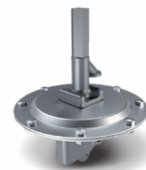



# Vapor and Flame Control Equipment

**100**  
YEARS  
IN BUSINESS



-  Flame Arresters
-  Conservation Relief Vents
-  Emergency Relief Vents
-  Hatches
-  Tank Blanketing Valves
-  Complementary Equipment





## Ensuring Safety for 100 Years and Counting

Protectoseal has more than a century of experience manufacturing and providing vapor and flame control equipment. This extensive expertise equips us with unrivalled capabilities to meet the most rigorous customer needs. Rely on our highly trained sales representatives and skilled engineering and design staff to deliver the best solution for your specific application.



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# End-of-Line Deflagration Flame Arresters

## ■ AVC End-of-Line Deflagration Flame Arrester

The AVC protects against deflagration and prevents the spread of external fires in piping systems. It incorporates innovative sintered gauze technology that ensures the secure passage of gas or vapor while extinguishing flames effectively. The flame arrester effectively cools combustion products at the element surface. Ideal for hydrogen applications.

Suitable for Group B and C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB and IIC

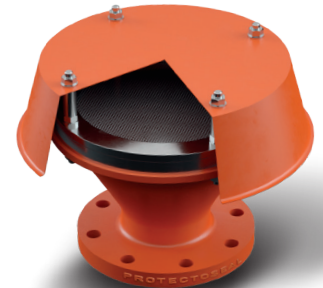
Sizes: 1" (DN 25) through 16" (DN 400)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel



## ■ EHB End-of-Line Deflagration Flame Arrester

The EHB protects against deflagration and prevents the spread of external fires in piping systems. It is intended for high-temperature applications and uses cutting-edge E-Flow Technology to provide superior performance, efficiently cooling combustion products at the element surface. This lightweight flame arrester boasts superior flow capacity and minimal pressure drop.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups Groups IIB1, IIB2, and IIB3

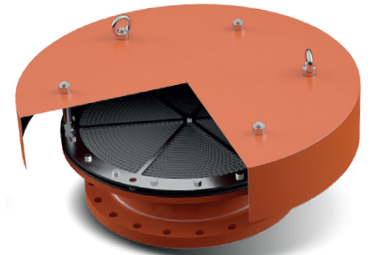
Sizes: ½" (DN 15) through 24" (DN 600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel 🔧 Alloy C/C276



## ■ ERB End-of-Line Deflagration Flame Arrester

The ERB protects against deflagration and prevents the spread of external fires in piping systems. It incorporates cutting-edge E-Flow® technology to provide superior performance, efficiently cooling combustion products at the element surface. Patented RE-Flow® technology enables downward venting and self-draining of the arrester element.

Suitable for Group C and D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA1, IIA, IIB1, IIB2, and IIB3

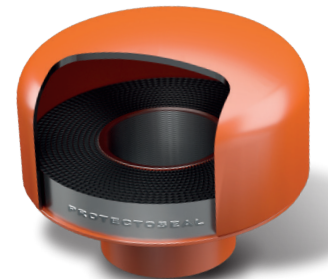
Sizes: ¼" (DN10) through 3" (DN 80)

Flange Pattern: Mates with 150# ANSI, DIN PN16, NPT (F), or BSP (F)

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel



## ■ ESA End-of-Line Deflagration Flame Arrester

The ESA protects against deflagration and prevents the spread of external fires in piping systems. It incorporates cutting-edge E-Flow® technology to provide superior performance, efficiently cooling combustion products at the element surface. Equipped with a control/monitoring system, it promptly detects temperature spikes and enacts secondary protective measures such as inerting and shut-off valves.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

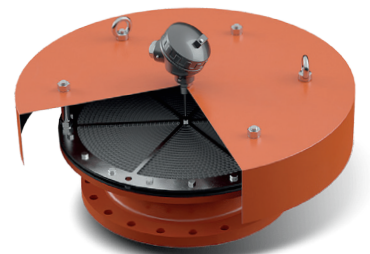
Sizes: ½" (DN 15) through 24" (DN 600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel 🔧 Alloy C/C276







### ■ EVA End-of-Line Deflagration Flame Arrester

The EVA protects against deflagration and prevents the spread of external fires in piping systems. It incorporates cutting-edge E-Flow® technology to provide superior performance, efficiently cooling combustion products at the element surface. Ideal for installation at the end of a pipeline or exit vent.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

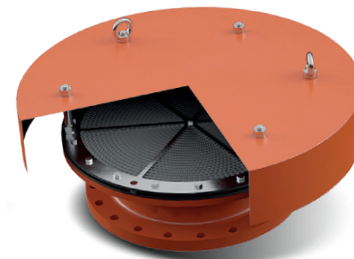
Sizes: ½" (DN 15) through 24" (DN 600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

#### Material of Construction

Stainless Steel Carbon Steel Alloy C/C276



### ■ EVB End-of-Line Deflagration Flame Arrester

The EVB protects against deflagration and prevents the spread of external fires in piping systems. It incorporates cutting-edge E-Flow® technology to provide superior performance, efficiently cooling combustion products at the element surface. Ideal for installation at the end of a pipeline or exit vent.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB1, IIB2, and IIB3

Sizes: ½" (15mm) through 24" (DN 600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

#### Material of Construction

Stainless Steel Carbon Steel Alloy C/C276

### ■ SV End-of-Line Deflagration Flame Arrester

The SV protects against deflagration and prevents the spread of external fires in piping systems. Designed for simple installation at pipeline ends or on atmospheric vents, it offers a lightweight and cost-effective solution for various applications. Ideal for use in gas purging, sample lines, and instrumentation lines.

