are generally used on new tank or riser pipe installations. The spill bucket is threaded directly onto 4" NPT fill and vapor-return riser pipes. An integral drain valve allows contained product to be drained into the tank. OPW Thread-On Spill-Containers are available in 5-, 10- and 15-gallon capacities. Thread-On Double-Wall spill-containers are also available in 5-gallon capacities.

Sealable Cover Spill-Containment Manholes

OPW Sealable Cover Spill-Containment Manholes are designed to eliminate problems associated with water entering grade-level spill-containers, and are ideal for areas with poor drainage, areas subject to tropical rain and standing water, and cold regions where melting snow and road salt can enter standard spill-containers. An expandable cover seal is latched down, sealing against the I.D. of the mounting ring and preventing ingress of surface water. Sealable spill-containers are available in thread-on and slip-on configurations in 5 and 15-gallon capacities.

Slip-On Spill-Containment Manholes

OPW Slip-On Spill-Containment Manholes are used on new or existing UST riser pipes. The spill bucket slides onto 3" or 4" fill and vapor-return riser pipes and is then secured in place. Slip-on spill-containers provide a fast, economical way to replace uncontained manholes or fill boxes. An optional suction hand pump allows contained product to be evacuated into the tank. OPW Slip-On Spill-Containers are available in 5- and 15-gallon capacities.

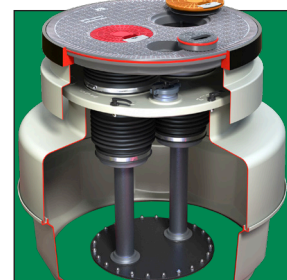
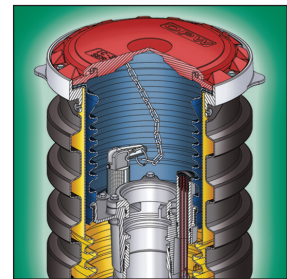
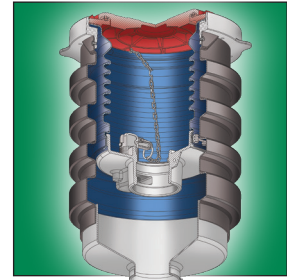
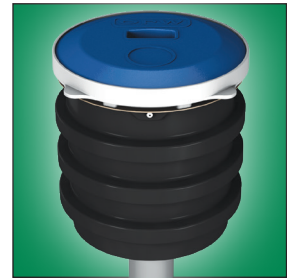
Below-Grade Spill-Containment Manholes

OPW Below-Grade Spill-Containment Manholes are used in new tank or riser pipe installations. The watertight spill-containment chamber is installed completely below grade-level. A grade-level manhole cover lies flush with the driveway grade to reduce a tripping hazard and the potential for damage from snow-plows and traffic. Surface water drains into the backfill between the manhole skirt and the exterior of the containment bucket. Below-grade spill-containers are available in thread-on and slip-on configurations in 5- and 15-gallon capacities.

Fibrelite Multiport Spill-Containment Manholes

OPW Fibrelite Multiport Spill-Containment Manholes provide spill-containment for underground storage tank (UST) fill pipes and vapor recovery risers.

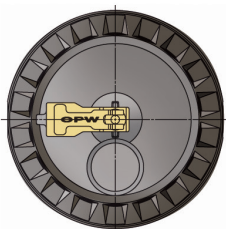
Multiports are installed over the top of tank sumps to preserve future access to the tank top and to facilitate containment of tank-bung fittings.



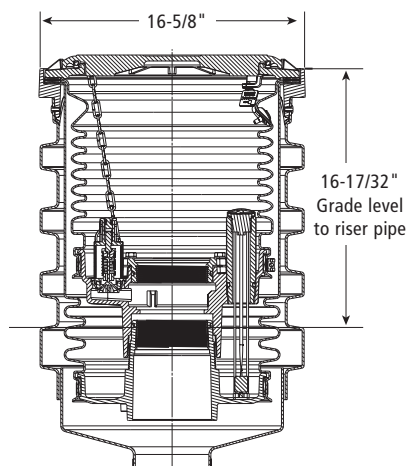
OPW EDGE™ Double-Wall Spill-Containers

Designed in collaboration with contractors and end-users, the OPW EDGE™ Double-Wall Spill-Container installs in the same space as single-wall buckets. The EDGE™ delivers best-in-class features that significantly improve reliability, installation, testing and ease of serviceability. The EDGE™ exceeds the performance levels of all other double-wall spill-containers.

- ◆ Fully Testable
- ◆ Unbeatable installation ease
- ◆ Uses existing riser pipe
- ◆ Unparalleled serviceability
- ◆ Superior quality
- ◆ Significantly reduces installation time and labor costs



Sealable Cover Option Available



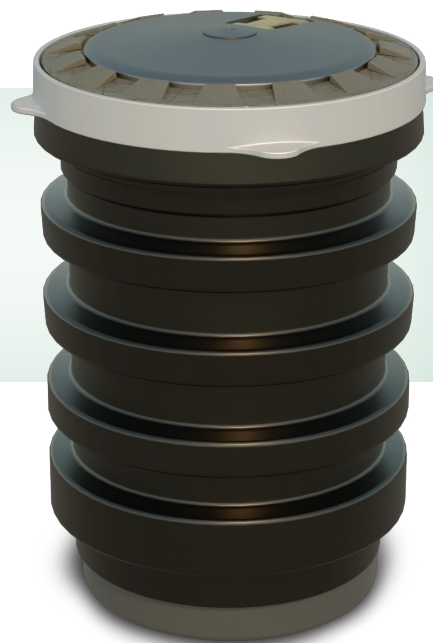
Weight: 120 lbs. (54.5 kg.)

Materials

- Cover:** Cast iron
- Mounting Ring:** Duragard®-coated ductile iron
- Bellows:** Polyethylene
- Base:** Cast iron E-coating
- Clamps:** Stainless-steel
- Seals:** Buna-N

Features

- ◆ **Top-Mounted Vacuum Test Port**
 - For quick and easy access
- ◆ **Superior Visual Gauge**
 - No messy dipsticks to contend with
 - Significantly simplifies and reduces testing time
- ◆ **Ease of Access to the Electronic Sensor for Testing**
 - Easy access for testing
 - Located to eliminate damage potential during product drops
- ◆ **Roto-Molded Primary & Secondary Buckets**
 - Thicker walls for greater durability and reliability
- ◆ **Ribbed Polyethylene Skirt Design**
 - Roto-molded for long-life durability
 - Provides rigidity for added durability
 - Provides handles on all sides for ease of installation
- ◆ **Patent-Pending Socket Design**
 - Enables the EDGE™ to install into the space of a single-wall spill-container
 - Helps to align bucket on riser
- ◆ **Patent-Pending Ledge Design**
 - Provides machined sealing face for drop tube
 - Improves overall drop tube sealing integrity
 - Eliminates face seal adaptors or de-burring of the riser pipe to obtain a flat surface for the drop tube
- ◆ **Patent-Pending Removable Adaptor**
 - Allows for quick and easy access to drop tube
 - Eliminates the need for cumbersome chain wrenches
- ◆ **Bellow Seals**
 - Improves overall sealing integrity
 - Eliminates mess and curing time found in sealants
 - Reduces service time and costs
- ◆ **SC Test**
 - Vacuum Testing Lid for Edge, 2200, 21000 and Multiports



Listings and Certifications



Ordering Specifications

The Edge™ Double-Wall Models - Fill Ports with Drain-Valves

Part #	Gal.	liter	Cover	Gauge/Sensor	lbs.	kg.
1C-3112D	5	19	Cast-Iron	Float Gauge	127	58
1C-3122D	5	19	Cast-Iron	Port Only (sensor not included)	127	58
1C-3132D	5	19	Cast-Iron	Electronic Sensor; 2 Stage, Normally Closed	127	58
1C-31512D	15	57	Cast-Iron	Float Gauge	185	84
1C-31532D	15	57	Cast-Iron	Electronic Sensor; 2 Stage, Normally Closed	185	84
1SC-3112D	5	19	Sealable	Float Gauge	127	58
1SC-3122D	5	19	Sealable	Port Only (sensor not included)	127	58
1SC-3132D	5	19	Sealable	Electronic Sensor; 2 Stage, Normally Closed	127	58
1SC-31512D	15	57	Sealable	Float Gauge	185	84
1SC-31532D	15	57	Sealable	Electronic Sensor; 2 Stage, Normally Closed	185	84

Installation Tools & Testing Equipment

1-3100-TOOL	Installation Tool for the EDGE™ DW Spill-Container
DW-VAC-TEST	Double-Wall Vacuum Tester
SC-VAC-TEST	Vacuum Testing Lid for OPW Spil Buckets

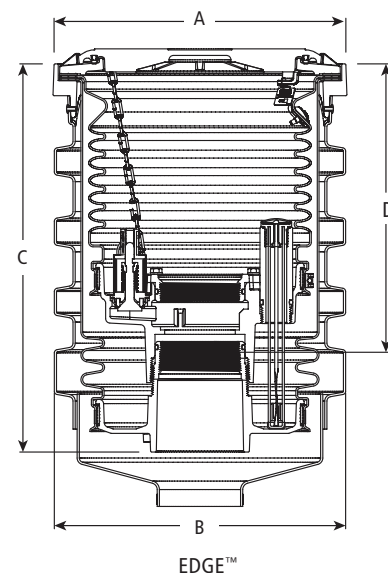
The Edge™ Double-Wall Models - Vapor Ports with Plug

Part #	Gal.	liter	Cover	Gauge	lbs.	kg.
1C-3112P	5	19	Cast-Iron	Float Gauge	127	58
1C-3122P	5	19	Cast-Iron	Port Only (sensor not included)	127	58
1C-3132P	5	19	Cast-Iron	Electronic Sensor; 2 Stage, Normally Closed	127	58
1C-31512P	15	57	Cast-Iron	Float Gauge	185	84
1C-31532P	15	57	Cast-Iron	Electronic Sensor; 2 Stage, Normally Closed	185	84
1SC-3112P	5	19	Sealable	Float Gauge	127	58
1SC-3122P	5	19	Sealable	Port Only (sensor not included)	127	58
1SC-3132P	5	19	Sealable	Electronic Sensor; 2 Stage, Normally Closed	127	58
1SC-31512P	15	57	Sealable	Float Gauge	185	84
1SC-31532P	15	57	Sealable	Electronic Sensor; 2 Stage, Normally Closed	185	84

Add the following to part number for colored powder-coated covers and rings.

Example 1C-3XXXD-W or 1SC-3XXXD-W

<input type="checkbox"/> White	-W	<input type="checkbox"/> Orange	-O	<input type="checkbox"/> Yellow	-Y
<input type="checkbox"/> Red	-R	<input type="checkbox"/> Blue	-B	<input type="checkbox"/> Bronze	-BZ



EDGE™

Dimensions 5-gallon EDGE™

	in.	cm
A	16 ⁵ / ₈	42
B	16 ¹⁹ / ₃₂	42
C	22 ¹ / ₈	56
D	16 ⁷ / ₁₆	42

Dimensions 15-gallon EDGE™

	in.	cm
A	24 ⁷ / ₈	63
B	24 ¹ / ₂	62
C	24 ¹ / ₂	62
D	18	46

Replacement Parts/Accessories

Part #	Description	Part #	Description	Part #	Description
1-21CC-XX (XX = Color)	5 Gallon Cast-Iron RT cover	211465	Visigauge Complete S/A	H12267	Wood Block Leveling Kit
1-21AC	5 Gallon Aluminum RT Cover	206017	Sensor Adaptor S/A (Primary)	202136-KIT	5 Gallon Primary Bucket with Plug
H12229M	5 Gallon Cover Seal for 1-21AC and 1-21CC	211064	Visigauge (only)	205987-KIT	15 Gallon Primary Bucket with Drain-Valve
1C-31RTR-X (x=color)	5 Gallon Snow-Plow Ring	201972	O-Ring, Visigauge Adaptor	206215-KIT	15 Gallon Primary Bucket with Plug
201689	5 Gallon Seal for Snow-Plow Ring	202013	O-Ring, Visigauge	202137-KIT	5 Gallon Secondary Replacement Kit for Float Gauge
203340	15 Gallon Rain Tight Rings	1DK-2100-EVR	Drain-Valve Sub Assembly	206010-KIT	5 Gallon Secondary Replacement Kit for Sensor Buckets
H12229M	15 Gallon RT Cover Seal	201739	Nipple Adaptor	206011-KIT	5 Gallon Secondary Replacment Kit for Electronic Sensor
SC-XXXX (XXX = Color)	5 or 15 Gallon Sealable Covers Powder-Coated	C05446M	15 Gallon Main Cover Seal	205988-KIT	15 Gallon Secondary Bucket Assembly
203035	5 Gallon Sealable Cover Replacement Snow-Plow Ring (White)	201686	S/A Secondary Gravel Guard	203269	Replacement 2 Stage, Normally Closed Sensor and Sealed Base Plug; Used in 1C-xx32 series Edge
217500	5 Gallon Sealable Cover Replacement Snow-Plow Ring (Orange)				
217501	5 Gallon Sealable Cover Replacement Snow-Plow Ring (Red)	202135-KIT	5 Gallon Primary Bucket with Drain-Valve	211079	Sensor Only Standard
217502	5 Gallon Sealable Cover Replacement Snow-Plow Ring (Yellow)			210488	Sensor Only
1DP-2100	Plug Kit			201692	O-Ring for 201739 Nipple
SCR Series	15 Gallon Sealable Cover Replacement Snow-Plow Ring	Float Gauge & Sensor Adaptor not included with replacement buckets			
Add the following to part number for colored powder-coated covers and rings. Example 1C-3XXXD-W or 1SC-3XXXD-W					
		<input type="checkbox"/> White	-W	<input type="checkbox"/> Orange	-O
		<input type="checkbox"/> Red	-R	<input type="checkbox"/> Blue	-B
		<input type="checkbox"/> Yellow	-Y	<input type="checkbox"/> Bronze	-BZ

EDGE™ Replacement Cartridge Kit

Original Edge Model	Original Product Description	Primary-Containment Replacement Kit	Secondary-Containment Replacement Kit	Primary and Secondary Containment Replacement Kit/EDGE 1 Upgrade Kits
1C-3112D / 1SC-3112D	DW EDGE: Drain-Valve + Gauge	202135-KIT	202137-KIT	202135-KIT + 202137-KIT + 211465
1C-3112P / 1SC-3112P	DW EDGE: Plug and Gauge	202136-KIT	202137-KIT	202136-KIT + 202137-KIT + 211465
1C-3122D / 1SC-3122D	DW EDGE: Drain-Valve and Sensor Access Port	202135-KIT	206010-KIT	202135-KIT + 206010-KIT + 206017
1C-3122P / 1SC-3122P	DW EDGE: Plug and Sensor Access Port	202136-KIT	206010-KIT	202136-KIT + 206010-KIT + 206017
1C-3132D / 1SC-3132D	DW EDGE: Drain-Valve & 2 Stage Norm. Closed Sensor	202135-KIT	206011-KIT	202135-KIT + 206011-KIT + 206017
1C-3132P / 1SC-3132P	DW EDGE: Plug & 2 Stage Norm. Closed Sensor	202136-KIT	206011-KIT	202136-KIT + 206011-KIT + 206017
1C-3101D / 1SC-3101D	EDGE 1: Drain-Valve	203193-KIT		
1C-3101P / 1SC-3101P	EDGE 1: Plug	203194-KIT		
1C-31512D / 1SC-31512D	DW Edge: 15 Gallon Drain-Valve + Gauge	205987-KIT	205988-KIT	205987-KIT + 205988-KIT + 211465
1C-31512P / 1SC-31512P	DW Edge: 15 Gallon Plug + Gauge	206215-KIT	205988-KIT	206215-KIT + 205988-KIT + 211465
1C-3142D / 1SC-3142D	DW Edge: Drain and Tri-State Sensor	202135-KIT	210493-KIT	202135-KIT + 210493-KIT + 206017
1C-3142P / 1SC-3142P	DW Edge: Plug and Tri-State Sensor	202136-KIT	210493-KIT	202136-KIT + 210493-KIT + 206017

Replacement Parts/Accessories

Part #	Description
SC-Test	Testable Sealable cover for SC Edge or 1-2200 buckets

4" Threaded Nipples for Mating Spill Bucket to Adaptor

Part #	Description
TC-400	4" Torque Cap
H15144M	4" NPT Nipple, 4" Length
H12806M	4" NPT Nipple, 5" Length
VPN4X7	4" NPT Nipple, 7" Length
H15271M	4" NPT Nipple, 8" Length
H15268M	4" NPT Nipple, 10" Length

4" Riser Extenders

Part #	Description
206121	4" NPT Riser Pipe Extender, adds 2" to Height
206122	4" NPT Riser Pipe Extender, adds 3.25" to Height

206122 Adapter (adds 3.25")



206121 Adapter (adds 2")



SC Tester

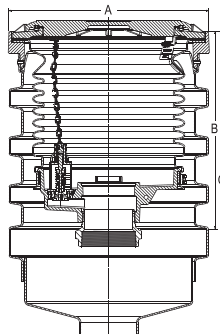


Threaded Nipple

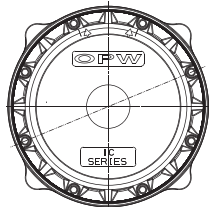
OPW EDGE 1™ Single-Wall Spill-Container

Introducing an advanced single-wall spill-container – the new EDGE 1™ by OPW. The new EDGE 1™ is rugged, easier to install and service, upgrades to a double-wall and is more reliable than current single-wall spill-containers available today. Leading-EDGE design features and superior materials of construction combine with expert spill-containment engineering excellence to deliver more benefits than any other single-wall spill-container, making the EDGE 1™ number one in:

- ◆ Installation and upgradeability ease
- ◆ Serviceability ease
- ◆ Durability and long-life reliability



A = 16 5/8"
B = 16 15/32"
C = 25 1/4"

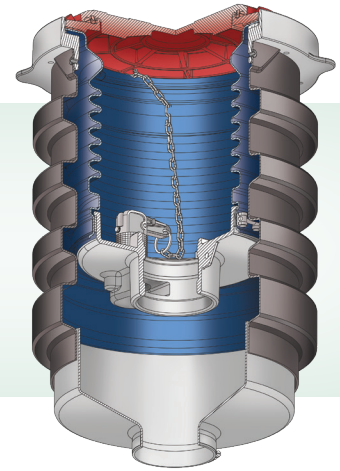


Replacement Parts/Accessories

Part #	Description
201689	Mounting Ring Seal
201530	Snow-Plow Ring
201692	O-Ring, Nipple Adaptor
1-21CC	Cover
203035	Sealable Cover Ring
H12229M	Cover Seal
SC-xxxx	(Xxxx=Color) Sealable Cover
1DK-2100-EVR	Drain-Valve Sub Assembly
203193-KIT	Replacement 5-Gallon with Drain-Valve
203194-KIT	Replacement 5-Gallon with Drain Plug
IP-2105	Hand Pump

Materials

Cover: Cast iron
Mounting Ring: Duragard®-coated ductile iron
Bellows: Polyethylene
Base: Cast iron E-coating
Clamps: Stainless-steel
Seals: Buna-N



Features

- ◆ Upgradeable to a double-wall bucket without breaking concrete
- ◆ Quick, easy replacement of spill bucket and mounting ring without breaking concrete – significantly reduces labor time and cost
- ◆ High-quality materials of construction
 - Roto-molded technology - provides for thicker, more robust bellows
 - Heavy-duty ductile-iron mounting ring - provides superior long-term reliability and damage protection against traffic drive-over and snow-plows
 - The integral pull-to-open drain
- ◆ Thread-on bucket design - ensures leak-free integrity, especially in the event of ground movement
- ◆ Corrosion-resistant polyethylene skirt – increased rigidity and durability, superior reliability over corrosive metallic skirts
- ◆ Unique concrete anchoring ring – wide-lip and four (4) convenient anchoring ears provide for better anchoring and longevity

valve uses non-corrosive and stainless-steel materials, unlike our competitors, which have corrosive materials in their design (a drain plug version is also available)

Ordering Specifications

Model #	Description	Weight	
		lbs.	kg
1C-3101D	The EDGE 1™ SW Spill-Container, 5 Gallon capacity, with Cast-Iron Cover and Drain-Valve	117	53
1C-3101P	The EDGE 1™ SW Spill-Container, 5 Gallon capacity, with Cast-Iron Cover and Drain Plug	117	53

NOTE: Any model can be purchased with a sealable cover option by using part number 1SC-XXXXD or 1SC-XXXXP.

NOTE: FSA-400-S must be installed with the EDGE 1™ to be upgraded to a double-wall spill bucket.

Add the following to part number for colored powder-coated covers and rings. Example 1C-3XXXX-W

<input type="checkbox"/> White	-W	<input type="checkbox"/> Orange	-O	<input type="checkbox"/> Yellow	-Y
<input type="checkbox"/> Red	-R	<input type="checkbox"/> Blue	-B	<input type="checkbox"/> Bronze	-BZ

Installation Tool

Model #	Description
61SA-TOOL	Wrench for Installation of the EDGE 1™ SW Spill-Container

Listings and Certifications

CARB
California Air Resources Board



Materials

Cover: Black Epoxy-Coated Cast-Iron

Mounting ring: Duragard®-coated ductile iron

Bellows: Polyethylene

Base: Cast iron E-coating

Seals: Buna-N



OPW 1-2200 Series Replaceable Single-Wall Spill-Container

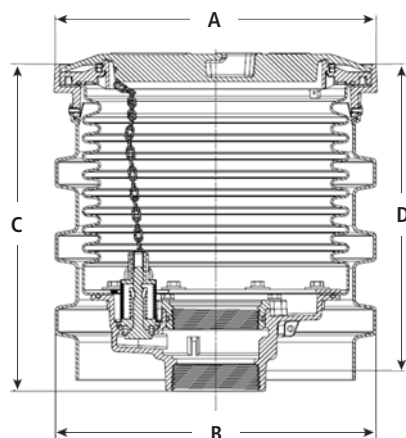
Introducing an affordable, all-accessible, all-replaceable and all-maintainable spill-container from OPW. Never break concrete again with our new EPA-Compliant UST Solution for today, tomorrow and the future.

Features

- ◆ Designed for proposed 2014 EPA Regulations and beyond
- ◆ Prepares you for future compliance
- ◆ Removable Bellows and Ring
- ◆ **Unique Flange Adaptor Feature-** Allows quick and easy removal of overfill valve without torquing base
- ◆ Built-In Face Seal Adaptor
- ◆ Innovative Snow-plow Ring-less, Liquid-Tight Cover with Integrated Lift Handle design
- ◆ Easy access for overfill-prevention valve testing and inspection
- ◆ Replace bucket without breaking concrete
- ◆ **ULC-Approved**

Ordering Specifications

Model #	Description
1C-2200D	Single-Wall, Field Replaceable Spill-Container with Drain-Valve
1C-2200P	Single-Wall, Field Replaceable Spill-Container with Drain Plug
1-3100-TOOL	Installation Tool, Used for Edge and 1-2200 Spill-Containers



Dimensions

	in.	cm	lbs.	kg
A	16 ⁵ / ₈	42	77	34.9
B	16 ¹⁹ / ₃₂	42	77	34.9
C	17 ² / ₃	45	77	34.9
D	16 ⁷ / ₁₆	42	77	34.9

1-3100-TOOL
Installation Tool



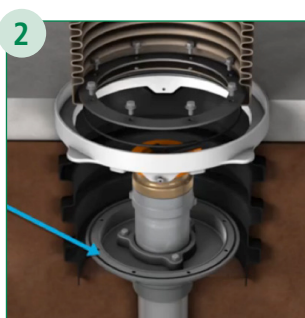
Listings and Certifications



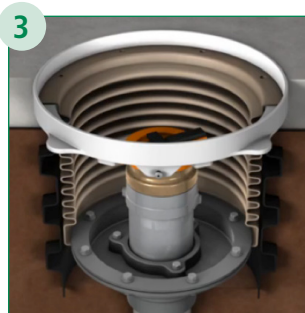
Replace Bellows in 3 Easy Steps



Remove Upper Bolts and Ring



Remove Lower Bolts and Ring and Remove Bellows



Replace Bellows, Reinstall Upper and Lower Rings

No Need to Remove Base in Order to Replace Bellows

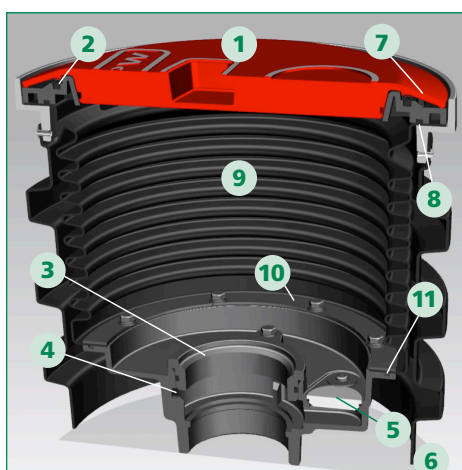
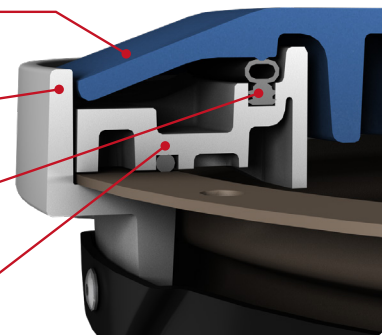
Liquid-Tight Cover

Special Cover and Ring Design
Seals Out Water and Debris

Eliminates Need for Snow-Plow Ring
Flush with Finish Grade

Proven "Bubble Seal"

Removable Compression Ring



1-2200 Series Replacement Parts

	Part/Kit Number	Description
1	207235	Cover
2	H12229M	Cover Seal
3	201739	Flange Adaptor
4	201692	Flange Adaptor O-ring
5	1DK-2100-EVR	Drain-Valve Sub Assembly
6	1DP-2100	Drain Plug Kit
7	208951	Upper Ring Replacement Kit (Includes; O-ring and Hardware)
8	207243	Upper Ring O-ring
9	208952	Bellows Replacement Kit (Includes; O-rings, Split Rings, and Hardware)
10	207212	Lower Split Ring, Each (2 Required per Spill-Container)
11	207211	Lower Bellows O-ring
	208197	Installation Instructions

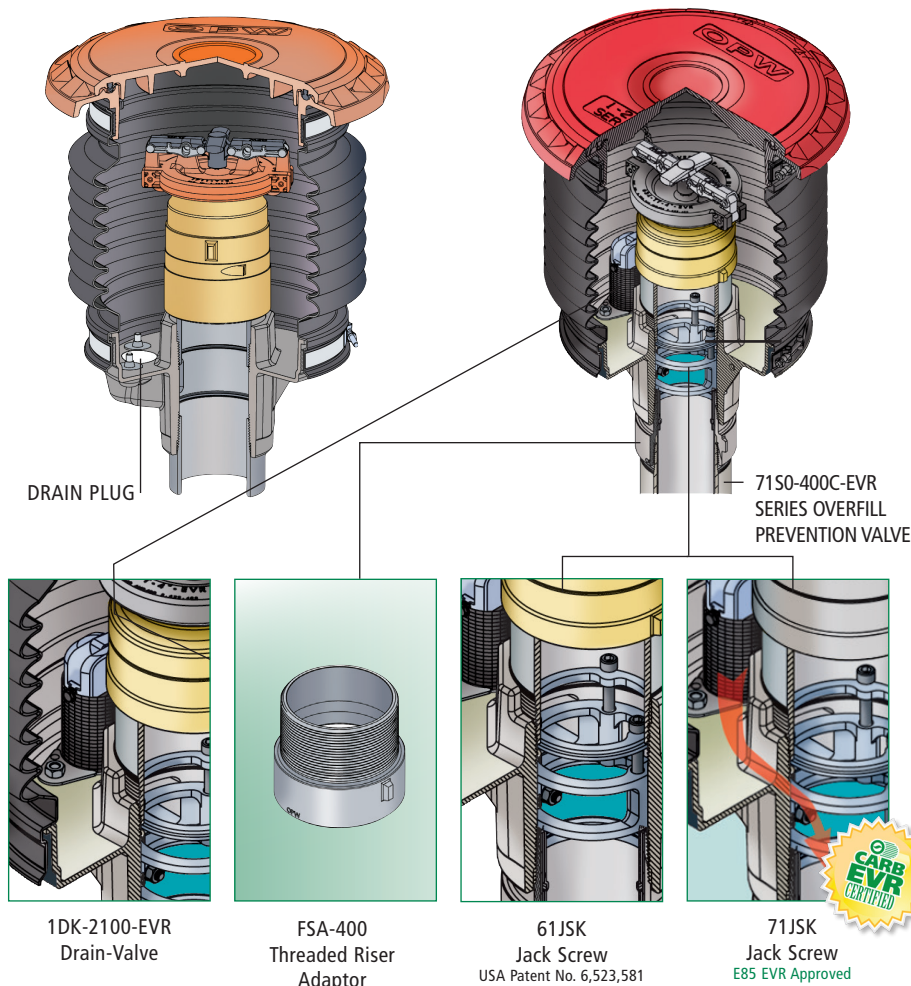
1-2100-PEVR Series Vapor Recovery Spill-Container

1-2100-DEVR Series Product-Fill Spill-Container

OPW 1-2100-EVR Series Direct-Bury Spill-Containment For CARB/EVR

The OPW Thread-On 1-2100-EVR Series Spill-Containers are certified for installation on OPW Phase I EVR Systems. All Fill-Port Spill-Containers feature an enhanced 1DK-2100-EVR vapor-tight drain valve (DEVR Models). The Vapor Return Spill-Containers (PEVR Models) feature a permanent plug in the drain port as per EVR requirements. The 1-2100-EVR Series Thread-On Spill-Containers are available in Composite or Cast-Iron bases with either 5- or 15-gallon buckets.

