

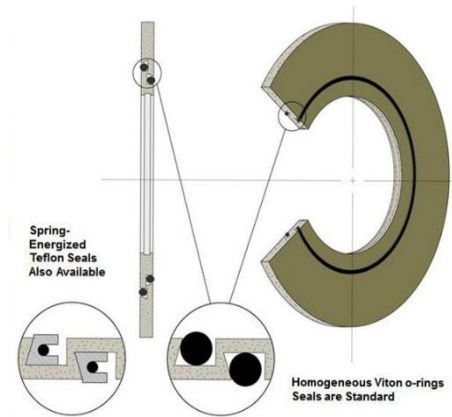
Flange Insulation Sets

PGE Flange Insulation Set

The PGE gasket is designed for electrical flange isolation & general sealing applications offering significant advantages over neoprene-faced phenolic resin gaskets. The gasket comprises overlapping and offset seal grooves are machined into the high strength G10 laminate. Spring energized Teflon or Viton o-ring seal offers excellent sealability at low loads.

The PGE gasket is a low pressure (Class 150, 300 & 600) gasket used for both isolating and general sealing purposes. The gasket has a proven track record of long lasting sealing solutions.

The PGE is available in all full face (Type E) and ring style (Type F).



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General Properties

- High reliability, low pressure sealing system.
- Provides excellent electrical insulation for cathodic protection systems.
- Overlapping seals eliminate potential leak/weep path in the laminate material.
- Can be suitable for most all hydrocarbons, depending on sealing element selected.
- Mitigates galvanic corrosion in dissimilar metal flanges.
- Protects flange faces from media-induced corrosion and flow-induced erosion.
- Decrease flange/bolt makeup stress.
- Easy installation and removal.
- Reusable seal retainer and seals.
- Suitable for all ANSI and API rated flanges

Materials

Gasket Insulating Material & Washers: G-10 Glass Reinforced Epoxy (GRE) as standard (G-11 high-temperature grade also available).

Spring energized Teflon or O-Ring pressure activated seal: Teflon (spring energized) as standard (Viton also available).

Insulation sleeves: GRE (standard) or Nomex for high temperature service.

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PGE Flange Gasket Advantages & Benefits

- Superior sealing for low pressure (ANSI class 150, 300 and 600) service.
- Pressure activated seals provide high confidence sealing.
- High strength laminate material resists failure due to excess compression
- Overlapping seal grooves eliminate potential leak/weep path in laminate material and provide stronger structural integrity versus 'opposing seal' designs.
- Reinforced laminate retainer material provides excellent insulation for cathodic protection systems.
- Gasket is sized to the bore to protect flange faces from media-induced corrosion and flow induced erosion.
- Mitigates galvanic corrosion in dissimilar metal flanges.
- Spring energized Teflon seal provides radial load and encapsulation in the seal groove which eliminates cold flow. This seal truly distinguishes the PGE from all other systems.
- Also available with a variety of elastomeric seals.
- Easy installation, make-up and removal:
 - Flanges do not have to be spread as with ring gaskets. The PGE easily slips in place.
 - Sealing system results in low required bolt loads. Less make-up force required resulting in less flange and bolt stress.
 - Gasket is self-aligning and centering, quick to install, no special tools are required.
- Maintenance-free, corrosion resistant design.

Insulation Kit Contents:

Insulating facing:	G-10 glass reinforced epoxy resin
Seal:	Spring energised Viton (PTFE also available)
Thickness:	3.2mm.
Insulating Washers:	G-10 glass reinforced epoxy resin (other materials are available) 3.2mm thickness 2 washers per bolt
Steel Washers:	Zinc-plated steel, 3.2mm thickness (stainless steel washers also available) 2 washers per bolt
Insulating Sleeves:	G-10 glass reinforced epoxy resin, wall thickness 0.75mm (Mylar and Nomex also available) 1 insulating sleeve per bolt

Core Materials:

Material type:	G-10 Glass-reinforced epoxy resin	G-11 High temperature resin
Compressive strength:	65,000psi	50,000psi
Dielectric strength:	29.5-31.5 kV/mm	19.7 kV/mm
Maximum temperature:	150°C	200°C
Water absorption:	0.05%	0.085%
Flexural strength:	65,000psi	57,700psi
Tensile strength:	50,000psi	41,000psi
Temperature range:	- 130°C to 150°C (limited by gasket material)	- 46°C to 200°C (limited by gasket material)
Seal:	Spring-energised PTFE (Viton rubber also available)	