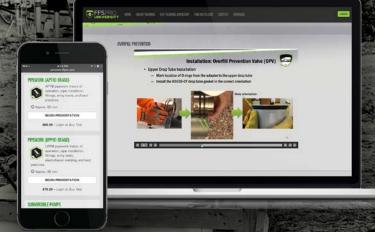


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Our product systems are designed to create efficiencies and user benefits beyond those of standalone products. Check out these examples of how our system solutions can help your business.

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ABOUT US



Welcome to Franklin Fueling 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.

TOTAL SYSTEM SOLUTION





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 sold under the brands EBW® and Phil-Tite.

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.

TRANSPORT SYSTEMS

Our product line is comprised of a broad range of equipment for both loading and off-loading applications. Connecting to loading terminals and underground storage tanks is made easy with a extensive line of FFS adapters, elbows, and valves.



Highlights



For Every Requirement a Solution

Franklin Fueling Systems Tank Transport Systems product line is comprised of an extensive line of products for both loading and off loading applications. Connecting to loading terminals and underground storage tanks is made easy with a broad line of FFS adapters, elbows, and valves.



Fuel Loading and Off-loading Management

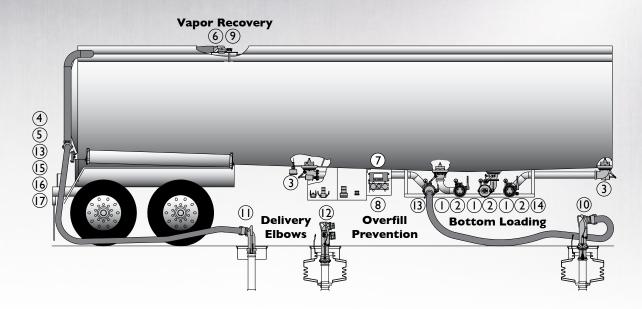
Loading and off-loading fuel from a transport truck is easier than ever with the bottom loading adapters from Franklin Fueling Systems. While loading, the free floating poppet opens under pressure allowing the handle to remain in the closed position. This minimises spillage caused by leaving the handle in the open position when disconnected from the bottom loader



Product Drop and Vapour Recovery

FFS has the solution to handle any product drop or vapour recovery situation. Preventing overfills at the loading rack is a top priority to any transporter. The FFS Optic Control Overfill Protection System (OCS) is designed to prevent such overfills and is compatible with all existing racks and monitors. A full line of nozzles compliment the system along with specialty items including Pressure Relief Valves, Hose Tube Doors and Side Seal Adapters. Each component of the Tank Transport System is designed and manufactured to work in even the toughest of environments.

FUEL AND VAPOUR TRANSFER SOLUTIONS



Bottom Loading

No.	Model	Description
1	88050002	API adapter, short stroke three position, no sight glass
1	88050004	API adapter, short stroke three position, 3" bubbled sight glass
1	88050005	API adapter, short stroke three position, 3" bubbled sight glass, no handle
1	88050007	API adapter, short stroke three position, no sight glass, removable handle
2	88033001	Female gravity drop adapter
2	88041101	Male gravity drop adapter
3	88043001	Mechanically-operated 90 degree emergency valve (Victaulic™)
3	88043201	Air assisted 90 degree emergency valve (Victaulic™)

Vapour Recovery

No.	Model	Description
4	30130001	3" N.P.S.M. vapour recovery adapter with poppet
4	30344404	4" N.P.S.M. vapour recovery adapter, no poppet
5	30230011	Flanged vapour check valve
6	88034301	Air-operated sequential vapour valve

Overfill Prevention

No.	Model	Description
7	89040002	2-wire controller
8	90822101	Optic socket
9	89011001	Optic probe, 2-wire, 8"
9	89011001	Optic probe, z-wire, o

Product Drop Elbows

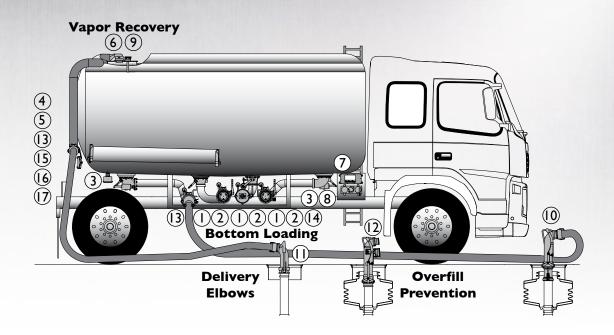
No.	Model	Description
10	88049302	Product drop elbow with cam and groove adapter and sight glass
10	88045501	Product drop elbow with sight glass
11	88046501	Dual point vapour recovery elbow
12	88049001	Coaxial delivery elbow

Accessories

No.	Model	Description
13	88015001	Three-way air interlock valve
13	88015002	Three-way air interlock valve with roller top
13	88015003	Three-way air interlock valve with offset actuator
14	88040301	API adapter dust cap
15	30420005	Vapour cap with chain-chevroned gasket
16	77432002	Vapour return hose coupler
17	78430003	Hose tube door



FUEL AND VAPOUR TRANSFER SOLUTIONS



Bottom Loading

No.	Model	Description
1	88050002	API adapter, short stroke three position, no sight glass
1	88050004	API adapter, short stroke three position, 3" bubbled sight glass
1	88050005	API adapter, short stroke three position, 3" bubbled sight glass, no handle
1	88050007	API adapter, short stroke three position, no sight glass, removable handle
2	88033001	Female gravity drop adapter
2	88041101	Male gravity drop adapter
3	88043001	Mechanically-operated 90 degree emergency valve (Victaulic™)
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5	30230011	Flanged vapour check valve
6	88034301	Air-operated sequential vapour valve

Overfill Prevention

No.	Model	Description
7	89040002	2-wire controller
8	90822101	Optic socket
9	89011001	Optic probe, 2-wire, 8"

Product Drop Elbows

No.	Model	Description
10	88049302	Product drop elbow with cam and groove adapter and sight glass
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16	77432002	Vapour return hose coupler
17	78430003	Hose tube door





ADAPTERS

Loading and off-loading fuel from a transport truck is easier than ever with the bottom loading adapters from Franklin Fueling Systems. While loading, the free floating poppet opens under pressure allowing the handle to remain in the closed position. This minimises spillage caused by leaving the handle in the open position when disconnected from the bottom loader. The adapter handle is offered in aluminium or nylon and provides two open positions of flow allowing the delivery driver to manage the flow rate while off-loading fuel from the truck.

