



• Gas station fitting series

SHANGHAI
AILE PETROLEUM
EQUIPMENT
MFG.CO.,LTD.

Valve Series



BC-CH Series Of Reconnectable Breakaways

The AILE BC-CH is a dry reconnectable breakaway for the conventional dispensing market. It is designed to be installed on fuel dispensing hoses, and will separate when subjected to a designated pull force. The dual valves seat automatically stopping the flow of fuel and limiting any fuel spillage, while protecting the dispensing equipment. When reconnecting the separated halves, the AILE BC-CH seals tightly on an O-ring before the poppet stems engage to open the valve. For proper operation on high-hanging hoses, the AILE BC-CH must always be installed with a "straightening" hose with a minimum length of 9". For low hose applications, the AILE BC-CH should be installed down stream of the retractor cable.

Materials:

Body: die cast zinc

Main Seals: Viton

Main Spring: stainless steel

Guide and poppet: POM

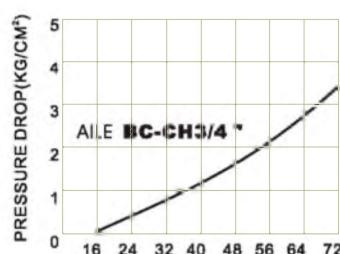
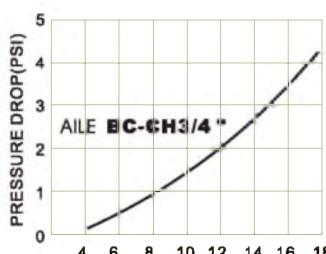
Protective Sleeve: PA66

BC-CH 3/4 "

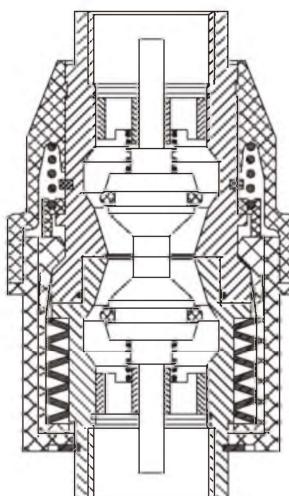
Package:

Gross Weight: 18.5kg/case of 32

31x30x26cm³/case of 50



AILE® BC-CH Series



Features & Benefits:

- ◆ **Pull force**- the AILE BC-CH 3/4" will break away with a pull force of 250 lbs \pm 5%, the AILE BC-CH 1" will break away with a pull force of 300 lbs \pm 5%.
- ◆ **Unique double-poppet design**-features low pressure drop.
- ◆ **Flow rate:** 0-60L/Min
- ◆ **Working pressure:** 0.18Mpa
- ◆ **Coupling halves**- protected by proven plastic sleeves.
- ◆ **Easily reconnected**- just "push and twist" until you hear the audible click, signifying the unit has been correctly reconnected. Reconnection force approximately 15 lbs.
- ◆ **Line shock** - the AILE BC-CH is able to absorb the effects of normal line shock through the unique design of the disconnecting features.
- ◆ **May be reconnected under wet or dry hose conditions.**
- ◆ **100% Factory Tested.**

Warning:

We advise you replace a new AILE BC-CH breakaway when the pull-force is lower than 180lbs after many reconnections.

Ordering Specifications:

Product #	Size
BC-CH 3/4"	BSP3/4" / NPT3/4"

BC-ZQ Series Of Safety Breakaway Swivels

► The AILE BC-ZQ Swivel Breakaway is intended for easy installation at the nozzle inlet the compact, light weight design incorporates a 360° swivel rotation at both the male end and middle joint,with a simple and easily reconnectable breakaway on the opposite end.

