

Catalog

Flame Arresters and Low Pressure Venting Equipment



The Protectoseal Company
(Headquarters)

✉ info@protectoseal.com
☎ 1.630.595.0800
🌐 www.protectoseal.com



Elmac Technologies Ltd.
T/A Protectoseal

✉ enquiries@protectoseal.uk
☎ +44 1352 717 560
🌐 www.protectoseal.com



Elmac Envisafe Technologies
Pvt. Ltd. T/A Protectoseal

✉ sales.eet@protectoseal.in
☎ +91 22 4100 6998
🌐 www.protectoseal.com



Contents

3 End-of-Line Deflagration Arresters

- 670 • EVA • AVC
- 670E • EVB • ERB
- 860 • EHB/ESA • SV

4 In-Line Deflagration Arresters

- 4950 • LEA • DFB
- LCA • LEB • DFC
- LCB • SGE-IB • MB-IB

5 In-Line Detonation Arresters

- 25000 • 36000 RP • UEA
- 26000 • UCA • UEB
- 35000 • UCB

6 End-of-Line Combo Conservation Vents and Arresters

- 830 • FAB • FAB-E

6 Tank Blanketing Valves

- 30 • 20 • 10

7 FAB/FAB-E Features and Benefits

8 Pressure and Vacuum Relief Vents

- 8540H • 18540D • 56000
- 8540G • 3908 • 6240
- 8740 • 17800 • 16240

9 Emergency Relief Vents

- 52600 • 54000 • 53300
- 7800 • 51700

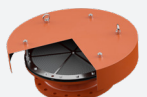
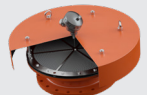
10 Speciality Valves and Fittings

- 782/PVC782 • 4970 • 660
- 3000 • 4980 • 4276
- 4960 • 5690 • Rupture Disks

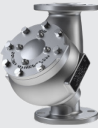
11 Ancillary Equipment

- 40000/41000 • Temperature • Flashback
- 42000B Sensors Guards
- Fuel Tank • Proximity
- Safety Caps Switches

End-of-Line Deflagration Arresters

Series		Explosion Group	Connection Sizes	Operating Conditions	Features
670		Group D	1" - 4"	Contact your local Protectoseal representative for further information.	Parallel Plate Element Weatherhood Automatic Condensate Drainage
670E		Group D Group C	1" - 6"	Contact your local Protectoseal representative for further information.	Parallel Plate Element Weatherhood Automatic Condensate Drainage
ERB		Group D Group C (MESG ≥ 0.65)	3/8" - 3"	-4°F to +140°F	E-Flow® Technology RE-Flow® Technology Threaded Connections
EVA		Group D (MESG > 0.9)	1/2" - 24"	-4°F to +140°F	E-Flow® Technology Removable Elements Extensive Options List
EVB		Group D Group C (MESG ≥ 0.65)	1/2" - 24"	-4°F to +140°F	E-Flow® Technology Removable Elements Extensive Options List
EHB /ESA		Group D Group C (MESG ≥ 0.65)	1/2" - 24"	-4°F to +302°F	Short Time Burn Option Extended Operating Limits E-Flow® Technology Removable Elements
AVC		Group D Group C Group B (MESG < 0.50)	1/2" - 16"	-4°F to +140°F	Removable Elements Extensive Options List
860		Group D	2" - 8"	Contact your local Protectoseal representative for further information.	Weatherhood Interchangeable Elements Swing-Bolt Design Automatic Condensate Drainage
SV		Group D Group C (MESG ≥ 0.65)	1/2" - 2"	-4°F to +140°F	Light Alloy Models Fixed Elements Threaded Connections

