

PRE-INSULATED VALVE

“Launching
New Solution
for Green
Buildings”



ADVANTAGES OF ADVANCE PRE-INSULATED VALVES:

- Rapid Installation and Quick Site Turnaround
- Condensation Free
- Each valve individually tested with full traceability
- Factory Warrantied Insulation on Valves
- Energy Saving
- Reduced Capital Equipment Cost
- Low Smoke Emission & Self Extinguishing Material
- Designed as per ASTM C680
- No change in flange and bolts for piping
- Motorized Butterfly Valves also available

“Patent Applied”

Changing the way you think about valves...

ADVANCE PRE-INSULATED VALVE SPECIFICATIONS

Valve Insulation is Closed Cell Polyurethane Foam (PUF) with density higher than 70 kg/m³. It is suitable for an operating temperature range of -40°C to 120°C. The insulation is protected by a cladding of HDPE to ensure life of the PUF and to prevent peeling and damage to it.

The insulation has Class P fire performance as per H5476 part 5 for ignitability and mean flame spread of less than 125mm as per BS 4735. This identifies the material as Self Extinguishing with fire retardant properties.

Insulation is done such that mounting bolts for the valve are fully enclosed by valve insulation. Standard flanges and bolts can be used with no change in flange insulation method. Flange bolts shall be tightened directly on metal surface of flange and not on top of insulation.

RANGE OF VALVES

- Concentric Butterfly Valves - 50mm (2") to 600mm (24" Manual or Motorized)
- Dual Plate Check Valves - 50mm (2") to 600mm (24")
- Flanged Balancing Valves - 65mm (2.5") to 300mm (12")

AMBIENT CONDITIONS DESIGNED FOR

Insulation is designed as per ASTM C680 to ensure there is no condensation with media temperature of 6°C. The valves are designed for 0 wind velocity which is what is observed in shafts and other typical places such valves are installed.

Assumed Ambient Conditions

I Temperature	35°C
ii) RH	85%
iii) Wind Velocity (for shafts)	0

The graph shows the line at which one will observe condensation. In the condensation zone, the Dew Point is lower than the temperature of valve insulation surface, resulting in Condensation. In the No Condensation Zone, the valve insulation surface temperature is higher than the Dew Point and there is No Condensation.

Dew Point for Ambient Conditions

