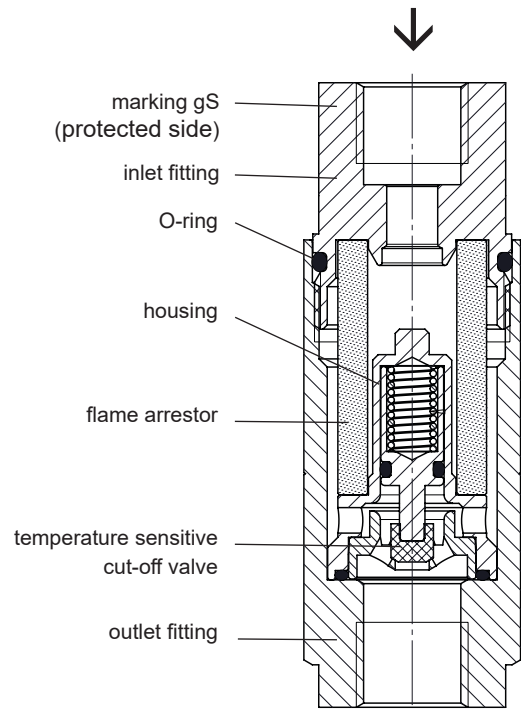


DETONATION FLAME ARRESTER F53N

DEFLAGRATION VOLUME PROTECTION DEVICE F53N



The deflagration volume protection device is ideal for protection of plants and equipment with a volume of max. 4.6 l.

Suitable as a detonation flame arrester ideal for mounting in small pipelines and to protect appliances, for example gas analysers.

Benefits

- compact design according to DIN EN ISO 16852
- offer security in case of deflagrations and stabile detonations
- applicable for almost all flammable gases and gas mixtures (not combined with oxygen)
- a temperature sensitive cut-off valve extinguishes sustained flashbacks long before the internal temperature of the arrestors reaches a dangerous level
- low life cycle costs
- may be mounted in any position / orientation
- compact size for easy, problem free installation
- designing and testing according to Directive 2014/34/EU test report: PTB Ex 14-44012, Ex 23-43002
- EC type-examination certificate PTB 14 ATEX 4003 X

Function and description

- the fitting protects against deflagrations and stabile detonations. Installation may be carried out at a distance from the ignition source of $L/D < 30$ (deflagration) and of $L/D > 150$ (stable detonation). The small and compact design of the flame arrester is for use in pipelines.
- designed for short burning with a burning time $t_{BT} = 4$ min. During this time there is no flash-back and the gas flow is interrupted ≤ 2 min. by the temperature sensitive cut-off valve

Approvals

Company certified according to ISO 9001 and ATEX Directive 2014/34/EU

Marking

Ex II G IIC
mounting position gS
(geschützte Seite / protected side)

Other models, options and accessories available upon request.

Application	Connec-tion	Volume	max. working pressure absolute	Standard gap width (MESG)	Tempera-ture	Material	O-ring Material	Order-No.
Deflagration volume protection device	Inlet F, G 1/4	max. 4.6 l	1.1 bar	≥ 0.29 mm	max. 60 °C	Inlet fitting, Outlet fitting, housing 1.4305 / AISI 303	FKM	145-337
Detonation flame arrester	Outlet F, G 1/4	–	1.5 bar					FFKM

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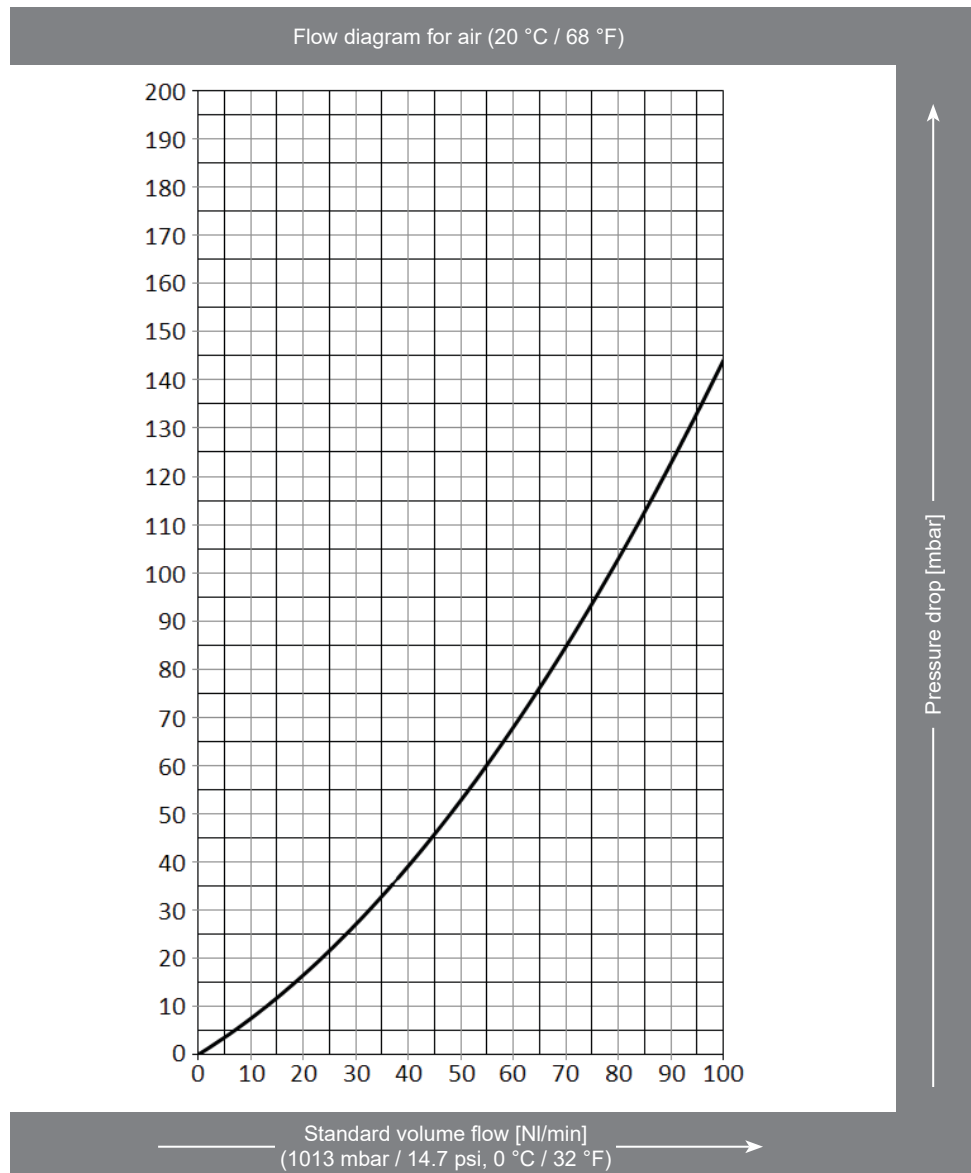
DEFLAGRATION VOLUME PROTECTION DEVICE F53N



F53N
 Detonation flame arrester
 145-336
 145-337

Conversion factors:

Butane	x 0.68
Natural Gas	x 1.25
Methane	x 1.33
Propane	x 0.80
Oxygen	x 0.95
Town gas	x 1.54
Hydrogen	x 3.75



F53N
 Deflagration volume
 protection device
 145-336
 145-337

Flow diagram upon request (depend on the system requirements)

Example of installation:

