



Selas Automatic Fire Checks

The Selas automatic firecheck valves, or flame arrestor, is a check valve which is closed by actuation of a thermal release.

How It Works

The Selas automatic firecheck, or flame arrestor, is basically a check valve which is closed by actuation of a thermal release. Hardware

includes a shut-off valve, check valve, corrugated fire screen, and a thermal latch.

Applications:

 Meets safety requirements on premix combustion systems



Operating Principles

In normal operations, the combustible fuel/air mixture passes freely through these components. If flashback occurs, the sudden increase in back pressure will cause the check valve to close and momentarily interrupt the forward flow of the fuel/air mixture. The reduced flow and the internal configuration of the firecheck allow the backward-traveling flame to stop at the fire screen. The tiny holes and chilling capacity of the fire screen hold the flame on the screen until the thermal element is heated and releases the latch to close the shut-off valve. This valve-closure stops fuel/air flow and prevents the flashback from proceeding past the firecheck. The shut-off valve remains closed until manually reset.

Benefits Features Fire screen with chilling capacity Confines flashback until trigger valve closes Installs in fuel mixture supply line close to burner Configured to stop a backward-traveling flame at the fire screen Protects personnel, equipment and processes from harm Fulfills safety requirements

