Insolion®
GRE

The Insolion® GRE gasket consists of a G10 glass reinforced (GRE) carrier with two modified PTFE sealing faces.

Proprietary machining of the carrier allows correct location of the sealing faces, with the depth / profile designed to achieve correct compression and groove fill.

Application guidelines

- Flange insulation and electrical isolation in conjunction with cathodic protection.
- Specified for plant wide use on the majority of flange specifications including ASME, API, EN, BS and DIN.
- Insulation between dissimilar metals to prevent galvanic corrosion.

Availability

Insolion GRE can be supplied in sizes from NB ½" to 24" diameter to match the majority of flange including ASME, API, EN, BS, ISO and DIN. Custom dimensions and sizing options are available upon request.

Nominal thickness of Insolion GRE is 3.2 mm.

Insolion GRE is supplied as a kit suitable for the specific flange size and class rating required.

This kit includes:

1 Insolion GRE gasket
2 G10 bolt sleeves
3 G10 washers
4 Metallic backup washers in zinc plated carbon steel or stainless steel

TEMPERATURE

Maximum Temperature:
+120°C (+248°F)
Minimum Temperature:
-128°C (-200°F)

PRESSURE

Maximum Pressure:
5 MPa/50 bar (725 psi)
(ASME Class 300, PN40)

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Typical physical properties

GRE laminate
GRE material is Type-approved to NEMA LI-1 G10 standards, and conform to BS EN 60893-3-2-EPGC201.

Property	Test method	Parameters	Typical physical property
Water absorption	ISO 62	mg	Maximum 22.0
Electric strength	IEC 60243-1	kV/mm	Minimum 15
Breakdown voltage	IEC 60243-1	kV	Minimum 80
Insulation resistance	IEC 60167	MΩ	Minimum 5.0 x 10^4
Compressive strength	ASTM D 695	MPa	Minimum 345
Impact strength	ASTM D 229	ft.lb/in	Minimum 12.0
Tensile strength	ASTM D 638	MPa	Minimum 345
Shear strength	ASTM D 732	MPa	Minimum 152

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