Suitable for Group C and D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA, IIA1, IIB1, IIB2, and IIB3

Sizes: ½" (15mm) through 2" (DN 50)

Flange Pattern: Mates with NPT (F) or BSP (M)

#### Material of Construction

Aluminum Zinc Alloy



(Continued on next page...)

# End-of-Line Deflagration Flame Arresters

(Continued)

## ■ 670 End-of-Line Deflagration Flame Arrester

The 670 protects against deflagration and prevents the spread of external fires in piping systems. Designed for easy mounting to the end of a tank nozzle leading directly to the atmosphere, it allows vapors to escape and air to be drawn into the tank through its specially designed grid assembly.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 1" (DN 25) through 4" (DN 100)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: UL

### Material of Construction

Aluminum Stainless Steel

## ■ 670E End-of-Line Deflagration Flame Arrester

The 670E protects against deflagration and prevents the spread of external fires in piping systems. Designed for easy mounting to the end of a tank nozzle leading directly to the atmosphere, it allows vapors to escape and air to be drawn into the tank through its specially designed grid assembly.

Suitable for Group D and C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA, IIA1, and IIB3

Sizes: 1" (DN 25) through 6" (DN 150)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

Aluminum Stainless Steel Carbon Steel



## ■ 860 End-of-Line Deflagration Parallel Plate Flame Arrester

The 860 protects against deflagration and prevents the spread of external fires in piping systems. Designed for easy installation at the end of a vent pipe, it allows vapors to escape into the atmosphere while enabling air to be drawn into the tank through its specially designed grid assembly.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 2" (DN 50) through 8" (DN 200)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: UL and FM

### Material of Construction

Aluminum Stainless Steel Ductile Iron



### 860 End-of-Line

Deflagration Parallel Plate  
Flame Arrester



### ■ Fig. 1

The 860 End-of-Line Deflagration Parallel Plate Flame Arrester lets tanks breathe normally and stops the flashback of an atmospheric deflagration.





# In-Line and Vent-Line Deflagration Flame Arresters

## ■ LCA In-Line Concentric Deflagration Flame Arrester

The LCA protects against deflagration and prevents fire spread with cutting-edge E-Flow® technology. This bi-directional flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. The flame arrester effectively cools combustion products at the element surface for added safety.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

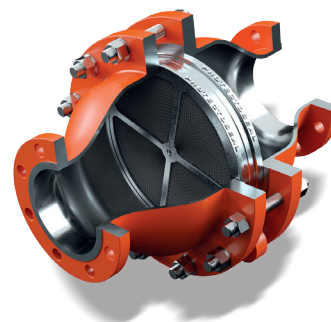
Sizes: 2" (DN 50) through 24" (DN600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C/C276



## ■ LCB In-Line Concentric Deflagration Flame Arrester

The LCB protects against deflagration and prevents fire spread with cutting-edge E-Flow® technology. This bi-directional flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. The flame arrester effectively cools combustion products at the element surface for added safety.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB1, IIB2, and IIB3

Sizes: ½" (DN 15mm) through 12" (DN 300)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C/C276

## ■ LEA In-Line Eccentric Deflagration Flame Arrester

The LEA protects against deflagration and prevents fire spread with cutting-edge E-Flow® technology. This bi-directional flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. Its eccentric housing design prevents condensation buildup, making it perfect for close installation near other objects or walls. The flame arrester effectively cools combustion products at the element surface for added safety.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA1 and IIA

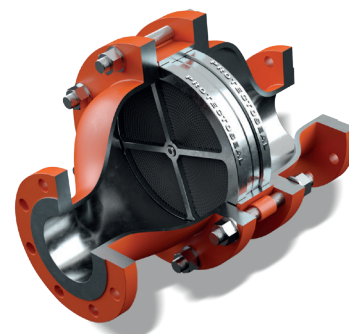
Sizes: ½" (DN 15) through 16" (DN400)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C/C276



## ■ LEB In-Line Eccentric Deflagration Flame Arrester

The LEB protects against deflagration and prevents fire spread with cutting-edge E-Flow® technology. This bi-directional flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. Its eccentric housing design prevents condensation buildup, making it perfect for close installation near other objects or walls. The flame arrester effectively cools combustion products at the element surface for added safety.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB1, IIB2, and IIB3

Sizes: ½" (DN 15) through 4" (DN100)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX or EN ISO 16852

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C/C276

(Continued on next page...)

# In-Line and Vent-Line Deflagration Flame Arresters

(Continued)

## ■ DFC In-Line Concentric Deflagration Flame Arrester

The DFC protects against deflagration and prevents fire spread with cutting-edge E-Flow® technology. This bi-directional flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. The flame arrester effectively cools combustion products at the element surface for added safety.

Suitable for Group B, C, and D vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB and IIC

Sizes: 1" (DN 25) through 6" (DN 150)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel



## ■ MB-IB In-Line Deflagration Flame Arrester

The MB-IB protects against deflagration and prevents fire spread within piping systems. This microbore flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. The flame arrester effectively cools combustion products at the element surface for added safety. Ideal for gas sampling and analysis equipment.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Group IIB3

Sizes: ½" (DN 15) through ¾" (DN 20)

Flange Pattern: Mates with NPT (F) or BSP (F)

### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel







### ■ 4950 Vent-Line/In-Line Deflagration Parallel Plate Flame Arrester

The 4950 protects against deflagration and prevents fire spread within piping systems. This vertical, circular plate-type flame arrester limits flames or explosions to the immediate area, halting continuation into the protected line. It allows vapors to safely discharge while permitting air to enter the pipe. Ideal for open vent pipes, bleed lines, and vapor conveyance systems.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

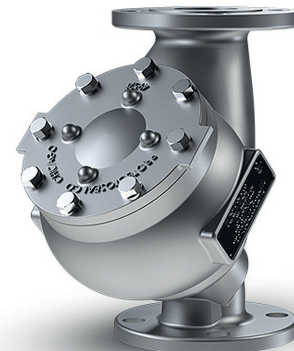
Sizes 1" (DN 25) through 12" (DN 300)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: UL and FM

#### Material of Construction

Aluminum Stainless Steel Ductile Iron



### ■ Fig. 2

The 4950 is usually placed just before the 8540H or with short sections of open vent outlet piping. This flame arrester is designed to withstand confined deflagration, where a flame front moves at a speed slower than sound within confined spaces like pipe walls or vent bodies.

