

Product CATALOG



# **OUR COMPANY**

CSI Industries Energy Group has a solid team of engineers for development and manufacturing sealing solutions to meet different industries demand, such as Chemical and Petrochemical, Oil and Gas, Water and Waste, Mineral, Power Generation and Renewable Energy.

## **OUR PRODUCTS**

- GASKETS
- BRAIDED PAKINGS
- COMPRESSION SHEETS
- FLANGE INSULATION GASKET
- SEALING RAW MATERIAL
- HEAT INSULATION
- RODS AND TUBES











Phone: +86-13710161874

### FLANGE ISULATION GASKET KIT

The Flange Insulation Gasket Kit is the most widely used form of controlling losses due to corrosion. Flange Insulation Gasket Kits can be used to control stray electric currents in piping at oil, gas, water, refinery, and chemical plants to increase the effectiveness of cathodic protection systems and confine or eliminate electrolytic corrosion

#### **OUR FLANGE INSULATION GASKET KITS**

- Type E Insulation Gasket Kit
- Type F Insulation Gasket Kit
- Type D Insulation Gasket Kit
- Type CHG
- Type CLG



## **INSULATION GASKET KITS**

Pipe flange insulation gasket kits include a range of isolating or sealing gaskets in addition to a variety of sleeves and washers. For maximum flexibility, components could be bought separately or together with complete flange insulation gasket kits. The materials for the flange insulation gasket kits and its sleeve, washer could be NEMA G10, G11, G7, Neoprene Faced Phenolic, Mylar, Nomex, Plain Phenolic, G10 with ss316 and other materials available, and for the types of flange insulation gasket kits we have type E, Type F, and Type D, which can be used in high pressure and low pressure situations



Flange Insulation Gasket Kit

Type E, Type F, and Type D flange insulation gasket kits along with its sleeve, washer could be NEMA grade G10, G11, G7, Phenolic, Mylar, Nomex, Plain Phenolic materials.

What Is Flange Insulation Gasket Kit?

Flange insulation gasket kits are designed for electrically insulating the flanges, and they act as an insulator between dissimilar metallic flanges. Also, they are used to isolate sections of pipework electrically in the cathodic protection systems, thus preventing the electrostatic charge flow along the pipelines as they remove the possibility of galvanic cell system creation.



Type E



Neoprene Faced Phenolic



Mylar Isolating Sleeve



Type F



G10 with SS 316L Core VCS



NEMA G10 Epoxy Fiberglass Tube



Type D Phenolic



VCS Very Critical Service

Phone: +86-13710161874





Type E is a full-faced gasket with precisely machined bolt holes and an outside diameter matching the flange. This design facilitates proper alignment of the gasket during installation and prevents foreign material from shorting the flange isolation. Type E gaskets have a standard manufacturing thickness of 1/8" and are available in the same materials as the Type F.

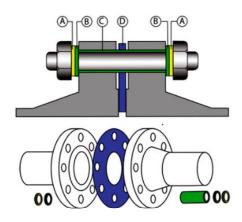
Components of A Flange Insulation Gasket Kit

- 1 one (1) central big flat or oval section gasket.
- 2 one (1) insulation sleeve per bolt.
- 3 two (2) insulating washers per bolt.
- 4 two (2) plated steel washers per bolt

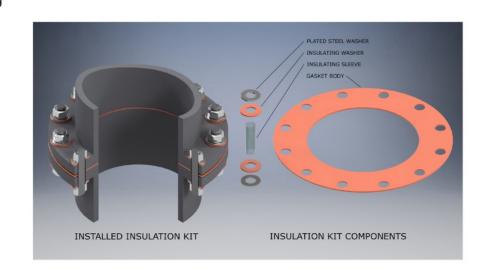
All these components are produced using special materials possessing chemical stability, dielectric properties, and low water absorption so that the purpose is solved, the materials for components usually are NEMA grade G10, G11, G7, Phenolic, Mylar, Nomex and Phenolic.