The FSA-400 Threaded Riser Face Seal Adaptor is installed on the fill pipe below the spill-container to provide a true sealing surface for the drop tube flange on the 61SO and 71SO overfill-prevention valve. The 61SO and 71SO series valves are installed in the base of the OPW EVR spill-container with the patent-pending 61JSK Jack Screw device. This configuration allows liquid in the spill-container to be drained directly into the drop tube thereby isolating the drain valve from the tank ullage, eliminating a notorious leak point in previous systems.



OPW Threaded Riser Adaptor (Face Seal Adaptor)

An OPW FSA-400 Threaded Riser Face Seal Adaptor provides a flat, true sealing surface on threaded pipes where a gasket seal exists per EVR requirements. The FSA-400 is installed on the fill pipe riser below the spill-container to provide a true sealing surface for the drop tube flange on the overfill-prevention valves. The FSA-400 is also required on tank-gauging risers and optional on vapor risers and rotatable adaptors.

61JSK, 71JSK (Jack Screw Device) Ordering Specifications

Product #	Description
FSA-400	4" Face Seal Adaptor
FSA-400-S	4" Short Face Seal Adaptor for Cast-Iron Base Only
61JSK-4410	Jack Screw Kit for Composite Base Spill Bucket
61JSK-44CB	Jack Screw Kit for Cast-Iron Base Spill Bucket
71JSK-4RMT	Remote Fueling Jack Screw Kit E85 EVR Approved
71JSK-44MA	Jack Screw Kit for Cast-Iron Base Spill Buckets E85 EVR Approved

OPW 1-2100 Series Thread-On Spill-Containers

OPW Spill-Containment Manholes are designed to prevent spilled product from entering the soil near the fill and vapor-return riser connections on underground storage tanks during normal tank filling operation, or in the event of tank overflow. The spill-containers catch spillage to help prevent soil contamination and groundwater pollution. OPW Thread-On Spill-Containment Manholes are generally used on new tank or riser pipe installations.

Materials

Cover: Cast aluminum or cast-iron
Mounting Ring: Cast iron E-coating
Bellows: Polyethylene
Base: Cast iron E-coating or Duratuff® II
Clamps: Stainless-steel
Seals: Nitrile

1-2115,
15-Gallon



Features

- ◆ **Easy Installation** – reduces job-site time and installation costs. OPW Thread-On Spill-Containers screw directly onto 4" NPT riser. No external connections to make; adjust the final grade height and support the unit with backfill
- ◆ **Integral Pull-to-Open Drain-Valve** – allows high-speed drainage of excess product into the tank. Designed with a convenient self-cleaning seal and removable screen for easier component cleaning
- ◆ **Capacity** – available in a true 5-gallon capacity as well as 15-gallon capacity
- ◆ **Rain-Shedding Cover** – available in either cast-aluminum or cast-iron, this unique design incorporates a seal in the underside of the cover. The seal seats between two dams on the mounting ring to prevent surface water from entering the spill-container.
- ◆ **Fuel Compatibility** – designed to accommodate the fuels of the future, including methanol, ethanol and fuels with MTBE additives
- ◆ **Product Identification Tags** – available for both the cover and bucket to positively identify the product contained in the UST with standard API symbols (See product I.D. tag specification page for more information: page 85.)
- ◆ **Heavy-Duty Mounting Ring** – the angled ramp design offers superior protection against snow-plow and traffic damage, and provides for secure concrete anchoring
- ◆ **Corrugated Bellows** – can be adjusted +/- 1" for desired grade-level
- ◆ **Duratuff® II or Cast-Iron Base** – composite Duratuff® II material is lightweight, durable, and conductive. A rugged, optional, cast-iron base is also available.
- ◆ **Highway 20 Rated (H20 /HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating

Listings and Certifications



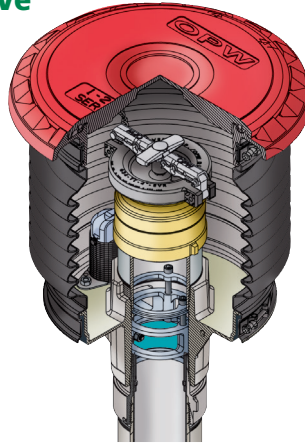
DEVR Models – Fill Port with Drain-Valve

Duratuff® II Base with Drain-Valve Models

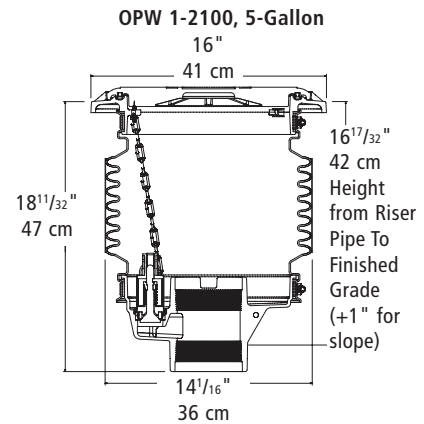
Model #	Gal.	Liter	Cover	lbs.	kg
1-2100-DEVR	5	19	Aluminum	40	18
1C-2100-DEVR	5	19	Cast-Iron	53	24
1-2115-DEVR	15	57	Aluminum	47	21
1C-2115-DEVR	15	57	Cast-Iron	60	27

Cast-Iron Base with Drain-Valve Models

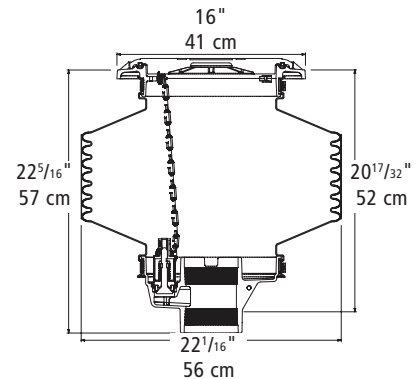
Model #	Gal.	Liter	Cover	lbs.	kg
1-2100C-DEVR	5	19	Aluminum	40	18
1C-2100C-DEVR	5	19	Cast-Iron	53	24
1-2115C-DEVR	15	57	Aluminum	47	21
1C-2115C-DEVR	15	57	Cast-Iron	60	27



1-2100-DEVR Series
Product Fill Spill-Container



OPW 1-2115, 15-Gallon



*Subtract 2" from height dimension for Cast-Iron Base Models.

NOTE: 20 17/32" dimension is height from riser pipe to finish grade (+1" for slope)

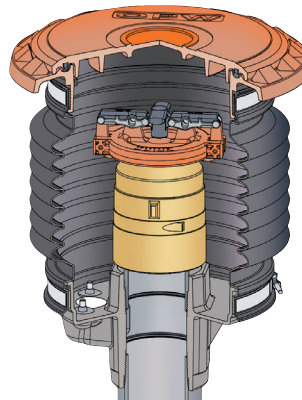
PEVR Models – Vapor Port with Plug

Duratuff® II Base with Plug Models


Model #	Gal.	Liter	Cover	lbs.	kg
1-2100-PEVR	5	19	Aluminum	40	18
1C-2100-PEVR	5	19	Cast-Iron	53	24

Cast-Iron Base with Plug Models

Model #	Gal.	Liter	Cover	lbs.	kg
1-2100C-PEVR	5	19	Aluminum	40	18
1C-2100C-PEVR	5	19	Cast-Iron	53	24



1-2100-PEVR Series
Vapor Recovery Spill-Container

 **4" Threaded Nipples
for Mating Spill Bucket
to Adaptor**

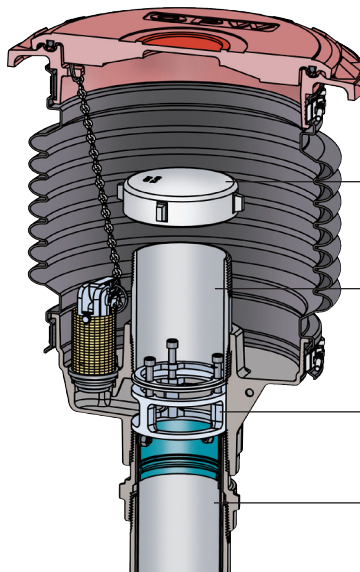
Part #	Description
TC-400	4" Torque Cap
H15144M	4" NPT Nipple, 4" Length
H12806M	4" NPT Nipple, 5" Length
VPN4X7	4" NPT Nipple, 7" Length
H15271M	4" NPT Nipple, 8" Length
H15268M	4" NPT Nipple, 10" Length

Replacement Parts

Part #	Description
1DK-2100-EVR	Drain-Valve Kit
1-21AC	Aluminum Cover w/ Seal
1-21CC	Cast-Iron Cover w/ Seal
H12229M	Cover Seal
1PPK-2100	Hand Pump & Plug Kit for 1-2100
1DP-2100	Replacement Drain Plug Kit for 1-2100

Add the following to part number for color powder-coated 1-21CC covers

<input type="checkbox"/> White	-W	<input type="checkbox"/> Orange	-O	<input type="checkbox"/> Yellow	-Y
<input type="checkbox"/> Red	-R	<input type="checkbox"/> Blue	-B	<input type="checkbox"/> Bronze	-BZ



TC-400 Torque Cap

Provides an easy means of threading a 4" NPT nipple into a spill-container. The OPW TC-400 coupled with the OPW 61SA-TOOL can provide the necessary torque requirements for installing adaptor nipples for spill-containers. The TC-400 can easily be removed without disturbing the installed threaded nipple. The TC-400 also eliminates the need for a strap or chain wrench.

4" Threaded Pipe Nipple

OPW pipe nipples are CNC machined, providing a smooth sealing surface where a gasket seal exists. Available in various lengths to custom fit the necessary height requirements for Fill and Vapor Adaptors.

61JSK Jack Screw Device

See page 84 for detailed information.

FSA-400 Face Seal Adaptor

See page 84 for detailed information.

The following products are in compliance with California Water Resources Control Board (W.R.C.B.) for coating of buried metal components, such as stainless-steel clamps or entire Spill-Containment Bucket bottoms.

Part #	Description
SL-1100	Urethane Sealant (10.3 oz.)
W.R.C.B. approved CCR Title 23, Div. 16, Sec. 1631 & 2636	

OPW 1SC-2100-EVR Series Sealable Cover Spill-Containers

OPW Spill-Containment Manholes are designed to prevent spilled product from entering the soil near the fill and vapor-return riser connections on underground storage tanks during normal tank-filling operations, or in the event of tank overfill. The spill-containers catch spillage to help prevent soil contamination and groundwater pollution. The OPW 1SC-2100-EVR Series Sealable Cover Spill-Containers are designed to eliminate the problems associated with water entering grade-level spill-containers. The operation of the cover is similar to that of a "plumbers plug." When the lever is latched down, the plates are drawn together, expanding the seal against the machined mounting ring wall. The 1SC-2100-EVR spill-containers are ideal for areas with a high water table, areas subject to tropical rain and standing water, and cold regions where melting snow and road salt can enter standard spill-containers.

Materials

Cover: Cast aluminum
Cover Seal: Low-swell nitrile
Lever: Bronze
Mounting Ring: Teflon® plasma-coated cast-iron
Bellows: Polyethylene
Base: Duratuff® II or cast-iron E-coating
Clamps: Stainless-steel
Seals: Low-swell nitrile



Lid Features

- ◆ **Simple "Plumbers Plug" Operation** – cover seal is expanded against mounting ring wall
- ◆ **Vertical Sealing Surface** – prevents gravel and debris from damaging or interfering with the cover seal
- ◆ **Machined Sealing Surface** – ensures watertight seal. Teflon®-coated stainless-steel
- ◆ **Field Replaceable Seal** – designed for all-weather performance
- ◆ **Clear Anodized Aluminum Top Plate** – deters cover theft
- ◆ **Potted Hinge Mechanism** – prevents ice and debris from hindering lever operation
- ◆ **Product Identification Tags** –

Additional Features

available for both the spill-container cover and bucket to positively identify the product contained in the UST with standard API symbols (See product I.D. tag specification page for more information: page 87.)

- ◆ **Capacities** – 5- and 15-gallon
- ◆ **Fuel Compatibility** – designed to accommodate all fuels, including methanol, ethanol and MTBE
- ◆ **Highway 20 Rated (H20/HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating

Listings and Certifications



Ordering Specifications

Plug or Drain-Valve Models

Model	Gal.	Liter	Base	Drain-Valve or Drain Plug	Cover	lbs.	kg
1SC-2100-DEVR	5	19	Composite	Drain-Valve	Aluminum	47	21
1SC-2115-DEVR	15	57	Composite	Drain-Valve	Aluminum	47	21
1SC-2100-PEVR	5	19	Composite	Drain Plug	Aluminum	47	21
1SC-2115-PEVR	15	57	Composite	Drain Plug	Aluminum	47	21
1SC-2100C-DEVR	5	19	Cast-Iron	Drain-Valve	Aluminum	53	24
1SC-2115C-DEVR	15	57	Cast-Iron	Drain-Valve	Aluminum	53	24
1SC-2100C-PEVR	5	19	Cast-Iron	Drain Plug	Aluminum	53	24
1SC-2115C-PEVR	15	57	Cast-Iron	Drain Plug	Aluminum	53	24

Dimensions

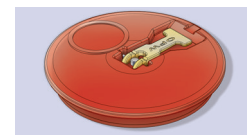
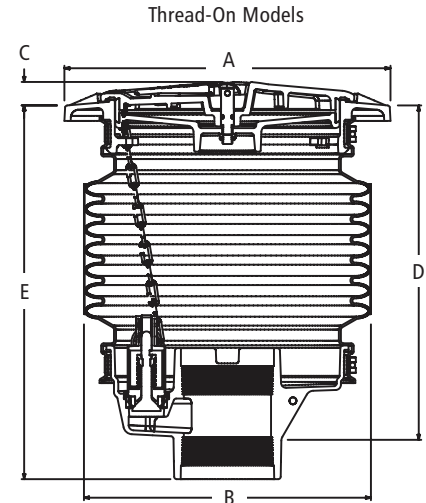
Slip-On Models (see drawing on right)

	1SC-2105		1SC-2155	
	in.	cm	in.	cm
A	16	41	16 ⁷ / ₃₂	41
B	14	36	22	56
C	1 ⁵ / ₃₂	3	1 ⁵ / ₃₂	3
D*	10 ¹ / ₁₆	25	14 ¹ / ₈	36
E*	17	43	21	53

*Subtract 2" from "E" dimension for Cast-Iron Base Models.

Thread-On Models (see drawing on right)

	1SC-2100		1SC-2115	
	in.	cm	in.	cm
A	16	40	16 ⁷ / ₃₂	41
B	14 ¹ / ₁₆	36	22	56
C	1 ⁵ / ₃₂	3	1 ⁵ / ₃₂	3
D	16 ³ / ₈	42	20 ¹ / ₂	52
E*	18 ⁵ / ₁₆	47	22 ¹ / ₂	57



Sealable Covers

SC-WHITE	
SC-RED	
SC-YELLOW	
SC-ORANGE	
SC-BLACK	
SC-PLAIN	

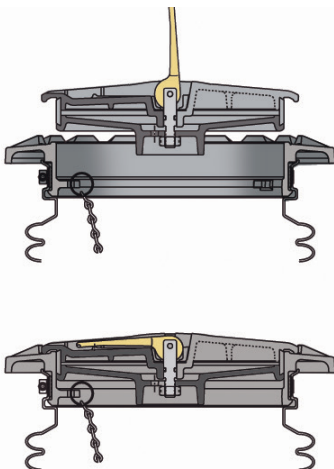
Replacement Parts

Part #	Description
SC-PLAIN	Replacement Cover
H13931M	Cover Gasket
C04101B	Bronze Lever Arm
D01874M	Lower Plate
C04141M	Rubber Insert
H12927M	Adjustment Nut
1SC-TOOL	Optional Easy-Opening Tool
1DK-2100-EVR	Drain-Valve Kit

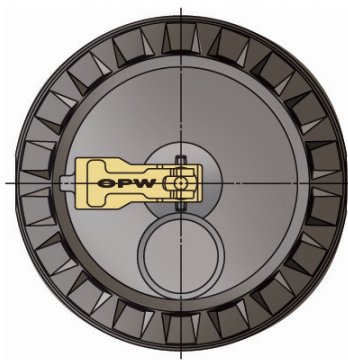
4" Threaded Nipples for Mating Spill Bucket to Adaptor

Part #	Description
TC-400	4" Torque Cap
H15144M	4" NPT Nipple, 4" Length
H12806M	4" NPT Nipple, 5" Length
VPN4X7	4" NPT Nipple, 7" Length
H15271M	4" NPT Nipple, 8" Length
H15268M	4" NPT Nipple, 10" Length

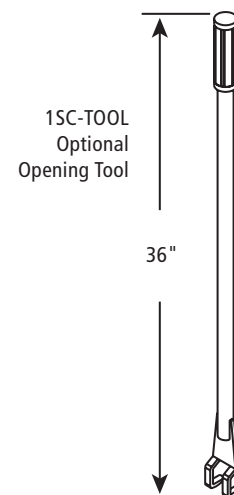
Sealable Cover Operation



Lid in Closed Position



1DK-2100 Drain-Valve Kit
Instruction Sheet Order
Number: **H11471M**



OPW 1-2105 Series Slip-On Spill-Containers

OPW Slip-On Spill-Containment Manholes are used on new or existing UST riser pipes. The spill bucket slides onto 3" or 4" fill and vapor-return riser pipes and is then secured in place. Slip-on spill-containers provide a fast, economical way to replace uncontained manholes or fill boxes.

Materials

Cover: Cast aluminum or cast-iron
Mounting Ring: Duragard®-coated cast-iron
Bellows: Polyethylene
Base: Duratuff®
Clamps: Stainless-steel
Seals: Nitrile

1-2105, 5-Gallon
Slip-On Spill-Container



Features

- ◆ **Easy Installation** – clamps directly onto a 4" riser pipe. Reduces job-site time and installation costs; no need to remove, cut or thread riser pipe
- ◆ **Capacity** – available in a true 5-gallon capacity as well as a 15-gallon capacity
- ◆ **Rain-Shedding Cover** – available in either cast-aluminum or cast-iron, this unique design incorporates a seal in the underside of the cover. The seal seats between two dams on the mounting ring to prevent surface water from entering the spill-container
- ◆ **Fuel Compatibility** – designed to accommodate the fuels of the future, including methanol, ethanol and fuels with MTBE additives
- ◆ **Optional Suction Hand Pump** – 8 oz. per stroke capacity for high-speed evacuation of excess liquid. Allows user to pump product back into the tank or out of the spill-container for proper disposal
- ◆ **Product Identification Tags** – available for both the spill-container cover and bucket to positively identify the product contained in the UST with standard API symbols (See product I.D. tag specification page for more information: Page 101.)
- ◆ **Offset-Base Pipe Entry** – 1" offset allows for proper clearance with close fill/vapor riser spacing on tanks
- ◆ **Heavy-Duty Mounting Ring** – the angled ramp design offers superior protection against snow-plows and provides for secure concrete anchoring
- ◆ **Highway 20 Rated (H20/HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating
- ◆ **Compatible with DEF fuels**

Spill-Container Slip-on Model
Instruction Sheet Order Number:
H12262M

Listings and Certifications



Ordering Specifications

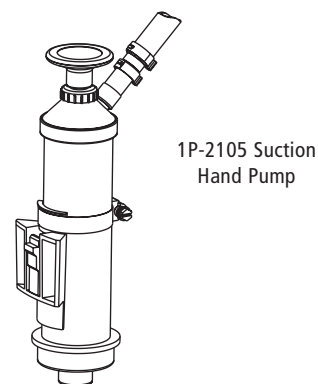
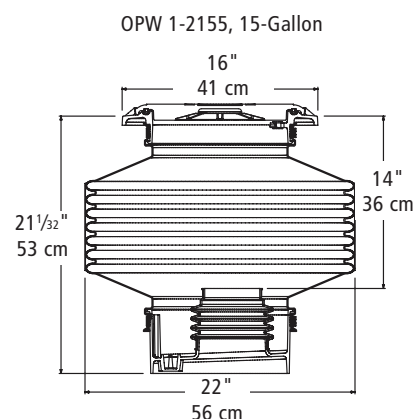
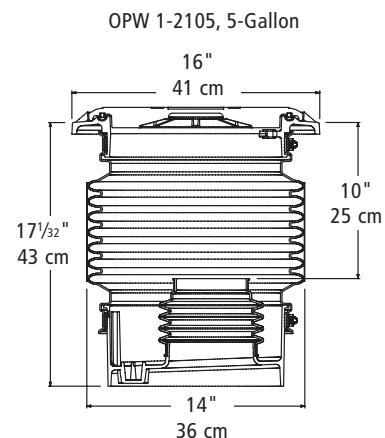
Model	Gal.	Liter	Cover	lbs.	kg
1-2105	5	19	Aluminum	39	18
1C-2105	5	19	Cast-Iron	53	24
1-2155	15	57	Aluminum	45	21
1C-2155	15	57	Cast-Iron	55	25
1SC-2105	5	19	Sealable	39	18
1SC-2115	15	57	Sealable	45	21

Replacement Parts/Accessories

Part #	Description
1-21AC	Aluminum Cover w/ Seal
1-21CC	Cast-Iron Cover w/ Seal
1P-2105	Optional Hand Pump Kit

Part #	Description
H12229M	Cover Seal
201567	Inner Bellows
201759	4 x 3 Reducer Insert

OPW 1-2105 Series Slip-On Spill-Containers



OPW 101BG-2100 Series Below-Grade Spill- Containers

OPW Below-Grade Spill-Containment Manholes are used in new tank or riser pipe installations. The watertight spill-containment chamber is installed completely below grade-level. A grade-level manhole cover lies flush with the driveway grade to reduce a tripping hazard and the potential for damage from snow-plows and traffic. Surface water drains into the backfill between the manhole skirt and the exterior of the containment bucket. Below-grade spill-containers are available in three ad-on and slip-on configurations in 5- and 15-gallon capacities.

101BG Slip-on Model Instruction
Sheet Order Number: **H12579M**

101BG-2100 Instruction Sheet
Order Number: **H12260M**

Important Notice: The OPW101BG-2100 Spill-Container Series does not prevent contamination of the soil or backfill resulting from spills flowing between the spill-container and the outer shell. Ground contamination may result if the spill-container is filled beyond capacity, or if a spill occurs outside the spill-containment cell.

- ◆ **Highway 20 Rated (H20/HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating.

Materials

Grade Cover: Fiberglass-reinforced composite (steel optional)
Lid: Glass-reinforced composite
Lever, top case: Polyethylene
Outer shell: Polyethylene, powder-coated steel
Containment cell: Polyethylene
Base: Duratuff® II or cast-iron



Features

- ◆ **Pull-to-Open Drain-Valve** – allows high-speed drainage of excess product into the tank. Designed with a convenient self-cleaning seal and removable screen for easier component cleaning (CARB Approved)
- ◆ **Capacity** – 5-gallon and 15-gallon capacities
- ◆ **Outer Shell** – the outer shell isolates the containment vessel from the surrounding concrete and gravel. This high-density polyethylene shell is designed to provide space between the outer shell and the containment vessel to allow any surface water that enters to flow into the backfill, not the containment vessel. Elimination of water in the spill-container reduces product contamination and ice formation during cold winter months
- ◆ **Vapor-Tight Lid** – a unique, hinged and sealed containment-vessel lid provides a vapor-tight seal, designed to prevent vapors from escaping at ground level while eliminating the accumulation of dirt and water that contaminate fuel. Incorporating a special lid-interlock design, the grade-level cover cannot be replaced on the outer shell without the lever being in the closed and locked position
- ◆ **Composite Grade Level Cover** – made of sturdy fiberglass-reinforced composite, the grade cover is less prone to theft than aluminum covers, and lighter in weight than cast-iron. In addition, the cover lies flush with the actual grade so no ramps are required to support the cover, eliminating snow-plow hazards and “speed bumps” (Optional steel-plate cover is also available)
- ◆ **Fuel Compatibility** – designed to accommodate the fuels of the future, including methanol, ethanol and fuels with MTBE additives
- ◆ **Easy Installation** – reduces job-site time and installation costs. Simply thread the Duratuff® II base (cast-iron base is optional) onto a standard 4" Schedule 40 pipe. Guides are provided to assure proper positioning of the spill-container. The hinged lid orientation is adjustable during installation for site-specific placement
- ◆ **Product Identification Tags** – available for both the spill-container cover and bucket to positively identify the product contained in the UST with standard API symbols (See product I.D. tag specification page for more information: page 91.)

Listings and Certifications

CARB Certifications and Listings

101BG(S)-2100
101BG(S)-2115

Approval Letter #93-26



Ordering Specifications

Duratuff® II Base Models

Model	Gal.	Liter	Drain-Valve	lbs.	kg
101BG-2100	5	19	Pull	60	27
101BG-2105**	5	19	None	60	27
101BG-2115	15	57	Pull	65	29

**Slip-on Base

Cast-Iron Base Models

Model	Gal.	Liter	Drain-Valve	lbs.	kg
101BG-2100C	5	19	Pull	72	33
101BG-2115C	15	57	Pull	77	35

Dimensions

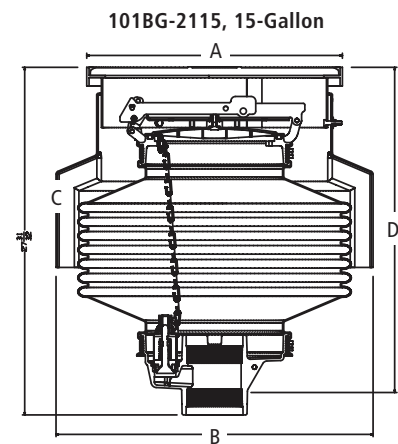
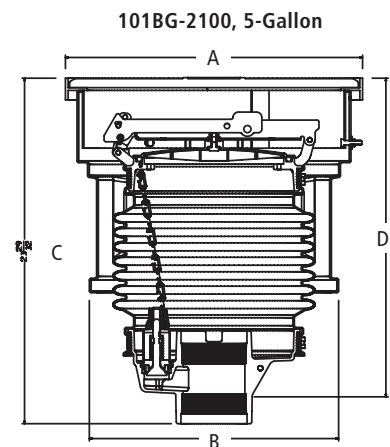
	101BG-2100		101BG-2115	
	in.	cm	in.	cm
A	20 ⁹ / ₁₆	52	20 ⁹ / ₁₆	52
B	17 ¹ / ₄	44	25 ¹ / ₂	65
C*	23 ²⁹ / ₃₂	61	27 ³¹ / ₃₂	71
D	22 ¹ / ₁₆	56	26 ⁵ / ₃₂	66

*Subtract 2" from "C" dimension for Cast-Iron Base Models.

Replacement Parts/Accessories

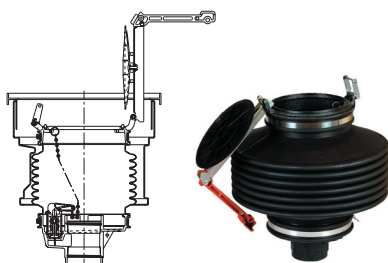
Part #	Description
1DK-2100-EVR	Pull Drain-Valve
101BG-21AR	Inside Hatch Height Extender
101BG-21LA	Red Lever & Crossarm Assembly
101BG-LATCH	Latch Kit; Yoke, Cotterpin & Spring
101BG-BUCKET	5 Gallon Replacement Spill Container
C04785M	5 Gallon Insert Support

Part #	Description
101BG-COVER	Composite Manhole Cover
E00491	Complete Replacement Top Assembly
H11671M	Steel Manhole Cover
H12280M	Ring Seal
H12620	Inside Hatch
P110-20LID	Steel Manhole Cover w/ID Tag System

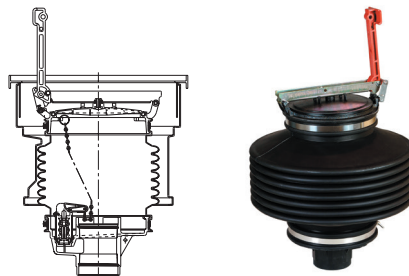


NOTE: "D" dimension is height from riser pipe to finish grade (+1" for slope)

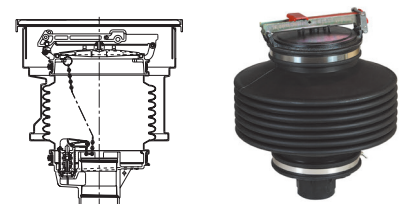
Operation of 101BG Lid



Lid and lever in open position.



Lid down, but not closed. Lever still in upright position preventing replacement of grade cover.



Lid and lever in closed and locked position. Grade cover now easily replaced on rim.

1DK-2100 Drain-Valve Kit Instruction Sheet Order Number: H11471M

OPW FibreTite Multiport Spill-Containment

OPW "FibreTite" Multiport Spill-Containment Manholes provide spill-containment for underground storage tank (UST) fill pipes and vapor recovery risers.

Multiports are installed over the top of tank sumps to preserve future access to the tank top and to facilitate containment of tank-bung fittings.

OPW "FibreTite" watertight covers are easy to remove. The composite manhole covers are available with center or offset port for access to fill risers.