In-Line Deflagration Arresters

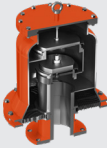
Series		Explosion Group	Connection Sizes	Operating Conditions	Features
LCA		Group D (MESG > 0.9)	1/2" - 24"	+140°F, 1.60 bar (23 psia) up to 12" +320°F, 1.45 bar (21 psia) up to 12" +140°F, 1.45 bar (21 psia) for sizes 14" & 16" +140°F, 1.20 bar (17 psia) up to 24"	Concentric Design Extended Operating Limits Short Time Burn Removable Elements
LCB		Group D Group C (MESG ≥ 0.65)	1/2" - 12"	+140°F, 1.10 bar (16 psia) up to 1.60 bar (23 psia) for 2" and 1.50 bar (22 psia) for 4"	
LEA		Group D (MESG > 0.9)	1/2" - 16"	+140°F, 1.60 bar (23 psia) +320°F, 1.45 bar (21 psia) +140°F, 1.45 bar (21 psia) for 12" - 16"	Eccentric Design Extended Operating Limits Short Time Burn Removable Elements
LEB		Group D Group C (MESG ≥ 0.65)	15 - 100 (1/2" - 4")	+140°F, 1.50 bar (22 psia) +302°F, 1.10 bar (16 psia)	
4950*		Group D	1 - 12"	Contact your local Protectoseal representative for further information.	Parallel Plate Design Removable Arrester Element Automatic Condensate Drainage
SGE-IB		Group D Group C (MESG ≥ 0.65)	1/2" - 16"	+302°F, 1.30 bar (19 psia) up to 8" +140°F, 1.60 bar (23 psia) up to 8" 1.25 bar (18 psia) up to 16"	Extended Operating Limits Removable Elements
DFB		Group D Group C (MESG ≥ 0.65)	1" - 6"	+140°F, 1.60 bar (23 psia) +302°F, 1.30 bar (19 psia)	Extended Operating Limits Removable Elements
DFC		Group D Group C Group B (MESG < 0.50)		+140°F 1.10 bar (16 psia) up to 4" 1.45 bar (21 psia) or 1.20 bar (17 psia) for 6"	
MB-IB		Group D Group C (MESG ≥ 0.65)	1/2" - 3/4"	-4°F to +140°F	Fixed Elements

*Vent-Line/In-Line Deflagration Flame Arrester.

In-Line Detonation Arresters

Series		Explosion Group	Connection Sizes	Operating Conditions	Features
UCA		Group D (MESG > 0.9)	1/2" - 24"	+140°F, 1.20 bar (17 psia) up to 12" 1.10 bar (16 psia) up to 18" 1.50 bar (22 psia) up to 4" +302°F, 1.40 bar (20 psia) up to 4" 1.10 bar (16 psia) for 8" - 16"	E-Flow® Technology HEDS® Technology Short Time Burn Removable Elements
UCB		Group D Group C (MESG ≥ 0.65)	1/2" - 12"	+140°F, 1.10 bar (16 psia)	
UEA		Group D (MESG > 0.9)	1/2" - 16"	+140°F, 1.20 bar (17 psia) up to 12" 1.10 bar (16 psia) up to 16"	E-Flow® Technology HEDS® Technology Short Time Burn Removable Elements
UEB		Group D Group C (MESG ≥ 0.65)	1/2" - 4"	+140°F, 1.10 bar (16 psia)	
25000		Group D	2" - 18"	Contact your local Protectoseal representative for further information.	Crimped Metal Arrestor Element Straight Through Flow Pattern Interchangeable Arrestor Element Welded Steel Housing
26000		Group D Group C	2" - 12"	Contact your local Protectoseal representative for further information.	Crimped Metal Arrestor Element Straight Through Flow Pattern Interchangeable Arrestor Element Welded Steel Housing
35000		Group D	2" - 8"	Contact your local Protectoseal representative for further information.	Crimped Metal Arrestor Element Straight Through Flow Pattern Interchangeable Arrestor Element Welded Steel Housing
36000 RP		Group D Group C	2" - 8"	Contact your local Protectoseal representative for further information.	Crimped Metal Arrestor Element Straight Through Flow Pattern Interchangeable Arrestor Element Welded Steel Housing