The lightweight, heavy-duty adapter is engineered and tested to meet API RP 1004 specifications. The outer end is made of hard coated aluminium and rotates seven times to maximise the products life and prevent wear that can be caused by terminal off-loading couplings. The inner wall of the adapter is

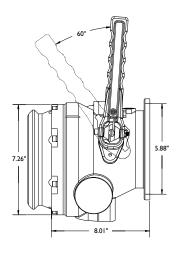
fully tapered, minimising product retention inside of the valve when off loading is complete. Each model is compatible with all API dry disconnect couplers and are constructed with a standard TTMA 4" tank truck flange and mounting lugs for FFS air interlock valves. Sight glass options are mounted on the side of the valve to maximise visibility during fuel transfer and are available in 1" and 3.5" sizes. Fuel loading and off loading management has never been easier, safer or more efficient.

Highlights

- Long Life Front API head may be rotated up to seven times to maximise the life of the adapter.
- Long Life Enhanced 3.5" sight glass provides greater impact strength and is compatible with Biofuels including E85 and Biodiesel.
- Safety Free floating poppet is opened by pressure from the terminal adapter probe to minimise spills during loading.
- Speed of Delivery The cam design utilised to retract the adapter poppet minimises product flow restriction during off loading and loading.

Model	Description	
88050002	Short stroke three position, no sight glass	
88050004	Short stroke three position, 3.5" sight glass	
88050005	Short stroke, three position, no handle, 3" sight glass	
88050007	Short stroke, removable handle, no sight glass	
88012001	Dust boot air cylinder	
88050701	Replacement poppet kit with handles	
88050702	Replacement poppet kit for bottom loaders with handles	





Order Information - continued

Description	Part	880-500 Model
Poppet head	88050901	-02, -04, -07
Spring, poppet	88012701	-02, -04, -07
O-ring	1103938	-02, -04, -07
Washer, flat, 5/8" ID	88019101	-02, -04, -07
Latch dual	88050601	-02, -04, -07
Cam, loading arm	88021501	-02, -04, -07
Roller, cam	88019001	-02, -04, -07
Pin, roller cam	88018901	-02, -04, -07
Hex, permanent handle	88019801	-02, -04
Spring, handle	88010201	-02, -04
Handle, dual latching	88050501	-02, -04
Handle, dual latching (Canada)	88050503	-7
Pin, latch	88019201	-02, -04, -07
O-ring, cross shaft	1103912	-02, -04, -07
Pin, 3/16", spiral	1108604	-02, -04, -07
Cap screw, socket head ¼-20 x 2"	1117016	-02, -04
Locknut, ¼-20	1104105	-02, -04
Cap screw, socket head, 10-24 x 5/8"	1103010	-02, -04, -07
Sight glass, 1" bubble	88051101	-3
Sight glass, 3.5" bubble	88051201	-4
Cap screw, socket head, 1/4-20 x ¾"	1117017	-04
O-ring, sight glass, 1" bubble	1103936	-3
O-ring, sight glass, 3.5" bubble	1103937	-4
Ball, flow indicator, 3/8", green	88012402	-3





DUST CAP

This lightweight API Dust Cap shields valuable bottom loading valves from destructive outside elements. The cap easily couples on all EBW® API bottom loading adapters using a reliable Buna-N gasket. The corrosion-resistant cap comes with forged brass cam arms and a heavy-duty attachment chain. This Dust Cap also meets API RP 1004 Specifications.

Specifications

Model Unit	880-403-01	88020601
Description	Dust Cap	Gasket
Inches	4	4
Millimetres	101.6	101.6
Pounds	3.06	_
Kilograms	1.39	_

Part	Description
880-403-01	API Bottom Loading Adapter Dust Cap
880-206-01	API Bottom Loading Adapter Gasket



THREE-WAY AIR VALVES

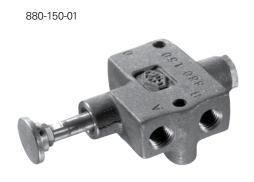
Play it safe with this lightweight valve that locks up the brakes on the trailer, preventing it from leaving the loading rack while connected to the loading arm. This three-way air valve can be used normally open or normally closed, has an adjustable stem, and comes with standardised TTMA and API mounting holes. The anodized aluminium valve is used on all API bottom loading adapters and all Vapour Check Valves.

Highlights

- Heat-treated, anodized aluminium construction.
- 1/4" NPT connection ports.
- Field serviceable.
- Adjustable stem button.