FibreTITE
COMPOSITE MULTIPORT

Materials:

Cover: Fiberglass

Frame: Fiberglass

Skirt: Fiberglass

Features & Benefits:

- ◆ Lightweight - reduce risk of back, foot and hand injuries
- ◆ UV resistant
- ◆ Standard duty (20-ton load rating)
- ◆ No bolts required to seal top cover
- ◆ Anti-slip surface
- ◆ Composite construction; does not corrode
- ◆ Watertight, sealed design
- ◆ Monolithic structure eliminates delaminating
- ◆ Ergonomic, single-person removal and replacement with Fibrelite lifting handle
- ◆ Easy access watertight sump inspection port
- ◆ Replaceable double-wall spill-containment
- ◆ Easy access to overfill-prevention valve

OPW FibreTite Multiport and Sump System Kit

Includes:

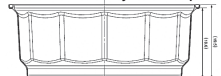
- | | | | |
|-------------------|--------------------|------------------------|-------------|
| - Multiport Cover | - Spill-Containers | - Clamping Kits | - Top Hat |
| - Frame | - Port Covers | - Water-Spill Platform | - Sump Base |
| - Skirt | - Shroud Boot | | |

FibreTite Multiport Spill-Containment Ordering Specifications

FTSX-XXXX XX - XXXXXX - X (X)

BASE DEPTH

M - Medium Bury (54" depth)

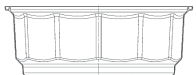


D - Deep Bury (64" depth)

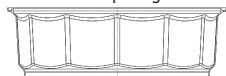


BASE DIAMETER

4237 - 42" Base & 37" Opening



4837 - 48" Base & 37" Opening



BASE MOUNTING

CR - Collar Ring



SB - Solid Bottom



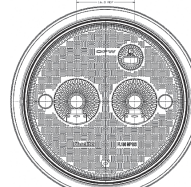
RF - Reverse Flange



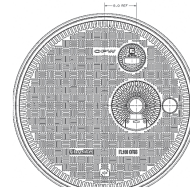
COVERCONFIGURATION

MP3716S - Multiport @ 16" Centers

SB - Solid Bottom



OF378S - Offset @ 8" offset



PORTCOVERCOLOR

BL - Black/Orange Cover
B - Blue/Orange Cover
G - Gray/Orange Cover
GR - Green/Orange Cover
O - Orange/Orange Cover
R - Red/Orange Cover
W - White/Orange Cover
Y - Yellow/Orange Cover

*Note: OF378S cover configuration will NOT include the Orange cover

PORTCOVER OPTION

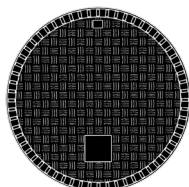
BLANK - FC-11 Cover



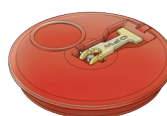
SC - Powder-Coated Sealable Cover



All Fill & Vapor Covers ship with Composite FC-11 Spill Port Covers.*



Add "SC" to the end of the part for Sealable Covers.



Listings and Certifications

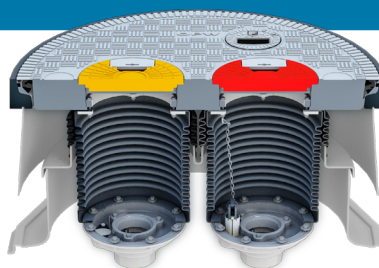


*Does not come with FLMP-IP as pictured. Must order separately.

New Style OPW FibreTite Multiport Kit to Install on Existing Tank Sump

Includes Spill-Containers

Kit includes; Multiport Cover, Frame, Skirt, Spill-Containers, Port Covers, Shroud Boot, Clamping Kits, Water-Spill Platform and Top Hat



FibreTITE
COMPOSITE MULTIPORT

Ordering Specifications

Part Number	Application	WT Cover	Round Sump Riser Diameter	Bonded Manhole		
				Skirt ID	FRP Cover	Fill & Vapor Cover
S42-3100G-MP3716S-W	5 Gallon Regular Gasoline MP System	37" WSP37-16S	42"	40"	Gray	White/Orange
S42-3100G-MP3716S-R	5 Gallon Premium Gasoline MP System	37" WSP37-16S	42"	40"	Gray	Red/Orange
S42-3100G-MP3716S-BU	5 Gallon Mid-Grade Gasoline MP System	37" WSP37-16S	42"	40"	Gray	Blue/Orange
S42-3100G-OF378S-Y	5 Gallon Diesel Offset System	37" WSP37-8S	42"	40"	Gray	Yellow
S48-3100G-MP3716S-W	5 Gallon Regular Gasoline MP System	37" WSP37-16S	48"	40"	Gray	White/Orange
S48-3100G-MP3716S-R	5 Gallon Premium Gasoline MP System	37" WSP37-16S	48"	40"	Gray	Red/Orange
S48-3100G-MP3716S-BU	5 Gallon Mid-Grade Gasoline MP System	37" WSP37-16S	48"	40"	Gray	Blue/Orange
S48-3100G-OF378S-Y	5 Gallon Diesel Offset System	37" WSP37-8S	48"	40"	Gray	Yellow



Replacement for Existing FL100 MP System includes Spill-Containers

Kit includes; Multiport Cover, Spill-Containers, Port Covers, Shroud Boot, Clamping Kits and Water-Spill Platform

Ordering Specifications

Part Number	Application	WT Cover	Bonded Manhole		
			Skirt ID	FRP Cover	Fill & Vapor Cover
FL100G-RETRO-MP3716S-W	5 Gallon Regular Gasoline MP System	37" WSP37-16S	40"	Gray	White/Orange
FL100G-RETRO-MP3716S-R	5 Gallon Premium Gasoline MP System	37" WSP37-16S	40"	Gray	Red/Orange
FL100G-RETRO-MP3716S-BU	5 Gallon Mid-Grade Gasoline MP System	37" WSP37-16S	40"	Gray	Blue/Orange
FL100G-RETRO-OF378S-Y	5 Gallon Diesel Offset System	37" WSP37-8S	40"	Gray	Yellow

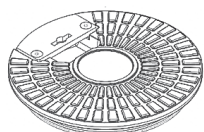
Multiport Kit Only, No Sump Includes Spill-Containers

Kit includes; Multiport Cover, Frame, Skirt, Spill-Containers, Port Covers, Shroud Boot and Clamping Kits

Ordering Specifications

Part Number	Application	Skirt ID	Bonded Manhole	
			FRP Cover	Fill & Vapor Cover
FL100GRAY-MP16S-SK12-W	5 Gallon Regular Gasoline MP System	40"	Gray	White/Orange
FL100GRAY-MP16S-SK12-R	5 Gallon Premium Gasoline MP System	40"	Gray	Red/Orange
FL100GRAY-MP16S-SK12-BU	5 Gallon Mid-Grade Gasoline MP System	40"	Gray	Blue/Orange
FL100GRAY-OF8S-SK12-Y	5 Gallon Diesel Offset System	40"	Gray	Yellow

Replacement Parts/Accessories



Replacement Fill Cover*



Replacement 2-Port Cover

Part Number	Description
P761C-FLDV	5 Gallon Fill Bucket for Fibrelite MP with Drain-Valve and Cast-Iron Base
P761C-FLPL	5 Gallon Vapor Bucket for Fibrelite MP with Plug and Cast-Iron Base
FC-11-Orange	11" Orange Vapor Cover
FC-11-RED	11" Red Fill Cover
FC-11-WHITE	11" White Fill Cover
FC-11-YELLOW	11" Yellow Fill Cover
FC-11-BLUE	11" Blue Fill Cover
FL100GRAY-MP16S*	FL100 Gray Composite Multiport Cover- 16" Centers
FL100GRAY-OF8S	FL100 Gray Composite Cover Offset Port
WSP37-16S	37" Dia. WT MP Spill Platform w Dual Access Part 16" Centers

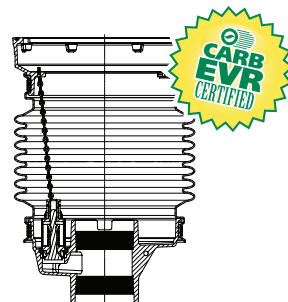
* Does not come with FLMP-IP as pictured. Must order separately.

Part Number	Description
FLMP-SB	MPS Shroud Boot Kit (Includes WSP-CRKS, Clamp Kit)
FLMP-IP	Inspection Port Kit for Fibrelite Multiport
FC-11-SEAL	Seal for FC-11 Covers
WSP37-8S	37" Multiport Water Shroud for Single Offset Port
WS-RING-37	37" Dia. Stainless-Steel Retaining Ring Kit
S-CR-FGK	FRP Kit for Bonding Collar Ring Sump to FGRP Tank Collar (Includes Resin, Catalyst & Glass Tape)
S-TH-FGK	FRP Kit for Top Hat to Sump (Includes Resin, Catalyst & Glass Tape)
RK-5000	Fiberglass Epoxy Kit (Qt. Size)
211300	Epoxy pack to bond 1TAG to composite cover

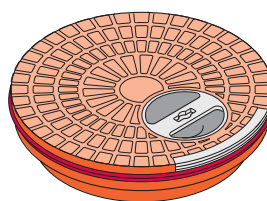
See 1TAG section for I.D. markers for new multiport

Old Style Fibrelite Multiport without Inspection Port Replacement Parts/Accessories

Part Number	Description
P711-EVRDV	5 Gal. Spill Bucket, Composite Base, Drain-Valve
P711-EVRPL	5 Gal. Spill Bucket, Composite Base, Plug
P761C-EVRDV	5 Gal. Spill Bucket, Cast-Iron Base, Drain-Valve
P761C-EVRPL	5 Gal. Spill Bucket, Cast-Iron Base, Plug
P511-15-EVRDV	15 Gal. Bucket w/Drain-Valve, Composite Base
FC-10-BLACK	10" Black Fill Cover
FC-10-BLUE	10" Blue Fill Cover
FC-10-GRAY	10" Gray Fill Cover
FC-10-ORANGE	10" Orange Fill Cover
FC-10-RED	10" Red Fill Cover
FC-10-WHITE	10" White Fill Cover
FC-10-YELLOW	10" Yellow Fill Cover
FC-10-SEAL	Replacement Gasket For FC -10 Covers



5-Gallon Fill or Vapor Spill Bucket



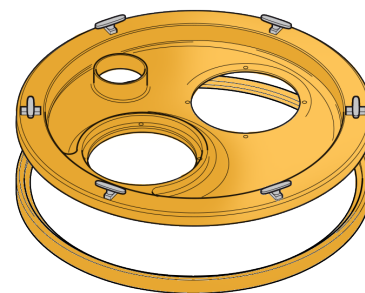
Replacement FC-10 Fill-Port Covers

Ordering Specifications

Multiport Watertight Spill Platform

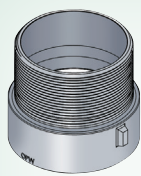
Part #	Application	Dia.	Height	Base	Weight (lbs)
WSP33-16	Dual Access Ports 16" Centers Slope to Fill bucket	34.75"	(2) 5 Gallon	16" Center	13
WSP33-8	Single Access Port At 8" Off Center Slope to Fill bucket	34.75"	(1) 5 Gallon	8" Offset	13
WSP37-16	Dual Access Ports At 16" Center Slope to Fill bucket	38.25"	(2) 5 Gallon	16" Center	17
WSP37-8	Single Access Port At 8" Off Center Slope to Fill bucket	38.25"	(1) 5 Gallon	8" Offset	17
WTS37-16	Dual Access Ports At 16" Center No Slope to Fill bucket	38.25"	(2) 5 Gallon	16" Center	17
WTS37-8	37" Dia Single Access Port At 8" Center No Slope to Fill bucket	38.25"	(1) 5 Gallon	8" Offset	17

All Multiport Platforms include WSP/CRK bucket clamping Kits

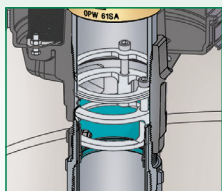


Replacement Parts

Part #	Description
WSP-WTS-OPC	6" Observation Port Cap
WTS-CAP-14	14" Container Port Cap
209939	Replacement Handle for FC10 Cover

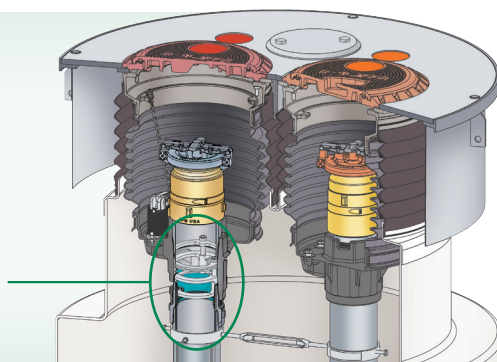


FSA400



61JSK

See pages 81, 84 and 117 for ordering specifications on the FSA-400 & 61JSK



OPW 400 and 500 Series Multiport Spill-Containment Manholes

OPW Multiport Spill-Containment Manholes provide spill-containment for underground storage tank (UST) fill pipes and vapor recovery risers in a completely integrated single manhole package. Multiports are installed over the top of tank sumps to preserve future access to the tank top and to facilitate containment of tank-bung fittings. OPW offers a vast array of standard multiport configurations and options, in addition to an almost unlimited ability to provide custom solutions for virtually any spill-containment application.

Model Descriptions

- ◆ **OPW 411 Series** – features a flush-mounted manhole lid and raised dual dam-and-groove-spill-container rings, with P2105 Buckets using OPW 1-2105 Style Slip-On 5-gallon containers. Base is standard 1" offset from center and can be used for 12", 14", 16" or wider riser spacing. Optional 1P-2105 Hand Pump available
- ◆ **OPW 500 Series (511 / 521) EVR Multiport** – features a flush-mounted manhole lid and raised dual dam-and-groove-spill-container ring, with P511-EVR Buckets using OPW 1-2100 Style Thread-On Spill-Containers. All Fill Ports in these spill-containers feature an enhanced 1DK-2100-EVR vapor-tight drain valve. The Vapor Return Spill-Container features a permanent plug in the drain port as per EVR requirements. EVR Multiport Thread-On

On Spill Containers are available in composite or cast-iron bases with 5-gallon buckets. Drain-Valve Spill Bucket & Plug Spill Bucket standard on Dual Ports, Drain-Valve Spill Bucket standard on Single Port

- ◆ **Required for EVR APPLICATIONS** – the FSA-400 Threaded Riser Face Seal Adaptor is installed on the fill pipe below the spill-container to provide a true sealing for the drop tube flange on the 71SO overfill-prevention valve. The 61SO and/or 71SO series valve is installed in the base of the OPW EVR spill-container with the patent-pending 61JSK jack screw device. This configuration allows liquid in the spill-container to be drained directly into the drop tube, thereby isolating the drain valve from the tank ullage, eliminating a notorious leak point in previous systems

Features

- ◆ **Contractor-Friendly Installation** – studded mounting ring simply bolts together inside the spill-containment bucket. No need to align bolt holes in the manhole cover
- ◆ **Rain-tight Service** – nitrile gaskets on the manhole and spill-bucket mounting rings help prevent contamination of the sump area from surface water intrusion
- ◆ **Highway 20 Load Rating** – the rugged diamond plate steel manhole covers, as well as the ductile iron (RT) or aluminum (SC) spill-container covers meet H20/HS20 Load Rating requirements
- ◆ **Spill-Container and Manhole Positive I.D. System** – special recesses cast into spill-container covers allow product I.D. tags to be attached to the lids. Matching bucket tags can be affixed to the inside of the spill container to prevent covers from getting switched
- ◆ **Fill/Vapor Ports** – configurations are available to accommodate a single fill riser, dual ports for both a fill and vapor riser, and triple and quad ports for multiple fill and vapor risers. Ports can be supplied with or without containment buckets
- ◆ **Port Configurations** – standard port locations match the popular riser spacings (16" or 24") and bung configurations on underground storage tanks. Custom port locations are easily accommodated. For riser spacings less than 16", old-style buckets must be used
- ◆ **CARB Certified** – 500 Series CARB EVR Approved Executive Order #VR-102
- ◆ **Manhole Cover Sizes** – standard bolt-down manhole cover diameters of 30" (76 cm), 37" (94 cm), 42" (107 cm) and 48" (122 cm) allow ample access to the sump area. Heavy-duty reinforced lid options are also available upon request

- ◆ **Spill-Container Cover Options** – standard spill-container options include the patented OPW dam-and-groove rain-tight (RT) design and the watertight Sealable Cover (SC) "plumber's plug" design. The rain-tight cover features a finger-grip lifting facility and an integral seal. The Sealable Cover features a cam-operated mechanism that expands the seal against the vertical wall of the mounting ring. Both of these water-shedding covers are protected by raised mounting rings.
- ◆ **Fastener Options** – two types of fasteners are available to secure the manhole lid and monitoring port to mounting rings. Standard are 5/16"-18 hex-head bolts. Optional are OPW Roto-Lock Fasteners. The OPW Roto-Lock system enables a secure, watertight connection without the need to locate threaded bolt holes on the mounting ring.
- ◆ **Powder-Coated Rings & Covers** – available upon request.
- ◆ **Replacement Covers** – see Part Number Configurations at www.opwglobal.com.

Listings and Certifications



CARB EVR Executive Order #VR-102
NYCFD Certified (6571 Series) #5053
Florida EQ-145

OPW Multiport Spill-Containment Ordering Specifications

EVR Multiports

Thread-On Spill-Containers are available in composite or cast-iron bases with either 5- or 15-gallon buckets. (1) Drain-Valve Spill Bucket & (1) Plug Spill Bucket standard on Dual Ports. Drain-Valve Spill Bucket standard on Single Port.

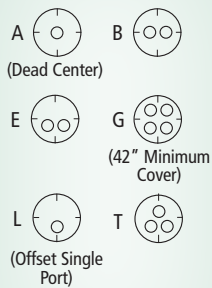
Product Number

6

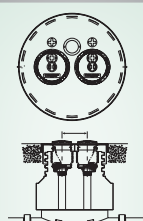
EVR

-

Fill/Vapor Port Configurations

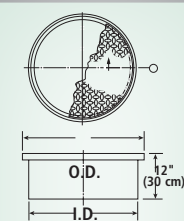


NOTE: 43 or 49 style Gauge Port must be used if a water shroud is to be used with L style



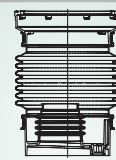
Riser Spacing

00 - Single Port (A Configurations)
16 - 16" Centers
24 - 24" Centers
(42" Minimum Cover)

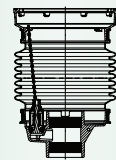


Manhole Cover Size*

30" (Configurations)
36 - 36" Retrofit Only
37 - 37"
39 - 39" Retrofit Only
42 - 42"
48 - 48"
* 42" is standard



411-5-gallon (Slip-On)



511-5-gallon (Thread-On)

Spill-Container Capacity***

00 - No Containment
05 - 5-Gallon
15 - 15-Gallon
*** 5-Gallon bucket is standard

Powder Coated Manhole Covers

R - (1) Red
(1) Orange
W - (1) White
(1) Orange
Y - (1) Yellow

Bolt Down Model Number

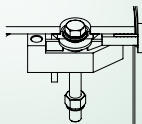
511EVR - HDPE Bellows, Thread-On Composite Base, Bolt-Down
561EVR - HDPE Bellows, Thread-On Cast-Iron Base, Bolt-Down

Roto-Lock Model Number

521EVR - HDPE Bellows, Thread-On Composite Base, Roto-Lock
571EVR - HDPE Bellows, Thread-On Cast-Iron Base, Roto-Lock

Optional Roto-Lock Fastener System

The OPW Roto-Lock system enables a secure rain-tight connection without the need to locate threaded bolt holes on the mounting ring.



Replacement / Retrofit Manhole

RP* - (No Ring / Skirt)

OPW recommends a field survey form on custom RP covers. Incorrect custom models are not eligible for return.

Gauge Port Location

00 - No Gauge Port
40 - Port at 12 o'clock
43 - Port at 3 o'clock
46 - Port at 6 o'clock
49 - Port at 9 o'clock
4M - Port in Center
7X - Flush Mount



NOTE: 3M-Style gauge port must be used with port in the center of "G" Style

Spill-Container Cover Style**

RT - Rain-tight
SC - Sealable Cover
00 - No Ring or Cover



RT - Rain-tight



SC - Sealable Cover (Lid in open position)
** Rain-tight cover is standard

Of Ports With Containment

0
1
2
3
4

Current Replacement Parts

For New 500 Series EVR Multiports 6511/6521, 6561/571 made post 11/2003

Part #	Description
P711-EVRDV	Replacement 5-Gallon Bucket, w/ Drain-Valve
P711-EVRPL	Replacement 5-Gallon Bucket, w/ Plug (Vapor)
P761C-EVRDV	Replacement 5-Gallon Bucket, C.I. Base w/ Drain-Valve
P761C-EVRPL	Replacement 5-Gallon Bucket, C.I.
P411-EVRPL	Replacement 5-Gallon Slip-On Bucket
P511-15-EVRDV	Replacement 15-Gallon Bucket, Comp Base, W/ Drain-Valve
C05170M	Gasket, Spill Bucket & Mounting Ring
H15187M	Replacement Seal for New Rain Tight Cover

Note: New P711 & P761 EVR buckets will only work with New "EVR" Multiport covers. (made post 11/2003)

See page XX for replacement rings and covers part numbers.

Dimensions

O.D.		I.D.		Thickness	
in.	cm	in.	cm	in.	cm
30	76	26 ⁵ / ₈	68	³ / ₈	0.952
37	94	34 ⁵ / ₈	88	³ / ₈	0.952
42	107	39 ⁵ / ₈	101	¹ / ₂	1.27
48	122	44 ⁵ / ₈	113	¹ / ₂	1.27

Optional Accessories

Part #	Description
6511-RB16	12" to 18" Riser Spacer
6511-RB24	20" to 26" Riser Spacer
H15144M	4" NPT Nipple, 4" Length
H12806M	4" NPT Nipple, 5" Length
VPN4X7	4" NPT Nipple, 7" Length
H15271M	4" NPT Nipple, 8" Length
H15268M	4" NPT Nipple, 10" Length
TC-400	4" Torque Cap for 16" Nipples
6521-XAR37	36", 37" OR 38" Roto-Lock Adaptor Ring to convert from Bolt Down
6521-XAR42	39" OR 42" Roto-Lock Adaptor to convert from Bolt Down
6521-XAR48	48" OR 52" Roto-Lock Adaptor to convert from Bolt Down



6511-RB16 Riser Spacer



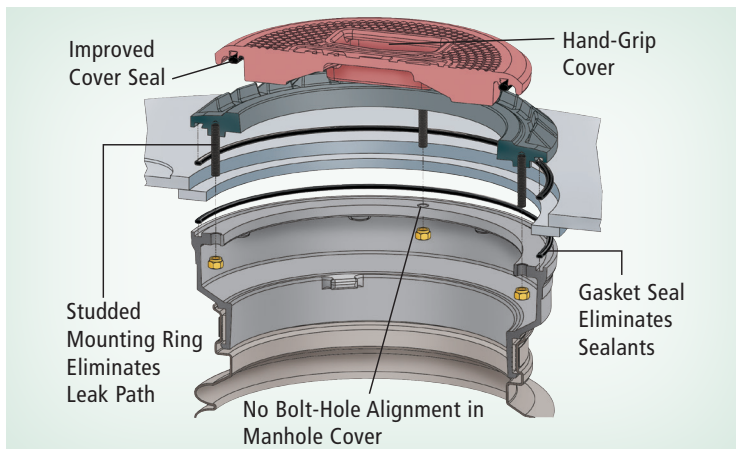
Torque Cap

4" Nipple

See page 94 for additional cover options.

See page 95 for replacement cover options.

OPW Multiport Spill-Containment Replacement Parts



Current Replacement Parts

For New 500 Series EVR Multiports 6511/6521, 6561/571 made post 11/2003

Part #	Description
P711-EVRDV	Replacement 5-Gallon Bucket, w/ Drain-Valve
P711-EVRPL	Replacement 5-Gallon Bucket, w/ Plug (Vapor)
P761C-EVRDV	Replacement 5-Gallon Bucket, C.I. Base w/ Drain-Valve
P761C-EVRPL	Replacement 5-Gallon Bucket, C.I.
P411-EVRPL	Replacement 5-Gallon Slip-On Bucket
P511-15-EVRDV	Replacement 15-Gallon Bucket, Comp Base, W/ Drain-Valve
C05170M	Gasket, Spill Bucket & Mounting Ring
H15187M	Replacement Seal for New Rain Tight Cover

Note: New P711 & P761 EVR buckets will only work with New "EVR" Multiport covers. (made post 11/2003)

See page XX for replacement rings and covers part numbers.

Old-Style Replacement Parts

311/411/511/521 Series Multiports

Note: 511/521 parts are for Multiports made prior to Nov. 2003

Part #	Description
1DK-2100-EVR	511/521 Series Drain-Valve
H13931M	Replacement Seal for SC Cover
P110-37G	34" - 37" Manhole Gasket
P110-42G	42" Manhole Gasket
P110-48G	48" Manhole Gasket
PROTO-LOCK	(1) Roto-Lock
P40-ROTOLID	Replacement 40 Style Gauge Port Roto-Lock Lid
H15240M	Replacement Gasket for 40 Style Gauge Port
C05501	Flush Mount Gauge Port Cover Only
P571-GK3T	Gasket Kit For New Style 571 Roto Multiport
203148	Replacement 3M Style Bolt Down Gauge Port, 4.8" diameter
205322	Replacement 30 Style Bolt Down Gauge Port, 6.5" diameter
P311-G	Bucket Top Flange Gasket
P511BUCKETBOLT	Spill Bucket RT Ring Kit (4) Bolts, Washers & Gaskets
H15238M	Replacement Gasket, 30 Style (Bolt Down)
1-2100-DSH	5 Gallon Fill Bucket with Composite Base & Drain-Valve
1-2100-PSH	5 Gallon Vapor Bucket with Composite Base & Plug

ALL

Part #	Description
411	P2105BUCKET 411 Replacement Bucket 5-Gallon
Parts	1P-2105 Hand Pump Kit for 411/P2105
	P111-WTL Replacement Cover (RT)
	P111WTL-S Replacement Seal for RT Cover
	P311-1R Replacement RT Ring
	P311-14 RT Ring for 14" Riser
	P511YBUCKET Replacement Waste Oil Bucket
	P511-DEVRBUCKET Replacement 5-Gallon Bucket with Drain-Valve
	P511-G14 Bucket Top Flange Gasket for Notched Gasket Set
	P511-PEVRBUCKET Replacement 5-Gallon Bucket with Plug
	P511C-DEVRBUCKET Replacement 5-Gallon Bucket With C.I. Base & Drain-Valve
511/521	P511C-PEVRBUCKET Replacement 5-Gallon Bucket With C.I. Base & Plug
Parts	P511-DEVRB-14 Replacement 5-Gallon Bucket with Drain-Valve 12" & 14" Risers
	P511-PEVRB-14 Replacement 5-Gallon Bucket with Plug - 12" & 14" Risers
	P511C-DEVRB-14 Replacement 5-Gallon Bucket W/ C.I. Base, Drain-Valve for 12" & 14" Risers
	P511C-PEVRB-14 Replacement 5-Gallon Bucket W/ C.I. Base, Plug, for 12" & 14" Risers
	P521-GKIT 521 Multiport Complete Gasket Kit
	P511-GKIT 511 Multiport Complete Gasket Kit

See page 94 for additional cover options.

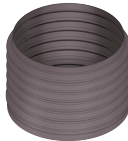
See page 95 for replacement cover options.

Multiport Manhole Water-Shroud System Option

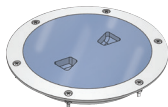
The new OPW Multiport Manhole Water-Shroud System (MPWS) is designed to completely isolate surface water and condensation from the tank sump. The MPWS features an injection-molded fiberglass Water-Shroud lid that mates to a standard tank sump top hat reducer. This new bolt-down design allows even compression to facilitate watertight sump access. Shroud Boots isolate the spill-container buckets using stainless-steel band clamps, which provide a tight seal between the water shroud top hat and the underside of the spill-container mounting rings. A 6" Sump Inspection Port is provided on each FRP Cover, allowing full inspection access through the Multiport Gauge Port. The OPW Water-Shroud system is available in 33" and 36" models. The MPWS Water-Shroud is sold separately.



