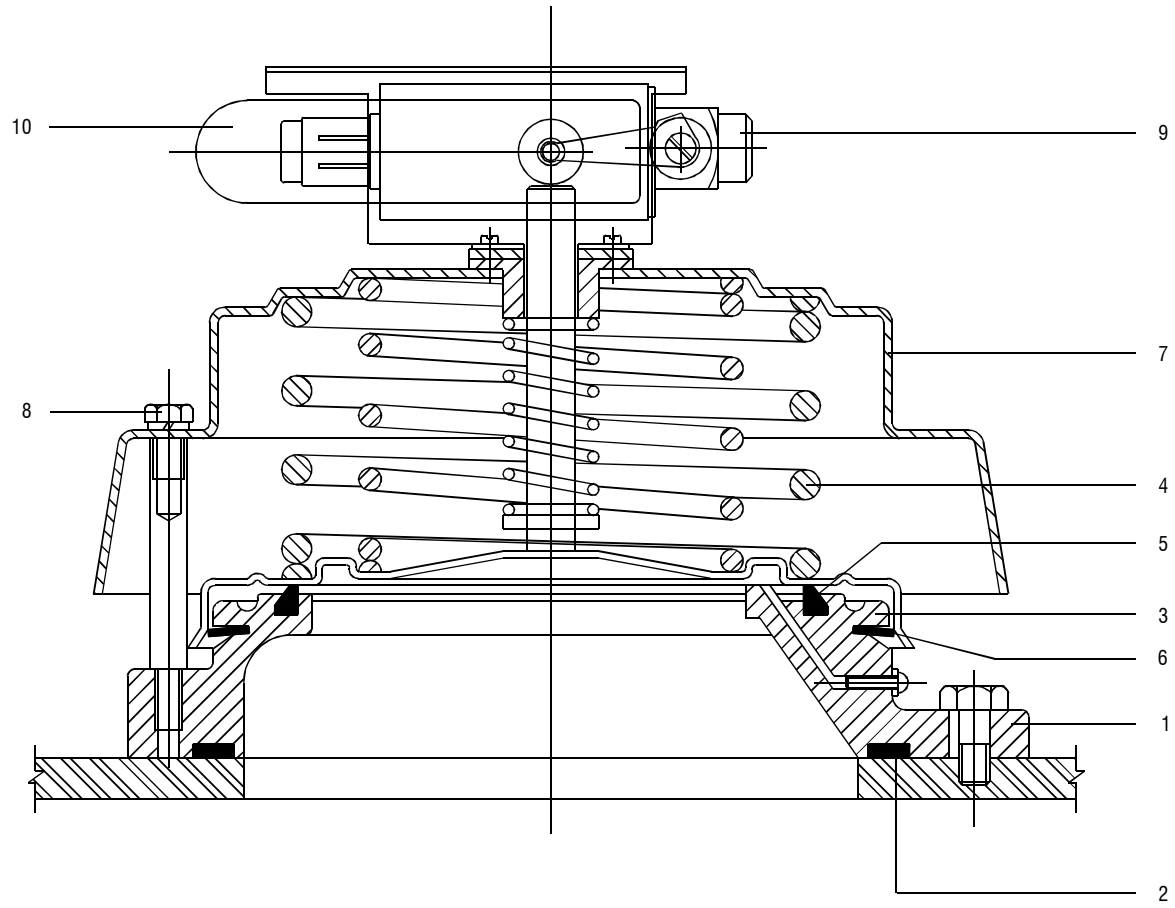
PRESSURE RELIEF VALVE
FOR OIL FILLED TRANSFORMER
Type : T6

FEATURES

- Pressure Die Cast Aluminium flange free of blow holes.
- Stainless Steel deep drawn operating diaphragm, specially coated to prevent sticking with rubber seals.
- Automatic and instantaneous venting and sealing.
- IP 67 protection for switch.
- Specially designed reverse wound springs and assembly, provide uniform valve loading and improved relief rates.
- Unique spring retaining system on disc and cover.
- 100% operation test for each instrument.
- Springs specially coated to prevent rust.
- Cover electrostatic powder coated for protection against corrosion.
- Switch with one NO and one NC contacts.
- Switch with two NO and two NC contacts - optional.
- Highly visible flag indicator integrated with the switch.

IN SERVICE TO THE TRANSFORMER INDUSTRY SINCE 1971



CONSTRUCTION

The Pressure Relief Valve consists of a pressure die cast Aluminium flange (1) with Nitrile gasket (2) for mounting on transformer. The Stainless Steel diaphragm (3) is loaded with two reverse wound calibrated springs (4) and seals the 150 mm port against top and side gasket (5&6). The deep drawn cover (7) retains and compresses the spring and is held in place by six screws (8).