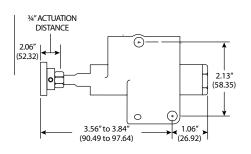
Specifications

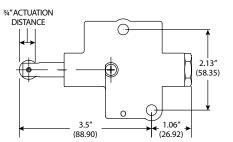
Model Unit	88015001	88015002	88015003
Width (Inches/Millimetres)	3.00/76.2	3.00/76.2	3.00/76.2
Length (Inches/Millimetres)	4.25/107.96	4.25/107.96	4.25/107.95
Pounds	0.69	0.69	0.69
Kilograms	0.31	0.31	0.31

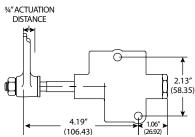


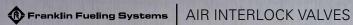












Part	Description
88011301	Screw Adjustor Assembly 1.5" Button
88015001	Three-way Air Interlock Valve
88015002	Three-way Air Interlock Valve, Roller Tip
88015003	Three-way Air Interlock Valve, Offset Actuator

Part Name	Qty. Req.			880500 Model
Part Name	-01	-02	-03	800000 Iviouei
Plug - Nut	1	1	1	88014501
Spring	1	1	1	88014801
Spool & O-ring Assembly	1	0	1	88017101
Retaining Ring	1	1	1	1109004
Dust Seal	1	1	1	88014201
Screw Adjuster 1.0"	1	0	0	88014401
Screw ¼-20 × 1.75" Hex Head	2	2	2	1106307
Spool & O-ring Assembly, Roller Tip	0	1	0	88017102
Actuator - Offset	0	0	1	88112001
880-150-01 Service Kit*	1	0	0	90012
880-150-02 Service Kit**	0	1	0	90055
880-150-03 Service Kit***	0	0	1	90056

^{*} Note: Service Kit includes: (1) #3, (1) #4, (1) #5, (1) #6, (1) #7, (1) #8, (1) #12

^{**}Note: Service Kit includes: (1) #3, (1) #5, (1) #6, (1) #14, (1) #15, (1) #16, (1) #17

^{***}Note: Service Kit includes: (1) #3, (1) #5, (1) #6, (1) #18, (1) #19, (1) #20, (1) #21, (1) #22



SIX-WAY AIR VALVES

These air interlock valves were designed to operate two different air systems at the same time. The lightweight valves are designed to lock the trailer brakes and open the air operated vapour valve at the same time. These six-way air valves can be used in the normally open (N/O) and normally closed (N/C) configurations of N/O, N/C, or N/O, N/O, or N/C, N/C positions. They have an adjustable stem and come standard with TTMA and API mounting holes.

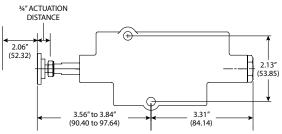
Highlights

- Heat-treated, anodized aluminium construction.
- 14" NPT connection ports.
- Field serviceable.
- Adjustable stem button.

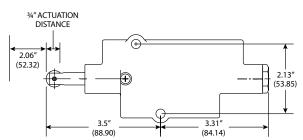
Specifications

Model Unit	88025601	88025602	88025603
Width (Inches/Millimetres)	3.00/76.2	3.00/76.2	3.00/76.2
Pounds	0.69	0.69	0.69
Kilograms	0.31	0.31	0.31









Part	Part Name
88025601	1/4" - 1" Button Six-way Air Valve
88025602	1/4" - 1" Roller Tip Six-way Air Valve
88025603	1/4" - 1" Duckfoot Six-Way Air Valve
90020	Service kit for 880-256-01
90059	Service kit for 880-256-02

Part	Description
880-145-01	Plug - Nut
880-148-01	Spring
880-258-01	Spool & O-ring Assembly
11090-04	Retaining Ring
880-142-01	Dust Seal



AIR INTERLOCK WITH LIMIT SWITCH



Ensure proper vapour recovery every time by using the Air Interlock with Limit Switch. With the limit switch, bottom loading cannot begin until a vapour recovery hose is connected to the vapour check valve. The switch does its job by breaking a connection in the secondary over-fill prevention system, thus preventing the rack monitor from giving a green light to the transport. Once a vapour line is connected, loading can begin. The coupler first depresses the plunger button of the interlock, which then locks the trailer brake system and completes the connection to the rack monitor. The vapour hose must be disconnected before the brakes will release, allowing the truck to be driven away.

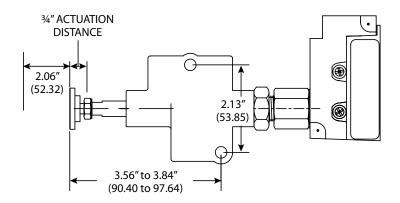
Specifications

Model Unit	88015501	88015502
Pounds	1.25	1.25
Kilograms	0.57	0.57

Part	Description
88015501	1/4" - 1" Button with Limit Switch
88015502	¼" - 1" Roller Tip with Limit Switch

Part	Description	
88115601	Air Valve Assembly	
1102104	*Nut - Hex Jam	
88115501	*Adapter - Valve to Switch	
1100325	O-ring	
1121902	Limit Switch	
90012	Service Kit for 880-155-01	

 $[\]ensuremath{^{\star}}$ Note: These items are components of Air Valve Assembly 881-156-01



MALE AND FEMALE

GRAVITY DROP ADAPTER

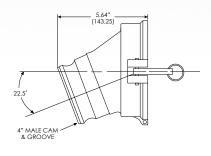
Let gravity do all the work with these high strength, corrosion-resistant adapters. A 22.5 degree angle makes service station drops a breeze with easy hose coupling and fast, unrestricted off-loading. Engineered to mate with API RP 1004 Bottom Loading Adapters, each adapter comes with a heavy-duty attachment chain and uses a large, resilient gasket that guarantees minimum product loss. The lightweight adapters are available in 3" male NPT or male cam and groove; 4" male NPT, male cam and groove or female cam and groove.

Highlights

- Heat-treated, anodized alloy body.
- Buna-N gaskets.
- Forged bronze cams and stainless steel pins.
- Meets API RP 1004 specifications.