Rubber
Shroud Cap



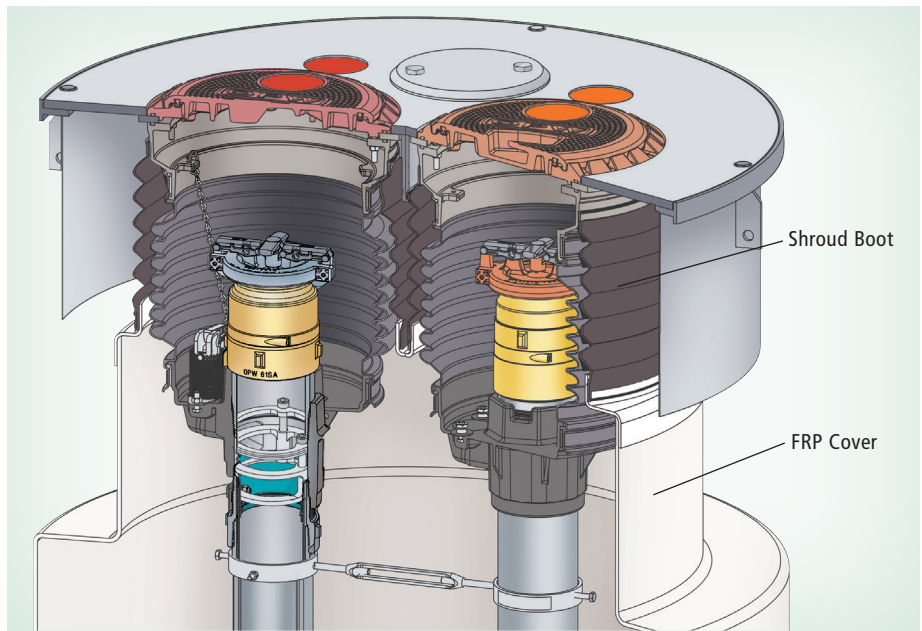
Shroud Boots
Vinyl Plastisol



Sump Inspection
Port (SIP) – Clear
ABS Construction
Inspection Port



FRP Cover
Injection
Molded
Fiberglass Cover



Ordering Specifications

Part #	Description
MPWS-33	33" FRP Cover with (2) 5-gallon Water Shroud Boots & Clamps
MPWS-33BD	33" Bolt Down Water Shroud
MPWS-33BDD	33" Bolt Down Water Shroud for Diesel
MPWS-36	36" FRP Cover with (2) 5-gallon Water Shroud Boots & Clamps
MPWS-39BD	39" 4-Port Bolt Down Water Shroud

Replacement Parts

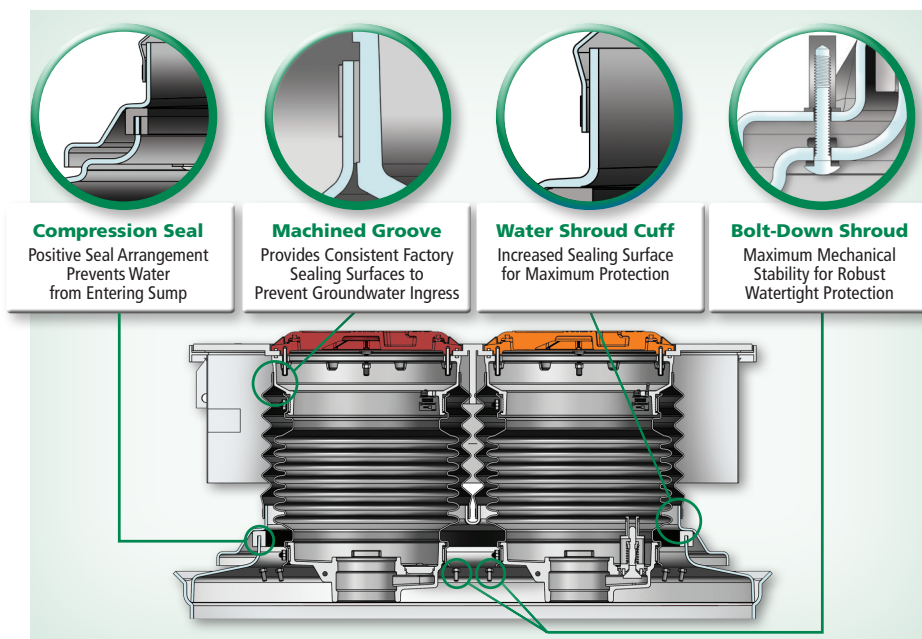
Part #	Description
C05223M	Shroud Boot Cap to Isolate One FRP Cover Port
D02571M	33" FRP Replacement Cover
D02575M	5-Gallon Shroud Boot
H15187M	Rain-tight Cover Replacement Gasket
H15188M	Lower Clamp for 5-Gallon Shroud Boot
H15190M	Upper Clamp for 5 or 15-Gallon Shroud Boot
SIP-6	6" Sump Inspection Port Sight Glass
SLPK	Gasket and Sealant Kit for Shroud
201393	36" FRP Replacement Cover
205181	Lower Clamp for 5 Gallon Shroud
205183	Upper Clamp for 5 Gallon Shroud
H15187M	Rain-tight Cover Replacement Gasket
C05170M	O-Ring for Sealable and Rain-tight Ring

Listings and Certifications

Florida EQ-145
NY Approval



NOTE: Part numbers do not include rings or covers. Rings and Covers must be ordered separately.



Bolt-Down Manhole Water-Shroud System Option

The Bolt-Down Multiport Water Shroud (MPWS-BD) is designed to mate with the OPW Multiport. The MPWS-BD isolates surface water and condensation from Tank Sumps.

Shroud boots isolate the spill-container buckets using stainless-steel band clamps, providing a tight seal between the water-shroud top hat and the underside of the spill-container-mounting ring. Bolts on the outer edge of the shroud cover secure it to the top hat. Available in 33" and 39" diameter covers.

New Ring and Cover Part Numbers

Rain-tight Covers	Rain-tight Cover Rings	Sealable Covers	Sealable Cover Rings
RTC-WHITE	RTR-WHITE	SC-WHITE	SCR-WHITE
RTC-RED	RTR-RED	SC-RED	SCR-RED
RTC-YELLOW	RTR-YELLOW	SC-YELLOW	SCR-YELLOW
RTC-GREEN	RTR-GREEN	SC-ORANGE	SCR-ORANGE
RTC-ORANGE	RTR-ORANGE	SC-BLACK	SCR-BLACK
RTC-BLACK	RTR-BLACK	SC-PLAIN	

Ordering Specifications

Part #	Description
Bolt-Down FRP Top Hat Options	
203246	42" x 33" FRP Bolt-Down Top Hat
203272	42" x 39" FRP Bolt-Down Top Hat

OPW 106 Identification Marker

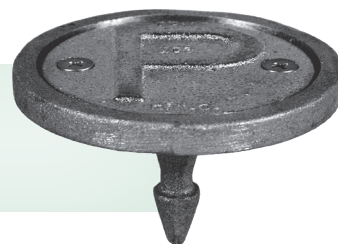
OPW 106 Identification Markers are used to identify the grade product stored in underground tanks. These markers are easily set in concrete, and once set, are permanent. The letter plate is recessed into the face of the base and fastened with two screws. The raised letters are easy to change when the product is changed. Letters available are P, R, U, SU, X, DL. Numbers 1, 2, 3, 4.

Materials

Base And Anchor Shank: Aluminum
Letter Plate: Cast aluminum
Screws (2): Brass

Ordering Specifications

Product #	Fuel Type	lbs.	kg
106DL-0095	Diesel	.43	.20
106P-0150	Premium	.41	.19
106R-0175	Regular	.44	.20
106SU-0185	Super Unleaded	.43	.20
106U-0125	Unleaded	.44	.20



Product #	Fuel Type	lbs.	kg
106UP-0125	Unleaded "Plus"	.44	.20
106N-1100	I.D. Marker #1	.44	.20
106N-2200	I.D. Marker #2	.44	.20
106N-3300	I.D. Marker #3	.44	.20
106N-4400	I.D. Marker #4	.44	.20

OPW 107 Nameplate Holder

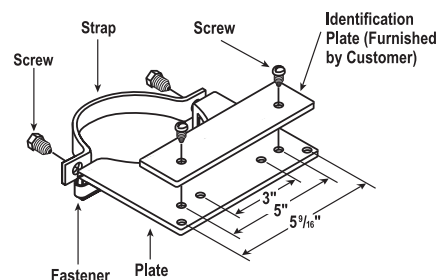
OPW 107 Nameplate Holders, when secured to storage tank fill pipes, provide a method to permanently identify the product in the tanks.

Materials

Plate: Plated steel
Straps: Plated steel

Ordering Specifications

Product #	in.	mm	lbs.	kg
107-0300	4	102	.39	.18



API Color Standard— On Bucket ID Tag - Adhesive



Ordering Specifications

Adhesive Tag Part #	Description
1TAG-API-RG0	Regular Gasoline E0
1TAG-API-MG0	Midgrade Gasoline E0
1TAG-API-PG0	Premium Gasoline E0
1TAG-API-RG10	Regular Gasoline E10
1TAG-API-MG10	Midgrade Gasoline E10
1TAG-API-PG10	Premium Gasoline E10
1TAG-API-RF0	Racing Fuel E0
1TAG-API-RF10	Racing Fuel E10
1TAG-API-E15	Gasoline E15
1TAG-API-E25	Gasoline E25
1TAG-API-E85	Gasoline E85
1TAG-API-BD5	Up to 5% Biodiesel
1TAG-API-BD20	B20 Biodiesel
1TAG-API-OFF	Offroad Diesel (up to 5%)
1TAG-API-OFFB5	Offroad Biodiesel 5%
1TAG-API-DEF	Diesel Exhaust Fluid
1TAG-API-Kero	Kerosene
1TAG-API-MW	Monitoring Well
1TAG-API-VR	Vapor Recovery

API Color Standard— On Bucket ID Tag - Hanging Tag



Ordering Specifications

Hanging Tag Part #	Description
1TAG-API-RG0T	Regular Gasoline E0
1TAG-API-MG0T	Midgrade Gasoline E0
1TAG-API-PG0T	Premium Gasoline E0
1TAG-API-RG10T	Regular Gasoline E10
1TAG-API-MG10T	Midgrade Gasoline E10
1TAG-API-PG10T	Premium Gasoline E10
1TAG-API-RF0T	Racing Fuel E0
1TAG-API-RF10T	Racing Fuel E10
1TAG-API-E15T	Gasoline E15
1TAG-API-E25T	Gasoline E25
1TAG-API-E85T	Gasoline E85
1TAG-API-BD5T	Up to 5% Biodiesel
1TAG-API-BD20T	B20 Biodiesel
1TAG-API-OFFT	Offroad Diesel (up to 5%)
1TAG-API-OFFB5T	Offroad Biodiesel 5%
1TAG-API-DEFT	Diesel Exhaust Fluid
1TAG-API-KeroT	Kerosene
1TAG-API-MWT	Monitoring Well
1TAG-API-VRT	Vapor Recovery

Spill-Container Product Identification Tags

OPW Color-Coded Spill-Container Tags positively and conspicuously identify tanks, preventing costly and dangerous product-drop mistakes. Simply "peel and stick" the high-visibility color inserts into the special recesses cast into the spill-container cover.

Matching bucket tags, supplied with tie wraps, are permanently affixed inside the spill-container to help prevent covers from getting switched.

Features

- ◆ **Unique Fiberglass Embedment Process** - ensures that the color identifiers won't scratch, crack, peel, weather or fade, even in gasoline and the harshest of environments
- ◆ **Compatible** – with all OPW 1-2100, 1-2200 and 1-3100 Series Spill-Containers, including aluminum, cast-iron, sealable cover and 101BG Composite Cover models. Also compatible with 111 Series, Multiport Spill-Containers and OPW 104FG/104C Manhole Covers
- ◆ **Available in All API Product I.D. Designations**

Powder-Coated Sealable Cover Rings

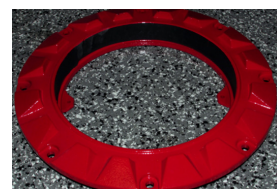
Powder-coated rain-tight rings and covers provide a long-lasting, high-quality, vivid color meant to help prevent cross-contamination on the tank pad. The powder-coated finish is offered on ALL our single-wall and double-wall EDGE models.

Ordering Specifications

Product #	Description
SC-WHITE	Sealable cover replacement (5 Gallon Edge)
SC-ORANGE	Sealable cover replacement (5 Gallon Edge)
SC-RED	Sealable cover replacement (5 Gallon Edge)
SC-YELLOW	Sealable cover replacement (5 Gallon Edge)
203035	Edge SC Ring, Dursaslide / WHITE POWDERCOAT
217500	Edge SC Ring, Dursaslide / ORANGE POWDERCOAT
217501	Edge SC Ring, Dursaslide / RED POWDERCOAT
217502	Edge SC Ring, Dursaslide / YELLOW POWDERCOAT

Sealable Cover Edge

Product #	Description
1SC-3112D-R	RED Sealable Cover Edge
1SC-3112D-W	WHITE Sealable Cover Edge
1SC-3112D-Y	YELLOW Sealable Cover Edge
1SC-3112P-R	RED Sealable Cover Edge
1SC-3112P-W	WHITE Sealable Cover Edge
1SC-3112P-Y	YELLOW Sealable Cover Edge
1SC-3112P-O	ORANGE Sealable Cover Edge
1SC-3132D-R	RED Sealable Cover Edge
1SC-3132D-W	WHITE Sealable Cover Edge
1SC-3132D-Y	YELLOW Sealable Cover Edge
1SC-3132P-R	RED Sealable Cover Edge
1SC-3132P-W	WHITE Sealable Cover Edge
1SC-3132P-Y	YELLOW Sealable Cover Edge
1SC-3132P-O	ORANGE Sealable Cover Edge
1SC-3101P-O	ORANGE Sealable Cover Edge



UST Fill-Pipe Connection Equipment

Tight-Fill Adaptors and Caps

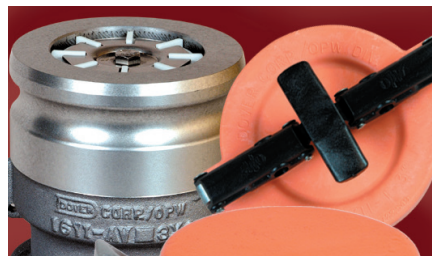
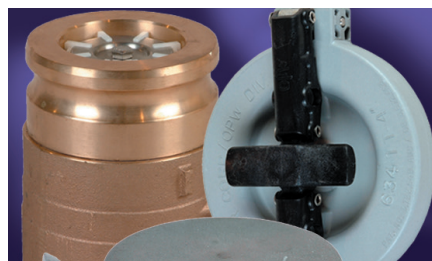
Tight-Fill Adaptors are installed in spill-containment manholes on the fill riser pipe from an underground fuel-storage tank. They mate with the gravity-drop delivery elbow on the transport truck. Tight-Fill Caps are installed on adaptors, when not in use, to prevent gasoline vapors from escaping and to prevent water, dust and debris from entering the tank.

Stage I Vapor Recovery Adaptors and Caps

Stage I Vapor Recovery Adaptors are installed in spill-containment manholes on the vapor recovery riser pipe from an underground gasoline-storage tank. They mate with the vapor recovery elbow on the delivery transport truck when recovery of gasoline vapors is required. Stage I Caps are installed on adaptors, when not in use, to prevent gasoline vapors from escaping and to prevent water, dust and debris from entering the tank.

Monitor Probe and Monitoring Well-Caps

Monitoring Probe Caps are installed on tank riser pipes to help prevent vapors from escaping or water from entering the tank. Monitoring Probe Caps include a wire-grommet fitting to accommodate the electric tank-gauge probe. Lockable Monitoring Well-Caps are installed on slotted PVC-pipe monitoring-wells to help prevent contamination from surface-water intrusion or inadvertent fuel deliveries.



OPW Adaptor & Cap-Height Profiles

The adaptor and cap dimensions below reflect the overall height and installed height of OPW adaptors and adaptor and cap combinations. The installed height is from the gasket seal to the top of the component. For example, the 61VSA height is 6 1/2", but only adds 4-7/8" to the overall height when added to the riser.



61VSA Vapor Recovery Swivel Adaptors

Overall Height Installed Height
6-1/2" 4-7/8"



1611AV Standard Vapor Adaptors

Overall Height Installed Height
5-7/16" 4-3/4"



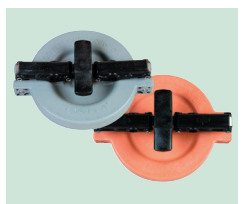
61SALP Fill Swivel Adaptor

Overall Height Installed Height
4-3/8" 2-7/8"



633T Standard Fill Adaptor

Overall Height Installed Height
3" 2"



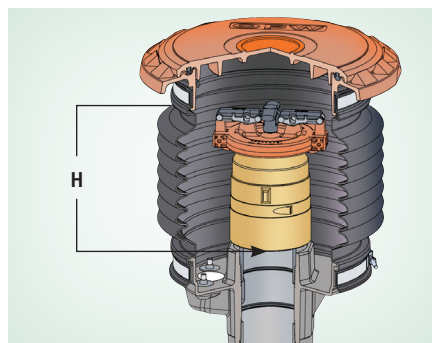
634TT Fill and 1711T Vapor Caps

Overall Height Installed Height
2-9/16" 1-1/2"



634LPC Fill and 1711LPC Low-Profile Caps

Overall Height Installed Height
7/8" 1/2"



Dimensions

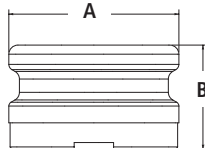
Product Combinations	H = Total Installed Height	
	in	mm
61VSA & 1711T	6 ³ / ₈	162
61VSA & 1711LPC	5 ³ / ₈	137
1611AV & 1711T	6 ¹ / ₄	159
1611AV & 1711LPC	5 ³ / ₈	137
61SALP & 634TT	4 ³ / ₈	111
61SALP & 634LPC	4 ⁷ / ₈	124
633T & 634TT	4 ¹ / ₂	114
633T & 634LPC	3 ¹ / ₂	89

OPW Tight-Fill Top-Seal Adaptors

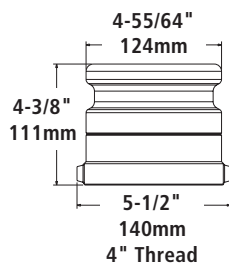
Tight-Fill Top-Seal Adaptors are installed in spill-containment manholes on the fill riser pipe from an underground fuel-storage tank. They mate with the gravity-drop delivery elbow on the transport truck.



633T-8076



61SALP-1020-EVR

61SALP-MA
E85 EVR Approved

OPW 633T

OPW 633T Top-Seal Adaptors thread onto the fill pipe of underground storage tanks, and are designed to mate with top-seal delivery elbows. Use OPW 634TT, 634TE or 634TTP Top-Seal Caps with 633T Adaptors.

Features

- ◆ **Easy Installation** – integral internal wrenching lugs are provided for installing in the confined space of spill-containers
- ◆ **Accommodate 633LC Lock Clamp** – 4" x 4" 633T (E) models incorporate dual notches in the base to accept 633LC clamps
- ◆ **Manufactured from Durable, Corrosion-Resistant Materials** – bronze and hard-coat aluminum

Ordering Specifications

Product #	Elbow Size	Riser Thread	A		B		Weight		Material
			in.	mm	in.	mm	lbs.	kg	
633T-8060	3"	3"	3 ¹⁹ / ₃₂	93	1 ⁵ / ₈	43	0.96	.44	Bronze
633T-8070*	3"	4"	3 ¹⁹ / ₃₂	93	2 ¹¹ / ₁₆	69	0.71	.32	Hardcoated Al.
633T-8075*	4"	4"	4 ⁵⁵ / ₆₄	124	2 ³¹ / ₃₂	76	0.82	.37	Hardcoated Al.
633T-8076	4"	4"	4 ⁵⁵ / ₆₄	124	2 ³¹ / ₃₂	76	2.70	1.23	Bronze

Note: Maximum height of adaptor is 2¹¹/₁₆" (68mm).

* DEF-compatible

Replacement Parts

Part #	Description
H05289M	Gasket
H09039M	Gasket
H09039M	Gasket
H09039M	Gasket

OPW 61SA Swivel Adaptor

Pressure-decay testing of underground storage tank systems has identified the joint between the tight-fill adaptor and the nipple or tank riser as a persistent leak point. Considerable movement takes place along the hose while the fill elbow is connected. Walk-downs and changes from one compartment to another move the hose across the pavement, rotating the elbow along with it. The result can be a loosening of the adaptor. As the adaptor backs off, the seal between it and the nipple is relaxed and a leak path is created allowing vapors to escape to the atmosphere. Vacuum-assist dispensing systems can aggravate this situation due to the slight pressurization of the UST.

The 61SA Swivel Adaptor mates with 4" top-seal delivery elbows and features a top section that rotates with hose movement while the bottom section remains securely in place maintaining seal integrity.

Features

- ◆ **Dual Seals** – ensure a vapor and liquid-tight seal
- ◆ **Conductive, Self-Lubricating Retaining Rod** – ensures maintenance-free, reliable service life
- ◆ **Same Internal Dimension as Standard 633T Adaptors** – to minimize pressure drop and maximize flow rates for quick product delivery
- ◆ **61SALP-MA – EVR Approved for E85**

Ordering Specifications

Product #	Base Material	Adaptor Material	Weight lbs.	kg
61SALP-1020-EVR*	Bronze	Bronze	7.1	3.2
61SALP-MA	Nickel	Nickel	7.1	3.2
61SA-TOOL**	Wrench		11.0	5.0
H09039M	Replacement Gasket			

*Low-Profile Fill Adaptor **See description on page 104.

Materials

Retaining Ring: Conductive nylon

Set Screws: Stainless-steel

Seals: Buna-N

Listings and Certifications



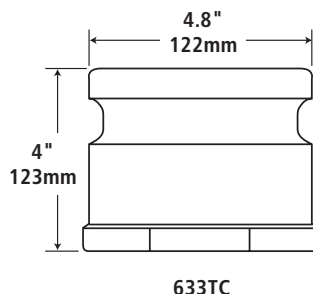
61SALP-MA
are EVR Approved for E85
USA Patent No. 5,664,951



Materials

Available in bronze or anodized aluminum for corrosion and wear resistance

633TC



633TC

Ordering Specifications

Product #	Elbow Size		Riser Thread		lbs.	kg	Description
	in.	mm	in.	mm			
633TC-8090	4	102	4	102	1.45	.66	Anodized Aluminum
633TCP-3803	4	102	4	102	1.26	.57	Anodized Aluminum

Matching Adaptors & Caps

	Description	Adaptor Part #	Seal	Cap Part #
Fill	3" Fill Elbow	633T, 633TE	Top	634TE
	4" Fill Elbow	633T, 633TE, 61SA, 61SALP	Top	634TT, 634LPC
	4" Coaxial Fill Elbow	633TC, 633TCP	Top	634TT, 634LPC
	3" Fill Elbow	61AS-3"	Side	62
Vapor	4" Fill Elbow	61AS-4"	Side	62, 62TT
	3" Vapor Elbow	1611AV, 1611AVB, 1611VR	Top	1711T, 1711LPC
Monitoring	Monitoring Well Pipe Caps	62M, 116M, 116, 634TTM, 62PMC	Complete Adaptor & Cap Kit	
Loose-Fill	Loose-Fill Pipe Caps 83, 269		Complete Adaptor & Cap Kit	

* Any variation of desired Adaptors will mate with corresponding Caps

OPW Tight-Fill Top-Seal Adaptors

Coaxial Adaptors

OPW 633TC

OPW coaxial vapor recovery fittings provide an easy, inexpensive means to convert existing conventional 4" underground storage tank fill pipes to coaxial vapor recovery installations when Stage I Vapor Recovery is required. Normally, little or no digging or breaking of concrete is necessary. Simply remove existing tight-fill adaptor and drop tube (if installation is so equipped), and insert an OPW 61TC Coaxial Drop Tube and the 633TC Adaptor. The OPW 633TC Adaptor is designed to mate with a coaxial delivery elbow.

OPW 633TCP Use On 61SOP

The OPW 633TCP Coaxial Adaptor features a poppeted vapor-return path that opens only when connected to a fill elbow. When not in use, the vapor path is sealed, preventing fugitive emissions. The 633TCP is a replacement adaptor for the 61TCP Coaxial Drop Tube, and is designed to mate with a coaxial delivery elbow.

NOTE: Poppeted fittings are certified by California Air Resources Board (CARB).

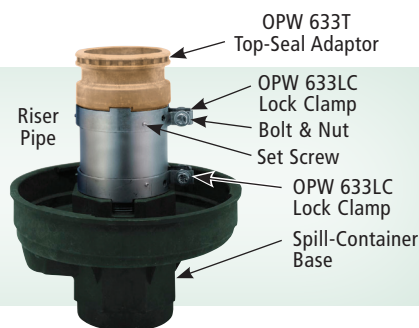
OPW 633LC

OPW 633LC Lock Clamp is designed to lock the OPW adaptor onto the riser pipe, preventing any potential vapor leaks from pressurized systems. The locking clamp slips over the riser pipe. The 633T, 633TE, or 1611 Adaptor is then threaded onto the riser pipe. Next, the lock clamp should be slid up the riser until the protrusions in the lock clamp line up with the notches in the adaptor. Once the adaptor and clamp are engaged, the lock clamp can be tightened and the adaptor will be locked onto the riser pipe, preventing it from being loosened by a delivery elbow.

Additionally, the lock clamp can be turned upside down on the riser pipe to lock the riser into the base of all OPW spill-containers, which have notches in them similar to the adaptors. Using the lock clamp in this manner will lock the riser pipe into the spill-container.

Materials

Clamp: Stainless-steel
Bolt: Zinc-plated steel
Set Screw: Stainless steel



633LC



Ordering Specifications

Part #	in.	cm	Description
633LC-1000	4"	10.16	Stainless-Steel Locking Clamp



OPW 61SA-TOOL

OPW 61SA-TOOL

The 61SA-TOOL is a wrench designed to thread on the 61SA Fill and 61VSA Vapor Adaptors. The OPW 61SA-TOOL Adaptor installation tool is required to insure proper installation of OPW rotatable swivel adaptors, thread-on spill-containers, fill and vapor adaptors, TC-400 torque cap for pipe nipples and threaded riser adaptors as per EVR requirements. The 61SA-TOOL includes provisions for the use of a torque wrench to facilitate accurate installation and testing.

633TC & 633TCP Instruction Sheet Order Number: **H10013PA**

OPW 634 Series Tight-Fill Top-Seal Caps

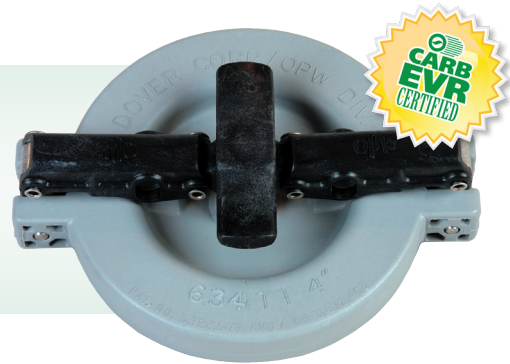
Tight-Fill Top-Seal Caps are installed on top-seal adaptors, when not in use, to prevent gasoline vapors from escaping and to prevent water, dust and debris from entering the tank.



EVR Approved for E85

Materials

Cap & Links: Duratuff®
Pins: Stainless-steel
Gasket: Nitrile
Color: Grey

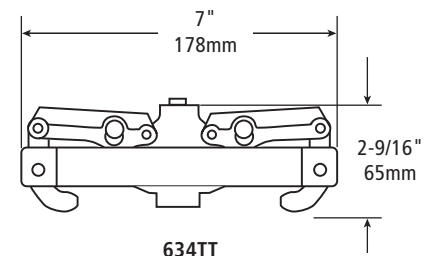


Ordering Specifications

Product #	in.	mm	lbs.	kg
634TT-7085-EVR	4	102	1.01	.46

Replacement Parts

Part #	Description
H15005M	Nitrile Gasket



NOTE: Effective height above adaptor: 1-19/32"

OPW 634TT

The OPW 634TT is designed to mate with 4" 633T, 633TE, 61SA, 633TC, and 633TCP Top-Seal Adaptors. Heavy-duty and corrosion-resistant, the body is made of Duratuff® to help eliminate rust and oxidation for a long, maintenance-free life. The toggle lever distributes downward pressure to compress its Buna-N gasket evenly, ensuring a positive, water and vapor-tight seal. The 634TT can be locked with a padlock or wire seal.

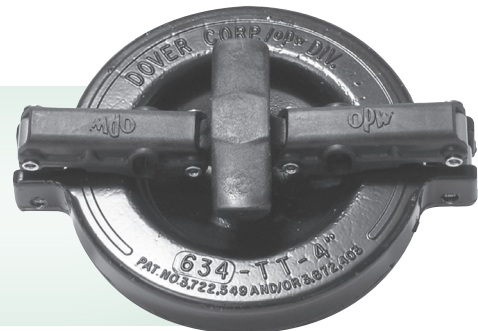
The OPW 633TE adaptor is similar to the 633T, except it does not have internal wrenching lugs.

OPW 634TT - Metal

The 634TT-4000 is a metal top-seal cap with the same dimensions as the 634TT-7085.

Materials

Cap: Die-cast zinc (powder-coated black)
Lever: Duratuff®
Pins: Stainless-steel
Gasket: Nitrile

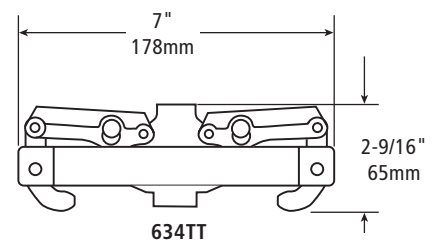


Ordering Specifications

Product #	in.	mm	lbs.	kg
634TT-4000	4	102	1.01	.46

Replacement Parts

Part #	Description
H15005M	Gasket for 634TT-4000



Listings and Certifications



OPW 634TT & 634LPC
are EVR Approved for E85



Materials

Cap: Cast zinc alloy
(powder-coated
yellow or grey)

Lever: Ductile iron

Gasket: Nitrile

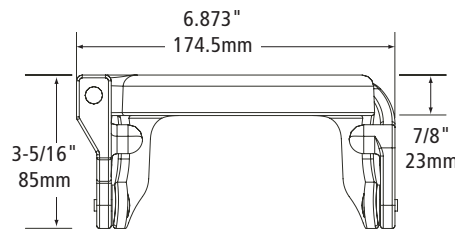


Ordering Specifications

Product #	in.	mm	lbs.	kg
634LPC-0400 - Gray	4	102	3.5	1.59
634LPC-0400D - Yellow	4	102	3.5	1.59

Replacement Parts

Part #	Description
H15005M	Buna-N Gasket



634LPC

Note: Effective height above adaptor: 1/2"

OPW 634LPC Low-Profile Top-Seal Fill Cap

The OPW 634LPC Low-Profile Top-Seal Fill Cap is designed for tight installations where the clearance between the top of the fill adaptor and the underside of the spill-container cover is limited. The rugged iron lever provides a positive cam-action that seats the cap firmly in the adaptor groove for a water and vapor-tight seal. When engaged, the lockable cap adds only 1/2" to the final height of the adaptor. The 634LPC can be used with the 4" OPW 633T, 633TE, 633TC, and 61SA series top-seal fill adaptors.