The cover and the operating disc have specially designed retainers to prevent dislocation of springs during repeated operations.

The switch assembly (9) for alarm is optional and houses one NO and one NC contact (four terminals). It also has a visual indicator (10).

WORKING

When pressure in the tank rises above the safe limit, the operating disc moves slightly upwards from top gasket. This exposes the transformer pressure to a greater area corresponding to the diameter of side gasket, resulting in sudden increase of force. The disk lifts instantaneously and vents gases, vapour and liquid till the pressure falls to allowable values.

APPLICATION

These Pressure Relief Valves are recommended to be used on power transformers.

They are much more effective, durable and suitable for repeated operations than the conventionally used explosion vent.

NUMBER PER INSTALLATION

No precise formula is available to determine the number of pressure relief valves to be used. However, it is recommended to use one device for each 35000 litres of cooling liquid capacity.

MOUNTING

The Pressure Relief Valve should be preferably mounted in the horizontal position, top side up. However, it can be mounted on its side, in vertical plane also.

Any pressure head due to side mounting or conservator tanks, should be taken into consideration (approximately 0.5 psi/foot) when determining operating pressure.

INSTALLATION

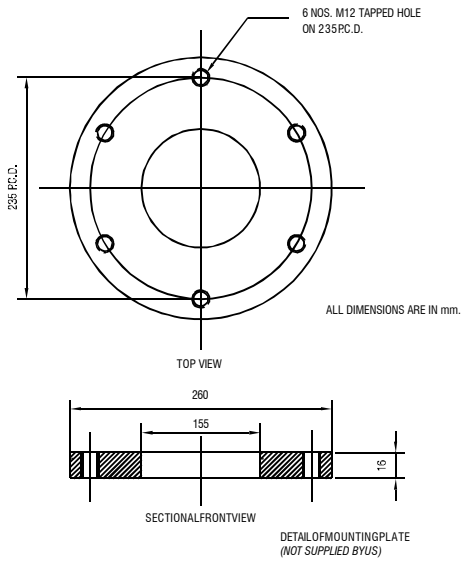
Clean surface of mounting pad on tank and place the flange with gasket. Use M12 x 30 bolts with a combination of plain thick washer and spring washer for tightening. Ensure that the gasket is placed in the groove provided in the flange.

Check the operation of switch by manually lifting the operating rod. After checking, the switch should be manually reset by placing the roller type knob back to its original position.

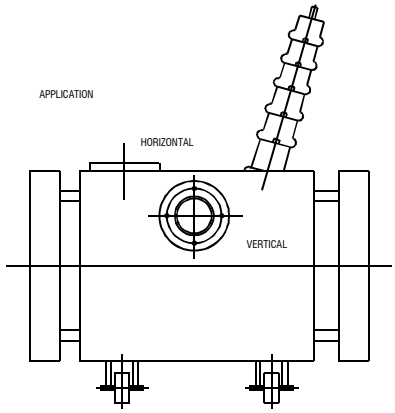
MAINTENANCE

The Pressure Relief Valve has a rugged construction and does not require any maintenance. The operating pressure is factory preset and cannot be changed at site. It is strongly recommended that the compression screws on the cover should never be removedwithout use of extreme caution. The operation of switch may be periodically tested by manually lifting the operating rod and should be reset before putting the instrument in service.