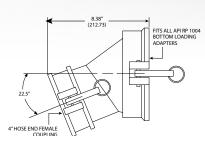
Male





Female





Specifications

Mo	odel Unit	88041001	88041101
Siz	e (Inches/Millimetres)	3.00/76.2	4.00/101.6
We	eight (Pounds/Kilograms)	4.00/1.81	5.00/2.27

Model Unit	88033001
Pack (In./Millimetre)	4.00/101.6
Weight (Pounds/Kilograms)	6.06/2.75

Order Information

Male

Part	Description
880-410-01	3" Male Cam & Groove
880-411-01	4" Male Cam & Groove
880-206-01	Gasket - API End

Part Name	Part
Rubber Gasket	88020601
4" Drop Adapter - Body Only	88041201
Groove Pin	1112507
Cam Arm & Pull Ring Assembly	77411603
Double Loop Chain	88011502
S-Hook	1111001

Female

Part	Description
88033001	Female Gravity Drop Adapter
88020601	Gasket - API End
77420204	Gasket - Hose End

Part Name	Part
Groove Pin	1112507
Cam Arm & Ring Assembly	77411603
S-Hook	1111001
Double Loop Chain	88011502
Gasket	88020601
Gasket	77420204



THREADED VAPOUR CHECK VALVE

Use this Vapour Check Valve to return vapour to the truck during terminal loading and service station drops. The 3" poppet opens when coupled and closes when disconnected, preventing the vapours from escaping into the atmosphere. The valve has 3" or 4" female NPSM threads, a 4" cam and groove, and tapped mounting holes for the EBW® Air Interlock Brake. The 303 series is available without a poppet to serve as a male quick coupler with an Air Interlock Valve mounting pad.

Highlights

- Anodized aluminium construction.
- Stainless steel stem and spring.
- Buna-N gasket.
- Aluminium guide.

Specifications

Model Unit	30130001	30130002	30130003	30333303	30344404
Poppet	Yes	Yes	Yes	No	No
Thread Size	3.00-NPSM	4.00-NPSM	3.00-BSPP	3.00-NPSM	4.00-NPSM
Weight (Lbs./Kg.)	4.50/2.04	4.81/2.18	2.55/1.16	3.81/1.73	4.31/1.96

Part	Description
30130001	3" N.P.S.M. Vapour Recovery Adapter, with Poppet
30130003	3" BSPP Vapour Recovery Adaptor, with Poppet
30130002	4" N.P.S.M. Vapour Recovery Adapter, with Poppet
30333303	3" N.P.S.M. Vapour Recovery Adapter, no Poppet
30344404	4" N.P.S.M. Vapour Recovery Adapter, no Poppet

Part	Part Name
30030502	Vapour Recovery Adapter - 3" N.P.S.M.
30030202	Vapour Recovery Adapter - 4" N.P.S.M.
30030532	Vapour Recovery Adapter - 3" B.S.P.P.
1103915	O-ring
30020301	Poppet
30010501	Spring - Poppet
30020501	Guide - Poppet Stem
1109002	Retaining Ring
77020102	3" Gasket Cover
77020103	4" Gasket Cover





FLANGED

VAPOUR CHECK VALVE

The sight glasses featured on this vapour recovery fitting can help detect liquid accumulation in the vapour manifold of a transport. A drain plug lets any extra fuel drain out, and the poppet prevents vapours from escaping when disconnected from the hose. A low pressure drop makes flow rates faster and vapour recovery safer. The adapter is constructed with a standard 4" TTMA flange, a 4" cam and groove, and a mounting pad for the Air Interlock Valve.

Specifications

Model Unit	30230011	30230012
Size (Inches/Millimetres)	4.00/101.6	4.00/101.6
Weight (Pounds/Kilograms)	6.00/2.72	6.00/2.72

Part	Description
30230011	Flanged Vapour Check Valve with Sight Glass
30230012	Flanged Vapour Check Valve without Sight Glass

Part	Part Name
1109002	Retaining Ring
30020501	Poppet Stem Guide
30010501	Poppet Spring
30020301	4" Poppet Vapour Recovery Adapter
1101002	Pipe Plug
1121504	Sight Glass
1103915	O-ring



MECHANICALLY OPERATED 90 DEGREE EMERGENCY VALVE

Emergency Valves make product handling safer. These Emergency Valves have a shear groove that meets 49 CFR 178.345-8. The seat area of the valve is located inside the tank shell as required by DOT regulations.

This valve gives you the advantage of a faster flow rate while fitting a standard 4"TTMA sump. The high flow rate is established by a full opening throat area. Emergency Valves are available in 90 degree elbow type or straight type, 4"TTMA flanges or Victaulic™ outlet, and mechanical or air assisted.

Highlights

- · High flow rate.
- Fits standard 4"TTMA sump.
- Shear section per TTMA, RP84-92 and meets DOT 49 CFR 178.345-8.
- Force ratings from TTMA RP86-92.

Specifications

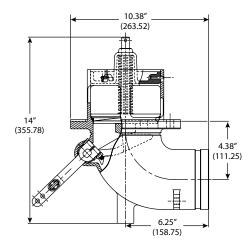
Model Unit	88043001
Weight (Pounds/Kilograms)	11.0/4.99

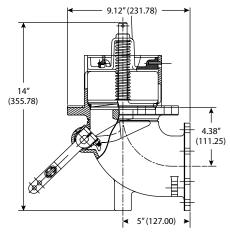
Flanged

Model Unit	88043101
Weight (Pounds/Kilograms)	11.0/4.99

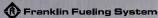
Part	Description
88043001	4" Standard-OutletSeal Victaulic™

- Shear groove meets DOT 406 requirement.
- Optional external air cylinder available.
- Available in Victaulic™ (*) or flanged version.
- Fluorocarbon O-ring.