EVR Approved for E85

Materials

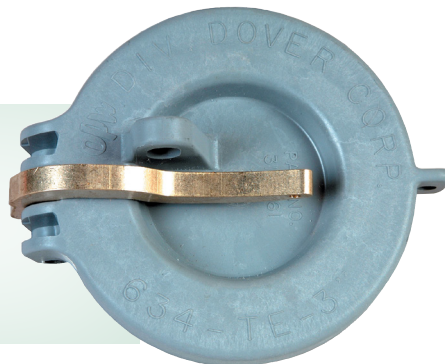
Cap: Duratuff®

Lever: Brass

Gasket: Nitrile

Pivot pin: Stainless-steel

Color: Grey

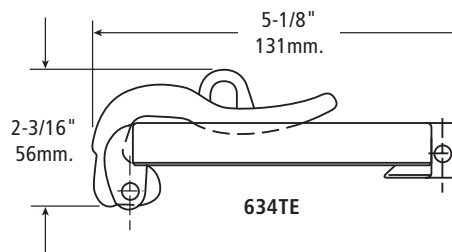


Ordering Specifications

Product #	in.	mm	lbs.	kg
634TE-7085	3	76	1.11	.50

Replacement Parts

Part #	Description
C01094RB	Lever
H10765M	Gasket
H10731RE	Pivot Pin



634TE

OPW 634TE Single Lever- Action Top-Seal Cap

The OPW 634TE is a Single Lever-Action Top-Seal Cap designed to mate with 3" OPW 633T Top-Seal Adaptors.

The locking lever seats in the groove in the adaptor, providing a cam-down action on the cap for a positive water and vapor-tight seal. The 634TE can be locked with a padlock or wire seal. Patent #3,118,561.

OPW Tight-Fill Side-Seal Adaptors

OPW 61AS Side-Seal Adaptors thread onto the fill pipe of underground storage tanks, and are designed to mate with side-seal delivery elbows.

Materials

Body: Bronze
Gasket: Nitrile

61AS



Ordering Specifications

Part #	Elbow Size		Riser Thread		lbs.	kg
	in.	mm	in.	mm		
61AS-2477	4	102	4	102	1.99	.90

NOTE: Maximum height of adaptor is 2" (51 mm).

Replacement Parts

Part #	Size		Description
	in.	mm	
H04145M	3 x 3	76 x 76	Gasket
H09039M	4 x 4	102 x 102	Gasket

OPW Tight-Fill Side-Seal Caps

Tight-Fill Side-Seal Caps are installed on side-seal adaptors, when not in use, to prevent gasoline vapors from escaping and to prevent water, dust and debris from entering the tank.

OPW 62TT

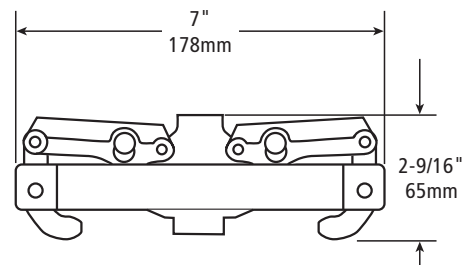
The OPW 62TT Side-Seal Cap is designed to mate with the 61AS Side-Seal Adaptor. The cap has a lever and gasoline-resistant Buna-N gasket to help assure a positive seal. The 62TT is constructed of Duratuff®, a high-impact composite that helps eliminate rust and oxidation to assure a long, maintenance-free life.

Materials

Cap & Links: Duratuff®
Pins: Stainless-steel
Color: Black



62TT



Ordering Specifications

Product #	in.	mm	lb.	kg
62TT-7085	4	102	1.15	.52

Replacement Parts

Part #	Description
C03485M	Gasket

Materials

Adaptor: Bronze
Base: Bronze
Retaining Ring:
Conductive nylon
Set Screws:
Stainless-steel
Seals: Nitrile



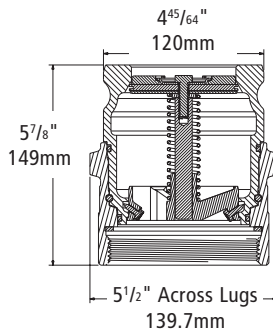
61VSA-1020-EVR
USA Patent No. 5,664,951

Features

- ◆ **Dual Seals** – ensure a vapor and liquid-tight seal
- ◆ **Conductive, Self-Lubricating Retaining Rod** – ensures maintenance-free, reliable service life
- ◆ **Same Internal Dimension as Standard 633T Adaptors** – to minimize pressure drop and maximize flow rates for quick product delivery
- ◆ **Self Guiding Poppet** – for consistent tight seal

Ordering Specifications

Product #	Base Material	Adaptor Material	Weight lbs.	kg
61VSA-1020-EVR	Bronze	Bronze	10.5	4.8
61SA-TOOL	Wrench		11.0	5.0
H09039M	Replacement Gasket			



OPW 61VSA-MA Vapor Recovery Swivel Adaptor

Materials

Adaptor: Nickel-coated brass
Base: Nickel-coated brass
E85 EVR Approved

Ordering Specifications

Product #	Base Material	Adaptor Material	Weight lbs.	kg
61VSA-MA	Nickel Coated Brass	Nickel Coated Brass	10.5	4.8
H09039M	Replacement Gasket			



Listings and Certifications



OPW 61VSA Series Adaptors are EVR Approved for E85



OPW Stage I Vapor Recovery Adaptors and Caps

Stage I Vapor Recovery Adaptors are installed in spill-containment manholes on the vapor recovery riser pipe from an underground gasoline-storage tank. They mate with the vapor recovery elbow on the delivery transport truck when recovery of gasoline vapors is required.

OPW 61VSA Vapor Swivel Adaptor

The OPW 61VSA Vapor Swivel Adaptor is a poppeted adaptor, designed to mate with a vapor recovery elbow, featuring a top section that rotates with hose movement while the bottom section remains securely sealed to the 4-inch tank riser.



OPW 61SA-TOOL

The 61SA-TOOL is a wrench designed to thread on the 61SA Fill and 61VSA Vapor Adaptors. The OPW 61SA-TOOL Adaptor installation tool is required to insure proper installation of OPW rotatable swivel adaptors, thread-on spill-containers, fill and vapor adaptors, TC-400 torque cap for pipe nipples and threaded riser adaptors as per EVR requirements. The 61SA-TOOL includes provisions for the use of a torque wrench to facilitate accurate installation and testing.

OPW 1611 Series Vapor Recovery Adaptor

The OPW 1611AV and 1611AVB are poppeted adaptors, designed to mate with a vapor recovery elbow, for returning gasoline vapor to the tank truck during a fuel delivery to an underground tank.

Materials

Body: Clear anodized aluminum or cast bronze

Stem: Chrome-plated steel

Stem Guide: Acetal resin

Spring: Stainless-steel

Gasket: Nitrile



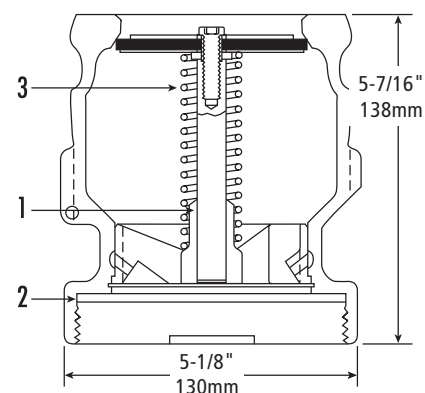
1611AV 3" x 4"
(76 x 102mm)

Ordering Specifications

Product #	Elbow Size		Riser Thread		Body Material		
	in.	mm	in.	mm	lbs.	kg	
1611AV-1605	3	76	3	76	2.91	1.32	Clear Anodized Aluminum
1611AV-1620	3	76	4	102	3.25	1.48	Clear Anodized Aluminum
1611AVB-1625	3	76	4	102	7.97	3.62	Cast Bronze

Replacement Parts

Key	Part #	Description
1	C02642M	Bridge Guide
Not Shown	H15294M	Screw (3") (76mm)
2	H04145M H04150M	Gasket (3") (76mm) Gasket (3" x 4") (76 x 102mm)
3	H08989M	Spring
61VSA-KIT Complete Replacement Kit		



Materials

Body: Duratuff®
Pins: Stainless-steel
Links: Duratuff®
Gasket: Nitrile
Color: Orange

1711T Cap

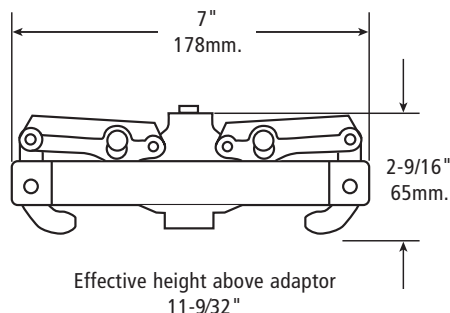


Ordering Specifications

Product #	in.	mm	lbs.	kg
1711T-7085-EVR	3	76	1.1	.50

Replacement Parts

Part #	Description
H10886M	Nitrile Gasket



OPW Stage I Vapor Recovery Caps OPW 1711T

The OPW 1711T Vapor Recovery Cap is for use with the OPW 1611AV, 61VSA, 1611AVB and 1611VR Adaptors. The 1711T is installed on the vapor recovery adaptor, when not in use, to prevent vapors from escaping and to prevent water, dust and debris from entering the tank. Constructed of Duratuff® to help prevent corrosion, the OPW 1711T will couple to Civacon/OPW 4" Kamloks, and features a center post that allows an even distribution of force when coupling to the adaptor. The 1711T can be locked with a padlock.

Materials

Cap: Cast zinc alloy (powder-coated orange)
Lever: Ductile iron
Gasket: Nitrile

1711LPC Cap



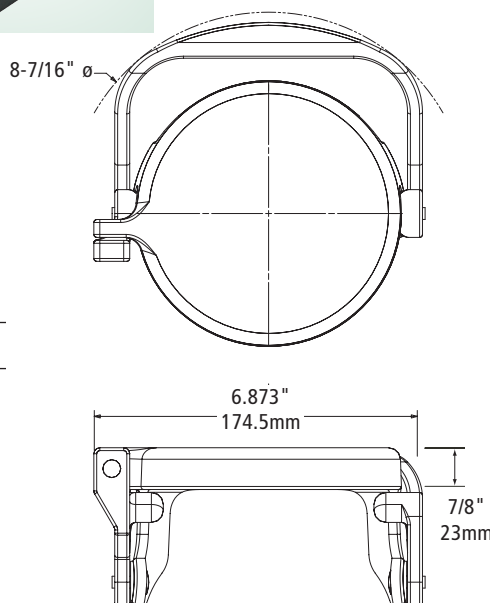
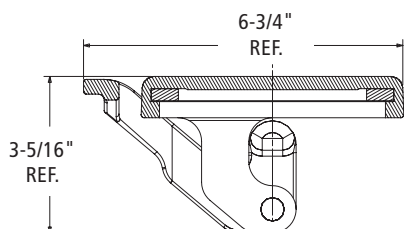
Effective height above adaptor 1/2"

Ordering Specifications

Product #	in.	mm	lbs.	kg
1711LPC-0300	3	76	3.5	1.59

Replacement Parts

Part #	Description
H15005M	Nitrile Gasket



OPW 1711LPC Low-Profile Vapor Cap

The OPW 1711LPC Low-Profile Top-Seal Vapor Cap is designed for tight installations where the clearance between the top of the vapor adaptor and the underside of the spill-container or manhole cover is limited. The rugged iron lever provides a positive cam-action that seats the cap firmly in the adaptor groove for a water and vapor-tight seal. When engaged, the lockable cap adds only 1/2" to the final height of the adaptor. The cap is powder-coated API Orange to signify vapor recovery. The 1711LPC can be used with the OPW 3" 1611AV, 1611AVB and 61VSA series vapor adaptors.

Listings and Certifications



OPW 1711 Series Caps are EVR Approved for E85



OPW Monitoring Well/Pipe/Probe Caps

Monitoring Probe Caps are installed on tank riser pipes to help prevent vapors from escaping or water from entering the tank. Monitoring Probe Caps include a wire-grommet fitting to accommodate the electronic tank-gauge probe.

OPW 62M Monitor Probe Cap & Adaptor Kit

The 62M Monitoring Probe & Adaptor Kit includes a 4" side-sealing adaptor, 4" side-sealing cap (tapped), and a 3/8" or 1/2" wire-grommet to secure the cable from an electronic tank-gauge probe in the tank riser pipe. A bracket, located on the underside of the cap, is provided to install a tension wire to relieve strain on probe cables. The 62M is gasketed to seal against water and debris entering, or vapors from escaping the tank. The cap includes provisions for a padlock to secure entry.

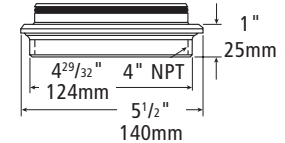
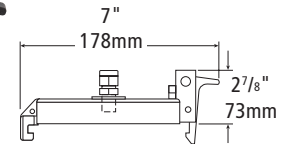
62M Monitor Probe Cap

Body: Cast aluminum

Cap: Cast aluminum

Seals: Nitrile

Latch: Duratuff®

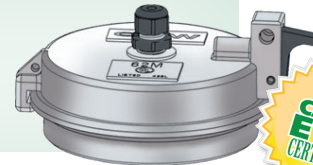


62M-MA Monitor Probe Cap

Body: Anodized aluminum

Cap: Anodized aluminum

E85 EVR Approved



Ordering Specifications

Product #	Body	Cap	Grommet		Riser Thread		lbs.	kg	
			in.	mm	in.	mm			
62M-0375	Alum.	Alum.	3/8	9.5	4	102	1.3	.59	Accepts .069" - .178" diameter wire
62M-0500	Alum.	Alum.	1/2	13	4	102	1.3	.59	Accepts .170" - .470" diameter wire
62M-MA	Nickel	Nickel	3/8	9.5	4	102	1.3	.59	Accepts .170" - .470" diameter wire
201478	Alum.	Alum.	N/A	N/A	4	102	1.3	.59	No Grommet
H09039M	Replacement Gasket								

OPW 116M

The OPW 116M Monitor Probe Cap is a standard 116 4" threaded pipe cap, drilled and tapped to accept a 3/8" or 1/2" wire-grommet to secure an electronic tank-gauge probe in a tank riser pipe. The 116M is gasketed for vapor and watertight service.

OPW 116

The OPW 116 Pipe Cap threads onto 4" riser pipes and provides access to ball-float extractor fittings and underground storage tank-bung openings. The 116 is constructed of composite Duratuff® to prevent rusting or corroding of steel riser pipes.

Materials

OPW 116M

Body: 4" Duratuff®

Cross bar: Zinc-plated steel



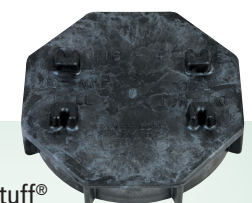
116M Cap

OPW 116

Body: 4" Duratuff®

Seal: Nitrile

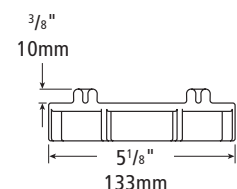
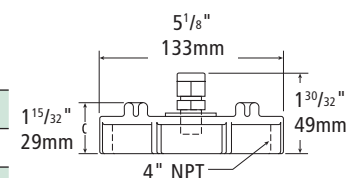
116-7085



Ordering Specifications

OPW 116M

Product #	Description	Riser Thread	lbs.	kg
116M-0375	3/8" Grommet	4" (102mm)	.45	.2
	Accepts .069" - .178" diameter wire			
116M-0500	1/2" Grommet	4" (102mm)	.45	.2
	Accepts .170" - .470" diameter wire			
H11199M	Replacement Gasket			
OPW 116				
116-7085			.40	.18

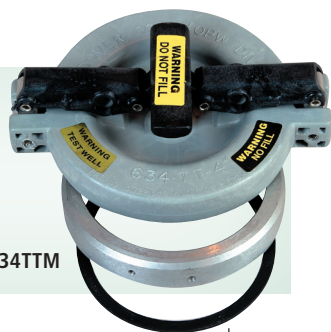


62M Series Instruction Sheet Order Number: **H14491PA**

Materials

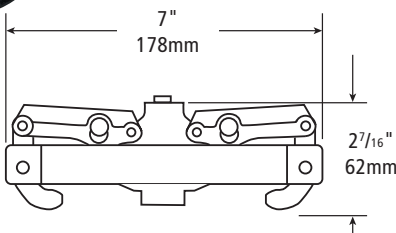
Cap: Duratuff®
Adaptor Ring:
Cast aluminum

634TTM



Ordering Specifications

Product #	lbs.	kg
634TTM-7087	1.42	.65



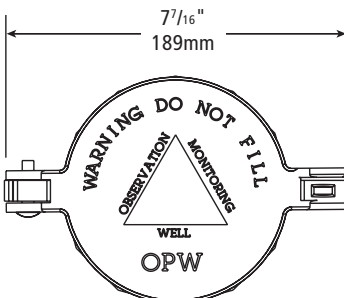
OPW Monitoring Well/ Pipe Caps

OPW 634TTM Well Cap Kit

The OPW 634TTM Well-Cap Kit is designed to install onto a 4" slotted PVC monitoring-well. The cap is marked "Do Not Fill" to clearly identify the monitoring-well. A cast-aluminum adaptor ring is set-screwed to the top of the slotted PVC well, and the cap mates with the ring. The 634TTM can be locked with a padlock or a wire seal.

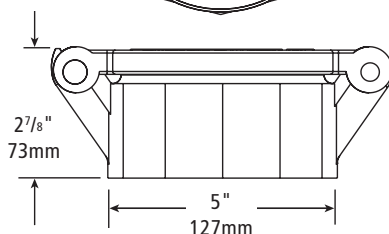


62PMC



Ordering Specifications

Product #	Description	lbs.	kg
62PMC-0400	Monitoring Cap	1.3	.59



OPW 62PMC Lockable Monitoring Cap

The OPW 62PMC is designed to thread or solvent-weld to a 61SPVC 4" slotted PVC monitoring-well pipe. The 62PMC is constructed of durable PVC with a stainless-steel hinge pin for resistance to rust and corrosion. An API warning statement, "Monitoring-Well...Do Not Fill," is permanently molded into the cap. The 62PMC can be locked with a long-shank padlock.

61SPVC



OPW 61SPVC Slotted PVC Pipe

The OPW 61SPVC Slotted PVC Pipe is designed for monitoring-well applications. The 61SPVC is constructed of durable Schedule 40 PVC pipe, PVC bottom plug with slot thickness of .020".

Ordering Specifications

Product #	Description	Length		Slotted Section		Weight	
		ft.	m	ft.	m	lbs.	kg
61SPVC-4000	4" x 13' Slotted PVC Pipe	13	3.96	10	3.04	26.5	12.0
61SPVC-4015	4" x 15' Slotted PVC Pipe	15	4.57	12	3.65	30.5	13.8
61SPVC-4020*	4" x 20' Slotted PVC Pipe	20	6.09	18	5.48	41.0	18.6

*20 ft. Models come in two (2) 10 ft. pieces.

634TTM-7087 Instruction Sheet Order Number: **H10772PA**

OPW Loose-Fill Pipe Cap Assemblies

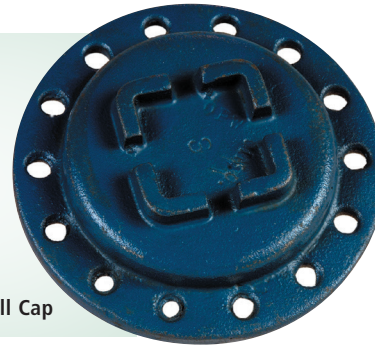
Loose-Fill Pipe Cap Assemblies are installed in spill-containment manholes on fill riser pipes from an underground fuel-storage tank. They are used when a tight-fill connection is not required.

OPW 83

The OPW 83 Fill Cap Assembly threads onto the fillpipe of an underground or aboveground tank. The screw-on cap is gasketed to ensure a tight seal against air, water, dust and debris. The 83 can be locked with a padlock or wire seal.

Materials

Body: ZA alloy
Cap: Cast iron
Gasket: Nitrile



83 Fill Cap

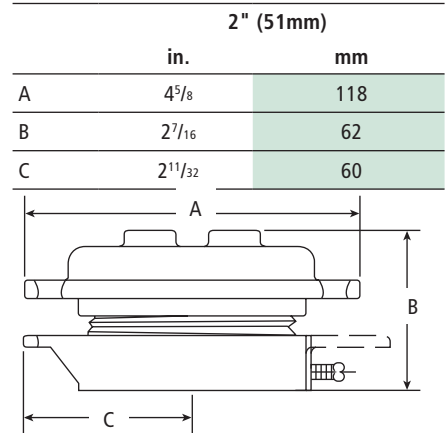
Ordering Specifications

Product #	Riser Thread			
	in.	mm	lbs.	kg
83-0022	2	51	2.46	1.12

Replacement Parts

Part #	in.	mm	Description
H04898M	2	51	Cap
H01608M	2	51	Gasket

Dimensions

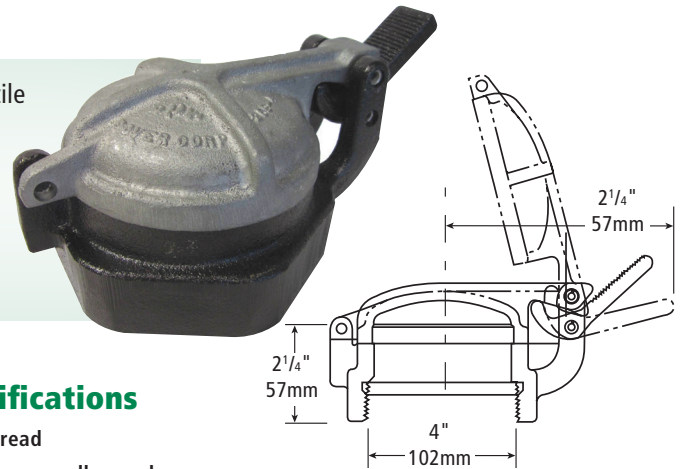


OPW 269 Sanitary Tank Hatch

The OPW 269 Sanitary Tank Hatch threads onto the fill pipe of an underground sanitary waste-disposal tank. The 269 is foot-operated and quick-opening/closing for clean emptying of sanitary waste from RVs, campers and travel trailers. The non-recessed design provides straight-through flow to eliminate entrapment of waste materials.

Materials

Body: Coated ductile iron
Cap: Zinc

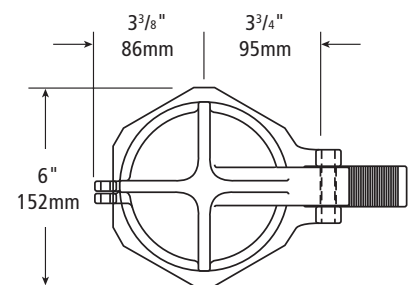


Ordering Specifications

Product #	Riser Thread			
	in.	mm	lbs.	kg
269-0085	4	102	10.92	4.91

Replacement Parts

Part #	Description
D00800B	Cap
H05783DI	Treadles
H05784M	Pin

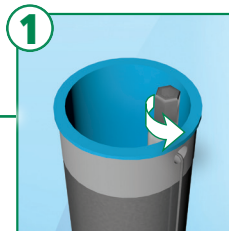
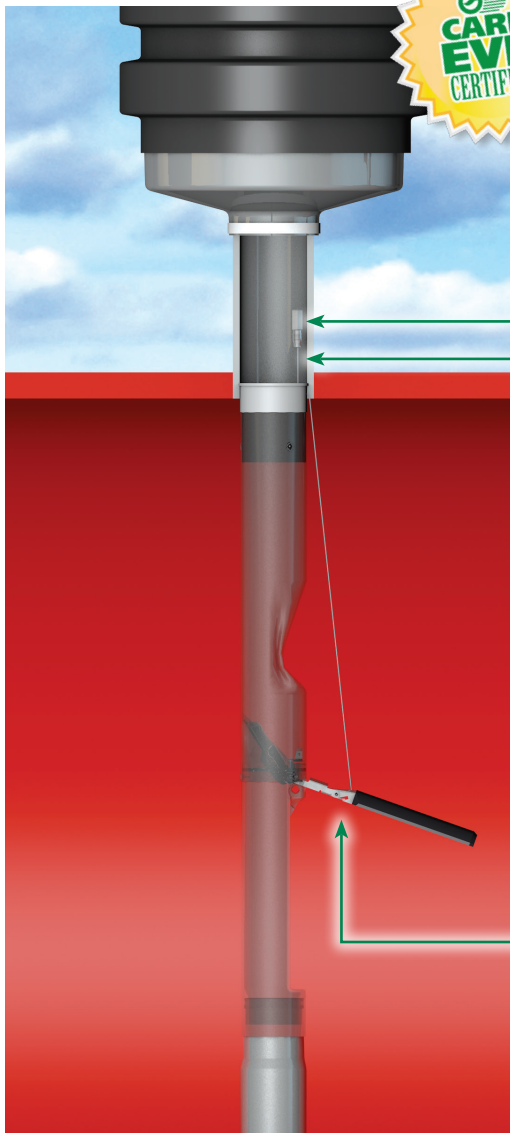


Testable 71SO Overfill-Prevention Valve

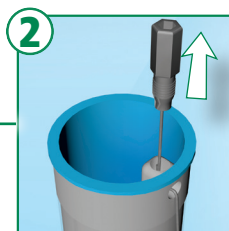
Patent-Pending



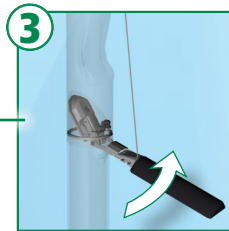
Testing & Verification Easy as 1·2·3



Loosen test plug



Lift float with cable to simulate fill



Validate proper poppet operation

The OPW Testable 71SO helps you be in compliance with the NEW EPA Regulations

- ◆ The Only UST Overfill-Prevention Valve that is testable without removal from the tank
- ◆ A testable feature is attached to a sealed plug in the inlet Adaptor
- ◆ The plug is easily accessed with a standard socket extension
- ◆ Attached to the extension, the testable feature can be raised and lowered, allowing the user to inspect the valve operation from the inside of the tube
- ◆ The plug is then easily reinstalled to the inlet Adaptor from grade
- ◆ No fill components, overfill valves, or vapor-tight seals have to be removed - avoids compromising vapor-tight compliance
- ◆ The Testable 71SO uses the same industry leading overfill-prevention technology for strong vapor-tight compliance
- ◆ B100 Compatible (ULC)

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

Ordering Specifications

Product #	Description	A- Upper Tube Length		B- Lower Tube Length		C- Overall Length		Max. Riser Length		Max. Nominal Tank Dia.		Max. Actual Tank Dia.		Weight	
		in.	m	in.	m	in.	m	in.	m	in.	m	in.	m	lbs.	kg
71SO-400CT*	Testable Vapor-Tight Overfill Valve, 5 Ft. Bury, 8 Foot Tank	60	1.5	83	2.1	154 ³ / ₄	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	16	7
71SO-410CT*	Testable Vapor-Tight Overfill Valve, 10 Ft. Bury, 10 Foot Tank	120	3.1	102	2.6	234 ³ / ₄	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	25	11
71SO-420CT*	Testable Vapor-Tight Overfill Valve, 10 Ft. Bury, 12 Foot Tank	120	3.1	126	3.2	258 ³ / ₄	6.5	113 ¹ / ₂	2.9	144	3.7	150	3.8	26	12
206740-KIT	Replacement Cable Kit														
206741	Replacement Inlet Tube w/ 206740 Cable Kit														

* ULC B100 Compatible

Listings and Certifications



Overfill-Prevention and Venting Equipment

7150 Testable Overfill Valve

The OPW Testable 7150-T Overfill-Prevention Valve is the easiest, quickest and most cost-efficient way to ensure that your overfill valves will operate when called upon - verifiable without removing them from the tanks. The OPW 7150-T Testable Overfill-Prevention Valve is the only UST Overfill-Prevention Valve that is testable from the surface without removal from the tank.

6150 & 7150 Overfill-Prevention Valves

The OPW 6150 and 7150 vapor-tight Overfill-Prevention Valves are two-stage shut-off valves designed to prevent the overfill of underground storage tanks by providing a positive shut-off of product delivery. Models of the 6150 and 7150 are available to meet virtually any UST application, including two-point, coaxial, popped coaxial and remote fill. The 7150 vapor-tight model is designed for enhanced vapor recovery (EVR) applications. Both the 6150 and 7150 are designed for use on tight-fill gravity-drop applications only, and can be installed in the fill riser of both new and existing underground storage tanks.

Ball-Float Vent Valves and Extractor Fittings

OPW Ball-Float Vent Valves protrude into underground storage tanks from the Stage I vapor-return riser pipe. As the tank becomes full during a product drop, the ball seat restrict the flow of vapors back to the transport truck or through the tank-vent. As the vapors are compressed in the tank, product flow into the tank is severely restricted.

