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)
- low life cycle costs
- may be mounted in any position / orientation
- compact size for easy, problem free installation
- designing and testing according to Directive 94/9/EC
- EC type-examination certificate PTB 14 ATEX 4003 X

**Function and description**
- the fitting protects against deflagrations and stabile detonations. This allows mounting into pipelines in any position / orientation, independent of distance to the potential source of ignition. The small and compact design of the flame arrester is for use in pipelines.

**Approvals**
Company certified according to ISO 9001 and ATEX 94/9/EC

**Marking**
II G IIC

**Other models, options and accessories available upon request.**

<table>
<thead>
<tr>
<th>Application</th>
<th>Material</th>
<th>Standard gap width</th>
<th>Temperature</th>
<th>Volume</th>
<th>max. working pressure absolute</th>
<th>Connection</th>
<th>Order-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deflagration volume protection device</td>
<td>Inlet fitting, Outlet fitting, housing 1.4305 / AISI 303</td>
<td>&lt; 0.5 mm</td>
<td>max. 60 °C</td>
<td>max. 4.6 l</td>
<td>1.1 bar</td>
<td>Inlet F, G 1/4</td>
<td>145-250</td>
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<td>Outlet M, M 12</td>
<td></td>
</tr>
<tr>
<td>Detonation flame arrester</td>
<td>O-ring 72 NBR 872 flame arrester 1.4404 / AISI 316L</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.5 bar</td>
<td>Inlet F, G 1/4</td>
<td>145-258</td>
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<td>Outlet F, G 1/4</td>
<td></td>
</tr>
</tbody>
</table>
DETONATION FLAME ARRESTER F53
DEFLAGRATION VOLUME PROTECTION DEVICE F53

F53
Detonation flame arrester
145-258

Flow diagram for air (20 °C / 68 °F)

Conversion factors:
Acetylene \( \times 1.04 \)
Butane \( \times 0.68 \)
Natural Gas \( \times 1.25 \)
Methane \( \times 1.33 \)
Propane \( \times 0.80 \)
Oxygen \( \times 0.95 \)
Town gas \( \times 1.54 \)
Hydrogen \( \times 3.75 \)

F53
Deflagration volume protection device
145-250

Flow diagram upon request (depend on the system requirements)