Order Information - continued

Part Name	Part
Emergency Valve Victaulic™ 4" Body	88042801
3/16" SYN PTFE Packing	1135801
O-ring FLC #2-114	1103920
Spirol Retaining Ring	1109008
Cam Shaft	88024101
Stuffing Box Nut	88024201
Emergency Valve Retainer Assembly	88026401
Poppet Spring	1135701
Poppet Assembly	88026301
Cam	88023301
Cam Lever Assembly	88026501
Emergency Valve Sump Gasket	1138801
Anti-seize Lubricant	1114401

Flanged

Part	Description
880-431-01	4" Standard Flanged Outlet Seal

Flanged

Part	Part Name
88042901	Emergency Valve Flanged 4" Body
1135801	3/16" SYN PTFE Packing
1103920	O-ring FLC #2-114
1109008	Spirol Retaining Ring
88024101	Cam Shaft
88024201	Stuffing Box Nut
88026401	Emergency Valve Retainer Assembly
1135701	Poppet Spring
88026301	Poppet Assembly
88023301	Cam
88026501	Cam Lever Assembly
1138801	Emergency Valve Sump Gasket
1114401	Anti-seize Lubricant





AIR ASSISTED 90 DEGREE EMERGENCY VALVE (VICTAULIC™)

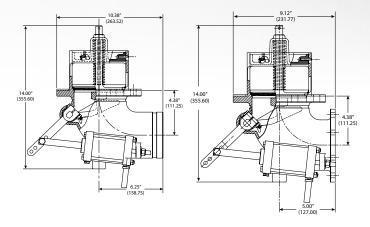
Air assisted emergency valves make product handling safer and installation more convenient. The emergency valve has a shear groove that meets 49 CFR 179.345-7. The seat of the valve is located inside of the tank shell as required by DOT regulations. One valve has the capability to be converted to either right or left hand control.

Specifications

Model Unit	88043201
Weight (Pounds/Kilograms)	13.0/5.9

Flanged

Model Unit	88043301	
Weight (Pounds/Kilograms)	13.0/5.9	



Order Information

Part	Description
880-432-01	4" Standard Victaulic™ (*) Outlet Seal with External Air Cylinder
Part	Description
88035002	Emergency Valve Air Cylinder
88042901	4" Victaulic™ (*) Emergency Valve Body
1135801	3/16" SYN PTFE Packing
1103920	O-ring FLC #2-114
1109008	Spirol Retaining Ring
88024101	Cam Shaft
88024201	Stuffing Box Nut
88026401	Emergency Valve Retainer Assembly
1135701	Poppet Spring
88026301	Poppet Assembly
1138801	Emergency Valve Sump Gasket
88026501	Cam Lever Assembly
1152601	Fusible Metal Pipe Plug, 1/8-27" NPT
1149401	Male Push-on Hose Fitting
88015901	Rubber Hose - Push-on Fitting

Flanged

Part	Description
88043301	4" Standard Flanged Outlet Seal with External Air Cylinder



Order Information - continued

Flanged

Part	Description
88035002	Air Cylinder
88042801	4" Flanged Emergency Valve Body
1135801	3/16" SYN PTFE Packing
1103920	O-ring FLC #2-114
1109008	Spirol Retaining Ring
88024101	Cam Shaft
88024201	Stuffing Box Nut
88026401	Emergency Valve Retainer Assembly
1135701	Poppet Spring
88026301	Poppet Assembly
1138801	Emergency Valve Sump Gasket
88026501	Cam Lever Assembly
1152601	Fusible Metal Pipe Plug, 1/8-27" NPT
1149401	Male Push-on Hose Fitting
88015901	Rubber Hose - Push-on Fitting

3" EMERGENCY VALVE

Emergency Valves make product handling safer and installation more convenient. The emergency valve has a shear groove that meets 49 CFR 179.345-7. The seat of the valve is located inside of the tank shell as required by DOT regulations. One valve has the capability to be converted to either right- or left-hand control.

Highlights

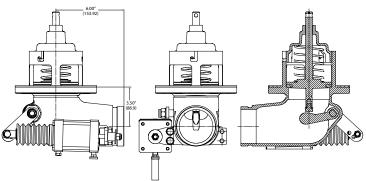
- High flow rate.
- Fits standard TTMA sump.
- Cable Operator can be mounted right-handed or left-handed.
- Optional External Air Cylinder available.
- Air Cylinder can be mounted right-handed or left-handed.
- 3" Victaulic™ Outlet only.

Specifications

Certifications/Listings

- TTMA, RP84-92: Shear Section.
- DOT 49 CRF 178.345-8: Shear Section.
- DOT 406: Shear Groove.
- TTMA, RP86-92: Force Rating.

Part	Description	Pack
88045601	Air Operated Valve	3"TTMA Flanged × 3" Victaulic™ Outlet
88044901	Cable Operated Valve	3"TTMA Flanged × 3" Victaulic™ Outlet







PRODUCT DROP ELBOWS

This durable 22" tall product elbow was designed for those deep tank burial applications and has a high flow rate as a result of the unrestricted flow pattern. It fits all 4-inch top seal adapters and can also be ordered with a variety of different adapters to meet any requirement. The single four bolt flange design allows for easy replacement of adapters over competitive threaded styles and is designed for extremely easy on- and off-coupling as a result of aluminium bronze alloy docking.

Highlights

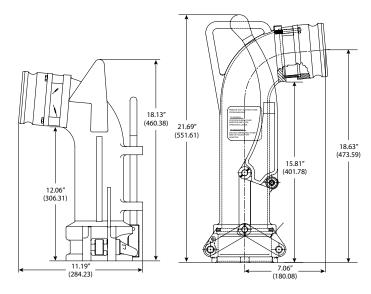
- Lightweight cast aluminium.
- Four bolt flange pattern fits all 4" seal adapters.
- Protective base shield.

- Unique cam locking handle for easy on/off coupling.
- 22" tall for deep tank burial applications.

