



Saffire 36ec Flashback Arrestors

Flashback Arrestors are essential safety devices which provide the maximum protection for the operator and his equipment in the event of a flashback.

A flashback can be caused by a variety of conditions such as sustained backfire, incorrect hose purging or simply the wrong gas pressure. Most are attributable to operator errors.

When a flashback occurs the flame front and pressure wave retreat into the blowpipe and hose at a very high speed. This can cause detonation within the system. It is essential that the regulator and more particularly the cylinder are protected from the effect of a flashback.

The well proven 36ec conforms to the requirements of BS EN 730-1. The unit offers comprehensive protection from the dangers of flashback and has the following important safety features:

- Reset Button – this is protected within the body of the unit to protect against damage. Very important. The “pop-up” feature indicates when a flashback has occurred and the arrestor activated. Simply lift to reset
- Sintered Metal Flame Arresting Element – very large diameter with extensive surface area – designed to arrest the flashback flame quickly. The element size is important to long service life and to allow high flow use
- Non-return Valve – upstream of the flame arresting element ensures no gas can backfeed to ignite incoming gases
- Thermal Cut-off Device – designed to completely isolate the system by cutting off all incoming gases in the event of a fire
- Pressure Sensitive Cut-off Valve – in the event of a flashback the pressure wave will activate the valve to cut off the gas supply automatically

Indicator button

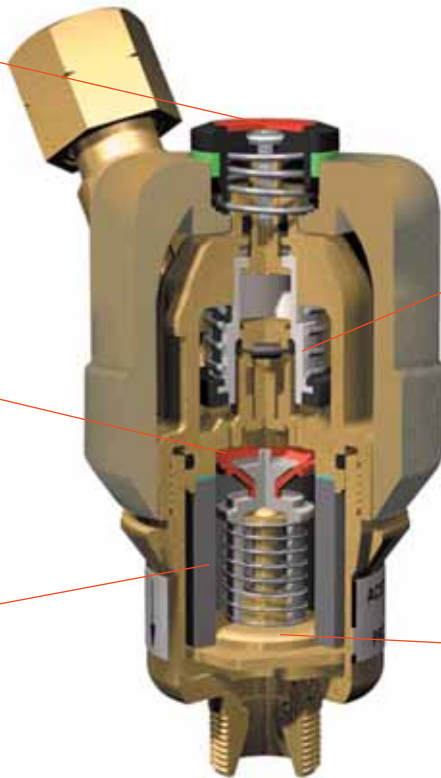
In normal operation a green safety band shows around the button. After a flashback the band does not show and the outer shroud must be lifted to reset the unit.

Non-return valve

Upstream of the flame arresting element, this unit ensures no gas can backfeed and ignite incoming gases.

Sintered metal flame arresting element

Extensive surface area designed to arrest a flashback flame quickly. The element surface area is important to ensure long service life and to permit high gas flow in normal operation.



Pressure sensitive cut-off valve

In the event of a flashback the pressure wave will activate the valve to cut off the gas supply automatically.

Thermal cut off device

Designed to cut off the gas in the event of extreme temperatures such as a hose fire. The unit is activated at 95°C.

In the event of a flashback the flame front strikes the retaining plate thereby displaying much of the flashback force. The flame front passes into the absorption chamber and is quenched as it enters the flame arresting element. The following pressure wave passes through the filter and activates the flow cut off valve by its pressure. This causes the reset button to move downwards. This equipment is thus rendered safe with the flashback flame extinguished and the incoming gas supply stopped.

Saffire XL5 Flashback Arrestors

The Saffire® XL cylindrical flashback arrestors, are of advanced design giving a higher flow rate. Internally the XL is equipped with a large cylindrical flame arresting element, an automotive reset non-return valve and a heat sensitive automatic cut-off.

- Automatic reset non-return valve
- Heat sensitive cut-off valve
- High flow flame arresting element
- Inlet filter for internal mechanism
- Conforms to BS EN 730-1



Saffire Hose Check Valves

A vital piece of equipment protecting against backfeed. The Murex hose check valve is a self-aligning non return valve which is spring loaded and detects reverse gas flow; it automatically closes, therefore preventing the conditions which lead to flashback. Conforms to BS EN 730-2.



Ordering Information

Description	Part No
FBA Model 36ec Acet/ Propane	0701282274
FBA Model 36ec Acet/ Oxygen	0701282274
FBA XL Acet/ Propane	0701258986
FBA XL Oxygen	0701258985
BV 12 Hose Check Valve 1/4" x 6.3mm LH	0701261904
BV 12 Hose Check Valve 1/4" x 6.3mm RH	0701261905
BV 12 Hose Check Valve 3/8" x 6.3mm LH	0701261906
BV 12 Hose Check Valve 3/8" x 6.3mm RH	0701261907
BV 12 Hose Check Valve 3/8" x 10mm LH	0701261910
BV 12 Hose Check Valve 3/8" x 10mm RH	0701261911

Flashback arrestors should always be used in conjunction with hose check valves as these help to prevent the backflow which leads to flashback.