

2020

PRODUCT CATALOGUE

PIPE & CONTAINMENT SYSTEMS
SERVICE STATION HARDWARE

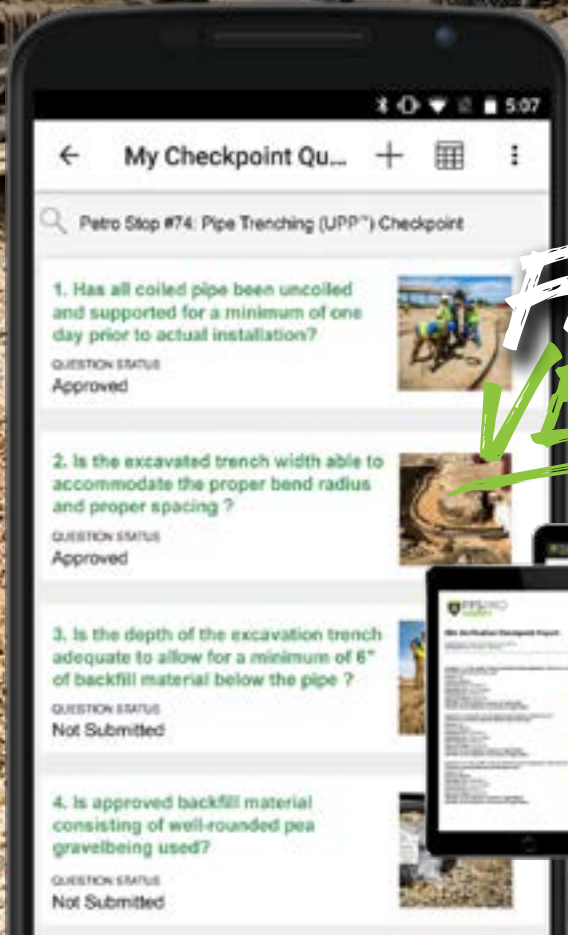
 Franklin Fueling Systems



 FFS PRO[®]
VERIFY

The sight of broken concrete is something no station owner wants to see. Repair costs associated with poorly installed underground fuel systems impact more than just your bottom line. Make sure your installation is done right - before the concrete is poured. FFS PRO[®] Verify is a cloud-based installation verification service that allows the installation of your complete system to be remotely inspected for quality work by our expert staff. Installers use our mobile app to submit photos of their work for review and approval. A complete report is then delivered to the station owner or project manager for total assurance and visibility.

See how at verify.ffspro.com



**FACTORY
VERIFIED**

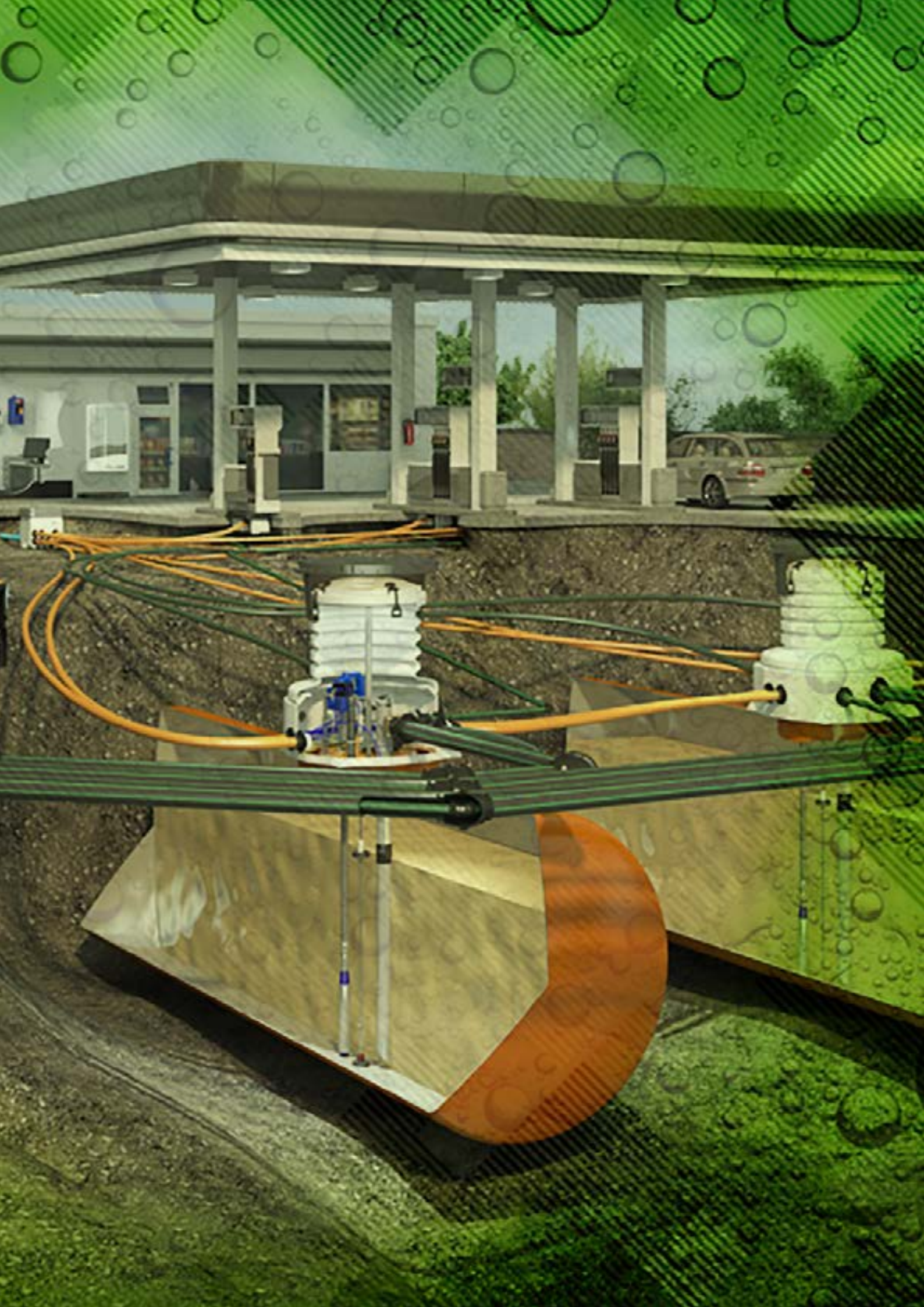




TOTAL

SYSTEM SOLUTIONS

FUEL MANAGEMENT SYSTEMS
SUBMERSIBLE PUMPING SYSTEMS
PIPING AND CONTAINMENT
DISPENSING SYSTEMS
SERVICE STATION HARDWARE
TRANSPORT SYSTEMS
DEF/ADBLUE®



TOTAL SYSTEM SOLUTIONS



The FFS PRO® suite of services is a set of professional grade services, powered by our industry expertise that help assure our petroleum equipment systems are delivered to the highest industry standards – every step of the way. From training, to site design and product selection, to order tracking, installation verification, and remote fuel management access - FFS PRO® has you covered every step of the way.

Visit ffspro.com to learn more.



FUEL MANAGEMENT SYSTEMS

Franklin Fueling Systems offers a complete line of inventory monitoring systems, providing users the capability to take complete control of fuel management. The complete range is ideal for monitoring inventory, environmental control and fuel management. Next generation technology from INCON® allows users to monitor tanks from any web browser.

SUBMERSIBLE PUMPING SYSTEMS

Franklin Fueling Systems submersible pumping systems provide faster fuel dispensing, improved efficiency and unmatched reliability. The FE Petro® brand industry-leading product design offers the highest performing submersible pumping systems available.

PIPING AND CONTAINMENT

Franklin Fueling Systems offers the most comprehensive line of piping and containment products in the industry. The UPP® brand features innovative technology and outstanding quality. With 30 years' worth of installations and a 100% leak-free performance record, Franklin Fueling Systems is the leading provider of fuel pipe.

DISPENSING SYSTEMS

Franklin Fueling Systems manufactures and markets a complete line of Stage II vapour recovery systems globally under the Healy® product brand. Healy® vapour recovery products suit any application and customise to any site, ensuring proper connection.

SERVICE STATION HARDWARE

Franklin Fueling Systems fuel station hardware products comprise a comprehensive and environmentally friendly system, including a complete biofuel approved system for E85 and biodiesel.

TRANSPORT SYSTEMS

Franklin Fueling Systems road tanker systems products make it easy to connect to loading terminals and underground storage tanks with our broad line of adapters, elbows and valves. Sold under the brand EBW®, these products cover both loading and off-loading applications. Our road tanker hardware products provide a wide range of connection options.

DEF/ADBLUE®

Franklin Fueling Systems offers a complete system of Diesel Exhaust Fluid (DEF) or AdBlue® compatible products all from a single manufacturer. Our system is designed together – to work together, resulting in unmatched system performance and an energy efficient means of keeping DEF from freezing at low temperatures.

About Us	11	UPP® Tools	70
Pipe & Containment	12	Service Station Hardware	74
Semi-rigid Pipework System	15	Vapour Recovery Equipment	77
Electrofusion Pipework	15	300 4" Vapour Check Valve Adapter	77
Gemini® Secondary Containment	18	304 4" Vapour Adapter Cap	78
Double Wall Termination Fittings	20	306 4" Coaxial Adapters	79
UPP® Pipework System	22	308 Ball Float Vent Valves	80
Primary	22	300 Series Extractor Vent Valves	81
Secondary	28	305 3" Float Vent Valves	82
Wire management	31	Shear Valves	83
Cable Tight™ Wire Management System	31	362 Series Vapour	83
Electrical Conduit	37	662 Series Product	84
32 mm 1" Lined Electrical Conduit	38	Emergency Shut-off Valve Accessories	85
Ducting	40	Emergency Shut-off Valve Replacement Tops	85
UPP® 110mm 4"	40	Fill Point Equipment	86
Fusion Ducted Entry Boot	41	Fill Swivel adapters	86
Mechanical Entry Seals	42	Vapor Swivel adapters	87
Flexible Entry Boots	42	777 4" Top Seal Fill Caps	88
PetroSeal	43	779 3" Top Seal Fill Caps	89
Fusion Entry Seals	44	778 Top Seal Fill Pipe Adapter	90
302-040	44	Defender Series® Overfill Prevention Valve	91
304 and 305 Series	45	Overfill Prevention	91
308 Series	47	Defender Series® OPV	93
Chambers	49	AutoLimiter® II	96
PetroTite® PE	49	Remote Fill Kit	97
PetroTite® PE Fusion	50	Drop Tubes	97
Optimum Fusion	51	Remote Fill Splice Kit	98
Optimum Fusion Small Riser	52	Sealing Dip Cap	99
Associated Items	53	LAG14 Leak Detection	99
Fusion Chambers	53	Spill Containers	100
Compatibility Chart	54	Selecting a Spill Container	100
Dispenser Sumps	55	Defender Series® Spill Containers	101
Nexus Series™	55	Tank Access Covers	110
Large Mouth	58	Round Access Covers & Skirts	110
Wayne™ Ovation™	59	Steel Access Covers	111
UPP® Dispenser Sumps	60	Power Lift Cast Iron Covers	112
Mounting Frames	62	Composite Manholes	114
Below Grade	63	Composite	114
Below Grade Intermediate	64	Fiber Reinforced Composite Manways	116
Grade Level	65	Composite Access Covers	117
Tools	66	Monitoring Well Equipment	119
Welders	66	Monitoring Well Manways	119
Vacuum Testing	68	Monitoring Well Cap Plugs	119
UPP® Tool Box	69	Monitoring Well Screen Pipe	120

Monitoring Well Filter Wrap	120
Monitoring Well Packages	121
Probe Access Manhole	121
Flexible Connectors	122
Isolation Accessories	125
Aboveground Storage Tank Equipment	126
Anti Syphon Valves	126
Pressure Regulator Valves	127
Warden® AST Overfill Prevention Valve	128
Storage Tank Vents	129
Tank Vents	129
Downward Tank Vents	129
Pressure Vacuum Vents	130
Suction System Equipment	131
NPT Angle	131
1.5" Union	131
Packages	132
Defender Series®	132
Installation Tools	134
Tools	134
Accessories	136
Pipe Guards & Bollards	136
Wall Mount Remote Fill Box	137
Remote Fill Box	137
DEF/ADBlue®	138
Flexible Connectors	138
Shear Valves	141
Technical	142
Fuel/Chemical Compatibility Chart to en14125:2013 (Retail Specific)	142
Trenches (Width, Depth & Fall Back)	142
Bedding	143
Pipe Spacing	143
Pressure / Vacuum Rating	144
Bend Radius	144
Interstitial Volume	144
Electrofusion Safety	145
Weld Pin Protection Caps	146
Contact Us	147



ABOUT US



WELCOME TO FRANKLIN FUELLING SYSTEMS, THE WORLD'S LEADING PROVIDER OF COMPLETE FUELLING SYSTEMS.

We are comprised of the industry's most extensive lines of fuelling product solutions. With us, you can get the most comprehensive product offering from the industry's leader in total system solutions.

Franklin Fueling Systems provides unparalleled simplicity in placing one order, having one point of contact, relying on one service team and receiving one consolidated shipment.

A wide variety of products, a world class customer service experience and extensive technical background create a complete system solution where our services, features and products set us apart as the industry leader.

Whether you want to automate your station or network, build or re-build your station according to the latest environmental laws, update a station to fulfill new regulations or intend to realize a more cost efficient site construction and operation, you can rely on Franklin Fueling Systems. Our submersible pumping systems, service station hardware, fuel management systems and complete pipework solutions can increase your efficiency and improve your business.

In addition to the industry's most comprehensive product offering, Franklin Fueling Systems also provides:

- One order for all equipment
- Factory tested leak-tight equipment
- Reduced site downtimes
- 100% Bio-fuel compatible options
- Effective control of your fuel stocks
- Ensured environmental protection
- Solutions to keep fuel in and water out
- Lowest total cost of ownership
- Time and money savings

Franklin Fueling Systems can deliver a complete package of pipework, manhole chambers, under dispenser containment, submersible pumps and intelligent fuel stock & environmental monitoring systems all designed around your exact needs and delivered in one shipment, ready for installation.

PIPE & CONTAINMENT

- 1 Semi-rigid electrofusion weld pipe
- 2 32mm Electrical conduit
- 3 Electrofusion entry seals
- 4 Polyethylene dispenser sumps
- 5 Polyethylene tank sumps
- 6 Gemini secondary containment
- 7 Termination fittings
- 8 P/V Vent





TOTAL
SYSTEM SOLUTIONS

PIPE & CONTAINMENT

The industry's most complete line of underground and aboveground containment products including pipe, fittings, sumps and boots. Whether you require product or vent piping, fiberglass or polyethylene sumps, Franklin Fueling Systems has the solution to fit any scenario.



HIGHLIGHTS

Diverse Sump Offering

Whether site conditions require fiberglass or polyethylene sumps, Franklin Fueling Systems offers a wide assortment of both UPP® and APT® brand dispenser and tank sumps in a variety of options to fulfill any site application.



Zero Leak Paths

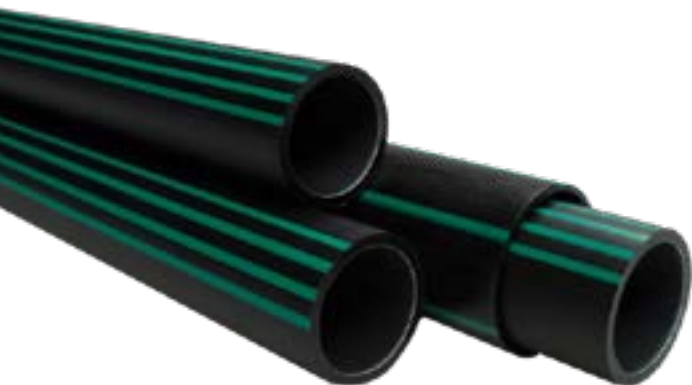
Patented UPP® electrofusion welded entry boots weld directly to the walls of polyethylene sumps, providing watertight seals between the sump and the UPP® pipework, conduit or ducting.



Electrofusion Welding

At the heart of the UPP® brand pipework is the highly efficient electrofusion welding process which connects pipe and fittings to all key system components to create a seamless direct burial pipework system.





ELECTROFUSION PIPEWORK

A TRUE LIQUID TIGHT SOLUTION

Since being introduced as the world's first electrofusion pipework system for fuel applications over thirty years ago, UPP® semi-rigid pipework has become known globally as the standard for liquid tight pipework systems. Synonymous with words like "safe", "efficient" and "simple" throughout petroleum equipment installer circles, UPP® pipework utilises the advanced electrofusion welding process to effectively bond system components together into one, leak proof system.

HIGHLIGHTS

Simple Installation

The UPP® electrofusion welding process is safe and simple to complete in any climate and virtually any weather condition. An installer simply prepares the components, fits them together attaching welder leads to the fitting, and then presses a single button on the welding unit to initiate the process. The welder unit itself calculates the exact settings required to complete the weld, regardless of the pipework diameter or temperature, leaving no settings for the installer to input.

Electrofusion Welding

At the heart of the UPP® pipework system is the highly efficient electrofusion welding process that connects pipe, fittings, seals and containment to create a seamless direct burial pipework system. The welding process uses the lightweight, portable UPP® electrofusion welder unit to form the strongest of assemblies, which is easily and quickly carried out - even in confined spaces.

Hand-Held Welder

The UPP® Electrofusion Welder is compatible with all UPP® fittings and products and has been used on thousands of installation sites around the world. The rugged water and dust proof welder features a state-of-the-art graphical display that illustrates the progress of the electrofusion process and provides visual indication of a completed weld.

Safety Above All Else

With installations in over 150 countries to its credit, the UPP® pipework system boasts a sterling safety record. Thousands of trouble-free existing installations around the world, some of which more than 30 years old, speak to the reliability of this non-conductive pipework system. The proven track record of performing effectively in some of the world's harshest conditions speaks for itself.

The Strength of EVOH

UPP® pipe features an innovative clear inner lining made of natural EVOH resin to provide maximum pipe strength and superior vapour permeation and hydrocarbon barrier qualities. UPP® pipe is the first to receive an exception Class T1 temperature rating with its EN14125 approval, a true testament to its strength.

Electrofusion Termination Fittings

The end of a piping run can be fitted with a wide variety of termination fittings to accommodate any application. UPP® termination fittings feature an overmolded design which permanently bonds the metal threads of the fitting to an HDPE pipe segment. This allows the same electrofusion process to create a liquid tight bond between the pipework and metal termination fitting.

Electrofusion Entry Seals

As a vital component to the UPP® pipework system, patented UPP® electrofusion entry seals weld directly to the wall of any polyethylene sump creating a liquid tight seal between the pipework system and containment spaces. They are specifically designed to reduce the number of fittings and eliminate bolt holes, rubber seals, band clamps and any potential leak paths.



SPECIFICATIONS

UPP® EN14125:2013 Standard Primary Pipe

- Material: PE100 with EVOH resin barrier
- Primary pressure rating (bar/psi): 10/145
- Primary colour: Black with two clusters of four green stripes, clear inner liner
- Temperature rating: Class T1 Rating (EN14125:2013) -40 °C to 50 °C
- Primary vacuum rating (-bar/"Hg): -0.9/-26.6

UPP® EN14125:2013 Standard Fill Pipe

- Material: PE100 with EVOH resin barrier
- Primary pressure rating (bar/psi): 6/87
- Primary colour: Black with two clusters of four green stripes, clear inner liner
- Temperature rating: Class T1 Rating (EN14125:2013) -40 °C to 50 °C

UPP® EN14125:2013 Standard Coaxial (Secondary) Pipe

- Material: PE100 with EVOH resin barrier
- Primary pressure rating (bar/psi): 10/145
- Primary colour: Black with two clusters of four green stripes, clear inner liner
- Secondary colour: Black with six green stripes
- Secondary pressure rating (bar/psi): 5/72
- Temperature rating: Class T1 Rating (EN14125:2013) -40 °C to 50 °C
- Primary vacuum rating (-bar/"Hg): -0.9/-26.6
- Secondary vacuum rating (-bar/"Hg): -0.6/-17.8

UPP® EN14125:2013 Standard Secondary Sleeve

- Material: PE100
- Secondary pressure rating (bar/psi): 5/72
- Primary colour: Black with six green stripes
- Temperature rating: Class T1 Rating (EN14125:2013) -40 °C to 50 °C
- Primary vacuum rating (-bar/"Hg): -0.6/-17.8

ORDERING INFORMATION

UPP® EN14125:2013 Standard Primary Pipe

Model	Ø (mm)	Unit	SDR	Primary ID (mm)	Ø32 mm Bend Radius (m)
001-032-100-E	32	100 m Coil	11	26	0.5
001-050-006-E	50	5.8 m Stick	11	40.8	0.75
001-050-050-E	50	50 m Coil	11	40.8	0.75
001-050-100-E	50	100 m Coil	11	40.8	0.75
001-063-006-E	63	5.8 m Stick	13.6	53.6	0.9
001-063-008-E	63	8 m Stick	13.6	53.6	0.9
001-063-100-E	63	100 m Coil	13.6	53.6	0.9
001-090-006-E	90	5.8 m Stick	13.6	76.6	2.25
001-090-050-E	90	50 m Coil	13.6	76.6	2.25
001-110-006-E	110	5.8 m Stick	13.6	93.8	2.75

UPP® EN14125:2013 Standard Fill Pipe

Model	Ø (mm)	Unit	SDR	Primary ID (mm)	Bend Radius (m)
001-110-006-FILL-E	110	5.8m Stick	17	96.8	2.75

ORDERING INFORMATION CONTINUED

UPP® EN14125:2013 Standard Coaxial (Secondary) Pipe

Model	Ø (mm)	Unit	SDR	Primary ID (mm)	Bend Radius (m)
001-040-032-050-E	40/32	50 m Coil	11 / 17	26	0.6
001-040-032-100-E	40/32	100 m Coil	11 / 17	26	0.6
001-063-050-030-E	63/50	30 m Coil	11 / 26	40.8	0.9
001-063-050-100-E	63/50	100 m Coil	11 / 26	40.8	0.9
001-075-063-010-E	75/63	10 m Stick	13.6 / 26	53.6	1.12
001-075-063-030-E	75/63	30 m Coil	13.6 / 26	53.6	1.12
001-075-063-050-E	75/63	50 m Coil	13.6 / 26	53.6	1.12

UPP® EN14125:2013 Standard Secondary Sleeve

Model	Ø (mm)	Unit	SDR	Bend Radius (m)
000-063-006-SC-E	63	5.8 m Stick	26	0.9
000-075-006-SC-E	75	5.8 m Stick	26	1.12
000-075-008-SC-E	75	8 m Stick	26	1.12
000-110-006-SC-E	110	5.8 m Stick	26	2.75
000-125-006-SC-E	125	5.8 m Stick	26	3.1





GEMINI® SECONDARY CONTAINMENT

A REVOLUTION IN FITTING DESIGN

No other secondary containment system has ever offered the ability to completely install the primary pipework system and execute integrity testing before closing the secondary system. With Gemini® three secondary fittings, which are specifically designed to enclose standard one-piece primary fittings, allow you to reduce the number of necessary parts, welds, time and overall cost. Gemini® allows Franklin Fueling Systems to provide up to 50% reduction in primary and secondary fittings and up to 50% reduction in fusion weld operations.

HIGHLIGHTS

Revolutionary Secondary Containment

Simple installation. Complete confidence. The most efficient secondary containment solution ever. Gemini® re-writes the rule book on secondary containment systems by splitting the secondary fitting into two pieces. This revolutionary feature allows you to slide the secondary fitting away so that the primary joint can be fully welded, pressure tested and inspected before welding the secondary fittings for the utmost in system security.

Less Fittings, More Savings

Before Gemini®, installing secondary containment was complicated. It required many different types of fittings to be welded together in sequence, piece-by-piece, over primary fittings at each bend. With Gemini® three secondary fittings, which are specifically designed to enclose standard one-piece primary fittings, allow you to drastically reduce the number of necessary parts, welds, time and overall cost.

Better by Design

The design of each Gemini® fitting in itself allows for the fastest, most efficient installation of secondary containment by reducing the number of welds needed to complete both primary and secondary pipework systems. Additionally, the integrated tabs allow the fitting to constrain itself in place for complete ease of installation without the need for specific clamps.

Weld and Test

No other secondary containment system has ever offered the ability to completely install the primary pipework system and execute integrity testing before closing the secondary system. Discovering a breach after the complete system has been welded can mean having to deconstruct the system to identify the problem, significantly increasing installation time and cost.

Independent Primary

Gemini® secondary fittings are completely independent of primary fittings giving you a full 360° interstitial space between the two systems. As a result, a new level of integrity testing is achieved giving you complete peace of mind that both the primary and secondary systems are performing at the highest level.

Cutting Pipe Cost

With Gemini®, you finally have a secondary fitting specifically designed for the most efficient usage of pipe. No longer is the secondary pipe diameter determined by the size of the primary fittings. Gemini® was designed to enclose standard one-piece primary fittings and then reduce down over the primary pipe cutting both pipe costs and installation time dramatically.

A Single Weld Lead

The same welding leads an installer uses to weld the primary fittings can be used to weld the Gemini® secondary fittings giving unparalleled installation efficiency.

Extreme Confidence

The Gemini® secondary containment system is simplicity itself. Design engineers, mechanical engineers and manufacturing engineers collaborated to ensure that a final design could be developed quickly without compromise. When you install a pipework system underground, you need to be certain that it will perform flawlessly. Secondary containment is crucial to ensuring safety and performance. With Gemini's® integrity testing capabilities, you get a level of confidence which installers and end users have yet to experience until now.

SPECIFICATIONS

- Material: PE100
- Temperature rating: -40 °C to 50 °C
- Secondary Pressure rating (bar): 5
- Welding current (Amps): 4
- Welding pin size : 4 mm

Approvals

- EN14125:2013 approved.

ORDERING INFORMATION

Gemini® Secondary Sliding 45° Elbow / Sliding Elbow/In-Line

Model	Description	Primary Fitting (45°)	Primary Fitting (In-line)	Primary Pipe Ø (mm)	Secondary Pipe Ø (mm)
G4-040-032	Secondary sliding 45° elbow for 40/32	04-032-EIF	02-032-L	32	40
G4-063-050	Secondary sliding 45° elbow for 63/50	04-050-EIF	02.50	50	63
G4-075-063	Secondary sliding 45° elbow for 75/63	04-063-EIF	02.63	63	75
G4-110-090	Secondary sliding 45° elbow for 110/90	04-090-EIF	02.90	90	110
G4-125-110	Secondary sliding 45° elbow for 125/110	04-110-EIF	02.110	110	125

Gemini® Secondary Sliding 90° Elbow

Model	Description	Primary Fitting (90°)	Primary Pipe Ø (mm)	Secondary Pipe Ø (mm)
G3-040-032	Secondary sliding 90° elbow for 40/32	03-032-EIF	32	40
G3-063-050	Secondary sliding 90° elbow for 63/50	03-050-EIF	50	63
G3-075-063	Secondary sliding 90° elbow for 75/63	03-063-EIF	63	75
G3-110-090	Secondary sliding 90° elbow for 110/90	03-090-EIF	90	110
G3-125-110	Secondary sliding 90° elbow for 125/110	03-110-EIF	110	125

Gemini® Secondary Tee

Model	Description	Primary Fitting (Tee, In-Line)	Primary Pipe Ø (mm)	Secondary Pipe Ø (mm)
G8-040-032	Secondary tee for 40/32	08-032-EIF, 02-032-L	32	40
G8-063-050	Secondary tee for 63/50	08-050-EIF, 02.50	50	63
G8-075-063	Secondary tee for 75/63	08-063-EIF, 02.63	63	75
G8-110-090	Secondary tee for 110/90	08-090-EIF, 02.90	90	110



DOUBLE WALL TERMINATION FITTINGS

UPP® brand double wall termination fittings make terminating double wall pipework simple by combining all pipework and fitting components into a single piece. Scraping and welding operations are drastically reduced making installation faster and easier.

HIGHLIGHTS

A Single Fitting

The Double Wall Termination Fitting comes complete as a single piece combining both the double wall pipe and the termination fitting.

- Single fitting replaces several individual parts, eliminating cleaning, scraping and welding.
- No assembly required, single-piece design.
- Install directly in-line with the secondary contained pipework.

Faster Installation

Each fitting is specifically designed for the fastest, most efficient installation of double wall pipework by reducing the amount of necessary cleans, scrapes, welds, and parts.

- The single-piece construction of double wall termination fittings allow for minimal welds, cleaning and scraping operations during installation.
- The legacy solution for a 110x90 mm installation would require 2 welds, 5 cleans, 2 scrapes and comes as 2 parts.
- The new double wall termination fitting requires 0 welds, 0 cleans, 0 scrapes and comes as a single part.

Ideal for Remote Fill

A remote fill point is exposed to constant wear and tear caused by fuel deliveries. Protect this vital point in the system by providing double wall protection all the way to grade level.

- Provides double wall containment all the way to grade level.
- Eliminates welded connections buried underneath or inside of concrete.
- Provides an integrated test port accessible at grade level for easy compliance testing.

Robust Design

The simple, yet rugged one-piece design withstands the harsh environment of a petrol station forecourt. The press fit construction utilizes barbed connections to combine primary and secondary pipe into a solid, single-piece assembly.

1. Primary fitting with barb
2. Intermediate ring with barb
3. Secondary compression ring
4. Primary pipe
5. Secondary pipe
6. Interstitial space
7. Test port (optional)

Integrated Test Port

The ability to test the integrity of a secondary contained system from both the remote fill point and tank chamber ensures complete integrity throughout the system.

- Fast integrity testing accessible at grade level.
- Ensure full 360 degree interstitial space communication.
- The robust nickel plated steel test port design ensures a long service life.

SPECIFICATIONS

- Material: PE100, nickel plated steel
- Temperature rating: -40 °C to 50 °C
- Primary pressure rating: 10 bar
- Secondary pressure rating: 5 bar
- Primary vacuum rating: -0.9 bar
- Secondary vacuum rating: -0.6 bar
- 75x63 mm model options include 1½" BSPT reducer fittings ideal for shear valve connections.

Approvals

- EN14125:2013

SPECIFICATIONS CONTINUED

Dimensions

Use the diagram and table for a full set of product dimensions.

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
91-063-050 BSPT	50	63	50	350	445	72	50
91-063-050-TP BSPT	50	63	50	350	445	74	50
92-063-050 BSPT	50	63	50	350	428	72	55
92-063-050-TP BSPT	50	63	50	350	428	74	55
91-075-063-1-TP BSPT	63	75	53	350	445	88	50
91-075-063-TP BSPT	63	75	53	500	599	88	62
92-075-063-1 BSPT	63	75	53	350	419	85	55
92-075-063-TP BSPT	63	75	53	500	583	88	67
91-110-090-TP BSPT	90	110	72	500	623	120	90
92-110-090 BSPT	90	110	72	500	601	120	94
92-110-090-TP BSPT	90	110	72	500	601	120	94
91-125-110-TP BSPT	110	125	82	500	637	139	114
92-125-110 BSPT	110	125	82	500	610	136	120
92-125-110-TP BSPT	110	125	82	500	610	139	120

63x50 mm Double Wall Termination Fittings

Model	Description
91-063-050 BSPT	Male, 63x50mm, BSPT thread
91-063-050-TP BSPT	Male, 63x50mm, BSPT thread, with test port
92-063-050 BSPT	Female, 63x50mm, BSPT thread
92-063-050-TP BSPT	Female, 63x50mm, BSPT thread, with test port

75x63 mm Double Wall Termination Fittings

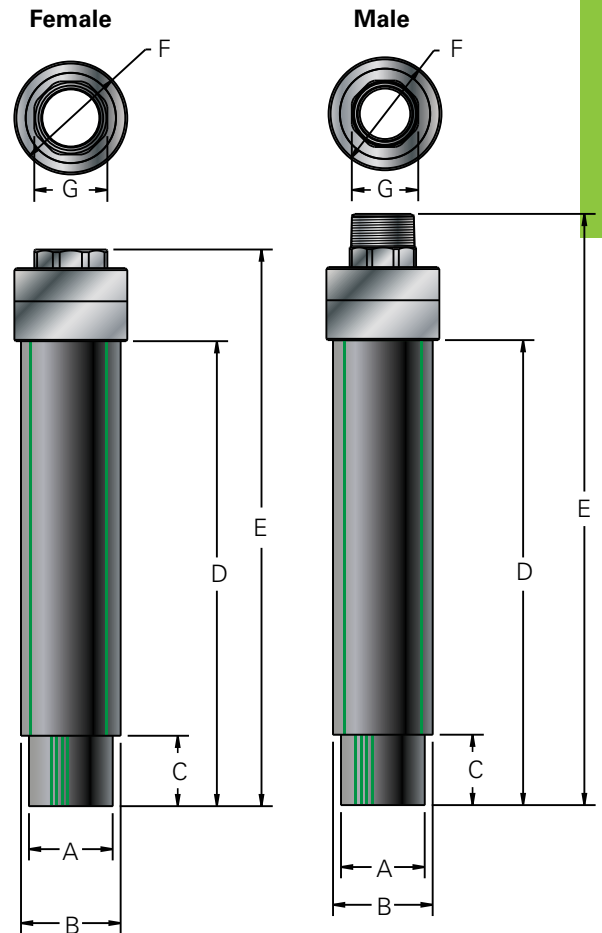
Model	Description
91-075-063-1-TP BSPT	Male, 75x63mm, 1½" BSPT thread with test port
91-075-063-TP BSPT	Male, 75x63mm, 2" BSPT thread, with test port
92-075-063-1 BSPT	Female, 75x63mm, 1½" BSPT thread
92-075-063-TP BSPT	Female, 75x63mm, 2" BSPT thread, with test port

110x90 mm Double Wall Termination Fittings

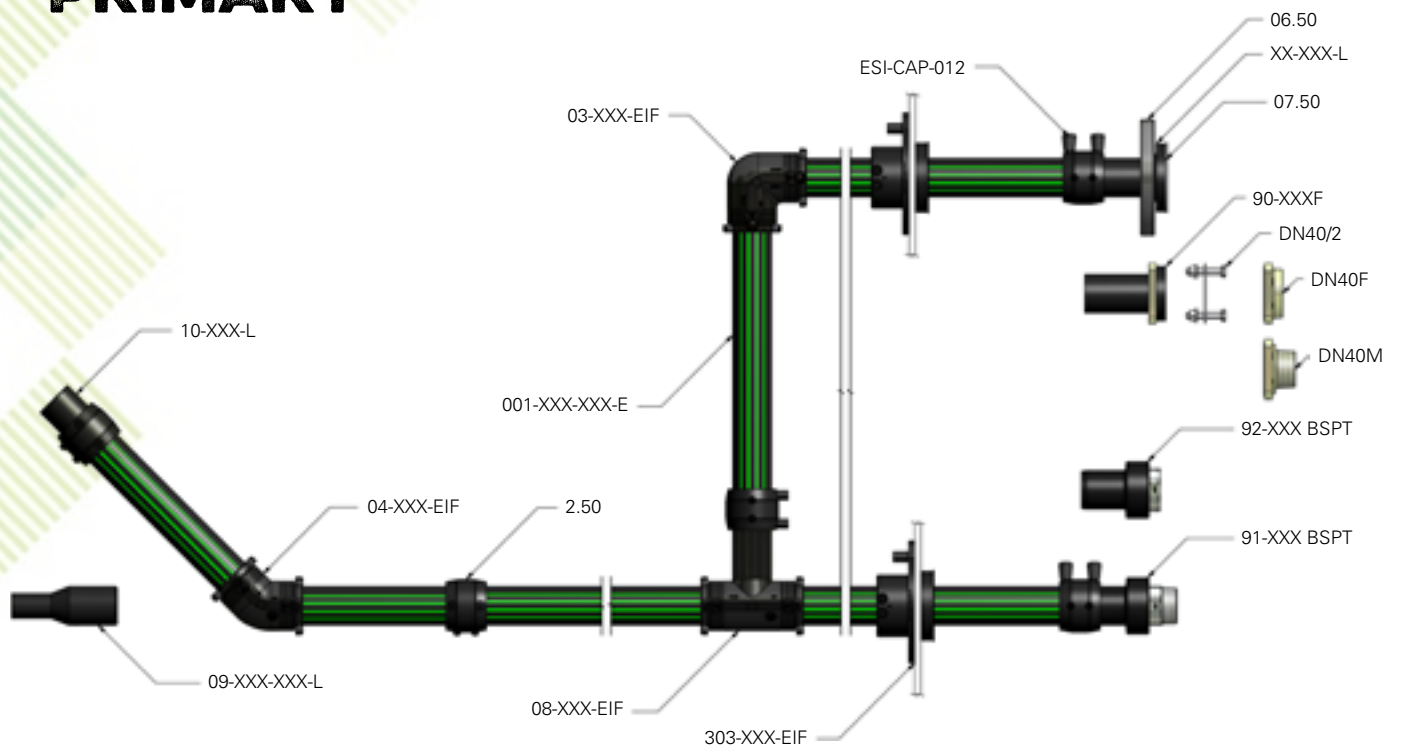
Model	Description
91-110-090-TP BSPT	Male, 110x90mm, BSPT thread, with test port
92-110-090 BSPT	Female, 110x90mm, BSPT thread
92-110-090-TP BSPT	Female, 110x90mm, BSPT thread, with test port

125x110 mm Double Wall Termination Fittings

Model	Description
91-125-110-TP BSPT	Male, 125x110mm, BSPT thread, with test port
92-125-110 BSPT	Female, 125x110mm, BSPT Thread
92-125-110-TP BSPT	Female, 125x110mm, BSPT thread, with test port



PRIMARY



Model	Description	Unit
001-032-100-E	Extra Pipe - 32 mm	100 m coil
001-050-006-E		5.8 m stick
001-050-050-E	Extra Pipe - 50 mm	50 m coil
001-050-100-E		100 m coil
001-063-006-E		5.8 m stick
001-063-008-E	Extra Pipe - 63 mm	8 m stick
001-063-100-E		100 m coil
001-090-006-E		5.8 m stick
001-090-050-E	Extra Pipe - 90 mm	50 m coil
001-110-006-E	Extra Pipe - 110 mm	5.8 m stick
001-110-006-FILL-E	Extra Pipe FILL - 110 mm	5.8 m stick
001-110-050-FILL-E		50 m coil
001-160-011-E	Extra Pipe - 160 mm	11.5 m stick



Model	Description	Diameter O(mm)
02-032-L	Fusion Coupler - Long	32
02.50	Fusion Coupler	50
02-050-L	Fusion Coupler - Long	50
02.63	Fusion Coupler	63
02-063-L	Fusion Coupler - Long	63
02.90	Fusion Coupler	90
02-090-L	Fusion Coupler - Long	90
02.110	Fusion Coupler	110
02-110-L	Fusion Coupler - Long	110
02.160	Fusion Coupler	160
02-160-L	Fusion Coupler - Long	160



Model	Description	Diameter O(mm)
03-050-L	Plain Elbow	50
03-063-L	Plain Elbow	63
03-090-L	Plain Elbow	90
03-110-L	Plain Elbow	110
03-160-L	Plain Elbow	160



Model	Description	Diameter O(mm)
03-032-EIF	Electrofusion Elbow	32
03-050-EIF	Electrofusion Elbow	50
03-063-EIF	Electrofusion Elbow	63
03-090-EIF	Electrofusion Elbow	90
03-110-EIF	Electrofusion Elbow	110



Model	Description	Diameter O(mm)
04-050-L	Plain Elbow	50
04-063-L	Plain Elbow	63
04-090-L	Plain Elbow	90
04-110-L	Plain Elbow	110
04-160-L	Plain Elbow	160



Model	Description	Diameter O(mm)
04-032-EIF	Electrofusion	32
04-050-EIF	Electrofusion	50
04-063-EIF	Electrofusion	63
04-090-EIF	Electrofusion	90
04-110-EIF	Electrofusion	110



Model	Description	Diameter O(mm)
05-032-L	Stub	32
06.32	Flange Circular PN DN22	32
07.32	Gasket for Stub	32
05-050-A	Stub, ANSI	50
05-050-L	Stub	50
06.50	Flange Circular PN16 DN40	50
07.50	Gasket 50mm for Stub	50
05-063-L	Stub 63mm	63
06.63	Flange Circular PN16 DN50 63mm	63
07.63	Gasket 63mm for Stub	63
05-090-L	Stub 90mm	90
06.90	Flange Circular PN16 DN80 90mm	90
07.90	Gasket 90mm for Stub	90
05-110-L	Stub 110mm	110
06.110	Flange Circular PN16 DN100 110mm	110
07.110	Gasket 110mm for Stub	110
05-160-L	Stub 160mm	160
06.160	Flange Circular PN16 DN150 160mm	150/160
07.160	Gasket 160mm for Stub	160



Model	Description	Diameter O(mm)
08-32	Tee Equal	32
08-050-L	Tee Equal	50
08-063-L	Tee Equal	63
08-090-L	Tee Equal	90
08-090-063-L	Reducer Tee Equal	90/63
08-110-L	Tee Equal	110
08.110.063-L	Reducer Tee Equal	110/63
08-160-L	Tee Equal	160



