

# Flange Insulation Kit

## Type S

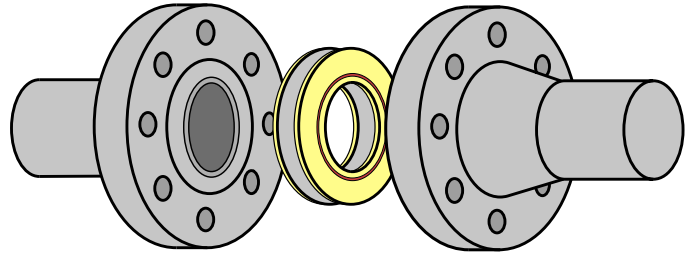


### Description:

Insulation kit is used to guarantee the electrical insulation between two flanges, in this way we can prevent electrochemical or galvanic corrosion process. It is used in order to prevent contact between two materials with different electrical potential, without modify with the flanges' tightening. It is suitable for flanges with rating up to ANSI 2500 and API 10000.

Flanges and bolts insulation is guarantee by sleeve and washer. The kit are composed by:

- » Insulation gasket manufactured by an Aisi 316 core in which we install two energized lip seal (PTFE/Elgiloy) and insulating layer (Phenolic resin: NEMA G10/G11) on both sides;
- » Insulation sleeve for each bolt (G10/G11);
- » Couple of insulating and steel washer for each bolt;



### Application/Service:

Cathodic flange insulation; Prevent electrochemical or galvanic corrosion process; Coupling between different type of flange (i.e. Ring Joint and Raised-Face flanges); Eliminate stagnation of aggressive fluids between the Ring Joint Gasket and the flanges; Minimize the fluid stagnation, the flow turbulence and erosion between ring joint and flanges; Due to its lip seal, the gasket requires a low tightening loads; acting on the gasket the fluid pressure increase the specific load.

### TECHNICAL DATA LAYERS, SLEEVES AND WASHERS:

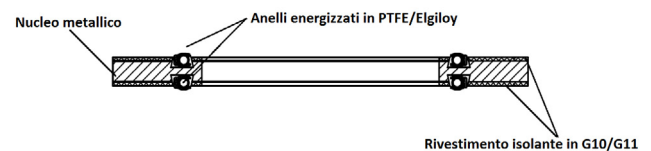
	Nema G10	Nema G11
Density (g/cm <sup>3</sup> )	1,9	1,9
Max. Working Temperature (°C)	130	155
Tensile Strength (MPa)	430	300
Compressive Strength ⊥ (MPa)	520	400
Dielectric Strength // (kV)	35	35
Dielectric Strength ⊥ (kV/mm)	20,9	20,9
Insulation Resistance (MΩ)	5x10 <sup>4</sup>	5x10 <sup>4</sup>
Water Absorption (%)	0,4	0,4



### TECHNICAL DATA LIP-SEAL:

	Energized Lip-Seal (PTFE/ELGILOY)
Max. Pressure (bar)	From vacuum to 800*
Max. Working Temperature (°C)	260
Min. Working Temperature (°C)	-200
pH Range	0 ÷ 14

\*for higher pressures contact the technical department



Since all properties, specifications and application parameters shown throughout this catalogue are approximate and may be mutually influenced, your specific application should not be undertaken without independent study and evaluation for suitability. All technical data and advice given is based on experiences KLINGER Italy has made so far. Failure to select proper sealing products can result in damage and/or personal injury. Properties, specifications and application parameters are subject to change without notice. KLINGER Italy does not undertake any liability of any kind whatsoever. Is not advised the use in the maximum temperature and at the same time with the maximum pressure.