Automatic Flashback Arrestor



BOC F5 Flashback Arrestor

Description

The BOC F5 Flashback Arrestors:

- Large surface mesh filter to remove dirt particles from the gas to improve service life of the arrestor.
- Spring loaded non-return valve to prevent slow or sudden backfeeding. It is protected from flashbacks by the downstream arrestor element.
- Large surface area flame arrestor of sintered stainless steel to extinguish any flashback entering the device in any direction. The cylindrical shape gives high flow capacity.
- 4) Temperature activated valve to cut-off the gas supply before the internal temperature reaches a dangerous level. The sealing element is shrouded from flashbacks and the valve closes in the same direction as the gas flow ensuring that it cannot be re-opened by the gas inlet pressure.

BOC F5 Flashback Arrestor, conform to EN 730, ISO 5175 and other national standards (details on request).

Tests

Every BOC Arrestor is tested individually for body leaks, non-return valve function and is subjected to flashback testing at the maximum rated operating pressure in accordance with ISO standards or those of the country of sale.

Maintenance

No maintenance is required. Nevertheless it is recommended that at annual intervals the units are tested with clean dry air or nitrogen for body leakage and against reverse flow. Test specifications and test equipment available on request.

Installation

The BOC F5 Flashback Arrestor may be installed at regulator or pipeline outlets. For pipeline use a shut-off valve should be fitted immediately upstream of the arrestor. If there is a danger from water vapour being carried with the gas, then a separator should be installed upstream. Not more than one process unit may be connected to one flashback arrestor. It may be mounted horizontally, vertically or any other position. The maximum working temperature is 70°C.

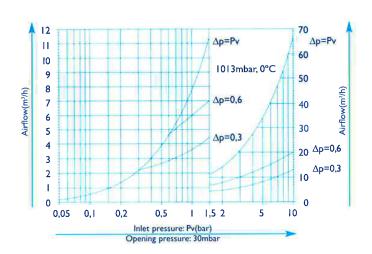
Repairs

Detective units as well as units with temperature activated cut-off valve closed should only be serviced by the manufacturer or his authorised local representative as it requires full testing including flashback testing after reassembly. The change of the dirt filter is not part of this requirement and can easily be carried out.

Maximum Working Pressure	Connection	Material Code
Air/Oxygen 10.0 bar	G 3/8 RH	11070
Acetylene 1.5 bar	G 3/8 LH	11071

Conversion factors:

Acetylene	x1,04
Butane	x0,86
Natural Gas	x1,25
Menthane	x1,33
Propane	x0,80
Oxygen	x0,95
Town Gas	x1,54
Hydrogen	x3,75





Automatic Flashback Arrestor



BOC FI Flashback Arrestor

Description

The BOC F1 Flashback Arrestor:

- Large surface mesh filter to remove dirt particles from the gas to improve service life of the arrestor.
- 2) Pressure activated cut-off valve to isolate gas supply after each flashback, severe back pressure and pressure differential caused by upstream leaks. The valve closes in the same direction as the gas flow ensuring that it cannot be reopened by the gas inlet pressure. Operation is indicated by a signal lever, after resetting the lever, the arrestor is again ready for immediate operation.
- Spring loaded non-return valve to prevent slow or sudden backfeeding. It is protected from flashbacks by the downstream arrestor element.
- 4) Temperature activated cut-off valve cuts off the gas supply automatically if internal temperature reaches a dangerous level. This may be caused by internal burning or external fire.
- 5) Large surface area flame arrestor of sintered stainless steel to extinguish any flashback entering the device. The cylindrical shape gives high flow capacity.
- 6) Explosion pressure relief valve to vent excessive pressure to atmosphere protecting the downstream hose. Products of combustion and debris created by a flashback are also vented here to minimise deposits on the arresting element extending the service life. BOC F1 Flashback Arrestor, conform to EN730, ISO 5175 and other national standards (details on

Test

Every BOC Flashback Arrestor is tested individually for body leaks, function of its non-return valve, cut-off valve and relief valve and is subjected to flashback testing at the maximum rated operating pressure in accordance with ISO Standards or those of the country of sale.

Maintenance

No maintenance is required. Nevertheless it is recommended that at annual intervals the units are tested with clean dry air or nitrogen for body leakage and for proper function of the valves. Test specifications and test equipment available on request.

Installation

The BOC FI Flashback Arrestor may be installed at regulator or pipeline outlets. For pipelines use a shut-off valve should be fitted immediately upstream of the arrestor. If there is a danger from water vapour being carried with the gas, then a separator should be installed upstream. The arrestor may be mounted horizontally, vertically or any other position. The maximum working temperature is 70°C.

Repairs

Defective units should only be serviced by the manufacturer or his authorised local representative as full testing including flashback testing after reassembly is required. The change of the dirt filter is not part of this requirement and can easily be carried out.

Maximum Working Pressure	Connection	Material Code
Air/Oxygen 10.0 bar	G 3/8 RH	11075
Acetylene 1.5 bar	G 3/8 LH	11074

Conversion factors:

request).

Acetylene x1,04 Butane x0,86 Natural Gas x1,25 Menthane x1,33 Propane x0,80 x0,95 Oxygen Town Gas x1,54 Hydrogen x3,75