End-of-Line Vents and Arresters

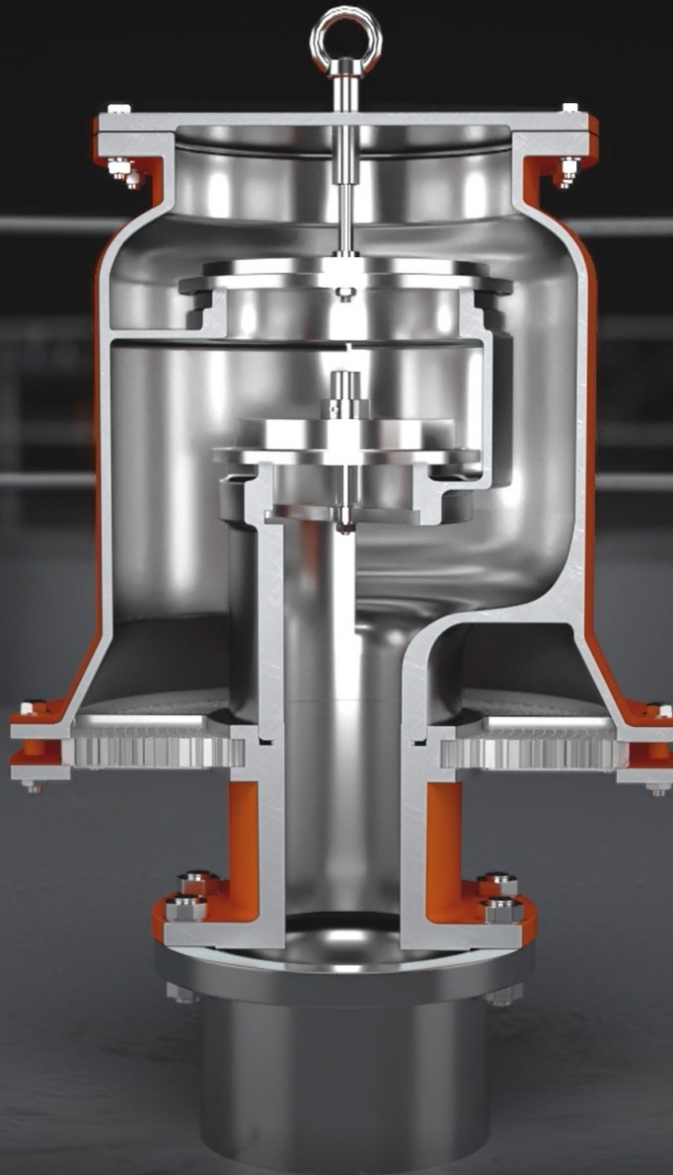
Series		Explosion Group	Connection Sizes	Operating Conditions	Features
830		Group D	2" - 10"	Contact your local Protectoseal representative for further information.	Air-Cushion Pallet Design Interchangeable Elements Swing-Bolt Design Automatic Condensate Drainage
FAB		Group D Group C (MESG ≥ 0.65)	2" - 12"	-4°F to +140°F	Enhanced Flow and Pressure Drop Compact Lightweight Easy to Install
FAB-E				-4°F to +302°F	

Tank Blanketing Valves

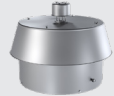
Series		Connections	Inlet Gas Pressure Range	Settings
30 Pilot Operated Tank Blanketing Valve (½")		½" FNPT inlet & outlet standard	10 psig to 200 psig	-0.1 in. W.C. to 69.2 in. W.C.
20 Pilot Operated Tank Blanketing Valve (1")		1" NPT inlet & outlet	20 psig to 200 psig	-0.5 in. W.C. to 69.2 in. W.C.
10 Pilot Operated Tank Blanketing Valve (2")		2" NPT inlet & outlet	40 psig to 130 psig	-0.5 in. W.C. to 69.2 in. W.C.

FAB/FAB-E Features and Benefits

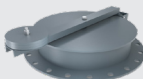
- E-Flow® element provides optimum flow and minimal pressure drop
- Compact, lightweight and easy to install
- Prevents explosion and risk of environmental pollution
- Easy to maintain with replaceable element
- Economic savings due to reduced product losses
- Easy visual in-situ inspection of the element
- Self-draining element prevents rain or other foreign matter entering the system
- Incorporates the patented RE-Flow® technology
- Optimized pallet design and sealing reduces chattering
- Unique valve design provides complete weather protection
- Protects against atmospheric deflagration



Pressure and Vacuum Relief Vents

Series		Sizes (inches)	Connections	Pressure Setting Range	Vacuum Setting Range
8540H End-of-Line Pressure and Vacuum Relief Vent		2" - 12"	Mates with 125#/150# ANSI and DIN PN 16	0.5 - 48 oz/in ² 2.15 - 206.84 mbar	0.5 - 23 oz/in ² 2.15 - 99.11 mbar
		2" - 12"	Mates with 125#/150# ANSI and DIN PN 16	0.5 - 48 oz/in ² 2.15 - 206.84 mbar	0.5 - 23 oz/in ² 2.15 - 99.11 mbar
8740 In-Line Pressure & Vacuum Relief Vent		2", 3" & 4"	Outlet connection has standard NPT threads. Inlet connection mates with 125#/150# ANSI and DIN PN 16	1 - 26 oz/in ² 4.31 - 112.04 mbar	1 oz/in ² 4.31 mbar
18540D Pipe-Away Pressure and Vacuum Relief Vent		2" - 12"	Mates with 125#/150# ANSI and DIN PN 16	0.5 - 47 oz/in ² 2.15 - 202.53 mbar	0.5 - 23 oz/in ² 2.15 - 202.53 mbar
3908 Pressure and Vacuum Relief Thief Hatch		8"	API flat face flange	2, 4, 6, 8, 12, 16, 24, 32 oz./sq. in.	0.4, 0.9, 3.5 oz./sq. in.
17800 Pipe-Away Pressure Relief Vent		2" - 12"	Mates with 125#/150# ANSI and DIN PN 16	0.5 - 47 oz/in ² 2.15 - 202.53 mbar	N/A
56000 PIN-TECH™ Bubble-Tight <500ppm Pressure Relief Vent		2" - 24"	Mates with applicable ANSI, API or DIN PN 16	0.75 - 15 psig 51.71 - 1034.21 mbar	N/A
6240 End-of-Line Vacuum Relief Vent		2" - 12"	Mates with 125#/150# ANSI or DIN PN 16	N/A	0.5 - 23 oz/in ² 2.15 - 99.11 mbar
16240 Side-Mounted Vacuum Relief Vent		2" - 14"	Mates with 125#/150# ANSI or DIN PN 16	N/A	0.5 - 47 oz/in ² 2.15 - 193.92 mbar

Emergency Relief Vents

Series		Sizes (inches)	Connections	Pressure Setting Range	Vacuum Setting Range
52600 Emergency Pressure and Vacuum Relief Vent		16" - 24"	Mates with applicable ANSI, API flange or DIN 16 PN	0.75 - 6 oz/in ² 3.23 - 25.86 mbar	0.5 - 0.75 oz/in ² 2.15 - 3.23 mbar
7800 End-of-Line Emergency Pressure Vent		2" - 24"	ANSI, DIN 16 PN or API flange	1 - 48 oz/in ² 4.31 - 206.84 mbar	N/A
54000 Spring-Loaded Emergency Pressure Relief Vents		16" - 24"	Mates with applicable ANSI, API flange or DIN 16 PN	1 - 11 psig 68.95 - 758.42 mbar	N/A
51700 Hinged Emergency Pressure Relief Manhole Cover Vent		16" - 24"	Mates with applicable ANSI, API flange or DIN 16 PN	0.57 - 34.6 oz/in ² 2.45 - 149.10 mbar	N/A
53300 Emergency Pressure Relief Manhole Cover Vent		16" - 24"	Mates with applicable ANSI, API flange or DIN 16 PN	1.10 - 6 oz/in ² 4.74 - 25.86 mbar	N/A