Specifications

Model Unit	88049301	88049302	88049303	88049304	88049305
Weight (Pounds/Kilograms)	12.3/5.58	13/5.9	14.5/6.59	14.5-6.59	14.5/6.59
Size (Inches/Millimetres)	_	4.00/101.6	3.00/76.2	4.00/101.6	3.00/76.2
Model Unit	88045001	88045501	88045502	88045504	88045505
Weight (Pounds/Kilograms)	13.75/6.24	16/7.26	18/8.18	18/8.18	18/8.18
Size (Inches/Millimetres)	_	4.00/101.6	3.00/76.2	3.00/76.2	4.00/101.6

Part	Description
88049301	Product Elbow Dual Point - No Adapter
88049302	4" Cam and Groove Adapter with Sight Glass 21" tall
88049303	3" Cam and Groove Adapter with Sight Glass
88049304	4" NPT Adaptor with Sight Glass
88049305	3" NPT Adaptor with Sight Glass



Order Information - continued

Part	Part Name
88013601	Rear Arm Assembly
88013901	Connecting Link
88048201	Operating Handle
	Operational Instruction
88013501	Front Arm Assembly
88015101	Sight Tube Spacer
88016201	Sight Tube
88014001	Sight Glass Seal
88028401	4" Dia. Coupling Adapter
88039601	3" Cam & Groove Adapter
88028901	4" NPT Adapter
88039701	3" NPT Adapter
1119001	Wave Spring
88013801	Connecting Pin
88014901	Shoulder Spacer
1119601	Screw - 3/8-16 × 1.5" Hex Socket
88013802	Connecting Pin
1118801	High Alloy Groove Pin
1118601	Flanged Bushing
88012101	Cam Assembly Insert
88014101	Seal

Part	Description
88045001	Body Only
88045501	4" Male Cam & Groove with S.G.
88045502	3" Male Cam & Groove with S.G.
88045504	3" Male NPT with S.G.
88045505	4" Male NPT with S.G.

Part	Part Name
88045901	Product Elbow Body
88023701	Product Elbow Handle
1130801	Product Elbow Seal
1108605	Pin Spirol
88031001	Locking "Right" Cam
88023801	Handle Block
88031002	Locking "Left" Cam
88014001	Sight Tube Seal
88016201	Sight Tube
88028401	4" Cam & Groove Adapter
88015101	Sight Tube Spacer
88039601	3" Cam & Groove Adapter
88024701	Adapter Flange Gasket
88039701	3" NPT Adapter

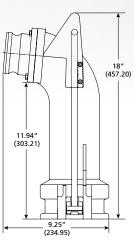


DUAL POINT VAPOUR RECOVERY ELBOW

This durable cast aluminium elbow ensures complete vapour recovery for dual point systems, and can be ordered with a variety of different adapters to meet any requirement. The simple four bolt flange design allows for easy replacement of adapters over competitive threaded styles. Its low profile design allows for convenient storage and the specially designed quick grip one hand operation handle allows for easy on and off attachments.

Highlights

- · Cast aluminium.
- Compact, low profile design.
- Four bolt flange pattern.
- Protective base shield.



Specifications

Model Unit	880460	88046501	88046502
Size (Inches/Millimetres)	_	3/76.2	3/76.2
Weight (Pounds/Kilograms)	11/4.99	12.38/5.62	12.38/5.62

Part	Description
88046001	Body Only
88046501	3" Male Cam & Groove Adapter
88046502	3" Male NPT Adapter

Part Name	Part
#10 - 24 × ½" Socket Head Cap Screw	1117012
Handle Retainer Block	88024601
Vapour Elbow Locking Bar	88039101
Grooved (Straight) Pin	1112607
Elbow Seal	87020001
Locking Cam	88024501
Grooved (Straight) Pin	1112601
Adapter Flange Gasket	88024701
3" Coupling Adapter	88039601
3" NPT Adapter	88039701





COAXIAL DELIVERY ELBOW

This longer Coaxial Delivery Elbow is designed to accommodate the needs of the tank truck industry. The longer elbow is made of durable lightweight cast aluminium. The elbow connects to the product line and vapour recovery line at the same time, allowing for single point drop and vapour recovery. This elbow meets Stage I and Il vapour recovery standards.

Highlights

- Cast aluminium.
- 4" product line inlet (male cam and groove adapter).
- 3" vapour line outlet (male cam and groove adapter).
- Unique cam locking handle for easy on/off coupling.
- Accommodates all coaxial drop tube adapters.
- Four bolt flange pattern vs. threaded.

Specifications	
Model Unit	88049001
Cina (in ab a a)	42

Model Unit	88049001	88049003
Size (inches)	4 × 3	4 × 3
Weight (Pounds/Kilograms)	22.0/9.98	22.0/9.98

Part	Description
88049001	Over and Under Tall 4" × 3" Cam & Groove
88049003	Over and Under Tall 4" NPT × 3" Cam & Groove

Part Name	Part
Flanged, Coaxial Elbow	88038001
Operating Handle	88048201
Gasket	88028101
Vapour Outlet Block Off Plate	88022901
Top Gasket	88028201
Rollpin - 1/8" × 1"	1100403
Connecting Pin	88013802
Connecting Pin	88013801
Wave Spring	1119001
Screw - 3/8", 16 \times ½" Hex Socket	1119601
O-ring Seal	88014701
Fuel Connection Adapter	88028501
Coaxial Elbow Seal	88014101

	25.69" (652.53)
14.63° (371.48)	
10.25' (260.35)	

Part Name	Part
Fuel Connection Seal	88014601
Rear Arm Assembly	88013601
Front Arm Assembly	88013501
Cam Assembly Insert	88012101
Long Connecting Link	88013902
Cam & Groove 3" Adapter	88039601
Cam & Groove 4" Adapter	88028401
Sight Tube	88016201
Sight Tube Spacer	88015101
Sight Tube Seal	88014001
4" NPT Adapter	88028901
3" NPT Adapter	88039701



TWO-WIRE CONTROLLER

The OCS Two-Wire Controller (890-400-02) is designed with a large viewing window. The anodized aluminium housing is rated NEMA® 4 with $\frac{1}{2}$ " NPT openings for ease of wiring. The Control Module is a microprocessor-based controller that provides continuous self-testing of probes, wiring, rack inputs, input voltage and memory settings. Inputs and outputs are intrinsically safe and FMRC/CSA approved for hazardous locations.

