

**RAMCO® ALPHA NITRILE COATED PHENOLIC ISOLATION KIT
PRODUCT SPECIFICATION
NDWMY**

The RAMCO® ALPHA Flange Isolation Kit is fabricated to be used with piping flanges to provide cathodic protection & galvanic corrosion protection of the flanges. The Flange Isolation Kits (FIK) come standard with one N-Phenolic Isolating Gasket, one Mylar Isolation sleeve/bolt hole, & two ZPS backing washers/bolt hole.

MATERIALS OF CONSTRUCTION:

BASE RETAINER COLOR	N-PHENOLIC – BLACK
SEALING ELEMENT COLOR	N/A
SLEEVE COLOR	MYLAR – CLEAR
ISOLATION WASHERS COLOR	PHENOLIC - BROWN
BACKING WASHERS COLOR	ZPS – GRAY/SILVER



SIZES AVAILABLE:

- FULL FACE (TYPE “E”)
- RAISED FACE (TYPE “F”)
- NPS: ½” – 144”
- 150#, 300#, 600#, 900#, 1500#, 2500#

STANDARDS: ANSI B16.5 AWWA C207 ASME B16.47 API 6A
 OTHER INTERNATIONAL STANDARD SIZES OR CUSTOM MANUFACTURING AVAILABLE – PLEASE CONTACT FACTORY

TEMPERATURE RATING:	MIN TEMP F°	MAX TEMP F°	MIN TEMP C°	MAX TEMP C°
	-15°	220°	-26°	104°

GASKET DESIGN CONSIDERATIONS:

ASTM		
D149	DIELECTRIC STRENGTH – VOLTS/MIL	600 V/MIL
D695	COMPRESSIVE STRENGTH – PSI	25,000 PSI
D570	WATER ABSORPTION - %	1.6
D257	INSULATING RESISTANCE – Meg Ohms	40,000
D495	ARC RESISTANCE – SEC	75
D790	FLEXURAL STRENGTH – PSI	22,500
D785	HARDNESS ROCKWELL “M” SCALE	100
D256	IZOD IMPACT, STRENGTH FT-LBS/IN	1.2
D732	SHEAR STRENGTH – PSI	12,200

MYLAR INSULATING SLEEVES:

The Isolation Sleeve is designed to fit over the bolt diameter & through the flange bolt holes inner diameter. The sleeve extends through both flanges & centers on the isolation washer thickness. Isolation Sleeves have a standard wall thickness of .03125” (.79mm), diameter & length of the isolation sleeve is determined by each application.

MYLAR DESIGN CONSIDERATIONS:

TEMPERATURE RATING:	MIN TEMP F°	MAX TEMP F°	MIN TEMP C°	MAX TEMP C°
	-100°	490°	-75°	255°

*** 490°F (255°C) is melting point ***

ASTM		
D638	TENSILE STRENGTH – PSI (73°F)	11,500
D1204	SHRINKAGE @ 150°C %	1.6/0
D1003	HAZE %	3.5
D570	WATER ABSORPTION/24HR %	10
D150	DIELECTRIC CONSTRAINT (60HZ/73°F, 50% RH)	3.4
D149	DIELECTRIC STRENGTH V/MIL	400 V/MIL
UL94	FLAMMABILITY	HB

ISOLATION WASHERS:

Isolation washers are designed to install over the outer diameter of the Isolation sleeve & sit flush against the flange. Isolation washers are a standard thickness of .125” (3mm)

BACKING WASHERS:

Backing washers are designed to install over the bolt diameter & flush against the Isolation Washer. Standard material for the backing washer is Zinc Plated Steel (ZPS). Backing washers are a standard thickness of .125” (3mm).

304ss, 316ss, & PTFE coated is available upon request