# In-Line Unstable Detonation Flame Arresters

## ■ UCA In-Line Unstable Concentric Detonation Flame Arrester

The UCA protects against confined deflagrations, stable detonations, and unstable detonations with patented HEDS® and cutting-edge E-Flow® technology. This bi-directional flame arrester boasts superior flow capacity and minimal pressure drop for efficient operations.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 1" (DN 25) through 24" (DN 600)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel 🔧 Alloy C/C276

Featuring Protectoseal's  
Patented HEDS® Technology



## ■ UCB In-Line Unstable Concentric Detonation Flame Arrester

The UCB protects against confined deflagrations, stable detonations, and unstable detonations with patented HEDS® and cutting-edge E-Flow® technology. This bi-directional flame arrester boasts superior flow capacity and minimal pressure drop for efficient operations.

Suitable for Group C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIB1, IIB2, and IIB3

Sizes: 1" (DN 25) through 12" (DN300)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel 🔧 Alloy C/C276

Featuring Protectoseal's  
Patented HEDS® Technology



## ■ UEA In-Line Unstable Eccentric Detonation Flame Arrester

The UEA protects against confined deflagrations, stable detonations, and unstable detonations with patented HEDS® and cutting-edge E-Flow® technology. This bi-directional flame arrester ensures optimal flow capacity with minimal pressure drop. Its eccentric housing design prevents condensation buildup, making it perfect for close installation near other objects or walls.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 1" (DN 25) through 16" (DN400)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

🔧 Stainless Steel 🔧 Carbon Steel 🔧 Alloy C/C276

Featuring Protectoseal's  
Patented HEDS® Technology



### (High Energy Dissipation System)

Protectoseal's HEDS® technology is a novel and patented technology used in our line of In-Line Unstable Detonation Flame Arresters. It establishes a new standard for performance by ensuring full protection against deflagration, stable detonation, and unstable detonation.

HEDS® technology combines our patented High Energy Dissipation System and E-Flow® technology. This combination reduces shock waves and extinguishes flames, effectively mitigating the effects of an explosion by preventing it from spreading.





### ■ 25000 In-Line Unstable Concentric Detonation Flame Arrestor

The 25000 protects against confined deflagrations, stable detonations, and unstable detonations. This bi-directional flame arrester is designed to withstand high-speed, high-pressure flame fronts. Ideal for intricate piping setups in vapor recovery or tank systems.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 2" (DN 50) through 18" (DN 450)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: UL and USCG

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C276

### ■ 26000 In-Line Unstable Concentric Detonation Flame Arrestor

The 26000 protects against confined deflagrations, stable detonations, and unstable detonations. This bi-directional flame arrester is designed to withstand high-speed, high-pressure flame fronts. Ideal for intricate piping setups in vapor recovery or tank systems.

Suitable for Group D and C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA, IIA1, IIB1, IIB2, and IIB3

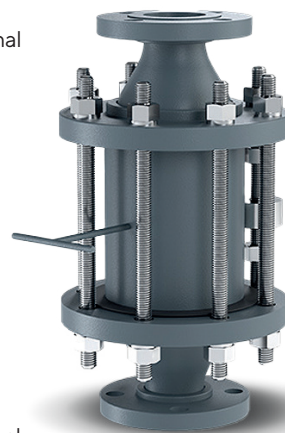
Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: FM and USCG

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C276



### ■ 35000 In-Line Unstable Concentric Detonation Flame Arrestor

The 35000 protects against confined deflagrations, stable detonations, and unstable detonations. This bi-dir flame arrester is designed to withstand high-speed, high-pressure flame fronts. Ideal for intricate piping setup recovery or tank systems.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 2" (DN 50) through 8" (DN 200)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: USCG

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C276

### ■ 36000RP In-Line Unstable Concentric Detonation Flame Arrestor

The 36000RP protects against confined deflagrations, stable detonations, and unstable detonations. This bi-directional flame arrester is designed to withstand high-speed, high-pressure flame fronts. Ideal for intricate piping setups in vapor recovery or tank systems.

Suitable for Group D and C Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA, IIA1, IIB1, IIB2, and IIB3

Sizes: 2" (DN 50) through 8" (DN 200)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: USCG

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel   🔧 Alloy C276



# End-of-Line Conservation Vents with Flame Arresters

## ■ FAB Valve® End-of-Line Pressure and Vacuum Relief Vent and Flame Arrester

The FAB Valve® is a patented valve designed to provide comprehensive pressure and vacuum relief, while also protecting against deflagrations. Featuring innovative E-Flow® technology and replaceable crimped-ribbon elements, this valve ensures exceptional flow capacity with minimal pressure drop. Its compact, lightweight design makes installation effortless, while enabling convenient in-situ inspection and maintenance.