Model	Description	Diameter O(mm)
08-032-EIF	Electrofusion Tee Equal	32
08-050-EIF	Electrofusion Tee Equal	50
08-063-EIF	Electrofusion Tee Equal	63
08-090-EIF	Electrofusion Tee Equal	90
08-110-EIF	Electrofusion Tee Equal	110



Model	Description	Diameter O(mm)
49-040-032	Fusion Reducer	40/32
09-063-050-EIF	Fusion Reducer	63/50
09-090-063-EIF	Fusion Reducer	90/63
09-110-090-EIF	Fusion Reducer	110/90



Model	Description	Diameter O(mm)
09-050-032-L	Plain Reducer	50/32
09-063-032-L	Plain Reducer	63/32
09-063-050-L	Plain Reducer	63/50
09-090-050-L	Plain Reducer	90/50
09-090-063-L	Plain Reducer	90/63
09-110-063-L	Plain Reducer	110/63
09-160-110-L	Plain Reducer	160/110



Model	Description	Diameter O(mm)
10-032-L	End Cap	32
10-050-L	End Cap	50
10-063-L	End Cap	63
10-090-L	End Cap	90
10-110-L	End Cap	110



Model	Description	Diameter O(mm)
302-040	Fusion Seal	40
303-050-EIF	Fusion Seal with integrated coupler	50
303-063-EIF	Fusion Seal with integrated coupler	63
304-110-090-TP	Fusion Seal with integrated coupler and Test Port	90
304-110-090	Fusion Seal with integrated coupler	90
304-110-EIF	Fusion Seal with integrated coupler	110
308	8" Fusion Seal for 90/110/160mm	90/110/160



Model	Description	Diameter O(mm)
11.32UF	32mm x 1" BSP	32

Model	Description	Diameter O(mm)
11-503F BSPT	Compression Elbow 50mm x 1½" BSPT Female	50

Model	Description	Diameter O(mm)
11-508 BSPT	Compression Tee 50mm x 1½" BSP Female	50

Model	Description	Diameter O(mm)
11.321	32mm x 1" BSP Male	32
11-501M BSPT	Compression Termination 50mm x 1½" BSPT Male	50
11-631M BSPT	Compression Termination 63mm/2" diameter - BSPT	63
11-631M-1 BSPT	Compression Termination 63mm/1½" diameter - BSPT	63
12-050 BSPT	Compression Termination 50mm/1½" diameter - BSPT Male	50
12-063 BSPT	Compression Termination 63mm/2" diameter - BSPT Male	63
12-063-1 BSPT	Compression Termination 50mm/1½" diameter - BSPT Male	63
12-090 BSPT	Compression Termination 90mm/3" diameter - BSPT Male	90
12-110 BSPT	Compression Termination 110mm/4" BSPT diameter - BSPT Male	110

Model	Description	Diameter O(mm)
91-032 BSPT	Termination 32mm x 1" BSPT male	32
91-050 BSPT	Termination 50mm x 1½" BSPT Male	50
91-050 NPT	Termination 50mm x 1½" NPT Male	50
91-063 BSPT	Termination 63mm x 2" BSPT Male	63
91-063 NPT	Termination 63mm x 2" NPT Male	63
91-063-1 BSPT	Termination 63mm x 1½" BSPT Male	63
91-063-1 NPT	Termination 63mm x 1½" NPT Male	63
91-090 BSPT	Termination 90mm x 3" BSPT Male	90
91-090 NPT	Termination 90mm x 3" NPT Male	90
91-110 BSPT	Termination 110mm x 4" BSPT Male	110
91-110 NPT	Termination 110mm x 4" NPT Male	110



Model	Description	Diameter O(mm)
92-032 BSPT	Termination 32mm x 1" BSPT Female	32
92-050 BSPT	Termination 50mm x 1½" BSPT Female	50
92-050 NPT	Termination 50mm x 1½" NPT Female	50
92-050 UF BSPT	Union Termination 50mm x 1½" BSPT Female	50
92-050 UF NPT	Union Termination 50mm x 1½" NPT Female	50
92-063 BSPT	Termination 63mm x 2" BSPT Female	63
92-063 NPT	Termination 63mm x 2" NPT Female	63
92-063 UF BSPT	Union Termination 63mm x 2" BSPT Female	63
92-063-1 BSPT	Termination 63mm x 1½" BSPT Female	63
92-063-1 NPT	Termination 63mm x 1½" NPT Female	63
92-063UF NPT	Union Termination 63mm x 2" NPT Female	63
92-090 BSPT	Termination 90mm x 3" BSPT Female	90
92-090 SS BSPT	Stainless Steel Termination 90mm x 3" BSPT Female	90
92-090 NPT	Termination 90mm x 3" NPT Female	90
92-110 BSPT	Termination 110mm x 4" BSPT Female	110
92-110 NPT	Termination 110mm x 4" NPT Female	110



Model	Description	Diameter O(mm)
81.032 SS BSPT	Stainless Steel Termination 32mm x 1" BSPT Male	32
81.050 SS BSPT	Stainless Steel Termination 50mm x 1½" BSPT Male	50
81.063 SS BSPT	Stainless Steel Termination 63mm x 2" BSPT Male	63



Model	Description	Diameter O(mm)
82.032 SS BSPP	Stainless Steel Termination 32mm x 1" BSPP Female	32
82.050 SS BSPP	Stainless Steel Termination 50mm x 1½" BSPP Female	50
82.063 SS BSPP	Stainless Steel Termination 63mm x 2" BSPP Female	63



Model	Description	Diameter O(mm)
90-050F	Flanged Termination 50mm	50
DN40/2	Gasket & Bolt Set for Coupling Flange DN 40	50
DN40F	Coupling Flange 50 mm BSPP Female	50
DN40M	Coupling Flange 50mm BSPT Male	50
11-50X OL	Spare Olive for 11-50X	50
90-063F	Flanged Termination 63mm	63
DN50/2	Gasket & Bolt Set for Coupling Flange DN 50	63
DN50F	Coupling Flange 63 mm BSP Female	63
DN50M	Coupling Flange 63mm BSPT Male	63
DN50M NPT	Coupling Flange 63mm NPT Male	63
90-090F	Flanged Termination	90
DN80/2	Gasket & Bolt Set for Coupling Flange DN 80	90
DN80F	Coupling Flange 90mm BSP Female	90
DN80M	Coupling Flange 90mm BSPT Male	90
90-110F	Flanged Termination 110mm	110
DN100/2	Gasket & Bolt Set for Coupling Flange DN 100	110
DN100F	Coupling Flange 110mm BSP Female	110



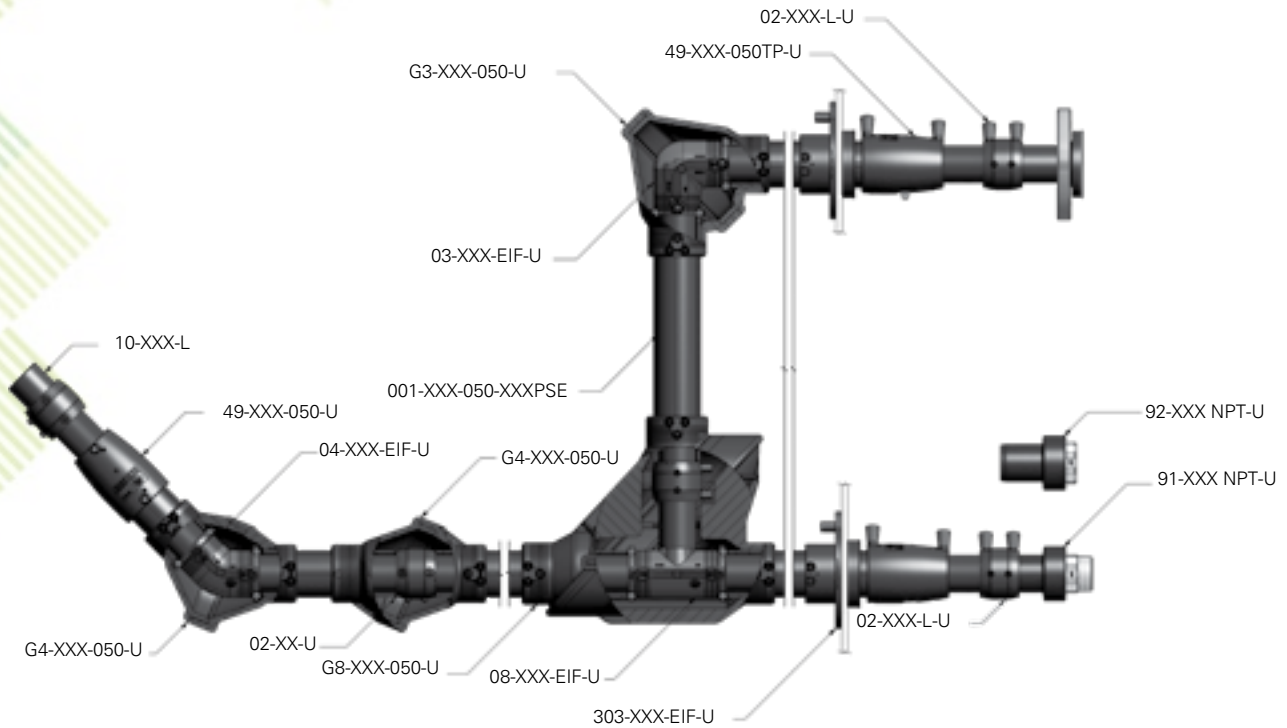
Model	Description	Diameter O(mm)
BV(2)	Ball Valve 63mm BSP F/F ½ Turn - Galvanised Steel	63



Model	Description	Diameter O(mm)
ESI-CAP-012	Weld Pin Protection Cap	All
91-050-TOOL	Plate Spanner 50A/F 91-050 For all Male 50mm sizes	50
92-050-TOOL	Plate Spanner 55A/F 92-050 For all Female 50mm sizes	50
11.50G	Spare Gasket for 50UF fittings	50
408046001	O Ring NBR 35 x 2.5 for 12-050	50
91-063-TOOL	Plate Spanner 62A/F 91-063 For all Male 63mm sizes	63
92-063-TOOL	Plate Spanner 67A/F 92-063 For all Male 63mm sizes	63
11.63G	Spare Gasket for 63UF fittings	63
408045001	O Ring NBR 48 x 3 for 12-063	63
11-63X OL	Spare Olive for 11-63X	63
408044001	O Ring NBR 69.5 x 3 for 12-090	90
CW-125-PIPE	Chain Wrench 125mm Pipe Max	90
408043001	O Ring NBR 89.5 x 3 for 12-110	110



SECONDARY



Model	Description	Pack Size	Diameter O(mm)
001-040-032-050-E	Extra Coaxial Pipe	50 m coil	40/32
001-040-032-100-E	Extra Coaxial Pipe	100 m coil	40/32
001-063-050-030-E	Extra Coaxial Pipe	30 m coil	63/50
001-063-050-100-E	Extra Coaxial Pipe	100 m coil	63/50
001-075-063-010-E	Extra Coaxial Pipe	10 m	75/63
001-075-063-030-E	Extra Coaxial Pipe	30 m coil	75/63
001-075-063-050-E	Extra Coaxial Pipe	50 m coil	75/63
000-063-006-SC-E	Secondary Pipe	5.8 m stick	63
000-075-006-SC-E	Secondary Pipe	5.8 m stick	75
000-075-008-SC-E	Secondary Pipe	8 m stick	75
000-110-006-SC-E	Secondary Pipe	5.8 m stick	110
000-110-006-SC-E	Secondary Pipe	5.8 m stick	110
000-125-006-SC-E	Secondary Pipe	5.8 m stick	125



Model	Description	Diameter O(mm)
02.40(SC)	Fusion Coupler Secondary	40
02.63(SC)	Fusion Coupler Secondary	63
02.75(SC)	Fusion Coupler Secondary	75
02.110(SC)	Fusion Coupler Secondary	110
02.125(SC)	Fusion Coupler Secondary	125
02.160(SC)	Fusion Coupler Secondary	160



Model	Description	Diameter O(mm)
09.110.75(SC)	Reducer Secondary	110/75
09.160.125(SC)	Reducer Secondary	160/125
09-050-032-L	Plain Reducer	50/32
09-063-032-L	Plain Reducer	63/32
13.75.40(SC)	Reducer Secondary	75/40



Model	Description	Diameter O(mm)
302-040	Fusion Seal 40mm	40
303-063-EIF	Fusion Seal 63mm with Integrated Coupler	63
303-075-EIF	Fusion Seal 75mm with Integrated Coupler	75
304-110-090	Fusion Seal with 110 & 90mm Couplers	90
304-110-090-TP	Fusion Seal with 110mm & 90mm Couplers with Test Port	90
304-110-EIF	Fusion Seal 110mm with Integrated Coupler	90
305-125-110	Fusion Seal with 125 & 110 Couplers	110
305-125-110-TP	Fusion Seal 125 & 110 Couplers with Test Port	110
305-125-EIF	Fusion Seal 125mm with Integrated Coupler	125



Model	Description	Diameter O(mm)
49-040-032	Fusion Reducer Secondary	40/32
49-040-032-TP	Fusion Reducer Secondary with Test Port	40/32
49-063-050	Fusion Reducer Secondary	63/50
49-063-050-TP	Fusion Reducer Secondary with Test Port	63/50
49-075-063-1	Fusion Reducer Secondary	75/63
49-075-063-TP-1	Fusion Reducer Secondary with Test Port	75/63
49-110-063(SC)	Sliding Reducer Secondary	110/63
49-110-075(SC)	Sliding Reducer Secondary	110/75
49-110-090	SC Welding Reducer	110/90
49-110-090-TP	SC Welding Reducer with Test Port	110/90
49-125-110	SC Welding Reducer	125/110
49-125-110-TP	SC Welding Reducer with Test Port	125/110



Model	Description	Diameter O(mm)
91-063-050 BSPT	Male, BSPT thread	63/50
91-063-050-TP BSPT	Male, BSPT thread, with test port	63/50
91-075-063-1-TP BSPT	Male, 1½" BSPT thread with test port	75/63
91-075-063-TP BSPT	Male, 2" BSPT thread, with test port	75/63
91-110-090-TP BSPT	Male, BSPT thread, with test port	110/90
91-125-110-TP BSPT	Male, BSPT thread, with test port	125/110



Model	Description	Diameter O(mm)
92-063-050 BSPT	Female, BSPT thread	63/50
92-063-050-TP BSPT	Female, BSPT thread, with test port	63/50
92-075-063-1 BSPT	Female, 1½" BSPT thread	75/63
92-075-063-TP BSPT	Female, 2" BSPT thread, with test port	75/63
92-110-090 BSPT	Female, BSPT thread	110/90
92-110-090-TP BSPT	Female, BSPT thread, with test port	110/90
92-125-110 BSPT	Female, BSPT Thread	125/110
92-125-110-TP BSPT	Female, BSPT thread, with test port	125/110



Model	Description	Diameter O(mm)
G3-040-032	SC Gemini® 90° Elbow	40
G3-063-050	SC Gemini® 90° Elbow	63
G3-075-063	SC Gemini® 90° Elbow	75
G3-110-090	SC Gemini® 90° Elbow	110
G3-125-110	SC Gemini® 90° Elbow	125



UPP® PIPEWORK SYSTEM

Model	Description	Diameter O(mm)
G4-040-032	SC Gemini® 45° Elbow OR SC Gemini® Inline Joint	40/32
G4-063-050	SC Gemini® 45° Elbow OR SC Gemini® Inline Joint	63/50
G4-075-063	SC Gemini® 45° Elbow OR SC Gemini® Inline Elbow	75/63
G4-110-090	SC Gemini® 45° Elbow OR SC Gemini® Inline Joint	110/90
G4-125-110	SC Gemini® 45° Elbow OR SC Gemini® Inline Joint	125/90



Model	Description	Diameter O(mm)
G8-040-032	SC 40x32mm Gemini® Tee	40
G8-063-050	SC 63x50mm Gemini® Tee	63
G8-075-063	SC 75x63 Gemini® Tee	75
G8-110-090	SC 110x90 Gemini® Tee	110



Model	Description	Diameter O(mm)
10-075-SC	End Cap 75mm Secondary	75
10-110-SC	End Cap 110mm Secondary	110



Model	Description	Diameter O(mm)
STB-100	Test Boot Secondary with Test Port	40/32
STB-175	Test Boot Secondary with Test Port	63/50
STB-200	Test Boot Secondary with Test Port	75/63



Model	Description
LDT 60-1	Leak Detection Tube Kit - not for use with STB-100 product offering
BPT-200	Leak Detection Tube Kit - for use with STB-100 product offering



Model	Description
ESI-CAP-012	Weld Pin Protection Cap





CABLE TIGHT™ WIRE MANAGEMENT SYSTEM

The UPP® brand Cable Tight™ Wire Management System provides a true end-to-end solution for electrical, sensor, and data wiring containment. All of the benefits of the field-proven electrofusion welded pipework system are applied to this crucial part of the forecourt installation to ensure a fully liquid-tight underground system. The offering includes a system for 32mm conduit, 75mm conduit, 110mm ducting, direct bury, and rigid conduit applications.

HIGHLIGHTS

- Electrofusion entry seals with integrated slotted compression disks and grommets create a leak proof system by eliminating liquid or vapour penetration.
- Multi-cable entry seal is ideal for consolidating groups of 5mm to 17mm diameter wires into one entry point.
- Rigid conduit entry fitting handles one to three ¾" bore rigid conduit entries.
- Direct bury entry fittings are ideal for applications where cable of 5mm to 16mm diameter are directly buried in the ground, such as grounding wires and armored power cables.
- Slotted multi-cable compression disk design allows wires to be positioned into place without having to pull them through each hole for significantly easier wire pulling.

SPECIFICATIONS

- Conduit and ducting Internal bore diameters: 25mm (32mm conduit), 65mm (75mm conduit), 106mm (110mm ducting)
- Max vapour seal penetration in containment: 60mm (75mm conduit), 50mm (32mm conduit), 50mm (direct bury)
- Transition chamber is a combination of an LLDPE chamber and a D400 load rated composite access cover and frame (factory tested to -30mbar)
- Transition chamber dimensions: W900 x D800 x H862

Approvals

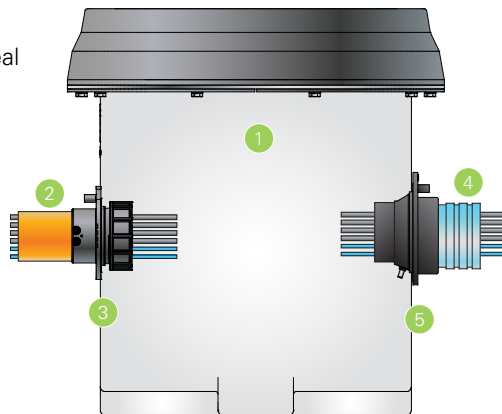
- Conduit approval to AS/NZS 2053.1:2001

Components

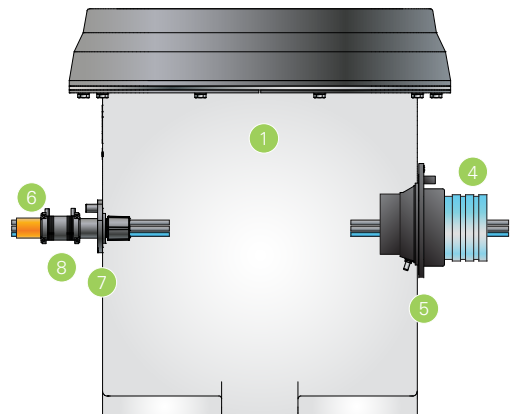
Systems and their various components installed.

- 1 Transition chamber with cover
- 2 75mm conduit
- 3 75mm multi-cable entry seal
- 4 110mm ducting
- 5 110mm entry seal
- 6 32mm conduit
- 7 32mm entry seal
- 8 32mm coupler

75mm and 110mm Contained



32mm and 110mm Contained



Multi-Cable Entry Seal Compression Disc Options



Range of compression discs and grommets sold separately



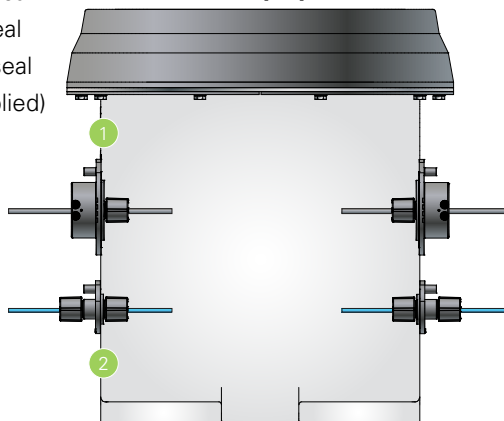
SPECIFICATIONS CONTINUED

Components

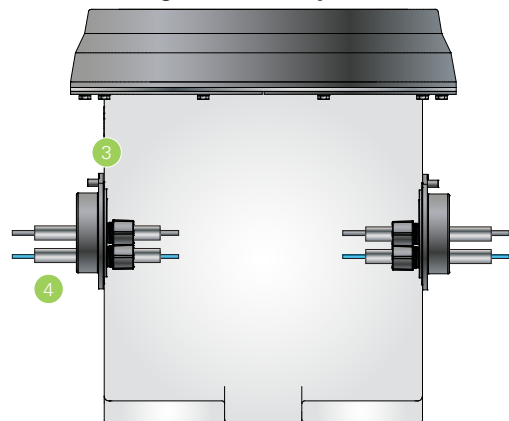
Systems and their various components installed.

- 1 Double direct bury entry seal
- 2 Single direct bury entry seal
- 3 Triple rigid conduit entry seal
- 4 Rigid conduit (locally supplied)

Direct Bury System



Rigid Conduit System



1



2



3

Range of grommets sold separately

Grommets included

Transition Chamber



ORDERING INFORMATION

75mm Cable Tight™ Wire Management System

Ideal for accommodating multiple cables in a wide range of diameters.

75mm Conduit

Model	Description
001-075-050-EC-E	75mm conduit, orange, 50m coil



Multi-Cable Entry Seal

The multi-cable entry seal is ideal for consolidating groups of 5mm to 17mm diameter wires into one entry point. Entry seals come without compression disks. Compression disks must be ordered separately. All compression disk cable entries are marked with nominal diameter and will accommodate a range of wire diameters (see ranges in descriptions below).

Model	Description
303-075-EC	Electrofusion multi-cable entry seal, for 75mm conduit
408040001	Replacement compression nut for 303-075-EC



Compression disks not included

Model	Description
408103001	12 cable compression disk - (12) 5-8mm cable entries

Typical use: Tank sensor wiring.
Corresponding plug: 408134001



Model	Description
408113001	9 cable compression disk - (3) 12-15mm cable entries, (6) 7-10mm cable entries

Typical use: Tank power wiring (pressure applications).
Corresponding plugs: (3) 408130001, (6) 408133001



Model	Description
408162001	6 cable compression disk - (5) 13-16mm cable entries, (1) 6-9mm cable entry

Typical use: Tank power and data wiring.
Corresponding plugs: (5) 408130001, (1) 408133001



Model	Description
408102001	5 cable compression disk - (2) 14-17mm cable entries, (1) 11-14mm cable entry, (2) 9-12mm cable entries

Typical use: Dispenser power and data wiring.
Corresponding plugs: (2) 408129001, (1) 408131001, (2) 408132001



Model	Description
408161001	5 cable compression disk - (4) 17-20mm cable entries, (1) 6-9mm cable entry

Typical use: Dispenser power and data wiring.
Corresponding plugs: (4) 408164001, (1) 408133001



Model	Description
408122001	Blank compression disc for 75mm entry fitting

Typical use: Line integrity testing and future expansion.



Cable Entry Plugs

Used to seal off unused cable entries in compression disks.

Model	Description	Model	Description
408165001	3mm cable entry plug	408131001	12mm cable entry plug
408134001	6mm cable entry plug	408130001	14mm cable entry plug
408133001	9mm cable entry plug	408129001	16mm cable entry plug
408132001	11mm cable entry plug	408164001	18mm cable entry plug



75mm Installation Tools

Model	Description
303-CLAMP-1	Welding clamp for 303-075-EC
HS3	102mm hole saw



ORDERING INFORMATION

32mm Cable Tight™ Wire Management System

Ideal for accommodating single large and multiple smaller diameter cables.

32mm Conduit

Model	Description
001-032-100-EC-E	32mm conduit, orange, 100m coil



32mm Conduit Entry Seal

Entry seals come without compression grommets. Compression grommets must be ordered separately. All compression grommet cable entries are marked with maximum diameter and will accommodate a range of wire diameters (see ranges in descriptions below).

Model	Description
302-032-EC	Electrofusion entry seal, for 32mm conduit
408112001	Replacement compression nut for 302-032-EC



Grommets not included

Model	Description
02-032-L	Electrofusion coupler, for 32mm conduit



Model	Description
408107006	3 cable compression grommet - (3) 5-6mm cable entries
408163001	3 cable compression grommet - (3) 2-3mm cable entries

Typical use: Sensors, line leak detection, interstitial tank and pipe monitoring, tank gauge wiring.
 408107006 Corresponding plug: 408134001
 408163001 Corresponding plug: 408165001



Model	Description
408107005	Cable compression grommet - (1) 7-9mm cable entry

Typical use: Tank grounding wiring.
 Corresponding plug: 408133001



Model	Description
408107004	Cable compression grommet - (1) 9-11mm cable entry

Typical use: Card reader in dispenser or outdoor payment terminal wiring.
 Corresponding plug: 408132001



Model	Description
408107003	Cable compression grommet - (1) 12-14mm cable entry

Typical use: Tank or dispenser power wiring.
 Corresponding plug: 408130001



Model	Description
408107002	Cable compression grommet - (1) 14-16mm cable entry

Typical use: Dispenser hook signal wiring.
 Corresponding plug: 408129001



Model	Description
408107007	Blank compression grommet

Typical use: Line integrity testing and future expansion.



Cable Entry Plugs

Used to seal off unused cable entries in compression grommets.

Model	Description	Model	Description
408165001	3mm cable entry plug	408131001	12mm cable entry plug
408134001	6mm cable entry plug	408130001	14mm cable entry plug
408133001	9mm cable entry plug	408129001	16mm cable entry plug
408132001	11mm cable entry plug	408164001	18mm cable entry plug



32mm Installation Tools

Model	Description
302-CLAMP	Welding clamp for 302-032-EC
HSCS2	51mm hole saw



ORDERING INFORMATION

Direct Bury Wire Management System

Ideal for accommodating direct bury cables requiring a liquid-tight containment entry.

Direct Bury Entry Seals

Direct bury entry seals are ideal for applications where cable is directly buried in the ground. Entry seals come without compression grommets. Compression grommets must be ordered separately. All compression grommet cable entries marked with maximum diameter and will accommodate a range of wire diameters (see ranges in descriptions below).

Model	Description
302-DBC	Electrofusion single direct bury entry seal, (1) entry
303-2DBC	Electrofusion double direct bury entry seal, (2) entries
408112001	Replacement compression nut for 302-DBC and 303-2DBC

Model	Description
408107006	3 cable compression grommet - (3) 5-6mm cable entries

Typical use: Sensors, line leak detection, interstitial tank and pipe monitoring, tank gauge wiring.
Corresponding plug: 408134001

Model	Description
408107005	Cable compression grommet - (1) 7-9mm cable entry

Typical use: Tank grounding wiring.
Corresponding plug: 408133001

Model	Description
408107004	Cable compression grommet - (1) 9-11mm cable entry

Typical use: Card reader in dispenser or outdoor payment terminal wiring.
Corresponding plug: 408132001

Model	Description
408107003	Cable compression grommet - (1) 12-14mm cable entry

Typical use: Tank or dispenser power wiring.
Corresponding plug: 408130001

Model	Description
408107002	Cable compression grommet - (1) 14-16mm cable entry

Typical use: Dispenser hook signal wiring.
Corresponding plug: 408129001

Model	Description
408107007	Blank compression grommet

Typical use: Line integrity testing and future expansion.

Cable Entry Plugs

Used to seal off unused cable entries in compression grommets.

Model	Description
408165001	3mm cable entry plug
408134001	6mm cable entry plug
408133001	9mm cable entry plug
408132001	11mm cable entry plug
408131001	12mm cable entry plug
408130001	14mm cable entry plug
408129001	16mm cable entry plug
408164001	18mm cable entry plug

Direct Bury Installation Tools

Model	Description
303-CLAMP-1	Welding clamp for 303-2DBC
HS3	110mm hole saw
302-CLAMP	Welding clamp for 302-DBC
HSCS2	63mm hole saw



Grommets not included



ORDERING INFORMATION

Rigid Conduit Entry Seal

The rigid conduit entry seals handles one to three ¾" (nominal 26.7mm O/D) rigid conduit entries where local regulations require steel conduit.

Model	Description
305-3X27MM-CON	Electrofusion triple rigid conduit entry seal, for ¾" (nominal 26.7mm O/D) rigid conduit, (3) entries
408128001	Cable plug for ¾" entry fitting
408117001	Replacement ¾" (nominal 26.7mm O/D) grommet



Grommets included Conduit not included

Rigid Conduit Installation Tools

Model	Description
305-EXT-CLAMP	Welding clamp for 305-3X27MM-CON
HS6	160mm hole saw



110mm Ducting

Model	Description
DUCT-400-250	110mm ducting, blue, 75m coil



110mm Ducting Entry Seal

The 110mm ducting entry seals is ideal for large bundles of cables running from the transition chamber back to the main kiosk.

Model	Description
304-110-TP	Electrofusion entry seal, for 110m ducting



110 mm Ducting Installation Tools

Model	Description
304-CLAMP	Welding clamp for 304-110-TP
HS5	140mm hole saw



Transition Chamber

Built specifically for wire management, the rugged transition chamber provides an easy access point for the electrician for maintenance or future expansion.

Model	Description
ECH-760-660-D400	Transition chamber, 700mm x 600mm
408109001	Removable segregation panel
VTL-750X650	Transition chamber test lid assembly, 750mm x 650mm



Model	Description
PCR-LIFT	Transition chamber access cover lifting tool





ELECTRICAL CONDUIT THE NEXT LEVEL OF ELECTRICAL CONDUIT

The old days of installing potentially corrosive metallic electrical conduit are over. The technologically advanced UPP® brand Electrical Conduit from Franklin Fueling Systems features several key upgrades that metallic conduit just can't provide - keeping your investment safe underground for years to come.

HIGHLIGHTS

Electrical Conduit Key Highlights

- Quality construction.
- Flexible, easy-to-install material.
- Non-corrosive construction.
- No buried joints.
- Electrofusion welded, watertight solution.
- Complete line of fittings, adapters and boots.

Quality Construction

UPP® brand Electrical Conduit is manufactured from a superior quality high density polyethylene material using an extrusion process which provides an extremely smooth inner bore. A tough, yet smooth specially formulated bonded inner liner provides a near-zero permeation barrier. The exceptionally smooth inner bore makes installation of wiring easy by eliminating the need to use draw wires. Electrical wiring can easily be pushed through the smooth bore of the pipe.

A Lightweight Solution

UPP® brand Electrical Conduit is anywhere between four to nine-times lighter than comparable metallic conduit. A heavier conduit can end up costing you more in transportation costs as well as installation. A heavier pipe is harder to work with and can extend installation times. UPP® Electrical Conduit is available in 100 meter coils, meaning you can skip time-consuming connections like the ones you have to make with limited length metallic pipe.

Flexibility is Key

With its flexible nature, UPP® brand Electrical Conduit provides a single-run, point-to-point solution making installation quick and easy. Available in 100 meter coils, this conduit allows you to make expansive pipe runs without any buried joints or potential leak paths which is something metallic pipe cannot offer.

A True Watertight Solution

What's the point of having a watertight product pipework system if you are using rubber boots and seals with your electrical system? The highly efficient electrofusion welding process connects pipe and fittings to create a seamless direct burial pipework system. Welding is quick and easy using the on site, lightweight, portable electrofusion welder. The Electrical Conduit electrofusion entry seal allows you to effectively join your electrical system directly to your containment spaces, eliminating any potential leak paths.

Non-Corrosive

Because of its porous nature, metallic piping can begin to corrode over time when it is exposed to humidity and water in the ground. This moisture can even infiltrate threaded connections with potential exposure to electrical wiring. The last thing you want to mix with electricity is water. UPP® brand Electrical Conduit features a non-corrosive high density polyethylene construction.

Easy Connect

Mating standard electrical fittings to UPP® brand Electrical Conduit is simple with UPP® termination fittings. These compression fittings tighten into the UPP® Electrical Conduit, allowing you to simply thread on a standard seal off fitting. Options for both BSPT and NPT threads are available.



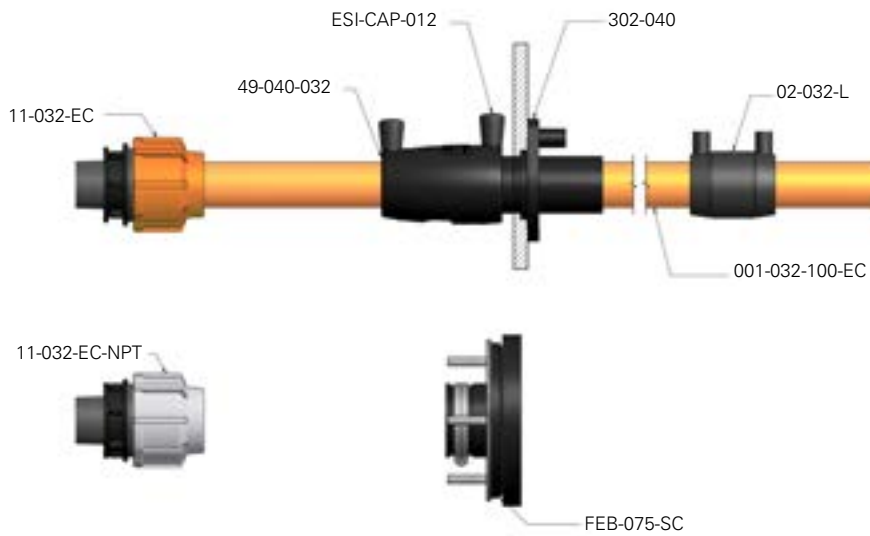
32 MM 1" LINED ELECTRICAL CONDUIT

The semi-flexible nature of the conduit means that it is easier to install in comparison to metal conduits.

Due to its non-corrodible nature, the UPP® 32 mm electrical conduit solves the problem of deteriorating steel armoured cable and metallic conduits. Cables inside the conduit are not affected by contaminants in the ground. Conduit runs are completely joint-free thanks to the UPP® fusion welding system.

Employing the latest and ever improving production technologies, UPP® electrical conduit is manufactured from the best quality high density polyethylene material using an extrusion process which provides a bore of exceptional smoothness. A tough, extremely smooth, specially formulated bonded liner, running its full length, enables UPP® conduit to achieve near-zero permeation. This permeation barrier makes installation of wiring easy and eliminates the need to use draw wires as the electrical wiring can easily be pushed through the smooth bore of the pipe. The UPP® patented permeation barrier protects wiring from the ingress of any products. The day-glow orange colour makes it easy to identify.

- Certified by ERA to AS/NZS 2053.1.2001.
- Corrosion resistant.
- Electrofusion welding system.
- A complete range of fittings.
- Day-glow orange for maximum visibility.
- 25 mm internal bore.



Product Code	Description	Unit	Diameter Ø (mm)
001-032-100-EC-E	UPP® Elect. Conduit Orange	100m coil	32

Note: Ideal for boiler house applications or small stand-by generators. OFTEC Listed. Also ideal for AdBlue.

Model	Description	Diameter Ø (mm)
02-032-L	UPP® Fusion Coupler Long	32



Model	Description	Diameter Ø (mm)
49-040-032	Fusion Reducer 40x32mm Secondary	40/32



Model	Description	Diameter Ø (mm)
302-040	Fusion Seal 40mm	40



Model	Description
ESI-CAP-012	Weld Pin Protection Cap



Model	Description	Diameter Ø (mm)
11-032-EC	Orange Termination 1" BSP	32



Model	Description	Diameter Ø (mm)
11-032-EC-NPT	Grey Termination 1" NPT	32



Model	Description	Diameter Ø (mm)
11-032-EC-075	BLUE Termination - 32mm ¾" NPT	32



Model	Description	Diameter Ø (mm)
10-032-EC	Compression Fitting End Cap	32

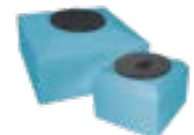


Model	Description	Diameter Ø (mm)
11.321	Compression Termination - BSPT Male	32



Related Items

Model	Description
IPS-2424	Electrical Draw Pit 24" x 24"
IPS-3636	Electrical Draw Pit 36" x 36"





UPP® 110MM 4" DUCT SYSTEM

With a thick and robust wall, the new duct is equally flexible and can be welded to electrofusion entry seals and other 110mm electrofusion fittings. The duct will provide a water tight chase for pipes or electrical cables when fully welded.

This product is for use as an electrical duct or gravel guard for fuel pipework.

HIGHLIGHTS

The following in-house testing has been satisfactorily carried out on the duct:

- Electrofusion trials.
- Cold temperature bending tests at -29°C.
- Ball impact test at -29°C.
- Pressure testing at 2 bar for 1 week.
- Drop test of coil from 2 m.

ORDERING INFORMATION

Model	Description
00-110-050-DUCT	110mm Flexible PE Duct Coil 50m
Model	Description
02.110	UPP® Fusion Coupler 110mm
02.125(SC)	UPP® Fusion Coupler 125mm Secondary
09.125.110(SC)	UPP® Reducer 125x110mm Secondary
10.125(SC)	UPP® End Cap 125mm Secondary
49-125-110	UPP® Terminating Reducer 125x110mm Secondary
49-125-110-TP	UPP® Terminating Reducer 125x110mm Sec with Test Port
304-110-TP	UPP® Fusion Entry Seal with Coupler 110mm with Test Port (No Boot)
305-R-1	UPP® 305 - 5' Fusion Ring Extended Spigot
ESI-CAP-012	Weld Pin Protection Cap



FUSION DUCTED ENTRY BOOT FOR XP PIPE DUCTING

APT® brand Fusion Ducted Entry Boots provide a watertight seal between XP Pipe and polyethylene constructed containment sumps. Utilizing the electrofusion welding process, the entry boot, ducting, and sump become one solid structure, creating a watertight entry into the containment space.

HIGHLIGHTS

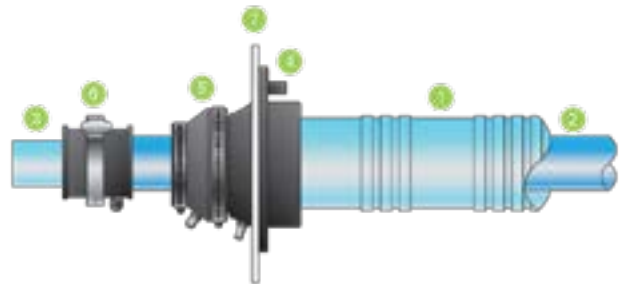
- The two-piece design includes the entry boot itself and a reducer fitting which seals off the secondary XP Pipe inside of the sump.
- Creates watertight entries into containment sumps.
- Features integrated test ports on both the entry boot and reducer fitting.
- The electrofusion welding process is safe and simple to complete in any climate and virtually any weather condition.
- The welding process uses the lightweight, portable electrofusion welder unit to form watertight connections.
- Ducting is recommended for future-proofing sites to accommodate pipe changes or as a pull chase for future station expansion.
- Available for use with 1½", 1¾", and 2" XP Pipe diameters.

Components

- 1. XP Ducting
- 2. XP Pipe (secondary layer outside of sump)
- 3. XP Pipe (primary layer exposed inside sump)
- 4. Fusion ducted entry boot
- 5. Reducing boot (included with fusion ducted entry boot)
- 6. Rigid split test boot
- 7. Polyethylene sump wall

ORDERING INFORMATION

Model	Description
FWEB-150-SC	Fusion ducted entry boot for 1½" XP Pipe
FWEB-175-SC	Fusion ducted entry boot for 1¾" XP Pipe
FWEB-200-SC	Fusion ducted entry boot for 2" XP Pipe
EF1-230V	230 Volt handheld electrofusion welder
408032001	Step up transformer for handheld welder unit
304-CLAMP	Entry boot installation clamp tool
SCR.HAR	Hand scraper installation tool





FLEXIBLE ENTRY BOOTS

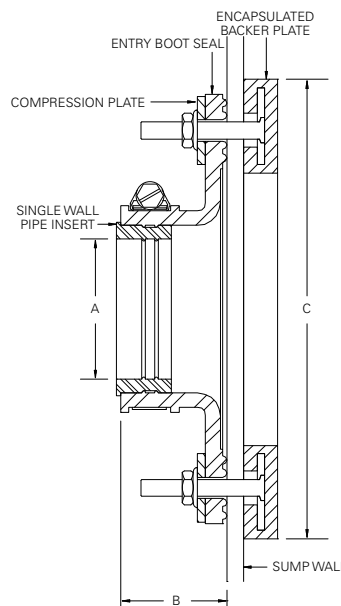
APT® flexible entry boots are two-piece boots that double the sealing power of your entry boots. Stainless steel studs and corrosion resistant nuts and backing rings make for the highest quality entry boot. Franklin Fueling Systems offers a complete line of sizes for single and secondary containment pipe. Also available in a ducted boot version to accommodate the use of APT® DCT-400 corrugated ducting for easy retractability.

