

Safety Pressure Relief Monitor

Applications:

- Safety Pressure Relief Monitor
- Safety Pressure Relief Valve Monitor
- Rupture Disk Release Monitor
- Pressure Relief Valve Monitor
- Pressure Relief Monitoring Switch

Application Background:

It is desirable and sometimes a requirement to monitor the pressure release from a safety relief valve or rupture disk. Typically some form of flow switch is installed downstream from the valve or disk to detect when the gas, liquid, or steam is released.

Application Solution:

There are many techniques to provide the flow monitoring switch. A pressure switch is probably the most common technique with displacement (paddle) types also applied in this application. Both of these techniques are mechanical in nature and subject to malfunction. A thermal flow switch provides for a more reliable technique without any moving parts.

With a single process connection into the pressure release flow pipe (MNPT or flange), any of Delta M's flow switch models (microtuf® or VersaSwitch®) can provide a reliable alarm output relay when activated by the fluid flow (liquid or gas). An added feature of the VersaSwitch® is its second channel relay tripped by a failure alarm option which monitors the switch itself for proper power input, sensor and electronics status. With the failure alarm option you have assurance and confidence that the safety pressure relief flow switch is armed and ready to perform its alarm function when the time comes.

For full details go to our website, <u>www.deltamcorp.com</u> to the products tab and look for Manuals. Find the dual channel Model VS5100 Versa-Switch® product manual. Section 10.2 will explain how the Failure Alarm Option can be provide a "Watchdog" feature for your fire pressure relief monitoring application.