Phone: +86-13710161874

Type E Insulation Gaskets - Full Face Insulation Gaskets has the excellent sealing and insulating design for all types of flanges.



- A: 1/8" thick plated steel washer
- B: 1/8" thick insulating washer
- C: full length insulating sleeve
- D: full face gasket



Email: info@csiindustrieseg.com



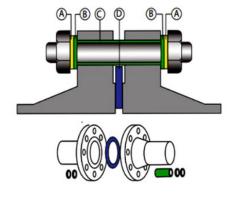


FLANGE INSULATION GASKET Type F (RING FACE GASKET) Type F Flange insulation Gasket Kit is made to physically fit the raised face component of flanges. The outside size of the gasket is slightly small compared to the inside diameter of the bolt hole circle. The outside diameter is designed for alignment by the insulating sleeves. The central gaskets can be obtained in the exact same materials as Type E. Upon installing, it is recommended that tape be covered around the outside of the flange in order to avoid external materials from lodging between your uncovered portions and creating shorting out of the flanges.

As there are no bolt holes in the "F" gasket, the inside diameter of the bolt hole circle is slightly smaller than the outside diameter of the gasket. Assuring an exact, automatic positioning of the gasket. Type F Gaskets are available in the same materials as the Type E Gaskets, standard thickness of 1/8".

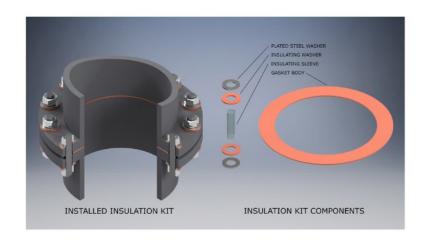
Phone: +86-13710161874

Type F Insulation Gaskets - Full Face Insulation Gaskets has the excellent sealing and insulating design for all types of flanges.



- A: 1/8" thick plated steel washer
- B: 1/8" thick insulating washer
- C: full length insulating sleeve D: inner bolt circle gasket

- Components of a type F Flange Insulation Gasket Kit
  - · 1 one (1) inner bolt circle gasket
  - 2 one (1) insulation sleeve per bolt.
  - 3 two (2) insulating washers per bolt.
- 4 two (2) plated steel washers per bolt



Email: info@csiindustrieseg.com

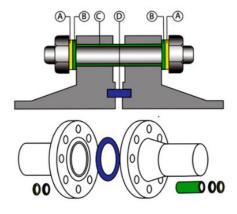




FLANGE INSULATION GASKET Type D (RING JOINT GASKET) Type D Flange insulation Gasket Kit is actually insulating ring joint gaskets made to physically fit the particular ring groove of Ring type Joint flanges. The type D central gasket is made of medium weave fabric reinforced phenolic or G10, made to ASME B16.20 gasket sizes. Attributes are usually similar to the ones from phenolic or G10 flat main gaskets and are available in the basic octagonal shapes. Oval Ring type joint gasket shapes can be requested by unique demand.

Type D gaskets are specifically designed to fit into the ring groove of ring-type-joint flanges. They are manufactured of a medium weave, fabric-reinforced phenolic material and are sized of ANSI specifications available in basic oval as well as octagonal shapes. BX gaskets is also available to meet pressure rating up to 15,000 psi.

Type D Insulation Gaskets - Full Face Insulation Gaskets has the excellent sealing and insulating design for all types of flanges.



A: 1/8" thick plated steel washer

B: 1/8" thick insulating washer

C: full length insulating sleeve

D: Insulating oval ring type joint

Components of a type D Flange Insulation Gasket Kit

- 1 one (1) Insulating oval ring type joint
- 2 one (1) insulation sleeve per bolt.
- 3 two (2) insulating washers per bolt.
- 4 two (2) plated steel washers per bolt







TFikseal™ Flange Isolation Gasket Kit

TFikseal™ IGK has a rectangular sealing element in combination with a unique groove design to effectively seal and isolate flanges for potable water and other low pressure fluid piping applications. This kind of Flange insulation Gasket Kit is available in raised face and flat face flanges in ANSI Class 150, 300 and 600 service, the sealing element materials can be Nitrile, Viton, Teflon PTFE or PTFE (Teflon) spring energized seal. Flange insulation Gasket Kit is an excellent choice for isolating distribution lines and transport lines for gas, oil and water. Because of the gasket kit has very good resistance to creep relaxation, it performs well in heat exchangers, applications with high vibration or excessive thermal cycling.