DETAILS OF MOUNTING PAD



HORIZONTAL & VERTICAL MOUNTING

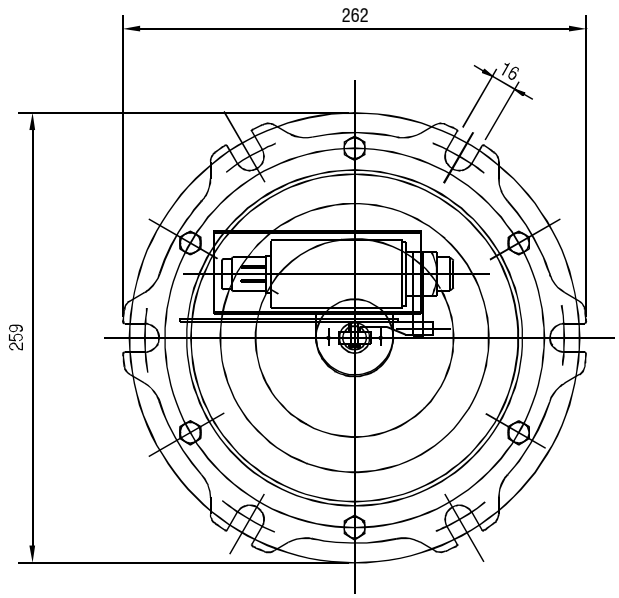


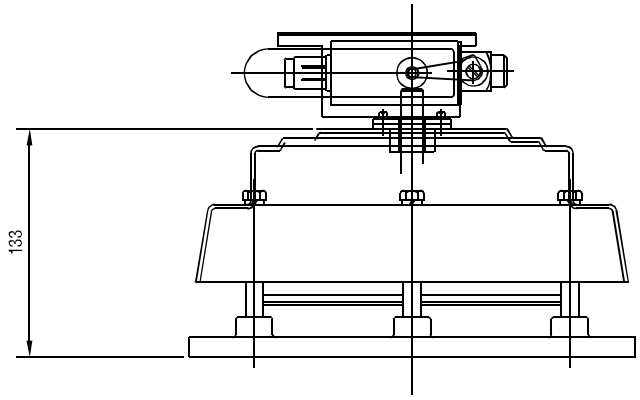
VALVE SPECIFICATIONS

1.	Liquid in tank	: Transformer oil
2.	Operating Pressure	: 0.42 Kg/cm^2 (6 PSI) 0.49 Kg/cm^2 (7 PSI) 0.56 Kg/cm^2 (8 PSI) 0.70 Kg/cm^2 (10 PSI)
3.	Operating tolerance	: $\pm$ 0.07 Kg/cm^2 (1.0 PSI)
4.	Operating time	: Instantaneous
5.	Operating temperature	: 0 to 100^{0}C (of transformer oil)
6.	Port opening	: 150 mm Dia
7.	Valve resetting	: Automatic
8.	Switch	: Limit Switch D.P.D.T.
9.	Switch resetting	: Manual
10.	Environment	: Indoor & Outdoor

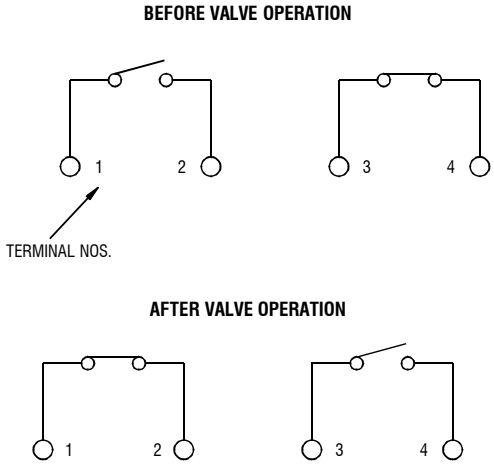
SWITCH SPECIFICATIONS

1.	Number of switch	: 1 Limit switch
2.	Operation	: Automatic
3.	Contact rating	: AC : 240V 10 Amps DC : 250V 0.4 Amps
4.	Number of contacts	: 1 NO + 1 NC 2 NO + 2 NC (optional)
5.	Weather protection	: IP 67
6.	Cable entry	: 1” Conduit

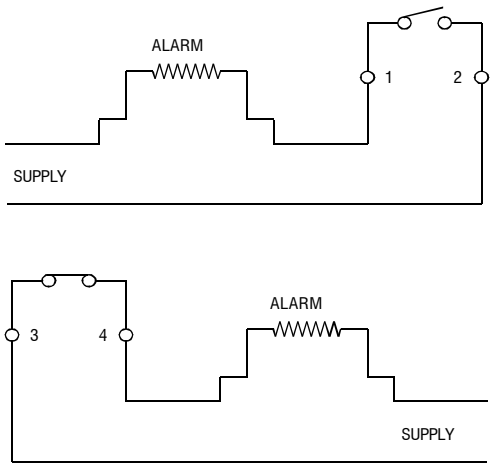




SWITCH OPERATION



WIRING DIAGRAM



To Order, Or For Quotation, Specify :

1. Model Number

- T6 - With Switch (1 NO + 1 NC)
- T6-2 - With Switch (2 NO + 2 NC)
- T6W - Without Switch

2. Operating Pressure

a) 0.42 Kg/cm2 (6 PSI)
b) 0.49 Kg/cm2 (7 PSI)
c) 0.56 Kg/cm2 (8 PSI)
d) 0.70 Kg/cm2 (10 PSI)
e) Other than above

Due to our policy of continuous product improvement, dimensions and designs are subject to change.

ATVUS INDUSTRIES

689, Block 'O', New Alipore, Kolkata - 700 053, INDIA
Phones: (91-33) 24001101, 24009885 Fax: (91-33) 24007443, 24007043 E-mail: atvus@dataone.in