HIGHLIGHTS

- Designed to be used with APT® product piping, the entry boots are also ideal for use with rigid piping and electrical conduits.
- Flexible entry boots available in sizes from ½" through 4".
- Ducted entry boots available in sizes from 1½" through 2½". APT® offers these ducted entry boots in an air testable version for easy testing of the 4" corrugated ducting.
- Boot size designations correspond directly to the pipe size being used.
- Any boot for a single wall pipe can be converted to a boot for a double wall pipe by simply removing the insert in the pipe opening.
- Entry boot can be serviced from inside the sump, eliminating the need for sump excavation.
- Made from oil- and gasoline-resistant nitrile rubber.
- Will work on round sumps of 36" or larger diameter.

SPECIFICATIONS

Model	A (mm)	B (mm)	C (mm)	Mtg. Hole Size (mm)	Mtg. Studs
FEB-075-SC	33	38	121	51	4
FEB-100-D	33	38	121	51	4
FEB-100-SC	43	38	121	51	4
FEB-150-D	44	38	172	90	8
FEB-175-SC	61	38	172	90	8
FEB-200-D	63	38	172	90	8
FEB-200-SC	73	38	172	90	8
FEB-300-R	90	38	172	90	8
FEB-400-R	114	38	204	140	10
FEB-400-F	125	38	204	140	10



ORDERING INFORMATION

Model	Description	Pack	UPP® Pipe Diameter Ø (mm)	Hole Diameter (mm)	Hole Saw
FEB-075-SC	Flexible Entry Boot for 1" Electrical Conduit	1	32	51	HSCS2
FEB-100-D	Flexible Entry Boot for ¾" and 1" Electrical Conduit	1	32	51	HSCS2
FEB-100-SC	Flexible Entry Boot for 40mm UPP®	1	40	51	HSCS2
FEB-150-D	Flexible Entry Boot for 50mm UPP®	1	50	83	HSP3
FEB-175-SC	Flexible Entry Boot for 63mm UPP®	1	63	83	HSP3
FEB-200-D	Flexible Entry Boot for 63mm UPP®	1	63	83	HSP3
FEB-200-SC	Flexible Entry Boot for 75mm UPP®	1	75	83	HSP3
FEB-300-R	Flexible Entry Boot for 90mm UPP®	1	90	102	HS3
FEB-400-R	Flexible Entry Boot for 110mm UPP®	1	110	140	HS5
FEB-400-F	Flexible Entry Boot for 125mm UPP®	1	125	140	HS5

PETROSEAL

PetroSeal entry boots are two-piece boots for 50mm to 160mm UPP® pipework. Using band clips and a backing ring to ensure a perfect fit and the highest quality entry boot.

Model	Description	Diameter Ø (mm)
PS3	PetroSeal for UPP®	50/63/75



Model	Description	Diameter Ø (mm)
PS3/R	Backing Ring for PS3	n/a



Model	Description	Diameter Ø (mm)
SS 4	Band Clip for PS3	70 - 90



Model	Description	Diameter Ø (mm)
PS6	PetroSeal for UPP®	90/110/160



Model	Description	Diameter Ø (mm)
PS6/R	Backing Ring for PS6	--



Model	Description	Diameter Ø (mm)
SS 5	Band Clip for PS6 (76-127mm)	90/110



Model	Description	Diameter Ø (mm)
SS 8	Band Clip for PS6/308 (165-216mm)	160





302-040

These electrofusion entry seals weld directly to the walls of polyethylene chambers or sumps. They have been specifically designed to reduce the number of fittings necessary to provide water tight seals between the underground tank sump/ chamber and the UPP® primary or secondary contained pipe and electrical conduit or duct. The nature of the seal means that after installation it becomes one with the sump, with zero leak paths, creating a 100% leak tight system. The seals are polyethylene based allowing electrofusion of UPP® pipework systems directly to the penetration, negating the need for mechanical boots and creating a homogeneous structure of the sump, boot and pipe.

HIGHLIGHTS

- Electrofusion seal for 40/32mm pipe.
- 302-040 seal complements 32mm pipe range.
- 40mm secondary (double wall) pipe welds directly to seal spigot using 02.40(SC) fusion coupler.
- 32mm primary (single wall) continues through penetration and into PE sump/chamber and is fusion sealed with 49-040-032 (ordered separately).

ORDERING INFORMATION

Model	Description	Diameter Ø (mm)
302-040	Fusion Seal	40

304 AND 305 SERIES



These electrofusion entry seals weld directly to the walls of polyethylene chambers or sumps. They have been specifically designed to reduce the number of fittings necessary to provide water tight seals between the underground tank sump/ chamber and the UPP® primary or secondary contained pipe and electrical conduit or duct. The nature of the seal means that after installation it becomes one with the sump, with zero leak paths, creating a 100% leak tight system. The seals are polyethylene based allowing electrofusion of UPP® pipework systems directly to the penetration, negating the need for mechanical boots and creating a homogeneous structure of the sump, boot and pipe. The spigot on both sides of the 305 allow for EIF welding. The seal is fully vacuum and pressure testable ensuring 100% leak free seals and sumps.

HIGHLIGHTS

- Space saving, welded entry seal.
- For use with 50mm (1 ½"), 63mm (2"), 90mm (3") and 110mm (4") SW or DW pipe.
- With or without test port.

ORDERING INFORMATION

Model	Description	Diameter Ø (mm)
304-110-050-TP	Fusion Entry Seal with Secondary Coupler with Test Port	50
304-110-063-TP	Fusion Entry Seal with Secondary Coupler with Test Port	63
304-110-075-TP	Fusion Entry Seal with Secondary Coupler with Test Port (pictured)	75

Model	Description	Diameter Ø (mm)
304-110-090	Fusion Entry Seal	110/90
304-110-090-TP	Fusion Entry Seal with Test Port (pictured)	110/90

Model	Description	Diameter Ø (mm)
304-110-TP	Fusion Entry Seal with Coupler with Test Port (No Boot)	110



ORDERING INFORMATION CONTINUED

Model	Description	Diameter Ø (mm)
304-110-EIF	Fusion Seal with Integrated Coupler	110

Model	Description	Diameter Ø (mm)
305	5" Fusion Seal	50/63/75

Model	Description	Diameter Ø (mm)
305-R-1	5" Fusion Ring Extended	125

Model	Description	Diameter Ø (mm)
305-SB	Seal Boot Kit	50/63/75

Model	Description	Diameter Ø (mm)
305-090-SB	Seal Boot Kit	90

Model	Description	Diameter Ø (mm)
305-125-EIF	Fusion Seal with Integrated Coupler	125

Model	Description	Diameter Ø (mm)
DCT-400-F	Seal Boot Kit	110

Model	Description	Diameter Ø (mm)
305 ELECTRICAL	5" Fusion Seal - Electrical Entry	12/18/ 32/41
305 ELECTRIC SB	Spare Boot 305 Electrical	12/18/ 32/40

Model	Description	Diameter Ø (mm)
305-125-110	Fusion Entry Seal	125/110
305-125-110-TP	Fusion Entry Seal with Test Port	125/110



308 SERIES



These electrofusion entry seals weld directly to the walls of polyethylene chambers or sumps. They have been specifically designed to reduce the number of fittings necessary to provide water tight seals between the underground tank sump/chamber and the UPP® primary or secondary contained pipe and electrical conduit or duct. The nature of the seal means that after installation it becomes one with the sump, with zero leak paths, creating a 100% leak tight system. The seals are polyethylene based allowing electrofusion of UPP® pipework systems directly to the penetration, negating the need for mechanical boots and creating a homogeneous structure of the sump, boot and pipe. The spigot on both sides of the 308 allow for EIF welding. The seal is fully vacuum and pressure testable ensuring 100% leak free seals and sumps.

HIGHLIGHTS

- Large diameter access.
- For use with 50mm (1½"), 63mm (2"), 75mm (SC), 90mm (3"), 110mm (4") and 160mm (6") pipe.

ORDERING INFORMATION

Model	Description	Diameter Ø (mm)
308	8" Fusion Seal	90/110/160

Model	Description	Diameter Ø (mm)
308-R	8" Fusion Ring	200

Model	Description	Diameter Ø (mm)
308-SB	Seal Boot Kit	90/110/160

Model	Description	Diameter Ø (mm)
308-075	8" Fusion Seal with Rubber Boot	50/63/75

Model	Description	Diameter Ø (mm)
308-075-SB	8" Seal Boot Kit	50/63/75



PIPING AND CONTAINMENT SYSTEMS

WATER-RESISTANT TANK SUMPS: KEEP WATER OUT

Water removal costs station owners millions in maintenance costs every year. The APT™ brand water-resistant tank sumps prevent the hassle and cost of sump liquid removal with its superior design.

WATER-RESISTANT DESIGN

Water-resistant tank sumps feature several key design features to ensure water stays out of the containment:

1 GASKETED SEAL

The gasketed sump lid engages the lid with the sump riser to create a seamless, water-resistant seal between the two.

2 HOLD-DOWN TOGGLES

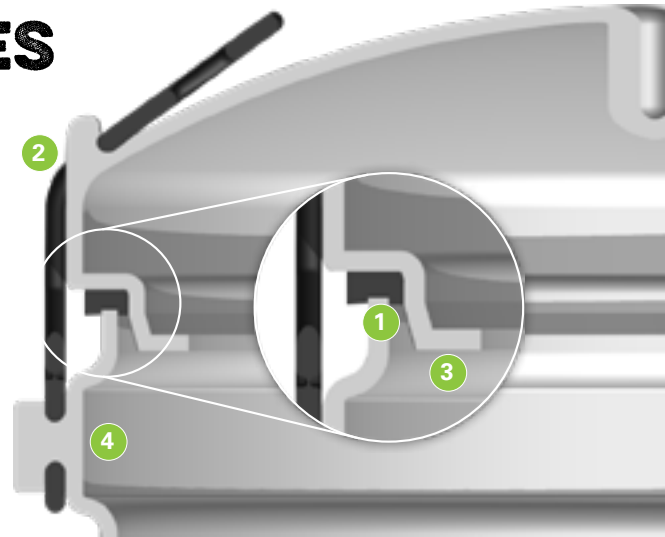
Four integrated hold-down lid toggles provide compression between the lid gasket and the riser, preventing liquid from entering into the sump. They also allow for ease of entry for service in and out of the sump.

3 DEEP LID INSERT

The lid extends down into sump riser creating overlap between the lid and the riser, reducing potential leak paths.

4 THICK SUMP WALLS

The thicker sump walls provide an overall robust sump design that will withstand the pressure of backfill without deformation. This ensures the sump walls will stay in-line with the lid, eliminating potential leak paths.





PETROTITE® PE

The DC4830 is of bolted construction at the riser/base joint which will give a joint of the same quality as that to the tank for a fully watertight seal.

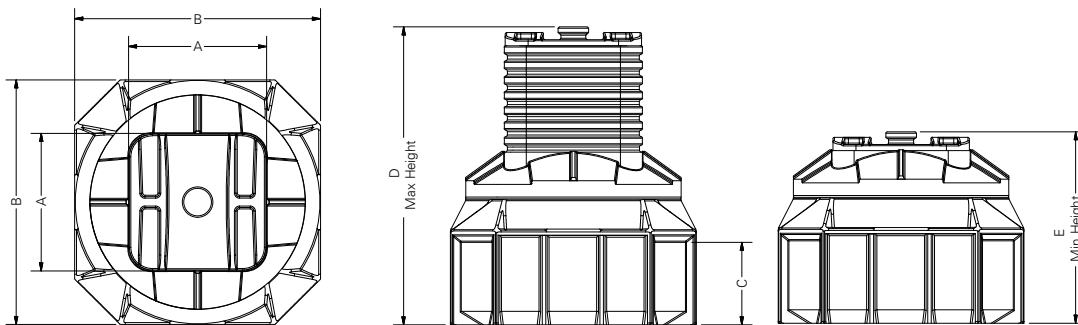
HIGHLIGHTS

- Vacuum testable. Specific testing at critical points ensures a leak-proof installation.
- Tank access remains dry and protected.
- Compatible with all UPP® electrofusion entry seals providing a welded UPP® containment system, eliminating mechanical entry seal joints and leaks.
- The two-piece design enables easy access during installation while the compact design allows for economy in shipping.

ORDERING INFORMATION

Model	Description
DC4830SB	PetroTite® PE Chamber 1.2 x 1.2 m
DC4828 (BASE)	PetroTite® PE Chamber BASE ONLY 1.2 x 1.2 m
DC4830SBG	Gasket Kit for DC4830SB - Base & Waist
DC4830-L *	PetroTite® PE Chamber Lid
DC4830-R *	PetroTite® PE Chamber Riser

Note: the gasket kit DC4830SBG is included with the DC4830SB
 * May require lead time. Consult factory for availability.



Model	A	B	C	D	E
DC4830SB	770	1370	460	1668	1072

Base suits square or round containment collars on tank:

Square □: 970 mm max (38.2")

Round Ø: 1150 mm max (45.3")





PETROTITE® PE FUSION

The LA Chamber is available in Deep or Shallow risers.

SPECIFICATIONS

LA-002-001 / LA-002-002

Welding lead code: EF1-C7A

ORDERING INFORMATION

Model	Description	Size (mm)	Neck Opening (Ø mm)	Overall Height (mm)
LA-002-001	PE Chamber, Deep/Small Bore	1641 x 1176	780	max = 1641 min = 1310
LA-002-002	PE Chamber, Shallow/Small Bore	1279 x 1176	780	max = 1279 min = 831

Model	Description
LA-004-001 *	PE Chambers Base
LA-005-001 *	PE Chambers Riser for Deep Burial
LA-006-002 *	PE Chambers Riser for Shallow Burial
LA-007-001 *	PE Chamber, water tight lid



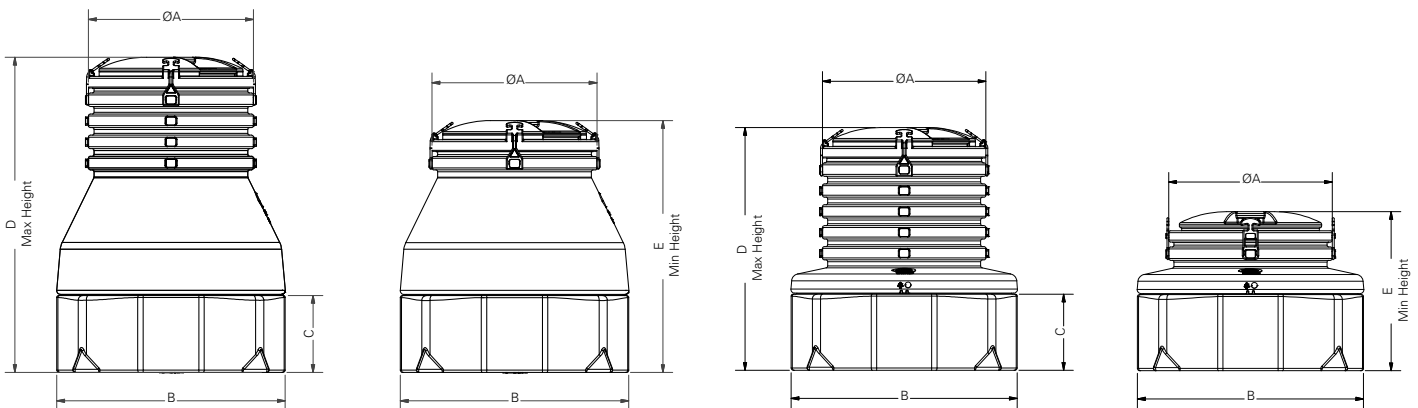
Note: Toggles OCH-1400-T1 included. Please Note a welding harness tool OCH-1400-H is required to install this product and must be ordered separately. This can be found under Associated Items on the menu. * May require lead time. Consult factory for availability.

Accessories

Model	Description
OCH-1400-T	Toggle for OCH
OCH-1400-LC	Mechanical Toggle for OCH

LA-002-001

LA-002-002



Model	A	B	C	D	E
LA-002-001	880	1176	400	1641	1310
LA-002-002	880	1176	400	1279	831

Base suits square or round containment collars on tank:

Square □: 970 mm max (38.2")

Round Ø: 1150 mm max (45.3")



OPTIMUM FUSION

With the PetroTite® Standard and Optimum fusion chambers the riser section electrofuses to the base, removing the need for multiple bolt holes and foam gaskets in this area, therefore dramatically reducing the number of potential leak paths.

With its simplified assembly, this electrofusion system also reduces the installation time. Welding of the chamber can be performed using UPP® electrofusion equipment in approximately six minutes.

Once welded and cooled the base and riser of the OCH models become one homogeneous unit, with no mechanical joints and no leak points. The chamber can then be vacuum tested to ensure that it is 100% leak-tight.

The Optimum chamber is available with either Deep or Shallow bases, and both will allow for a very easy installation of pipework before the riser is fused into place.

SPECIFICATIONS

OCH-1400-D / OCH-1400-S

Welding lead code: EF1-C7A

ORDERING INFORMATION

Model	Description	Size (mm)	Neck Opening (Ø mm)	Overall Height (mm)
OCH-1400-D	PE Chamber Deep Burial 1400	1400 x 1616	980	max = 1616 min = 1176
OCH-1400-S	PE Chamber Shallow Burial 1400	1400 x 1266	980	max = 1266 min = 826

Model	Description
OCH-1400-BD *	Deep Chambers Base
OCH-1400-BS *	Shallow Chambers Base
OCH-1400-RL *	Large opening Chambers Riser
OCH-1400-LW *	Lid, watertight, large bore

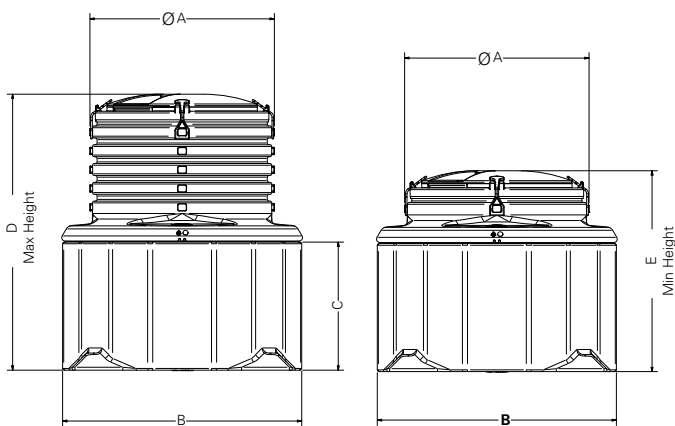


Note: Toggles OCH-1400-T1 included.
Please Note a welding harness tool OCH-1400-H is required to install this product and must be ordered separately. This can be found under Associated Items on the menu.
* May require lead time. Consult factory for availability.

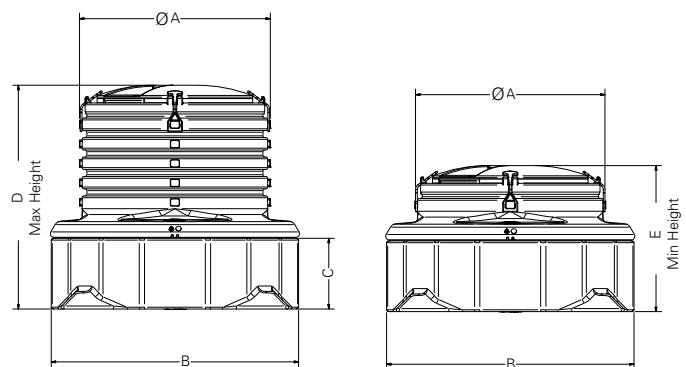
Accessories

Model	Description
OCH-1400-T	Toggle for OCH
OCH-1400-LC	Mechanical Toggle for OCH

OCH-1400-D



OCH-1400-S



Model	A	B	C	D	E
OCH-1400-D	1080	1400	750	1616	1176
OCH-1400-S	1080	1400	400	1266	826

Consult FFS Technical Support for square and round manway collar sizing to ensure internal dimensions of tank chamber are not exceeded by tank collar clamping plates.

Square □ : 1270x1270 mm max (50')
Round Ø: 1380 mm max (54.3')





OPTIMUM FUSION SMALL RISER

The Optimum chamber is available with either Deep or Shallow bases, and both will allow for a very easy installation of pipework before the riser is fused into place.

SPECIFICATIONS

OCH-1400-DS / OCH-1400-SS

Welding lead code:

EF1-C7A

ORDERING INFORMATION

Model	Description	Size (mm)	Neck Opening (Ø mm)	Overall Height (mm)
OCH-1400-DS	PE Chamber Deep/Small Bore	1400 x 1616	780	max = 1616 min = 1176
OCH-1400-SS	PE Chamber Shallow/Small Bore	1400 x 1266	780	max = 1266 min = 826

Model	Description
OCH-1400-BD *	Deep Chambers Base
OCH-1400-BS *	Shallow Chambers Base
OCH-1400-RS *	Small opening Chambers Riser
LA-007-001 *	PE chamber, water tight lid



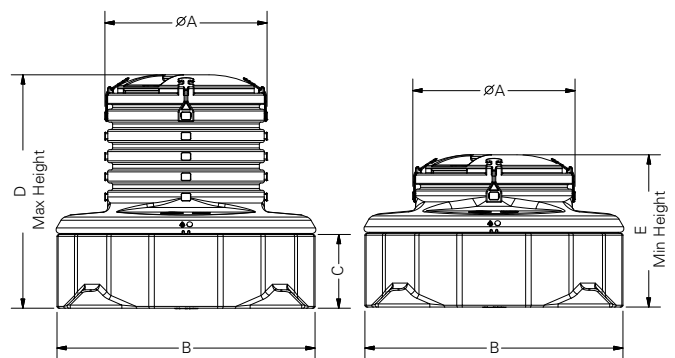
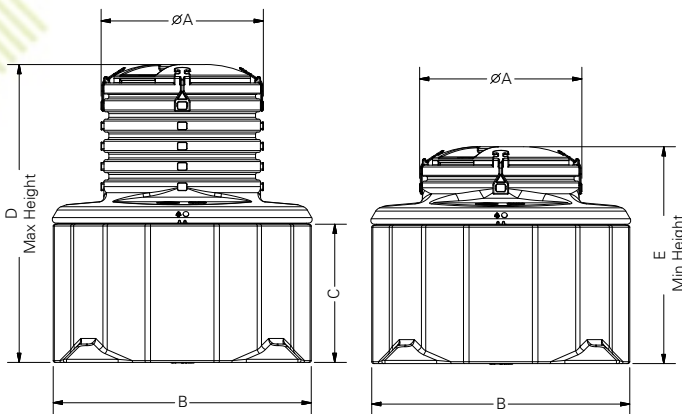
Note: Toggles OCH-1400-T1 included.
Please Note a welding harness tool OCH-1400-H is required to install this product and must be ordered separately. This can be found under Associated Items on the menu.
* May require lead time. Consult factory for availability.

Accessories

Model	Description
OCH-1400-T	Toggle for OCH
OCH-1400-LC	Mechanical Toggle for OCH

OCH-1400-DS

OCH-1400-SS



Model	A	B	C	D	E
OCH-1400-DS	880	1400	750	1616	1176
OCH-1400-SS	880	1400	400	1266	826

Base suits square or round containment collars on tank:

Square \square : 1270x1270 mm max (50")

Round \varnothing : 1380 mm max (54.3")



FUSION CHAMBERS

With the PetroTite® Standard and Optimum fusion chambers the riser section electrofuses to the base, removing the need for multiple bolt holes and foam gaskets in this area, therefore dramatically reducing the number of potential leak paths.

With its simplified assembly, this electrofusion system also reduces the installation time. Welding of the chamber can be performed using UPP® electrofusion equipment in approximately six minutes.

Once welded and cooled the base and riser of the LA models become one homogeneous unit, with no mechanical joints and no leak points. The chamber can then be vacuum tested to ensure that it is 100% leak-tight.

The LA Chamber is available in Deep or Shallow risers.

HIGHLIGHTS

- With the PetroTite® Standard and Optimum fusion chambers the riser electrofuses to the chamber base - no bolts, no leaks. Quick installation with no bolt holes.
- Vacuum testable. Specific testing at critical points ensures a leak-proof installation.
- Tank access remains dry and protected even in high water table areas.
- Compatible with all UPP® electrofusion entry seals. Fully welded UPP® system, eliminating mechanical joints and leaks.
- The two-piece design enables easy access during installation while the compact design allows for economy in shipping.

ASSOCIATED ITEMS

Model	Description
OCH-1400-H *	PE-Chambers Harness
OCH-1400-T1 *	Replacement toggles for OCH-Chambers
OCH-1400-BG *	Base Seal for Chambers
OCH-1400-G *	Gasket Watertight Lid Large Bore
CLAMP(OCH)	CLAMP OCH Riser - Base
LA-007-003 *	Gasket Watertight Lid Small Bore
EF1-110V	EF1 welders 110 V
EF1-230V	EF1 welders 230 V
OCH-1400-LC	Mechanical Toggle for OCH

* May require lead time. Consult factory for availability.



OUTSIDE N. AMERICA UDC COMPATIBILITY CHART

Supplied from FFS, Wittlich, Germany. Contact FFS Wittlich Customer Service for availability and lead times.

Model	Medium Depth Sump	Deep Depth Sump	Frame	Stabiliser Bar
Bennet				
3K Series	P0783, P0784, P0785, P0786, P0831, P0828, P0829, P0830, P0951, P0982	LMM-2010	LMD-2010	Included SBK-2
Compaq				
Legend	MD6	LMM-4111	LMD-4111	Included SBK-25
Dresser Wayne				
Vista™	3/V590D, 3/V591D, 3/V595D, 3/V490D, 3/V490D/U, 3/V590D/U, 3/V595D/U, 3/V399D, 3/V390D, 3/V390D/U, V395P/U, V590P/U, V590D/U, V395D/U, 1/V395D/U, 1/V590D/U, 1/V590D, X1/V590D, V395D, X/V395D, V590D, X/V590D	LMM-4111	LMD-4111	Included SBK-25
Ovation™	R11, R13, B12/R22, B23	DS3915	DS3915	Included SBK-3
Global Star	H Frame	DS4620	DS4620	DS4620-F-WGHF DS-SBA-20
	CXX-11 1 product, CXX-21 2 product, CXX-31 3 product	DS3818	DS3818	DS3818-F-CX31 DS-SBA-18
	CXX-44 4 product	DS5518	DS5518	DS5518-F-CX44 DS-SBA-18
3/G Prefix	3/G2201D, 3/G2221D/GHK, 3/G2227D/GJKR, 3/G3387D, 3/G3388, 3/G3389D, 3/G3384D	LMM-2715	LMD-2715	Included SBK-3
	3/G3397D, 3/G3399D, 3G/3390D, 3/G3490D, 3/G3498D	LMM-4115	LMD-4115	Included SBK-3
Helix	2000 and 4000 series	LMM-2915	LMM-2915	Included SBK-3
	5000 series	LMM-4115	LMM-4115	Included SBK-3
Gilbarco™				
Encore™	550/500, 500S	DS3617 ENCORE	DS3617 ENCORE	Included SBK-3
SK700	2/1/2 - 2 hose	DS3420	DS3420	DS3420-F-SK72 DS-SBA-20
	4/2/4 - 4 hose	DS3420	DS3420	DS3420-F-SK74 DS-SBA-20
	6/3/6 - 6 hose	DS4620	DS4620	DS4620-F-SK76 DS-SBA-20
	8/4/8 - 8 hose	DS4620	DS4620	DS4620-F-SK78 DS-SBA-20
	10/5/10 - 10 hose	DS5518	DS5518	DS5518-F-SK710 DS-SBA-20
Advantage™	1 and 2 Grade	LMM-2915	LMD-2915	Not Required SBK-3
	3 and 4 Grade	LMM-4115	LMD-4115	Included SBK-3
	Quad/Dual	LMM-2915	LMD-2915	Included SBK-3
	X+0 (36" frame)	LMM-2915	LMD-2915	Included SBK-3
China	TC3202-202, TB3202-202	DS4620	DS4620	DS4620-F-3202 DS-SBA-20
Neotec				
M-5200	M5225	LMM-2010	LMD-2010	Included SBK-2
Petrotech				
	EURO 4000B DBL PMP	DS3617	DS3617	SBK-3
	EURO 4000B SNGL PMP	DS3617	DS3617	SBK-3
	P5000 3P6H	DS5518	DS5518	DS-SBA-18
Prowalco				
Salesmaker	Salesmaker 10 Hose	DS5518	DS5518	DS-SBA-18
	SM1080W	DS3617	DS3617	SBK-3
	SM1011WHV	LMM-2615	LMD-2615	Included SBK-3
	SM1020, SM1020WHV, SM1021WHV, SM1921WHV STD, SM1021W, SM1021WHV SIDOFL, SM1020WHV SIDOFL, SM1020WHV SIDOSL, SM1040W, SM1040WHD, SM1041WHD, SM1041W, SM1010, SM1010WHV, SM1020WSIDOFL, SM1021WSIDOFL, SM1031W	LMM-2715	LMD-2715	Included SBK-3
	SM1060W	LMM-4115	LMD-4115	Included SBK-3
	SM1061W	LMM-4115	LMD-4115	Included SBK-3
Somo				
Multi Ex	4S, 4S2H, 6S	LMM-4111	LMD-4111	Included SBK-25
Tatsuno				
Sunny XE	Sunny XE Wide Body	DS4620	DS4620	DS4620-F-TSXE-W DS-SBA-20
Sunny XE	Sunny XE Narrow Body	DS3420	DS3420	DS3420-F-TSXE-N DS-SBA-20
Sunny - X	3 product	LMM-4111	LMD-4111	Included SBK-25
Multi - X	3 product	LMM-4111	LMD-4111	Included SBK-25
Tokheim™				
Quantium™	410T	DS4620	DS4620	DS4620-F-Q410 DS-SBA-20
	510T 2 product	DS3420	DS3420	DS3420-F-Q5T2 DS-SBA-20
	510T 3 product	DS4620	DS4620	DS4620-F-Q5T3 DS-SBA-20
	510T 4 product, 2 column	DS4620	DS4620	DS4620-F-Q5T4 DS-SBA-20
	510T 4 product, 3 column	DS4620	DS4620	DS4620-F-Q5T4-3 DS-SBA-20
	510T 4 product, 4 column	DS4620	DS4620	DS4620-F-Q5T4-4 DS-SBA-20
	510T 5 product	DS5518	DS5518	DS5518-F-Q5T5 DS-SBA-18
	430S	LMM-2811	LMD-2811	Included SBK-25
	330S	LMM-2407	LMD-2407	Included SBK-1
230T	LMM-2010	LMD-2010	Included SBK-25	

Gilbarco™, Advantage™ and Encore™ are trademarks of Gilbarco Inc.
Wayne™ is a trademark of Dresser Equipment Group Inc.
Ovation™ and Vista™ are trademarks of Dresser Inc.
Quantium™ and Tokheim™ are trademarks of Tokheim Holding B.V.



NEXUS SERIES™ UNDER DISPENSER CONTAINMENT SUMPS

UPP® brand Nexus Series™ under dispenser containment sumps (UDCs) combine a completely optimised containment space with the latest in double wall piping technology to deliver a truly state-of-the-art containment space. By incorporating an advanced UDC with UPP® double wall termination fittings and Gemini® secondary containment pipe fittings, you get superior watertight containment with faster and safer installations.

HIGHLIGHTS

Redefining Under Dispenser Containment

Franklin Fueling Systems has totally re-imagined under dispenser containment with the UPP® brand Nexus Series™ line of under dispenser containment. We've completely optimised the containment space making installation faster, easier, more secure and removed potential leak paths for superior watertight containment.

Eliminate Potential Leak Points

The Nexus Series employs the use of Gemini® Secondary Contained Fittings under the containment to reduce the amount of penetrations. Instead of penetrating both sides of the containment, only a single seal is needed per line.

- Drastically reduces the amount of containment penetrations and potential leak paths on a site.
- Electrofusion welded entry seals ensure liquid and vapour tight seals between pipework and containment.
- Gemini® secondary contained fittings are both EN and UL approved and proven in the field.

A Fully Optimised Use of Space

Space in under dispenser containment is at a premium. The Nexus Series™ provides an ideal, fully optimised containment space with enough room to work freely, yet also minimises the overall size of the containment.

- A single stabiliser bar spans the length of the sump with preset U-Bolt holes for fast and accurate shear valve installation.
- The optimised containment space brings all connections within arm's reach of a service contractor.
- The integrated angled side wall provides an ideal surface for electrical connection penetrations.

Secondary Contained Protection to Grade

The Nexus Series™ was specifically designed to incorporate UPP® brand double wall termination fittings which provide secondary contained pipe protection all the way to grade level.

- Eliminates potential leak paths and minimises installation time with a single-piece termination fitting.
- The single-piece construction of double wall termination fittings allow for minimal welds, cleaning and scraping operations during installation.
- Easy access to the integrated test port makes integrity testing of the secondary contained system simple.

Integrated Monitoring Features

Two integrated monitoring sensor reservoirs molded into the under dispenser containment make placement of liquid sensors simple and consistent.

- The dual recessed sensor reservoirs allow any liquid to pool quickly and provide prompt indication.
- Reservoirs are appropriately sized to fit either a smaller liquid detecting sensor or a larger discriminating sensor.
- Integrated channels run the length of the containment bottom, guiding any liquid directly towards the sensor.

A Versatile Frame for Any Application

The adjustable frame height feature provides installation versatility and ensures a uniform installation. This eliminates the use of scrap metal or wood to hold the under dispenser containment in place.

- The powder coated finish provides long-lasting corrosion protection with five height adjustment points.
- Integrated pipe spacers eliminate the need for in-field pipe spacing materials such as foam or wood while also stabilising pipe and fittings during welding.
- Integrated tabs allow for support and easy anchor into concrete.

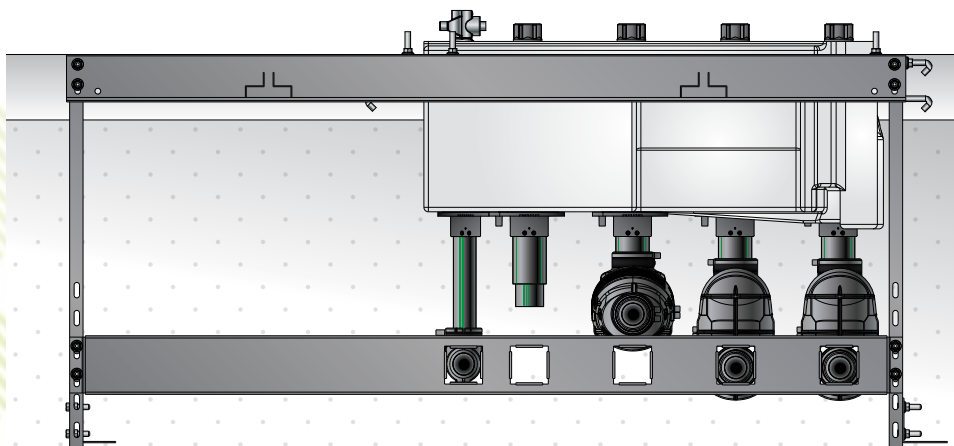
SPECIFICATIONS

- Shallow pan material: HDPE
- Frame material: Powder coated steel
- Stabiliser bar material: Galvanised steel
- Designed for specific use with UPP® brand double wall termination fittings and Gemini® secondary containment pipe fittings (tees and 90° elbows).
- Field height adjustable between 514mm and 629 mm

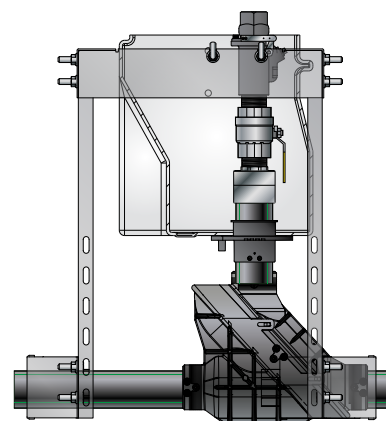
Components

Shown in various stages of installation for reference purposes.

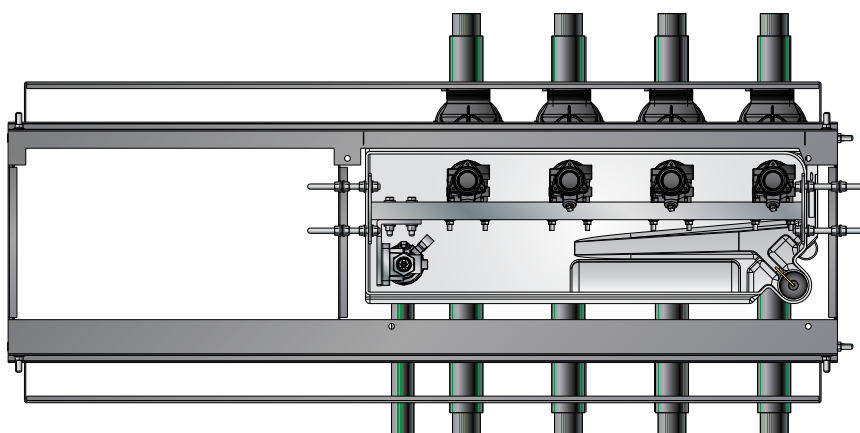
- Shallow pan (Nexus Series™)
- Frame (Nexus Series™)
- Stabiliser bar (Nexus Series™)
- Double wall termination fittings
- Gemini® tee (or 90° elbow)
- Stage II vapour recovery line
- Vapour shear valve
- Product shear valve
- Ball valve
- Liquid sensor



Front View



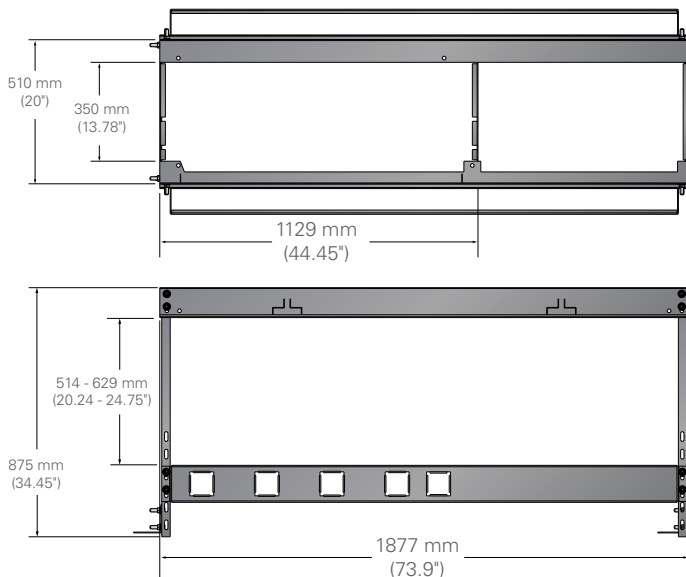
Side View



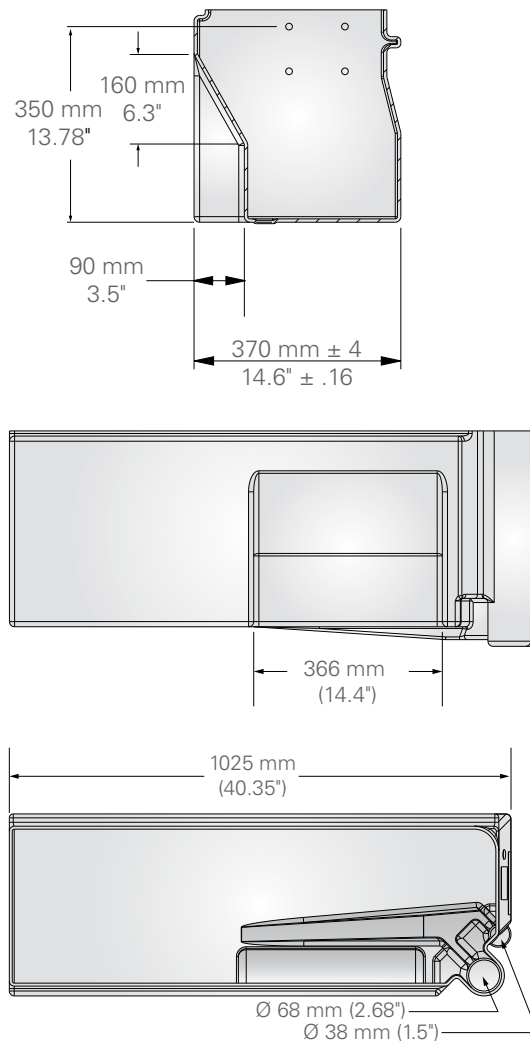
Top View

SPECIFICATIONS CONTINUED

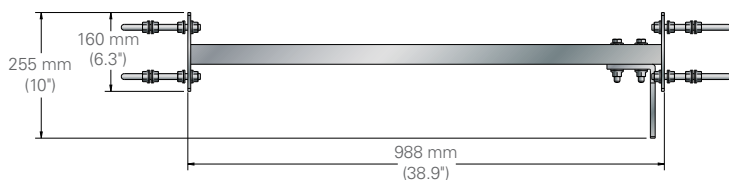
Frame Dimensions



Shallow Pan Dimensions



Stabiliser Bar Kit Dimensions



ORDERING INFORMATION

Model	Description
DP-Q510-48-S	Nexus Series™ shallow pan for use with Tokheim™ four-product dispenser
DP-Q510-48-F	Nexus Series™ frame for use with Tokheim™ four-product dispenser
DP-Q510-48-SBK	Nexus Series™ stabiliser bar kit for use with Tokheim™ four-product dispenser
66213801	U-Bolt kit for stabiliser bar*

*Order (1) one U-Bolt kit per shear valve.