Suitable for Group C and D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA, IIA1, and IIB3

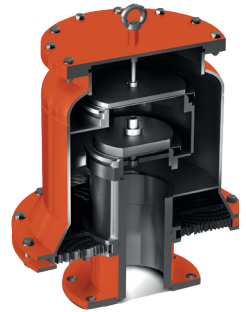
Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 150# ANSI or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

Stainless Steel Carbon Steel



## ■ 830 End-of-Line Pressure and Vacuum Relief Vent and Flame Arrester

The 830 is designed to provide comprehensive pressure and vacuum relief, while also protecting against deflagrations. Featuring a certified test report for guaranteed performance, this vent boasts a patented "air-cushion" pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 830 is a reliable choice for maintaining optimal storage conditions.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

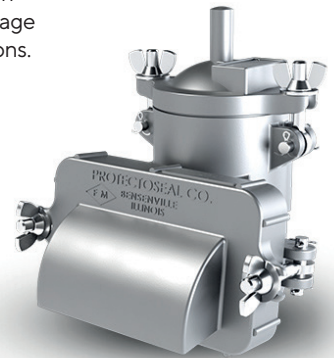
Sizes: 2" (DN 50) through 10" (DN 250)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: FM and UL

### Material of Construction

Aluminum Stainless Steel Ductile Iron



## ■ 830E End-of-Line Pressure and Vacuum Relief Vent and Flame Arrester

The 830E is designed to provide comprehensive pressure and vacuum relief, while also protecting against deflagrations. Featuring a certified test report for guaranteed performance, this vent boasts a patented "air-cushion" pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 830 is a reliable choice for maintaining optimal storage conditions.

Suitable for Group D Vapors (NEC 70, Article 500), generally equivalent to IEC Groups IIA and IIA1

Sizes: 2" (DN 50) through 6" (DN 150)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: ATEX and EN ISO 1685

### Material of Construction

Aluminum Stainless Steel Ductile Iron





# End-of-Line Conservation Vents

## ■ 8540H End-of-Line Pressure and Vacuum Relief Vent

The 8540H offers efficient pressure and vacuum relief, ensuring the tank's vapor space stays within safe limits and minimizing evaporation losses. Featuring a certified test report for guaranteed performance, this vent boasts a patented "air-cushion" pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 8540H is a reliable choice for maintaining optimal storage conditions.

Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: ATEX

### Material of Construction

- |          |                 |              |              |              |            |
|----------|-----------------|--------------|--------------|--------------|------------|
| Aluminum | Stainless Steel | Carbon Steel | Ductile Iron | Alloy C/C276 | Fiberglass |
| PVC      | CPVC            | PVDF         | PP           | PE           |            |

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin



## ■ 5200G End-of-Line Weatherhood Free Vent

The 5200G provides open access to a tank's vapor space with continuous pressure and vacuum venting. The vent features a new and improved economical design that is easy to install and maintain. Additionally, it comes equipped with a protective mesh screen to prevent debris from compromising the tank opening.

Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

### Material of Construction

- |          |                 |              |
|----------|-----------------|--------------|
| Aluminum | Stainless Steel | Carbon Steel |
|----------|-----------------|--------------|



## ■ 6240 End-of-Line Vacuum Relief Vent

The 6240 offers efficient vacuum relief, ensuring the tank's vapor space stays within safe limits. Featuring a certified test report for guaranteed performance, this vent boasts a patented "air-cushion" pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 6240 is a reliable choice for maintaining optimal storage conditions.

Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: ATEX

### Material of Construction

- |          |                 |              |              |              |            |
|----------|-----------------|--------------|--------------|--------------|------------|
| Aluminum | Stainless Steel | Carbon Steel | Ductile Iron | Alloy C/C276 | Fiberglass |
| PVC      | CPVC            | PVDF         | PP           | PE           |            |

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin



## End-of-Line Conservation Vents

(Continued)

### ■ 16240 Side-Mounted Vacuum Relief Vent

The 16240 offers efficient vacuum relief, ensuring the tank's vapor space stays within safe limits, and has a side-mount design for seamless installation. Featuring a certified test report for guaranteed performance, this vent boasts a patented "air-cushion" pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 16240 is a reliable choice for maintaining optimal storage conditions.

Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: ATEX

#### Material of Construction

- |          |                 |              |              |              |            |
|----------|-----------------|--------------|--------------|--------------|------------|
| Aluminum | Stainless Steel | Carbon Steel | Ductile Iron | Alloy C/C276 | Fiberglass |
| PVC      | CPVC            | PVDF         | PP           | PE           |            |

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin



## Non-Metallic Vents

Non-Metallic Vents provide pressure and/or vacuum relief for hazardous vapors that would otherwise damage conventional metallic vents and components.

### ■ Fiberglass Reinforced Plastic Vents

#### Availability:

8540H, 18540D, 7800, 17800, 6240, 16240, 53300, 4980, 7300D

These vents are extremely durable due to their one-piece housing and seamless hand lay-up construction, ensuring the vent's integrity over a long lifespan. They are reinforced with glass fibers and made with a carefully selected plastic resin to offer maximum resistance to strong corrosive substances. The standard resin used in construction is Derakane 470®.



### ■ Thermoplastic Resin Vents

#### Availability:

8540H, 18540D, 7800, 17800, 6240, 16240, 17800, 18540

These vents are extremely durable due to their one-piece housing and seamless hand lay-up construction, ensuring the vent's integrity over a long lifespan. They are reinforced with glass fibers and made with a carefully selected plastic resin to offer maximum resistance to strong corrosive substances. The standard plastics used in construction are PVC, CPVC, PP, PE, and PVDF.





# In-Line and Pipe-Away Conservation Vents

## ■ 8740 In-Line Pressure and Vacuum Relief Vent

The 8740 offers efficient pressure and vacuum relief within tank house installations. Designed to reduce evaporation losses, this vent ensures safe operation as it directs vapors for discharge through outlet pipes. Featuring a certified test report for guaranteed performance, this product boasts a patented “air-cushion” pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage for easy maintenance, the 8740 is a reliable choice for maintaining optimal storage conditions.

