GUARDIAN PREMIUM IPT

Composition

- Gasket: Bi-axially oriented PTFE
  - Thickness 1.50 ÷ 3.00 mm
- Insulating sleeves
  - Thickness: 0.90÷1.10 mm
    - Option A: GRE G10 (FR4)
    - Option B: GRE G11 (FR5)
- Insulating washers
  - Thickness: 3.00 mm
    - Option A: GRE G10 (FR4)
    - Option B: GRE G11 (FR5)
- Metallic Washers
  - Thickness: 3.00 mm
    - Option A: Zinc Plated Carbon Steel
    - Option B: Other metals on request

Characteristics

For the technical characteristics of Planiflon™ B13, please refer to the following technical data sheet: ptfe-jointing-sheet-planiflon-b13

Applications

Insulating kit for flanges.

Tech Data

TEST METHOD	FEATURES	G10 (FR4)[4]	G11 (FR5)[4]	PTFE[2]
D149	Dielectric Strength KV/mm Short Time	-29,5÷31,50	21,5	16,9
D695	Compressive Strength (MPa)	448,0	434,0	160,0
D638	Tensile Strength (MPa)	344,0	290,0	10,0
D570	Water Adsorption (%)	0,1	0,1	0,01
--	Temperature - Operating °C	-150÷150	-75÷200	-200÷260

TEST METHOD	FEATURES	Phenolic[4]	Phenolic Rubber Faced[3]	Mylar® [1]	Nomex® [1]
D149	Dielectric Strength KV/mm Short Time	20,0	20,0	15,8	18,0
D695	Compressive Strength (MPa)	172,0	172,0	-	-
D638	Tensile Strength (MPa)	138,0	138,0	69,0	620,0
D570	Water Adsorption (%)	1,6	1,6	0,8	7,0
--	Temperature - Operating °C	-50÷100	-40÷100	-50÷150	-50÷230

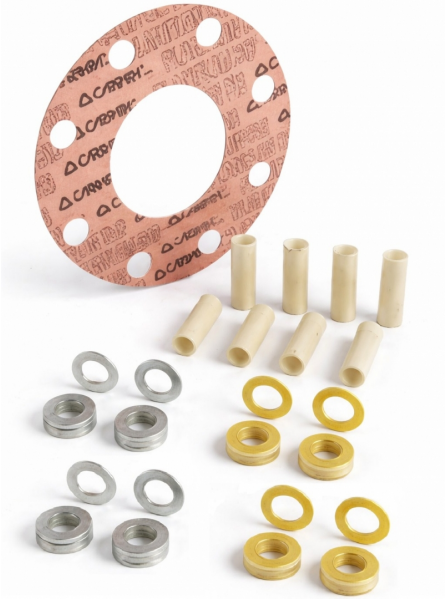
Note (1): Material available only for sleeves.
Note (2): Material available for retainer and sealing element.
Note (3): Material available for washer.
Note (4): Material available for sleeve and washer.

Gasket Pressure range	
ASME Gasket Pressure Range	150÷300 lbs
PN Gasket Pressure Range	PN2,5÷PN40

Sealing Element - Temperature range	
PTFE	-200°C÷260°C

* The maximum operating temperature of the kit is the lowest among its individual components.
* Customized kits are available with tailored thickness and component materials.

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Guardian Premium IPT

This insulating flange kit uses Planiflon™ B13 as the sealing and electrical insulating element. This modified, bidirectionally oriented PTFE minimizes relaxation and creep effects typical of these gaskets, ensuring high reliability even in the most demanding applications. Planiflon™ B13 can be used on RF and FF flanges, offering broad chemical compatibility across the full pH 0–14 range.
This kit can be used up to 200°C, with pressure ranges up to 600 lbs and PN100 for sizes up to 3" and DN80, and in ASME 150–300 lbs and PN 2,5–40 ratings for larger sizes. The use of GRE G10 (FR4) sleeves and washers is always recommended, as compared to other solutions (ex. phenolic), it has a much lower hygroscopic factor. This ensures full sealing efficiency throughout the entire service life, preventing malfunctions caused by loss of mechanical load due to washer degradation.

** In the standard configuration, the kit is supplied with insulating sleeves and washers in GRE G10 (FR4).*

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