► Package:

Net Weight: 0.256Kg/pc
Gross Weight: 0.26kg/pc
 42x26x24cm/case of 50 pc

► Features & Benefits:

- ◆ **Pull force**-the swivel breakaway will break away with a pull force of no more than 250lbs.
- ◆ **Easily reconnected at waist height**-after relieving line pressure, simply push coupling halves together until latched. Reconnection force is approximately 15lbs.
- ◆ **Reduces connections**-the single unit design replaces the standard swivel, breakaway and whip hose, eliminating possible leak points.
- ◆ **Double o-ring seal**-both swivel joints are protected by a double o-ring design.
- ◆ **Flow Range**-0~90L/min

► Ordering Specifications:

product#	Inlet	Outlet	Suit
BC-ZQ-801	BSPT1"male	M34x1.5male	ZYQ NOZZLE
BC-ZQ-802	BSPT1"male	BSPT1"male	OTHER NOZZLE
BC-ZQ-803	BSPT1"male	BSPT1"Female	OTHER NOZZLE
BC-ZQ-804	BSPT1"male	BSPT3/4"Female	OTHER NOZZLE
BC-ZQ-805	BSPT1"male	BSPT3/4"male	OTHER NOZZLE
BC-ZQ-806	BSPT1"Female	M34x1.5male	ZYQ NOZZLE
BC-ZQ-807	BSPT1"Female	BSPT1"male	OTHER NOZZLE
BC-ZQ-808	BSPT1"Female	BSPT1"Female	OTHER NOZZLE
BC-ZQ-809	BSPT1"Female	BSPT3/4"Female	OTHER NOZZLE
BC-ZQ-8010	BSPT1"Female	BSPT3/4"male	OTHER NOZZLE
BC-ZQ-8011	BSPT1"male	M34x1.5ma	ZYQ NOZZLE
BC-ZQ-8012	BSPT1"male	NPT1"malee	OTHER NOZZLE
BC-ZQ-8013	BSPT1"male	NPT1"Female	OTHER NOZZLE
BC-ZQ-8014	BSPT1"male	NPT3/4"Female	OTHER NOZZLE
BC-ZQ-8015	BSPT1"male	NPT3/4"male	OTHER NOZZLE
BC-ZQ-8016	BSPT1"Female	M34x1.5ma	ZYQ NOZZLE
BC-ZQ-8017	BSPT1"Female	NPT1"malee	OTHER NOZZLE
BC-ZQ-8018	BSPT1"Female	NPT1"Female	OTHER NOZZLE
BC-ZQ-8019	BSPT1"Female	NPT3/4"Female	OTHER NOZZLE
BC-ZQ-8020	BSPT1"Female	NPT3/4"male	OTHER NOZZLE
BC-ZQ-8021	BSPT3/4"Female	M34x1.5male	ZYQ NOZZLE
BC-ZQ-8022	BSPT3/4"Female	BSPT1"male	OTHER NOZZLE
BC-ZQ-8023	BSPT3/4"Female	BSPT1"Female	OTHER NOZZLE
BC-ZQ-8024	BSPT3/4"Female	BSPT3/4"Female	OTHER NOZZLE
BC-ZQ-8025	BSPT3/4"Female	BSPT3/4"male	OTHER NOZZLE
BC-ZQ-8026	NPT3/4"Female	M34x1.5ma	ZYQ NOZZLE
BC-ZQ-8027	NPT3/4"Female	NPT1"malee	OTHER NOZZLE
BC-ZQ-8028	NPT3/4"Female	NPT1"Female	OTHER NOZZLE
BC-ZQ-8029	NPT3/4"Female	NPT3/4"Female	OTHER NOZZLE
BC-ZQ-8030	NPT3/4"Female	NPT3/4"male	OTHER NOZZLE

► AILE® BC-ZQ Series

BC-YC Series Of Breakaways

► The AILE BC-YC is designed to be installed on fuel dispensing hoses, and will separate when subjected to a designed pull force. The dual valves seat automatically, stopping the flow of fuel and limiting any fuel spillage, while protecting the dispensing equipment. For proper operation, the AILE BC-YC 3/4" should be installed with a "straightening" hose with a minimum length of 9". The AILE BC-YC 1" should be installed with a minimum length of 12".

