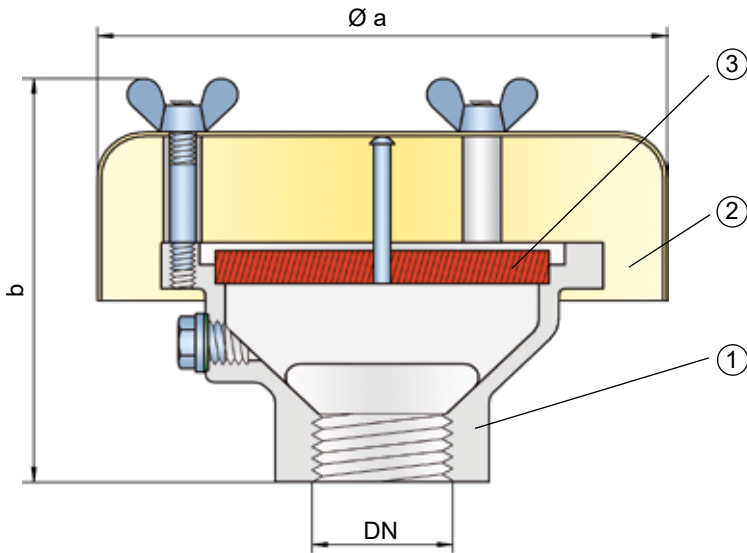


Deflagration Flame Arrester, End-of-Line

PROTEGO® BE/AD



Function and Description

The PROTEGO® BE/AD end-of-line deflagration flame arrester provides protection against atmospheric deflagrations. The device is usually installed on vent lines of small vessels and plant equipment which are not pressurized. For safe application, it is important that an endurance burning situation can be excluded. So typically, it is installed on vents lines which discharge vapor for a short time period. The device is the ideal solution for preventing flame transmission from atmospheric deflagration into the vessel or plant.

The PROTEGO® BE/AD consists of the housing (1), a weather hood (2), and the PROTEGO® flame arrester unit (3). The device is equipped with a metal weather hood. The FLAMEFILTER® gap size will depend on the device's intended use. Specifying the operating conditions, such as the temperature, pressure, explosion group, and the composition of the fluid, enables PROTEGO® to select the best end-of-line deflagration flame arrester for your application. The PROTEGO® BE/AD series end-of-line deflagration flame arrester is available for substances from explosion groups IIA to IIC (NEC groups D to B).

The standard design can be used with an operating temperature of up to +60°C / 140°F.

Type-approved in accordance with the current ATEX Directive and EN ISO 16852, as well as other international standards.

Special Features and Advantages

- Weather hood provides protection against environmental impact (harsh weather conditions, foreign bodies, and nesting animals.)
- easy maintenance
- quick removal and installation of FLAMEFILTER®
- threaded connection
- provides protection against atmospheric deflagrations
- low operating and lifecycle costs
- cost-effective Flame arrester
- cost-effective spare parts

Design Type and Specification

Deflagration flame arrester, end-of-line, basic design **BE/AD**

Special designs available upon request.

Table 1: Dimensions

Dimensions in mm / inches

To select the nominal size (DN), please use the flow capacity charts on the following pages.

DN	15 / G ½"	20 / G ¾"	25 / G 1"	32 / G 1¼"	40 / G 1½"	50 / G 2"
a	116 / 4.57	116 / 4.57	116 / 4.57	116 / 4.57	200 / 7.87	200 / 7.87
b	80 / 3.15	80 / 3.15	85 / 3.35	85 / 3.35	150 / 5.91	150 / 5.91

Table 2: Selection of explosion group

MESG	Expl. Gr. (IEC/CEN)	Gas Group (NEC)	
≥ 0,65 mm	IIB3	C	Special approvals upon request.
< 0,5 mm	IIC	B	

Table 3: Specification of max. operating temperature

≤ 60°C / 140°F	Tmaximum allowable operating temperature in °C	
-	Designation	Higher operating temperatures upon request.

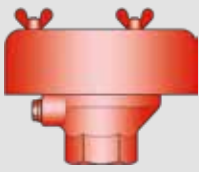
Table 4: Material selection

Design	A	B	C	
Housing	Steel	Stainless Steel	Hastelloy	Special materials upon request.
Weather hood	Stainless Steel	Stainless Steel	Stainless Steel	
FLAMEFILTER®	Stainless Steel	Stainless Steel	Hastelloy	