Speciality Valves and Fittings



Air Dryer Series 782/PVC782

- Sizes 2" and 3"
- Reduced pressure drops
- Flanged and threaded options available
- Integral humidity indicator
- Easy inspection and maintenance
- Large, removable desiccant receptacle
- Desiccant chamber with a large diameter



Internal Safety Valve Series 3000

- Sizes range from 2" to 12"
- Closes automatically in the event of a fire
- Simple one-handed valve operation
- By-pass valve for pressure equalization
- Exceptional flow capability
- Easily replaceable fuse link
- 160°F fusible link included



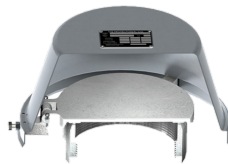
Gauge Hatches Series 4960/4970/4980/5690

- Sizes 4", 6" and 8"
- Allows manual tank gauging, sampling and temperature readings
- Free-lifting and lockdown models available
- Thermometer hook, gauge marker and lock hole included
- Hinged cover can be opened a full 75° to 80°



Water Drain Valve Series 660

- Sizes range from 2" to 6"
- Removes excess water from the tank
- Simple one-handed valve operation
- Two-stage opening and closing
- Padlock bracket prevents unauthorized valve opening
- Non-freeze design



Pressure Relief Rim Vent Series 4276

- Cost-effective and functional design
- 6" FNPT connection
- Vapors vent to atmosphere
- Integral weatherhood protects tank opening
- Screens protect the tank's interior from debris
- Lightweight design allows for easy handling
- Easy to install and maintain



Rupture Disks

- Sizes range from 3/8" to 16"
- Protects the valve from corrosive and viscous products
- Prevents fugitive emissions
- Easy to service and maintain
- Protects the valve (spring) from pressure fluctuations and cycling

Ancillary Equipment



Liquid Level Indicators Series 40000/41000

- Accurate liquid level gauging of fixed and floating roof tanks
- Allows for quick and easy readings
- Easy installation for "tanks-in-service" or "tanks-out-of-service"
- Float-actuated indicators
- Resistant to corrosive petroleum products



Automatic Tank Gauge Series 42000B

- High precision in measuring liquid levels
- Reduced time needed for readings
- Used on tanks up to 65' tall and at pressures up to 50 PSIG
- Conveniently mounted on the tank's top or side
- Limit and programme switches available upon request



Fuel Tank Safety Caps

- Sizes range from 3/8" to 16"
- Manually engaged compression spring latch
- Provides automatic pressure relief if tank pressure exceeds normal limits
- Self-closing, hinged cap design
- Padlock opening prevents theft or unauthorized access



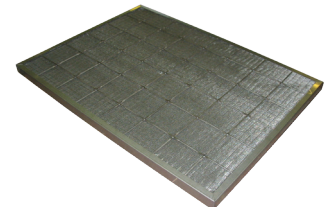
Temperature Sensors

- ATEX certified for use with Flame Arresters
- Measures process flow temperature
- Flame detection and monitoring
- Easy integration with on-site process controls
- Tailored to customer specifications



Proximity Switches

- To be used with low-pressure venting equipment
- Pallet lift detection
- ATEX certified for zoned installation
- Easy integration with on-site process controls



Flashback Guards

- Available in 304L and 316L stainless steel
- Knitted mesh panels
- Individualized design for specific applications
- Tailored frames and mountings available upon request



Contact Protectoseal today to learn more about our safety solutions and how our maintenance services can keep your operations secure and compliant.



The Protectoseal Company
(Headquarters)

✉ info@protectoseal.com

☎ 1.630.595.0800

🌐 www.protectoseal.com



Elmac Technologies Ltd.
T/A Protectoseal

✉ enquiries@protectoseal.uk

☎ +44 1352 717 560

🌐 www.protectoseal.com



Elmac Envisafe Technologies
Pvt. Ltd. T/A Protectoseal

✉ sales.eet@protectoseal.in

☎ +91 22 4100 6998

🌐 www.protectoseal.com



PROTECTOSEAL®
Safety Without Compromise