



# GUARDIAN PERFORMER ICB

## Composition

- Gasket + sealing layers
  - Thickness: 6.35 mm (0.250")
- SS316L Metal Core (other available on demand)
  - Thickness: 3.00 mm (0.120")
- GRE Laminate (for side)
  - Thickness: 1.60 mm (0.065")
    - Option A: G10 (FR4)
    - Option B: G11 (FR5)
- Primary Sealing Element
  - PTFE with SS spring
- Secondary Sealing Element
  - Option A: PTFE with SS spring
  - Option B: NBR
  - Option C: FKM
- 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

## Applications

Insulating kit for flanges.

## Tech Data

TEST METHOD	FEATURES	Mylar® (1)	Nomex® (1)	G10 (FR4) <sup>(2)</sup>	G11 (FR5) <sup>(2)</sup>
D149	Dielectric Strength KV/mm Short Time	15,8	18,0	-29,5÷31,50	21,5
D695	Compressive Strength (MPa)	-	-	448,0	434,0
D638	Tensile Strength (MPa)	69,0	620,0	344,0	290,0
D570	Water Adsorption (%)	0,8	7,0	0,1	0,1
--	Temperature - Operating °C	-50÷150	-50÷230	-150÷150	-75÷200

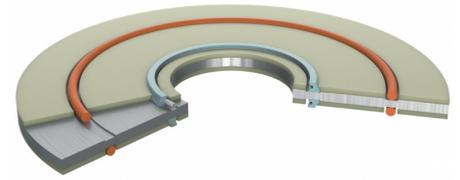
Note (1): Material available only for sleeves.

Note (2): Material available for retainer, sleeve and washer.

Gasket Pressure range		Sealing Element - Temperature range	
ASME Gasket Pressure Range	150÷2500 lbs	Lip Seal PTFE	-200°C÷260°C
API Gasket Pressure Range	2000÷10000 psi	NBR	-40°C÷120°C
PN Gasket Pressure Range	PN2,5÷PN420	FKM	-29°C÷200°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.



## Guardian Performer ICB

The flange insulation set Guardian Performer ICB is specific for Sub-Sea applications.

The Insulation Kits Guardian Performer ICB use a metal support on which the isolation GRE (Glass-Reinforced Epoxy) layers are applied. The main energized PTFE sealing is assisted by a secondary NBR or FKM rubber sealing to ensure maximum system efficiency.

Since the secondary seals are bidirectional they can stop the external pressure from the sea water side while the main seal performs its function containing the internal force.

The Guardian Performer ICB flange isolation kit is applicable up to 200 °C in ANSI 150 - 2500 #, API 2 - 10K # and PN 420 # ratings.

\* In the standard configuration, the kit is supplied with a SS316L retainer and with insulating sleeves and washers in GRE G10 (FR4).



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