



END OF LINE DEFLAGRATION FLAME ARRESTER

MODEL NO: 20501

ATEX CERTIFIED TANK PRESSURE PROTECTION DEVICES THAT PROTECTS ENVIRONMENT, EQUIPMENT AND HUMAN LIVES











Flame arresters are classified according to their location with respect to the equipment they are protecting. When a flame arrester is located directly on a vessel/tank vent nozzle, or on the end of a vent line from the vent nozzle, it is called an end-of-line arrester, and is usually a deflagration flame arrester.

These are commonly installed on atmospheric pressure storage tanks, process vessels, and transport containers. If the vented vapors are ignited, perhaps by lightning, the flame arrester will prevent the flame from spreading from the atmosphere to the inside of the vessel.

PRECON® End of line Flame Arrestors are designed to allow free venting in combination with flame protection for vertical vent applications. This type product is installed at the top of an atmospheric vent line or storage tank. They prevent flame propagation by absorbing and dissipating heat using spiral wound crimped ribbon flame cells.

These cells allow maximum flow with maximum protection. The Model 20501 is used to stop the propagation of confined and unconfined low pressure deflagrations. It prevents an ignited atmospheric vapor cloud from propagating beyond the Flame Arrestor into the vent line or tank.

Model 20501 is used for the end of line applications when the system operating pressure is near atmospheric levels and when there is minimal probability of a flame stabilizing on the Flame Arrestor element for an extended period.

End of Line Flame Arrestors allow free venting and flame protection for vertical vent applications.

Flame Arrestors allow free venting and flame protection for vertical vent applications. Designed with flanged connections, this arrestor allows removal of the flame cell element without their removal of the venting assembly. Standard housing construction is aluminum, carbon steel, and stainless steel.

Designed with Features and Benefits PRECON large crimp metal opening provide:

- Maximum flow
- Less pressure Drop
- Easy Cleaning
- Less Clogging
- Less Maintenance
- Single Element Design.
- Flanged design available in ANSI, DIN and JIS flanges.

Assessment of the overall system and classification into hazardous zones in accordance to frequency and duration of explosive atmosphere based on national and international regulations.

Zone 0 = A place in which an explosive atmosphere consisting of a mixture of air with flammable substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.

Zone 1= A place in which an explosive atmosphere consisting of a mixture of air with flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.

Zone 2= A place in which an explosive atmosphere consisting of a mixture of air with flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Flame arresters tested according to EN ISO 16852 fulfil the health and safety requirements of current ATEX directive.





END-OF-LINE VERTICAL DEFLAGRATION ARRESTERS

Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop.

Proven spiral-wound, crimped ribbon, flame element provides reliable flame protection.

Modular design allows easy and cost effective flame bank maintenance.

Drains and instrument ports available upon request.

Exterior painting or coating available.

DIN or ASME/ANSI drilling available.

Sizes 1/2" through 24". Housing standard material: carbon steel (WCB/CS), stainless steel (CF8M/316), Aluminum

Flame element standard material: 316 stainless steel Other materials available upon request

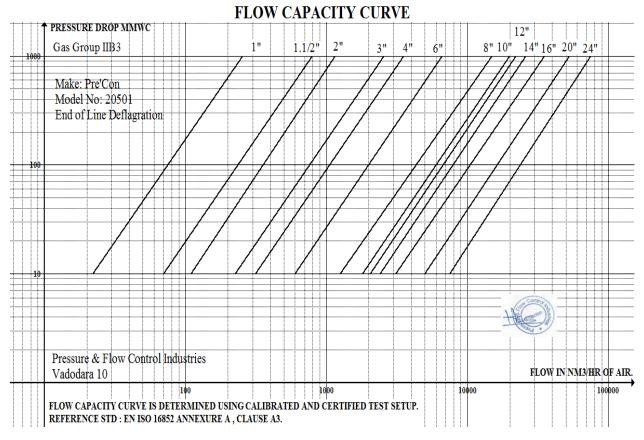
Good for Explosion gas group IIA1, IIA, IIB1, IIB2, IIB3 and IIC.

Certified to ATEX Directive 94/9/EC in compliance with EN ISO 16852:2010

| Certificate No: IBExU16ATEX2082 X | Size : ¹ / ₂ " NB to 24" NB | To: 60 Deg C |
|-----------------------------------|---|--------------|
| Certificate No: IBExU16ATEX2083 X | Size : ¹ / ₂ " NB to 12" NB | To: 60 Deg C |







FLOW CAPACITY CURVE

| ◆ PRESSURE DROP MMWC | | LOW CONTROL INDU | | |
|---|-------------------|-----------------------|----------|------------------------|
| Gas Group IIC | 1" | 1.1/2" 2" | 3" 4" 6" | 8" 10" 14" 16" 20" 24" |
| 00 | | | | |
| | | | | |
| Make: Pre'Con | | | | |
| Model No: 20501 End of Line Deflagration | | | | |
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| Pressure & Flow Control Industri Vadodara 10 | es | | | FLOW IN NM3/HR OF AI |
| Vadodara 10 | | 100 | 1000 | |
| FLOW CAPACITY CURVE IS DETERMIN | | CERTIFIED TEST SETUP. | 1000 | 10000 |
| REFERENCE STD : EN ISO 16852 ANNEX | UKE A, CLAUSE A3. | | | |

PRESSURE & FLOW CONTROL INDUSTRIES 823 GIDC ESTATE, MAKARPURA 390010.





Model D Coding & Ordering Information Base Model No: 2050

| Table 1 : TYPE | |
|---|---|
| End of Line Deflagration | 1 |
| End of Line Deflagration (High Temperature) | 4 |

Table 2Selection of Material

| Description | А | В | С | D |
|---------------|-----------------|-----------------|---------------|---------------|
| Body | BS 1490 Gr LM 6 | Cast Steel | A 351 Gr | A 351 Gr |
| | | | CF8/SS304 | CF8M/SS316 |
| Shell | A106 Gr B | A 106 Gr B | SS 304 | SS 316 |
| Flame Element | SS 316/SS 316L | SS 316/SS 316L | SS316/SS 316L | SS316/SS 316L |
| Gasket | NAM 39 | NAM 39 | PTFE | PTFE |
| Fasteners | C/S zinc plated | C/S zinc plated | SS 304 | SS 304 |

ANY OTHER SPECIAL MATERIAL AVAILABLE ON REQUEST.

Table 3Explosion Group

| MESG | Explosion Group (IEC) | | | | |
|----------------|-----------------------|--|--|--|--|
| >0.9 mm | IIA | | | | |
| \geq 0.65 mm | IIB3 | | | | |
| <0.5 mm | IIC | | | | |

| _ | | Table | 4 Si | ze | | | | | | | | | | | | | |
|---|----|-------|------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |

Table 5 End connection

| BS 10 Table D,E,F | BS |
|------------------------|------|
| DIN PN 6, PN 10, PN 16 | DIN |
| ANSI 150 FF/RF, 300 RF | ANSI |

