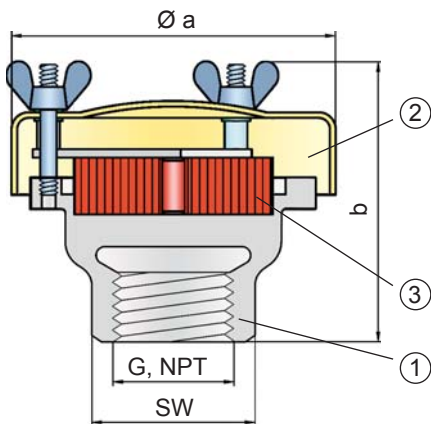


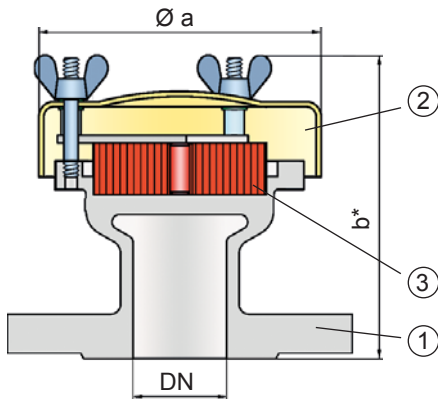
Deflagration Flame Arrester, endurance burning proof, End-of-Line

PROTEGO® EB-Z

Threaded connection



Flange connection



Function and Description

The PROTEGO® EB-Z end-of-line deflagration flame arrester has been successfully used to protect small vessels and process engineering apparatus which are not pressurized. The device provides protection against flame transmission through atmospheric deflagration and stabilized flames which can burn for very long time on the flame arrester element surface, so called endurance burning. Main application area is on in- and outbreathing vent lines, with the goal to prevent flame transmission caused by endurance burning or atmospheric deflagration from propagating into the vessel or plant.

The PROTEGO® EB-Z consists of a housing (1), a weather hood (2) and the FLAMEFILTER® (3). The weather hood is made out of acrylic glass, which will melt when impacted by flames and allow heat to dissipate to the environment. The PROTEGO® EB-Z serie end-of-line deflagration flame arrester is available for substances of explosion group IIA (NEC group D MESH > 0.90 mm)

The standard design can be used for operating temperatures up to +60°C / 140°F.

Type-approved according to ATEX Directive and EN ISO 16852 as well as other internationally accepted standards.

Special Features and Advantages

- protection against atmospheric deflagration and endurance burning of pure hydrocarbons
- weather hood protects against environmental impact (i.e. weather, bird nests, etc.)
- modular design allows replacement of single FLAMEFILTER®
- easy maintenance
- modular design results in low spare part costs
- low operating and lifecycle cost
- cost effective protection for small vessels and process engineering apparatus

Design Type and Specification

End-of-line deflagration flame arrester, basic design **EB-Z**

Special designs available on request

Table 1: Dimensions

Dimensions in mm / inches, SW = width across flats

To select the nominal size (DN), please use the flow capacity chart

DN / G, NPT	15 / 1/2"	20 / 3/4"	25 / 1"	32 / 1 1/4"
a	87 / 3.43	87 / 3.43	114 / 4.49	114 / 4.49
b	93 / 3.66	93 / 3.66	98 / 3.86	98 / 3.86
b*	123 / 4.84	123 / 4.84	123 / 4.84	123 / 4.84
SW	32	32	50	50

Table 2: Selection of explosion group

MESG	Expl. Gr. (IEC/CEN)	Gas Group (NEC)	Special approvals upon request
> 0,90 mm	IIA	D	

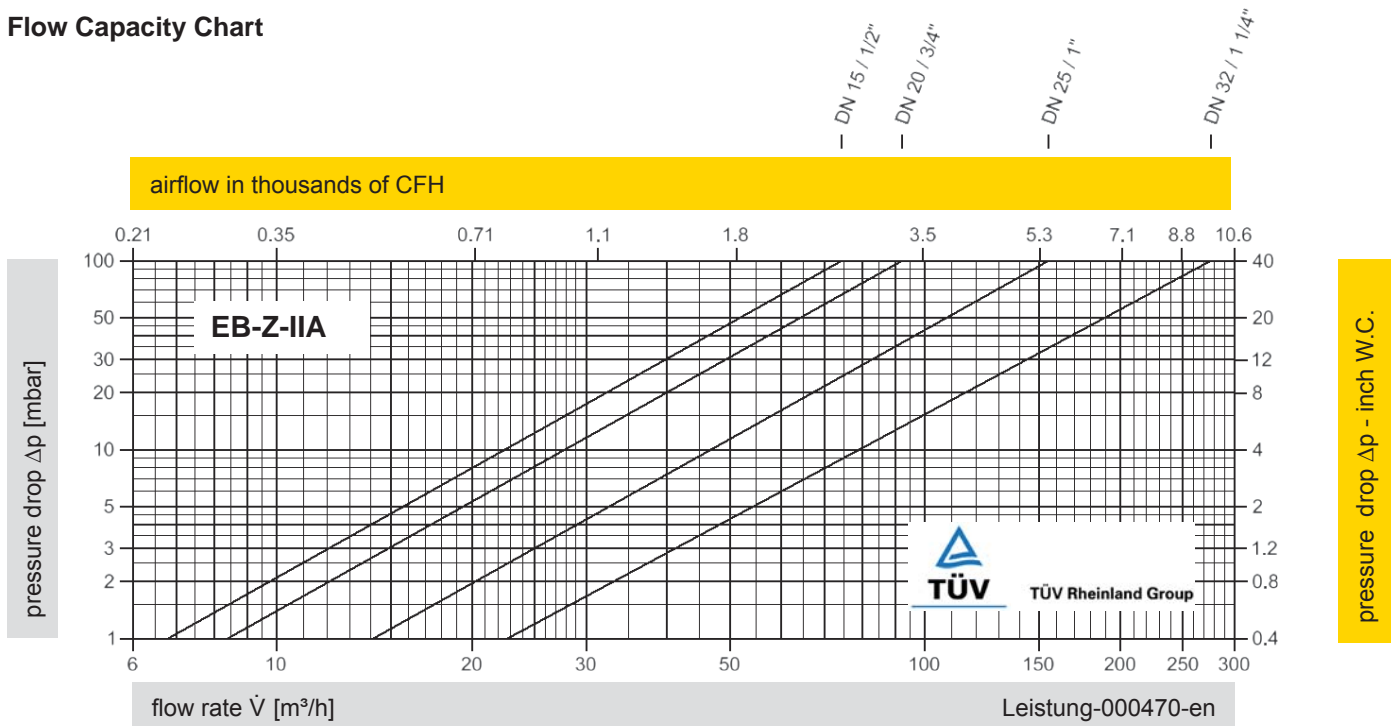
Table 3: Material combination

Design	B	Special materials upon request
Housing	Stainless Steel	
Weather hood	Acrylic glass	
FLAMEFILTER®	Stainless Steel	

Table 4: Connection type

Pipe thread DIN ISO 228-1	other types upon request
EN 1092-1; Form B1	
ASME B16.5; 150 lbs RFSS	

Flow Capacity Chart



The flow capacity charts have been determined with a calibrated and TÜV certified flow capacity test rig. Volume flow \dot{V} in [m³/h] and CFH refer to the standard reference conditions of air ISO 6358 (20°C, 1bar). Conversion to other densities and temperatures refer to Vol. 1: "Technical Fundamentals".