► Materials:

Body: Aluminum

Main Seals: Viton

Main Spring: stainless steel

Guide and poppet: POM

Protective Sleeve: PVC

► BC-YC 3/4" Package:

Net Weight: 0.23kg/pc

Gross Weight: 0.26kg/pc

26.8x48x26cm³ /case of 100pc

► BC-YC1 "Package:

Net Weight: 0.38kg/pc

Gross Weight: 0.44kg/pc

29x29x30cm³ / case of 50pc

► Ordering Specifications:

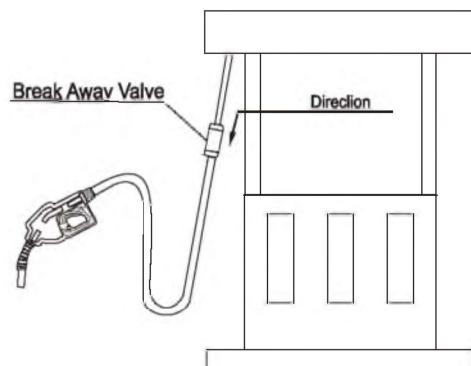
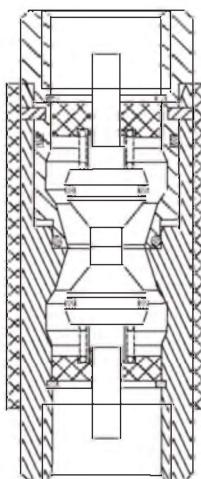
Product #	Size	Weight
BC-YC 801	NPT3/4"×NPT3/4"	230g
BC-YC 802	BSP3/4"×BSP3/4"	230g
BC-YC 803	NPT1"×NPT1"	380g
BC-YC 804	BSP1"×BSP1"	380g

► Features & Benefits:

- ◆ **Pull force-** the AILE BC-YC 3/4" will break away with a pull force 300 lbs ±5%, the AILE BC-YC 1" will break away with a pull force 360 lbs ±5%.
- ◆ **Certainty of operation-** designed to be replaced after separation, instead of reassembled, to protect against reassembly errors.
- ◆ **Unique double-poppet design-** features low pressure drop.
- ◆ **Flow rate:** 0-60L/Min (3/4")
0-120L/Min (1")
- ◆ **Working pressure:** 0.18Mpa
- ◆ **Low pressure drop-** the integral check valve design allows for minimal pressure drop for faster, high-volume fill-ups.
- ◆ **100% Factory Tested.**



► AILE BC-YC Series



DJF Series Angle Check Valves

► AILE DJF Angle Check Valves are installed on suction system, fuel lines on top of fuel storage tanks to maintain prime. Models are available with male threaded inlets for connection directly into tank bung fittings or with female inlets for connection to a nipple that is threaded into a tank bung fitting. Single-poppet models can be used in applications where the valve is easily accessible for maintenance and disc cleaning or replacement.

► **Materials:**

Body: Cast Iron

Cap: Brass

Surface: Electronic Chrome Plated

► **Package:**

Net Weight: 2.1kg/pc

Gross Weight: 2.125kg/pc

28x26x27.8 cm³/case of 12pc

► **Ordering Specifications:**

Product #	Size
DJF 801	NPT1 $\frac{1}{2}$ "(inlet)xNPT1 $\frac{1}{2}$ "(outlet)
DJF 802	NPT1 $\frac{1}{2}$ "(inlet)xBSP1 $\frac{1}{2}$ "(outlet)
DJF 803	BSP1 $\frac{1}{2}$ "(inlet)xNPT1 $\frac{1}{2}$ "(outlet)
DJF 804	BSP1 $\frac{1}{2}$ "(inlet)xBSP1 $\frac{1}{2}$ "(outlet)
DJF 805	NPT2 "(inlet)xNPT2 "(outlet)
DJF 807	BSPT2 "(inlet)xBSPT2 "(outlet)

► **Features & Benefits:**

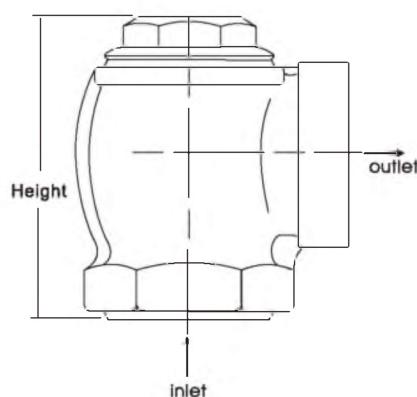
- ◆ The AILE DJF features a spring-loaded poppet and Buna-N discs to assist in keeping the valve closed when installed in high-vibration areas.
- ◆ The AILE DJF Angle Check Valves are recommended for use on suction lines where the pressure does not exceed 34 ft of head (approximately 15 psi.).
- ◆ **100% Factory Tested.**

