



Sealing Global - Servicing Local



ISOTEK™ ISOLATION GASKETS & KITS



ISO TEK™ ISOLATION GASKETS

Lamons now offers a complete line of sealing solutions with a product line dedicated to sealing and flange isolation.

Retainer type gaskets combined with sealing elements offer sealing and cathodic protection solutions. To isolate connecting flanges and protect the gasket and flange from corrosion, Lamons provides sleeve and washer sets to complete the isolation system.

LAMONS DEFENDER™

The Defender™ sealing and isolating gasket is designed for critical applications. Manufactured with a 316 stainless steel core retainer and laminated on both sides with high strength G10 laminate, the Defender™ gasket is resistant to deformation under load and is used when electrical isolation and corrosion control are required on pipes containing gas, natural gas, oil and other hydrocarbon based medias up to 392°F (200°C). Available for flat face, raised face and ring type joint flanges from ½" to 32", ANSI 150-2500# and API 2-10K. The Defender™ gasket is an engineered solution that eliminates costly leaks and provides a solution for fugitive emissions.

LAMONS ISO GUARD™

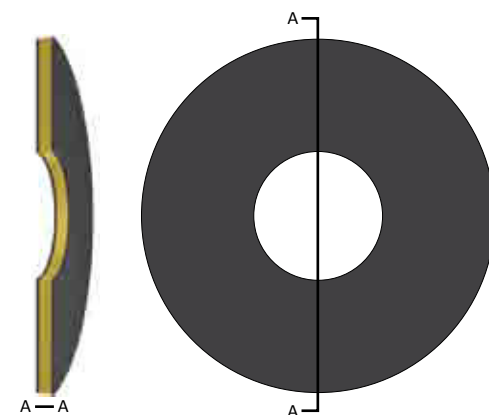
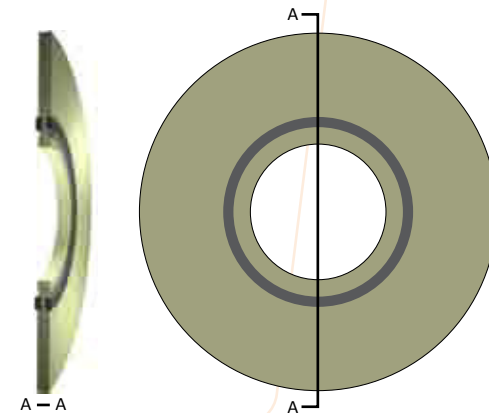
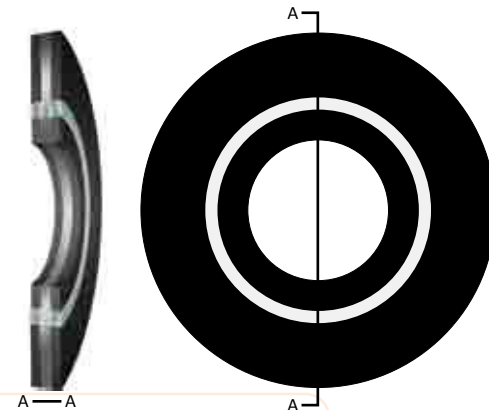
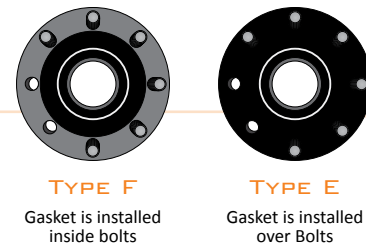
The IsoGuard™ sealing/isolating gasket system is designed for general applications where electrical flange isolation and corrosion control are required on pipes containing gas, natural gas, oil, water/wastewater, and other hydrocarbon based medias up to 300°F (150°C). Available for flat face, raised face and ring type joint flanges from ½" to 42", ANSI 150-1500# and API 2-5K.

The IsoGuard sealing/isolating gasket system consists of a retainer with an incline-plane seal groove designed to optimize each seal's elastic memory, in combination with a proven rectangular sealing element ("Quad" ring). This design guarantees low bolt load requirements and sealing reliability.

LAMONS ISOMATE™

IsoMate™ sealing/isolating gasket consists of a Phenolic retainer faced on both sides with Nitrile rubber material. This gasket is an economical solution for basic performance.

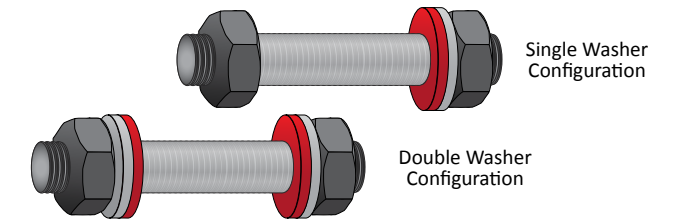
The IsoMate sealing/isolating gasket is designed for basic applications where electrical flange isolation and corrosion control are required on pipes containing water/wastewater, gas, natural gas, oil and other hydrocarbon based medias up to 175°F (79°C). Available for flat face and raised face joint flanges from ½" to 24", ANSI 150-300#.



ISO TEK™ ISOLATION KITS

SLEEVES & WASHERS

For complete isolation, sleeves and washers are needed with an IsoTek™ sealing and isolation gasket. To isolate connecting flanges and protect the gasket and flange from corrosion, Lamons provides sleeve and washer sets to complete the isolation system. The sleeves and washers prevent current from reaching the bolts/studs and nuts. Sleeve and washer sets are available in Single and Double washer sets.