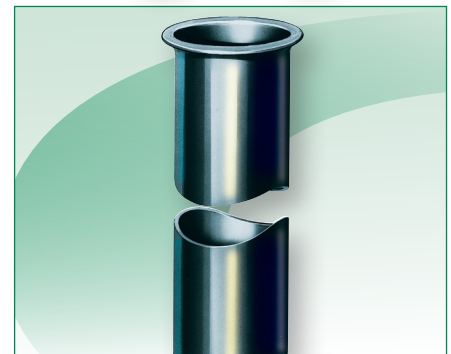
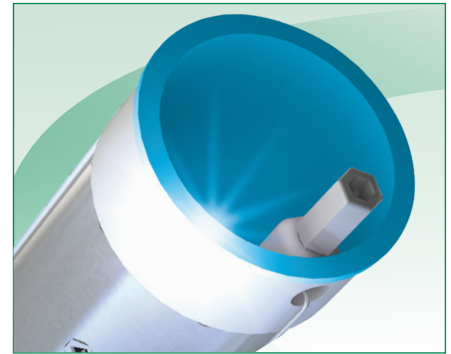
OPW ball-floats are mounted in OPW extractor fittings to maintain access through grade-level manholes.

Drop Tubes and Accessories

OPW drop tubes are installed inside tank fill risers to prevent fuel from contacting riser joints. Drop tubes extend close to the bottom of the tank to minimize turbulence and vapor production. Tank-bottom protectors are installed on the bottom of drop tubes to prevent tank erosion at the fill point.

Pressure Vacuum Vents and Adaptors

Pressure Vacuum Vents are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.



OPW 7150 Overfill-Prevention Valves

The CARB-certified OPW 7150 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 7150 allows easy installation (without breaking concrete) and requires no special manholes.

The OPW 7150 is a vapor-tight 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.

NOTE: The 7150 Overfill-Prevention Valve can be adjusted to shut off 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.

7150 Instruction Sheet Order
Number: **H15524PA**

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 pre-checks 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**
- ◆ **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



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 7150 closes, causing a hazard and environmental contamination.

NOTE: The OPW 7150 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



OPW 7150M is EVR
Approved for E85

Raising The Standard In Overfill-Prevention

From the company that brought you the industry standard OPW 6150, OPW raises the standard with the introduction of the **7150 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, quicker installation
- Higher quality more reliable installation
- Lower costs
- Greater protection against fugitive emissions and pressure decay
- Fastest flow rate in the industry

The new 7150 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%.

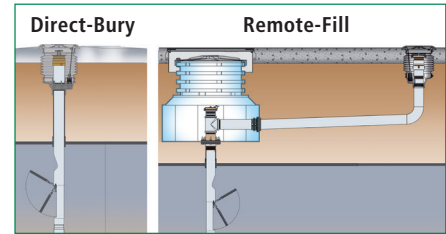
The 7150 is available for direct-bury and remote applications.



All Vapor-Tight Overfill Valves are CARB EVR Certified



No Epoxy Sealants Required!



Replacement Parts

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

7150 Ordering Specifications

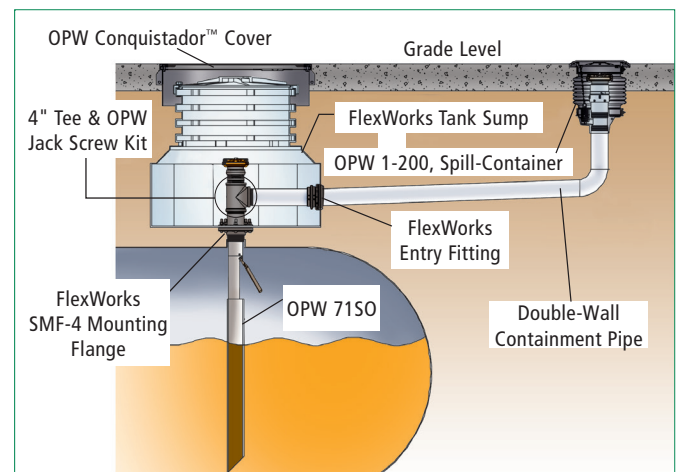
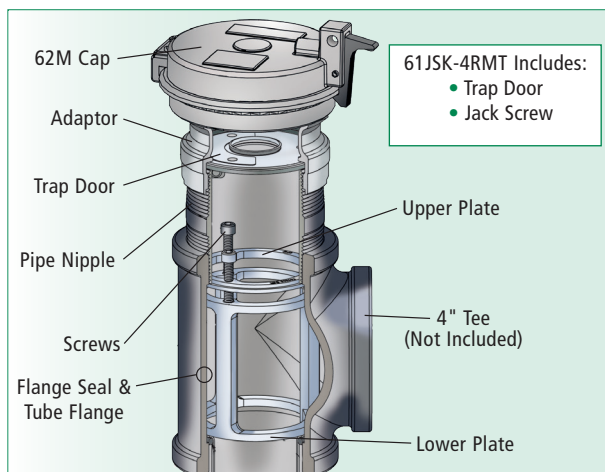
Product #	Description	Bury Depth		Tank Diameter		Upper Tube Length		Lower Tube Length		Overall Length		Max. Riser Length		Max. Nominal Tank Dia.		Max. Actual Tank Dia.		Weight	
		ft.	m	ft.	m	in.	m	in.	m	in.	m	in.	m	in.	m	in.	m	lbs.	kg
7150-400CB*	B20-B100 Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155 ³ / ₄	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	16	7
7150-410CB*	B20-B100 Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234 ³ / ₄	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	25	11
7150-420CB*	B20-B100 Overfill Valve	10	3.0	12	3.6	120	3.1	126	3.2	258 ³ / ₄	6.5	113 ¹ / ₂	2.9	144	3.7	150	3.8	26	12
7150-400C	Vapor-Tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155 ³ / ₄	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	16	7
7150-410C	Vapor-Tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234 ³ / ₄	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	25	11
7150-420C	Vapor-Tight Overfill Valve	10	3.0	12	3.6	120	3.1	126	3.2	258 ³ / ₄	6.5	113 ¹ / ₂	2.9	144	3.7	150	3.8	26	12
7150-4000	Non Vapor-tight Overfill Valve	5	1.5	8	2.4	60	1.5	83	2.1	155 ³ / ₄	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	16	7
7150-4010	Non Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234 ³ / ₄	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	25	11
7150M-412C	E85 Vapor-tight Overfill Valve	10	3.0	10	3.0	120	3.1	102	2.6	234 ³ / ₄	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	38	17.3
7150-TOOLCT	7150 Installation Tool																	2.5	1
61JSK-4RMT	Jack Screw Kit For Vapor-Tight Remote Applications																	1.5	0.7
61JSK-4410	Jack Screw Kit For Composite Base Spill Bucket																	1	0.5
61JSK-44CB	Jack Screw Kit For Cast-Iron Base Spill Buckets																	1	0.5
71JSK-4RMT	E85 Jack Screw for Remote-Fill Applications																	1	0.5
71JSK-44MA	E85 Jack Screw for Direct-Fill Applications																	1.5	0.7

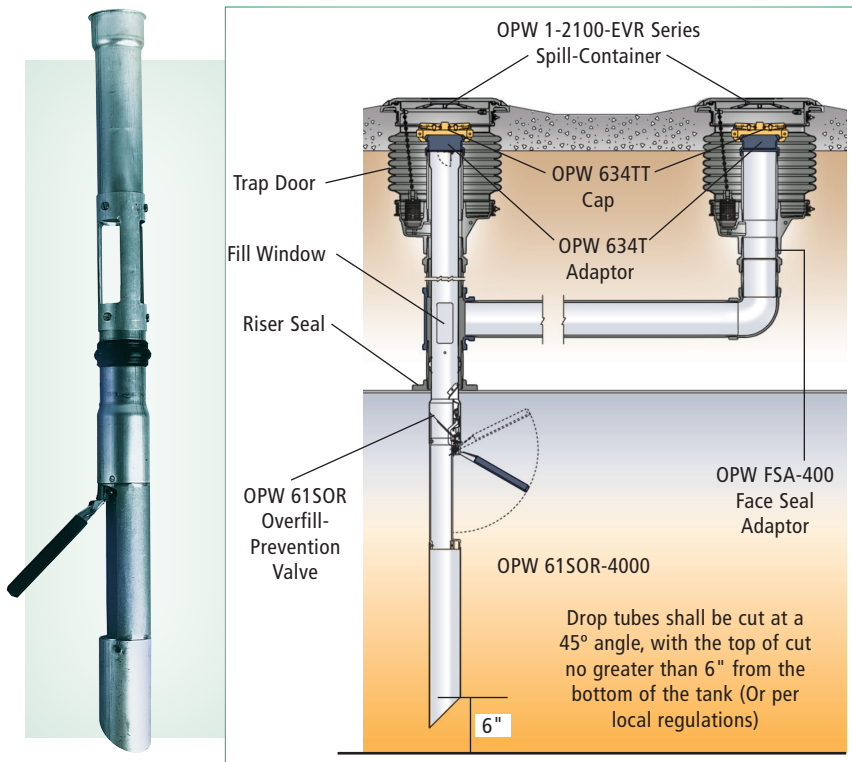
61JSK-4410 AND 61JSK-44CB Instruction Sheet Order Number: **H15289M**

*ULC B100 Compatible

7150 Vapor-Tight Remote Fill

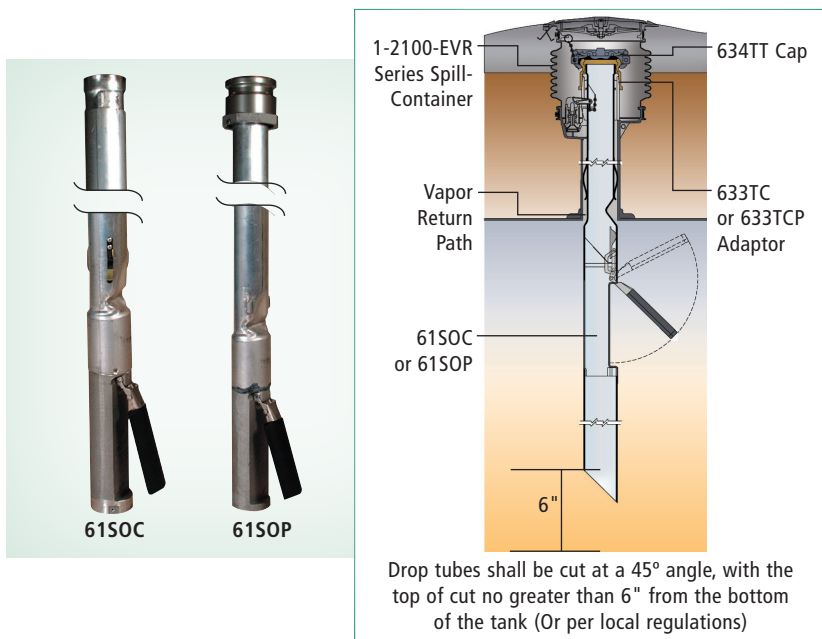
The OPW Vapor-Tight Remote Fill is designed for two-point vapor-tight remote-fill applications, where the fill point is not directly over the UST. A CARB-approved vapor-tight 7150 overfill valve is installed in the sump through a riser pipe directly over the tank.





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**

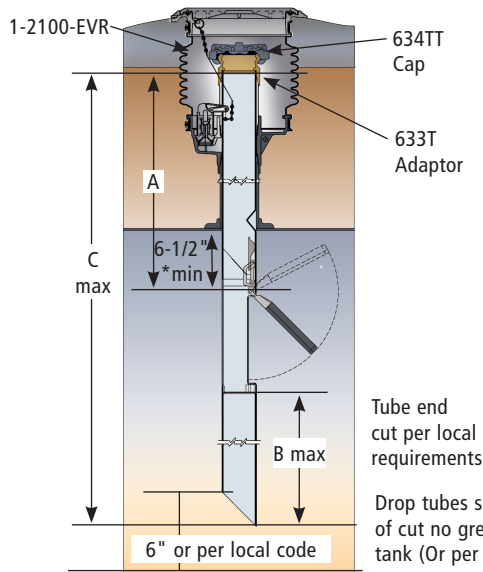
61SOR Remote Fill Tube Instruction Sheet Order Number: **H11964M**

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**



Replacement Parts

Part #	Description
61SOK-0001	Float Kit
C03899M	Two-Point Inlet Tube
C03632M	Coaxial Inlet Tube
D01756	Inlet Tube/Adaptor Assy. for 61SOP
H11931M	Drop Tube O-Ring
C03749	Trap Door Assy. (Remote)

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)

Ordering Specifications

Product/ Suffix #	Description	A-Upper Tube Length		B-Lower Tube Length		C-Overall Length		Max. Riser Length		Max. Nominal Tank Dia.		Max. Actual Tank Dia.		Weight	
		in.	m	in.	m	in.	m	in.	m	in.	m	in.	m	lbs.	kg
61SOC-4001	Coaxial	60	1.5	83	2.1	154 ³ / ₈	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	16	7
61SOC-4011	Coaxial	120	3.1	102	2.6	233 ³ / ₈	5.9	113 ¹ / ₂	2.9	120	3.1	126	3.2	25	11
61SOP-4002	CARB, pop. coaxial	60	1.5	83	2.1	154 ³ / ₈	3.9	53 ¹ / ₂	1.4	96	2.4	107	2.7	20	9
61SOP-4012	CARB, pop. coaxial	108	2.7	102	2.6	221 ³ / ₈	5.6	101 ¹ / ₂	2.6	120	3.1	126	3.2	27	12
61SOR-4000*	Remote (non-vapor-tight, 8 ft tank diameter max)	72	1.8	83	2.1	166 ³ / ₈	4.2	65 ¹ / ₂	1.7	96	2.4	107	2.7	19	9
61SOR-400C*	Remote (vapor-tight, 8 ft tank diameter max)	72	1.8	83	2.1	166 ³ / ₈	4.2	65 ¹ / ₂	1.7	96	2.4	107	2.7	19	9

*Remote-fill applications

Materials

Body: Duragard®
Coated Cast-Iron
Cage Assembly: ZA12 Zinc/Alloy
(TEE)

Features

- ◆ **Duragard®-Coated Cast-Iron Body**
– helps prevent rust and corrosion for long service life
- ◆ **ZA12 Zinc/Alloy Cage Assembly**
– eases installation and removal of ball-float vent valves and test plugs
- ◆ **Precision-Machined Threads** – help prevent cross threading of the ball-float or tank riser pipe
- ◆ **Compatible with 85% Ethanol (E85) or Methanol (M85)**



OPW 233 Series Extractor Fittings

OPW 233 Series Extractor Fittings thread into 4 NPT openings on underground storage tanks. A 4" riser pipe threads into the top of the 233 for use in Stage I Vapor Recovery or to access a ball-float. The 233 Extractor Fittings have threaded single-outlet connections for attaching tank-vent lines or multiple outlets used to manifold tank-vents or accommodate Stage II vapor-return lines from dispensers. Internal threads on the 233 are designed to install a ball-float or test plug in the extractor.

OPW 233

The OPW 233 Extractor Fittings are designed for use with all OPW 53VML Ball-Float Vent Valves that include an extractor cage (the OPW 233 does not include an extractor cage). The 233 Extractor incorporates either single-outlet or multiple-outlet threads.

OPW 233VP Extractor Test Plug

The OPW 233VP Extractor Fitting Test Plug is used on all OPW 233 Series Extractor Fittings. The 233VP incorporates an O-Ring above the threads (on the plug) to isolate the tank from the vent piping systems during a tank test.

Ordering Specifications

Product #	Top Thread		Outlet Thread		Bottom Thread		Weight	
	in.	mm	in.	mm	in.	mm	lbs.	kg
233-4420 (Tee)*	4	102	2	51	4	102 Ext.	13.89	6.31
233-4430 (Tee)*	4	102	3	76	4	102 Ext.	14.06	6.39
233-4422 (Cross)*	4	102	2 x 2	51 x 51	4	102 Ext.	15.18	6.90
233-4433 (Cross)*	4	102	3 x 3	76 x 76	4	102 Ext.	15.54	7.06
233-4432 (Cross)*	4	102	3 x 2	76 x 51	4	102 Ext.	17.29	7.86

* Without cage assembly NOTE: Use OPW89 Extractor Wrenches (See page XXX)

Replacement Parts

OPW 233V and 233VM

Part #	Description
H11930	2" Cage SA
H14578M	O-Ring for 233VP-6046
233VP-6046	Test Plug

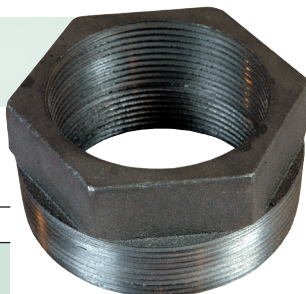
Materials

Bushing: Iron

53

Ordering Specifications

Model #	Threads	lbs.	kg
	(MNPT x FNPT)		
53-0036	4" x 2" (102 x 51mm)	2.5	1.1



OPW 53 Bushings

OPW 53 Bushings are general-purpose bushings for use on tank-vent lines, fill lines, suction-lines or other lines where it is necessary or desirable to bush up or bush down.

Listings and Certifications



OPW 233 Series Extractor Fittings are EVR Approved for E85

OPW 53VML (30MV) Ball-Float Vent Valves

The OPW 53VML Ball-Float Vent Valves protrude into underground storage tanks from OPW 233 Series Extractor Fittings at the Stage I vapor-return riser pipe or tank-vent line. During a product delivery, as the tank level rises, a counterweight stainless-steel ball seats on the valve body and restricts flow of vapors back to the transport truck. As the vapors become compressed in the tank (ullage), product flow into the tank is severely restricted. The 53VML Series Ball-Float meets the U.S. EPA 90% requirement for product flow restriction into underground storage tanks. The 53VML-0060 and 53VML-0065 are designed as "back-up" overfill protection for overfill-prevention valves, and to minimize product mixing with underground manifold vent lines.

Ordering Specifications and Dimensions

Product #	Pipe Dia.	Length (A)		Weight	
		in.	mm	lbs.	kg
53VML-0060	2*	6 ¹ / ₈	157	2	0.9
53VML-2070	2	7	178	3	1.5
53VML-0120	2	12	305	4	1.8
53VML-0160	2	16	407	5	2.3
53VML-0180	2	18	457	6	2.7
53VML-3050	3	5	127	5	2.3
53VML-3110	3	11	279	7.6	3.5
53VML-3120	3	12	305	7.7	3.5

* 1/16" Vapor-Flow Orifice

30MV-KIT Ordering Specifications

Part #	Description
30MV-KIT	O-Ring 1/16" Brass orifice insert

Materials

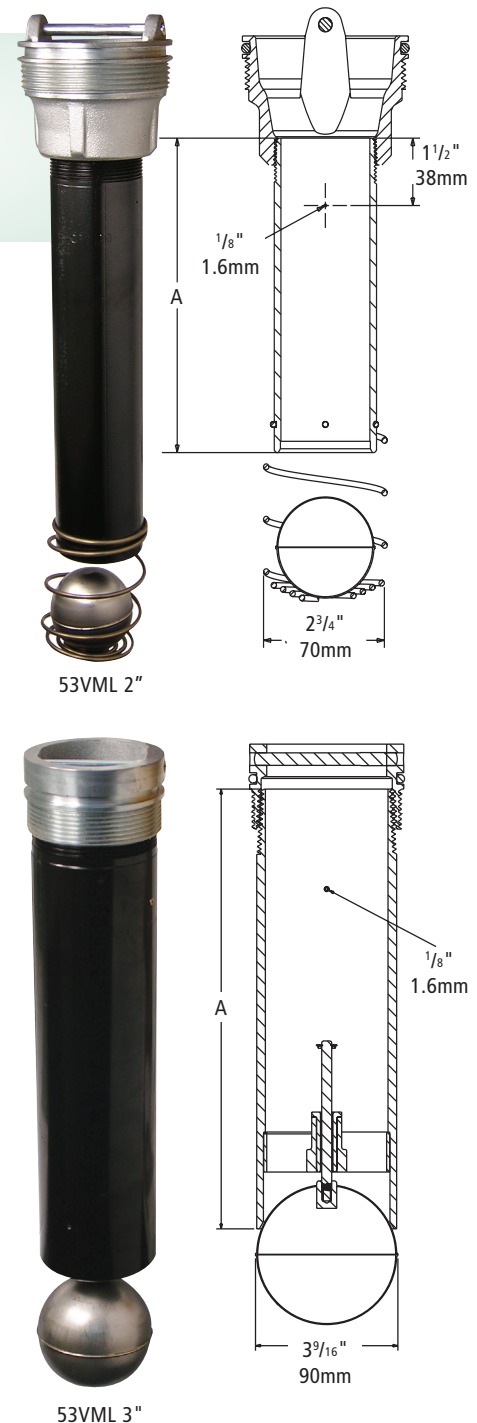
Pipe Nipple: Steel
Coating: Black Duragard®
Basket: Stainless-steel
Ball: Stainless-steel

Features

- ◆ **Stainless-Steel Counterweight Ball-Float** – corrosion-resistant for long service life. Counterweight ensures proper seating of the ball for precision "slow-down" of product flow into the tank
- ◆ **Vapor-Flow Orifice** – a "bleed" hole machined into the body of the valve, sized to properly "slow-down" the delivery flow rate
- ◆ **Duragard® Body Coating** – helps prevent rust and corrosion build-up for a smooth seating surface and long service life
- ◆ **Various Body Lengths** – accommodate virtually any size tank
- ◆ **2" and 3" Body Sizes** – 3" size increases vapor flow to reduce product delivery time
- ◆ **Easy Installation, Service and Testing** – both 2" and 3" valves install in OPW 233 Series Extractor Fittings and are easily removed for inspection or tank testing with OPW 89 Extractor Wrench
- ◆ **Compatible with 85% Ethanol (E85) or Methanol (M85)**

Convert your 53VML into the 30MV Ball-Float

The 30MV Series ball-float has the same function as the 53VML, but allows for higher storage capacity in larger-volume tanks. The 30MV meets the U.S. EPA 30-minute warning requirement for product flow restriction in the underground storage tank. Using the Tank Ullage calculation on page 121, convert your desired length 53VML by adding the 30MV-KIT.



53VML/30MV Instruction Sheet
 Order Number: **H14111PA**

Warning OPW Overfill-Warning Systems should only be used on submerged pumping systems, not suction-pump systems. For special applications, contact OPW Fueling Components. OPW Overfill-Warning Systems should only be used on gravity-drop systems. DO NOT use where Pump-Off Unloading or coax fills are used.

Specifying the Proper Length 53VML or 30MV Series Ball-Float

Step 1: Determine Dimension "X":
Consult the tank chart (provided by the tank manufacturer) to determine the distance that corresponds to 10% of the total tank capacity for 53VML or 308 gallons for 30MV.

Step 2: Determine Dimension "Y":
Measure the dimension from the inside top of the tank to the top of the 4" threaded tank "bung" fitting.

Step 3: Add measurements "X" and "Y". Then subtract 1/4" and round up to the nearest length ball-float.

Tank Ullage Calculator

- ◆ 30 minutes x 5GPM = 150 gallons
- ◆ Ullage-compression rate* is 27% after the ball seats
- ◆ 150 gallons ÷ .73 (1- ullage-compression rate) = 205.48 gallons
- ◆ 205.48 x 1.5 (OPW recommended safety factor) = 308.22 gallons
- ◆ Approximately 308 gallons required ullage

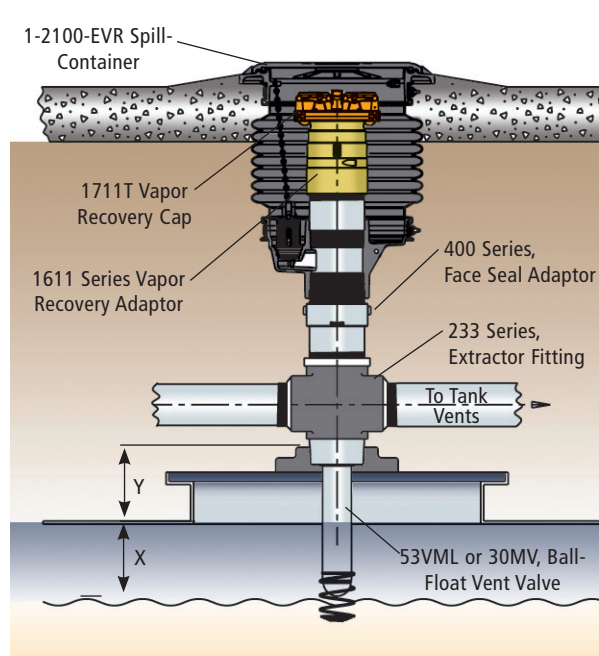
*Ullage-compression rate will vary with head pressure.

OPW 53VML and 30MV Ball-Float Sizing/OPW 89 Extractor Wrench

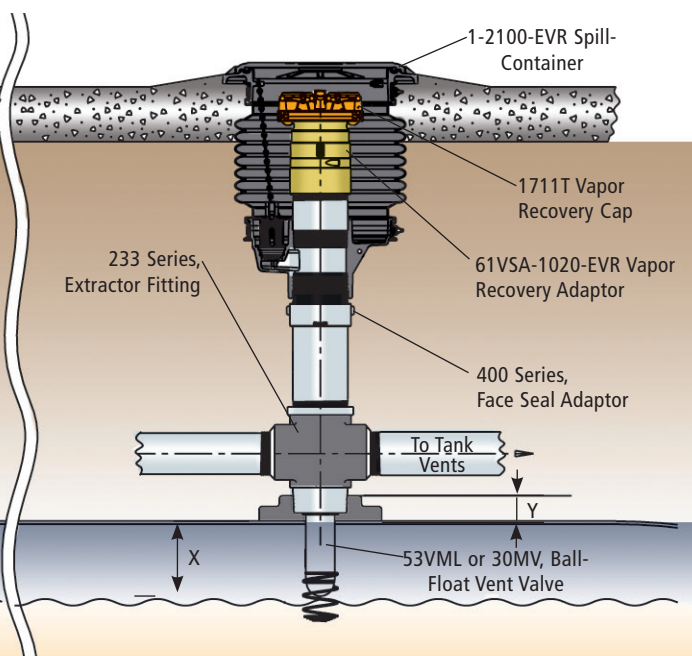
IMPORTANT:

Installing the incorrect-length OPW 53VML or 30MV Ball-Float Vent Valve for your specific application may result in delivery flow restriction at unacceptable levels. Always consult the appropriate tank charts and determine the specifics of your tank installation to determine the appropriate length OPW 53VML or 30MV. The illustration and instructions below are intended to serve as a guide in this determination.

Tank Manway Mounted Extractor

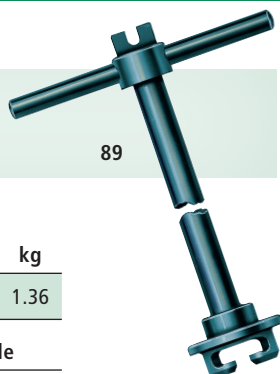


Tank Top Mounted Extractor



Materials

Pipe: Extra-heavy black iron
Handle and Hook: Ductile iron



Ordering Specifications

Product #	in.	mm	lbs.	kg
89-0044	2	51	3	1.36

Size	Wrench	Product Compatible
2"	89-0044	233E, 88E Series

OPW 89 Extractor Wrench

The OPW 89 Extractor Wrench is designed to install or remove OPW 53VML and 30MV Ball-Float Vent Valves or OPW 233VP and 233VMP Test Plugs in OPW 233, 233V, and 233VM Extractor Fittings. The 89 is also designed to work with the cage assemblies on the 233E Suction-Tube Extractor Fitting and 88E Extractable Angle Check Valve in suction-system applications. The 89 wrench consists of a 4" section of pipe welded to a "T" handle with a 2" hook section. The 2" hook section mates with current OPW ball-floats and extractable cages.

OPW 61T Drop Tube

The OPW 61T Drop Tube is installed in the fill riser pipe to an underground storage tank. It is designed to transfer product from the fill connection point (between the delivery drop elbow and tight-fill adaptor) to within 6" (or per local requirements) of the bottom of the tank. This allows for submerged filling of the tank, resulting in a more efficient delivery flow rate while reducing the buildup of vapors or foam in the tank.

OPW 61TC Coaxial Fill Drop Tubes

The OPW 61TC Coaxial Drop Tube is designed to replace an OPW 61T Conventional Drop Tube when Stage I Vapor Recovery is required and a vapor recovery riser pipe is not available on the tank or would require excavation to the top of the tank. The 61TC is used in conjunction with OPW 633TC Coaxial Vapor Recovery Adaptors to return vapors to the tank truck through one riser pipe during a fuel delivery to an underground storage tank. The upper section of the 61TC is tapered to allow vapors to return to the tank truck through the interstitial space between the riser pipe and outside wall of the drop tube. Simultaneously, product is delivered to the tank through the center of the 61TC.

OPW 61TCP Poppeted Coaxial Fill Drop Tubes

The OPW 61TCP Poppeted Coaxial Fill Drop Tube is similar to the 61TC, but is spring-loaded. When used in conjunction with the OPW 633TCP, the 61TCP acts as a poppet to close off the vapor-return side of the coaxial-fill tube.



Features

- ◆ .062" Thick Drop Tube Walls – deter denting and damage to the tube upon installation or removal for long service life.
- ◆ Various Lengths and Diameters – accommodate a variety of tank diameters and fill riser pipe sizes.

Ordering Specifications

Product #	in.		mm		lbs.		kg		Drop Tube Length	
									ft.	m
61T-7368	4		102		7.65		3.48		15	4.57
E85 EVR Approved:										
61T-DEF-0412*	4		102		6.18		2.8		12	3.66

*For DEF Applications Only

Replacement gaskets for the 61T-4" and the 61SO Series are available. Order the OPW 61TG (4000).