Highlights

- Microprocessor base controller.
- Continuous self-diagnostics.
- Internal relay outputs.
- FMRC approved for Hazardous (Classified) Locations.
- Versatile mounting features.

- Continuous self-testing of:
- All probes attached
- All probe and power wiring
- Rack input signals for terminal
- Proper input voltage

Order Information

Part	Description
89040002	Controller Mounted in Waterproof Housing
89020002	Control Module Only



TWO-WIRE OPTIC OVERFILL PROBES

OCS Two-Wire Probes are manufactured with a leakproof aluminium body and anodized black aluminium tip to absorb stray light. For optimum performance, reliability and accuracy a glass ground prism is standard for all styles of probes. Optic Two-Wire Probes are thermistor compatible for connecting directly to the overfill monitor and require no dummy element.

Highlights

- Probes feature surface mount military spec electronic components.
- Two-Wire Probes thermistor compatible.
- Operating temperature -40 °F to +160 °F
- FMRC approved for Hazardous (Classified) Locations.

Part	Description	Length
89011001	Two-Wire Optic Overfill Probe	8"





PROBE HOLDER SOLUTIONS

Probe Holders are anodized aluminium with ½" NPT openings positioned for easy access and wiring. An O-ring seal is standard for short and tall caps. The three bolt locking ring prevents probe movement and seals the housing from product splash and vapours.

Highlights

- Anodized aluminium construction.
- 1/2" NPT connection ports.
- 2" NPT cast lock nut.
- Tall or short cover.

- · O-ring sealed.
- Three bolt locking ring.
- For use with all EBW® and other manufacturers' probes.

Order Information

Part	Description	Parts Included
90826202	Probe Holder with 2" NPT Male Thread, Tall Cap	
90826301	Probe Holder with 2" Cast Lock Nut	
90820801	Tall Probe Holder Cover	
89025702	Probe Holder with Probe Kit	1 Probe Holder (90826301) 1 Two-Wire Probe (89011001)



SINGLE SOCKET SOLUTIONS

Single Sockets are manufactured in accordance to API RP1004 and are compatible with all overfill monitor plugs. These sockets are moisture proof and have stainless steel contact pins in a bakelite housing. Hard-coated aluminium faceplates and J-Slots are long-lasting and come standard with black plastic caps. Optic, Thermistor and Float styles are available.

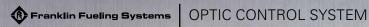
Highlights

- · Ease of installation.
- Moisture proof.
- Stainless steel contact pins.

- Produced in accordance with API 1004.
- Available in all three API standard socket configurations.

Part	Description
90821101	Thermistor Socket with Plastic Cap
90822101	Optic Socket with Plastic Cap
90823001	7-Pin Socket with Plastic Cap
90811901	Plastic Cap Only
90811001	Thermistor Conversion Kit
90812001	Optic Conversion Kit
90823101	7-Pin Conversion Kit





INSTALLATION KITS

Highlights

- Seven conductor oil resistant cable included.
- Watertight connectors included.
- Controller included.

- · Probes included.
- Probe holders included.

Order Information

Part	Description	Parts Included
89016202	2 Compartment Kit	(2) 89025702 probe w/ holder, (1) 89040002 2-wire controller, (6) 90813101 watertight bushing 1/2", (1) 90813203 7-CON cable 50'
89016203	3 Compartment Kit	(3) 89025702 probe w/ holder, (1) 89040002 2-wire controller, (12) 90813101 watertight bushing, (1) 90813206 7-CON cable 100'
89016204	4 Compartment Kit	(4) 89025702 probe w/ holder, (1) 89040002 2-wire controller, (16) 90813101 watertight bushing, (1) 90813206 7-LON wire 100'

WIRING KITS

Part	Description	Parts Included
90831301	Three Compartment Wiring Kit	100' Cable and 12 Watertight Fittings
90831401	Four Compartment Wiring Kit	100' Cable and 16 Watertight Fittings
90831501	Five Compartment Wiring Kit	100' Cable and 22 Watertight Fittings
90831601	Six Compartment Wiring Kit	100' Cable and 30 Watertight Fittings
90813101	Watertight Fitting Only	N/A
90813206	100' Seven Conductor Cable Only	N/A
90813203	25' 7-CON cable	N/A



VAPOUR CAPS

These lockable vapour caps act like dust covers, but won't activate the Air Interlock Valve when used on vapour check valves and adapters. Iron-copper infiltrated cams create a solid push-down-and-pull-up movement for quick, easy removal and replacement; steel latches hold the caps secure. Orange in colour to indicate vapour recovery, the caps can be used with any 4" male cam and groove. Caps also available with finger ring and chains.

Highlights

- Meets API RP 1004 Standard.
- Aluminium or glass-filled nylon construction.
- Iron-copper infiltrated cams and steel latches.
- Lockable.

Order Information

Part	Description
30420001	Nylon Vapour Cap without Chain
30420002	Nylon Vapour Cap with Chain
30420004	Nylon Vapour Cap without Chain-Chevroned Gasket
30420005	Nylon Vapour Cap with Chain-Chevroned Gasket
30430101	Aluminium Vapour Cap without Chain
30430102	Aluminium Vapour Cap with Chain

for 30420001/30420002/30420004/30420005

Part Name	Part
Spirol Pin	1102409
Security Chain with Rings	77411003
Handle Assembly	30411201
Vapour Recovery Cover	30430501
Flat Gasket	77711101*
Gasket with Chevrons	30410501*

^{*30420001/30420002} use 77711101 Flat Gasket

30420004/30420005 use 30410501 Gasket with Chevrons

for 30430102

Part Name	Part
Gasket	95021501
Aluminium Body Cover	30430601
Spirol Pin	1102403
Security Chain with Rings	77411003
Cover Assembly	30430101



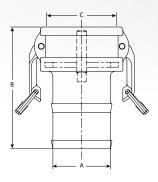


VAPOUR RETURN HOSE COUPLERS

Fast, safe vapour recovery is easy with probed hose couplers. Hose shank end bands to a vapour recovery hose and the probe automatically opens the poppet of the vapour check valve when coupled. The coupler comes in three sizes for use with most vapour check valves and hose configurations. The poppetted vapour return hose coupler design prevents vapour from escaping when disconnected. The probe automatically opens the vapour check valve when connected properly. The design also offers low restrictive vapour passage. The body and probe are made of heat-treated anodised aluminium with forged bronze cams and stainless steel pins, and the poppet has a replaceable fluorocarbon seal.

