

Insulation Gasket Specifications

Neoprene Faced Phenolic Gasket has been used as standard flat isolating gasket in the oil and gas industries for many years. Soft neoprene rubber sheets are factory applied to both sides of a laminated phenolic retainer providing an effective sealing surface. Phenolic retainer is 1.6mm(1/16") thickness and neoprene face is 0.8mm(1/32") thickness on each side, so total gasket is 3.2mm(1/8") thickness.

Gasket Characteristics and Advantages:

- 1. Seals and insulates at pressures up to ANSI 600#.
- 2. Outstanding insulation properties for cathodic protection.
- Gasket is sized to the flange bore to protect flange faces from media-induced corrosion and flow-induced erosion. Prevents turbulent flow at flanged connections.
- 4. Mitigates galvanic corrosion in dissimilar metal flanges.
- 5. Available to match any flange specification (ANSI, API, BS, DIN, AS, others).
- 6. Can seal mismatched RTJ Flange with Raised Face Flanges.

Gasket Types

Type "E" (Full Face) Gaskets have same outside diameter of the flange and precise located bolt holes, this feature will help to automatically center the gasket, and offer maximum protection against foreign material "shorting-out" the flange.

Type "F" (Ring Type) Gaskets are made to fit within the bolt hole circle of the flange. The O.D. of the gasket extends out to the I.D. of the bolt hole circle for good protection against foreign material "shorting-out" the flange.

Insulating Gasket Material

Gasket Thickness: 3.2mm

Material: Neoprene Faced Phenolic





Neoprene Faced Phenolic Insulating Gasket

Gasket Material Properties

Properties	Neoprene Faced Phenolic	Phenolic	
Dielectric Strength (Volts/mil)	500	500	
Water Absorption (%)	1.6	1.6	
Tensile Strength (psi)	20,000	20,000	
Compressive Strength (psi)	25,000	25,000	
Operating Temperature (℃)	-54 to +80	-54 to +104	

Insulating Sleeve

The insulating sleeve is suitable for standard flange bolt hole and standard bolt.

The normal wall thickness is 0.8mm.

The insulating sleeve is full length, which will cross two insulating washers and reach one steel washer.

Insulating Sleeve Material Properties

Properties	NEMA Grade G10	NEMA Grade G11
Dielectric Strength (Volts/mil)	550	550
Water Absorption (%)	0.1	0.1
Operating Temperature (℃)	-120 to +150	-110 to +200

Insulating Washer

The insulating washer is suitable for standard flange bolt hole and standard bolt and is cut to SAE washer dimensions.

The normal thickness is 3.2mm.

The insulating washer material could be G10, G11, or Phenolic.



Neoprene Faced Phenolic Insulating Gasket

Insulating Washer Material Properties

Properties	NEMA Grade G10	NEMA Grade G11	Phenolic
Dielectric Strength (Volts/mil)	650	670	500
Water Absorption (%)	0.1	0.1	1.6
Operating Temperature ($^{\circ}\!\mathbb{C}$)	-120 to +150	-110 to +200	-54 to +104

Steel Washer

The steel washer is suitable for standard flange bolt hole and standard bolt and is cut to SAE washer dimensions.

The normal thickness is 3.2mm.

The steel washer material could be Zinc Plated CS, Zn-Ni Coated CS, PTFE Coated CS, SS316, HCS, and so on.