LARGE MOUTH



The large mouth dispenser sump modular design provides versatility and ease of installation. There are six polyethylene bases in three lengths and two depths. These bases have a large 22" wide by 24", 36" or 48" long openings, easing the installation of entry boots and piping connections. The ribbed riser can be cut down in 3" increments in the field to achieve proper pipe slopes with respect to grade. A variety of large mouth tops (LMTs) are available to match nearly every dispenser model. The lids are corrosion-resistant painted steel to which shear valves and dispenser frames are mounted.

HIGHLIGHTS

- 22" wide by 24", 36" or 48" long opening on base gives plenty of room for boot, fitting and monitor installation.
- Available in medium and deep burial depths to properly maintain slope.
- The base widens to a spacious 26" where entry boots and pipe connections are made.
- Height modifications are accomplished by trimming off the base at the ribs.
- Stabiliser bar kits (SBKs) mount into welded strut channels for shear valve mounting. One SBK is required for each shear valve and must be purchased separately.

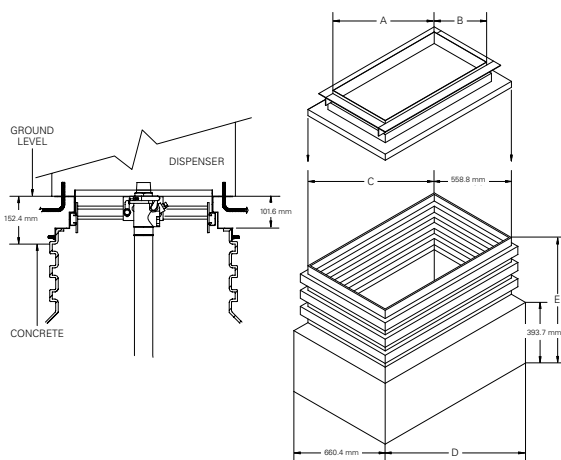
ORDERING INFORMATION

Model	Description
LM(M/D)-2010	Medium/Deep Dispenser Sump 20" x 10"
LM(M/D)-2407	Medium/ Deep Dispenser Sump 24" x 7.5"
LM(M/D)-2715	Medium / Deep Dispenser Sump 27" x 15"
LM(M/D)-2811	Medium / Deep Dispenser Sump 28" x 11"
LM(M/D)-2915	Medium/Deep Dispenser Sump 29" x 15"
LMM2915-HLX	Medium Dispenser Sump for Wayne Helix 2000 or Helix 4000
LM(M/D)-3513-TOK	Medium / Deep Dispenser Sump for Tokheim Q430S
LMM-3915-HLX	Medium Dispenser Sump for Wayne Helix 5000
LM(M/D)-4111	Medium/Deep Dispenser Sump 41" x 11"
LM(M/D)-4115	Medium/Deep Dispenser Sump 41" x 15"
LM(M/D)-4716-TOK	Medium/ Deep Dispenser Sump for Tokheim Q430W

Model	Description
SBK-1	Stabiliser Bar Kit for 2407
SBK-2	Stabiliser Bar Kit for 2010
SBK-25	Stabiliser Bar Kit for 4111
SBK-3	Stabiliser Bar Kit for 2915 & 4115

Measures to outside edge of the stabiliser bar kit.

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	
					(LMM)	(LMD)
LM(M/D)-2010	520	254	610	711	711	1092
LM(M/D)-2407	603	191	914	1016	711	1092
LM(M/D)-2715	686	191	914	1016	711	1092
LM(M/D)-2811	724	191	914	1016	711	1092
LM(M/D)-2915	756	400	914	1016	711	1092
LMM-2915-HLX	756	387	914	1016	711	N/A
LM(M/D)-3513-TOK	887	410	1219	1321	711	1092
LMM-3915-HLX	1010	387	1219	1321	711	1092
LM(M/D)-4111	1054	279	1219	1321	711	1092
LM(M/D)-4115	1054	400	1219	1321	711	1092
LM(M/D)-4716-TOK	1039	410	1219	1321	711	1092



WAYNE™ OVATION™

Our dispenser sumps, with patented welded entry boot and piping systems, give you what you need; years of worry-free, maintenance free performance. All our UPP® sumps are manufactured from virgin polyethylene with a steel painted frame and galvanised steel stabiliser bar and they are compatible with the UPP® electrofusion entry system.

HIGHLIGHTS

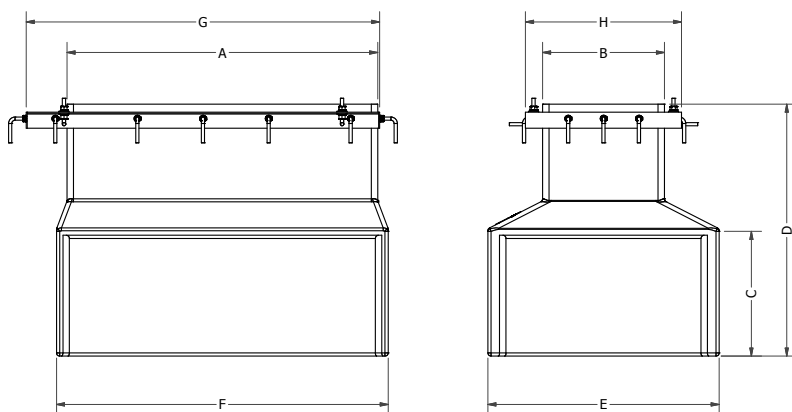
- Rigid and thick one-piece PE body with reinforced contoured structure.
- No Leak Paths - one system when using UPP® Electrofusion(EIF) Entry Seals.
- Conduits can enter the dispenser through mounting frame without penetrating the sump wall.
- Integrated rain lip option.
- Large clear entry seal face.
- The PetroTite® Ribbed Dispenser Sumps neck can be trimmed to adjust sump burial depth.
- Stabiliser bars feature pre-drilled shear valve mounting plate and spring channel nuts.

ORDERING INFORMATION

Model	Description	Overall Base Dimensions (mm)
DS3915-OVATION	Deep Dispenser Sump 39" x 15" for Wayne™ Ovation™	1031 x 719



Model	Description	Length (mm)*
SBK-25	Stabiliser Bar Kit for DS3915	254 (min) - 362 (max)



Model	A	B	C	D	E	F	G	H
DS3915-OVATION	966	379	389	782	719	1031	1096	485



UPP® DISPENSER SUMPS



UPP® dispenser sumps feature a rigid 8mm thick HDPE body with reinforced contoured structure and integrated rain lip allowing them to stand up to harsh forecourt conditions such as ground movement or hydrostatic pressure. The neck of UPP® dispenser sumps can be trimmed to adjust for varying sump burial depths ensuring an efficient installation. In addition, the durable steel UPP® dispenser sump top frames feature conduit entry points which allow conduit to enter the dispenser through the top frame without having to penetrate the sump wall. The galvanized steel stabiliser bars feature pre-drilled shear valve mount plates and spring channel nuts for quick mounting. UPP® electrofusion entry boots allow you to connect UPP® pipework directly to the dispenser sump, creating a solid, one-piece construction and eliminating potential leak paths.

HIGHLIGHTS

- Rigid and thick one-piece PE body with reinforced contoured structure.
- No Leak Paths - one system when using UPP® Electrofusion(EIF) Entry Seals.
- Conduits can enter the dispenser through mounting frame without penetrating the sump wall.
- Integrated rain lip option.
- Large clear entry seal face.
- The PetroTite® Ribbed Dispenser Sumps neck can be trimmed to adjust sump burial depth.
- Stabiliser bars feature pre-drilled shear valve mounting plate and spring channel nuts.

ORDERING INFORMATION

Model	Description	Overall Base Dimensions (mm)
DS3617 ENCORE	Deep Dispenser Sump 36" x 17" for Gilbarco™ Encore™	996 x 719

Model	Description	Length (mm)
SBK-3	Stabiliser Bar Kit for DS3617 ENCORE	343 (min) - 540 (max)



ORDERING INFORMATION

Model	Description	Overall Base Dimensions (mm)
DS3818	Deep Dispenser Sump 38" x 18"	1034 x 880
DS5518	Deep Dispenser Sump 55" x 18"	1397 x 880



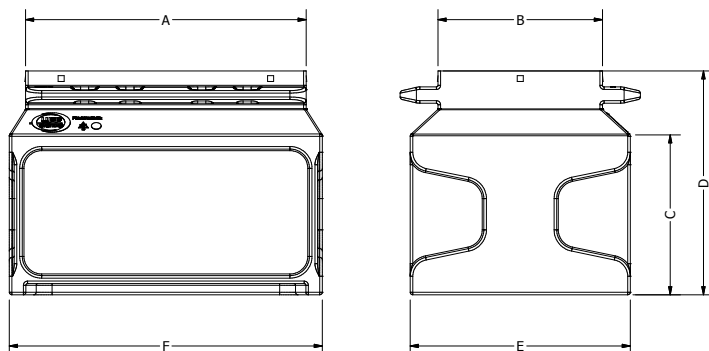
Model	Description	Length (mm)
DS-SBA-18	18" Wide Access Stabiliser Bar Kit	483 x 140



Model	Description	Overall Base Dimensions (mm)
DS3420	PE Wide Access Sumps 34" x 20"	967 x 680
DS4620	PE Wide Access Sumps 46" x 20"	1273 x 680



Model	Description	Length (mm)
DS-SBA-20	20" Wide Access Stabiliser Bar Kit	496 x 140



Model	A	B	C	D	E	F
DS3818	1034	495	610	785	880	1034
DS5518	1397	495	610	785	880	1397
DS3420	867	508	500	700	680	967
DS4620	1173	508	500	700	680	1273

Model	A	B	C	D	E	F	G	H
DS3617 ENCORE	966	379	389	782	719	1031	1096	485



MOUNTING FRAMES

ORDERING INFORMATION

Model	Description	Neck Opening (mm)
DS3420-F-SK72	Gilbarco™ SK700 2 Hose Mounting Frame	863 x 508
DS3420-F-SK74	Gilbarco™ SK700 4 Hose Mounting Frame	863 x 508
DS4620-F-SK76	Gilbarco™ SK700 6 Hose Mounting Frame	1168 x 508
DS4620-F-SK78	Gilbarco™ SK700 8 Hose Mounting Frame	1168 x 508
DS4620-F-Q410	Gilbarco™ Encore™ 510 Mounting Frame	1168 x 508
DS5518-F-SK710	Gilbarco™ Encore™ 510 Mounting Frame	1168 x 508



Model	Description	Neck Opening (mm)
DS3420-F-Q5T2	Tokheim™ Q500 2 product Mounting Frame	863 x 508
DS4620-F-Q5T3	Tokheim™ Q500 3 product Mounting Frame	1168 x 508
DS4620-F-Q5T4	Tokheim™ Q500 4 product Mounting Frame	1168 x 508
DS5518-F-Q5T5	Tokheim™ Q500 5 product Mounting Frame	1397 x 457



Model	Description	Neck Opening (mm)
DS3818-F-CX31	Wayne™ CXX.11, 21, 31 Mounting Frame	965 x 457
DS4620-F-WGHF	Wayne™ Global Mounting Frame	1168 x 508
DS5518-F-CX44	Wayne™ CX44 Mounting Frame	1397 x 457



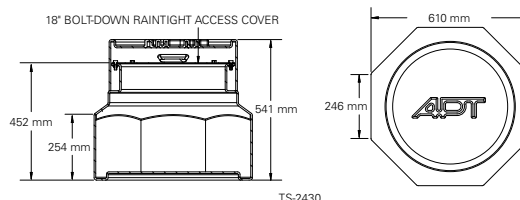


BELOW GRADE

APT®'s TS-2430, TS-3630 and TS-4230 tank sumps are ideally suited for low cost retro fits and shallow burial applications. The TS-2430 is ideal for line branching points and for containing piping splices. The 36" or 42" bases provide ample space for submersibles and fittings. The bolt-on gasket-lid combination fits economically under a 30" manway.

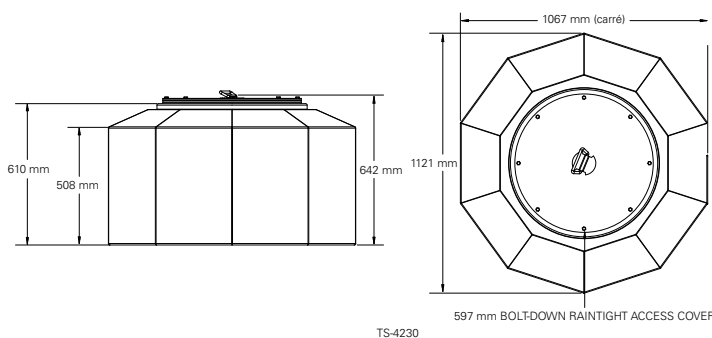
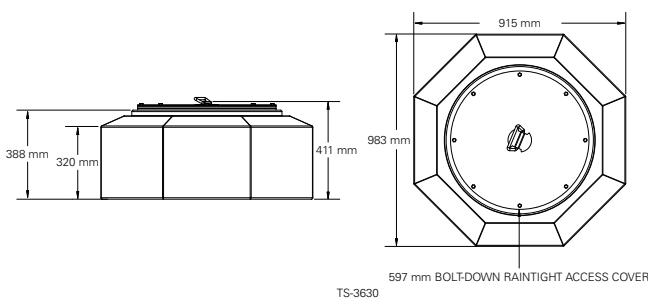
HIGHLIGHTS

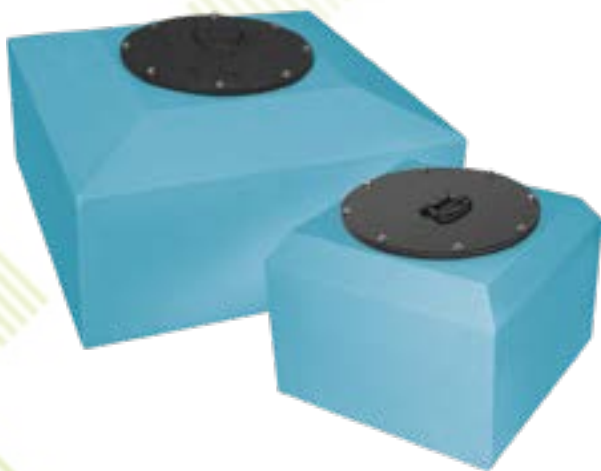
- TS-2430 utilizes an 18" bolt-down watertight lid.
- TS-3630 and TS-4230 utilize a 597 mm bolt-down watertight lid.
- High density polyethylene construction is durable and chemical-resistant.
- All TS-Series sumps allow fittings to be installed with ease, while tapered design allows for installation under an economical 30" manway.
- Bolt-down cover can be easily removed for routine inspections.
- One-piece design enhances water resistance.



ORDERING INFORMATION

Model	Description
TS-2430	Transition sump, shallow burial, 24" base, fits under a 30" manway
TS-3630	Tank sump, shallow burial, 36" base, fits under a 30" manway
TS-4230	Tank sump, medium burial, 42" base, fits under a 30" manway
TS-KIT	TS-3630/4230 retro fit kit, replacement lid assembly for screw-on polyethylene lids
99985555	Replacement gasket





BELOW GRADE INTERMEDIATE

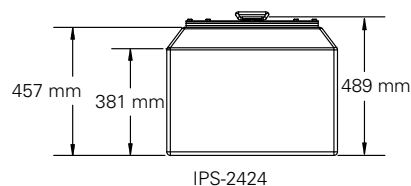
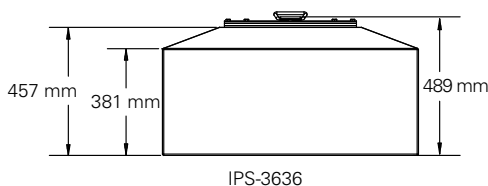
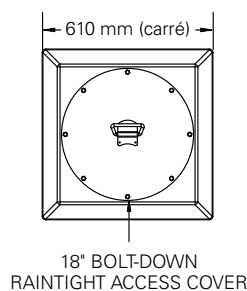
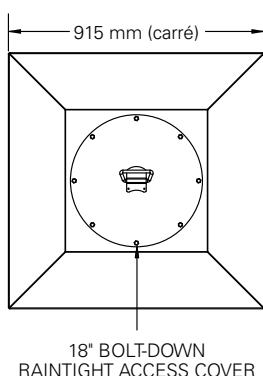
The APT® intermediate piping sump is a multifunctional component in the underground flexible piping system. The IPS-2424 and IPS-3636 can be used as a containment sump for fittings when utilizing a tee between dispenser islands, for contained piping splices, or for line branching points. These sumps are ideal for a low point sensor chamber between USTs and dispenser islands where required.

HIGHLIGHTS

- 18" bolt-down watertight lid.
- Design is engineered to be multi-functional.
- Sumps are constructed from high density polyethylene, making them durable and chemical-resistant.
- Two sizes available, 24" x 24" square and 36" x 36" square.
- Tapered top allows both intermediate piping sumps to fit securely under a 24" manway.
- One-piece design ensures environmental security and water resistance.

ORDERING INFORMATION

Model	Description
IPS-2424	Intermediate piping sump, 24" x 24", fits under a 24" manway
IPS-3636	Intermediate piping sump, 36" x 36", fits under a 36" manway
99985554	Replacement gasket
73510102	Replacement cover





GRADE LEVEL

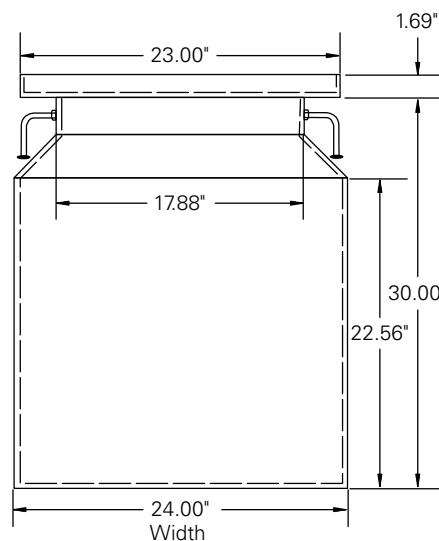
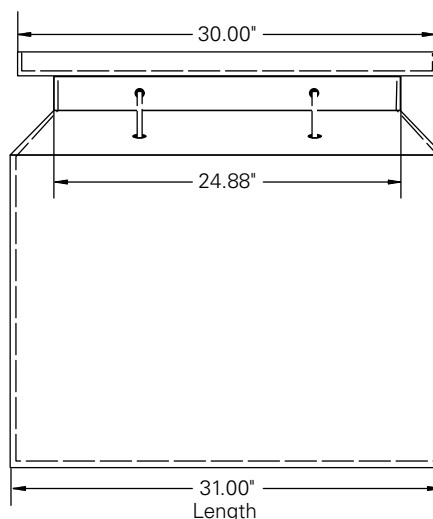
The AST above or below ground transition sump is the practical, environmentally sound solution for remote dispensing from aboveground storage tanks. Steel and flexible piping enter the sump through the APT® flexible entry boot. Inside the sump, the steel piping easily connects to flexible piping for a fueltight, continuous run to dispensers or an intermediate sump.

HIGHLIGHTS

- Transition sumps help meet environmental regulations by isolating metal piping from the soil.
- Transition sumps can be installed either inside or outside containment dikes.
- 30" burial depth allows the transition sump to be used as the system low point for leak detection.
- Load rated composite cover.
- Flexible entry boot provides a fueltight and watertight seal around the metal piping and flexible piping as it enters the sump lid and sidewall.
- H-20 load rating. Pipe entries installed in lids negate the load rating.

ORDERING INFORMATION

Model	Description
AST-2922	Aboveground storage tank transition sump
99985553	Replacement gasket
25202923	Replacement AST-2922 lid, grey
IP-400-B	Inspection replacement port, FEB style with replacement well cap



WELDERS

The EF1 UPP® electrofusion unit from Franklin Fueling Systems works with all UPP® electrofusion fittings and products. UPP® welders feature state-of-the-art electronics which allow for a more compact, user-friendly design.



HIGHLIGHTS

- The EF1 welder is IP65 rated and has been tested around the world under exacting site conditions and has proved to be an easy to use, efficient and invaluable addition to the tool box. Its robust construction, dust proof features and enhanced graphic feed-back of the electrofusion progress, offer real benefit to the operator.
- The unit's improved self diagnostic capabilities also ensure increased reliability and tolerance in a variety of climatic conditions. It comes complete with welding leads in a lightweight carry bag for the 230V and a robust case for the 110V.
- The EF1 unit automatically recognizes the fitting when connected with the correct welding cable. It also checks the ambient temperature using a sensor positioned in the housing and adjusts the energy level to balance with the local environment. It then applies the correct amount of energy for a successful weld.

SPECIFICATIONS

CE Certified

Supplied Cables

Primary Cable - Standard	Red	4mm	5.5m long
Secondary Containment Cable	Green	2mm	5.5m long
Bridging Cable (For multiple welds)	Red	4mm	5.5m long
Fusion Chamber Cable	White	2.3mm	5.5m long
Power Supply Cable	4m (13')		

Welding Unit Specifications

Welding Unit Specifications

UPP® Stock Code Number	EF1-230V	EF1-110V
Operating Voltage	230 V (+/-15%)	110 V (+/-15%)
Operating Frequency	40 to 70 Hz	
Operating Temperature	-15° to 45°C (5°F to 113°F)	
Shipping Dimensions	460mm x 210mm x 210mm	420mm x 340mm x 80mm
Shipping Weight	3.6 kg	13.24 kg

This unit is designed to weld UPP® pipes and fittings only* and must not be used in conjunction with any other Polyethylene pipework systems. *The UPP® systems welder uses a constant current welding system unlike other systems which use constant voltage. Non-UPP® fittings may not be fused correctly with a risk of leakage. Information shown is accurate at the time of going to print. Franklin Fueling Systems reserves the right to change product specifications at any time.

ORDERING INFORMATION

Cables & Transformer

Model	Description	Colour
EF1-110V	EF1 Welder Set 110V	Orange
EF1-230V	EF1 Welder Set 230V	Orange
EF1-PC 4MM	Welding Cable - Primary 4amp, 4mm Pins Red	Orange / Red
EF1-SC 2MM	Welding Cable - Secondary 5amp, 2mm Pins Green	Green
EF1-C7A	Welding Cable - Chamber 7amp, 4mm Pins White	White
EF1-PC 2MM	Welding Cable - Primary 2mm Red	Orange / Red
EF1-BC 4MM	Bridging Cable - Primary 4amp, 4mm Pins Red	Orange / Red
EW/BC/SC	Welding Cable - Secondary for E3, E4 & E7 welders only Green	Green
EW1/C	Welding Cable - Primary 2mm for E3, E4 & E7 welders only Red	Orange





VACUUM TESTING

The System Integrity Testing Kit from Franklin Fueling Systems allows tightness testing of spill containers, tank access chambers and dispenser sumps to ensure airtight seals and peace of mind. Specific testing at critical points during the installation process ensures that all components are installed correctly and that the complete installation is leak proof, preventing the need for an expensive rework.

HIGHLIGHTS

- A Vacuum test unit which can be set to indicate the relationship between the on-site water table level and the level of the tank or dispenser sumps. The pressure test setting allows for low pressure testing with an additional setting specifically for spill containers.
- 5.5 metre connection tubes between the test unit and the test lid allow the test unit to be placed outside zone 2 areas during testing.
- Transparent test lids (sold separately) with close cell foam gaskets are available in a variety of sizes. These allow full visibility of areas being tested to observe gaskets, penetration seals etc. for easy visual identification of leak points. All lids come supplied in a tough black carry bag.
- Easy to use.
- Clear and concise instructions.
- Easy to read vacuum gauge.
- Adjustable depth of test to match water table level.
- Built-in spark arrester.
- Appropriate for use on a variety of systems.
- Variety of test lids available with carry bags.

ORDERING INFORMATION

Vacuum Testing Units

Model	Description
VTU-110V	Vacuum Testing Unit 110V
VTU-230V	Vacuum Testing Unit 230V

Chamber Test Lids

Model	Description	For use with
VTL-560 DIA	Chamber Test Lid Assy 560 dia	
VTL-850 DIA	Chamber Test Lid Assy 850 dia	OCH-1400-DS, OCH-1400-SS, LA-002-001 and LA-002-002 risers
VTL-1200 DIA	Chamber Test Lid Assy 1200 dia	DC4830, LA-002-001 and LA-002-002 bases
VTL-1350 DIA	Chamber Test Lid Assy 1350 dia	OCH-1400-D, OCH-1400-S risers and base of any OCH-1400 chamber model
VTL-750X650	Chamber Test Lid Assy 750x650	ECH-760-660-D400
VTL-800x800	Sump Test Lid Assy 800x800	DC4830 riser
VTL-1250X600	Sump Test Lid Assy 1250x600	DS4417
VTL-1470X600	Sump Test Lid Assy 1470x600	DS3420, DS4620, DS3818 and DS5518



UPP® TOOL BOX

Model	Description	Colour
IB 1000 (EX EW)	Tool Box UPP® with Tools No Welder - please order separately	Black

Contents:

Rotary Scraper 25-110mm 1 - 4'	SCR-025-125	1
Pipe Cutter 50 - 125mm Pipe	P.CUT	1
Cutting Wheel for P.CUT Pipe Cutter	CW1	1
Holesaw 51mm for SB2.CO1, SB2-CO1-5, FEB-075-SC, FEB-100-D, FEB-100-SC & 302 Entry Seals	HSCS2	1
Holesaw 102mm for 303 & FEB-300-R Entry Seals	HS3	1
Holesaw 140mm for 305 Entry Seal	HS5	1
Holesaw 160mm for 305-125-110 Entry Seals	HS6	1
Holesaw 83mm for PS3	HSP3	1
Holesaw 168mm for PS6	HSP6	1
Mandrel for All Holesaws	MAN1	1
Angled Clamp for straight & elbow joints	CLAMP (A)	1
Straight Clamp for straight joints (32 - 110mm)	CLAMP (S)	2
Clamp for UPP® Fusion Seals 302	302-CLAMP	1
Clamp for UPP® Fusion Seals 303	303-CLAMP-1	1
Clamp for UPP® Fusion Seals 304	304-CLAMP	1
Clamp for UPP® Fusion Seals 305	305-CLAMP-1	1
Clamp for UPP® Fusion Seals 305-125-110	305-EXT-CLAMP	1
Plate Spanner 62A/F 91-063	91-063-TOOL	1
Plate Spanner 67A/F 92-063	92-063-TOOL	1
Chain Wrench 125mm Pipe Max	CW-125-PIPE	1
Mallet	MAL1	1
Flexishaft Driver	F.DRIVER	1
Hand Held Scraper 1 1/2"	SCR.HAR	1
Blades for Hand Held Scraper (8 Blades)	SCR.HAR(B)	1
Pipe Marker Pen	MARKER	1
UPP® Installation Manual	-	1

UPP® TOOLS

Model	Description	For Sizes
91-050-TOOL	Plate spanner tool for use with 50mm male 90 Series termination fittings	All Male 50mm sizes
92-050-TOOL	Plate spanner tool for use with 50mm female 90 Series termination fittings	All Female 50mm sizes
91-063-TOOL	Plate spanner tool for use with 63mm male 90 Series termination fittings	All Male 63mm sizes
92-063-TOOL	Plate spanner tool for use with 63mm female 90 Series termination fittings	All Female 63mm sizes
CW-125-PIPE	Chain wrench tool for use with male and female 90mm and 110mm sizes, 125mm Pipe Max	All Male and Female 90mm and 110mm sizes



Model	Description	Material
P.CUT SMALL	UPP® Pipe Cutter 32 - 50mm	Aluminium & Steel
CW2	Cutting Wheel for P.CUT SMALL	Steel
P.CUT	UPP® Pipe Cutter 50 - 125mm	Aluminium & Steel
P.CUT MED	UPP® Pipe Cutter 110 -160mm	Aluminium & Steel
CW1	Cutting Wheel for P.CUT & P.CUT MED	Steel



Model	Description
RS-40	40mm (1" secondary) pipe scraper tool
RS-50	50mm (1½" primary) pipe scraper tool
RS-63	63mm (2" primary or 1½" secondary) pipe scraper tool
RS-75	75mm (2" secondary) pipe scraper tool
RS-90	90mm (3" primary) pipe scraper tool
RS-110	110mm (4" primary or 3" secondary) pipe scraper tool
RS-125	125mm (4" secondary) pipe scraper tool
RS-160	160mm (6" secondary) pipe scraper tool



Model	Description
SCR-025-125	UPP® Rotary Scraper 25-110mm 1" - 4"
SCR-090-225	UPP® Rotary Scraper 90-225mm 3" - 9"
SCR-BLADE-025-225	UPP® Rotary Scraper Spare Blade 1" - 9"



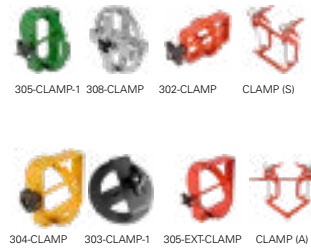
Model	Description
SCR.HAR	UPP® Hand Scraper
SCR.HAR(B)	Blades for SCR.HAR (8 Blades)



Model	Description
SCR.K(1)	Scraper Kit for Legacy UPP® 50/63/90/110mm
SCR.B	Replacement Blade for SCR.K(1) Shallow Cut
SCR.K(1)-E	Scraper Kit for current UPP® 50/63/90/110mm
SCR.K(1) SHAFT	Drive Shaft for SCR.K(1)
SCR.M110-FILL	Scraper Mandrill for 110mm FILLPIPE
MDR.K-E	Mandrill Kit for Legacy Scraper
MDR.063-E	Mandrel for 63mm Pipe (SDR13.6)
MDR.090-E	Mandrel for 90mm Pipe (SDR13.6)
MDR.110-E	Mandrel for 110mm Pipe (SDR13.6)



Model	Description
CLAMP (S)	UPP® Pipe Clamp - Straight 32 - 110mm
CLAMP (A)	UPP® Pipe Clamp - Angled 32 - 110mm
302-CLAMP	Clamp for Fusion Seals 302
303-CLAMP-1	Clamp for Fusion Seals 303
304-CLAMP	Clamp for Fusion Seals 304
305-CLAMP-1	Clamp for Fusion Seals 305
305-EXT-CLAMP	Clamp for Fusion Seals 305-125-110
308-CLAMP	Clamp for Fusion Seals 308



Model	Description
TH50	Towing Head for UPP® Primary Pipe 50mm
TH63SC	Mud Tight Towing Head for UPP® SC Pipe 63x50mm
TH75SC	Mud Tight Towing Head for UPP® SC Pipe 75x63mm
TH50-SDR8	Towing Head for UPP® UL & EN Pipe 50mm
TH63SC-SDR8	Towing Head for UPP® UL & EN Pipe 63mm



Model	Description
MAN1	Mandril for all Holesaws
HSCS2	Holesaw 51mm for FEB-075-SC, FEB-100-D, FEB-100-SC & 302 Entry Seals
HSP3	Holesaw 83mm for PS3, FEB-150-D, FEB-175-SC, FEB-200-D & FEB-200-SC Entry Seals
HS 3	Holesaw 102mm for 303 & FEB-300-R Entry Seals
HS075	Holesaw 105mm for FEB-D-075-1 Entry Seal
HS 5	Holesaw 140mm for FEB-400-R, FEB-400-F, FEB-D-110-1 & 305 Entry Seals
HS 6	Holesaw 160mm for 305-125-110 Entry Seals
HSP6	Holesaw 168mm for PS6 Entry Seals
HS 8	Holesaw 210mm for 308's Entry Seals



Model	Description
MAL1	Wooden Mallet
MARKER	Pipe Marker
F.DRIVER	Flexishaft Driver for band clamps - 8mm
D/TAPE	UPP® Warning Tape - 100m roll
EMERY	Emery Cloth 50 Metre Roll ONLY
FEB-110-TOOL	GRP Entry Fitting Wrench 125mm

Seal / Holesaw / Clamp Matrix

Seal Code	Holesaw	Diameter (mm)	Diameter (inches)	Clamp	Clamp Colour
302-040	HSCS2	51	2	302-CLAMP	Orange
303-050-EIF	HS3	102	4	303-CLAMP/ 303-CLAMP-1	Blue
303-063-EIF	HS3	102	4	303-CLAMP/ 303-CLAMP-1	Blue
303-075-EIF	HS3	102	4	303-CLAMP-1	Blue
304-110-050-TP	HS5	140	5½	304-CLAMP	Yellow
304-110-063-TP	HS5	140	5½	304-CLAMP	Yellow
304-110-075-TP	HS5	140	5½	304-CLAMP	Yellow
304-110-090	HS5	140	5½	304-CLAMP	Yellow
304-110-090-TP	HS5	140	5½	304-CLAMP	Yellow
305	HS5	140	5½	305-CLAMP-1	Green
305-R-1	HS5	140	5½	305-CLAMP-1	Green
305-125-110	HS6	160	6 5/16	305-EXT-CLAMP	Red
305-125-110-TP	HS6	160	6 5/16	305-EXT-CLAMP	Red
308	HS8	210	8 ¼	308-CLAMP	Silver
308-R	HS8	210	8 ¼	308-CLAMP	Silver

PS3	HSP3	83	3¾
PS6	HSP6	168	6 5/8
FEB-D-075-1	HS075	105	41/8
FEB-D-110-1	HS5	140	5½
FEB-S-125	HS5	140	5½



Seal Code	Holesaw	Diameter (mm)	Diameter (inches)
FEB-075-SC	HSCS2	51	2
FEB-100-D	HSCS2	51	2
FEB-100-SC	HSCS2	51	2
FEB-150-D	HSP3	83	3½
FEB-175-SC	HSP3	83	3½
FEB-200-D	HSP3	83	3½
FEB-200-SC	HSP3	83	3½
FEB-300-R	HS3	102	4
FEB-400-R	HS5	140	5½
FEB-400-F	HS5	140	5½





SERVICE STATION HARDWARE

- 1 Product shear valves
- 2 Vapor shear valves
- 3 Defender Series® spill containers
- 4 Access covers
- 5 Defender Series® overfill prevention valves
- 6 Vapor recovery caps
- 7 Vapor recovery swivel adapter
- 8 Fill caps
- 9 Fill swivel adapter
- 10 Drop tubes
- 11 Tank bottom protectors





4

5

10

11

2

1

TOTAL
SYSTEM SOLUTIONS

SERVICE STATION HARDWARE

Our service station hardware product line provides the most comprehensive and environmentally friendly system of tank trim and hardware available. Biofuel system components ensure compatibility with evolving fuel needs while the large breadth of products provides the right solution for any application.



Complete Package

Get each hardware system component from a single manufacturer that is known throughout the world for providing quality products.



Biofuel Compatible

As renewable fuel regulations continue to expand, customer demand for biofuel compatible equipment continues to increase. Franklin provides a solid biofuel compatible offering of hardware and is committed to the continuous improvement of product designs to allow for compatibility.



Spill Containment

A wide array of spill containment products designed and manufactured to the highest standard to ensure total protection where you need it the most. Whether you need single wall or double wall, manual or electronic interstitial monitoring, Franklin has the solution.





300 4" VAPOUR CHECK VALVE ADAPTER

The vapour check valve adapter permits coupling to the vapour return line from the underground tank in dual point systems. The poppet design seals off the vapour path when not coupled.

HIGHLIGHTS

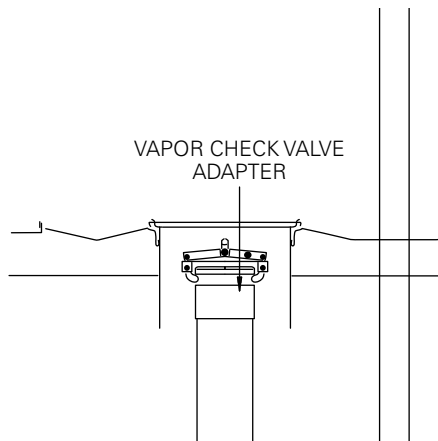
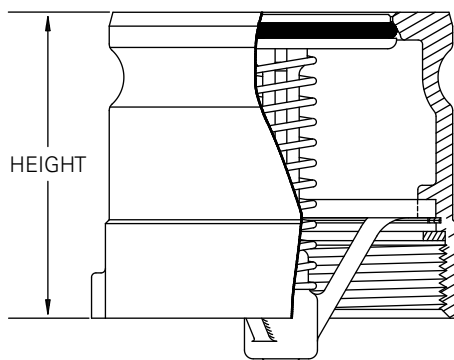
- Body constructed of anodised aluminium or brass.
- Fits all 4" vapour recovery elbows.

ORDERING INFORMATION

Model	Hose Size	Riser Thread	Height		Body Material	Weight	
			mm	In.		Kg	Lbs.
30030001	4"	3" NPSM	139	5.44	Anodised aluminium	1.95	4.3
30030031*	4"	3" BSPP	139	5.44	Anodised aluminium	1.95	4.3
30021001	4"	4" NPSM	107	4.19	Anodised aluminium	1.95	4.3
30021031*	4"	4" BSPP	107	4.19	Anodised aluminium	1.95	4.3

Model	Description
77020102	3" replacement gasket for 300300
77020103	4" replacement gasket for 300210

* BSPP thread on the 30030031 and 30021031, NPSM thread on others.



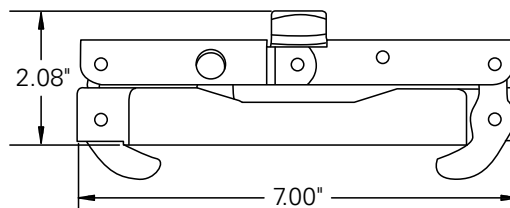


304 4" VAPOUR ADAPTER CAP

The vapour cap secures the vapour check valve preventing dust and debris buildup. It also protects the vapour poppet of a dual point fill system. Orange in colour to indicate vapour recovery lines and lockable to prevent misuse, our vapour cap fits all 4" male quick couplings. The cam action creates a solid push down and pull up movement for fast, easy removal and replacement of cap.

HIGHLIGHTS

- Two body styles to choose from, glass-filled nylon or epoxy coated aluminium.
- Padlock capability.
- Iron-copper infiltrated 4" cams.
- Corrosion-resistant steel hatches.
- Orange body for easy identification.



304-200-01

ORDERING INFORMATION

Model	Material	Weight	
		Kg	Lbs.
30420007	Glass filled PBT	0.53	1.19
30430103	Aluminium, AGB	0.63	1.38

Model	Description
95021501	Replacement gasket for 30430101



306 4" COAXIAL ADAPTERS

The EBW® coaxial vapour recovery adapter provides an inexpensive way to convert conventional underground storage tank fill risers to coaxial vapour recovery for Stage I vapour recovery requirements where the cap can remain on the adapter during vapour testing. When used in conjunction with EBW® coaxial drop tubes, the coaxial vapour recovery adapter allows product to flow through the centre while vapours escape around the edge of the drop tube back to the delivery truck.

HIGHLIGHTS

- Constructed of hard coated aluminium.
- Set screw on the adapter prevents movement on the riser pipe ensuring a tight seal.
- Bodies constructed of hard-coat anodized aluminium for compatibility with E-85 and Biodiesel.

ORDERING INFORMATION

Model	Material	Weight	
		Kg	Lbs.
30630001	Non-Poppeted Coax V.R. Adaptor-NPT	1.52	0.69
30630021	Non-Poppeted Coax V.R. Adaptor-BSPT	1.59	0.69
708335901	Poppeted Coax V.R. Adaptor	3.3	1.5
708336901	Poppeted Coax & Drop Tube Kit	Call	Call

708335901 Poppeted Coaxial Vapour Recovery Adaptor must use 708332901 Drop Tube.





308 BALL FLOAT VENT VALVES

The EBW® ball float vent valves are used in conjunction with extractor vent valves in the Stage I vapour riser or tank vent line on underground storage tanks. The ball float vent valve will restrict vapour venting should a full tank condition occur and protects against product mixing and vapour locks due to vent pipe flooding. The bleed hole allows for delivery hose drainage after an overfill.

The valve includes a brass installation cage and will fit all EBW® extractor vent fittings. All ball floats are made of materials fully compatible with alcohol/gas blends and biofuels (E-85, Biodiesel, B-20)

HIGHLIGHTS

2" Ball Float Advantages

- Epoxy coated steel nipple to prevent dissimilar metals from contacting each other.
- Stainless steel ball float is corrosion-resistant for long life.

SPECIFICATIONS

WARNING: EBW® 308 Series float vents should not be used with suction pump systems. For use on gravity drop systems only. Do not use with pump-off unloading. Do not use with coaxial Stage I vapour recovery drop tubes.