► **Dimension for height:**

Product Size	H
1 $\frac{1}{2}$ "	116
2"	123



► **AILE DJF Series**



QDYH Series Of Emergency Shut-off Valves

► AILE QDYH Series Emergency Shut-off Valves are installed on fuel supply lines beneath at grade level to minimize hazards associated with collision or fire at the dispenser. If the dispenser is pulled over or dislodged by collision, the top of the valve breaks off the flow of fuel. Single-poppet models shut off supply flow, while double-poppet models shut off supply as well as prevent release of fuel from the dispenser's internal piping. The base of the Emergency Valve is securely anchored to the concrete dispenser island through a stabilizer bar system within a U-Bolt Assembly. Valve inlet (bottom) connection are female pipe threads and outlet (top) connections are available with female threads, male threads, or a union fitting. Other options include suction system models with a normally closed secondary poppet which maintain prime, and models with external threads on inlet body which connect to secondary containment system.

► Materials:

Body: Cast iron

Seal: Buna-N O-ring

Carrier: Zinc-Plate Steel

Medium: Water, gasoline, diesel, and kerosene

Operating Environment: -30°C~+55°C

► Package:

Net Weight: 3kg/pc

Gross Weight: 3.33kg/pc

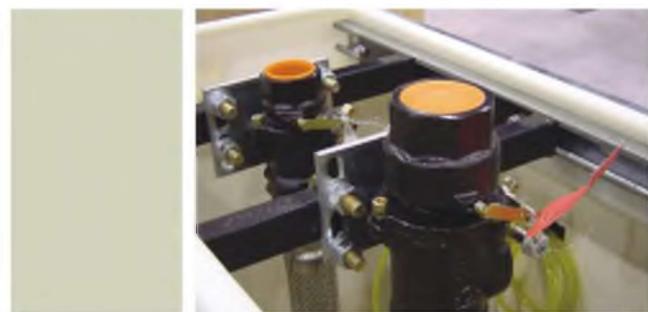
37.5x13.5x39 cm³/case of 6pc

► AILE® QDYH Series



► Features & Benefits:

- ◆ **Shear force:** 600NM-880NM
- ◆ **Fire Protection-** a fusible link trips the valve closed at 75°C to shut off fuel supply to the dispense.
- ◆ **Integral Test Port-** a 3/8" Test Port allows the piping system to be air tested without breaking any piping connection.
- ◆ **Low-Profile Tops-** Female and Union-top double-poppet valves have a low-profile top to allow upgrading from AILE single-poppet valves without changing existing piping.
- ◆ **Multiple Mounting Option-** Valves are boss-mounted to stabilizer bars in sumps and pans or mounted to bars embedded in the island with U-Bolt kits. Versatile Combination Body (boss mount/ U-Bolt mount) models are available to accommodate most mounting applications with one valve style.
- ◆ **100% Factory Tested.**

