

Insulation Sets



Insulation sets are used to limit corrosion in pipeline systems. Where dissimilar metals are present, the sets remove the possibility of the system acting as a galvanic cell and reduce the risk of galvanic corrosion of the pipework.

Insulation sets are also used to isolate cathodically protected piping systems where they prevent the flow of electro-static charge.

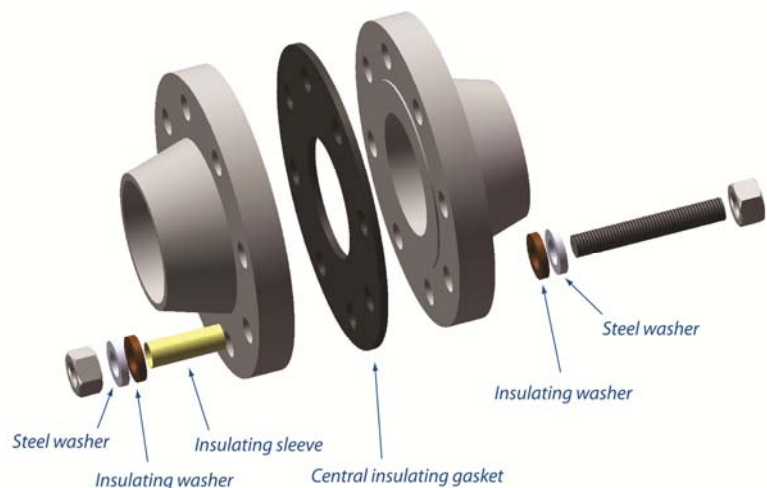
Each flange insulation set comprises one central flat or oval section gasket, one insulation sleeve per bolt and two insulating and two plated steel washers per bolt. The sets are individually packed and clearly labelled with the flange rating, size, type and material combination.

Properties of Standard Insulation Material

Component	Gasket		Insulating Washer	Insulating Sleeve		Gasket, washer, sleeve
	Neoprene® Faced Phenolic*	KLINGER-SIL C-4430		Phenolic	Mylar*	
Material	Neoprene® Faced Phenolic*	KLINGER-SIL C-4430	Reinforced Phenolic*	Phenolic	Mylar*	Glass reinforced epoxy resin, G10
Dielectric Strength (kV/mm)	19.7	59.5	7.9	5.5	157.5	29.5-31.5
Comp. Strength (N/mm ²)	270	-	270	-	-	450
Flexural Strength (N/mm ²)	155	-	155	-	-	450
Water Absorption (%)	1.6	10.6	1.0	1.0	0.8	0.05
Max. Operating temp. (°C)	107	400	107	107	145	-

*Denotes standard material

Typical Example of Insulation Set Components



Gasket Configurations



Type E

Applications: Oil and Hydrocarbons where flange insulation is a requirement.

- Where the extra security of full face isolation is required.
- For use in either a flat face or raised face flanges.
- Manufactured from material with high dielectric strength to ensure minimum electrical contact between flanges.

Max. temperature: 100°C
 Max. pressure: 40bar
 Max. dielectric strength: 500 Volt/mm



Type F

Applications: Oil and Hydrocarbons where flange insulation is a requirement.

- For use in either a flat face or raised face flange.
- Manufactured from material with high dielectric strength to ensure minimum electrical contact between flanges.

Max. temperature: 100°C
 Max. pressure: 40bar
 Max. dielectric strength: 500 Volt/mm



Type D

Applications: Oil and Hydrocarbons where flange insulation is a requirement.

- For use in RTJ flange arrangements.
- Manufactured from material with high dielectric strength to ensure minimum electrical contact between flanges.
- Fabric reinforced phenolic resin without rubber coating

Max. temperature: 100°C
 Max. pressure: 40bar
 Max. dielectric strength: 200 Volt/mm

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