

# PRESSURE RELIEF VALVE – 70MM

# **APPLICATION:**

These Pressure Relief Valves are recommended to be used on all sizes of OLTC and transformers ranging from 250 KVA to 5 MVA . They are much more durable, and suitable for repeated operations than the conventionally used explosion vent.

# **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 below set value.



# **INSTALLATION & MAINTENANCE**

Clean surface of mounting pad on tank and place the flange with gasket supplier by us and use M10 x 30 bolts with washers 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.

The Pressure Relief Valve has a rugged construction and does not require any maintenance except keeping it clean. 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 removed without use of 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.

# **VALVE SPECIFICATIONS:**

S. No	Parameter	Specification	S. No	Parameter	Specification
1	Liquid in tank	Transformer oil	6	Port opening	70 mm Dia
2	Operating Pressure	0.35 to 0.7 kg/sq cm	7	Valve resetting	Automatic
3	Operating tolerance	0.07 kg/sq cm	8	Switch	Limit Switch
4	Operating time	Instantaneous	9	Switch resetting	Manual
5	Operating temperature	0°C to 100°C of oil temperature	10	Environment	Indoor & Outdoor

# **FEATURES**

- Die Cast Aluminum with Electrostatic powder coated body.
- Deep drawn Stainless Steel operating diaphragm.
- Automatic and instantaneous venting and sealing.
- Ideal for OLTC tanks and small transformer tanks.
- Switch with 1NO + 1NC contacts with operation Indication Flag. Optionally switch with 2NO + 2NC contacts can be supplied against specific request.
- IP 67 protection for switch.
- 100% operation test for each instrument.
- Unique spring retainer at top and bottom provided for perfect repeated operations.
- Powder coated Spring Steel springs for long life.

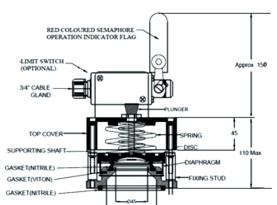
# **ADDITIONAL ADVANTAGES:**

- Corrosion resistant construction
- Highly flexible Installation.
- No Part of the Pressure Relief valve project inside the Transformer tank.

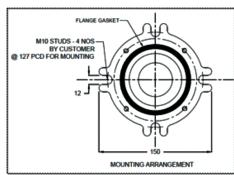
# DETAILS OF MOUNTING PAD

# MIO TAPPED HOLE 4 NOS @ 127 PCO & SO'ANGLE

# CONSTRUCTION



# **MOUNTING**



The Pressure Relief Valve consists of an integral Aluminum Alloy flange with Nitrile gasket for mounting on transformer tank. The Stainless Steel diaphragm is spring loaded and seals the 70 mm port against top and side gasket (Nitrile & Viton). The cover retains and compresses the spring and is held in place by fours stainless steel screws. The spring retainer (Inner Disc) prevents the dislocation of springs during repeated operations.

# **SWITCH SPECIFICATIONS:**

S. No	Parameter	Specification	S. No	Parameter	Specification	
1	Number of switch	One Limit switch	6	Insulation Voltage	600V AC	
2	Operation	Automatic	7	Contacts Type	1NO+1NC/	
					2NO+2NC (optional)	
3	Utilization Cate-gory	AC 15, DC 13 as per IEC 947-5-1	8	Weather protection	IP 67	
		IS-13947/pt-5sec 1 of 2004				
4	Thermal Current	Ith10A	9	Cable entry	3/4" Cable Gland	
5	Contact rating	AC 15 Rating: 6A @ 110V, 3A @ 220V, 1.5A @ 400V, 1.2A @ 550V.				
		DC 13 Rating: 0.2A @ 110V, 0.1A @ 220V				
		(OR)				
		OPTIONAL SWITCH WITH RATING				
		10A @ 125V, 250V OR 300V AC				
		0.8A @ 125 VDC, 0.4A @250VDC, 0.1A @ 600VDC				

# **ORDERING INFORMATION**

1	Model No.:	1090-70
2	Switch	With Switch/ Without Switch
3	Contact Type	1NO+1NC/2NO+2NC (optional)
4	Operating Pressure	Any value between 0.35 and 0.7 kg/sq cm

Desclaimer: Precimeasure reserves the right to make any changes in the specification without prior notice.