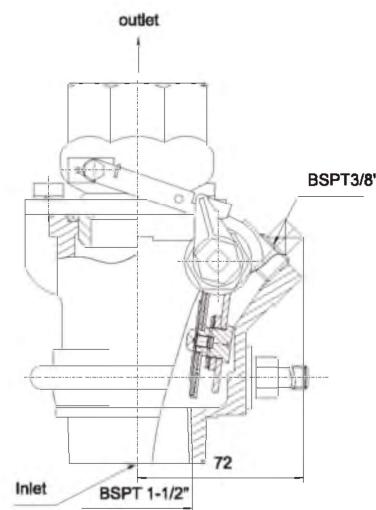
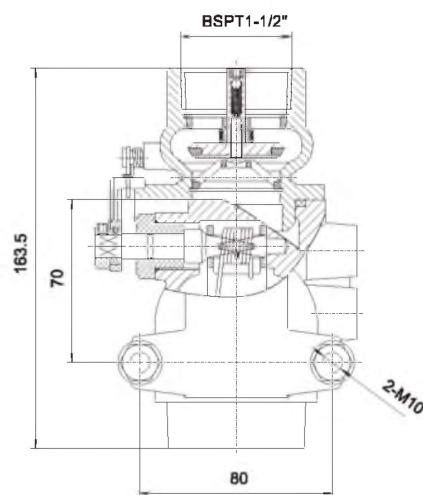
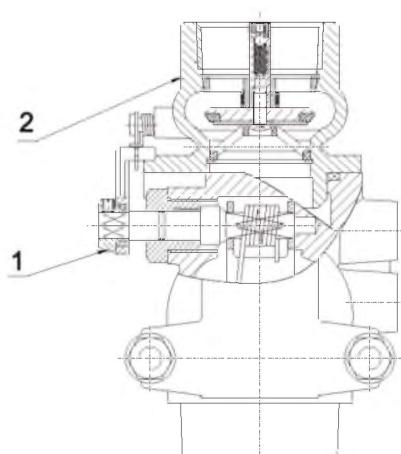


► Ordering Specifications:

product #	Inlet thread	Outlet thread	Poppet Configuration
QDYH 901	NPT1 1/2"(female)	NPT1 1/2"(female)	Single
QDYH 902	NPT1 1/2"(female)	NPT1 1/2"(female)	Double
QDYH 906	NPT1 1/2"(female)	NPT1 1/2"(male)	Single
QDYH 909	BSP1 1/2"(female)	BSP1 1/2"(female)	Single
QDYH 910	BSP1 1/2"(female)	BSP1 1/2"(female)	Double
QDYH 912	BSP1 1/2"(female)	BSP1 1/2"(male)	Single
QDYH 913	NPT2"(male)	NPT1"(female)	Single
QDYH 914	NPT2"(male)	NPT1"(female)	Double
QDYH 917	NPT2"(male)	NPT1"(male)	Single
QDYH 921	BSP2"(male)	BSP1"(female)	Single
QDYH 922	BSP2"(male)	BSP1"(female)	Double
QDYH 924	BSP2"(male)	BSP1"(male)	Single
QDYH 926	NPT2"(male)	NPT2"(male)	Single
QDYH 928	NPT2"(male)	NPT2"(male)	Double
QDYH 930	BSPT2"(male)	BSPT2"(male)	Single
QDYH 932	BSPT2"(male)	BSPT2"(male)	Double

QDYH Series Of Emergency Shut-off Valves

► AILE® QDYH Shown



► Important:

AILE® Products should be used in compliance with country, province and local Laws and regulations. Products selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. AILE Makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest products information available at the time of publication, AILE reserves the right to make changes at any time in price, materials, specifications and models and to discontinue models without notice or obligation.

► Replacement Parts:

Key	Description	Weight
1	Protect pin	
2	Cap (Single)	0.795kg
3	Cap (Double)	0.895 kg



Sv40 Series Foot Valves

► AILE Products should be used in compliance with country, province and local Laws and regulations. Products selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. AILE Makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest products information available at the time of publication, AILE reserves the right to make changes at any time in price, materials, specifications and models and to discontinue models without notice or obligation.

► Materials:

Body: Brass
Valve: Brass
Seals: Buna-N / Viton
Valve closing speed: 0.5S
Medium: Gasoline, diesel, and kerosene
Operating Temperature: -30°C ~ +55°C

► Package:

Net Weight: 1.6kg/pc
Gross Weight: 1.75kg/pc
30x31.2x18.5cm³/case of 20pc

► Ordering Specifications

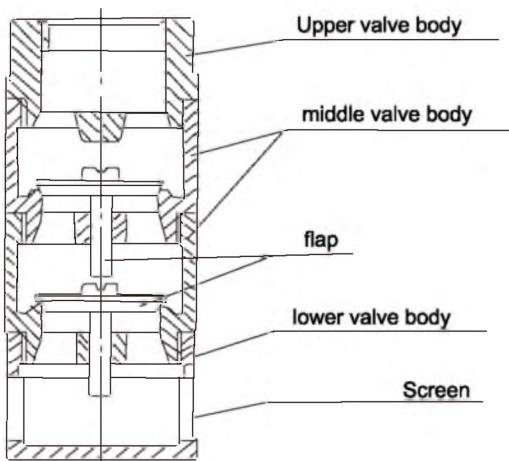
Product #	Size	Poppet Configuration	Weight
SV-40	BSP1 ¹ / ₂ " NPT1 ¹ / ₂ "	Double	1.6kg
SV-50	BSP2" NPT2"	Double	2.4kg
SV-80	BSP3" NPT3"	Double	5kg

► Features & Benefits:

- ◆ AILE Series Foot Valves are installed on the bottom of suctiontubes in the fuel storage tank to maintain prime in suction system fuel lines.
- ◆ Double-poppet models provide redundant protection for holding the prime, and are ideal for installations where the valve is not easily accessible.
- ◆ AILE Series Foot Valves feature precision metal-to-metal sealing arrangements. AILE Series Foot Valves are recommended for use on suction lines where the pressure does not exceed 34 ft of head (approximately 15 psi).
- ◆ All AILE Series Foot Valves are pressure tested to ensure accuracy
- ◆ Screen protects the valve from debris
- ◆ 100% factory tested



► AILE® Sv40 Series



AILE HC Series Of Ball Float Vent Valves

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

► **Package:**

Net Weight: 0.92 kg/pc
Gross Weight: 1.09 kg/pc
 29.5x46x39cm³/Case of 30pc

► **Ordering Specifications:**

Product #	Thread Size In	"A" LENGTH	Kg.
HC-201	2 "	76	0.82
HC-202	2 "	130	0.91
HC-203	2 "	178	1.36
HC-204	2 "	306	1.81
HC-205	2 "	408	3.18
HC-206	2 "	535	3.18

► **2" Ball Float Features**

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

► **AILE® HC Series****Adaptor of Extractor vent valves**

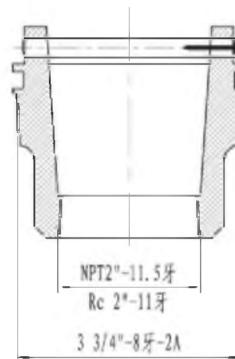
► AILE's Adaptor of Extractor vent valves is designed to connect Extractor vent valves with Ball float vent valves.

► **Materials:** Cast Iron► **Package:**

Net Weight: 1.1 kg/pc
Gross Weight: 1.2 kg/pc
 45x45x50 cm³/case of 40pc

► **Warning:**

AILE extractor vent valves assembly 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 One Vapor recovery drop tubes.



Extractor Vent Valves

► AILE's Extractor Vent Valves are designed to fit into a 4" tank opening on an underground storage tank. Models with a brass cage assembly are used in conjunction with AILE's 2" Float Vent Valves offering easy removal for maintenance or testing. Several outlet sizes are available to accommodate manifolded tank lines and Stage II vapor recovery installations.

► Package:

Net Weight: 7.08 kg/pc
 Gross Weight: 7.17 kg/pc
 57x44x16cm³/Case of 6pc

► Accessories

◆ Cast Iron Plug w/o-Ring Seal, for isolating vent piping from tank during testing.

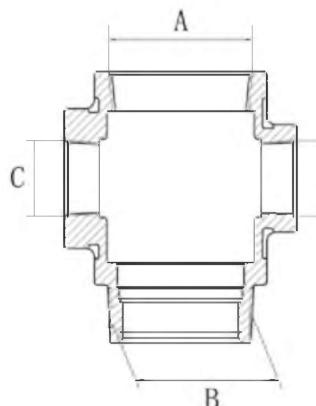
► Features & Benefits:

◆ Zinc coated cast iron body offers long life and protection against rust and corrosion.
 ◆ Brass insert cage allows easy access to float vent valves.