Sizes: 2” (DN 50) through 4” (DN 100)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

### Material of Construction

Aluminum Stainless Steel Ductile Iron



## ■ 17800 Pipe-Away Pressure Relief Vent

The 17800 offers efficient pressure relief in applications where hazardous vapors must be piped away rather than released into the atmosphere. Featuring a certified test report for guaranteed performance, this vent boasts a patented “air-cushion” pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 17800 is a reliable choice for maintaining optimal storage conditions.

Sizes: 2” (DN 50) through 12” (DN 300)

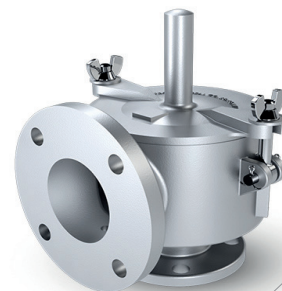
Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: ATEX

### Material of Construction

Aluminum Stainless Steel Carbon Steel Ductile Iron Alloy C/C276 Fiberglass  
PVC CPVC PVDF PP PE

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin



## ■ 18540D Pipe-Away Pressure and Vacuum Relief Vent

The 18540D offers efficient pressure and vacuum relief in applications where hazardous vapors must be piped away rather than released into the atmosphere. Featuring a certified test report for guaranteed performance, this vent boasts a patented “air-cushion” pallet design that limits leakage to no more than 1 SCFH at 90% of the set point. With automatic condensate drainage and a swing-bolt design for easy maintenance, the 18540D is a reliable choice for maintaining optimal storage conditions.

Sizes: 2” (DN 50) through 12” (DN 300)

Flange Pattern: Mates with 125# ANSI, 125# ANSI, 150# ANSI, or DIN PN16

Certifications/Approvals: ATEX and EN ISO 16852

### Material of Construction

Aluminum Stainless Steel Carbon Steel Ductile Iron Alloy C/C276 Fiberglass  
PVC CPVC PVDF PP PE

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin





# Emergency Pressure Relief Vents

## ■ ERV Hinged Emergency Pressure Relief Manhole Vent

The ERV is a reliable solution for emergency pressure relief in the face of external fire incidents. Specifically designed for easy installation on tank manhole openings, this vent serves as a reliable means of releasing large volumes of vapor that exceed the capacity of a standard operating vent. To ensure leak-tight sealing under normal operating conditions, the ERV features a PTFE insert between the pallet and seat

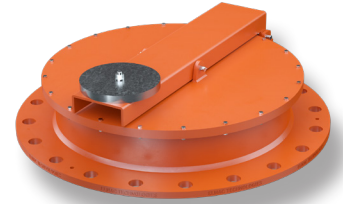
Sizes: 8" (DN 200) through 24" (DN 600)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or API

Certifications/Approvals: ATEX

### Material of Construction

Stainless Steel Carbon Steel



## ■ 7800 End-of-Line Emergency Pressure Relief Vent

The 7800 is a reliable solution for emergency pressure relief in the face of external fire incidents. Designed to minimize evaporation losses, this vent comes with a certified test report ensuring specified settings and leakage performance. With innovative features such as the patented "air-cushion" seating made from FEP film, this unit boasts a leakage rate of less than 1 SCFH of air at 90% of the set point.

Sizes: 2" (DN 50) through 24" (DN 600)

Flange Pattern: Mates with 125# ANSI, 150# ANSI, DIN PN16, or API

Certifications/Approvals: ATEX

### Material of Construction

Aluminum Stainless Steel Carbon Steel Alloy C/C276 Fiberglass PVC  
CPVC PVDF PP PE

Also Available in  
Fiberglass Reinforced Plastic  
and Thermoplastic Resin



## ■ 51700 Hinged Emergency Pressure Relief Manhole Vent

The 51700 is a reliable solution for emergency pressure and vacuum relief in the face of external fire incidents. Engineered with a unique hinge design for increased pressure relief capacity, this unit is tailored for easy installation on storage tank manhole openings. This vent comes with a certified test report ensuring specified settings and leakage performance. With innovative features such as the patented "Air-Cushioned Seating" made from FEP film, this unit boasts a leakage rate of less than 1 SCFH of air at 90% of the set point.

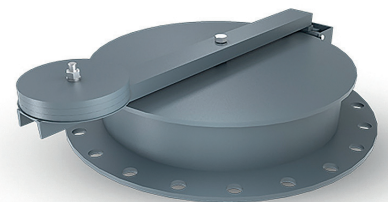
Sizes: 12" (DN 300) through 24" (DN 600)

Flange Pattern: Mates with 125# ANSI, DIN PN16, or API

Certifications/Approvals: ATEX

### Material of Construction

Aluminum Stainless Steel Carbon Steel



## ■ 52600 Emergency Pressure and Vacuum Relief Vent

The 52600 is a reliable solution for emergency pressure and vacuum relief in the face of external fire incidents. Designed for easy installation on the manhole opening of storage tanks, this vent comes with a certified test report ensuring specified settings and leakage performance. With innovative features such as the patented "air-cushion" seating made from FEP film, this unit boasts a leakage rate of less than 1 SCFH of air at 90% of the set point.

Sizes: 16" (DN 400) through 24" (DN 600)

Flange Pattern: Mates with 125# ANSI, DIN PN16, or API

Certifications/Approvals: ATEX

### Material of Construction

Aluminum Stainless Steel Carbon Steel





### ■ 53300 Emergency Pressure Relief Manhole Vent

The 53300 is a reliable solution for emergency pressure relief in the face of external fire incidents while also offering convenient access for tank cleaning, inspection, and repair work. This vent comes with a certified test report ensuring specified settings and leakage performance. With innovative features such as the patented “air-cushion” seating made from FEP film, this unit boasts a leakage rate of less than 1 SCFH of air at 90% of the set point.