Highlights

- Meets API RP 1004 Standard.
- Heat-treated, aluminium alloy body and brass probe.
- Forged bronze cams and stainless steel pins.
- Used with probe for opening vapour check valve.



Specifications

Model Unit	77432002	77432003
Dim. A (Inches/Millimetres)	3.00/76.2	4.00/101.6
Dim. B (Inches/Millimetres)	6.62/168.15	6.62/168.15
Dim. C (Inches/Millimetres)	4.75/120.65	4.75/120.65
Weight (Pounds/Kilograms)	3.00/1.36	3.38/1.53

Part	Description
77432002	774-CV 4" × 3" Assembly
77432003	774-CV 4" × 4" Assembly

Part Name	Part
774-CV 4" × 3" Assembly	77432002
774-CV 4" × 4" Assembly	77432003
Probe	77411201
3" Gasket	77420203
4" Gasket	77420204
Groove Pin	1112507
Cam & Ring Assembly	77411603



AIR-OPERATED SEQUENTIAL VAPOUR VALVES

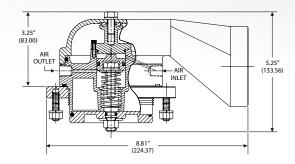
Handle fuel vapours safely and efficiently with this lightweight aluminium vapour valve. The air-operated valve allows fast vapour flow during loading and unloading. The poppet is designed to open into the tank, preventing accidental leakage from product surges or from a tank truck rollover. Easy-to-use air line connections are located outside the compartment for convenient installation and maintenance. The 3.5" vapour valve comes with male NPT threads or a TTMA flange for installation in conventional 16" or 20" manholes.

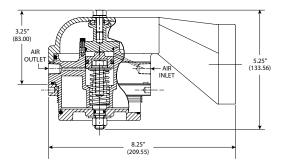
Highlights

- Lightweight aluminium body and hood.
- Fluorocarbon seal.
- TTMA specifications.

Part	Description
88034301	Flanged with Hood
88034501	Threaded with Hood

Part	Part Name
1103403	Square Cut Seal Ring
88034401	Sequential Vapour Valve Body Assembly
1100326	O-ring
88026701	Mounting Assembly Flange







HOSE TUBE DOORS

Total protection from the elements is what you get with the heavy-duty Hose Tube Door. Beyond durable, this door withstands rusting, rugged use, and continuous road wear. The cap closes securely and can be used with a padlock for theft protection. All three sizes are available plain or cast with the EBW® logo or our customised logo. Call for pricing and lead time.

Highlights

- Cast aluminium frame and cap.
- Spring steel, chrome and plated hardware.
- Nylon bushing.
- Name embossed upon request.

Specifications

Model Unit	78430003	78440003
Style	Plain	Plain
Size (Inches/Millimetres)	6.00/152.4	8.00/203.2
Weight (Pounds/Kilograms)	3.00/1.36	4.00/1.81

Part	Description
78430003	6" Plain Door
78440003	8" Plain Door

ATTACHMENTS



Model Unit	88024801
Weight (Pounds/Kilograms)	6.0/0.17



Model Unit	88024901
Weight (Pounds/Kilograms)	13.0/0.37



Model Unit	88039601
Weight (Pounds/Kilograms)	1.19/0.45



Model Unit	88028401
Weight (Pounds/Kilograms)	1.44/0.65



Model Unit	88039701
Weight (Pounds/Kilograms)	1.44/0.65



Model Unit	88028901
Weight (Pounds/Kilograms)	1.50/0.68

- Heat-treated, aluminium alloy body and brass probe.
- Forged bronze cams and stainless steel pins.

2	
	0

Part	Description
77421220	2" Cam and Groove Dust Cap
77421240	4" Cam and Groove Dust Cap





SIDE SEAL ADAPTOR

The Side Seal Adapter is designed to give flexibility to top seal drop elbows. Your 4" top seal delivery elbow can now be used on a side 4" seal fill adapter. You don't have to bring a separate side seal elbow, which reduces cost and the number of fittings required on your truck.

Two lever clamps secure the adapter to the station's side seal fitting and allow a 4" elbow to attach to the adapter. Special locking rings prevent accidental cam arm release during filling. Cast aluminium makes the side seal adapter light and strong. The specially designed seal gives you the added insurance that no leaks will occur.

Highlights

- Designed for use with 4" side seal service station fittings.
- Lightweight.
- Cast aluminium body.
- Special innovative seal design.
- No separate side seal elbow to transport.
- Locking rings to prevent accidental cam arm release during filling.

4.65" 8.94"

Specifications

Model Unit	88044501
Weight (Pounds/Kilograms)	10.0/4.58

Part	Description	
88044501	Side Seal Adapter	
	•	
Part Name		Part

Part Name	Part
Seal	88120201
Release Lever Spring	88110301
Release Lever Interlock	88120100
Pin, 0.125 × 0.875", Groove Type "E"	1145901
Release Lever	88120001

If you wish to contact us about any of our products or services please contact the nearest Franklin Fueling Systems office.

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