► Ordering Specifications:

PART	SIZE-A	SIZE-B	SIZE-C	SIZE-D
	IN.	IN.	IN.	IN.
EVV-01	4	4	3	2
EVV-02	4	4	3	3
EVV-03	4	4	2	2

► AILE® Extractor Vent Valves



Ball Float Vent Valves & Extractor Vent Valves Assembly

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

The extractor vent valves are designed to fit into a 4" tank opening on an underground storage tank. Models with a brass cage assembly are used in conjunction with 2" float vent valve offering easy removal for maintenance or testing. Several outlet sizes are available to accommodate manifolded tank lines and Stage II vapor recovery installations.

Adaptor of Extractor vent valves is designed to connect Extractor vent valves with Ball float vent valves.

► Ball Float Features:

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

► Extractor Vent Valves Features:

Zinc coated cast iron body offers long life and protection against rust and corrosion. Brass insert cage allows easy access to float vent valves.

► Warning:

Float vent valves 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 One Vapor recovery drop tubes.

► AILE® Ball Float Vent Valves & Extractor Vent Valves Assembly



VV-A Open Atmospheric Vent

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

► **Materials:**

Body: aluminum
Screen: 40-mesh stainless steel
Set Screws: brass

► **Ordering Specifications:**

Product #	Connection
VV-A-801	2" without threads
VV-A-802	NPT2" Female
VV-A-803	BSPT2" Female
VV-A-804	11/2" without threads
VV-A-805	NPT11/2" Female
VV-A-806	BSPT11/2" Female

► **Features & Benefits:**

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

► **AILE® VV-A****VV-V & VV-VR Pressure Vacuum Vents**

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

► **Package:**

Net Weight: 0.51 kg/pc
Gross Weight: 0.52 kg/pc
35x35x55 cm³/case of 45pc

► **Ordering Specifications:**

Product#	Connection Threads	OZ.OF Pressure	OZ.OF Vacuum
VV-V-801	NPT2"Female	8.00	5.00
VV-V-802	BSPT2"Female	8.00	5.00
VV-V-803	BSPP2"Female	8.00	5.00
VV-VR-801	NPT2"Female	500pa-900pa	1500pa-2250pa
VV-VR-802	BSPT2"Female	500pa-900pa	1500pa-2250pa
VV-VR-803	BSPP2"Female	500pa-900pa	1500pa-2250pa

Note: VV-VR is used for Vapor Recovery System of Petrol Station

► **AILE® VV-V / VV-VR**

ZHF-V Series Of Vapor Check Valve Adaptors

► AILE'S ZHF-V vapor check valve adaptors are used on the vapor recovery riser pipes on an underground storage tank. Dual point vapor recovery systems provide an easy and economical installation at new locations and faster drop times than coaxial systems due to a straight 4" drop across the top and vapors collected from 3" or 4" riser pipe. The vapor check valve adaptor permits coupling to the vapor return line from the underground tank in dual point systems. The poppet design seals off the vapor path when not coupled.

► Package:

Net Weight:1.95Kg/pc
Gross Weight: 1.96Kg/pc
36.5x48.5x40cm³/ case of 36pc

► Ordering Specifications:

product#	Connection Threads	SIZE	MATERIAL
ZHF-V-801	NPT 4"Female	4"	Anodized aluminum
ZHF-V-802	BSPT 4"Female	4"	Anodized aluminum

► Features :

- ◆ Constructed of anodized aluminum body
- ◆ Eliminates digging---Slips into existing drop tubes
- ◆ Fits all 4" vapor recovery elbows

ZHF-API Check valve**► Materials:**

Body: Cast aluminum
Spring: Stainless steel
Discs Seals: Buna-N

► Package:

Net Weight:4.15Kg/pc
Gross Weight: 4.2Kg/pc
39x45x38cm/ case of 8pc

► Features :

- ◆ Heavy-duty body
- ◆ long-life performance
- ◆ Easy and inexpensive to maintain-saal and conversion kits available
- ◆ 4"x4" connection flange complies with Tw100
- ◆ 300psi(20 bar) pressure rating

**► AILE' ZHF-V Series****► AILE' ZHF-API Check valve**