

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

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, two Integrated Minlon Isolation sleeves/bolt hole, & two ZPS backing washers/bolt hole.

MATERIALS OF CONSTRUCTION:

BASE RETAINER COLOR	N-PHENOLIC – BLACK
SEALING ELEMENT COLOR	N/A
SLEEVE COLOR	MINLON – WHITE
ISOLATION WASHERS COLOR	INTEGRATED W/SLEEVE
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

MINLON INTEGRATED ISOLATION SLEEVE:

The Integrated Sleeve is designed to fit over the bolt diameter & through the flange bolt holes inner diameter. The integrated sleeve and washer is a one piece molded Minlon, that extends through one flange for isolation. Isolation Sleeves have a standard wall thickness of .03125” (.79mm), diameter & length of the isolation sleeve is determined by each application.

MINLON DESIGN CONSIDERATIONS:

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

ASTM		
ISO 527-1/-2	TENSILE STRENGTH – MPA	5900
ISO 294-4	SHRINKAGE @ 150°C %	.9/0
ISO 62	WATER ABSORPTION/24HR %	1.1
IEC 60243-1	ELECTRICAL STRENGTH KV/MM	24
IEC 60695-11-10	FLAMMABILITY (1.5MM TESTED)	HB
	UL RECOGNIZED	

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