ORDERING INFORMATION

2" Ball Floats

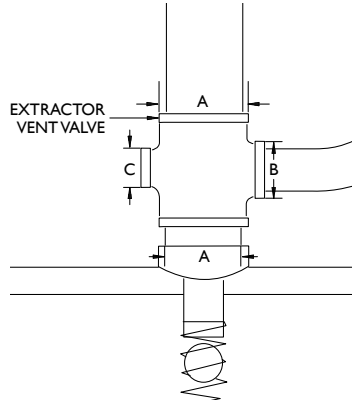
Model	Nipple Length		Bleed Hole		Thread
	In.	mm	In.	mm	
308020003	3	76.2	0.06	1.524	NPT
308020205	5.12	130.04	0.06	1.524	NPT
308020107	7	177.8	0.06	1.524	NPT
308020112	12	304.8	0.06	1.524	NPT
308020116	16	406.4	0.06	1.524	NPT
308023003	3	76.2	0.06	1.524	BSPT
308023107	7	177.8	0.06	1.524	BSPT
308023112	12	304.8	0.06	1.524	BSPT
308023116	16	406.4	0.06	1.524	BSPT
308024115	15	381	0.06	1.524	BSPT
3080241117	17	431.8	0.06	1.524	BSPT
308024119*	19	482.6	0.06	1.524	BSPT

*Does not include Installation Cage.

ORDERING INFORMATION CONTINUED

Installation Cages

Model	Size		Thread
	In.	mm	
30822802	2	50.8	NPT
30822803	3	76.2	NPT



300 SERIES EXTRACTOR VENT VALVES

EBW extractor vent valves are designed to fit into a 4" tank opening on an underground storage tank. Several outlet sizes are available to accommodate manifolded tank lines and Stage II vapor recovery installations.

SERVICE STATION
HARDWARE

HIGHLIGHTS

- E-coated bodies are fully compatible for alcohol/gas blends and Biodiesel.

Model	Description 4" X A X B	A		B		C		Weight	
		In	mm	In	mm	In	mm	Lbs	Kg
31040011	4" x 2" extractor valve w/o adaptor-NPT	4.00	102.00	2.00	51.00	n/a	n/a	13.00	5.90
31140011	4" x 3" extractor valve w/o adaptor-NPT	4.00	102.00	3.00	76.00	n/a	n/a	13.00	5.90
33040011	4" x 3" x 2" extractor valve w/o adaptor-NPT	4.00	102.00	3.00	76.00	2.00	51.00	18.00	8.16
33140011	4" x 3" x 3" extractor valve w/o adaptor-NPT	4.00	102.00	3.00	76.00	3.00	76.00	15.00	6.80
34040011	4" x 2" x 2" extractor valve w/o adaptor-NPT	4.00	102.00	2.00	51.00	2.00	51.00	17.00	7.71
34040041	4" x 2" x 2" extractor valve w/o adaptor-BSPP	4.00	102.00	2.00	51.00	2.00	51.00	17.00	7.71
31040042	4" x 2" extractor valve w/o adaptor-BSPT	4.00	102.00	2.00	51.00	n/a	n/a	13.00	5.90
31140042	4" x 3" extractor valve w/o adaptor-BSPT	4.00	102.00	3.00	76.00	n/a	n/a	13.00	5.90
33040042	4" x 3" x 2" extractor valve w/o adaptor-BST	4.00	102.00	3.00	76.00	2.00	51.00	18.00	8.16

ORDERING INFORMATION

Hard Coated Aluminum Plug with O-ring Seal

Plug used for isolating vent piping from tank during testing.

Model	Description	Weight	
		Lbs	Kg
39120101	4" test plug	3.60	1.63



Adaptors for use with EBW Ball Floats

Model	Description	Weight	
		Lbs	Kg
30822802	ADPT 2" NPT, AGB, spare	1.15	0.52
30822803	ADPT 3" NPT, AGB, spare	1.65	0.75

4" Brass Pipe Cap

Model	Description	Weight	
		Lbs	Kg
76020101	Brass, NPSM	4.60	2.09
76020131	Brass, BSPP	4.60	2.09
770201023	4" Spare gasket	4.60	2.09

5' Extractor Wrench

Five-foot extractor wrench works on all EBW extractor vent valves for removing extractor cage assemblies and inserting test plugs.

Model	Description	Weight	
		Lbs	Kg
32110001	5' extractor wrench	14.00	6.35





305 3" FLOAT VENT VALVES

Model	Description
30530521	3" x 3" x 2" BSPT for manifolded vents SS ball. Aluminium



362 SERIES VAPOUR SHEAR VALVE

The EBW® 362 vapour shear valve is designed for use as an emergency breakaway on Stage II vapour recovery lines in fuel dispensers. The double poppet design allows spring-loaded poppets inside the valve to seal vapours within both the dispenser riser and vapour piping in the event of dispenser displacement, providing maximum environmental protection.

HIGHLIGHTS

- Dual poppets seal vapours in dispenser riser and in vapour line for maximum environmental protection.
- One 1" test port and two 3/8" test ports eliminate extra T-joints in vapour line which reduces potential leak points and provides more flexibility for Stage II vapour recovery installation.
- Durable zinc plated body is resistant to corrosion.
- Standard U-bolt and boss mount allow for quick and easy installation.
- Base thread includes 1-1/2" female.
- California State Fire Marshal approved.

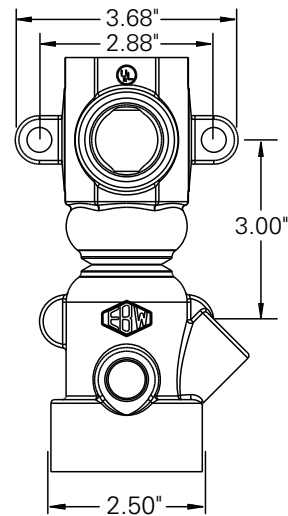
ORDERING INFORMATION

Model	Description
36220603	1" x 1-1/2" NPT thread vapour shear valve
36220621	1" x 1-1/2" BSPT thread vapour shear valve

Note: When not using FFS Stabiliser Bar Kits with Vapour Shear Valves, the Vapour Shear Fastener Kit will also need to be included on the order. The Vapour Shear Fastener Kit comes with hex-head bolts.

Model	Description
90069	Vapour Shear Fastener Kit

Vapour Shear Fastener Kit is needed when used with non-FFS Stabiliser Bars





662 SERIES PRODUCT SHEAR VALVE

EBW® brand emergency shear valves immediately stop product flow in the event of fire or collision at the dispenser. A patented adapter shears clean upon impact, causing the poppet to seal on the valve body preventing fuel spillage. When fire occurs, a fusible link releases the fulcrum arm, engaging the poppet. Standard 1-1/2" NPT openings allow minimal flow restriction and a pre-drilled test plug is included for line pressure testing. The valve can be boss or U-bolt mounted. Easy-to-replace adapters slide on and off valve base without lifting the dispenser. Adapters are available in male, female or union connections. Single poppet models stop product flow from the pump. Double poppet models stop flow from the pump and dispenser piping.

HIGHLIGHTS

- Fusible link closes poppet in the event of a fire (165.0 °F and 73.9 °C).
- Single and double poppet.
- Main poppet seals in valve body, preventing accidents when replacing adapters.
- E-coated body corrosion protection.
- Meets NFPA 30A requirements.
- AGB compatible (E-85, gasoline and Biodiesel.)
- UL 842A and UL 842B approved for E-85 alcohol/gas blends and biodiesel.

ORDERING INFORMATION

Model	Description
662500901	Single poppet, union, 1½" NPT, E-coat AGB
662500902	Single poppet, female, 1½" NPT, E-coat AGB
662500903	Single poppet, male, 1½" NPT, E-coat AGB
662510902	Single poppet, female, 1½" BSPT, E-coat AGB
662510903	Single poppet, male, 1½" BSPT, E-coat AGB
662501901	Double poppet, union, 1½" NPT, E-coat AGB
662501902	Double poppet, female, 1½" NPT, E-coat AGB
662501903	Double poppet, male, 1½" NPT, E-coat AGB
662511902	Double poppet, female, 1½" BSPT, E-coat AGB
662511903	Double poppet, male, 1½" BSPT, E-coat AGB
662502902	Double poppet, normally closed, female, 1½" NPT, E-coat AGB

662502902 is UL listed only.

SPECIFICATIONS

- Top and body material: E-coat cast iron
- Poppet and O-ring: Fluorocarbon
- Stem and poppet spring: Stainless steel
- The closing feature of an automatic shut-off valve must be checked at least once per year by manually tripping and holding linkage.

Approvals

- UL and ULC listed
- UL 842 A&B approved for ethanol and biodiesel
- ATEX approved, SIRA 13ATEX9035U

Note: The closing feature of an automatic shut-off valve must be checked at least once per year by manually tripping and holding linkage.

NFPA-WARNING

Annually test auto shut-off. Electrical supply to the submersible pump must always be disconnected before servicing meters, dispensers or emergency shut-off valves. Do not apply more than 50 psi to valve with poppet in its closed position. Valve seat and disc damage may occur.

EMERGENCY SHUT-OFF VALVE ACCESSORIES

Holds the single or double poppet shut-off valve rigidly in place, ensuring proper shearing.

Model	Description	Weight	
		Lbs.	Kg
66213801	U-bolt kit	0.3	0.14

Model	Description	Weight	
		Lbs.	Kg
90074	Fulcrum arm kit	0.1	0.05
66225001	Fusible link assembly	0.1	0.05

EMERGENCY SHUT-OFF VALVE REPLACEMENT TOPS

Model	Description	Poppet	Shear Valve Adapter Used	Thread
662500202	Shear Valve Top Female 1.5" NPT	Single	662500902	NPT
662510202	Shear Valve Top Female 1.5" BSPT	Single	662510902	BSPT

Model	Description	Poppet	Shear Valve Adapter Used	Thread
662500203	Shear Valve Top Male 1.5" NPT	Single	662500903	NPT
662510203	Shear Valve Top Male 1.5" BSPT	Single	662510903	BSPT





FILL SWIVEL ADAPTERS

The fill swivel adapter helps prevent leaks caused by constant fill delivery elbow movement on the riser adapter. The top section rotates during normal deliveries, preventing the bottom section from loosening on the riser pipe which could cause a vapor or product leak around the adapter.

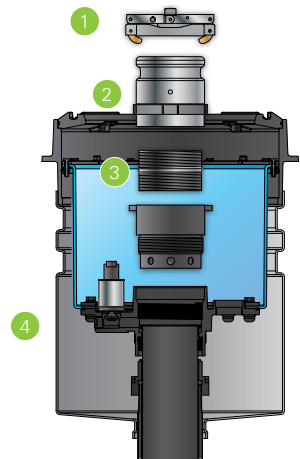
HIGHLIGHTS

- Adds approximately 4" to riser height to fit under most existing fill and vapor manway covers.
- Swivels on two rows of corrosion-resistant chromium steel ball bearings for long life in high volume stations.
- All vapor seals are fluorocarbon and inert in motor fuels.
- Stainless steel models provide additional fuel compatibility and are CARB Phase I EVR approved under executive order VR-101.
- Available in packages including fill and vapor adapter.
- Available in kits including riser, cap, and swivel adapter.

SPECIFICATIONS

Components

- 1 Cap
- 2 Swivel adapter
- 3 Riser nipple
- 4 Spill container



ORDERING INFORMATION

Fill Swivel Adapters



Model	Description
SWF-100-SS**	Fill swivel adapter, 4" NPT, stainless steel
SWF-100-B*	Fill swivel adapter, 4" NPT, brass
SWFV-PKGSS**	Vapor and fill swivel adapter kit, 4" NPT, stainless steel
SWFV-PKG*	Vapor and fill swivel adapter kit, 4" NPT, brass
85039	Replacement gasket for all swivel adapters

*EVR Phase 1 Certification VR-101.

**EVR Phase 1 Certification VR-101 for gas and E85.

Fill Swivel Adapter Kits

Be sure to select the appropriate kit for your specific spill container type.



Model	Description
70541202	Fill swivel adapter kit for 5 gallon Defender Series® (grade level and below grade level) and EBW® Series (grade level) spill containers, includes stainless steel fill swivel adapter, 3" riser nipple, vapor top cap.
70541201	Fill swivel adapter kit for 5 gallon PHIL-TITE™ and EBW® Series (below grade) spill containers, includes stainless steel fill swivel adapter, 5" riser nipple, vapor top cap.
70541503	Fill swivel adapter kit for 15 gallon EBW® Series (below grade) spill containers, includes stainless steel fill swivel adapter, 12" riser nipple, vapor top cap.



VAPOR SWIVEL ADAPTERS

The vapor swivel adapter helps prevent leaks caused by constant delivery elbow movement on the riser adapter. The top section rotates during normal deliveries, preventing the bottom section from loosening on the riser pipe which could cause a vapor or product leak around the adapter. It's poppet design seals off the vapor path when not coupled.

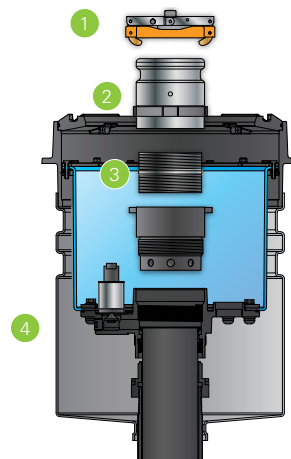
HIGHLIGHTS

- Adds approximately 4" to riser height to fit under most existing fill and vapor manway covers.
- Swivels on two rows of corrosion-resistant chromium steel ball bearings for long life in high volume stations.
- All vapor seals are fluorocarbon and inert in motor fuels.
- Stainless steel models provide additional fuel compatibility and are CARB Phase I EVR approved under executive order VR-101.
- Available in packages including vapor and fill adapter.
- Available in kits including riser, cap, and swivel adapter.

SPECIFICATIONS

Components

- 1 Cap
- 2 Swivel adapter
- 3 Riser nipple
- 4 Spill container



ORDERING INFORMATION

Vapor Swivel Adapters



Model	Description
SWV-100-SS**	Vapor swivel adapter, 4" NPT, stainless steel
SWV-100-B*	Vapor swivel adapter, 4" NPT, brass
SWFV-PKGSS**	Vapor and fill swivel adapter kit, 4" NPT, stainless steel
SWFV-PKG*	Vapor and fill swivel adapter kit, 4" NPT, brass
85039	Replacement gasket for all swivel adapters

*EVR Phase 1 Certification VR-101.

**EVR Phase 1 Certification VR-101 for gas and E85.

Vapor Swivel Adapter Kits

Be sure to select the appropriate kit for your specific spill container type.



Model	Description
70541302	Vapor swivel adapter kit for 5 gallon Defender Series® (grade level and below grade level) and EBW® Series (grade level) spill containers, includes stainless steel vapor swivel adapter, 3" riser nipple, vapor top cap.
70541301	Vapor swivel adapter kit for 5 gallon PHIL-TITE™ and EBW® Series (below grade) spill containers, includes stainless steel vapor swivel adapter, 5" riser nipple, vapor top cap.
70541303	Vapor swivel adapter kit for 15 gallon EBW® Series (below grade) spill containers, includes stainless steel vapor swivel adapter, 12" riser nipple, vapor top cap.



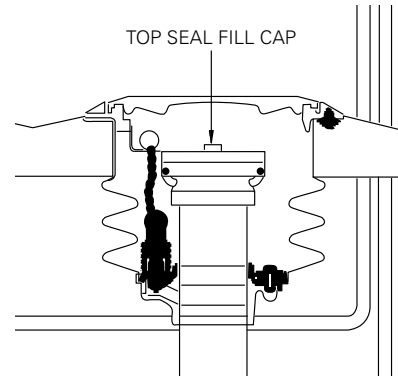
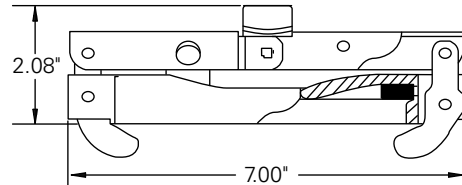


777 4" TOP SEAL FILL CAPS

EBW top seal fill caps are used to prevent vapours from escaping the fill riser pipe on the underground storage tank when it is not being filled. The geometry of the linkage provides self-centring characteristics for dependable sealing. The easy-to-operate T-handle provides a convenient method of removal and replacement — simply pull to remove and push to replace.

HIGHLIGHTS

- Glass-filled nylon and aluminium body styles available.
- Stainless steel latches.
- Padlock capability.
- Form fitting replaceable gasket, molds itself to the contour of the adapter to form a positive seal for added protection.



ORDERING INFORMATION

Model	Description	Weight	
		Kg	Lbs.
77720102*	Fill Cap 4" glass-filled PBT	0.45	1
777201901	Fill Cap 4" glass-filled PBT, 20 pack	--	--
95021501	Fill Cap Replacement Gasket 4"	--	--

* Biofuel approved model (E85 and biodiesel), CARB: Phase 1 Certification VR-101.
Note: 77720102 replaces 77720101

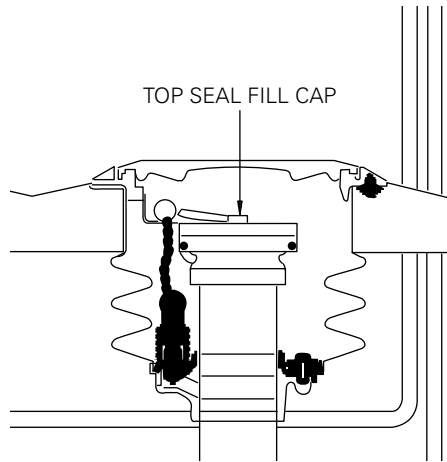
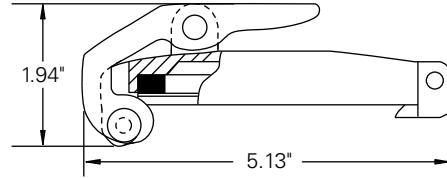


779 3" TOP SEAL FILL CAPS

This durable 3" top seal single lever cap provides a tight positive seal on all 3" adapters.

HIGHLIGHTS

- Extruded brass cam arm.
- Cap body made of corrosion-resistant epoxy coated aluminium.



ORDERING INFORMATION

Model	Description	Weight	
		Lbs.	Kg
77920001	3" top seal fill cap	1	0.45
Model	Description		
77420203	Replacement Buna-N gasket		



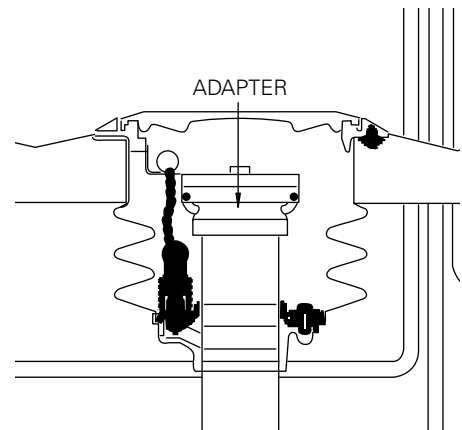
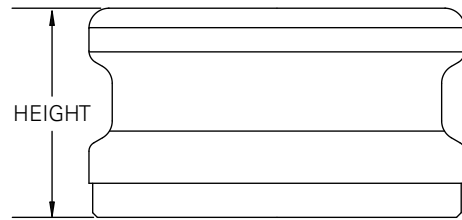


778 TOP SEAL FILL PIPE ADAPTER

Top seal fill pipe adapters are installed on the fill riser pipe in spill containment manways on an underground storage tank. The adapters are used to connect delivery drop elbows to the fill pipe for fuel deliveries. Adapters can be ordered with or without wrenching lugs to suit your installation preference. EBW® top seal fill pipe adapters fit all top seal drop elbows and top seal fill caps.

HIGHLIGHTS

- Constructed of ASTM B62 corrosion-resistant brass.
- Nitrile gasket for a secure seal onto the fill pipe.



ORDERING INFORMATION

Model	Description	Height		Weight		Thread
		mm	In.	Kg	Lbs.	
78020001	3" x 3" without lugs	44.45	1.75	0.9	2	NPSM
77830231	4" x 3" with lugs	57.15	2.25	0.9	2	BSPP
77830101	4" x 4" with lugs	68.27	2.69	0.9	2	NPSM
77830135	4" x 4" with lugs - nickel plated	68.27	2.69	0.9	2	BSPP
77830132	4" x 4" without lugs	68.27	2.69	0.9	2	BSPP

Model	Description
77020102	3" replacement gasket
77020103	4" replacement gasket

** Biofuel compatible model (E85 and biodiesel).

SERVICE STATION HARDWARE

DEFENDER SERIES® OVERFILL PREVENTION VALVE

In an industry of increasing complexity wouldn't it be nice if someone started making things simpler for you? The revolutionary Defender Series® overfill prevention valve gives you a single solution for all fuel types, all applications, and makes elaborate installation and testing procedures a thing of the past.

Sound simple enough?



THE BEST DEFENSE

Check out these unique features found only on the Defender Series® Overfill Prevention Valve (OPV).



NO LEAK POINTS

The revolutionary magnetically-coupled actuator system allows the Defender Series® OPV to achieve positive shut-off without a single penetration in the valve body.

HIGHLIGHTS

- The absence of body penetrations in the OPV eliminates potential leak paths for escaping vapors.
- With increasing vapor recovery regulations around the world, the Defender Series® OPV will have you ready for compliance.



SIMPLE INSTALL

Gone are the days of flaring, riveting, and epoxying drop tubes on site. The Defender Series® OPV utilizes an error-proof roll-crimp and thread installation method to achieve a perfectly in-line installation.

HIGHLIGHTS

- A special, double O-ring top adapter is used to attach the drop tube for easy installation without any drilling, riveting, epoxy or flaring tools.
- A perfectly in-line assembly installs smoothly into the riser and can be easily removed for maintenance.



REMOTE TESTING

The magnetically-coupled actuator system along with the testing tool allows for primary functionality testing of the OPV without having to remove the entire assembly from the riser.

HIGHLIGHTS

- The remote testing tool will actuate the flapper when inserted down the drop tube and slid by the actuator - this is confirmed visually through a window in the tool.
- Fast visual inspection can be conducted by a single person.



VERSATILITY

The Defender Series® represents our most versatile offering of OPVs to date with more approvals and capabilities per model as well as simpler ordering options.

HIGHLIGHTS

- Alcohol, gas, and biofuel (E-85, gasoline and Biodiesel) compatible models come with hard coated anodized drop tubes for full compatibility.
- For use in direct and remote gravity drop applications with models for coaxial applications.



DEFENDER SERIES® OPV OVERFILL PREVENTION VALVE

The Defender Series® overfill prevention valve (OPV) prevents the overfill of an underground storage tank during a gravity-fed product delivery. It employs a revolutionary magnetically-coupled actuator system to provide positive shutoff. This unique method of shutoff eliminates any penetrations in the valve, making it both vapor and leak tight. The Defender Series® OPV provides safe, rapid, and reliable fuel drops with simple installation, service, and remote testing capability.

HIGHLIGHTS

Eliminate Leak Points

The revolutionary magnetically-coupled actuator system allows the Defender Series® OPV to achieve positive shutoff without a single penetration in the valve body.

- The absence of body penetrations in the OPV eliminates potential leak paths for escaping vapors.
- Every unit is factory tested for 100% vapor tightness to ensure a clean, fugitive emission-free forecourt.
- With increasing vapour recovery regulations around the world, the Defender Series® OPV will have you ready for compliance.

Simple Installation

Gone are the days flaring, riveting, and epoxying drop tubes on site. The Defender Series® OPV utilises an error proof roll-crimp and thread installation method to achieve a perfectly in-line installation.

- A special, double O-ring top adapter is used to attach the drop tube for easy installation without any drilling, riveting, epoxy or flaring tools.
- A perfectly in-line assembly installs smoothly into the riser and can be easily removed for maintenance.
- With threaded top and bottom drop tube installation, damaged drop tubes can easily be replaced without having to purchase an entirely new assembly.

High or Low Flow

Minimal flow path obstructions accommodate high flow drops while the magnetically-coupled actuator system also provides reliable positive shutoff for low flow drops.

- The Defender Series® OPV accommodates a broad range of flow rates from 25 gpm to 370 gpm (95 lpm to 1,400 lpm).
- In high flow applications, the actuator system will hold the flapper in place, only releasing it into the flow of fuel once the float has risen to generate positive shutoff.
- In low flow applications, the actuator system will assist by kicking the flapper out into the flow of fuel to generate positive shutoff.

Remote Testing

The magnetically-coupled actuator system along with the testing tool allows for primary functionality testing of the OPV without having to remove the entire assembly from the riser.

- The remote testing tool will actuate the flapper when inserted down the drop tube and slid by the actuator - this is confirmed visually through a window in the tool.
- To accommodate varying tank sizes, the testing tool handle is segmented into six sections for customisation up to 11 feet (3.35 meters) in length.
- Fast visual inspection can be conducted by a single person.

Completely Versatile

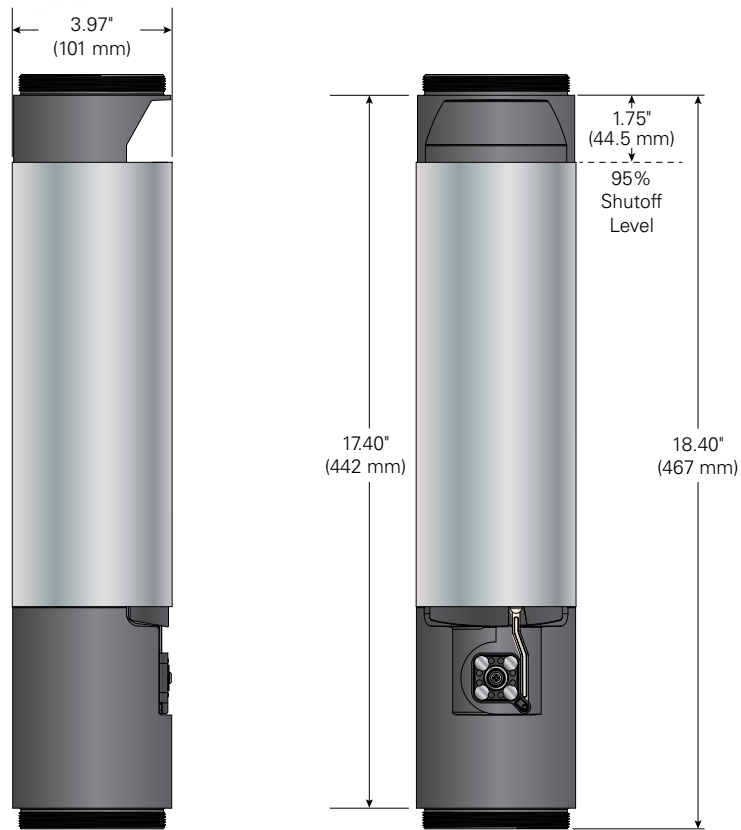
The Defender Series® represents our most versatile offering of OPVs to date with more approvals and capabilities per model as well as simpler ordering options.

- Each model is designed to meet all major approvals and global performance requirements.
- Alcohol, gas, and biofuel (E-85, gasoline and biodiesel) compatible models come with hard coated anodized drop tubes for full compatibility.
- For use in direct and remote gravity drop applications with models for coaxial applications.



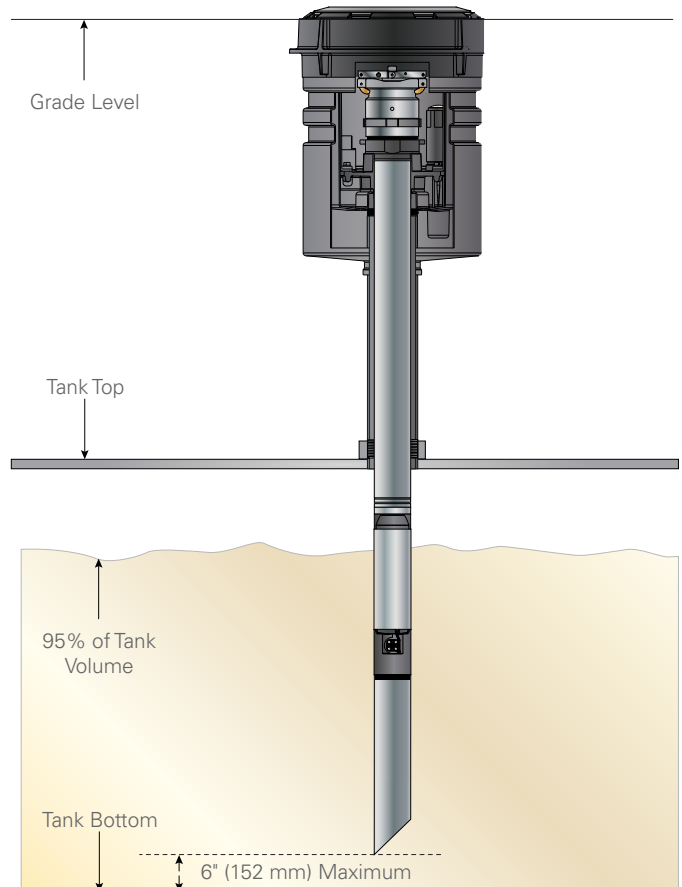
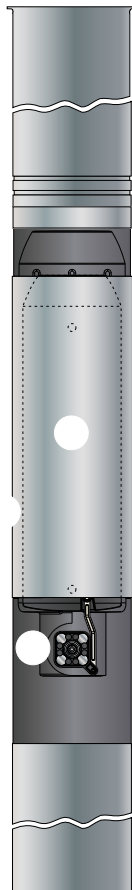
SPECIFICATIONS

Dimensions



Components

- Pre-flanged aluminum top drop tube
- Roll-crimped top fitting/drop tube
- Protective float sleeve
- Float (shielded by float sleeve)
- Valve Assembly
- Magnetically-coupled actuator
- Threaded bottom drop tube.



SPECIFICATIONS CONTINUED

Approvals/Certifications

- ULc listed.
- ATEX approved.
- EN/KIWA certified.

Operation

As the liquid level in the UST approaches 95% capacity, the liquid level raises the float. As the float rises it actuates the external/internal magnetic couplers which release the flapper to be closed by the flow of product. As the float continues to rise, the internal mechanism pushes the flapper further into the product flow to allow actuation at high or low flow rates. This sudden reduction in flow caused by the primary flapper closing creates "line shock" to the fill hose which signals the delivery driver that the tank is nearing 95% capacity. As the float continues to rise to the 95% fill level, the secondary closes, completely stopping the flow of fuel.

ORDERING INFORMATION

Model	Description
708591901	Defender Series® overfill prevention valve with 5' top drop tube, 8' bottom drop tube for EN/KIWA
708591902	Defender Series® overfill prevention valve with 5' top drop tube, 10' bottom drop tube for EN/KIWA
708591921	Defender Series® overfill prevention valve with 5' top drop tube, 8' bottom drop tube, AGB compatible for EN/KIWA*
708591922	Defender Series® overfill prevention valve with 5' top drop tube, 10' bottom drop tube, AGB compatible for EN/KIWA*
708592901	Defender Series® overfill prevention valve with 10' top drop tube, 8' bottom drop tube for EN/KIWA
708592902	Defender Series® overfill prevention valve with 10' top drop tube, 10' bottom drop tube for EN/KIWA
708592921	Defender Series® overfill prevention valve with 10' top drop tube, 8' bottom drop tube, AGB compatible for EN/KIWA*
708592922	Defender Series® overfill prevention valve with 10' top drop tube, 10' bottom drop tube, AGB compatible for EN/KIWA*
708593901	Defender Series® overfill prevention valve, coaxial with 6.5' top drop tube, 8' bottom drop tube for EN/KIWA
708593902	Defender Series® overfill prevention valve, coaxial with 6.5' top drop tube, 10' bottom drop tube for EN/KIWA
708593923	Defender Series® overfill prevention valve, poppeted coaxial with 6.5' top drop tube, 8' bottom drop tube for EN/KIWA
708593924	Defender Series® overfill prevention valve, poppeted coaxial with 6.5' top drop tube, 10' bottom drop tube for EN/KIWA
708594901	Defender Series® overfill prevention valve only with top adapter, AGB compatible for EN/KIWA*
708594902	Defender Series® overfill prevention valve only with coaxial top adapter, AGB compatible for EN/KIWA*
708535901	Roll crimping tool
708530930	Replacement roll crimper tool roller bit for retrofit with existing tool
708534901	Remote testing tool, 11' long sectional/collapsible

*Alcohol, gas, biofuel compatible (E-85, gasoline and biodiesel) models come with hard coated anodized drop tubes for full compatibility.





AUTOLIMITER® II

AUTOMATIC OVERFILL PREVENTION VALVE

The Autolimiter® overfill prevention valve is a self contained two-stage positive shut-off valve designed to prevent the overfill of an underground storage tank (UST) during a gravity fed product delivery. When the liquid level of the UST reaches about 92% of the tank capacity during a fill, the product in the tank raises the lower float of the valve. The primary poppet of the valve is then released and reduces flow to about 10% of normal flow. The sudden reduction in flow created by the closing of the primary poppet provides "line shock" to the fill hose notifying the transport delivery driver the tank is nearing 95% capacity. The transport delivery driver can then stop filling the tank, disconnect and drain the delivery hose. The upper float will close off the product flow when the product level reaches 95% of the tank capacity.

HIGHLIGHTS

- Two-stage, spring-loaded shut-off flapper reduces line shock.
- Vertical float design allows for valve to be removed even when tank is full.
- Inspection test port.
- Bottom tube threads on (except for -04 models).

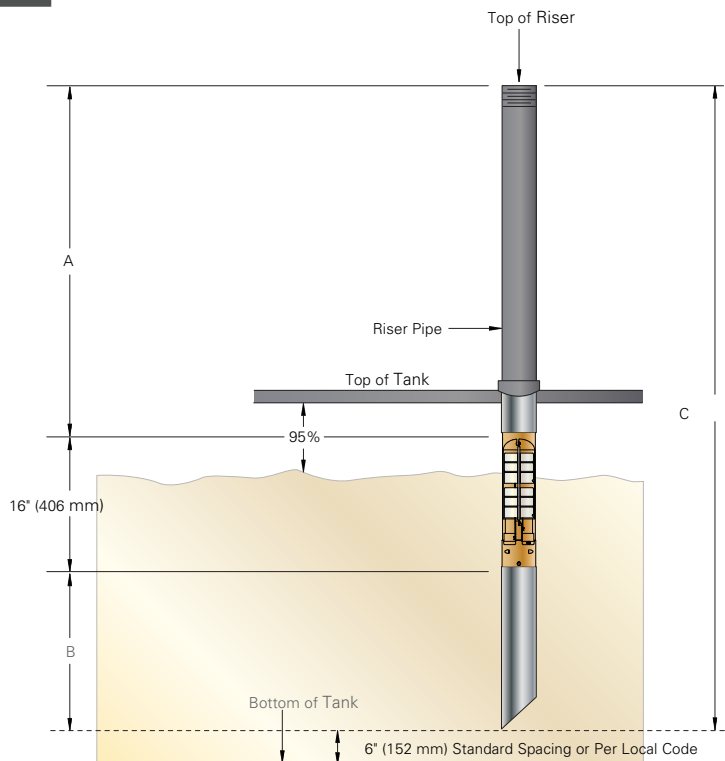
SPECIFICATIONS

Installation

- The Autolimiter® II is designed solely for use in underground storage tanks. For gravity drops only. No attempt should be made to utilize this product with aboveground storage tanks. The valve would not function, creating a very dangerous condition.
- This product is for use in tight fill applications only.
- EVR Phase 1 models require T-6100-FT installation tool.

ORDERING INFORMATION

Model	Description	A		B		C		
		mm	In.	mm	In.	mm	In.	
70849404	Overfill Prevention Valve only 4" without Drop Tube	Valve only						



Note: EVR valves require faring tool.



REMOTE FILL KIT

The EBW® remote fill kit is needed when your tank location does not allow the space for a tanker truck or a convenient means to fill your tanks during high traffic periods. The remote fill can also be utilised for day or night filling, allowing delivery away from the main building during the day and close to the building during night-time hours.

HIGHLIGHTS

- More flexibility with station and equipment design.
- Allows for sticking tank through main fill adapter.

ORDERING INFORMATION

Model	Length of Top Tube with Kit		Weight	
	In.	M	Lbs.	Kg
70832002	72	1.8	6.4	2.9



DROP TUBES

EBW® drop tubes are available in two wall thicknesses. The thin wall (.035 and .042 thickness) models offer easy handling and installation. The heavy wall (.062 thickness) models offer more durability. The drop tube fits directly into the underground tank riser pipe in dual point vapour recovery and conventional non-vapour recovery fill systems. Fuel is efficiently delivered at a faster rate, and allows submerged filling, which generates less vapours and evaporation.

The drop tubes are furnished with a straight cut bottom, which can be cut to length on the job site.

HIGHLIGHTS

- Flared end with Buna-N gasket for positive seating.

SPECIFICATIONS

- Note: For use with outside clamping drop elbows on adapter only. Do not use with inside expanding drop elbows.
- 2" size shipped six tubes per box.

ORDERING INFORMATION

Model	Description	Tubes per Box	Size mm × m	Size In. × Ft.	Wall Thickness		OD		Weight	
					mm	In.	mm	In.	Kg	Lbs.
782204102	Drop Tube, Aluminium 4" x 10' Pack of 2	2	102 × 3.05	4 × 10	1.58	0.062	99	3.88	10	22





REMOTE FILL SPLICE KIT FOR DEFENDER SERIES® OPVS

The Defender Series® remote fill splice kit allows you to modify a standard drop tube for remote fill applications. The open tube design provides access to a Defender Series® overfill prevention valve (OPV) for remote testing without having to remove the assembly. The kit contains installation hardware as well as a gasketed splice which is then roll-cripped inside of the drop tube using the Defender Series® OPV installation tool. An external O-ring provides a vapor tight seal inside the riser tee. The kit provides the same biofuel compatibility as the Defender Series® OPV.

SPECIFICATIONS

Components

1. Top drop tube (included with OPV)
2. Defender Series® remote fill splice kit
3. Bottom drop tube (included with OPV)
4. Defender Series overfill prevention valve (included with OPV)
5. 4" x 4" x 4" tee (locally supplied)
6. Remote fill line

ORDERING INFORMATION

Model	Description
708556901	Defender Series® remote fill splice kit, includes splice and O-rings





SEALING DIP CAP

The sealing dip cap prevents the overflowing of a tank through uncapped tank dipstick risers. The 3" sealing dip cap incorporates a spring-loaded, self-closing internal valve which seals when the sealing cap is removed and the dipstick is not in place. This innovative safety feature provides overflow protection whether the sealing cap and the dipstick are removed, or the sealing cap is in position with an attached dipstick stored in the tank.

HIGHLIGHTS

- Threads onto 3" NPT or BSPT riser pipes, with adapter available for 2" NPT or BSPT riser pipes.
- Substantial safety improvement for tanks which are frequently dipped.
- Lockable latch to hold sealing cap in place.
- Dipstick can be attached to the sealing cap and stored inside the tank.
- Compact design for minimal height.
- Biofuel compatible.
- Easy to retrofit on existing dipstick riser pipes with minimal site disruption.

ORDERING INFORMATION

Model	Description
405718901	3" BSPT sealing dip cap
405718902	3" NPT sealing dip cap
405755901	2" BSPT riser adapter for 3" BSPT sealing dip cap model 405718901
405756901	2" NPT riser adapter for 3" BSPT sealing dip cap model 405718901

SPECIFICATIONS

Components

1. Sealing cap
2. Lockable latch
3. Self-closing valve (closed)
4. Self-closing valve (open)
5. Dipstick mounting bracket
6. Mounted dipstick
7. Dip cap body



LAG14 LEAK DETECTION

This class II (EN 13160-1: 2003) leak detector with an intrinsically safe probe circuit is designed for double-skinned tanks containing liquid in the interstitial space. The unit is designed for monitoring inflammable liquids of danger classes A I, A II, A III and B stored above ground and non-inflammable water-polluting liquids.

The system consists of a control unit, a container for leak monitoring fluid and a probe. CE-certified control unit with visual and audible alarms, test button and increased interference protection. With relay for connection of additional alarm equipment.

ORDERING INFORMATION

Model	Description	Pack Size	Weight (kg)	Weight (lbs)
LAG14-ER	Leak detector for double-skinned tanks	1	1.4	3.1



SELECTING A SPILL CONTAINER

When you fully understand both your current site needs and where you might be headed in the future, you are able to make a sound decision on which type of spill container is right for your application. Be sure to consider your compliance needs, operational requirements, and weather/environmental conditions when selecting between a Defender Series® grade level or below grade spill container. Use this side-by-side comparison of the two spill container options to assist in making your selection.