Sizes: 16” (DN 400) through 24” (DN 600)

Flange Pattern: Mates with 125# ANSI, DIN PN16, or API

Certifications/Approvals: ATEX

#### Material of Construction

Aluminum

Stainless Steel

Carbon Steel

Alloy C/C276

Fiberglass

Also Available in  
Fiberglass Reinforced Plastic



### ■ 54000 Spring-Loaded Emergency Pressure Relief Vent

The 54000 is a reliable solution for emergency pressure relief in the face of external fire incidents while also offering convenient access for tank cleaning, inspection, and repair work. With a spring-loaded pallet designed for higher working pressure tanks, this unit ensures robust and reliable performance when it matters most. This vent also comes with a certified test report ensuring specified settings and leakage performance.

Sizes: 16” (DN 400) through 24” (DN 600)

Flange Pattern: Mates with 150# ANSI, DIN PN16, or API

#### Material of Construction

Stainless Steel

Carbon Steel



### ■ 56000 PIN-TECH™ Bubble-Tight Pressure Relief Vent

The 56000 is a reliable solution for emergency pressure relief in the face of external fire incidents. This vent is specifically designed to be mounted to a storage tank or vessel’s vapor space flange connection. By incorporating this vent, costly evaporation losses and VOC emissions are significantly reduced. Additionally, the vent is ETV verified to have “no detectable” emissions (<500 ppm), ensuring environmental compliance.

Sizes: 2” (DN 50) through 24” (DN 600)

Flange Pattern: Mates with 150# ANSI, DIN PN16, or API

Certifications/Approvals: Optional testing and certification for <500 ppm leakage

#### Material of Construction

Stainless Steel

Carbon Steel

Alloy C/C276



# Hatches

## ■ 3908-SL Pressure/Vacuum Relief Thief Hatch

The 3908-SL offers access to the tank interior for inspection, gauging, or sampling operations. This hatch also offers efficient pressure and vacuum relief, ensuring the tank's vapor space stays within safe limits and minimizing evaporation losses. With a certified test report verifying specified settings and leakage performance, the 3908-SL ensures secure vapor control, boasting low leakage performance of no more than 0.1 SCFH at 90% of the set pressure.

Sizes: 8" (DN 200)

Flange Pattern: Mates with API

### Material of Construction

Aluminum Stainless Steel



## ■ 4960D Free-Lifting Gauge Hatch

The 4960D is designed to provide convenient access to a storage tank's interior for inspection, gauging, and sampling purposes. This hatch is ideal for situations where a flame arrester is not required for fire protection. With a hinged cover for easy access, lightweight construction for effortless handling, and the added feature of a thermometer hook, the 4960D offers practicality and functionality for tank maintenance and monitoring tasks.

Sizes: 4" (DN 100), 6" (DN 150), and 8" (DN 200)

Flange Pattern: Mates with 125# ANSI or DIN PN16

Certifications/Approvals: FM

### Material of Construction

Stainless Steel Carbon Steel



## ■ 4980D Free-Lifting Gauge Hatch

The 4980D is designed to provide convenient access to a storage tank's interior for inspection, gauging, and sampling purposes. This hatch is ideal for situations where a flame arrester is not required for fire protection. With a hinged cover for easy access and lightweight construction, the 4980D offers practicality and functionality for tank maintenance and monitoring tasks.

Sizes: 4" (DN 100), 6" (DN 150), and 8" (DN 200)

Flange Pattern: Mates with 125# ANSI or DIN PN16

Certifications/Approvals: FM

### Material of Construction

Aluminum







### ■ 4970D Lockdown Gauge Hatch

The 4970D is designed to provide convenient access to a storage tank's interior for inspection, gauging, and sampling purposes. This hatch is ideal for situations where a flame arrester is not required for fire protection. Specifically designed for tanks operating under 3 PSIG, the lockdown feature ensures a secure cover with minimal leakage and evaporation losses. With its lightweight construction, the 4970D offers easy handling and practicality for efficient tank maintenance and monitoring needs.

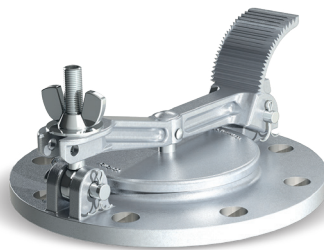
Sizes: 4" (DN 100), 6" (DN 150), and 8" (DN 200)

Flange Pattern: Mates with 125# ANSI or DIN PN16

Certifications/Approvals: FM

#### Material of Construction

🔧 Aluminum



### ■ 5960D Lockdown Gauge Hatch

The 5960D is designed to provide convenient access to a storage tank's interior for inspection, gauging, and sampling purposes. This hatch is ideal for situations where a flame arrester is not required for fire protection. Specifically designed for tanks operating under 3 PSIG, the lockdown feature ensures a secure cover with minimal leakage and evaporation losses. With its lightweight construction, the 5960D offers easy handling and practicality for efficient tank maintenance and monitoring needs.

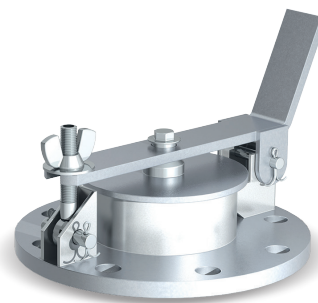
Sizes: 4" (DN 100), 6" (DN 150), and 8" (DN 200)

Flange Pattern: Mates with 125# ANSI or DIN PN16

Certifications/Approvals: FM

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel



### ■ 7500 Lift Assist Sampling Hatch

The 7500 is sampling hatch tailored for the wine industry. This specialized hatch boasts a spring-assist cover, cam lock, food-grade diaphragm, cover locking pin, and an integrated handle, along with an optional and removable sampling/safety grate. The 7500 is meticulously tested to guarantee low leakage while facilitating regular assisted sampling and aeration, providing a high-quality solution for wine production facilities.

