

**RAMCO® ENFORCER G-10V (VITON) ISOLATION KIT PRODUCT  
SPECIFICATION  
EG10VDWG10MY**

The RAMCO® ENFORCER 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 Isolating Gasket w/sealing element, one Isolation sleeve/bolt hole, two Isolation washers/bolt hole, & two backing washers/bolt hole. The ENFORCER KITS are provided with a sealing element integrated into the gasket to ensure effective sealing integrity between the flanges.

**MATERIALS OF CONSTRUCTION:**

BASE RETAINER COLOR	G10/FR4 – PALE GREEN
SEALING ELEMENT COLOR	VITON - BLACK
SLEEVE COLOR	MYLAR – CLEAR
ISOLATION WASHERS COLOR	G10 – PALE GREEN
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\*\*\*

<b>TEMPERATURE RATING:</b>	MIN TEMP F°	MAX TEMP F°	MIN TEMP C°	MAX TEMP C°
	-15°	280°	-26°	138°

**GASKET DESIGN CONSIDERATIONS:**

ASTM		
D149	DIELECTRIC STRENGTH – VOLTS/MIL	550 V/MIL
D695	COMPRESSIVE STRENGTH – PSI	50,000 PSI
D229	WATER ABSORPTION - %	0.1
D257	INSULATING RESISTANCE – Meg Ohms	200,000
D790	FLEXURAL STRENGTH – PSI	60,000
D785	HARDNESS ROCKWELL “M”	115
D256	IZOD IMPACT, STRENGTH FT-LBS/IN	14
D732	SHEAR STRENGTH - PSI	22,000

**VITON SEALING ELEMENT:**

The Viton Sealing Element is manufactured from fluorocarbon rubber & with its excellent resistance to higher temps & resistance to a wide variety of chemicals, makes it a great choice for a wide range of applications to compress & seal the piping connection once installed & bolts are properly torqued.

**ISOLATION SLEEVE:**

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)

**G10 DESIGN CONSIDERATIONS:**

Same as gasket retainer material

**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\*\*\*