GRADE LEVEL



BELOW GRADE

Single wall containment option	✓	
Double wall containment option	✓	✓
Upgrade from single wall to double wall spill containment	✓	
Integrated monitor option (visual inspection testing)	✓	✓
Integrated electronic sensor option (continual ATG monitoring)	✓	✓
Push-pull drain option	✓	✓
Installs with 1" (2.5cm) slope to grade level	✓	
Installs flush with grade level		✓
Snow plow ring	✓	
Flush fiberglass composite manway cover		✓
Cast iron gasketed lid	✓	
Gasketed lock-down lid with locking tabs		✓
Containment housed inside a ribbed roto-molded PE gravel guard.	✓	
Containment protected by a solid steel manway skirt		✓



DEFENDER SERIES® SPILL CONTAINERS

Defender Series® five gallon spill containers combine years of knowledge and experience in forecourts across the globe to represent the best defense in spill containment. Proactively protecting a site from the dangers of fugitive emissions during fuel delivery can save station owners both time and money by avoiding remediation due to fuel leakage. Available in both grade level and below grade level models to meet the needs of your application and preference, the complete lineup of Defender Series® spill containers provides a durable, easy-to-install, and simple-to-maintain and service spill containment solution for any environment and any application.

HIGHLIGHTS

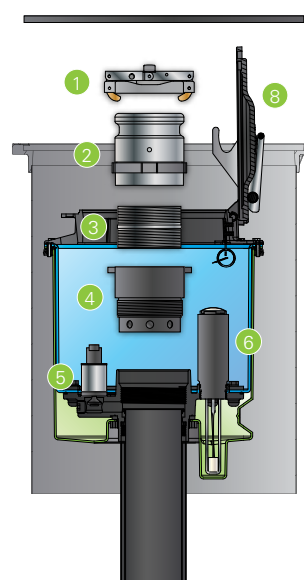
- Available in both grade level and below grade level models to meet the needs of your application and preference.
- Double wall protection complete with integrated visual interstitial integrity monitor or electronic sensor monitoring options for the secondary containment space (single wall grade level option available).
- Visual interstitial monitor facilitates efficient monthly inspections of the integrity of the secondary containment space during walk-through inspections.
- Electronic sensor monitor provides active integrity monitoring of the secondary containment space, providing immediate alarm of liquid when paired with an automatic tank gauge.
- Drop tube adapter ensures a vapor tight seal and easy in and out of drop tube / overflow prevention valve during installation or maintenance.
- Drain valve option, designed to meet CARB leak rate requirements, drains any spilled fuel into the tank.
- Grade level spill containers feature a rugged concrete ring, sturdy snow plow ring, and cast iron lid to deflect forecourt traffic. Their integrated liquid dam and gasketed lid prevent water entry. The container is housed inside a ribbed roto-molded PE gravel guard.
- Below grade spill containers feature a flush fiberglass composite manway lid allowing forecourt traffic to pass cleanly over its top. The gasketed lock-down cover seals water out. The container is protected by a solid steel manway skirt.
- Grade level spill containers offer variable installation height adjustment making it easy to ensure proper installation.
- Below grade spill containers install easily, and cleanly into the included 18" manway for simple installation.
- Easily upgrade from single to double wall without breaking concrete.

SPECIFICATIONS

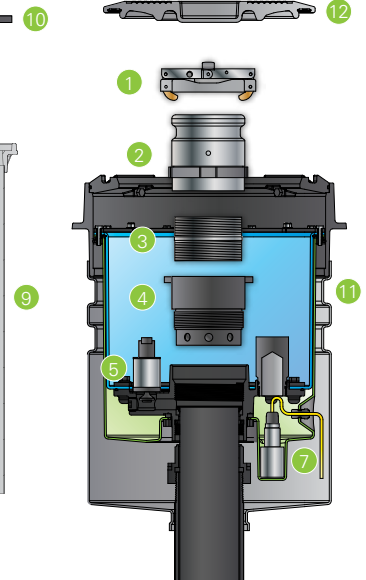
Components

- Primary containment
- Secondary containment
- 1 Adapter cap
- 2 Swivel adapter
- 3 Nipple
- 4 Drop tube adapter
- 5 Drain
- 6 Visual monitor
- 7 Electronic sensor monitor
- 8 Lock down lid
- 9 18" manway
- 10 Fiberglass manway lid
- 11 Gravel guard
- 12 Cast iron gasketed lid

Below Grade



Grade Level



9

10

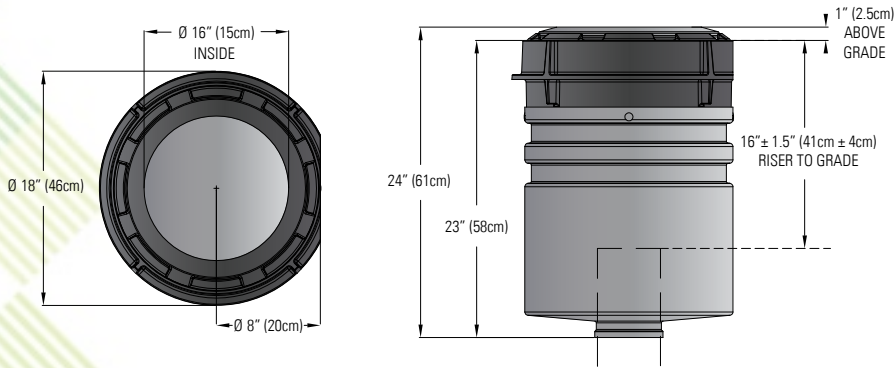
12

11

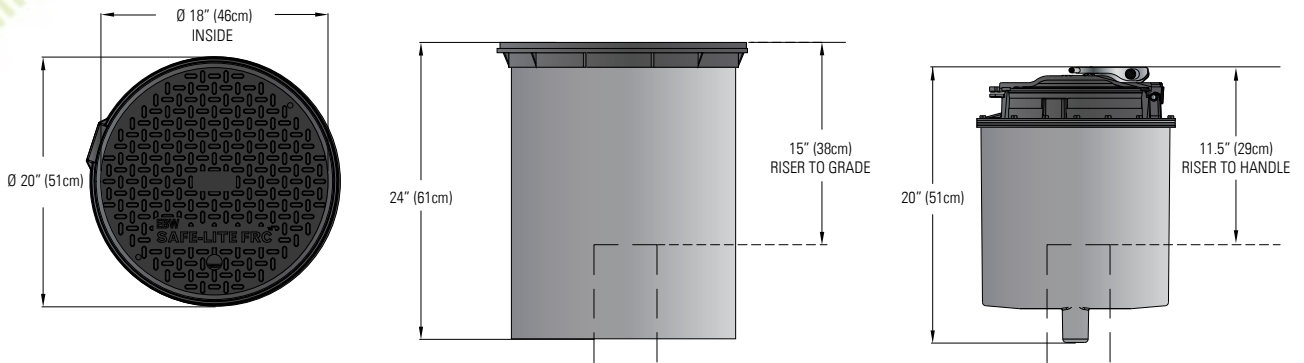


SPECIFICATIONS CONTINUED

Grade Level Spill Container Dimensions



Below Grade Spill Container Dimensions



Configurations

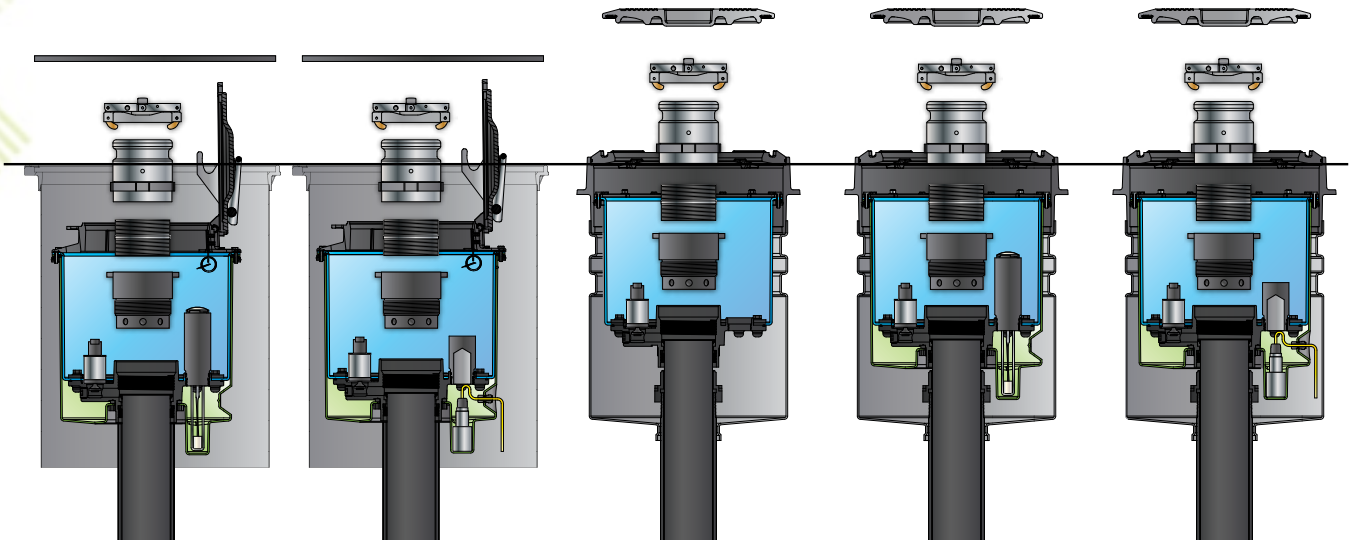
Below Grade
Double Wall
Visual Monitor

Below Grade
Double Wall
Electronic Monitor

Grade Level
Single Wall

Grade Level
Double Wall
Visual Monitor

Grade Level
Double Wall
Electronic Monitor



SPECIFICATIONS CONTINUED

Approvals/Certifications

- ULC Listed (grade level CI-GKT versions only).
- CARB approved (grade level only).
- Exceeds H20 and HS20 load standards (maximum axle load requiring support for the 32,000 or 16,000 pounds for each set of dual tire wheels).

ORDERING INFORMATION

Ordering Guide

Complete spill container part numbers have a specific order and are created using the following guidelines:

705 XXX Y A B C

XXX = Containment Options

- 545 = Grade level single wall
- 555 = Grade level double wall
- 556 = Below grade double wall

Y = Interstitial Monitoring Options

- 0 = No sensor
- 1 = Visual monitor (float gauge)
- 2 = Electronic sensor monitor

A = Base Thread Options

- 0 = NPSM
- 1 = NPT
- 2 = BSPT

B = Drain Options

- 1 = With drain
- 2 = Without drain

C = Lid/Cover*

- CI-GKT = Black epoxy-coated cast iron gasketed lid (grade level only)
- BLK = Black fiberglass 18" manway cover (below grade only)

* API colors available. Call factory for additional lid options.

Example: **70555111CI-GKT** = Defender Series® grade level double wall spill container with visual monitor, with NPT base thread, with drain and with black cast iron gasketed lid.

Example: **705556211BLK** = Defender Series® below grade double wall spill container with electronic sensor monitor, with NPT base thread, with drain and with black fiberglass manway cover (manway included).

Defender Series® Spill Containers Common Configurations

Model	Description
705545001CI-GKT	Defender Series® grade level, single wall, NPSM thread, with drain, with black epoxy-coated cast iron gasketed lid
705545002CI-GKT	Defender Series® grade level, single wall, NPSM thread, without drain, with black epoxy-coated cast iron gasketed lid
705545011CI-GKT	Defender Series® grade level, single wall, NPT thread, with drain, with black epoxy-coated cast iron gasketed lid
705545012CI-GKT	Defender Series® grade level, single wall, NPT thread, without drain, with black epoxy-coated cast iron gasketed lid
705545021CI-GKT	Defender Series® grade level, single wall, BSPT thread, with drain, with black epoxy-coated cast iron gasketed lid
705545022CI-GKT	Defender Series® grade level, single wall, BSPT thread, without drain, with black epoxy-coated cast iron gasketed lid
70555101CI-GKT	Defender Series® grade level, double wall, NPSM thread, with drain, with visual monitor, with black epoxy-coated cast iron gasketed lid
70555102CI-GKT	Defender Series® grade level, double wall, NPSM thread, without drain, with visual monitor, with black epoxy-coated cast iron gasketed lid
70555111CI-GKT	Defender Series® grade level, double wall, NPT thread, with drain, with visual monitor, with black epoxy-coated cast iron gasketed lid
70555112CI-GKT	Defender Series® grade level, double wall, NPT thread, without drain, with visual monitor, with black epoxy-coated cast iron gasketed lid
70555211CI-GKT	Defender Series® grade level, double wall, NPT thread, with drain, with electronic sensor monitor, with black epoxy-coated cast iron gasketed lid
70555212CI-GKT	Defender Series® grade level, NPT thread, without drain, with electronic sensor monitor, with black epoxy-coated cast iron gasketed lid
70555611BLK	Defender Series® below grade, double wall, NPT thread, with drain, with visual monitor, with black fiberglass manway cover (18" manway included)
70555612BLK	Defender Series® below grade, double wall, NPT thread, no drain, with visual monitor, with black fiberglass manway cover (18" manway included)
705556211BLK	Defender Series® below grade, double wall, NPT thread, with drain, with electronic sensor monitor, with black fiberglass manway cover (18" manway included)
705556212BLK	Defender Series® below grade, double wall, NPT thread, no drain, with electronic sensor monitor, with black fiberglass manway cover (18" manway included)
705559901*	Defender Series® grade level cutaway display, double wall, with drain, with visual monitor

*For display and demonstration purposes only. Six to eight week lead time.

Defender Series® Spill Container Installation Tools

Model	Description
T-7001	T-handle wrench
T-7106	Double-ended installation tool
T-7107	Double wall vacuum test kit (for double wall models only)



ORDERING INFORMATION CONTINUED

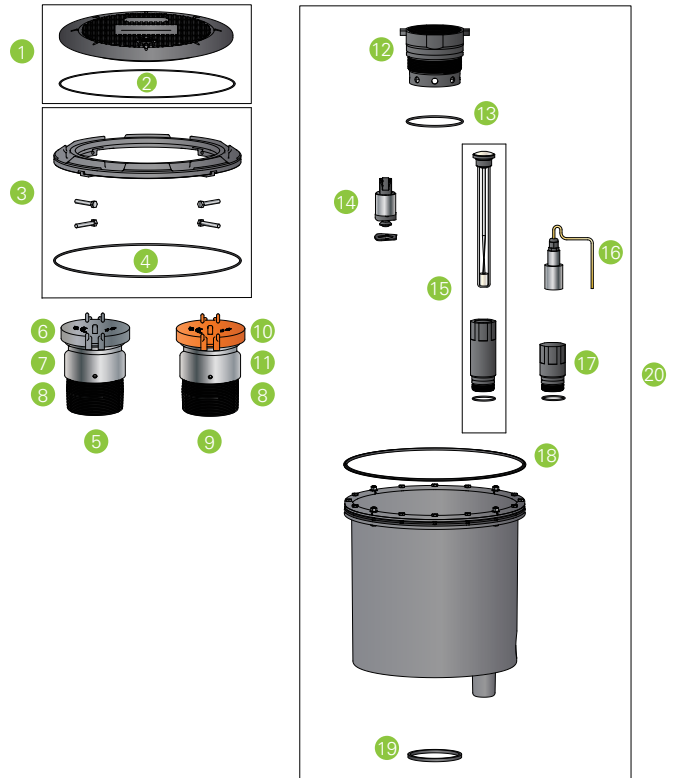
Grade Level Single Wall Replacement Parts

#	Model	Description
1	70544011	Cover, cast iron w/gasket (black)
2	70551911	Cover gasket
3	70553001	Plow ring assembly
4	602009007	Plow ring gasket
5	70541202	Fill riser, cap, and adapter kit
6	77720102	Top seal fill cap
7	SWF-100-SS	Fill swivel adapter
8	70521307	4" x 2.88" close nipple
9	70541302	Vapor riser, cap, and adapter kit
10	30430103	Top seal vapor cap
11	SWV-101-SS	Vapor swivel adapter
12	70550901EC	DT riser clamp assembly
13	1103939	DT riser gasket
14	70533729	Pull-to-push drain valve kit
15	70550311	Spill container seal ring gasket
16	602256001	Tank riser gasket
17	705545001SP	Spill container, NPSM, with drain
	705545002SP	Spill container, NPSM, no drain
	705545011SP	Spill container, NPT, with drain
	705545012SP	Spill container, NPT, no drain



Grade Level Double Wall Replacement Parts

#	Model	Description
1	70544011	Cover, cast iron w/gasket (black)
2	70551911	Cover gasket
3	70553001	Plow ring assembly
4	602009007	Plow ring gasket
5	70541202	Fill riser cap and adapter kit
6	77720102	Top seal fill cap
7	SWF-100-SS	Fill swivel adapter
8	70521307	4" x 2.88" close nipple
9	70541302	Vapor riser, cap, and adapter kit
10	30430103	Top seal vapor cap
11	SWV-101-SS	Vapor swivel adapter
12	70550901EC	DT riser clamp assembly
13	1103939	DT riser gasket
14	70533729	Pull-to-push drain valve kit
15	70553301	I ² monitor and inspection port kit
16	TSP-ULS	Electronic leak detection sensor
17	70553302	Sensor inspection port
18	70550311	Spill container seal ring gasket
19	602256001	Tank riser gasket
20	70555101SP	Spill container, I2, NPSM, with drain
	70555102SP	Spill container, I2, NPSM, no drain
	70555111SP	Spill container, I2, NPT, with drain
	70555112SP	Spill container, I2, NPT, no drain
	70555201SP	Spill container, sensor, NPSM, with drain
	70555202SP	Spill container, sensor, NPSM, no drain
	70555211SP	Spill container, sensor, NPT, with drain
	70555212SP	Spill container, sensor, NPT, no drain



ORDERING INFORMATION CONTINUED

Below Grade Double Wall Replacement Parts

#	Model	Description
1	78130401	Cover, 18", fiberglass (black)
2	705587901	Lock down cover assembly
3	70541202	Fill riser cap and adapter kit
4	77720102	Top seal fill cap
5	SWF-100-SS	Fill swivel adapter
6	70521307	4" x 2.88" close nipple
7	70541302	Vapor riser, cap, and adapter kit
8	30430103	Top seal vapor cap
9	SWV-101-SS	Vapor swivel adapter
10	70550901EC	DT riser clamp assembly
11	1103939	DT riser gasket
12	70533729	Pull-to-push drain valve kit
13	70553301	I ² monitor and inspection port kit
14	TSP-ULS	Electronic leak detection sensor
15	70553302	Sensor inspection port
16	70550311	Spill container seal ring gasket
17	602256001	Tank riser gasket



SERVICE STATION
HARDWARE





EBW® SERIES SPILL CONTAINERS

EBW® Series spill containers provide an economical solution for the collection of spilled product during normal tank filling of underground storage tanks. They are available in both grade level and below grade level models to meet the needs of your application and preference. The complete lineup of EBW® Series spill containers provides a basic, easy-to-install, and simple-to-maintain spill containment solution.

HIGHLIGHTS

- Available in both grade level and below grade level models to meet the needs of your application and preference.
- Single wall containment protection.
- The flexible polyethylene container is designed to move with natural ground movements.
- Drain and pump options facilitate easy return of spilled fuel back into the tank.
- A cast iron base provides stability (NPT or BSPT).
- Threaded base for new installations.
- Slip-on grade level models for retrofit applications use a gasket flanged bolt system to secure the spill container to the riser pipe and are designed to eliminate the need to remove the riser pipe from the tank when installing.
- Covers available in a variety of colors to clearly identify product contained in the tank and prevent cross drops.

Grade Level Spill Containers

- 5 gallon capacity.
- Grade level spill containers feature a durable cast iron deflector ring which provides protection from heavy traffic and truck plows while diverting water away from the spill container top.
- The container is equipped with a gravel guard to prevent backfill material from filling in around the movable shell, mitigating issues with ground movement.
- Composite, cast iron, or aluminum cover options.

Below Grade Level Spill Containers

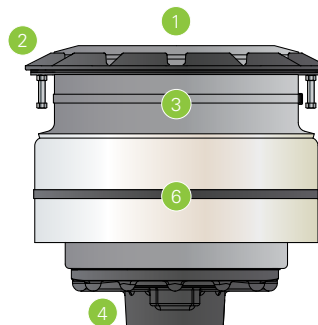
- 5 gallon and 15 gallon capacity options.
- Below grade level spill containers feature a hinged, locking, watertight cover that prevents water from entering the containment.
- They include an 18" wide, 8" deep cast iron manway with either a composite or steel lid that allows forecourt traffic to pass cleanly over its top.

SPECIFICATIONS

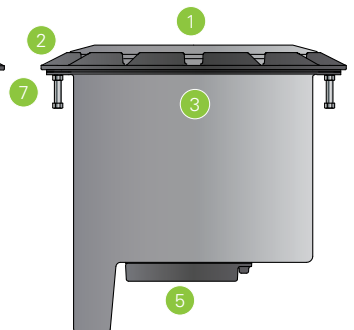
Components

- | | |
|-------------------------------|------------------------|
| 1 Cover | 6 Gravel guard |
| 2 Cast iron deflector ring | 7 Concrete anchors |
| 3 Flexible polyethylene shell | 8 Locking cover |
| 4 Cast iron threaded base | 9 18" Cast iron manway |
| 5 Cast iron slip-on base | |

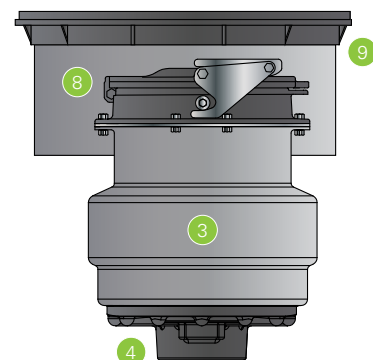
Grade Level



Grade Level Retrofit

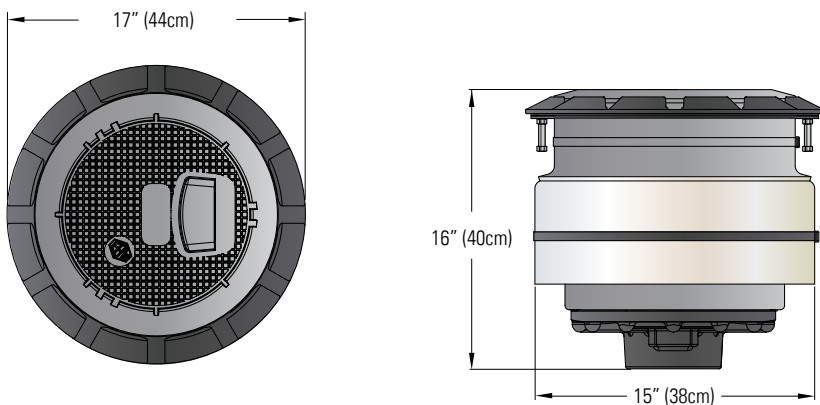


Below Grade

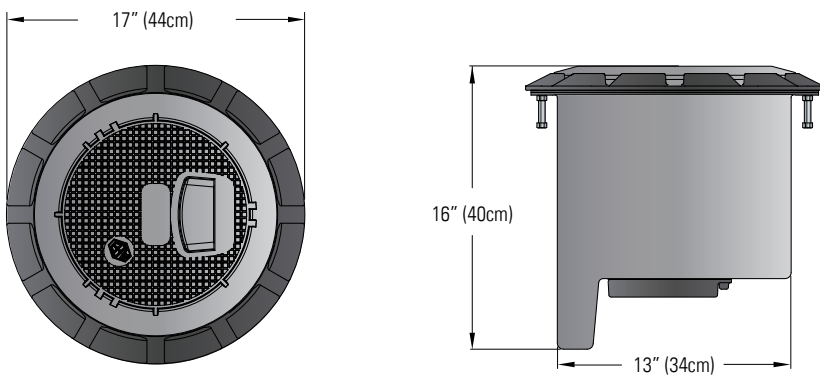


SPECIFICATIONS CONTINUED

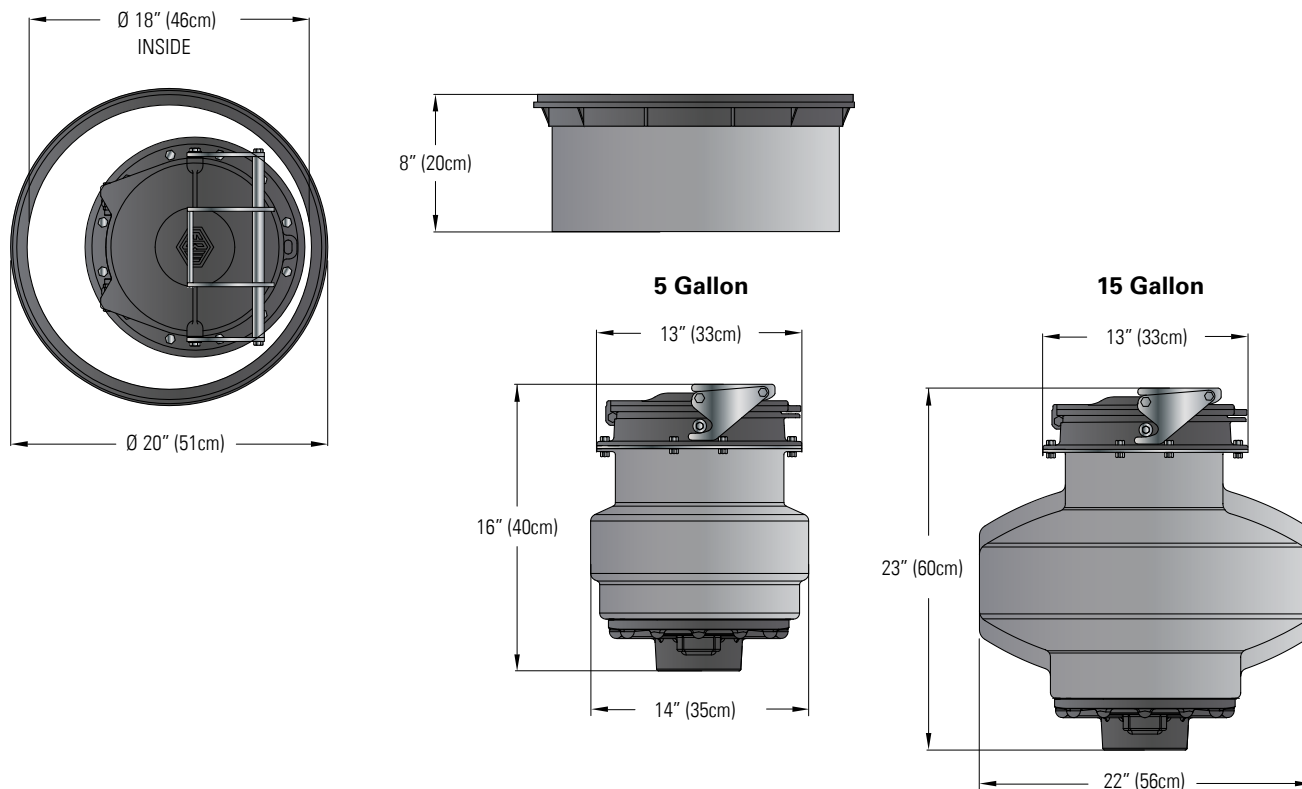
Grade Level Spill Container Dimensions



Grade Level Retrofit Spill Container Dimensions



Below Grade Spill Container Dimensions



SPECIFICATIONS CONTINUED

Grade Level Spill Containers Materials

- Base: Cast iron
- Container: Polyethylene
- Deflector ring: Cast iron
- Cover: Fiber reinforced composite (FRC), cast iron, or aluminum

Approvals/Certifications

- Spill containers and manways exceed DOT H20 requirements.
- ULC listed, MH21091*
- CARB Phase 1 EVR approved, VR-101*

*See ordering information for a listing of specific spill container models that hold this approval/certification.

Below Grade Level Spill Containers Materials

- Base: Cast iron
- Container: Polyethylene
- Deflector ring: Cast iron
- Cover: Fiber reinforced composite (FRC), or steel

ORDERING INFORMATION

EBW® Series Grade Level Spill Containers



Model	Description	Capacity	Weight
70547001ALUM	Grade level spill container, with drain, NPT threads, aluminum cover	19 L / 5 gal	30.6kg / 67.55 lbs
70547002ALUM	Grade level spill container, without drain, NPT threads, aluminum cover	19 L / 5 gal	
70547021ALUM	Grade level spill container, with drain, BSPT threads, aluminum cover	19 L / 5 gal	30.6kg / 67.55lbs
70547001BLK	Grade level spill container, with drain, NPT threads, black composite cover	19 L / 5 gal	25kg / 54lbs
70547002BLK	Grade level spill container, without drain, NPT threads, black composite cover	19 L / 5 gal	
70547021BLK	Grade level spill container, with drain, BSPT threads, black composite cover	19 L / 5 gal	25kg / 54lbs
70547901CI-GKT*	Grade level spill container, with drain, NPT threads, cast iron cover with gasket	19 L / 5 gal	25.4kg / 56lbs
70547902CI-GKT*	Grade level spill container, without drain, NPT threads, cast iron cover with gasket	19 L / 5 gal	30.8kg / 68lbs
70549001BLK**	Grade level spill container, with drain, NPT threads, black composite cover (CARB approved)	57/15	28kg / 62lbs
70549002BLK**	Grade level spill container, without drain, NPT threads, black composite cover (CARB approved)	19 L / 5 gal	19.3kg / 42lbs

*ULC listed, MH21091

**CARB Phase 1 EVR approved, VR-101

EBW® Series Grade Level Retrofit Spill Containers



Model	Description	Capacity	Weight
70240001BLK	Grade level retrofit spill container, with pump, slide-on base, black composite cover	19 L / 5 gal	17.2kg / 37.9lbs
70240002BLK	Grade level retrofit spill container, without pump, slide-on base, black composite cover	19 L / 5 gal	
70240401CI-GKT*	Grade level retrofit spill container, with pump, slide-on base, cast iron cover with gasket	19 L / 5 gal	17.2kg / 38lbs
70240402CI-GKT*	Grade level retrofit spill container, without pump, slide-on base, cast iron cover with gasket	19 L / 5 gal	16.8kg / 37lbs

*ULC listed, MH21091

EBW® Series Grade Level Spill Container Covers

Replace the last letters in any standard spill container part number for these cover options.

Model	Description	Model	Description
BLK	Black composite	WHTX	White with black cross composite
WHT	White composite	RED-X	Red with white cross composite
RED	Red composite	ALUM	Aluminum
YEL	Yellow composite	CI	Cast iron
ORG	Orange composite	CI-GKT	Cast iron with gasket
BRN	Bronze composite		

ORDERING INFORMATION

EBW® Series Below Grade Spill Containers



Model	Description	Capacity	Weight
70547401BLK*	Below grade spill container, with drain, NPT threads, 18" x 8" manway with black composite cover	19 L / 5 gal	41.7kg / 92lbs
70547402BLK*	Below grade spill container, without drain, NPT threads, 18" x 8" manway with black composite cover	19 L / 5 gal	42.6kg / 94lbs
70549201BLK**	Below grade spill container, with drain, NPT threads, 18" x 8" manway with black composite cover (CARB approved)	19 L / 5 gal	41.7kg / 92lbs
70549202BLK**	Below grade spill container, without drain, NPT threads, 18" x 8" manway with black composite cover (CARB approved)	19 L / 5 gal	42.6kg / 94lbs
71547401BLK*	Below grade spill container, with drain, NPT threads, 18" x 8" manway with black composite cover	57/15	43.5kg / 96lbs
71547402BLK*	Below grade spill container, without drain, NPT threads, 18" x 8" manway with black composite cover	57/15	43.5kg / 96lbs
71549201BLK**	Below grade spill container, with drain, NPT threads, 18" x 8" manway with black composite cover (CARB approved)	57/17	50.8kg / 112lbs
71549202BLK**	Below grade spill container, without drain, NPT threads, 18" x 8" manway with black composite cover (CARB approved)	57/15	50.8kg / 112lbs

*ULC listed, MH21091

**CARB Phase 1 EVR approved, VR-101

EBW® Series Manway Covers

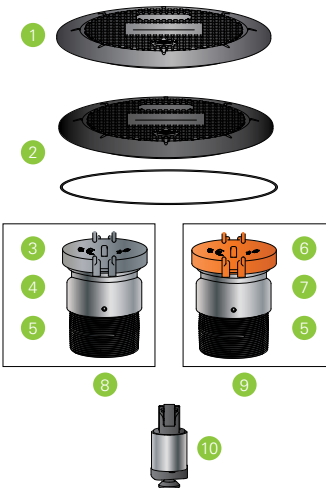
Replace the last letters in any standard spill container part number for these cover options.

Model	Description	Model	Description
BLK	Black composite	YEL	Yellow composite
WHT	White composite	ORG	Orange composite
RED	Red composite	STL	Steel

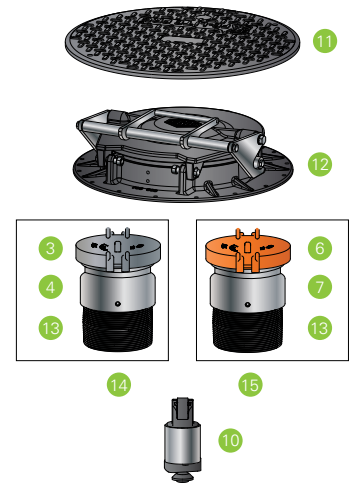
EBW® Series Spill Container Replacement Parts

#	Model	Description
1	70542301	Cover, composite (black)
2	70544011	Cover, cast iron w/gasket (black)
3	77720102	Top seal fill cap
4	SWF-100-SS	Fill swivel adapter
5	70521307	4" x 3" close nipple
6	30430103	Top seal vapor cap
7	SWV-101-SS	Vapor swivel adapter
8	70541202	Fill riser, cap, and adapter kit for grade level spill containers
9	70541302	Vapor riser, cap, and adapter kit for grade level spill containers
10	70533219*	Pull-to-push drain valve kit
11	78130401	Cover, 18", fiberglass (black)
12	71040114 71040201	Lock down cover w/ base Lock down cover w/o base
13	70521305	4" x 5" close nipple
14	70541201	Fill riser, cap, and adapter kit for below grade spill containers
15	70541301	Vapor riser, cap, and adapter kit for below grade spill containers

Grade Level



Below Grade



*CARB approved model (P/N 70533719) also available.



ROUND ACCESS COVERS & SKIRTS

These manways have a proven track record of trouble-free operation. Their durable construction withstands the heaviest traffic and meets the requirements of a D.O.T. H20 load rating.

HIGHLIGHTS

- Cast Iron Cover and Rings - EBW® 7-1/2" round manways have ribbed cast iron covers and cast iron rings to withstand heavy loads and traffic.
- Heavy Duty Skirts - EBW® 7-1/2" round manways have heavy duty cast iron skirts. 12" and 18" round manways have a 16 gauge welded steel skirt and are available in different depths to fit your needs.
- Coloured Cover Options - EBW® 18" round manways can be ordered with optional FRC coloured covers in standard API colour codes. The FRC covers also include a recessed area for optional API colour coded identification plates.
- Highway 20 Rated (D.O.T. H20) - All EBW® spill containers and manways exceed the D.O.T. H20 requirement.

ORDERING INFORMATION

Model	Manway Size		Cover	Skirt Depth		Weight	
	In.	mm		In.	mm	Lbs.	Kg
78120808	7.5	191	Cast iron	8	203	22	10
78121212CI	12	305	Cast iron	12	305	36	16
78121212CI-H	12	305	Cast iron with handle	12	305	36	16
78121224CI	12	305	Cast iron	24	610	70	32
78141808BLK	18	457	FRC	8.5	216	30	14
78141808GRY	18	457	FRC	8.5	216	30	14
78141812BLK	18	457	FRC	12	305	33	15
78141812GRY	18	457	FRC	12	305	33	15
78141818BLK	18	457	FRC	18	457	39	18
78147865	18	457	FRC bolted	8.5	216	30	14

Replacement Round Manway Covers

Model, with drain	Manway Size		Cover	Weight	
	In.	mm		Lbs.	Kg
78130201	12	305	FRC black	10	5
78130207	12	305	FRC orange	10	5
78130401	18	457	FRC black	10	5
78130601	18	457	0.375" steel	33	15
78140001	12	305	Cast iron	17	8
78140201	7.5	191	Cast iron	6	3
78140701	12	305	Cast iron with handle	18	8.1
78133401	18	457	Bolt-down FRC black	10	15



STEEL ACCESS COVERS

Available in 18" to 48" round or 24" square.

HIGHLIGHTS

- Covers meet or exceed D.O.T. H20 load rating.
- Available in a bolted version including bolts and gasket.
- Painted rustproof black.
- 24" square manway is manufactured using all welded construction. Corners are matched to ensure proper fit with covers.

ORDERING INFORMATION

Model	Dimensions		Skirt Size		Cover	Weight	
	In.	cm	In.	cm		Lbs.	Kg
SSQ2409	24 x 24	60.96 x 60.96	9	22.86	Non-bolted	86	39.01

Model	Dimensions		Skirt Size		Cover	Weight	
	In.	cm	In.	cm		Lbs.	Kg
78141808STL	18	45.72	8	20.32	Non-bolted	39	17.6
78141812STL	18	45.72	12	30.48	Non-bolted	41	18.6
78141818STL	18	45.72	18	45.72	Non-bolted	44	19.95
SR1809 WT	18	45.72	9	22.86	Bolted	40	18.14
SR2409 HD	24	60.96	9	22.86	Non-bolted	70	31.75
SR3009 HD	30	76.2	9	22.86	Non-bolted	139	63.05
SR3009 WT	30	76.2	9	22.86	Bolted	139	63.05
SR3609 HD	36	91.44	9	22.86	Non-bolted	192	87.09
SR3609 WT	36	91.44	9	22.86	Bolted	192	87.09
SR3809 HD	38	96.52	9	22.86	Non-bolted	235	106.59
SR3809 WT	38	96.52	9	22.86	Bolted	235	106.59
SR4209 HD	42	106.68	9	22.86	Non-bolted	310	140.61
SR4209 WT	42	106.68	9	22.86	Bolted	310	140.61
SR4809 HD	48	121.92	9	22.86	Non-bolted	400	181.44
SR4809 WT	48	121.92	9	22.86	Bolted	400	181.44

SPECIFICATIONS

Model	A		B		C		D	
	In.	cm	In.	cm	In.	cm	In.	cm
78141808STL	19	48.26	18	45.72	8.5	21.59	17.93	45.54
78141812STL	19	48.26	18	45.72	12	30.48	17.93	45.54
78141818STL	19	48.26	18	45.72	18	45.72	17.93	45.54
SR1809 WT	17.5	44.45	16.75	42.55	9	22.86	16.25	41.28
SR2409 HD	23.5	59.69	22.75	57.79	9	22.86	22.25	56.52
SR3009 HD	29.5	74.93	28.75	73.03	9	22.86	28.25	71.76
SR3009 WT	29.5	74.93	28.75	73.03	9	22.86	28.25	71.76
SR3609 HD	35.5	90.17	34.75	88.27	9	22.86	34.25	87
SR3609 WT	35.5	90.17	34.75	88.27	9	22.86	34.25	87
SR3809 HD	39.5	100.33	38.75	98.43	9	22.86	38.25	97.16
SR3809 WT	39.5	100.33	38.75	98.43	9	22.86	38.25	97.16
SR4209 HD	41.5	105.41	40.25	102.24	9	22.86	39.75	100.97
SR4209 WT	41.5	105.41	40.25	102.24	9	22.86	39.75	100.97
SR4809 HD	47.5	120.65	46.25	117.48	9	22.86	45.75	116.21
SR4809 WT	47.5	120.65	46.25	117.48	9	22.86	45.75	116.21





POWER LIFT CAST IRON COVERS

UPP® brand power lift cast iron covers are designed for use on forecourts and refuelling stations with heavy traffic where frequent access is required. They combine the strength and durability of cast iron construction with a spring loaded hinge mechanism that allows the covers to be opened and closed with ease. The lid will stay open at any angle without the need for a locking mechanism or stays, greatly increasing safety and time/manpower efficiencies on site.

HIGHLIGHTS

- The extremely hard wearing and durable covers will not spin out, buckle or loose shape due to pressure forces from vehicles.
- The unique spring loaded hinge mechanism makes the ease of opening the ultra strong cast iron cover comparable to that of a lightweight composite cover.
- Lockable design increases on site security and safety.
- When locked, the covers become watertight due to the chemically resistant neoprene sealing gasket and internal drainage channel.
- Surface liquids drain away from the cover preventing leaking into the underground containment.
- Resistant to chemical corrosion from petroleum and alcohols and painted with a noncorrosive paint which protects the cover from rust.
- Square, rectangle and round access model options.
- Raised and flush mount model options.
- Dip model available with integrated inspection port.

SPECIFICATIONS

- Each cover complies with the toughest engineering standards for access covers: BS EN 124 to Class D400 structural integrity as tested by Lloyds British Testing plc.

ORDERING INFORMATION

Model	Description	Kg	Lbs.	Opening (mm)
PC76-D400*	UPP® Access Cover 760x760mm D400 flush	120	264.6	760 x 760

* Note that one handle PC/H needs to be ordered with each PC76-D400 cover.

Model	Description	Kg	Lbs.	Opening (mm)
PC76-1*	UPP® Cast Iron Cover 760x760mm raised	121	266.8	760 x 760

* Note that one handle PC76-1/H needs to be ordered with each PC76-1 cover.



ORDERING INFORMATION CONTINUED

Model	Description	Kg	Lbs.	Opening (mm)
PC770 *	UPP® Cast Iron Cover 770x770mm raised	130	286.6	770 x 770

* Note that one handle PC/H needs to be ordered with each PC770 cover.