RECOMMENDED STANDARD PACKAGED SLEEVE/WASHER SETS:

DEFENDER™ GASKET
(Mylar Sleeves, Steel ZP and G-10 Washers)
(G10 Sleeves, Steel ZP and G10 Washers)
(G10 Sleeves, Steel ZP and Steel HC Washers)

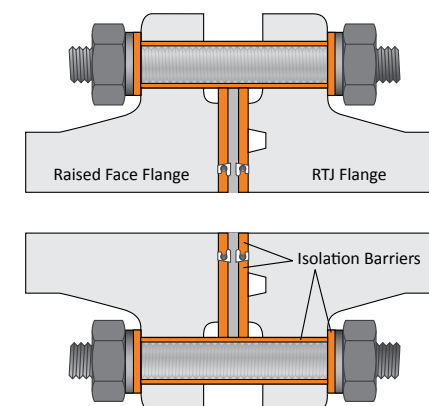
ISO GUARD™ GASKET
(Mylar Sleeves, Steel ZP and G10 Washers)
(G10 Sleeves, Steel ZP and G10 Washers)

ISOMATE™ GASKET
(Mylar Sleeves, Steel ZP and Phenolic Washers)

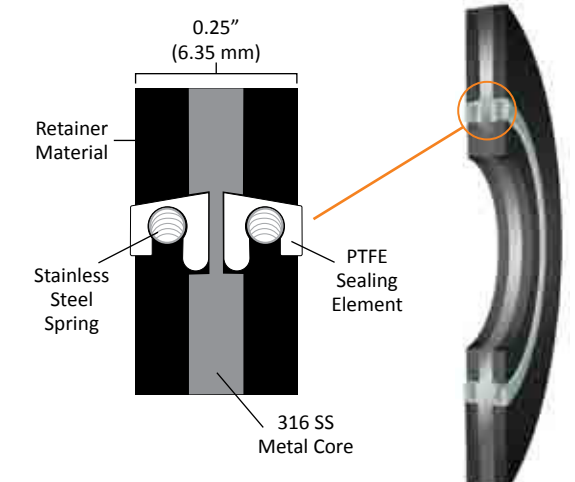
HIGH TEMPERATURE APPLICATIONS - DEFENDER™ & ISOMATE™ GASKET
(Nomex® Sleeves, ZP and G3 Washers)

ISOLATION KIT INSTALLED IN FLANGES

For Applications with Different Flange Types, use Lamons Defender™ Gasket



DEFENDER SEAL DETAIL



SEALING/ISOLATION GASKET MATERIAL PHYSICAL PROPERTY SPECIFICATIONS

ASTM	Test Method	G10	G11	Phenolic	Rubber Faced Phenolic
D149	Dielectric Strength (Volts/Mil Short Time)	750-800	520	500	500
D695	Compressive Strength (psi)	65,000	50,000	25,000	25,000
D570	Water Absorption (%)	0.05	0.1	1.6	1.6
D790	Flexural Strength (psi)	65,000	60,000	22,500	22,500
D256	IZOD Impact Strength (Ft-Lbs/Inch)	14.00	12.00	1.2	1.2
D638	Tensile Strength (psi)	50,000	42,000	20,000	20,000
D732	Shear Strength (psi)	21,000	21,000	10,000	10,000
D952	* Bond Strength (lb)	2,600	2,200	-	-
	Operating Temperature	Cryogenic to 302°F (150°C)	-100 to 392°F (-73 to 200°C)	-65 to 220°F (-54 to 104°C)	-65 to 175°F (-54 to 79°C)

* This indicates the bond strength of the actual sheet material for the IsoGuard™ and Defender™ gaskets; excludes the steel core for the Defender™ gasket

SEALING/ISOLATION GASKET TEMPERATURE LIMIT SPECIFICATIONS

Seals	Operating Temperature
Nitrile	-40°F (-40°C) to 250°F (121°C)
Viton®	-20°F (-29°C) to 392°F (200°C)
PTFE	Cryogenic to 525°F (274°C)
EPDM	-65°F (-54°C) to 250°F (121°C)
PTFE (Spring)	Cryogenic to 525°F (274°C)

SLEEVE MATERIAL PHYSICAL PROPERTY SPECIFICATIONS

ASTM	Test Method	Mylar	G10 (GRE)	Nomex®
D149	Dielectric Strength Volts/ Mil Short Time	1100	775	650
D570	Water Absorption (%)	0.8	0.05	7.0
D790	Flexural Strength (psi)	13,000	65,000	18,000
	Operating Temperature	-75 to +302°F (-59 to 150°C)	Cryogenic to 302°F (150°C)	-65 to 450°F (-54 to 232°C)

WASHER MATERIAL PHYSICAL PROPERTY SPECIFICATIONS

ASTM	Test Method	G10	G11	G3	Phenolic	Steel (HC)
D149	Dielectric Strength Volts/ Mil Short Time	750-800	520	500	500	750-800
D695	Compressive Strength (psi)	65,000	50,000	55,000	25,000	-
D570	Water Absorption (%)	0.05	0.1	0.1	1.6	-
	Operating Temperature	Cryogenic to 302°F (150°C)	-100 to 392°F (-73 to 200°C)	-100 to 392°F (-73 to 200°C)	-65 to 220°F (-54 to 104°C)	-100 to 392°F (-73 to 200°C)

HC = Hardened Coated