



# GUARDIAN BASIC IER

## Composition

- Gasket
  - Thickness 3.00 mm
    - Phenolic rubber-coated
- Insulating sleeves
  - Thickness: 0.90÷1.10 mm
    - Phenolic
- Insulating washers
  - Thickness: 3.00 mm
    - Phenolic rubber-coated
- Metallic Washers
  - Thickness: 3.00 mm
    - Option A: Zinc Plated Carbon Steel
    - Option B: Other metals on request

## Applications

Flange isolation kit.

## Tech Data

TEST METHOD	FEATURES	Phenolic <sup>(2)</sup>	Phenolic Rubber Faced <sup>(3)</sup>	Mylar <sup>(1)</sup>	Nomex <sup>(1)</sup>	G10 (FR4) <sup>(2)</sup>	G11 (FR5) <sup>(2)</sup>
D149	Dielectric Strength KV/mm Short Time	20,0	20,0	15,8	18,0	-29,5÷31,50	21,5
D695	Compressive Strength (MPa)	172,0	172,0	-	-	448,0	434,0
D638	Tensile Strength (MPa)	138,0	138,0	69,0	620,0	344,0	290,0
D570	Water Adsorption (%)	1,6	1,6	0,8	7,0	0,1	0,1
-	Temperature - Operating °C	-50÷100	-40÷100	-50÷150	-50÷230	-150÷150	-75÷200

Note (1): Material available only for sleeves.

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

Note (3): Material available for retainer and washer.

Gasket Pressure range		Sealing Element - Temperature range	
ASME Gasket Pressure Range	150÷300 lbs	Phenolic Rubber Faced	-40°C÷100°C
PN Gasket Pressure Range	PN2,5÷PN40		

\* 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 Basic IER

The **Guardian Basic IER** flange insulation kit uses phenolic material as both the sealing element and the electrical insulating component: a solid and reliable solution for standard applications. The gasket and washers are **rubber-coated** to reduce permeability and improve performance under specific operating conditions.

Washers and sleeves are also made of phenolic material, but the use of GRE G10 (FR4) is strongly recommended; its lower permeability ensures long-term stability of the sealing and insulation system.

Guardian Basic IER can be used continuously within the temperature range -40°C to 250°C and with pressure ranges up to 300 lbs and PN40.

\* In the standard configuration, the kit is supplied with phenolic sleeves and rubber-coated phenolic insulating washers.



Carrara S.p.A.,

Via Provinciale 1/E - 25030 Adro - BS - Italia  
tel. +39 030 7451121 [www.carrara.it](http://www.carrara.it) [info@carrara.it](mailto:info@carrara.it)



The information provided in this publication, as well as that supplied to users in other forms, is based on our experience and communicated according to the best knowledge available. However, since numerous factors beyond our knowledge and control may influence the use of the products, no warranty, explicit or implicit, is given regarding such content. The operating limits indicated do not constitute confirmation that these values can be applied simultaneously. Avoid using the product at the maximum temperature and pressure limits. The maximum temperature is sustainable only for short periods under specific conditions. Specifications may be changed without notice. The images in the DS may not exactly represent the product, its color and/or marking.