TECHNICAL BULLETIN Takasago Ventiduct Feature

For Temperature Sensitive And Volatile Fluid Media Applications

TYPICAL APPLICATIONS

The Ventiduct is an optional part fitted between the valve body and solenoid. It has ducts for ventilation and heat radiation. Ventiduct isolates and protects the metal solenoid parts from contact with volatile corrosive gases such as Trifluoro Acetic Acid that manage to pass through a standard Teflon isolation diaphragm.

The Ventiduct protects the fluid media from heat generated by the solenoid. Conversely, Ventiduct shields the valve solenoid when the fluid media is at a high temperature.



The pictures to the right demonstrate the effectiveness of Ventiduct in protecting the metal solenoid parts from exposure to Trifluoro Acetic Acid for 48 hours at room temperature. A 0.2 mm thick PTFE isolation diaphragm was used. A B

The metal plunger of Valve A is clearly corroded while Valve B is unaffected.

The charts below demonstrate the effectiveness of Ventiduct for heat control by thermal radiation. The Ventiduct reduces the temperature rise in the valve by approximately 12°C. **Test Conditions:** Fluid- water; Valve Type- MTV-2; Full Rated Voltage Applied (24Vdc)



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