Sizes: 24" (DN 600)

Flange Pattern: Mates with 125# ANSI or DIN PN16

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel



# Tank Blanketing Valves

## ■ 10 Pilot Operated Tank Blanketing Valve (2")

The 10 is a cutting-edge product designed to efficiently regulate the flow of blanketing gas, typically nitrogen, into the vapor space of storage tanks. Its pilot-operated design ensures a tight operating band, while optional flow orifice plates allow for tailored flow capacity, conserving blanketing gas. Additionally, its fully field serviceable feature minimizes downtime, making it a valuable asset for industrial applications.

Sizes: 2" (DN 50)

Flange Pattern: Mates with 150# ANSI, 300# ANSI, or NPT (F)

Certifications/Approvals: ATEX

### Material of Construction

Stainless Steel



## ■ 20 Pilot Operated Tank Blanketing Valve (1")

The 20 is a cutting-edge product designed to efficiently regulate the flow of blanketing gas, typically nitrogen, into the vapor space of storage tanks. Its pilot-operated design ensures a tight operating band, while optional flow orifice plates allow for tailored flow capacity, conserving blanketing gas. Additionally, its fully field serviceable feature minimizes downtime, making it a valuable asset for industrial applications.

Sizes: 1" (DN 25)

Flange Pattern: Mates with 150# ANSI, 300# ANSI, or NPT (F)

Certifications/Approvals: ATEX

### Material of Construction

Stainless Steel



## ■ 30 Spring Operated Tank Blanketing Valve (1/2")

The 30 is a cutting-edge product designed to efficiently regulate the flow of blanketing gas, typically nitrogen, into the vapor space of storage tanks. With its spring operation and optional flow plugs, it can tailor the flow capacity to meet specific requirements while conserving blanketing gas. Additionally, its fully field serviceable feature minimizes downtime, making it a valuable asset for industrial applications.

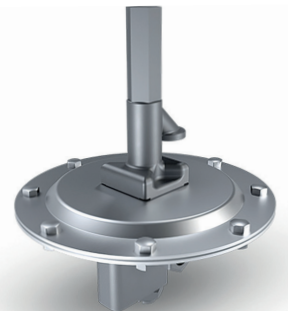
Sizes: 1/2" (DN 15)

Flange Pattern: Mates with 150# ANSI, 300# ANSI, or NPT (F)

Certifications/Approvals: ATEX

### Material of Construction

Stainless Steel



7800 End-of-Line Emergency Pressure Relief Vent

8540H End-of-Line Pressure and Vacuum Conservation Relief Vent

4950 Vent-Line and In-Line Deflagration Parallel Plate Flame Arrester

20 Pilot Operated Tank Blanketing Valve (1")

## ■ Fig. 3

The 20 controls the flow of a blanketing gas, typically Nitrogen, into the vapor space of a flammable liquid storage tank. It detects the pressure in the vapor space and opens completely once the tank pressure matches the valve's set point, allowing gas to flow into the tank.



## Complementary Equipment

### ■ 780 Storage Tank Air Dryer

The 780 is the ideal solution for removing unwanted moisture from make-up air in tanks and systems where the cost of central air drying or inert gas systems is not justified. Specifically designed to protect moisture-sensitive liquids, this product offers efficient operation with low pressure drops and includes an integral humidity indicator for easy monitoring. Additionally, the 780 allows for simple inspection and maintenance, ensuring optimal performance at all times.

Overall Height: 29 1/2" (749.3mm)

Body Diameter: 12 3/4" (323.9mm)

Capacity: 30lbs (13.6kg) of silica gel

Flange Pattern: Mates with 150# ANSI, 2" NPT (F), or 3" NPT (F)

#### Material of Construction

🔧 Stainless Steel   🔧 Carbon Steel

### ■ PVC780 Thermoplastic Resin Storage Tank Air Dryer

The PVC780 is the ideal solution for removing unwanted moisture from make-up air in tanks and systems where the cost of central air drying or inert gas systems is not justified. Specifically designed to protect moisture-sensitive liquids, this product offers efficient operation with low pressure drops and includes an integral humidity indicator for easy monitoring. Additionally, the PVC780 allows for simple inspection and maintenance, ensuring optimal performance at all times. This unit is built to be rust and fade-resistant, providing durability and reliability over time.

Overall Height: 27 7/8" (696.9mm)

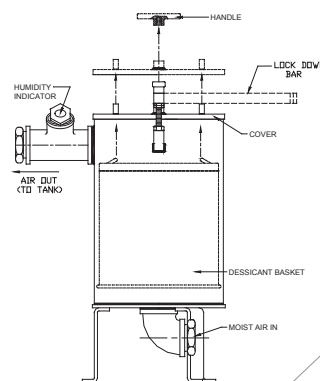
Body Diameter: 12 3/4" (323.9mm)

Capacity: 30lbs (13.6kg) of silica gel

Flange Pattern: Mates with 150# ANSI, 2" NPT (F), or 3" NPT (F)

#### Material of Construction

🔧 PVC



### ■ 3000 Internal Safety Valve

The 3000 is a critical safety solution designed for storage tanks holding flammable or combustible liquids. This valve provides robust protection against fire hazards and accidents while offering superior flow capability for efficient water distribution. Equipped with a pressure equalizing by-pass valve for optimal performance and designed for easy one-handed operation, the 3000 features a lightweight design for convenient handling during inspections and maintenance.