Features

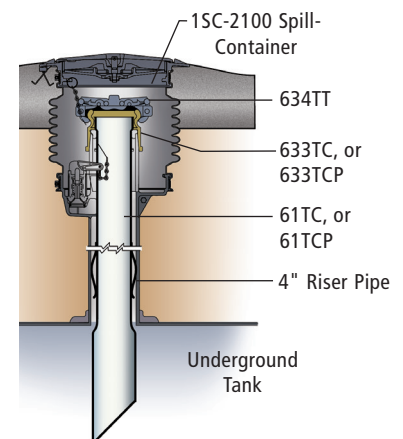
- ◆ .052"-Thick Drop-Tube Walls – deter denting and damage to the tube upon installation or removal for long service life
- ◆ Various Lengths and Diameters – accommodate a variety of tank diameters and fill riser pipe sizes
- ◆ Fully Welded Retaining Brackets – ensure a secure installation in the riser pipe
- ◆ Three Centering Springs – enable even flow of vapors back to the tank truck

Ordering Specifications

Product #	Diameter		Length		Weight	
	in.	mm	ft.	m	lbs.	kg
61TC-7270	4	102	13	3.96	8.64	3.93
61TC-7272	4	102	16	4.88	13.82	6.28
61TCP-3800	4	102	13	3.96	8.96	4.07

61T Drop Tube Instruction Sheet Order Number: **200652**

61TCP-3800 Instruction Sheet Order Number: **H12064M**



Materials

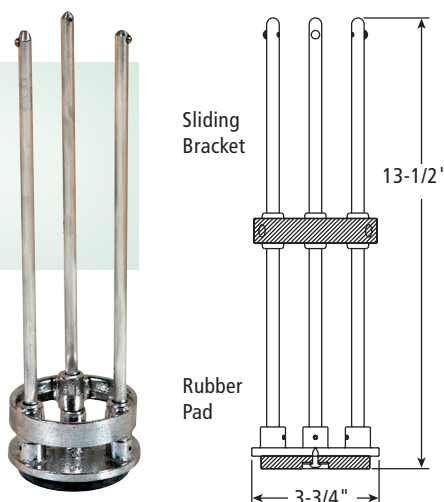
Body: Aluminum and stainless-steel components

Viton® Base Pad

6111-1400

Features

- ◆ **Viton® Base Pad** – ensures compatibility with current fuel formulations and absorbs impact of wooden gauge sticks to protect the bottom of the tank from punctures
- ◆ **Corrosion-Resistant** – aluminum and stainless-steel components provide for long service life
- ◆ **Unencumbered Vertical Movement** – assures the pad rests on the bottom of the tank and absorbs shock evenly
- ◆ **CARB Approved** – approval Letter #98-12
- ◆ **EVR Approved**



Ordering Specifications

Product #	Height		Diameter		Weight	
	in.	mm	in.	mm	lbs.	kg
6111-1400	13 1/2	343	3 3/4	96	3	1.4

OPW Tank-Bottom Protectors

OPW Tank-Bottom Protectors are installed at the bottom of overfill-prevention valves or drop tubes to help prevent the underground storage tank from damage or leakage at the fill point due to manual tank-gauging with wooden sticks and erosion from dirt or debris.

OPW 6111-1400 Tank-Bottom Protector

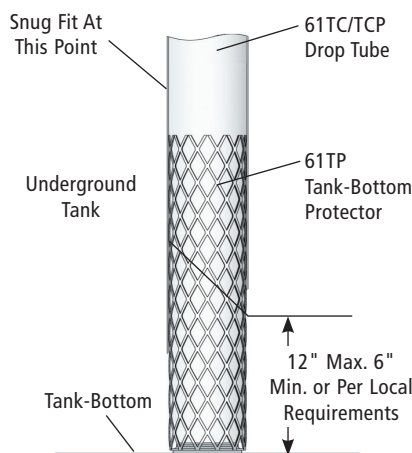
The OPW 6111-1400 incorporates a sliding bracket that is pop-riveted to the bottom of the drop tube. This secures the tank-bottom protector to the drop tube for easy, reliable installation and removal for servicing the tank.

Features

- ◆ **Zinc-Plated Steel Cage** – ensures corrosion resistance for long service life
- ◆ **Mesh Screen Design** – helps prevent debris or other foreign matter from obstructing the submersible pump or suction-line foot valve

Ordering Specifications

Product #	Height		Weight	
	in.	mm	lbs.	kg
61TP-2398	4	102	1.02	.46



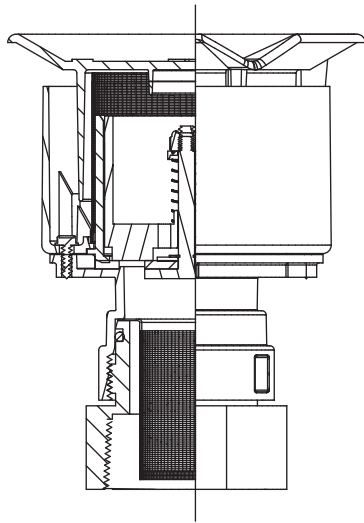
OPW 61TP Tank-Bottom Protector

The OPW 61TP is a flanged, mesh screen design that slides to the bottom of the drop tube. The 61TP is held in place by the flanged spring action of the mesh screen. The mesh screen helps keep debris or other foreign matter from obstructing the submersible pump or suction-line foot valve.

6111-1400 Tank-Bottom Protector Instruction Sheet
Order Number: **H14977PA**

OPW 723V Pressure Vacuum Vents

Pressure Vacuum Vents are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.



Conversion Table

Measurement Units	=	Oz.	PSI	In H ₂ O (WC)	In Hg (Merc)	Bar
Bar	x	236.0	14.5	401.4	29.53	
In. Hg (Mercury)	x	7.843	0.49	13.6		0.034
In H ₂ O (WC)	x	0.578	0.04		0.074	0.002
PSI	x	16.00		27.68	2.04	0.069
Oz.	x		0.063	1.73	0.128	0.004

Listings and Certifications



Materials

Top/Body: Polypropylene
Base: Anodized aluminum
Poppet: Anodized aluminum
Screen: Stainless-steel mesh
Gasket: Cellular rubber



723V

Vent Must Be Mounted Vertically



Features

- ◆ **Preset and Tested Factory Settings** – 2.5" to 6" water-column pressure settings and -6" to -10" water-column vacuum settings
- ◆ **Cycle Tested For Reliability** – tested to the equivalent of 80 years of service in the most severe environment without leakage problems
- ◆ **Long Service Life** – corrosion-resistant Duratuff® composite construction
- ◆ **Easy Installation** – the 723V is available in 2" and 3" threaded versions
- ◆ **Certifications** – California Air Resources Board and Enhanced Vapor Recovery (CARB EVR)
- ◆ **UL Approved to CARB CP-201 Requirements**
- ◆ Underwriters Laboratory 2583 Listed
- ◆ Complies with NFPA 30 Requirements for venting gasoline vapors upward
- ◆ **High Maximum Flow Rate** – 6450 SCFH at 2 psi (0.1 bar) pressure drop
- ◆ **Manifold Vent Pipes** – vent pipes may be manifolded to produce a single Pressure Vacuum Vent line. The 723V exceeds California's requirements of a maximum vapor leak rate of 0.17 SCFH at 2.00 inches H₂O
- ◆ **Leak Rate** – multiple pressure vacuum vents may be installed on a single site. The 723V exceeds California standards with a leak rate of 0.05 SCFH or less at 2.00 inches H₂O
- ◆ **Screened Tank Vent Lines** – a 65-micron stainless-steel screen helps prevent debris and insects from entering the lines. An added screen installed at the base prevents debris from intruding from the vent stack
- ◆ **No Tools Required** – A removable snap-fit top allows for easy maintenance (recommended yearly)
- ◆ **Removable Threaded Bushing** – designed for easy installation on NPT-threaded risers. Allows easy access to lower screen

723V Instruction Sheet

Order Number: 211276

Ordering Specifications

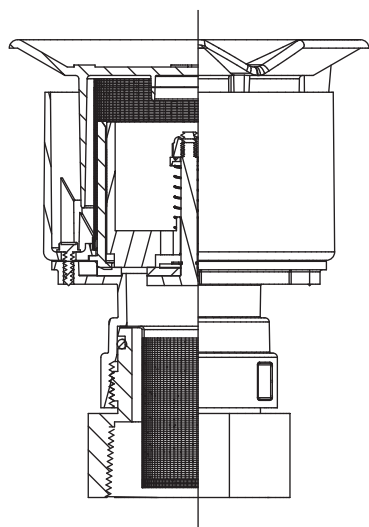
Product #	Description	Identification Label Color	lb.	kg
723V-2203	2" Thread, 2" to 3" WC Pres., 8" WC Vac. Thread-On	Yellow	1.55	.70
723V-3203	3" Thread, 2" to 3" WC Pres., 8" WC Vac. Thread-On	Yellow	2.20	1.00

Replacement Parts

Part Number	Description
C05086M	Lower Screen
209817	Upper Screen
C05089	2" Threaded Base Adaptor
C05122	3" Threaded Base Adaptor

OPW 623V Pressure Vacuum Vent

Pressure Vacuum Vents are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.



Materials

Top/Body: Polypropylene
Base: Anodized aluminum
Poppet: Anodized aluminum
Screen: Stainless-steel mesh
Gasket: Closed-cell foam



623V
Vent Must Be Mounted Vertically

Features

- ◆ **Pressure/Vacuum Setting** – 2.5" to 6" water-column pressure settings and -6" to -10" water-column vacuum settings are factory preset and tested
- ◆ **Reliable Service** – cycle tested to the equivalent of 80 years of service in the most severe environment without leakage problems
- ◆ **Corrosion-Resistant Construction** – a Duratuff® composite body ensures a long service life
- ◆ **Easy Installation** – the 623V is available in 2" and 3" threaded versions
- ◆ **Complies with NFPA 30 Requirements** – for venting gasoline vapors upward
- ◆ **Manifold Vent Pipes** – vent pipes may be manifolded to produce a single Pressure Vacuum Vent line. The 623V is designed to exceed California's requirements of a maximum vapor leak rate of 0.17 SCFH at 2.00 inches H₂O
- ◆ **High Maximum Flow Rate** – 6450 SCFH at 2 psi (0.1 bar) pressure drop
- ◆ **Leak Rate** – multiple pressure vacuum vents may be installed on a single site. The 623V exceeds California standards with a leak rate of 0.05 SCFH or less at 2.00 inches H₂O
- ◆ **Maintenance** – no tools required. A removable snap-fit top allows for easy maintenance (recommended yearly)
- ◆ **100-Mesh Stainless-Steel Wire Screens** – helps prevent debris and insects from entering the tank-vent lines. An added screen installed at the base prevents debris from intruding from the vent stack
- ◆ **Adaptor Bushing** – removable hex-threaded bushing designed for easy installation on NPT-threaded risers. Allows easy access to lower screen
- ◆ **ATEX Approved** – for flame-arrestor applications

Ordering Specifications

Conversion Table						
Measurement Units		In H ₂ O		In Hg		
		Oz.	PSI	(WC)	(Merc)	Bar
Bar In. Hg (Mercury)	=					
	x	236.0	14.5	401.4	29.53	
	x	7.843	0.49	13.6		0.034
In H ₂ O (WC)	x	0.578	0.04		0.074	0.002
	x					
PSI Oz.	x	16.00		27.68	2.04	0.069
	x		0.063	1.73	0.128	0.004

Product #	Description	Identification Label Color	lb.	kg
623V-2203	2" Thread, 2.5" to 6" WC Pres., -6" to -10" WC Vac. Thread-On	Yellow	1.55	.70
623V-3203	3" Thread, 2.5" to 6" WC Pres., -6" to -10" WC Vac. Thread-On	Yellow	2.20	1.00

Replacement Parts

Part #	Description
C05086M	Lower Screen
H14895M	Upper Screen
C05089	2" Threaded Base Adaptor
C05122	3" Threaded Base Adaptor

623V Instruction Sheet
Order Number: H14898M

Listings and Certifications



OPW 623V
& 523V



ATEX Approved

Patent No.
WO2004/036096AZ

Features

- ◆ **A Variety of Pressure/Vacuum Settings** – 3" water-column, 1 oz. and 8 oz. pressure settings and 8" water-column or 1/2 oz. vacuum settings are factory preset and tested
- ◆ **Reliable Service** – self-guided poppet assembly ensures consistent seating of the pressure/vacuum valve
- ◆ **Corrosion-Resistant Construction** – Duratuff® composite body assures long service life
- ◆ **Easy Installation** – 523V is available in 2" and 3" threaded versions or slip-on models that provide for attachment to the vent line with Allen-head screws and radial sealing O-ring



- ◆ **Complies with NFPA 30 Requirements** – for venting gasoline vapors upward
- ◆ **High Maximum Flow Rate** – 7000 SCFH at 2 psi pressure drop
- ◆ **40-Mesh Stainless-Steel Wire Screen** – helps prevent debris and insects from entering the tank-vent lines

Ordering Specifications

Product #	Description	Identification Label Color	lb.	kg
523V-1100	2" 8 oz Pres., 1/2 oz. vac. thread-on	Red	1.65	.75
523V-1150	2" 8 oz Pres., 1/2 oz. vac. slip-on	Red	1.65	.75
523V-3100	3" 8 oz Pres., 1/2 oz. vac. thread-on	Red	3.2	1.45
523V-3150	3" 8 oz Pres., 1/2 oz. vac. slip-on	Red	3.2	1.45
523V-2200	2" 1 oz Pres., 1/2 oz. vac. thread-on	Silver	1.65	.75
523V-2250	2" 1 oz Pres., 1/2 oz. vac. slip-on	Silver	1.65	.75
523V-3200	3" 1 oz Pres., 1/2 oz. vac. thread-on	Silver	3.2	1.45
523V-2203	2" 3" WC Pres., 8" WC vac. thread-on	Yellow	1.65	.75
523V-2253	2" 3" WC Pres., 8" WC vac. slip-on	Yellow	1.65	.75
523V-3203	3" 3" WC Pres., 8" WC vac. thread-on	Yellow	3.2	1.45
523V-3253	3" 3" WC Pres., 8" WC vac. slip-on	Yellow	3.2	1.45

OPW 523V Pressure Vacuum Vent

Pressure Vacuum Vents are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.

Conversion Table

Measurement Units		In H ₂ O (WC)		In Hg (Merc)	Bar
	=	Oz.	PSI		
Bar In. Hg (Mercury)	x	236.0	14.5	401.4	29.53
	x	7.843	0.49	13.6	0.034
In H ₂ O (WC)	x	0.578	0.04	0.074	0.002
	x	16.00	27.68	2.04	0.069
PSI Oz.	x	0.063	1.73	0.128	0.004
	x				

Replacement Parts

Part #	Description
H11432M	O-Ring for 2" Thread
H11456M	O-Ring for 3" Thread

523V Instruction Sheet
Order Number: **H11972M**

Materials

Body: Aluminum
O-Ring: Nitrile



Ordering Specifications

Product #	Description	in.	mm	lb.	kg
523A-1003	4" Thread-On Adaptor for use with 523V Pressure / Vacuum Vents	2x3	51x76	.47	.213
523SA-1003	3" Slip-On Adaptor for use with 523V Pressure / Vacuum Vents	2x3	51x76	.63	.286
523SA-1002	2.5" Slip-On Adaptor for use with 523V Pressure / Vacuum Vents	2x2	51x51	.31	.141

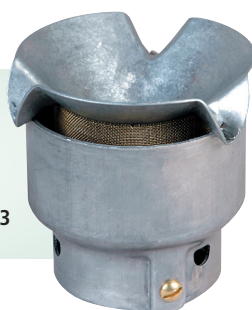
OPW 523V Series Adaptor Bushings

The 523V Series Adaptor Bushings are designed to thread into the base of 2" threaded 523V vents. The adaptor bushings convert a 2" 523V to 3" threaded, 2" slip-on or 3" slip-on connection.

Materials

Body: Aluminum
Screen: 40-mesh brass
Set Screws: Brass

23



Features

- ◆ **Reliable Service** – vent-cap drain spouts extend outward to deter rainwater entry
- ◆ **Corrosion-Resistant Construction** – aluminum body and cap assure a long service life
- ◆ **Easy Installation** – 23 series is available in 2" and 3" slip-on models that provide for attachment to the vent line with set screws
- ◆ **Complies with NFPA 30 Requirements** – for venting gasoline vapors upward
- ◆ **High Maximum Flow Rate** – 7000 SCFH at 2 psi (0.1 bar) pressure drop
- ◆ **40-Mesh Brass Wire Screen** – helps prevent debris and insects from entering the tank-vent lines

Replacement Parts

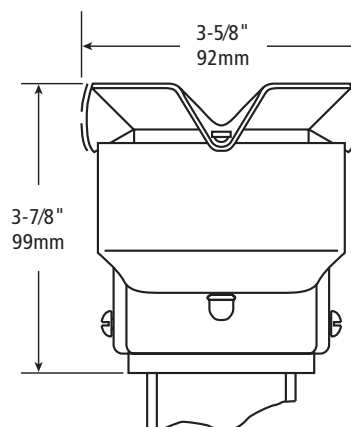
Part #	Description
H00122M	Screw
H01967M	Nut
H01969M	Screen

Ordering Specifications

Product #	Description	in.	mm	lbs.	kg	Weight	
						lbs.	kg
23-0044	Open Vent	1½	38	.25	0.11	0.25	0.11
23-0033	Open Vent	2	51	.25	0.11	0.25	0.11
23-0055	Open Vent	3	76	1.6	0.73	1.00	0.45

OPW 23 Series Open Atmospheric Vents

Open Atmospheric Vents are installed on the top of vent pipes from underground or aboveground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. These vents are always open to atmosphere and allow any pressure or vacuum in the tank to vent.



Materials

Body: Zinc/aluminum
Screen: brass
Cap: 2" - Steel 4" - cast-iron
Screen: 40-mesh stainless-steel

113

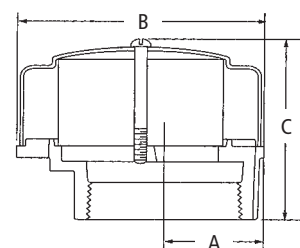


Ordering Specifications

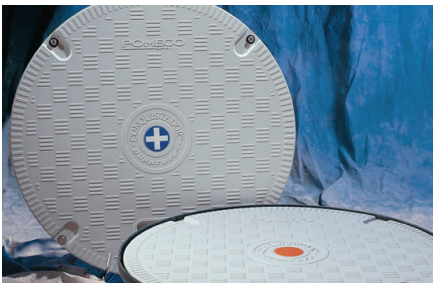
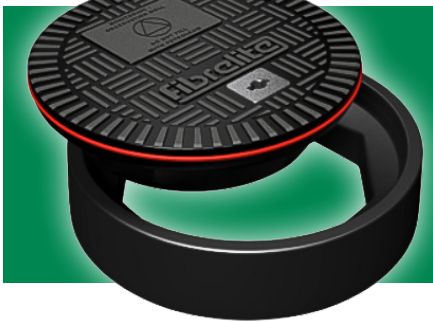
Product #	in.	mm	lbs.	kg
113-0099	4	102	7.50	3.41

OPW 113 Series Open Atmospheric Utility Vents

OPW 113 Open Atmospheric Utility Vents are installed on the top of above ground fuel-storage tanks. The vent-cap and internal wire screen are designed to protect the tank-vent lines against intrusion and blockage from water, debris or insects. These vents are always open to atmosphere and allow any pressure or vacuum into the tank to vent. The 113 vents vapors downward and is used primarily on diesel, fuel oil, waste-oil and motor-oil tanks, but can also be used on a wide variety of aboveground storage tank-venting applications.



Manholes & Monitoring Well Equipment



OPW Manhole Covers Exceed Highway Specification-20 (H20/HS20)

Highway Specification-20 (H20/HS20) is contained in the "Standard Specifications for Highway Bridges" and is intended to serve as a standard or guide of preparation of state specifications.

H20/HS20 incorporates rear-axle loading of 32,000 lbs. over rear-axle (4 wheel on single axle) or wheel loading of 8,000 lbs. per tire.

These sketches illustrate the AASHTO-approved live-loading specifications for the standard H20 and HS20 trucks.

Fibrelite Composite Access Covers

Fibrelite manufactures the widest range of composite manhole covers for the Retail Fueling industry. After 30 years Fibrelite remains number one in the market, supplying globally innovative new designs.

Manholes & Monitoring Well Equipment

OPW Manholes are designed for use in a wide variety of service station, commercial and industrial driveway applications. They provide access from grade-level to underground equipment including tank sumps, tank riser pipes, monitoring equipment, submersible pumps, valves and piping connections.

Composite Manholes

Lightweight and extremely durable, composite cover manholes make sump accessibility safer and easier than ever before. Designed for use in many service station, commercial and industrial driveway applications, these manholes offer a wide variety of features to ensure the ultimate in safety, user-friendly convenience and long-lasting performance.

Cast-Iron Manholes and Fill Boxes

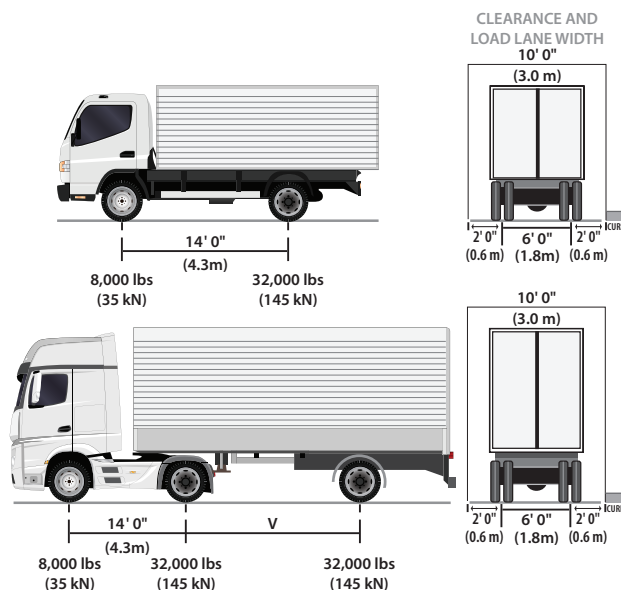
Heavily ribbed cast-iron covers and body rings ensure maximum load-bearing capacity on cast-iron manholes and fill boxes. These manholes are ideal for connecting underground tank lines directly to the surface without sump enclosures. A variety of features available on cast-iron manholes and fill boxes make them the perfect choice for many applications.

Steel Manholes

Steel Manholes are designed for use in a variety of service station driveway, industrial and commercial applications, and are used to provide access to all types of underground equipment, including vapor recovery connections, UST monitoring equipment, submersible pumps and tank-gauging equipment.

Monitoring Well Manholes

OPW Monitoring Well Manholes are designed for monitoring and observation well applications where limited access and clear identification are essential. Rugged cast-iron covers meet H20/HS20 load rating requirements for long-lasting and reliable performance. The covers feature a permanently cast-in "Do Not Fill" warning statement and a black equilateral triangle inset into a white background in accordance with API Recommended Practice 1615.



Fibrelite Composite Manholes

Fibrelite offers the retail-petroleum industry's leading watertight, easy to remove, non-bolted composite manhole covers in a large selection of shapes and sizes. From general tank sump access to multiport and single-port fill-sump applications to interstitial sumps and monitoring-wells, Fibrelite has every application covered.

Multiple colors are available – Contact OPW Customer Service for pricing, availability, and lead times.

Materials:

Cover: Fiberglass

Frame: Fiberglass

Skirt: Fiberglass

**Cover Includes
Frame and Skirt**



Features & Benefits:

- ◆ UV resistant
- ◆ Round, square and rectangular (wide range of sizes)
- ◆ Anti-slip surface - no costly injury claims
- ◆ Will not corrode
- ◆ Watertight, sealed design
- ◆ No bolts required
- ◆ Monolithic structure eliminates delaminating
- ◆ Ergonomic, single-person removal and replacement with Fibrelite lifting handle
- ◆ Locks available for all covers
- ◆ Available in any color
- ◆ Heavy-duty (HD40) covers available for truck stops, bus depots and industrial applications

Complete Cover Assemblies

Ordering Specifications - Complete Grade Level "Flat" Composite Manholes

Part #	Description	Color	Skirt I.D.	Cover O.D.	Skirt Length	Skirt Style	Wt.
FL120BLACK-SK12	12" Black Flat Composite Manhole Cover Bonded	Black	13"	15"	12"	Tapered	26 lbs
FL180BLACK-SK12	18" Black Flat Composite Manhole Cover Bonded	Black	19"	21.2"	12"	Tapered	40 lbs
FL600BLACK-SK12	24" Black Flat Composite Manhole Cover Bonded	Black	26"	27"	12"	Tapered	76 lbs
FL760BLACK-SK12	30" Black Flat Composite Manhole Cover Bonded	Black	32"	33"	12"	Tapered	89 lbs
FL90BLACK-SK12	36" Black Flat Composite Manhole Cover Bonded	Black	37"	38.5"	12"	Tapered	109 lbs
FL90GRAY-SK12	36" Gray Flat Composite Manhole Cover Bonded	Gray	37"	38.5"	12"	Tapered	109 lbs
FL100BLACK-SK12	40" Black Flat Composite Manhole Cover Bonded	Black	42"	44"	12"	Stepped	142 lbs
FL100GRAY-SK12	40" Gray Flat Composite Manhole Cover Bonded	Gray	42"	44"	12"	Stepped	142 lbs



FL90-SK12

Contact OPW for custom length skirts, heavy duty or colored covers 1-800-422-2525.

Replacement Parts - Replacement Covers

Part #	Description	Color	Cover O.D.	Cover Ht.	Wt.
FL120BLACK	12" Dia. Black Flat Sealed Composite Cover	Black	15"	3.91"	13 lbs
FL180BLACK	18" Dia. Black Flat Sealed Composite Cover	Black	21.2"	3.84"	22 lbs
FL600BLACK	24" Dia. Black Flat Sealed Composite Cover	Black	27"	3.84"	46 lbs
FL760BLACK	30" Dia. Black Flat Sealed Composite Cover	Black	33"	3.84"	59 lbs
FL90BLACK	36" Dia. Black Flat Sealed Composite Cover	Black	38.5"	3.84"	75 lbs
FL100BLACK	40" Dia. Black Flat Sealed Composite Cover	Black	44"	3.84"	110 lbs
FL100GRAY	40" Dia. Gray Flat Sealed Composite Cover	Gray	44"	3.84"	110 lbs
FL36BLACK	36" Dia. Black Raised Composite Cover	Black	39.5"	3.84"	66 lbs
FL36GRAY	36" Dia. Gray Raised Composite Cover	Gray	39.5"	3.84"	66 lbs
FL42BLACK	42" Dia. Black Raised Composite Cover	Black	46.5"	3.84"	93 lbs

*Add HD to Part Numbers above to specify Heavy-Duty H25/HS25-Rated Covers



FL100-SK12

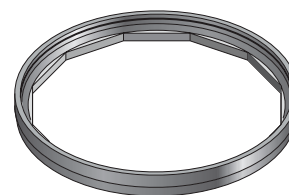


FL90

Ordering Specifications

Frames "Mounting Frame"

Part #	Description	Skirt I.D.	Manhole Type	Weight (lbs)
FL120F	12" Composite Frame For FL120 Covers	13"	Flat	7.7
FL180F	18" Flat Composite Frame For FL180 Covers	19"	Flat	11
FL600F	24" Flat Composite Frame For FL600 Covers	26"	Flat	17
FL760F	30" Flat Composite Frame For FL760 Covers	32"	Flat	18
FL90F	36" Flat Composite Frame For FL90 Covers	37"	Flat	20
FL100F	40" Composite Frame For FL100 Covers	42"	Flat	26



Frames - Flat Fiberglass Mounting Ring

Ordering Specifications

Skirts

Part #	Description	Skirt I.D.	Skirt Length	Skirt Style	Weight (lbs)
FL120-SK12	12" Deep FRP Skirt To Fit FL120	13"	12"	Tapered	5
FL180-SK12	12" Deep FRP Skirt To Fit FL180	19"	12"	Tapered	7
FL600-SK12	12" Deep FRP Skirt To Fit FL600	26"	12"	Tapered	10
FL760-SK12	12" Deep FRP Skirt To Fit FL760	32"	12"	Tapered	12
FL90-SK12	12" Deep FRP Skirt To Fit FL90 Flat	37"	12"	Tapered	14
FL100-SK12	12" Deep FRP Skirt To Fit FL100	42"	12"	Stepped	16



FL90-SK12

Ordering Specifications

Cover Accessories

Part #	Description
FL7	Lifting Handle For Raised Covers - FL42/FL36
FL7A	Lifting Handle With Foot Pedal For Watertight Covers - FL100/FL90/FL180
FL7A-ENCL	Enclosure To House FL7A Handles
KEY-HREP-10-76-90	Key Housing Repair Kit & Compound
FIB-KHB	Replacement Rubber Bung
FIB-KHP	Rubber Key Housing Plug
FIB2-RL-KEY	Key For FIB2-RL Cover Lock
FL120-SEAL	12" Replacement Gasket For FL120
FL180-SEAL	18" Replacement Gasket For FL180
FL600-SEAL	24" Replacement Gasket For FL600
FL760-SEAL	30" Replacement Gasket For FL760
FL90-SEAL	36" Replacement Gasket For FL90
FL100-SEAL	40" Replacement Gasket For FL100



FL7A Keylift



FL7 Keylift

Replacement Gasket



FL7A-ENCL Enclosure

OPW Conquistador™ Plus Composite Cover Manholes

Lightweight and extremely durable, composite cover manholes make sump accessibility safer and easier than ever before. Designed for use in many service station, commercial and industrial driveway applications, these manholes offer a wide variety of features to ensure the ultimate in user-friendly convenience and long-lasting performance.

