

FireChek® FC4 Series

FM Approved Heat Activated Pneumatic Shut-off Valve



When FireChek senses excessive heat from a nearby fire, it immediately vents the pneumatic actuator and closes the actuator air supply line. FireChek triggers quickly, securing pneumatically operated process line valves. Because FireChek responds to heat, not flame, it offers dramatically improved protection compared with conventional plastic tubing burn-through. It shuts off the air supply line to prevent plant air from feeding oxygen to a fire.

The shape memory element senses the ambient temperature and, through a phase induction change, rapidly produces the force and motion to operate FireChek. The element is 100% reliable because the shape memory effect is intrinsic to the alloy. Shape memory alloys have performed successfully for years in military, industrial, and consumer product applications.

FireChek's manual reset allows routine performance testing for safety maintenance programs. A hot-air gun will quickly actuate FireChek. After cooling briefly, the FireChek can easily be reset without the use of tools, for continued protection.

FireChek installs easily between the pneumatic supply and spring return actuator via two female threaded connections.

FEATURES

- Rapidly responds to temperature rise, not flames.
- Vents actuator air pressure.
- Closes actuator air supply line.
- Needs no power source, self activates.
- Compatible with all pneumatic actuators.
- No contact with process fluids.
- Easy to test and reset.
- Reliable, intrinsic triggering.
- Easy to retrofit, installs in minutes.
- FM approved.

FC4 SERIES MODEL NUMBERING

Model Number: _____ **FC4 X X**

Connection: _____

NPT = 1/4-18 NPT (standard)

ISO = 1/4-19 ISO

Actuation Temperature: _____

135 = 135°F

150 = 150°F

165 = 165°F (standard)

MAXIMUM PRESSURE

126 PSI (8.62 bar)

MATERIALS OF CONSTRUCTION

**Shape Memory Alloy
Actuator and Sensor:**
MEMRY®.

Thermal Insulators:
DELRIN®.

O-rings:
BUNA-N.

**Body Cover, Reset, Shuttle
Cap, Pin and Bias Spring:**
300 stainless steel.

SPECIFICATIONS

Actuation Time:

25 sec. or less at a temperature rise rate of 30°F/min.

Fill and Discharge Capacity:

1 liter of air in under 1 sec. at 125 PSI (8.62 bar); 0.49 CV.

Dimensions:

2.59" length, 1.00" diameter.

Weight:

0.482 lbs.