BS_≥**B[®]** Vis-U-Tec[™] sensors

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The Vis-U-TecTM and electronic Vis-U-TecTM sensors are pressure sensing devices. The sensor provides a visual warning that a pressure event has occurred (see image to the right). Instant warning of a ruptured disk can reduce plant downtime, product loss and environmental pollution.

When the Vis-U-Tec senses a differential pressure of 10 psig (0.69barg) downstream of the rupture disk indicating a burst or leakage scenario, the piston will move to its fully extended position providing a visual warning of the ruptured disk. The electronic Vis-U-Tec provides an electrical signal and visual warning of a ruptured disk when used with a BS&B Burst Disk Monitor[™], Rupture Disk Manager[™] or other suitable electrical monitoring equipment. The movement of the piston causes a break in the sensor's conductive circuit. The disruption of the current flowing through the circuit provides an electrical signal which activates a burst disk monitor or other suitable electrical monitoring equipment to give an audible and / or visual signal.

The standard piston material is aluminum with optional SST. The piston is sealed with a Viton[®] O-ring.



Viton[®] is a registered trademark of DuPont Dow Elastomers L.L.C.



Installation

The Vis-U-Tec sensor is fitted to the outlet of the safety head or piping using a 1/4 inch (6.35mm) NPT screw connection.

Applications

The Vis-U-Tec[™] will provide warning of a ruptured disk.

- Relief Valve Isolation Used alone or in addition to the standard Telltale Indicator*
- **Double Disk Assembly** Installed in the midflange between both rupture disks
- Free Venting Disks Venting to the atmosphere or into down stream piping
- Other Applications On storage, process vessels or equipment to warn of an increase in pressure of / or above 10 psig (0.69barg)

*Nipple, cross, gauge and excess flow valve

Resetting of Sensor

When a ruptured disk has been replaced, the Vis-U-Tec sensor may be reset by pushing the piston back fully into the unit.

Materials

All wetted parts that may come in contact with process fluids are 316 stainless steel for both the Vis-U-Tec and electronic Vis-U-Tec sensors. The standard piston material is aluminum with optional SST. The piston is sealed with a Viton[°] O-ring.

Electrical Components

Each electronic Vis-U-Tec is supplied with a 12 inch (30cms) two-conductor cable. The sensor is supplied without an electrical connector. Consult BS&B or your local representative for connector options.





Free venting disk			
Disk size		Minimum burst pressure	
in	mm	psig	barg
1	25	100	6.89
1.5	40	100	6.89
2	50	100	6.89
3	80	200	13.79
4	100	200	13.79
6	150	500	24.13

For larger disk sizes, consult BS&B. The maximum burst pressure is 2,000 psig (137.89barg).

Values are based on using a free vented outlet flange with no down stream piping

Operating Conditions

Venting into enclosed volume:

- Activation pressure: 10 psig (0.69 barg)
- Minimum disk burst pressure: 40 psig (2.76 barg)

Operating Temperature Range

The sensor is suitable for a wide operating temperature range, minimum -40°F (-40°C) to maximum 400°F (204°C).

Electrical Specification

Maximum current 250 mA Maximum voltage 24Vdc

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