Model	Description	Kg	Lbs.	Opening (mm)
PC95-D400*	UPP® Access Cover Ø950mm D400	200	441	Ø950

* Note that one handle PC/H needs to be ordered with each PC95-D400 cover.



Model	Description	Kg	Lbs.	Opening (mm)
PC95-D400-DIP*	UPP® Access Cover Ø950mm Dip D400	200	441	Ø950

* Note that one handle PC/H needs to be ordered with each PC95-D400-DIP cover.



Model	Description	Kg	Lbs.	Opening (mm)
PC150-76-D400	UPP® Access Cover 1500x760 mm D400	264	582	1502 X 762

* Note that TWO handle PC/H need to be ordered with each PC-150-76-D400 cover.



Model	Description	Kg	Lbs.	Material
PC/H	Handle for PC 51/76/77/95 (pictured)/150/770	1.06	2.3	Cast Iron
PC76-1/H	Handle for PC76-1			
PC76/J	Gasket for PC76 Access Cover	0.3	0.7	Neoprene





COMPOSITE MANHOLES

At a fraction of the weight of typical steel manholes, FLEX-ING® brand Composite Manholes give you all the benefits of a solid, well-constructed manhole with none of the difficulties you've come to expect from steel. A single technician can easily remove the lightweight cover while the composite construction and design allow the cover to stand up to the harshest forecourt conditions.

HIGHLIGHTS

Steel Has Met Its Match

At a fraction of the weight of typical steel manholes, FLEX-ING™ brand Composite Manholes give you all the benefits of a solid, well-constructed manhole with none of the difficulties you've come to expect from steel. A single technician can easily remove the lightweight cover while the composite construction and design allow the cover to stand up to the harshest forecourt conditions.

Solid Construction, No Compromise

We don't compromise with cheap wood or foam fillers. FLEX-ING® brand Composite Manholes are constructed of many layers of high quality fibreglass bonded together with premium resin and then hand-finished with the utmost attention to quality. The end result is a durable, lightweight cover that not only meets, but exceeds, most testing standards.

Greater Wall Thickness

FLEX-ING® brand Composite Manholes feature a domed shape. At their centre, our manholes taper up from 1" to 1 ¼" in wall thickness while most competitive models remain at a uniform 1" wall thickness. This extra wall thickness provides minimal deflection and an extended service life.

Quality Construction

A shallow handle hole and chest-style handle with backer plate keep the wall thickness higher around this high-impact area of the cover. 38" and 42" come standard with spring loaded handle and are available with Cam lock for rain tight applications. Additionally FLEX-ING® brand Composite Manholes feature a 12 gauge skirt construction that is also powder coated for extreme protection.

SPECIFICATIONS

- Constructed of many layers of high quality fibreglass bonded together with premium resin and then hand-finished with the utmost attention to quality.
- At their centre, our manholes taper up from 1" to 1 ¼" in wall thickness while most competitive models remain at a uniform 1" wall thickness. This extra wall thickness provides minimal deflection and an extended service life.
- A shallow handle hole and chest-style handle with backer plate keep the wall thickness higher around this high-impact area of the cover.
- 38" and 42" come standard with spring loaded handle and are available with Cam lock for rain tight applications.
- 12 gauge skirt construction that is also powder coated for extreme protection.
- Exceeds H20 and HS20 load standards (maximum axle load requiring support for the 32,000 or 16,000 pounds for each set of dual tire wheels)
- Slip resistant

COMPOSITE

Model	Diameter	Lid Thickness	Frame ID	Skirt Height	Skirt ID	Opening
38" manholes	39.00"	1.00"	39.75"	10.50"	37.00"	35.25"
42" manholes	43.94"	1.00"	44.50"	10.50"	42.00"	41.25"

ORDERING INFORMATION

Model	Description
14U-3810	38" Composite manhole lid, ring, and 10" skirt
14URT-3810	38" Raintight Composite manhole lid, ring, and 10" skirt
14U-RT3810CL	38" Raintight Composite manhole with 10" skirt and cam locks
14U-3810C	38" Composite manhole lid only
14U-4210	42" Composite manhole lid, ring, and skirt (10")
14URT-4210	42" Raintight Composite manhole lid, ring, and skirt (10")
14U-RT4210CL	42" Raintight Composite manhole with skirt (10") and cam locks
14U-4210C	42" Composite manhole lid only





FIBER REINFORCED COMPOSITE MANWAYS

EBW® SAFE-LITE FRC manway covers are ultra lightweight. Engineered and tested to exceed the D.O.T. H20 load ratings. Covers weigh almost one-third less than steel which dramatically reduces injury potential during cover removal. Available in 12", 30", 36" and 42" sizes. The slide action cover further reduces the chance of injury by eliminating the need to bend down to remove or replace the cover.

HIGHLIGHTS

- Exceeds D.O.T. Requirements - Engineered for high-strength and tested to over 50,000 lbs. load (2-1/2 times D.O.T. requirement) without failure.
- Fatigue Resistant - Product has undergone 30 year life simulation testing, with 11,000 loading cycles of 20,000 lbs. each.
- Lightweight - FRC composite covers weigh almost one-third less than steel. Lighter weight reduces back injuries, increases ease of access to manway and decreases shipping costs.
- Skirt Ring - Made of 1/4" rolled angle iron. Skirt is 14 gauge steel, built to handle the heaviest traffic.
- Slide Action Cover - Cover is removed and replaced by placing the slide action handle into the plate on the cover. No bending down to remove the cover.
- Cover Options - Bolted, non-bolted and slide on models. All covers are supplied with handles. Other colours available; call for details.
- Optional Aramid Covers - For extra wear protection at heavy traffic sites. Available for 36" and 42" models only.

Model	Description	Cover OD
78148206	36" Access Cover (only) - Slide Action, Grey	39.5"
78148512GRY	36" Access Cover complete with skirt and frame assembly	--
78134101	Handle for Slide Action Cover Removal	--

M.H.ASS'Y,36" SLID - 78148512GRY is not supplied with gasket. Gasket must be ordered separately. Gasket part number is NONBOLT KIT.



COMPOSITE ACCESS COVERS

UPP® brand composite access covers feature a lightweight, watertight design for safe and easy access to underground containment. Their large diameter openings provide a wide access point for larger containment spaces. The full composite construction of both the lid and the ring provide complete corrosion resistance. For the ultimate in easy access, dip models feature an integrated inspection port at the center of the cover lid. Additionally, the locking mechanism seal the cover down to prevent it from spinning out and thwart unwanted access.

HIGHLIGHTS

- Two size ranges are available to accommodate varying applications and access opening size requirements including a 35" (900mm) diameter access opening and a larger 42" (1,060mm) diameter access opening.
- Complete composite construction is corrosion resistant even in the harshest forecourt conditions as well as resistant to chemical corrosion from petroleum and alcohols.
- Composite construction resists warping and delamination.
- Extremely hard wearing and durable, will not spin out, buckle or lose shape due to pressure forces from vehicles.
- Lockable design provides increased on-site security and safety.
- Anti-slip surface for increased safety.
- Integrated cover O-ring creates a watertight seal between the cover and frame.
- Dip models available with integrated inspection port.
- Locking mechanism key included.
- All component parts are resistant to chemical attack, diesel, petrol, salt and water or a combination over the lifespan of the cover (surface discoloration is acceptable in service).
- Access cover lifting handles make cover removal safe and easy (sold separately).
- Access cover skirts available (sold separately).

SPECIFICATIONS

35" (900mm) Composite Access Cover

- Load rating: EN124:1994 Class C250 & D400
- Clear opening: 35 7/16" (900mm) diameter
- Cover external dimension: 37 7/8" (962mm) diameter
- Frame external dimension: 43 5/16" (1,100mm) diameter
- Cover weight: 68 lbs (31kg)
- Frame weight: 33 lbs (15kg)
- Tread: Embedded aggregate – uni-directional, complies with EN124:1994
- Material: Advanced fiberglass composite.

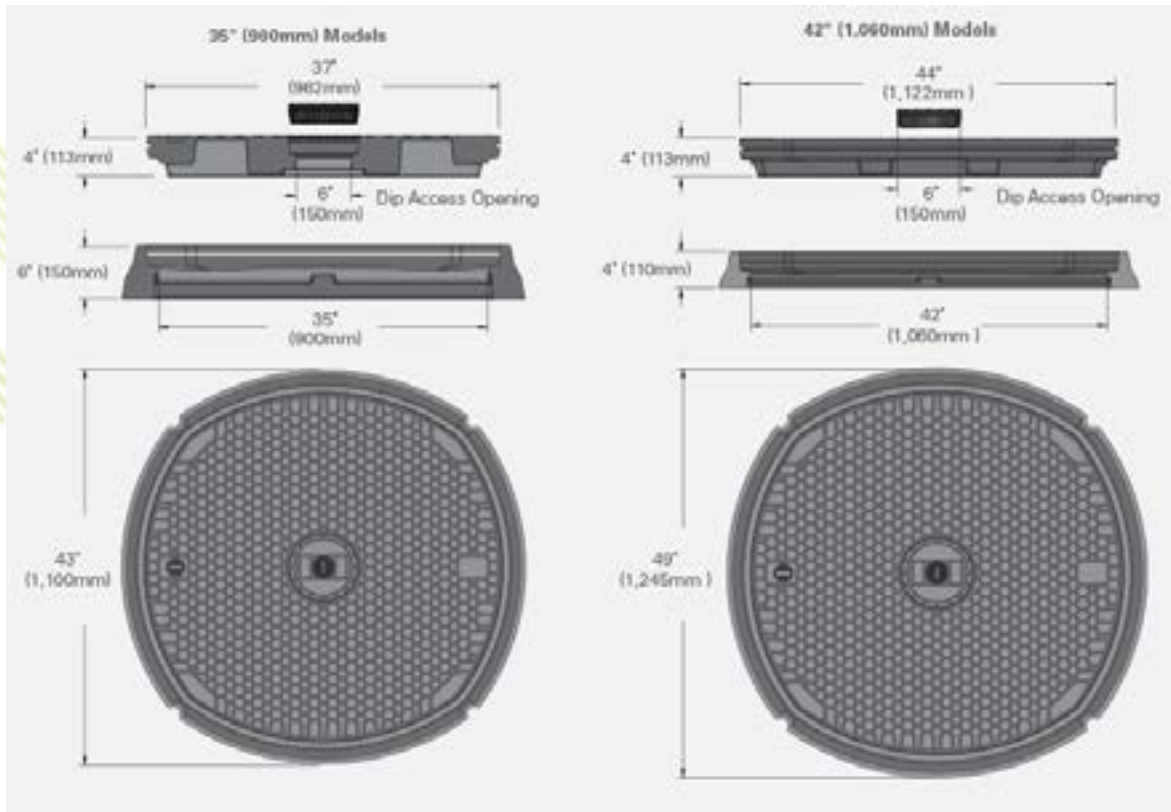
42" (1,060mm) Composite Access Cover

- Load rating: EN124:1994 Class C250
- Clear opening: 41 3/4" (1,060mm) diameter
- Cover external dimension: 44 3/16" (1,122mm) diameter
- Frame external dimension: 49 1/16" (1,245mm) diameter
- Cover weight: 88 lbs (40kg)
- Frame weight: 29 lbs (13kg)
- Tread: Embedded aggregate – uni-directional, complies with EN124:1994
- Material: Advanced fiberglass composite.



SPECIFICATIONS CONTINUED

Dimensions



ORDERING INFORMATION

Composite Access Cover

Model	Description
PCR090	35" (900mm) composite access cover, C250 rating
PDR090	35" (900mm) composite access cover, D400 rating
PCR090-DIP	35" (900mm) composite access cover with integrated dip inspection port, C250 rating
PCR106	42" (1,060mm) composite access cover, C250 rating
PCR106-DIP	42" (1,060mm) composite access cover with integrated dip inspection port, C250 rating
PCR-DIPCAP	Replacement dip cap for composite access covers
PCR-LIFT	Lifting handle tool for composite access covers
PCR-LOCK	Locking mechanism for composite access covers
PCR-PLUG	Locking mechanism replacement dust plug
SDFLX40FC	Sealant (to seal access cover frame to skirt)



Lifting Handle Tool

35" (900mm) Composite Access Cover Accessories

Model	Description
PDR090-S	Replacement gasket for 35" (900mm) composite access covers (between lid and frame)
PXR090-OCH-SK	35" (900mm) fiberglass skirt, for use with OCH tank cambers

42" (1,060mm) Composite Access Cover Accessories

Model	Description
PCR106-S	Replacement gasket for 42" (1,060mm) composite access covers (between lid and frame)
PCR106-OCH1400-SK	42" (1,060mm) fiberglass skirt, for use with OCH tank cambers
PCR106-TSM4542-SK	42" (1,060mm) fiberglass skirt, for use with TSM tank cambers



MONITORING WELL MANWAYS

EBW® brand 8", 10", and 14" monitoring well manways are equipped with strong cast iron, bolt-down lids to provide limited access to entering the manway. A watertight seal prevents contamination and a heavy-duty cast iron rim protects the manway from forecourt traffic. The lid features a distinctive triangle and the words "Do Not Fill - Test Well" which are both cast into the cover to meet API specifications.

SPECIFICATIONS

Materials

- 8" manway height / weight: 13" (330 mm) / 18 Lbs (8 Kg)
- 10" manway height / weight: 12" (305 mm) / 25 Lbs (11 Kg)
- 14" manway height / weight: 12" (330 mm) / 41 Lbs (19 Kg)

ORDERING INFORMATION

Model	Description
80840001	8" cast iron monitoring well
81030201	10" cast iron monitoring well
81430201	14" cast iron monitoring well



MONITORING WELL CAP PLUGS

EBW® brand monitoring well cap plugs expand on the inside diameter of the screen pipe casing to form a vapour and watertight seal. An integrated locking mechanism prevents unauthorized access. The locking mechanism features a captured bolt, eliminating potential drop-out. The cap is a distinctive yellow colour and features the words "Do Not Fill - Monitor Well" which is molded into the cap.

SPECIFICATIONS

- Body: Corrosion-proof plastic
- Gasket: Buna-N.

ORDERING INFORMATION

Model	Description
77210601	2" monitoring well cap plug (51 mm)
77210201	4" monitoring well cap plug (102 mm)
77210901	6" monitoring well cap plug (152 mm)





MONITORING WELL SCREEN PIPE

EBW® brand monitoring well screen pipes facilitate groundwater testing by allowing groundwater to pass through horizontal slots in the pipe. The screen pipe features precision cut slot apertures that provide a measured and uniform barrier to ingress with no sharp edges to damage the filter sock or oversized apertures that can allow bulging and perforation of the filter sock.

SPECIFICATIONS

- The screen pipe must be installed with the included bottom cap to prevent any bypass of the well screen pipe apertures and filter wrap.
- The screen pipe is intended to be installed together with a filter wrap.

ORDERING INFORMATION

Model	Description
77320001	2' x 13' monitoring well screen pipe (51 mm x 396 cm)
77320002	4' x 13' monitoring well screen pipe (102 mm x 396 cm)
77320003	6' x 13' monitoring well screen pipe (152 mm x 396 cm)
77320004	4' x 15' monitoring well screen pipe (102 mm x 457 cm)



MONITORING WELL FILTER WRAP

EBW® brand monitoring well filter wrap is used on the outside of monitoring well screen pipe to further prevent fine soil from entering and blocking the slots.

SPECIFICATIONS

- Body: Spun bound polypropylene
- Micron rating: 250 microns
- Available in 100' (3048 cm) rolls

ORDERING INFORMATION

Model	Description
77310002	2' x 100' monitoring well filter wrap (51 mm x 3048 cm)
77310004	4' x 100' monitoring well filter wrap (102 mm x 3048 cm)



MONITORING WELL PACKAGES

The EBW® brand offering of monitoring well equipment includes all of the necessary hardware components necessary to operate and properly maintain a monitoring well. When combined with the INCON® brand TS-MWS monitoring well brite sensor, you have the ability to accurately detect the presence of hydrocarbon floating on groundwater. This can be programmed to trigger a number of alarm actions, allowing you to react immediately.

SPECIFICATIONS

- 8", 10", and 14 " manway options.
- 2", 4" and 6" cap plug options.
- 2", 4" and 6" screen pipe options.
- 2" and 4" screen pipe filter wrap options.
- Monitoring well discriminating liquid sensor.

ORDERING INFORMATION

Model	Description
808-4-K	(1) 808-400-01 8" manway, (1) 772-102-01 4" cap plug, and (1) 773-200-02 4" screen pipe
810-6-K	(1) 810-302-01 10" manway, (1) 772-109-01 6" cap plug, and (1) 773-200-03 6" screen pipe

Note: Filter wrap and liquid sensor sold separately.



PROBE ACCESS MANHOLE

FLEX-ING® brand probe access manholes offer an ideal solution for housing fuel management systems electronics and providing tank access with isolation from backfill.

SPECIFICATIONS

- Height: 14.88" (377.95 mm)
- Cover diameter: 21.87" (550.50 mm)
- Bottom diameter: 14.88" (377.95 mm)
- Mounting bolts: 3/8" hex head mounting bolts with built-in washers bolt into anchors with couplings

ORDERING INFORMATION

Model	Description
20URTATG	Probe access manhole
81830701	Replacement cover with plain lid top





FLEXIBLE CONNECTORS

Since their introduction in 1995, FLEX-ING® FIREFLEX Flexible Connectors have quickly become the industry standard and benchmark for quality as a means to easily connect pipework system to other systems components such as submersible pumps or shear valves. The benefit of their use is undeniable. They have quickly become an integral part of any installation. Installers love their ease of installation while station owners have come to depend on their durability and how easy they make regular maintenance. With tons of available options, Franklin Fueling Systems has the right connector to fit any application.

HIGHLIGHTS

- Standard on all flexible connectors, the stainless steel corrugated fuel contact layers feature a thick construction and gain flexibility from having more corrugations per foot rather than thinner walls.
- Enclosing the corrugated fuel contact layer is a stainless steel braid that is manufactured from only high-grade stainless steel.
- Standard end fittings are nickel plated steel with stainless steel construction options available on any flexible connector that does not include a swivel end fitting.
- Available in a multitude of end connections to ensure the right fit for any application - including tees, elbows, and fiberglass transitions.
- All metal construction means one flexible connector for both above and below ground applications (may not be direct buried).
- Schedule 80 hex end fittings protect against deformation of the ends during installation.
- The EZ FIT union style coupling system is specifically designed to make connections in confined spaces simple and tight.
- EZ FIT union style couplings come complete with couplers and gaskets (flange only fittings excluded).

SPECIFICATIONS

- Meets USA NFPA 30-A fire code requirements.
- Outer shell: 304 stainless steel
- Inner core: 321 stainless steel
- End fittings: Nickel plated steel or stainless steel.
- 100% pressure tested to 100 PSI to assure quality.

Approvals/Certifications

- UL 2039 listed for above and below ground installation for use with gasoline, gas alcohol blends (up to E85), diesel, and Biodiesel.
- UL 2039 approved for 50 psi working pressure.

- | | |
|------------------------------|-------------------------------|
| 1 EZ Fit flange only* | 8 Hex female fixed (NPT)* |
| 2 EZ Fit male* | 9 Hex male fixed (BSPT)* |
| 3 EZ Fit female* | 10 Hex male swivel (BSPT)* |
| 4 EZ Fit fiberglass (glued)* | 11 90° male swivel |
| 5 Male swivel | 12 EZ Fit tee flanges only* |
| 6 Female swivel | 13 Flat faced round flange* |
| 7 Hex male fixed (NPT)* | 14 Raised faced round flange* |

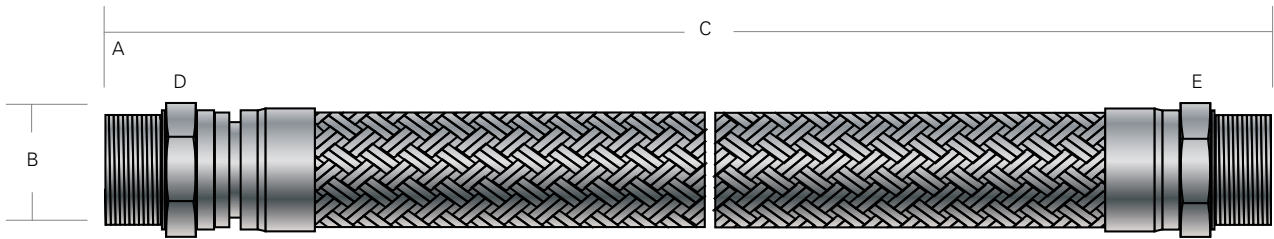
*Also available in stainless steel.



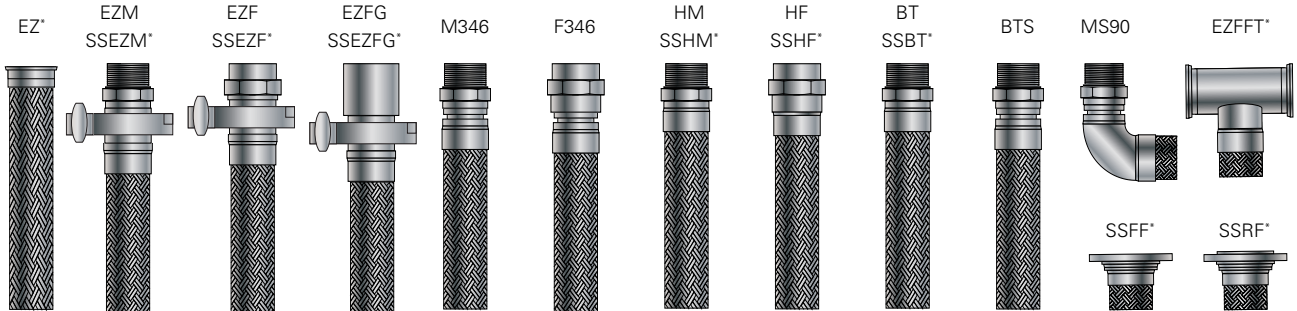
ORDERING INFORMATION

Use the diagrams below along with the Ordering Guide at the bottom to help you build your flexible connector model numbers.

Ordering Options Diagram



End Fitting Options



*These models feature full stainless steel construction.

Ordering Guide

Complete flexible connector part numbers have a specific order and are created using the following guidelines. Please note that full stainless steel models are available on any flexible connector that does not include swivel end fittings.

A B X C D X E

A = Product Type

FF = If either of the end connections are any type of swivel or EZ Fit, this option must be selected.

FFUL = If both end connections are fixed (non-swivel or EZ Fit), this option must be selected.

B = Hose Diameter

- 07 = 3/4"
- 10 = 1"
- 15 = 1 1/2"
- 20 = 2"
- 30 = 3"
- 40 = 4"

C = Overall Length in Inches

Use two-digit format

Examples:

FF20X18M346XHM = Flexible connector with swivel end fitting(s), 2" hose diameter, 18" overall length, with one male swivel end fitting and one fixed Hex male end fitting.

FF20X18SSEZMXSSHM = Flexible connector, 2" hose diameter, 18" overall length, with one stainless steel EZ Fit male end fitting and one stainless steel fixed hex male end fitting, full stainless steel construction.

D & E = End Fitting Options (non-swivel options available in stainless steel)

- EZ = EZ FIT flange only (stainless steel only)
- EZM = EZ FIT male NPT (SSEZM = stainless steel)
- EZF = EZ FIT female NPT (SSEZF = stainless steel)
- EZFG = EZ FIT fiberglass glue pipe (SSEZFG = stainless steel)
- M346 = Male swivel NPT
- F346 = Female swivel NPT
- HM = Hex male fixed NPT (SSHM = stainless steel)
- HF = Hex female fixed NPT (SSHF = stainless steel)
- BT = Hex male fixed BSPT (SSBT = stainless steel)
- BTS = Male swivel BSPT
- MS90 = 90° with male swivel NPT
- EZFFT = EZ Fit Tee (stainless steel only)
- SSFF = Flat faced round flange (stainless steel only)
- SSRF = Raised faced round flange (stainless steel only)

NOTE: Each EZ FIT union style coupling comes complete with couplers and gaskets.

Flexible Connectors with Differing Hose and End Fitting Diameters

All end fittings are, by default, the same diameter as the hose. If you require a flexible connector where the end fitting diameter does not match the hose diameter, the size must be indicated numerically in front of the corresponding fitting as in the following example.

Example: FFUL15X18HM2HM = Flexible connector with fixed end fittings, 1 1/2" hose diameter, 18" overall length, with one 1 1/2" hex male fixed end fitting, and one 2" hex male fixed end fitting.

Rules:

- 1) End fitting diameters can not be smaller than hose diameters.
- 2) Only one hose fitting per flexible connector can be of a different diameter than the hose diameter.
- 3) End fitting diameter must only be one size larger than hose (1" hose could use 1 1/2" fitting, 1 1/2" hose could use 2" fitting, etc.).
- 4) EZ Fit end fittings are available in 1", 2", and 3" only.
- 5) Additional end fitting types are available. Please contact Customer Service with inquiries.

SERVICE STATION
HARDWARE



ORDERING INFORMATION CONTINUED

Common Models

You can also select from the following most-common flexible connector model numbers.

Vertical Connection into Bottom of 362 Series Vapour or 662 Series Product Shear Valve

Model	Description	Metric Length
FF15X12BTXBTS	FIREFLEX 1½" X 12" Fixed male by swivel male-BSPT	300 mm
FF15X14BTXBTS	FIREFLEX 1½" X 14" Fixed male by swivel male-BSPT	350 mm
FF15X16BTXBTS	FIREFLEX 1½" X 16" Fixed male by swivel male-BSPT	400 mm
FF15X18BTXBTS	FIREFLEX 1½" X 18" Fixed male by swivel male-BSPT	450 mm
FF15X18BTSXBTS	FIREFLEX CN, 1½" Fixed male by swivel male-BSPT 18" L	450 mm
FF15X24BTSXBTS	FIREFLEX CN, 1½" Fixed male by swivel male-BSPT 24" L	600 mm
FF20X18BTXBTS	FIREFLEX 2" X 18" Fixed male by swivel male-BSPT	450 mm
FF20X24BTXBTS	FIREFLEX 2" X 24" Fixed male by swivel male-BSPT	600 mm
FF20X30BTXBTS	FIREFLEX 2" X 30" Fixed male by swivel male-BSPT	750 mm

Connection at Pump Manifold -All NPT

Model	Description	Metric Length
FF20X15HMXMS90	FIREFLEX 2" X 15" Fixed Hex male x welded 90 elbow w/ Swivel male-NPT	375 mm
FF20X18HMXMS90	FIREFLEX 2" X 18" Fixed Hex male x welded 90 elbow w/ Swivel male-NPT	450 mm
FF20X24HMXMS90	FIREFLEX 2" X 24" Fixed Hex male x welded 90 elbow w/ Swivel male-NPT	600 mm

Connection at Pump Manifold - NPT Pump End, BSPT Pipe End

Model	Description	Metric Length
FF20X24BTXMS90	FIREFLEX 2" X 24" Fixed Hex male-BSPT x welded 90 elbow w/ Swivel male-NPT	600 mm



ISOLATION ACCESSORIES

These protective sleeves are constructed with durable, state-of-the-art engineered polymers which are resistant to fuels and other corrosive materials to provide an extended service life.

ORDERING INFORMATION CONTINUED

Yellow Jacket Easy Fit Boot

The Yellow Jacket Easy Fit Boot features a Velcro™ seal making it easy to install on existing piping systems or new installations.

Model	Description
YJVSLEEVE	30" Yellow Jacket Easy Fit boot with Velcro™ seal
YJVSLEEVE25	25' Yellow Jacket Easy Fit boot with Velcro™ seal
YJVSLEEVE50	50' Yellow Jacket Easy Fit boot with Velcro™ seal
YJVSLEEVEII	30' Yellow Jacket Easy Fit boot with Velcro™ seal, adhesive, straps and two mounting collars

Yellow Jacket Heat Shrink Wrap

Model	Description
YJHS03	36" Yellow Jacket heat shrink wrap
YJHS20	20' Yellow Jacket heat shrink wrap
YJHS50	50' Yellow Jacket heat shrink wrap

Yellow Jacket Boot

The Yellow Jacket Boot has the ability to be pulled back while the connection is being made and then slide back in place to seal off.

Model	Description
YJ32BOOT	3½" ID x 30" Yellow Jacket boot
YJ32BOOTKIT-40	3½" ID x 40" Yellow Jacket boot, adhesive, straps and two mounting collars

Heat Shrink Flex Wrap

Model	Description
FLEXWRAP47X03	4.7" x 3' heat shrink sleeve





ANTI SYPHON VALVES

EBW[®] anti syphon valves are recommended for all aboveground storage applications to prevent fuel from exiting the storage tank in the event of a broken line or leak.

The anti syphon valves shut off product flow when lines are broken, preventing fuel spillage and fire hazards. Each valve has an adjusting mechanism allowing for various liquid head pressure settings within the valve range. The adjusting mechanism is lockable after the preferred setting is made. EBW[®] anti syphon valves are set to maximum head pressure when shipped from the factory. The anti syphon valve also includes a pressure relief valve, eliminating thermal expansion of fluid in the lines.

HIGHLIGHTS

- Hydrostatic pressure adjusting mechanism with durable weather cap.
- Built in thermal expansion pressure relief valve.
- 3/4" and 1" models are ideal for fuel oil and generator applications.
- Can be used in pressure systems.
- NFPA 30.
- API/RP 2000.

SPECIFICATIONS

Materials

- Body: ductile iron-zinc plated.
- Spring: zinc plated steel.
- Adjustment screw: stainless steel.
- Disc: fluorocarbon seal.

Approvals

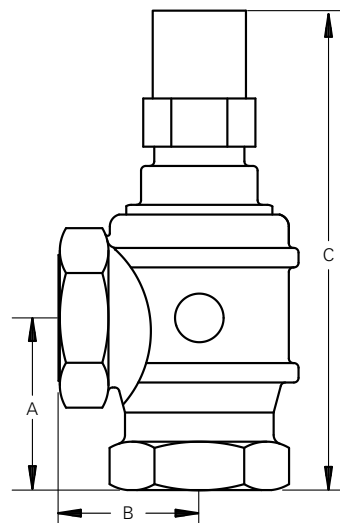
- UL Listed

ORDERING INFORMATION

Model	Description
605-300-01	¾" NPT anti syphon valve, 0' to 12' head pressure
606-300-01	1" NPT anti syphon valve, 0' to 12' head pressure
616-300-03	1½" NPT anti syphon valve, 0' to 5' head pressure
616-300-01	1½" NPT anti syphon valve, 5' to 12' head pressure
616-300-02	1½" NPT anti syphon valve, 12' to 25' head pressure
636-300-11	2" NPT anti syphon valve, 5' to 12' head pressure, AGB compatible
636-300-12	2" NPT anti syphon valve, 12' to 25' head pressure, AGB compatible
636-300-31	2" BSPT anti syphon valve, 5' to 12' head pressure, AGB compatible
636-300-32	2" BSPT anti syphon valve, 12' to 25' head pressure, AGB compatible

Model	Size		Thread	Weight	
	In.	mm		Lbs.	kg
60530001	0.75	19.02	NPT	3.4	1.54
60630001	1	25.4	NPT	3.2	1.45
61630003	1.5	38.1	NPT	4.6	2.09
61630001	1.5	38.1	NPT	4.6	2.09
61630002	1.5	38.1	NPT	4.6	2.09
63630011*	2	50.8	NPT	7.2	3.27
63630012*	2	50.8	NPT	7.2	3.27
63630031*	2	50.8	BSPT	7.08	3.22
63630032*	2	50.8	BSPT	7.08	3.22

*Alcohol, gas, biofuel compatible



*Alcohol, gas, biofuel compatible (E-85, gasoline and biodiesel) models come with E-coated body for full compatibility.



PRESSURE REGULATOR VALVES

The EBW® 664 pressure regulator valve is designed to be used in conjunction with suction type dispensers connected to an above-ground storage tank. The pressure regulator valve prevents fuel from flowing to the pumping unit and flowing out the vent tube of the self-contained dispenser when the pump is not activated. The pressure regulator valve is a vacuum actuated valve which will not allow product flow until the suction of the pumping unit opens the valve. The valve closes by means of an internal spring when pumping is complete.

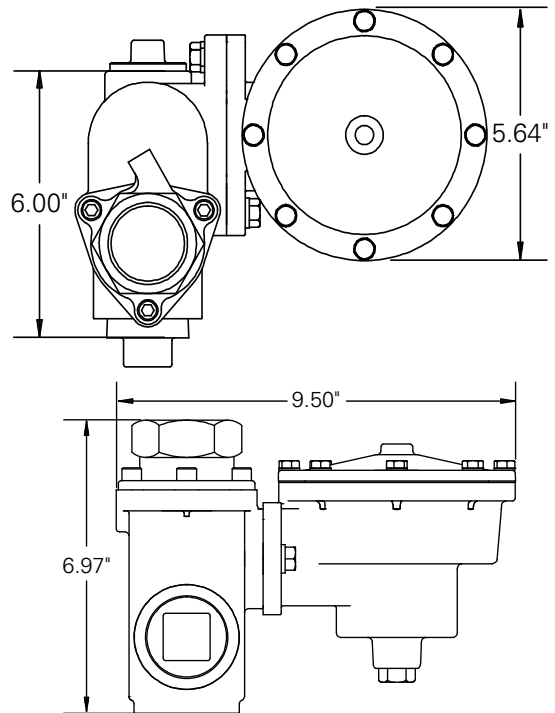
HIGHLIGHTS

- Hydrostatic pressure adjusting mechanism with durable weather cap.
- Built in thermal expansion pressure relief valve.
- Shear section is standard, eliminating need for an additional shear valve.
- NFPA 30.
- API/RP 2000.

SPECIFICATIONS

Materials

- Body: cast iron.
- Seals: fluorocarbon.
- Filter: stainless steel.
- Poppet: fluorocarbon.



ORDERING INFORMATION

Model	Description	Weight	
		Lbs.	Kg
66430201	Male-NPT	19	8.62
66430202	Union	19.3	8.75
66430203	Female-NPT	19	8.62
66430206	Female-Poppeted	19	8.62
66430226	Female-BSPT	19	8.62

Model	Description
66222001	Male replacement adapter
66222101	Union replacement adapter
66222201	Female replacement adapter for 66430203
66421101	Female Replacement Adaptor for 66430206
66430401	Mounting bracket





WARDEN® AST OVERFILL PREVENTION VALVE

The EBW Warden® is designed to provide a positive shut-off during a pressurised fill delivery on an aboveground storage tank. It eliminates spills and overfills, avoiding costly cleanup expenses and ground contamination. The Warden® is fully adjustable to provide shut-off in various height and capacity aboveground tanks. It is designed to fit into a 4" fill riser, making installation on new and existing locations simple and quick. Designed with inverted floats for use in small or large rectangular tanks. Requires 4" minimum ullage.

Note: The Warden® is recommended for use with clean product only. Contaminated product may cause erratic operation or valve failure.

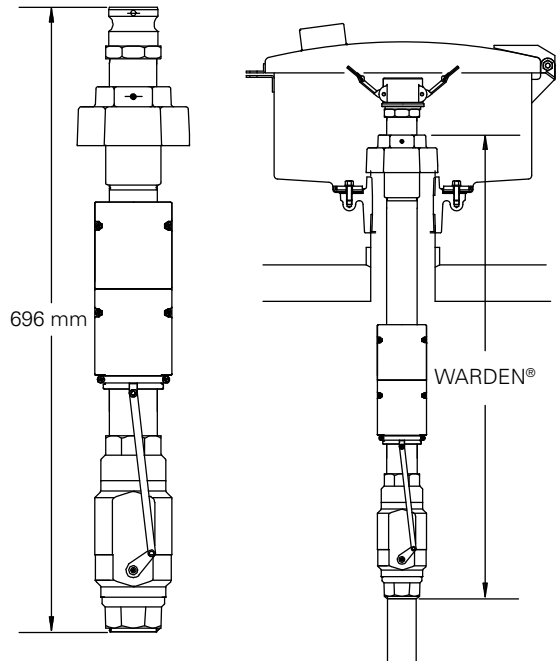
HIGHLIGHTS

- Cylindrical float design eliminates interference with tank walls and cross braces.
- 6.9 bar working pressure rating.
- Flow rate 757 L/min at 1.38 bar.
- No minimum flow rate.
- Ships complete with upper nipple and tight fill adapter with crossbar to prevent open fills.
- Simply thread onto a 4" riser pipe to install. Length of upper tube determines shut-off point.

SPECIFICATIONS

Materials

- Valve body: aluminium 356-T6.
- Poppet: aluminium 356-T6.
- Shaft: stainless steel.
- Float: high density polyethylene.
- Nipple: epoxy coated black iron pipe.



ORDERING INFORMATION

Model	Description	Weight	
		Lbs.	Kg
70942001	Warden®, 4" overfill with inverted floats	12.5	5.67
77421220	2" dust cap	1.25	0.57



TANK VENTS

EBW® tank vents are designed to provide an open path for vapours from an underground or aboveground storage tank to the atmosphere.

HIGHLIGHTS

- Dome-shaped top design drains off moisture including rain, snow and ice.
- 30 mesh prevents dirt and debris from entering vent lines.

SPECIFICATIONS

Materials

- Body: aluminium.
- Lid: zinc plated steel.
- Seal: brass.

ORDERING INFORMATION

Model	Description	Pack		Weight	
		mm	In.	Kg	Lbs.
80020702	Vent Cap Aluminium Upward Discharge 2" Screw Fixing	51	2	0.42	1
80020301	Vent Cap Aluminium Upward Discharge 3" Screw Fixing	76	3	0.54	1.19



DOWNWARD TANK VENTS

EBW® tank vents are designed to provide an open path for vapours from an underground or aboveground storage tank to the atmosphere.

HIGHLIGHTS

- Dome-shaped top design drains off moisture including rain, snow and ice.
- 30 mesh prevents dirt and debris from entering vent lines.

SPECIFICATIONS

Materials

- Body: aluminium.
- Lid: zinc plated steel.
- Seal: brass.

ORDERING INFORMATION

Model	Description	Pack Size	Kg	Lbs.
VENT CAP 2	Vent Cap Aluminium Down Discharge 1.5"/2" BSPT	24	0.54	1.19

Designed with two sets of female threads to engage a 1-1/2" or 2" [MC] BSPT male thread vent riser in same enclosure.



PRESSURE VACUUM VENTS

EBW® pressure vacuum vents are used on storage tank vent pipes to discharge vapours upward into the atmosphere. The top casting is dome-shaped to quickly drain off moisture including rain, snow and ice. Body and cover are cast aluminium. 2" and 3" models have vent rates of 8000 cubic feet per hour, and produce 8.0 ounces of pressure and 0.5 ounces of vacuum.

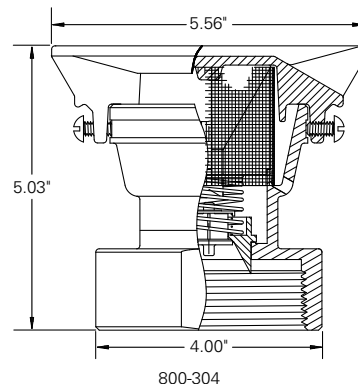
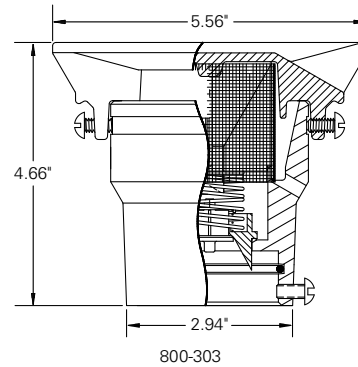
HIGHLIGHTS

- Two model types available, NPT/BSPT threads or O-ring with locking screw.
- NFPA 30°

SPECIFICATIONS

Materials

- Body: aluminium.
- Poppet: acetal.
- Spring: stainless steel.
- Screws: zinc plated steel.
- Screen: brass.
- These vents should not be used on UST with a throughput of 100,000 gallons or more per month (per 40 CFR 63 subpart CCCCCC)..



ORDERING INFORMATION

Model	Description	Size		Weight	
		mm	In.	Kg	Lbs.
80230301	PV Valve Aluminium Upward Discharge 2" NPT	51	2	0.85	1.88
80230321	PV Valve Aluminium Upward Discharge 2" BSPT	51	2	0.85	1.88
80230302	PV Valve Aluminium Upward Discharge 2" Screw Fixing	51	2	0.83	1.84



NPT ANGLE

Angle check valves are used on suction system fuel lines to maintain prime. EBW® angle check valves are installed at the top of an underground storage tank suction line. Single poppet models are typically used where access to the valve is readily available.

SPECIFICATIONS

Materials

- Body: zinc plated cast iron.
- Seat: brass.
- Poppet: brass.
- NPT: brass.
- Spring: stainless steel.

ORDERING INFORMATION

Model	Pack		Poppet Type	Weight	
	In.			Kg	Lbs.
63520101	2		Single	3.3	7.25



1.5" UNION

EBW® union check valves are designed to be installed into an existing union to temporarily stop the loss of prime due to damaged foot valves, angle check valves, or vertical check valves in a suction system fuel line.