The Conquistador™ Duratuff® helps put an end to the risk of back, foot and hand injuries with a slip-resistant tread pattern and lightweight, low-profile construction for easier and safer access to tank sumps and other underground equipment.



Replacement Parts

Product #	Description
New Recessed Handle Replacement Parts	
205749	Handle
203174	Screw
Recessed Handle Replacement Parts	
RPHK	Replacement Handle Kit
H13439M	Handle
H13441M	Weld Nut
H14462M	Screw
H11620M	Washer

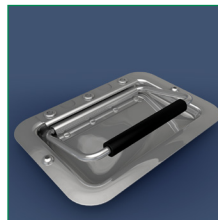
Features

- ◆ Slip-resistant tread pattern
- ◆ Easy removal and replacement
- ◆ Two lifting options; stainless-steel recessed handle or key-lift provision
- ◆ Reduced risk of back, foot and hand injuries
- ◆ Unmatched deflection performance
- ◆ Outstanding long-term durability in rigorous cycle tests
- ◆ Three mounting options
- ◆ Unique structural fiberglass reinforcement matrix
- ◆ Water-resistant models available
- ◆ Roto-Lock and Bolt-Down models available
- ◆ Interchangeable with other manufacturers' covers
- ◆ Painted ring and brass bolts help to prevent rust and corrosion



- ◆ Ribbed gasket peel and stick design for easy replacement
- ◆ Roto-Lock Models – for securing a rain-tight connection without the need to locate threaded bolt holes on the mounting ring. The Roto-Lock offers quick and easy access, while maintaining a secure sump application
- ◆ H20/HS20 Rating – Exceeds Highway Specification - 20 (H20/HS20) Rating

Lifting Options



NEW Recessed
Handle
203666



Recessed Handle
RPHK

Replacement Handles and Keylifts by Model Year

Item	Part #	Conquistador Model Years	Description
Replacement Handle	RPHK	2000-2008	2 Thru Hole Bolt Pattern Design Handle
Replacement Handle	203666	2009-Present	2 Threaded Hole Bolt Pattern Design Handle

Materials

Cover: Fiberglass

Ring: Painted steel

Skirt: Galvanized steel

Key Lift / Recessed Handles: Stainless-steel

Bolts: Stainless-steel

Roto-lock: Brass



Dimensions

Cover	A (Ring I.D.)		B (Skirt I.D.)		Cover Wt.		Assembly Wt.	
39 1/2"	36 1/8"	92 cm	38 5/8"	98 cm	76 lbs.	34.4 kg	134 lbs.	60.8 kg
44 1/4"	40 29/32"	104 cm	43 3/8"	110 cm	89 lbs.	40.4 kg	163 lbs.	74 kg

Ordering Specifications

Plain Cover-Grey

Product #	Description	Cover Only
39CD-PL10	39 1/2" Plain Cover w/ Recess Handle	E00618
44CD-PL10	44 1/4" Plain Cover w/ Recess Handle	E00626

Bolt-Down Cover-Grey

Product #	Description	Cover Only
39CD-WT10	39 1/2" Bolt Down Cover w/ Recess Handle	E00622
44CD-WT10	44 1/4" Bolt Down Cover w/ Recess Handle	E00630

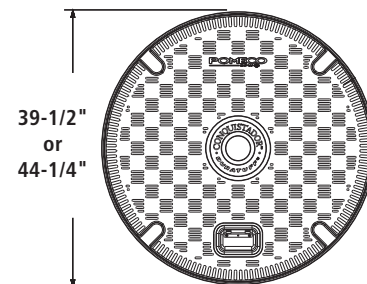
Roto-Lock Cover-Grey

Product #	Description	Cover Only
39CD-RL10	39 1/2" Roto-Lock w/ Recess Handle	E00714
44CD-RL10	44 1/4" Roto-Lock w/ Recess Handle	E00713

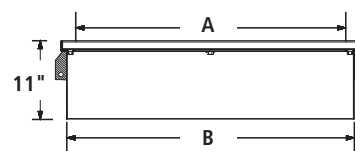
Steel Cover Only

Product #	Description
P110-3950L	39 1/2" Plain Cover Only
P110-4425L	44 1/4" Plain Cover Only

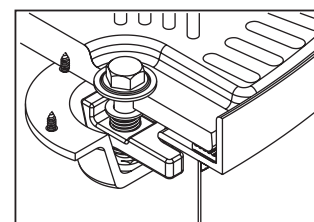
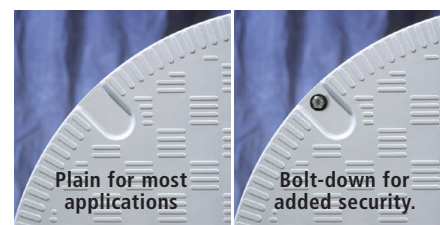
OPW Conquistador™ Plus Composite Cover Manholes



Cover 1" Thick

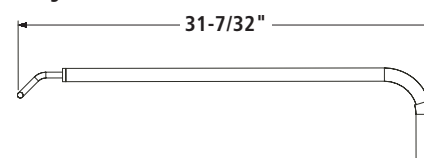


Mounting Options:



Roto-Lock Fastening System

Key Lift Provision Stick



Replacement Parts

Product #	Description
90K-KLS	Key-Lift Provision Stick
H14858	Replacement Gasket for 39CD and 44CD
H14460M	Replacement Bolts
H14461M	Replacement Washers
1RL-KIT	Replacement Roto-Lock Kit

MATADOR

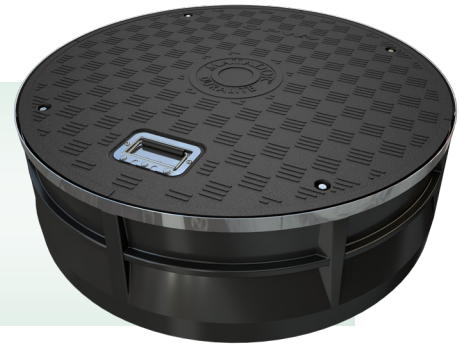
COMPOSITE COVER

Gain independence from heavy steel covers with this all-new composite cover. OPW engineered the Matador with next-generation composite technology to make it the lightest cover in the industry, and priced it to compete with any cover on the market for use at petroleum retail operations, in addition to use for commercial and industrial driveway applications.

Available in 37" and 42" options, the Matador Composite Cover is lightweight, water resistant and extremely durable. Standout features include a steel frame, stainless-steel recessed lift handle and a polyethylene skirt with a flair that prevents corrosion and rust. The lightweight design and slip-resistant tread pattern helps to prevent the risk of back, foot and hand injuries. The Matador makes sump accessibility safer and easier than ever before.

Materials

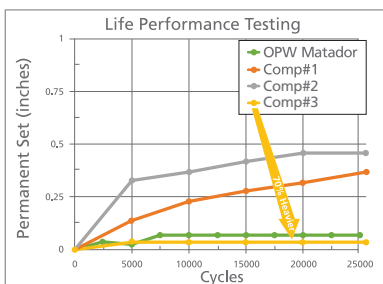
- Cover:** Fiberglass
- Ring:** Painted Steel
- Skirt:** Polyethylene
- Recessed Handle:** Stainless-steel
- Roto Locks:** Ductile iron



Features & Benefits

- ◆ **Lightweight design** helps to reduce risk of back, foot and hand injuries
- ◆ **Slip-resistant tread pattern**
- ◆ **Water resistant**
- ◆ **Easy removal and replacement**
- ◆ **Stainless-steel recessed handle**
- ◆ **Exceptional deflection performance**
- ◆ **Long-life performance** – comparable to heavier competitor models in cycle tests
- ◆ **Special structural fiberglass reinforcement matrix**
- ◆ **Two mounting options**
- ◆ **Roto-Lock Option** – for providing a secure locking mechanism without the need to locate threaded bolt holes on the mounting ring. The Roto-Lock offers quick and easy access while maintaining a secure sump application.
- ◆ **Painted steel frame**
- ◆ **Polyethylene skirt with flair**
- ◆ **H20/HS20 Rating** – Exceeds Highway Specification – 20 (H20/HS20) Rating
- ◆ **Flared skirt** allows equivalent water percolation to 39" and 44" covers

Performance Chart

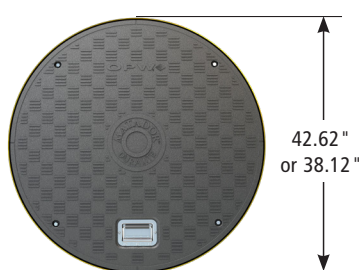


Ordering Specifications

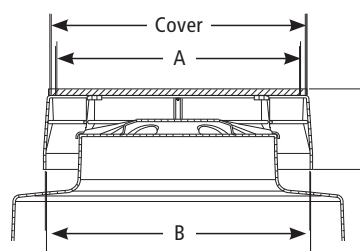
Product #	Description	Covers Only	lb.	kg
37MAT-PL12	37" Plain Matador Composite Cover, Includes Ring and Skirt	212529	63.00	28.58
37MAT-CM12	37" Cam-Lock Matador Composite Cover, Includes Ring and Skirt	212168	66.00	29.94
42MAT-PL12	42" Plain Matador Composite Cover, Includes Ring and Skirt	212518	83.00	37.65
42MAT-CM12	42" Cam-Lock Matador Composite Cover, Includes Ring and Skirt	212164	87.00	39.46
203666	Replacement Handle Kit (same as conquistador)	Equivalent to Conquistador replacement numbers		
205749	Replacement Handle Only (same as conquistador)			
203174	Replacement Handle Screw Only (same as conquistador)			
1CL-KIT	Replacement Cam Kit			

Dimensions

Cover	A (Ring I.D.)		B (Skirt I.D.)		Assembly Weight (Plain)		Assembly Weight (Cam-Lock)	
37.50	35.50 in	90.17 cm	38.62 in	98.09 cm	83.00 lbs	37.63 kg	105.00 lbs	47.63 kg
42.00	40.00 in	101.60 cm	43.50 in	110.49 cm	86.00 lbs	39.00 kg	109.00 lbs	49.44 kg

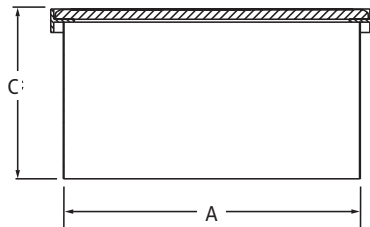
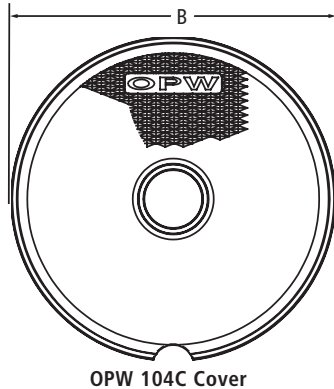


Cover 1" Thick

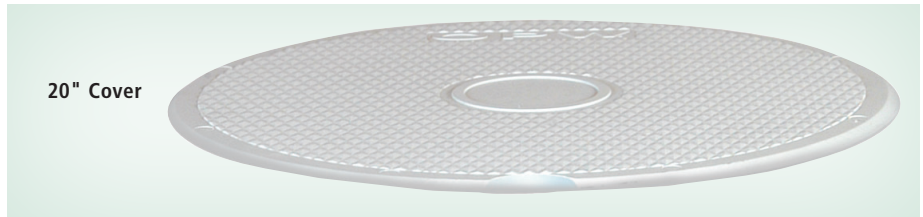


OPW 104C Composite Cover Manholes

The OPW 104C 20" (500mm) Composite Cover Manholes allow easy access to UST-monitoring equipment and provide additional space for electrical junction boxes.



OPW 104C Composite Cover Manholes



Features

- ◆ **Lightweight Cover** – provides safe, easy removal and replacement
- ◆ **Durable Composite Construction** – never rusts, fades or needs to be painted
- ◆ **Spark-Free Cover Design** – fiberglass construction eliminates the possibility of sparks caused by replacing cover on mounting ring
- ◆ **Flush-Mount, Rolled Steel Mounting Ring** – eliminates the need for sloping concrete to reduce snow-plow and traffic hazards
- ◆ **Highway 20 Rated (H20/HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating

Ordering Specifications

Product #	ID (in.)	ID (mm)	lbs.	kg
104C-2000	20	500	22	10.0

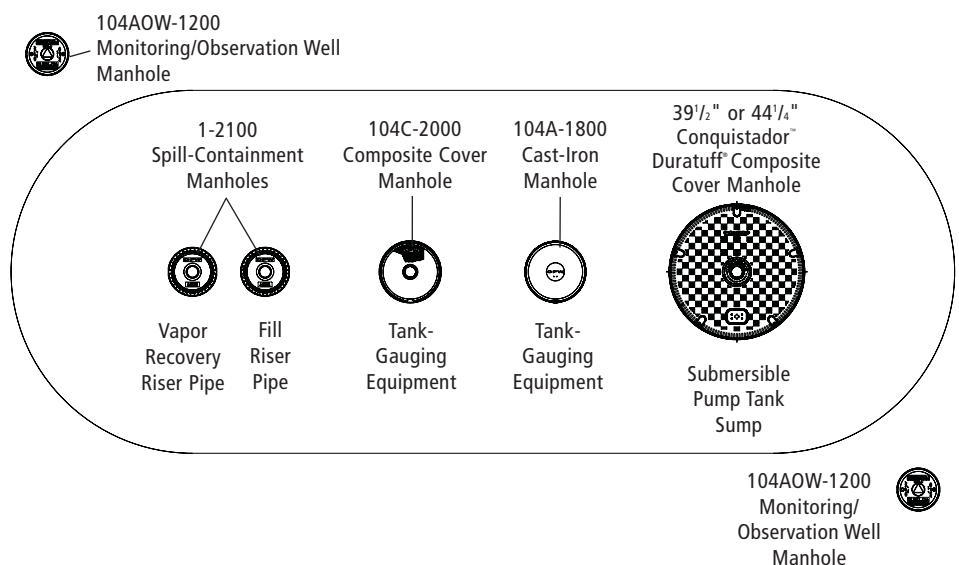
Replacement Parts

Part #	Description
101BG-Cover	Cover for 104C-2000

Dimensions

Product #	A		B		C	
	in.	cm	in.	cm	in.	cm
104C-2000	19	48.26	20 ^{3/4}	52.7	11	27.9

Typical Underground Storage Tank Manhole Layout



Materials

Body Ring: Cast iron
Cover: Cast iron
Skirt: Galvanized steel



OPW 104A Cast-Iron Manhole

A sturdy steel skirt on the standard 104A extends nearly a foot below grade to ensure trouble-free installation in deep concrete, and optional skirts that extend a full 19-1/4" below grade are available in 12" and 18" diameters for sandy-soil locations.

OPW 104FG Cast-Iron Manhole

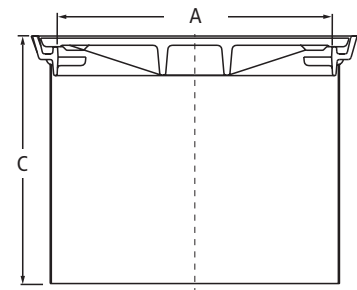
The 104FG provides a convenient finger-grip feature on the cover to facilitate cover removal.

Features

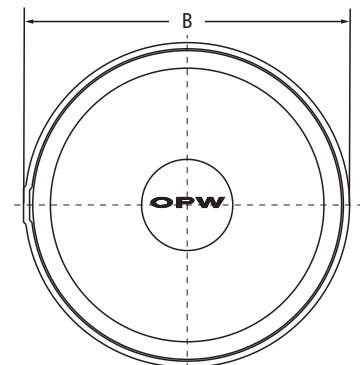
- ◆ Full-size internal diameters for maximum access and working area
- ◆ Highway 20 Rated (H20/HS20) – All OPW spill-containers and manholes exceed the requirements of the Highway 20 rating
- ◆ Rugged cast-iron covers and body rings
- ◆ Cast-in, non-skid finish on covers
- ◆ Sturdy, extra-long steel skirts
- ◆ Individually boxed for ease of handling

OPW 104 Series Cast-Iron Manholes

Heavily ribbed cast-iron covers and body rings ensure maximum load-bearing capacity on cast-iron manholes and fill boxes. These manholes are ideal for connecting underground tank lines directly to the surface without sump enclosures. A variety of features available on cast-iron manholes and fill boxes make them the perfect choice for many applications.



OPW 104A/FG Cast-Iron Cover Manholes



OPW 104A & 104FG Cover

Ordering Specifications

Product #	ID (in.)	ID (mm)	lbs.	kg
104A-0800	8	203	15	6.8
104A-0800WT (bolt down)	8	203	15	6.8
104A-1200	12	305	28	12.7
104A-1200WT (bolt down)	12	305	33	15.0
104A-1219	12	305	33	15.0
104FG-1200*	12	305	28	12.7
104FG-1219*	12	305	33	15.0
104A-1800	18	457	50	22.7
104A-1800WT (bolt down)	18	457	50	22.7
104A-1819	18	457	57	25.9
104A-1819WT (bolt down)	18	457	57	25.9

* Finger Grip Cover Manhole

Replacement Parts

Part #	Description
E00508M	Cover for 8" 104A-0800
E00510M	Cover for 12" 104A-1200
E00584M	Cover for 12" 104FG-1200
E00512M	Cover for 18" 104A-1800
206118	Cover for 8" 104A-0800WT
206119	Cover for 12" 104A-1200WT
206120	Cover for 18" 104A-1800WT

Replacement Parts

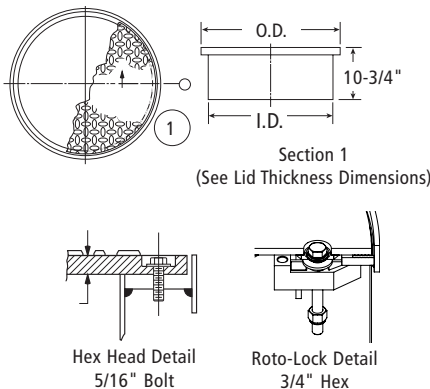
Part #	Description
H12872M	Seal for 8" Ring
H12873M	Seal for 12" Ring
H12874M	Seal for 18" Ring

Dimensions

Product #	A		B		C	
	in	cm	in	cm	in	cm
104A-0800	8	20.3	10 1/8	25.7	11 1/4	28.6
104A/FG-1200	12	30.5	14 1/4	36.2	11 1/4	28.6
104A/FG-1219	12	30.5	14 1/4	36.2	19 1/4	48.9
104A-1800	18	45.7	20 1/8	51.1	11 1/4	28.6
104A-1819	18	45.7	20 1/8	51.1	19 1/4	48.9

OPW 110/120 Series Steel Round Manholes

OPW 110/120 Series Round Manholes are designed for use in a wide range of service station driveway, industrial and commercial applications. The 110s and 120s are used to provide access to all types of underground equipment, including vapor recovery connections, UST-monitoring equipment and submersible pumps. The 120 Series includes Roto-Lock fasteners on 24" and larger manholes.



Replacement Parts

Part #	Description
P110-8G	8" Replacement Gasket
P110-12G	12" Replacement Gasket
P110-16G	16" Replacement Gasket
P110-18G	18" Replacement Gasket
P110-24G	24" Replacement Gasket
P110-30G	30" Replacement Gasket
P110-37G	37" Replacement Gasket
P110-40G	40" Replacement Gasket
P110-42G	42" Replacement Gasket
P110-48G	48" Replacement Gasket
PROTO-LOCK	(1) Replacement Roto-Lock
P110-8L	Replacement Cover 8"
P110-12L	Replacement Cover 12"
P110-16L	Replacement Cover 16"
P110-18L	Replacement Cover 18"
P110-24L	Replacement Cover 24"
P110-30L	Replacement Cover 30"
P110-37L	Replacement Cover 37"
P110-40L	Replacement Cover 40"
P110-42L	Replacement Cover 42"
P110-48L	Replacement Cover 48"
P110-18WT	Replacement Cover 18" Bolt Down
P110-24WLT	Replacement Cover 24" Bolt Down
P110-30WLT	Replacement Cover 30" Bolt Down
P110-37WLT	Replacement Cover 37" Bolt Down
P110-42WLT	Replacement Cover 42" Bolt Down
P110-48WLT	Replacement Cover 48" Bolt Down
P120-37L	Replacement Cover 37" Roto-Lock
P120-42L	Replacement Cover 42" Roto-Lock
RPHK	Replacement Handle

Materials

Skirt: Galvanized steel
Cover: Steel diamond plate
Ring: Cast iron or fabricated steel
Gasket: Nitrile



Features

- ◆ **Standard and Rain-tight Models Available** – models include Buna-N gaskets and recessed hex-head bolts or Roto-Lock fasteners to help prevent water intrusion
- ◆ **Wide Range of Sizes** – sizes range from 24" to 48" (61 to 122 cm) to accommodate a wide range of applications. Custom sizes and configurations are also available
- ◆ **Easy Cover Removal** – an integral recessed handle is included on all rain-tight and plain manholes 24" and larger. Manholes 42" and larger

include dual recessed handles and provisions for a centered 1/2" - 13-threaded Allen-head blind plug for easy removal so that a 1/2" - 13 eyebolt can be threaded into the hole for easier removal of covers

- ◆ **Highway 20 Rated (H20/HS20)** – all OPW spill-containers and manholes exceed the requirements of the Highway 20 rating

Ordering Specifications

Model #	Description	Cover O.D.		Skirt I.D.		Thickness		Weight		Ring
		in.	cm	in.	cm	in.	cm	lbs.	kg	
6110-24WT	Rain-tight*	24	61	21 ⁵ / ₈	55	³ / ₈	.9	88	40	Fab. Steel
6110-2410	Standard*	24	61	21 ⁵ / ₈	55	³ / ₈	.9	88	40	Fab. Steel
6110-30WT	Rain-tight*	30	76	27 ⁵ / ₈	70	¹ / ₂	1.3	160	73	Fab. Steel
6110-3010	Standard*	30	76	27 ⁵ / ₈	70	³ / ₈	.9	160	73	Fab. Steel
6110-37WT	Rain-tight*	37	94	34 ⁵ / ₈	88	¹ / ₂	1.3	178	81	Fab. Steel
6110-3710	Standard*	37	94	34 ⁵ / ₈	88	³ / ₈ **	.9	178	81	Fab. Steel
6110-4010	Standard*	40	102	37 ⁵ / ₈	96	³ / ₈	.9	198	90	Fab. Steel
6110-42WT	Rain-tight*	42	107	39 ⁵ / ₈	101	¹ / ₂ **	1.3	290	132	Fab. Steel
6110-4200	Standard	42	107	39 ⁵ / ₈	101	¹ / ₂ **	1.3	290	132	Fab. Steel
6110-48WT	Rain-tight*	48	122	45 ⁵ / ₈	116	¹ / ₂ **	1.3	390	177	Fab. Steel
6110-42WT18	Rain-tight with 18" skirt*	42	107	39 ⁵ / ₈	101	¹ / ₂ **	1.3	290	132	Fab. Steel
6120-24WT	Roto-Lock Rain-tight 24WT*	24	61	22 ⁵ / ₈	58	³ / ₈	.9	88	40	Fab. Steel
6120-30WT	Roto-Lock Rain-tight 30WT*	30	76	28 ⁵ / ₈	72	¹ / ₂	1.3	160	73	Fab. Steel
6120-37WT	Roto-Lock Rain-tight 37WT*	37	94	35 ⁵ / ₈	91	³ / ₈	1.3	178	81	Fab. Steel
6120-42WT	Roto-Lock Rain-tight 42WT*	42	107	40 ⁵ / ₈	103	¹ / ₂ **	1.3	290	132	Fab. Steel
6120-48WT	Roto-Lock Rain-tight 48WT*	48	122	46 ⁵ / ₈	118	¹ / ₂ **	1.3	390	177	Fab. Steel

* Recessed Handle

** Reinforced Cover

Standard - Plain No Bolts

Rain-tight - Bolt Down

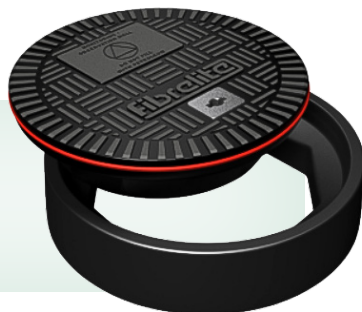
Deep skirts available upon request

Materials:

Cover: Fiberglass
Frame: Fiberglass
Skirt: Fiberglass

Cover Includes Frame
and Skirt

Monitoring Well Manholes



Features & Benefits:

- ◆ UV resistant
- ◆ Round, square and rectangular (wide range of sizes)
- ◆ Anti-slip surface – no costly injury claims
- ◆ Will not corrode
- ◆ Watertight, sealed design
- ◆ No bolts required
- ◆ Ergonomic, single-person removal and replacement with Fibrelite lifting handle

Ordering Specifications - Monitoring Well Manholes

Part #	Description	Color	Skirt I.D.	Cover O.D.	Skirt Length	Wt.
FL120BLACK-MW	Flat Sealed Composite Cover - Labeled	Black	12"	15"	3.91"	13 lbs
FL120BLACK-MW-SK12	Bonded	Black	12"	15"	12"	26 lbs
Bonded - Assembled Cover, Ring And Skirt						

Fibrelite Composite Monitoring Manholes

Fibrelite offers the retail-petroleum industry's leading watertight, easy to remove, non-bolted composite manhole covers in a large selection of shapes and sizes. From general tank-sump access to multiport and single-port fill-sump applications to interstitial sumps and monitoring-wells, Fibrelite has every application covered.

Multiple colors are available – Contact OPW Customer Service for pricing, availability, and lead times.

Replacement Covers

FL120BLACK-MW

Sealed - Labeled Monitoring Well Cover

Color	Skirt I.D.	Cover O.D.	Cover Ht.	Wt.
Black	12"	15"	3.91"	13 lbs

OPW Monitoring/Observation Well Manholes

Designed to be installed at grade-level over a slotted PVC monitoring-well where limited access and clear identification are essential. Ring gasket prevents water contamination.

Materials

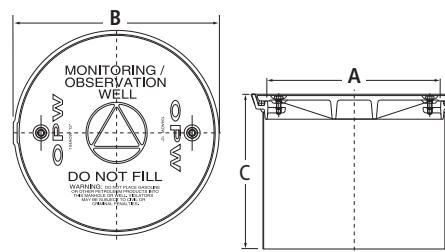
Body Ring: Cast iron

Cover: Cast iron

Skirt: Steel (104 AOW)

Gasket: Neoprene

104AOW-1200



Ordering Specifications

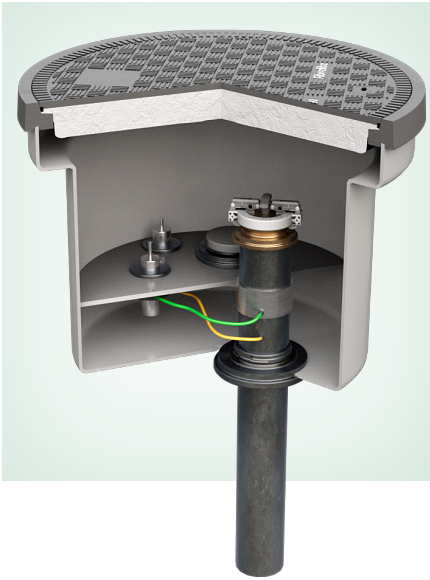
Product #	ID (in.)	ID (mm)	lbs.	kg
104AOW-0800	8	203	15	6.8
104AOW-1200	12	305	28	12.7
104AOW-1219	12	305	33	15.0
104AOW-1800	18	457	50	22.7
104AOW-1819	18	457	57	25.9

Replacement Parts

Part #	Description
E00514I	Cover for 8" 104AOW-0800
E00515I	Cover for 12" 104AOW-1200
E00514I	Cover for 8" 104MW-0800
E00516I	Cover for 18" 104AOW-1800
H12872M	Gasket for 104AOW 8"
H12873M	Gasket for 104AOW 12"
H12874M	Gasket for 104AOW 18"

Dimensions

Product #	A		B		C	
	in.	mm	in.	mm	in.	mm
104AOW-0800	8	203	10 ¹ / ₈	257	11 ¹ / ₄	286
104AOW-1200	12	305	14 ¹ / ₄	362	11 ¹ / ₄	286
104AOW-1219	12	305	14 ¹ / ₄	362	19 ¹ / ₄	489
104AOW-1800	18	457	20 ¹ / ₈	511	11 ¹ / ₄	286
104AOW-1819	18	457	20 ¹ / ₈	511	19 ¹ / ₄	489



Brine-Monitoring Reservoir

Deep solid-base sump, with a spill-container, integrated drainback system to the tank

Ordering Specifications

Part #	Description	Weight (lbs)
S45-1180BL	18" dia. x 18" DP FRP Sump w/ FL180F & FL180BLACK Cover	76
S45-1180G	18" dia. x 18" DP FRP Sump w/ FL180F & FL180GRAY Cover	76



Replacement Manhole Covers (Old & New)

Product #	Replacement Cover	Cover O.D.
104A-1066	D00173M	13 ¹ / ₈ "
104A-0800	E00508M	9 ¹ / ₂ "
104A-1200 & 1219	E00510M	13 ¹ / ₂ "
104A-1800 & 1819	E00512M	19 ¹ / ₂ "
104AOW-0800	E00514M	9 ¹ / ₂ "
104AOW-1200 & 1219	E00515I	13 ¹ / ₂ "
104AOW-1800 & 1819	E00516I	19 ¹ / ₂ "