



CATHODIC
PROTECTION
CO LTD

Insulating Flange Kits

APPLICATION

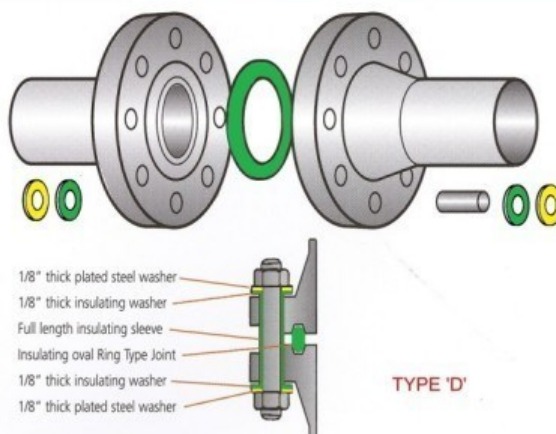
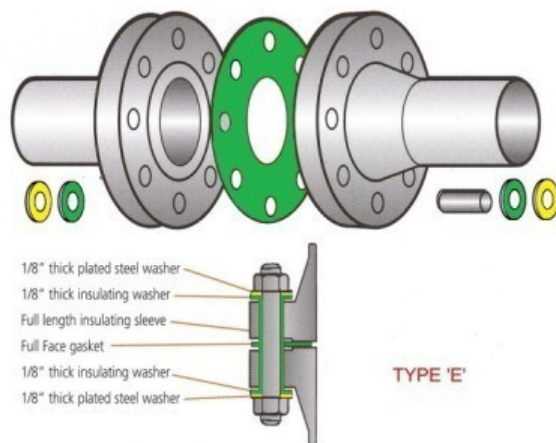
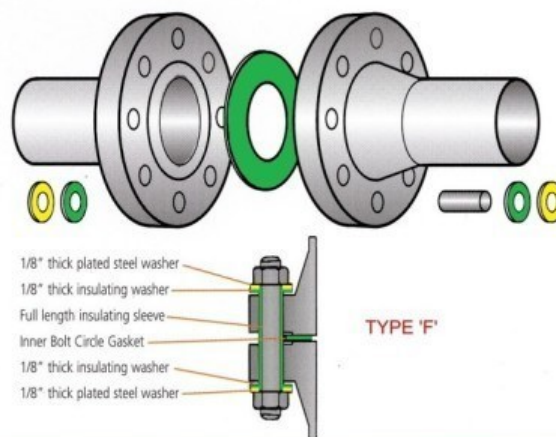
Flange insulation kits for metallic pipelines are available for all flange sizes, types, pressure ratings and materials. Flange insulation kits are commonly installed at each end of a pipeline to electrically isolate the pipe for other buried foreign metallic structures and plant grounding systems therefore limiting the amount of cathodic protection current required to protect the pipeline.

GASKET TYPES

TYPE 'E' For use on flat face & raised face flanges. Insulating gasket manufactured from either reinforced phenolic or high dielectric strength non-asbestos sheeting. Insulating sleeve manufactured from either phenolic, mylar or polyethylene. Insulating washers manufactured from reinforced phenolic.

TYPE 'F' The central gasket locates inside the bolts. Insulating gasket manufactured from either reinforced phenolic or high dielectric strength non-asbestos sheeting. Insulating sleeve manufactured from either phenolic, mylar or polyethylene. Insulating washers manufactured from reinforced phenolic.

TYPE 'D' For use on ring joint flanges. Insulating gasket made from reinforced phenolic Insulating sleeve manufactured from either phenolic, mylar or polyethylene. Insulating washers manufactured from reinforced phenolic.



Insulating Flange Kits

Material Specifications							
ASTM	Test Method	Plain Phenolic	Neoprene Faced Phenolic	G-3 Hi-Temp Phenolic	(*) G-7 Silicon Glass	G-10 Epoxy Glass	G-11 Epoxy Glass
D149	Dielectric Strength Volts/Mil (short time)	500	500	550	350-400	550	550
D695	Compressive Strength (psi)	25,000	25,000	50,000	40,000	50,000	50,000+
D229	Water Absorbion (%)	1.60	1.60	0.70	0.07	0.10	0.10
D257	Insulation Resistance (M \wedge)	40,000	40,000	46,000	2,500	200,000	200,000
D790	Flexural Strength (psi)	22,500	22,500	60,000	27,000	60,000	75,000+
D785	Hardness Rockwell "M"	85	85	115	105	115	115
D256	IZOD Impact Strength (ft-lbs/inch)	1.2	1.2	12.0	8.0	14.0	12.0
D638	Tensile Strength (psi)	20,000	20,000	42,000	25,000	45,000	43,000
D732	Shear Strength (psi)	10,000	10,000	18,000	20,000	22,000	22,000
	Temperature Range (°F)	-65 to +220	-65 to +175	-65 to +392	Cryogenic to +450	Cryogenic to +280	Cryogenic to +350
	Temperature Range (°C)	-54 to +104	-54 to +79	-54 to +200	Cryogenic to +232	Cryogenic to +138	Cryogenic to +177

(*) G-7 Material should not be used with Hydrocarbons, not even in trace amounts