



**MATHESON
TRI•GAS**
ask. . .The Gas Professionals™

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Flashback Arrestor Model 6103A Safety and Operating Instructions

Norms and Standards: ISO 5175; BAM EN 730-1, EN 730-2; ÖNORM EN730; BS 6158; EN 561; ISO 7289; UL MH16872; CGA; AS 4603; SABS.

Follow local national Safety Regulations.

- Information:** - For any questions, please call Matheson Tri-Gas at 215-641-2700.
- Function:**
- Protection against creeping and sudden reverse flow of gas;
 - Flashbacks;
 - Burnbacks
 - Pressure build-up due to pressure surges
 - Particulate contamination
- Correct Usage:**
- Safety at the supply and tapping points, cylinder regulators and torches
 - **Use only in connection with given data per model number**
- Working pressure:** - See data per model number
- Incorrect Usage:**
- Application of other gases and/or pressures other than those indicated per model number
 - Couplings are not cut-off valves; in the event of longer breaks or at the end of the working day the gas source should be closed.

Warning:

- △ **Use only** in the prescribed gas direction and do not exceed the maximum working pressure.
- △ **Use only the prescribed gas.** Do not connect the flashback arrestor to any other pressure recipients (e.g. directly to pressure gas cylinders 200 bar, 20,000 kPa, 2856 PSI) - **DANGER TO LIFE !**
- △ **Compressed Air** controlled valves are no longer allowed to be used in oxygen systems.
- △ **CAUTION** - Do **NOT** attempt to repair flashback arrestors. There are no user repairable parts.
- △ **Only one** operating unit may be installed in conjunction with a flashback arrestor.
- △ Additional marking, stamping or engraving on the arrestor by the user is strictly forbidden, as this can cause damage.

Assembly Instructions:

- ⇒ Before commencing, check visually that all connections are clean and undamaged.
- ⇒ When assembled, check for possible leaks by going up to maximum working pressure.
- ⇒ When using oxygen, all connections and the complete unit must be free from oil and grease
- ⇒ Fit with open-ended spanners for each connection

Maintenance:

- ⇒ The flashback arrestors and couplings must be tested at regular intervals by a trained and authorized person according to your local safety regulations. This means testing at least once per year (with couplings coupled and uncoupled being tested every six months) for gas leaks and gas reverse flow.
- ⇒ Where Acetylene generators are used, a gas purifier must be installed directly before the arrestor.
- ⇒ Where there is the possibility of condensed water in the acetylene delivery pipes/hoses, an adequate water filter should be installed before the arrestor.
- ⇒ Repairs of all sorts may only be carried out by the manufacturer or manufacturer's representative.
- ⇒ The dust filter at the inlet of the arrestor may be changed and/or cleaned by the user.

Trouble shooting:

- ⇒ **No gas flow:** check flow direction, operating pressure, gas cut-off valves, gas source, thermal and pressure cut-off valves.
- ⇒ Couplings and coupling pins can leak if they are damaged or dirty; therefore they should be checked regularly.
- ⇒ **Gas return flow:** replace device
- ⇒ **External leakage:** replace device

Reset Instructions:

1. In normal operating condition, the black control knob is toward the inlet, and the green ring is visible.
2. After a flashback or reverse flow over 0.5 bar, the control knob snaps toward the outlet end, hiding the green ring.
3. To reset, pull control knob toward inlet end, exposing the green ring.