High Pressure Flange Isolation Gasket Kits

High pressure flange insulation gasket kit is one kind of gaskets used for critical service, it provides the utmost safety and reliability in some of the most demanding, dangerous environments on earth. And it is usually reinforced with a stianless steel core such as SS316, designed and constructed of premium materials and extensively tested in conditions that far exceed field service specifications. Our critical service flange insulation gasket kits provide the dependability you need when failure is absolutely unacceptable and this kind of gasket can seal and insulate at all pressures up through ANSI 2500# and API 15,000 PSI.

www.csiindustrieseg.com Phone: +86-13710161874 Email: info@csiindustrieseg.com



Central big gasket retainer material Central big gasket retainer materials are:

- G3
- G10
- G7
- · Nitrile-Face
- Plain Phenolic
- · Neoprene faced phenolic
- Klinger
- Teflon
- · Durlon, etc

Gasket Material	Dielectric Strength	Compressive Strength	Water Absortion	Tensile Strength	Operating Temp (C°)
Plain Phenolic	500 vpm	25 ksi	1.6%	20 ksi	-54 - 104
Neoprene faced phenolic	500 vpm	25 ksi	1.6%	20 ksi	-54 - 79
Reinforced PTFE 350 vpm	350 vpm	2.3 ksi	0.01%	1450 psi	-196 - 260
G7	350 vpm	40 ksi	0.07%	25 ksi	-196 - 232
G10	550 vpm	55 ksi	O.1%	45 ksi	-196 - 138
G11	550 vpm	57 ksi	0.1%	43 ksi	-196 - 176

Sleeve Material	Dielectric Strength	Low Operating Temp	Max Operating Temp  149°C  232°C  232°C  150°C  202°C	0.8% - 0.07% 0.1%
Mylar	500 vpm	-59°C		
Nomex	500 vpm	-54°C -196°C -128°C		
G7	350 vpm			
G10	550 vpm			
G11	550 vpm	-45°C		

Sleeve Material	Dielectric Strength	Compressive Strength	Tensile Strength	Water Adsortion  1.6%  0.01%  0.1%
Phenolic	500 vpm	25000 psi	20000 psi 32000 psi 25000 psi 50000 psi 43000 psi	
Mica	400 vpm	30000 psi 40000 psi 65000 psi		
G7	350 vpm			
G10	550 vpm			
G11	550 vpm	50000 psi		

#### Insulating Sleeve Materials

Insulating sleeve materials are available in G10, G7, G11, Mylar, polyethylene, phenolic, and Nomex. They are designed to fit easily over the flange bolts, and may be used with standard-sized bolts and bolt holes even with some misalignment. they are used with separate insulating washers and have a standard wall thickness of 0.79mm

#### Insulating Gasket Washer Material

Standard insulating washers are made of high strength insulation materials such as G10, G7, G11, phenolic and mica, they provide tough, positive insulation at temperatures maxly up to 200 oC. Steel washer are zinc plated carbon steel, also can be stainless steel 304 or 316. For special application, the steel washer can be HCS with X37 coating.

www.csiindustrieseg.com Phone: +86-13710161874 Email: info@csiindustrieseg.com



Phone: +86-13710161874



Headquarter: Ho King Commercial Centre, 16th Floor, 2-16, Garden Street, Mong Kok, Hong Kong China Mainland: Hillview Plaza 2F, C13O, DongCheng District, Dongguan, Guangdong Province