Table 5: Type of connection

Pipe thread DIN ISO 228-1	DIN	Other types of thread upon request.
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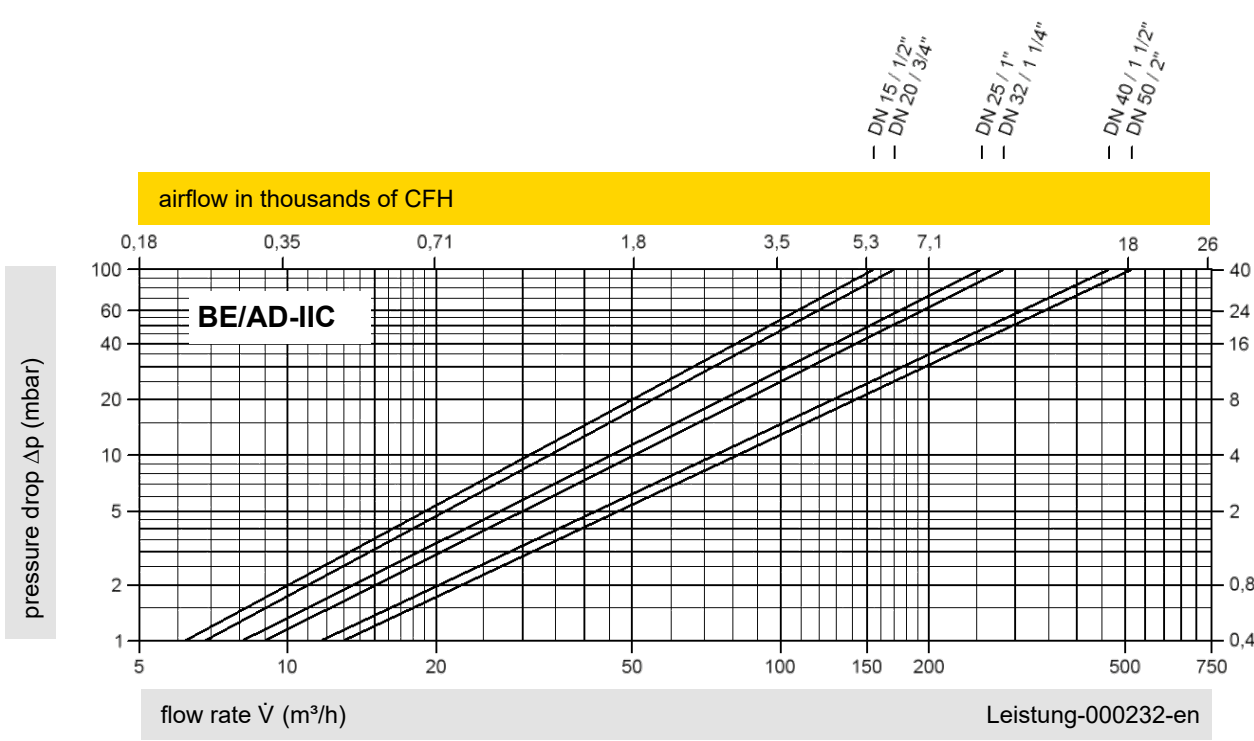
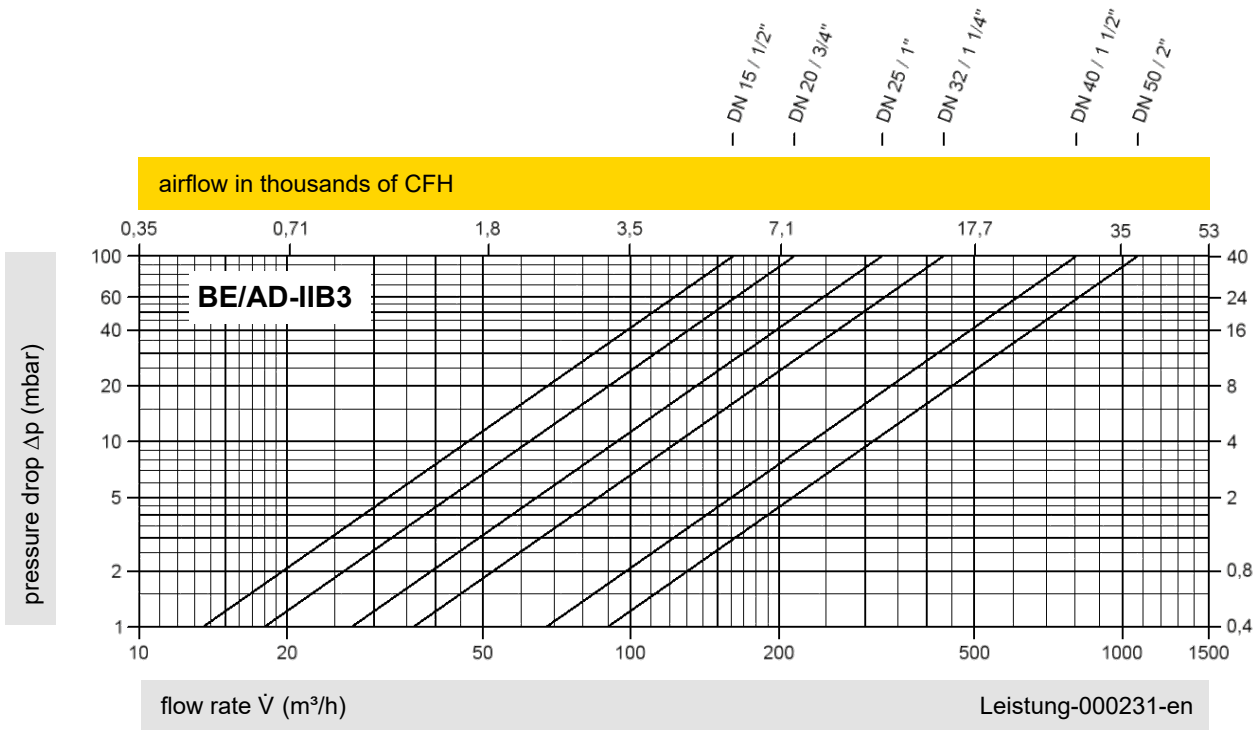




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Flow Capacity Charts

PROTEGO® BE/AD



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 in ISO 6358 (20°C, 1bar). For conversion to other densities and temperatures, refer to Sec. 1: "Technical Fundamentals."