HIGHLIGHTS

- Spring-loaded poppet.
- Open construction design allows for free flow of product.
- With or without protective screen.

SPECIFICATIONS

Materials

- Body: bronze.
- Poppet: acetal.
- Seal: fluorocarbon.
- Spring: stainless steel.
- Screen: brass.

ORDERING INFORMATION

Model	Pack		Screen	Weight	
	In.	mm		Lbs.	Kg
65010402	1.5	38.1	Yes	0.5	0.23
65010802	1.5	38.1	No	0.5	0.23





DEFENDER SERIES® BUNDLE PACKAGES

Combine Defender Series® spill containers, overfill prevention valves (OPVs), and riser, cap, and adapters into a single part number and receive a 10% discount* compared to purchasing all components separately.

HIGHLIGHTS

- Get a premium Defender Series® solution from grade level to tank for fill point and overfill release prevention.
- Components are designed together to work as an optimized system.
- An easy fill point solution to help comply with new UST Federal regulations.

ORDERING INFORMATION

Components

1. Defender Series® spill container
2. Defender Series® overfill prevention valve
3. Riser, cap, and adapter

Ordering Guide

A B C

A = Spill Container

Select from the spill container MODEL numbers below

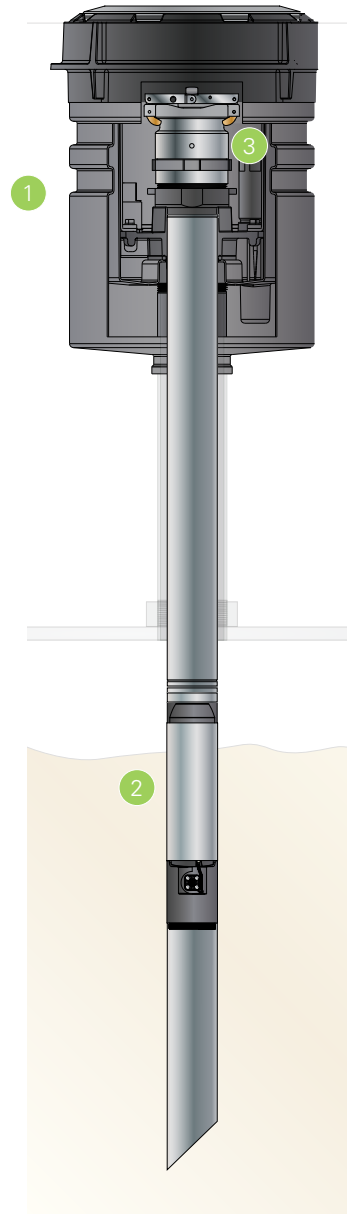
B = Overfill Prevention Valve

Select the ALPHA character below which corresponds with the appropriate OPV

C = Riser, Cap, and Adapter

- 1 = Stainless steel swivel fill adapter, cap, and nipple
- 2 = No riser, cap, or adapter

* Item 70541202 includes the SWF-100-SS Swivel Fill Adaptor, 70521307 – Close nipple 4" NPT 2.88" and 77720102 – Top seal cap 4", AGB
Example: 705545001A1 = Defender Series® 5 gallon spill container, single wall, NPSM thread, with drain, with gray epoxy-coated cast iron gasketed lid with Defender Series® overfill prevention valve with 5' top drop tube, 8' bottom drop tube with Stainless steel swivel fill adapter, cap, and nipple



ORDERING INFORMATION

Defender Series® Spill Containers

Model	Description
705545001	Defender Series® 5 gallon spill container, single wall, NPSM thread, with drain, with gray epoxy-coated cast iron gasketed lid
705545002	Defender Series® 5 gallon spill container, single wall, NPSM thread, without drain, with gray epoxy-coated cast iron gasketed lid
705545011	Defender Series® 5 gallon spill container, single wall, NPT thread, with drain, with gray epoxy-coated cast iron gasketed lid
705545012	Defender Series® 5 gallon spill container, single wall, NPT thread, without drain, with gray epoxy-coated cast iron gasketed lid
705545021	Defender Series® 5 gallon spill container, single wall, BSPT thread, with drain, with gray epoxy-coated cast iron gasketed lid
705545022	Defender Series® 5 gallon spill container, single wall, BSPT thread, without drain, with gray epoxy-coated cast iron gasketed lid
705555101	Defender Series® 5 gallon spill container, double wall, NPSM thread, with drain, with I2 monitor, with gray epoxy-coated cast iron gasketed lid
705555102	Defender Series® 5 gallon spill container, double wall, NPSM thread, without drain, with I2 monitor, with gray epoxy-coated cast iron gasketed lid
705555111	Defender Series® 5 gallon spill container, double wall, NPT thread, with drain, with I2 monitor, with gray epoxy-coated cast iron gasketed lid
705555112	Defender Series® 5 gallon spill container, double wall, NPT thread, without drain, with I2 monitor, with gray epoxy-coated cast iron gasketed lid
705555121	Defender Series® 5 gallon spill container, double wall, BSPT thread, with drain, with I2 monitor, with gray epoxy-coated cast iron gasketed lid
705555201	Defender Series® 5 gallon spill container, double wall, NPSM thread, with drain, with TSP-ULS sensor, with gray epoxy-coated cast iron gasketed lid
705555202	Defender Series® 5 gallon spill container, NPSM thread, without drain, with TSP-ULS sensor, with gray epoxy-coated cast iron gasketed lid
705555211	Defender Series® 5 gallon spill container, double wall, NPT thread, with drain, with TSP-ULS sensor, with gray epoxy-coated cast iron gasketed lid
705555212	Defender Series® 5 gallon spill container, NPT thread, without drain, with TSP-ULS sensor, with gray epoxy-coated cast iron gasketed lid

Defender Series® Overfill Prevention Valves

Model	Alpha	Description
708591901	A	Defender Series® overfill prevention valve with 5' top drop tube, 8' bottom drop tube
708591902	B	Defender Series® overfill prevention valve with 5' top drop tube, 10' bottom drop tube
708591921	C	Defender Series® overfill prevention valve with 5' top drop tube, 8' bottom drop tube, AGB compatible*
708591922	D	Defender Series® overfill prevention valve with 5' top drop tube, 10' bottom drop tube, AGB compatible*
708592901	E	Defender Series® overfill prevention valve with 10' top drop tube, 8' bottom drop tube
708592902	F	Defender Series® overfill prevention valve with 10' top drop tube, 10' bottom drop tube
708592921	G	Defender Series® overfill prevention valve with 10' top drop tube, 8' bottom drop tube, AGB compatible*
708592922	H	Defender Series® overfill prevention valve with 10' top drop tube, 10' bottom drop tube, AGB compatible*
708593901	I	Defender Series® overfill prevention valve, coaxial with 6.5' top drop tube, 8' bottom drop tube
708593902	J	Defender Series® overfill prevention valve, coaxial with 6.5' top drop tube, 10' bottom drop tube
708593923	K	Defender Series® overfill prevention valve, poppoted coaxial with 6.5' top drop tube, 8' bottom drop tube, AGB compatible*
708593924	L	Defender Series® overfill prevention valve, poppoted coaxial with 6.5' top drop tube, 10' bottom drop tube, AGB compatible*

*Alcohol, gas, biofuel compatible (E-85, gasoline and biodiesel) models come with hard coated anodized drop tubes for full compatibility.



TOOLS

EBW® tank tools make installation faster, safer and easier. These heavy duty tools can be used for removal as well as installation, on new or existing systems. Hard-to-reach fill adapters are easily removed or installed with the EBW® heavy duty chain wrench. It features a 3/4" drive to reach adapters located below grade level or in other difficult locations. EBW® extractor wrenches were designed to easily remove or install valves, test plugs and pipe caps. The 321-100 is used with the EBW® extractor foot valve, extractor vent valves and most competitor extractor fittings.

- Heavy duty construction.
- Wrench has cast iron head with steel chain.
- Wrench is steel constructed.



Model	Description	Application	Weight	
			Lbs.	Kg
32110001	60" extractor wrench	Remove and install	14	6.4
90110101	3/4" chain wrench	Remove and install	3	1.4

The T-6100-FT flaring tool reduces the installation time for 4" aluminium fill drop tubes. This flaring tool cuts and flares the tube in less than 10 minutes. Eliminates drilling, bolting and epoxying a factory-supplied drop tube.

- Cut tube.
- Flare tube.
- Fix small dents on tube.
- No drill required.



Model	Description
T-6100-FT	Flaring tool kit for flaring drop tubes

Note: May require two week lead time, consult factory.

This 4" x 4" threaded riser adapter installs at the top of the 4" field-installed tank riser for a precision sealing surface for spill containers and probe adapters. Adds 1-3/4" to riser length.

- Patent number 6,840,549 B1.
- EVR Phase 1 Certification VR-101.
- Tracer tight approved.
- Missouri MOPETP approved APCP-0002-001-99.



Model	Description
M/F 4x4	4" x 4" threaded riser adapter

Alignment brackets to keep riser pipes supported at 16" or centre-to-centre separation for alignment into multi-port cover.

- EVR Phase 1 Certification VR-101.
- Missouri MOPETP approved APCP-0002-001-99.



Model	Description
M-1600	Riser alignment bracket for 16" centre

INSTALLATION TOOLS

Designed to install and remove Phil-Tite and competitive make spill containers and swivel adapters. Each tool is colour-coded to perform specific functions.

Model	Purpose
Black adapter	Phil-Tite spill containers
Orange adapter	Phil-Tite fill and vapour swivel adapters and M/F 4x4 riser adapters
T-handle	Attaches to colour-coded tools
Allen wrench	Removes screw protecting threaded openings for jackscrews

Model	Description
T-7001	T-handle for installation tool kit
T-7002-A	Black heavy duty adapter used to install removable Phil-Titespill buckets
T-7002-HD	Heavy duty spill bucket removal tool, includes T-7002-A adapter and T-handle with handle weights
T-7043	Tool kit required to install a Phil-Tite spill container, tool kit items listed above
T-7100	Red adapter tool used to remove old fill non-swivel adapters with lugs
T-7102	Orange adapter tool, used to remove or install SWF-100-B and SWV-101-B swivel adapters and M/F 4x4 riser adapters
T-7103	Blue adapter tool, used to install OPW tall swivel adapters
T-7104	Green torque adapter tool for static torque testing on any swivel adapter
T-7200	Cast iron cover removal tool
T-7106	Defender Series® spill container installation tool
T-7107	Defender Series® spill container double wall vacuum test kit



SERVICE STATION
HARDWARE

Keeps debris out of the filter area of the spill container. Easily removed and cleaned.

- EVR Phase 1 Certification VR-101.
- Missouri MOPETP approved APCP-0002-001-99.

Model	Description
PP-1005-TB	Debris bucket without pump
PP-1005-TBP	Debris bucket with pump



Designed for separation and orderly support of piping runs. Intended to be buried for permanent installation.

Model	Description
48-409	Styrofoam piping supports, 20-pack



Used to ease the removal of cast iron covers.

Model	Description
T-7200	Cast iron cover removal tool





PIPE GUARDS & BOLLARDS

Protect property and avoid costly damage to dispensers with these schedule 40 pipe guards and bollards.

HIGHLIGHTS

- Available in straight pipe or double radius.
- Schedule 40 pipe construction.
- Primer finished, ready for your custom paint.
- Stainless steel mill finish available upon request.
- Bollards available with or without caps.

ORDERING INFORMATION

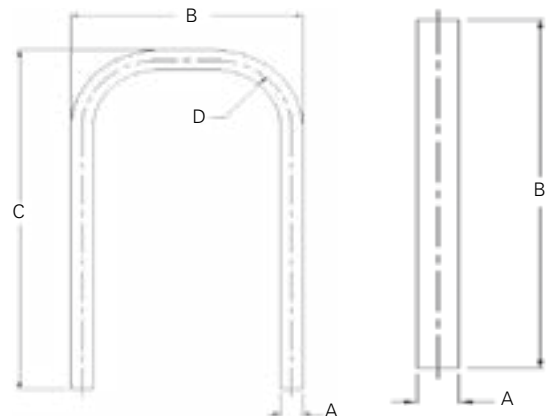
U-Shaped Pipe Guards

Model	A	B	C	D
BGU35565414	3.5"	36"	54"	14"
BGU35415314	3.5"	41"	53"	14"
BGU35485014	3.5"	48"	50"	14"
BGU40365614	4.0"	36"	56"	14"
BGU40415314	4.0"	41"	53"	14"
BGU40417414	4.0"	41"	74"	14"
BGU40435414	4.0"	43"	54"	14"
BGU40485114	4.0"	48"	51"	14"

Bollards

Model	A	B
BGS4042	4.0"	42"
BGS4063	4.0"	63"
BGS4072	4.0"	72"
BGS6063	6.0"	63"
BGS6072	6.0"	72"
BGS6084	6.0"	84"

Note: Do not store primed units outside as primer alone will not prevent rust when exposed to elements





REMOTE FILL BOX

These stainless steel remote fill boxes house valves, fittings and connectors required for the remote filling of underground storage tanks. The remote fill boxes are available in a variety of configurations, connection sizes and mounting styles and can be ordered as pre-plumbed (including valves, fittings, and connectors) or not plumbed.

HIGHLIGHTS

- Lockable door.
- Hand pump with shut-off valve.
- Inlet connection with quick couplers and dust caps.
- Internal pre-plumbed check valves, fittings and shut-off valves.
- Wall or post-mount brackets.
- Optional vapour recovery bracket.
- Available with 2" or 3" threaded connections.
- Carbon steel version also available.

ORDERING INFORMATION

Model	Description	Height	Depth	Width
RFBP-TOP	3" pre-plumbed box, top inlet	643 mm	648 mm	515 mm
RFBP-REAR	3" pre-plumbed box, rear inlet	643 mm	648 mm	515 mm
RFBNP-TOP	3" box only (not plumbed), top inlet	643 mm	648 mm	515 mm
RFBNP-REAR	3" box only (not plumbed), rear inlet	643 mm	648 mm	515 mm

WALL MOUNT REMOTE FILL BOX

The wall mount remote fill boxes feature a stainless steel enclosure design which houses valves, fittings and connectors required for the remote filling of underground tanks. The wall mount model is designed for external building wall applications.

HIGHLIGHTS

- 14 gauge stainless steel construction.
- Hinged access door with gasket.
- Lockable handle.
- 18" deep spill compartment.
- 3/4" NPT drain connection.

ORDERING INFORMATION

Model	Description	Height	Depth	Width
RFBP-WALL	Wall mount remote fill box	643 mm	648 mm	515 mm



FLEXIBLE CONNECTORS FOR DEF/ADBLUE®

FLEX-ING® brand diesel exhaust fluid flexible connectors allow you to easily connect a pipework system to other systems components such as submersible pumps. Installers love their ease of installation while station owners have come to depend on their durability and how easy they make regular maintenance. The all-stainless steel construction provides complete compatibility with DEF (Diesel Exhaust Fluid)/AdBlue®. With tons of available options, Franklin Fueling Systems has the right connector to fit any application.

HIGHLIGHTS

- The corrugated DEF/AdBlue® contact layers feature a 25% thicker metal construction and gain flexibility from having more corrugations per foot rather than thinner walls.
- Enclosing the corrugated DEF/AdBlue® contact layer is a stainless steel braid that is manufactured from only high-grade stainless steel.
- The EZ FIT union style coupling system is specifically designed to make connections in confined spaces simple and tight.
- Each EZ FIT male and female union style coupling comes complete with couplers and gaskets.

SPECIFICATIONS

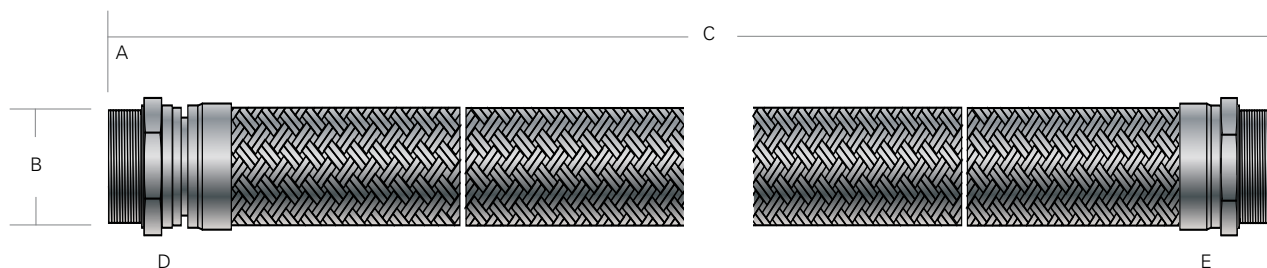
- All metal construction means one flexible connector for both above and below ground applications
- An 18-8 alloy outer wrap, 321 Stainless Steel inner core provides a long service life
- Thick, schedule 80 hex end fittings protect against deformation of the ends
- 100% pressure tested to assure quality
- 50 Psi working pressure
- EZ FIT clamp and gasket are included with each assembly
- Stainless steel fittings and EPDM gaskets are fully DEF/AdBlue® compatible

ORDERING INFORMATION

Use these diagrams below along with the Ordering Guide at the bottom of the page to help you build your flexible connector model numbers.

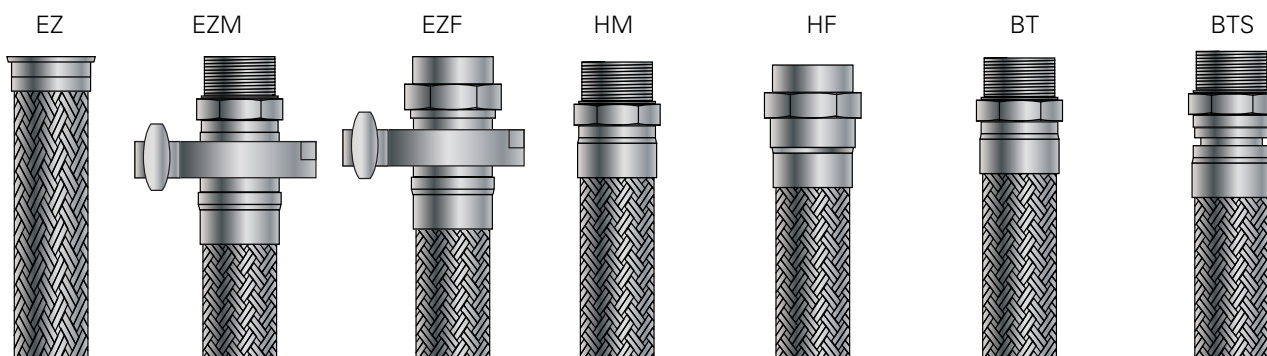
Ordering Options Diagram

Use the options and descriptions in the Ordering Guide along with this diagram to assist in building your model numbers.



End Fitting Options

Use the options and descriptions in the Ordering Guide along with the diagrams below to select your end fitting types (two total).



Ordering Guide

DEF A X B C X D

- DEF = DEF/AdBlue® Flexible Connector
 - All materials are fully compatible with DEF/AdBlue® including stainless steel fittings and EPDM seals.
- A = Hose Diameter
 - 07 = ¾"
 - 10 = 1"
 - 15 = 1½"
 - 20 = 2"
 - 30 = 3"
- B = Overall Length in Inches
 - Use two-digit format
- C & D = End Fitting Options
 - EZ = EZ FIT flange only
 - EZM = EZ FIT male NPT (Each EZ FIT union style coupling comes complete with couplers and gaskets)
 - EZF = EZ FIT female NPT (Each EZ FIT union style coupling comes complete with couplers and gaskets)
 - M = Hex male fixed NPT
 - F = Hex female fixed NPT
 - BT = Hex male fixed BSPT
 - BTF = Hex female fixed BSPT

Example: DEF20X18MXEZM = DEF flexible connector, 2" hose diameter, 18" overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other (includes EZCLAMP and EZ20GASKET-EPDM).

ORDERING INFORMATION CONTINUED

Flexible Connectors with Differing Hose and End Fitting Diameters

All end fittings are, by default, the same diameter as the hose. If you require a flexible connector where the end fitting diameter does not match the hose diameter, the size must be indicated numerically in front of the corresponding fitting as in the example below.

Rules:

- End fitting diameters can not be smaller than hose diameters.
- Only one hose fitting per flexible connector can be of a different diameter than the hose diameter.
- End fitting diameter must only be one size larger than hose (1" hose could use 1½" fitting, 1½" hose could use 2" fitting, etc.)

Example : DEF15X18MX2M = DEF flexible connector, 1½" hose diameter, 18" overall length, with one 1½" hex male fixed NPT fitting on one end and one 2" male NPT fitting on the other.

Common Models

You can also select from the following most-common flexible connector model numbers.

Model	Description
DEF10X10MXEZM	DEF flexible connector, 1" hose diameter, 254 mm overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other
DEF10X12MXEZM	DEF flexible connector, 1" hose diameter, 305 mm overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other
DEF10X12MXM	DEF flexible connector, 1" hose diameter, 305 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF10X15MXM	DEF flexible connector, 1" hose diameter, 381 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF10X18MXM	DEF flexible connector, 1" hose diameter, 457 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF15X18MXEZM	DEF flexible connector, 1½" hose diameter, 457 mm overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other
DEF15X18MXM	DEF flexible connector, 1½" hose diameter, 457 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF20X12MXM	DEF flexible connector, 2" hose diameter, 305 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF20X18MXEZM	DEF flexible connector, 2" hose diameter, 457 mm overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other
DEF20X18MXM	DEF flexible connector, 2" hose diameter, 457 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF20X24MXEZM	DEF flexible connector, 2" hose diameter, 610 mm overall length, with one hex male fixed NPT fitting on one end and one EZ FIT male NPT fitting on the other
DEF20X24MXM	DEF flexible connector, 2" hose diameter, 610 mm overall length, with one hex male fixed NPT fitting on one end and one hex male fixed NPT fitting on the other
DEF20X30MXF	DEF flexible connector, 2" hose diameter, 762 mm overall length, with one hex male fixed NPT fitting on one end and one hex female fixed NPT fitting on the other



SHEAR VALVES FOR DEF/ADBLUE®

FLEX-ING® brand 1½" diesel exhaust fluid shear valves shut off the flow of DEF/AdBlue® in the event of a vehicle collision with a dispenser preventing an excessive and uncontrolled release into the environment. The optional e-coated mounting bracket allows installation both in containment sumps beneath the dispenser as well as direct mounting to the concrete forecourt.

HIGHLIGHTS

- Integrated wrench flats for easy installation.
- Mounting bracket kit allows for in-sump containment or flush mounting.
- Available with either 1½" NPT or BSPT inlet (bottom) and 1" NPT or BSPT outlet (top) options.

SPECIFICATIONS

- Body: Stainless steel
- Mounting bracket: E-coated steel
- Height: 3¾" (95.25 mm)
- Break force: Under 650 pound-feet (884 N-m)
- Break force within parameters established by UL842 for product shear valves.
- Must be installed with locally supplied 1" rigid pipe threaded into outlet.

ORDERING INFORMATION

Model	Description
663100001	DEF/AdBlue® shear valve, 1½" NPT inlet, 1" outlet
663100021	DEF/AdBlue® shear valve, 1½" BSPT inlet, 1" outlet
66320000	Mounting bracket for DEF/AdBlue® shear valve including U-bolt, nuts and bracket guides

FUEL/CHEMICAL COMPATIBILITY CHART TO EN14125:2013 (RETAIL SPECIFIC)

Automotive Fuels

- Gasohol (E1 to E10)
- Premium Unleaded Gasoline
- Regular Unleaded Gasoline
- Premium Leaded Gasoline
- Diesel

Bio-Fuels & Blends

- Ethanol 100% (Ethyl alcohol)
- E85 - Ethanol 85% + Unleaded Fuel 15%
- E70 - Ethanol 70% + Unleaded Fuel C 30%
- Ethanol 50% + reference Fuel C 50%
- Ethanol 30% + reference Fuel C 70%
- Ethanol 10% + reference Fuel C 90%
- Biodiesel 10% to 100%

Methanol Mixtures

- Methanol 100%
- Methanol 50% + Reference Fuel C 50%
- Methanol 15% + Reference Fuel C 85%

Test Fuels & Fuel Additives

- UL971 – MV,CT,HB,AM
 - ASTM Fuel C 100%
 - EN14125:2013 Fuel 1
 - EN14125:2013 Fuel 2
 - No.2 Fuel Oil
 - MTBE 10% + reference Fuel C 90%
 - MTBE 15% + reference Fuel C 85%
 - Toluene
 - AdBlue*
- * Requires stainless steel transition fittings.

Aviation & Marine Fuels

- Jet A1 (Avtur)
- JP8 (F-34)
- Methmix
- Avgas
- Kerosene

TRENCHES (WIDTH, DEPTH & FALL BACK)

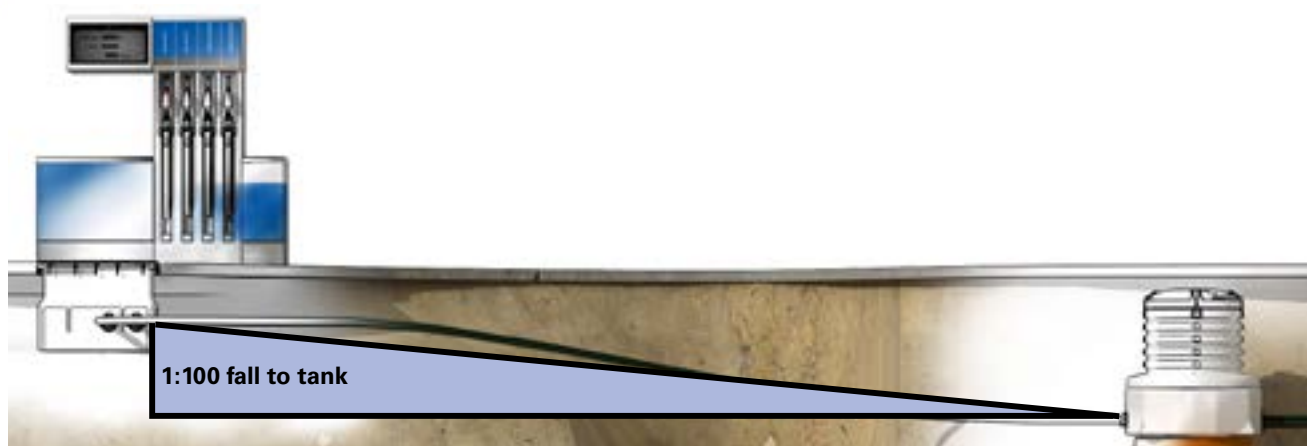
It is important to construct proper trenches before laying UPP® pipe. Trenches should be wide and deep enough to comfortably allow pipe runs, recommended spacing and backfill materials.

Recommended burial depth of UPP® pipe is a minimum of 300mm (12").

All trenches should be sloped back towards the storage tanks with a recommended gradient of 1:100.

Vapour return lines must have a slope of 1:50 (1/4" per foot) and never less than 1:100 (1/8" per ft) back towards the tank farm, unless in-line joints such as elbows are to be used.

Trench corners should contain a radius suitable for the pipe work.

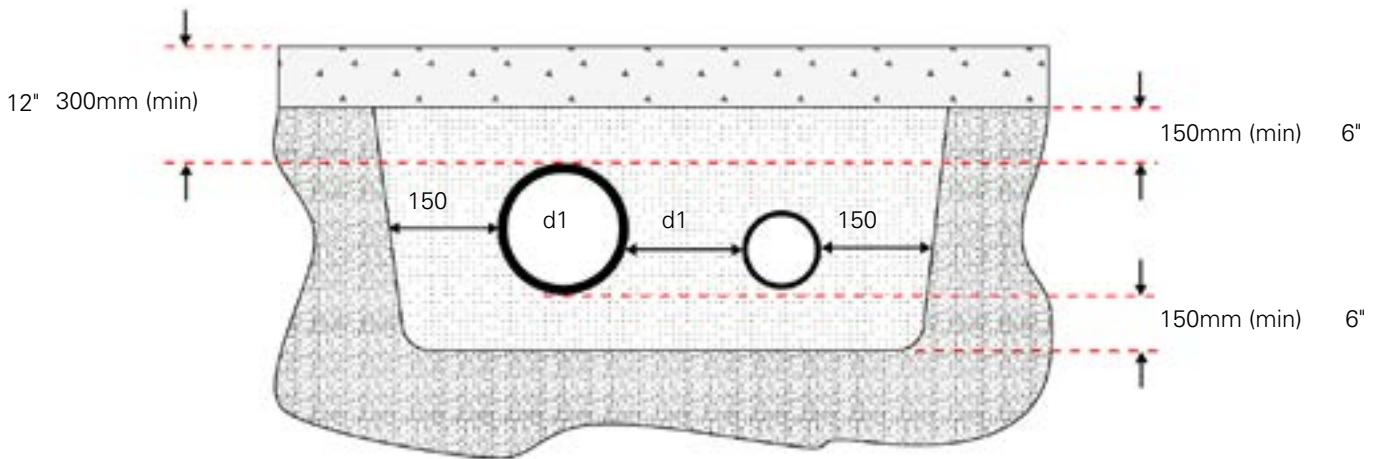


BEDDING

- A recommended 150mm (6") bed of backfill material should be laid underneath the prior to pipe installation and there must never be voids under or around the pipe.
- When laying duct onto a concrete base a 150mm (6") thick bed of compacted sand should be laid on the concrete, below the duct. (Absolute minimum amount of sand should be 50mm (2") of compacted sand).
- All beds should be laid so that the pipe will not dip or sag when it is installed.
- Underground pipe runs may be continuous or have electrofusion welded joints. Any mechanical joints or compression fittings must be inspectionable and located within a containment chamber or sump.
- UPP® pipe exceeding 12m (40ft) should be laid in a series of large snake-like curves and not in straight lines. Uncoiled pipe, when laid, will settle in a natural curve.
- Generally any thermal expansion will be accounted for by following our guidelines for spacing, backfilling and ensuring runs are not dead straight.
- Pipes should be separated from each other by at least the diameter of the largest pipe.
- If pipe-runs cross each other they must be separated by at least as much backfill material as the diameter of the largest pipe or protected by using at least 25mm (1") of styrofoam.
- If used above ground, UPP® pipe should be protected against mechanical, climatic and fire damage by wrapping it in radiation or thermal shielding tape. Additional supports and anchor points may also be required.
- Contact Franklin Fueling Systems Technical Services for more details concerning above ground installations (see page 86).

PIPE SPACING

- Bed/backfill with pea-shingle, sand or crushed rock.
- Separate pipes by the diameter of the largest pipe in the run.
- For spacers and support use:
 - Expanded polystyrene (Styrofoam).
 - Pipe off-cuts.
 - Timber/block/brick (as temporary measures).
 - Sacks of backfill.



PRESSURE / VACUUM RATING

The values listed below have been qualified by third party approvals testing.

UPP® Extra & EN14125:2013 Pipes	Rated Pressure		Rated Vacuum		Typical Burst Pressure	
	Bar	Psi	Bar	"Hg	Bar	Psi
Primary Pipe	10	145	-0.9	-26.6	40	580
Secondary Pipe	5	58	-0.6	-17.7	20	290
Fill Pipe	6	87	n/a	n/a	30	435
Electrical Conduit	10	145	-0.9	-26.6	40	580
Corrugated Duct	n/a					

UL971 Pipes						
Primary Pipe	6.2	90	-0.9	-26.6	40	580
Un-Lined Vent Pipe	4	58	-0.6	-17.7	20	290

BEND RADIUS

Q: Because UPP® is semi-rigid, what Bend Radius is possible during installation?

A: This is largely temperature dependent, but in general you may use these values for single or double wall UPP® delivered as coils:

		50 mm	63 mm	90 mm	110 mm
Warm weather	15 x Ø	80 cm	1 m	1.5 m	3 m
Cold weather	25 x Ø	140 cm	1.6 m	2.5 m	4 m
Very Cold weather	35 x Ø	190 cm	2.2 m	3.5 m	5 m

For UPP® in 5.8 m straight lengths welded together and then curved to suit the required layout you can expect:

		50 mm	63 mm	90 mm	110 mm
Warm weather	30 x Ø	1.5 m	2 m	3 m	4 m
Cold weather	60 x Ø	3 m	3 m	5 m	6 m
Very Cold weather	80 x Ø	4 m	4 m	7 m	8 m

INTERSTITIAL VOLUME

When using leak detection equipment it is often necessary to know the interstitial volume of double wall pipes to decide the amount of compressed gas or type of pumped detection unit required. Below are the volumes per metre of UPP® pipework.

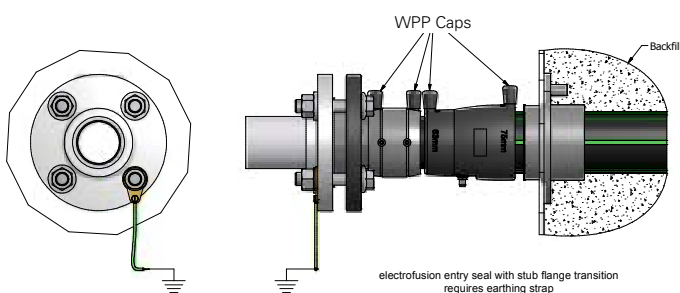
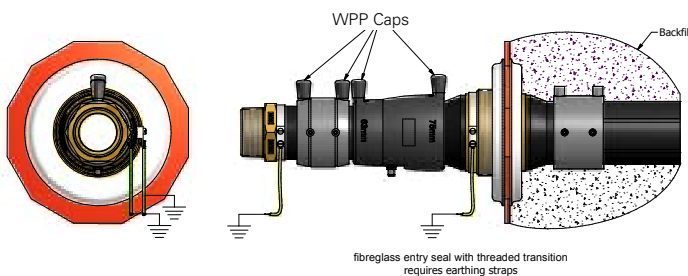
Double Wall Pipe							
Interstitial Volume	40/32mm	63/50mm	75/63mm	110/90mm	125/110mm	160/90mm	160/110mm
	(1")	(1½")	(2")	(3")	(4")	(3")	(4")
Litres / m	0.24	0.66	0.62	2.15	0.97	10.79	7.64
Cubic Inches / ft	4.40	12.29	11.52	39.93	18.01	200.73	142.12

UL971 Double Wall Pipe				
Interstitial Volume	63/50mm	75/63mm	110/90mm	125/110mm
	(1½")	(2")	(3")	(4")
Litres / m	0.12	0.13	1.41	0.45
Cubic Inches / ft	2.25	2.43	26.21	8.35

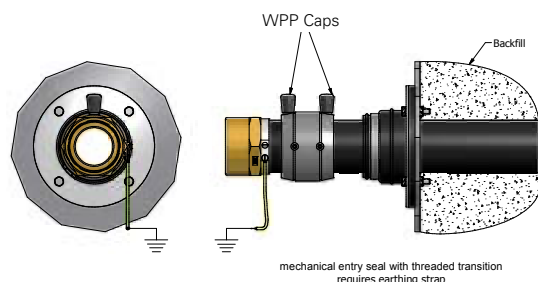
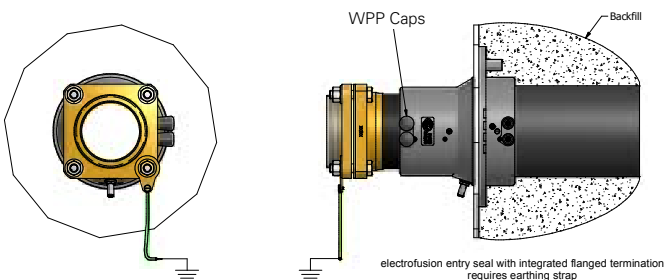
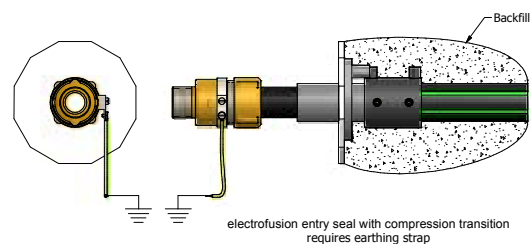
ELECTROFUSION SAFETY

- UPP® Welding Units must never be operated in Zone 1 or Zone 0 areas (Hazardous area definitions are from IP Model Code of Safe Practice Part 15 and are available in the APEA Blue Book 2nd Edition).
- UPP® Welding units are suitable for use in Zone 2 areas with just the welding leads and fitting being welded positioned in a Zone1 area.
- Ensure Welding Units are connected to a power supply that meets the requirements detailed in the user manual and are within the requirements of any local authority or regional legislation.
- UPP® piping complies with all the requirements imposed by EN14125:2013 concerning electrostatic safety.
- The risk assessment against electrostatic hazard has demonstrated that the use of insulating material such as that used in UPP® piping results in a safe choice.
- The safety of UPP® systems rely upon the small capacitance and hence the small energy that they can accumulate. This energy, has been demonstrated to be well below the Minimum Ignition Energy or MIE required to ignite petrol or alcohol blended fuel
- Extensive studies simulating fuel flow situations much more severe than what can be found in underground pipework at petrol filling stations have demonstrated that UPP® pipe cannot be a source of spark ignition. For this reason UPP® pipe can be considered an inherently safe system with respect to the electrostatic risk
- The most important recommendation, common to any type of piping system is to connect safely to ground all metallic components. Metallic components, and more general conductive materials, thanks to their high capacitance can have the potential to store high amount of electrostatic energy (sparks discharge can only be observed over conductive elements).
- All exposed metal parts used in UPP® System installations should be adequately grounded to a dedicated earth electrode and brought to a potential equal to that of other metal parts in the close proximity.

All UPP® metal transition fittings in the fill box, at the tank top and under the dispenser should be adequately earthed according to local electrical regulations. If in doubt the resistance of grounding should be $\geq 100k\Omega \leq 1M\Omega$. Earthing cables should be plastic covered copper conductors of at least 4mm² cross sectional area and should be connected to an exclusive earth electrode.



Note: The metal fittings at the tank manhole should be at equal potential so additional cables may be required to interconnect the metal fittings.
The drawings show how to ground various types of UPP® metal transition fittings:



WELD PIN PROTECTION CAPS

Paragraph 5.6.2 of EN 14125:2004 requires that the terminal pins of electrofusion couplers which are not buried in the ground shall be closed with plastic caps. The purpose is to prevent any perceived risk of ignition hazard resulting from a static electricity discharge in accordance with EN 14125:2004.

Franklin Fueling Systems Ltd has designed a multi-purpose cap to suit all electrofusion fittings in the UPP® System range. The design and materials have been third-party tested and certified as fit-for-purpose.

The caps are only required to be fitted when the coupler is in air (not buried) and when an explosive atmosphere is or may be present, i.e. inside chambers & sumps which are classified as Zone 0, 1 or 2.

- Refer to IP 15 - IP Model Code of Safe Practice Part 15 Area classification code for installations handling flammable fluids, 2nd edition - for a definition of these hazardous areas.

Weld Pin Protection Caps are compatible with all UPP® fusion elements such as those for primary and secondary pipework and electro-fusion entry seals. The UPP® System Weld Pin Protection Caps have the same fuel resistance as UPP® containment products in which they are designed to be used.

1. Caps should be fitted AFTER tightness testing is completed.
2. Press one cap firmly over each shroud surrounding the pin.
3. Tap cap with light hammer to ensure it is fully seated.
4. Inspect all of the chamber / sump area to ensure that all unburied electro-fusion fittings have been securely fitted with Weld Pin Protection Caps.



If you wish to contact us about any of our products or services please contact the nearest Franklin Fueling Systems office. For a list of local contacts please visit franklinfuelling.com for more information.

US AND CANADA

Franklin Fueling Systems
3760 Marsh Rd.
Madison, Wisconsin
53718, USA
T: +1 800 225 9787
F: +1 608 838 6433

UK

Franklin Fueling Systems Limited
Olympus Close, Whitehouse Industrial Estate,
Ipswich, Suffolk,
IP1 5LN, UK
T: +44 (0)1473 243 300
F: +44 (0)1473 243 301

EUROPE

Franklin Fueling Systems GmbH
Rudolf-Diesel-Str. 20,
54516, Wittlich,
Germany
T: +49 6571 105 380
F: +49 6571 105 510

AUSTRALIA

Franklin Fueling Systems Australia
21 Aristoc Road - PO Box 47
Glen Waverley, Vic 3150
Australia
T: +61 3 9550 1874
F: +61 3 95 61 94 77

CHINA

Franklin Fueling Systems (Beijing) Co., Ltd
A802, ChaoWaiMEN Centre, No. 26 Chaowai Street,
Chaoyang District,
Beijing 100020, China
T: +86 10 8565 4566
F: +86 10 8565 4766

BRAZIL

Franklin Fueling Sistemas de Combustíveis Ltda
Rua Hans Dieter Schmidt, 1.501
Zona Industrial Norte
Joinville, Santa Catarina, Brazil, 89219-504
T: +55 0800 710 0300

TOTAL

SYSTEM SOLUTIONS



Franklin Fueling Systems

Franklin Fueling Systems GmbH
Rudolf-Diesel-Str. 20, 54516 Wittlich, Germany
Tel: +49-6571-105-380 • Fax: +49-6571-105-510
US/Can: +1 800 225 9787 • Mex: 001 800 738 7610
UK: +44 (0)1473 243300 • CN: +86 10 8565 4566



Global Product Catalogue FFS-0158 08-19