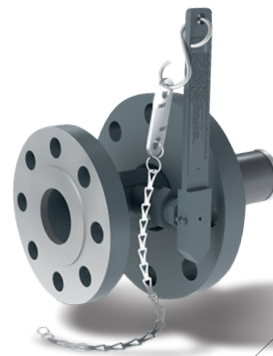
Sizes: 2" (DN 50) through 12" (DN 300)

Flange Pattern: Mates with 150# ANSI, DIN PN16, or NPT (F)

Certifications/Approvals: UL

#### Material of Construction

🔧 Carbon Steel   🔧 Stainless Steel



(Continued on next page...)



## Complementary Equipment

(Continued)

### ■ 7300D Overflow Valve

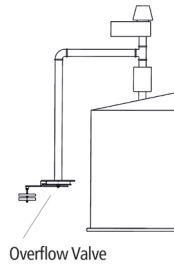
The 7300D is a state-of-the-art valve for eliminating open overfill pipe connections and sealing liquid overflow pipes in storage tanks. This valve mounts securely on the tank overflow pipe, offering superior sealing with its patented FEP film “air-cushion” seating technology. With a sleek and lightweight design, the 7300D ensures hassle-free handling while directly venting to the atmosphere for optimal performance.

Sizes: 2" (DN 50) through 12" (DN 300)

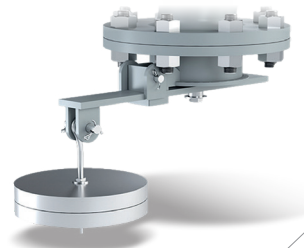
Flange Pattern: Mates with 125# ANSI, 150# ANSI, or DIN PN16

#### Material of Construction

Stainless Steel Carbon Steel Alloy C/C276 Fiberglass



Also Available in  
Fiberglass Reinforced Plastic



### ■ 660 Water Drain Valve

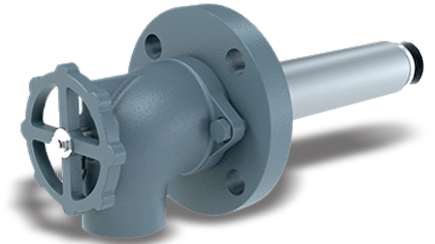
The 660 is a versatile valve designed to efficiently relieve tanks of accumulated water with maximum flow and self-draining action. Featuring easy one-hand valve operation for convenience and a non-freeze design that ensures continuous functionality in cold conditions, this lightweight unit allows for easy and convenient handling. Additionally, all valves are 100% factory tested to guarantee positive shut-off performance.

Sizes: 2" (DN 50) through 6" (DN 150)

Flange Pattern: Mates with 150# ANSI or DIN PN16

#### Material of Construction

Carbon Steel



### ■ 4276 Pressure Relief Rim Vent

The 4276 offers essential pressure relief for floating roof tanks, specifically designed to address pressure accumulations under the pontoon sections of the roof. This lightweight vent is mounted around the tank rim, ensuring easy handling while safely venting gas vapors to the atmosphere. Featuring an integrated weatherhood to shield the tank opening and a durable screen guard to protect the interior from debris, the 4276 undergoes rigorous factory inspections to guarantee quality and reliability upon shipping.

Sizes: 6" (DN 150)

Flange Pattern: Mates with NPT (F)

#### Material of Construction

Aluminum



### ■ FTSC Fuel Tank Safety Cap

Designed for installation in fuel tank openings of gasoline or diesel-powered industrial trucks and equipment such as forklifts, tractors and airport ground support equipment. The perforated metal flash arrester keeps a flame from entering the tank, thereby preventing explosion of the confined vapors within the tank.

Sizes: 1½" (DN 40) through 4" (DN 100)

Flange Pattern: Mates with NPT (F), NPS (F), or NPS (M)

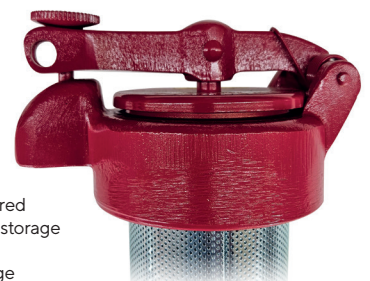
Certifications/Approvals: UL

#### Material of Construction

Aluminum Brass



Available in red  
for gasoline storage  
or green for  
diesel storage





#### ■ 40000 Liquid Level Indicator With Unguided Float

The 40000 provides accurate liquid level gauging for fixed and floating roof tanks. It is designed for easy installation on "tanks-in-service" or "tanks-out-of-service" and features a float-actuated mechanism with a steel target moving vertically on a calibrated board to display the tank's contents level.

##### Material of Construction

🚩 Aluminum    🚩 Stainless Steel    🚩 Galvanized Steel

#### ■ 41000 Liquid Level Indicator With Guided Float

The 41000 provides accurate liquid level gauging for fixed and floating roof tanks. It is designed for easy installation on "tanks-in-service" or "tanks-out-of-service" and features a float-actuated mechanism with a steel target moving vertically on a calibrated board to display the tank's contents level.

##### Material of Construction

🚩 Aluminum    🚩 Stainless Steel    🚩 Galvanized Steel



## Business contact details:



### Protectoseal US

✉ [info@protectoseal.com](mailto:info@protectoseal.com)  
☎ +1 630 595 0800  
🌐 [www.protectoseal.com](http://www.protectoseal.com)



### Protectoseal UK

✉ [enquiriesuk@protectoseal.com](mailto:enquiriesuk@protectoseal.com)  
☎ +44 1352 717 560  
🌐 [www.protectoseal.com](http://www.protectoseal.com)



### Protectoseal IN

✉ [sales.eet@protectoseal.com](mailto:sales.eet@protectoseal.com)  
☎ +91 22 4619 5453  
🌐 [www.protectoseal.com](http://www.protectoseal.com)



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