



INTEGRA II SSAID®

Severe Service Cathodic Isolating Gaskets

***PATENT PENDING*



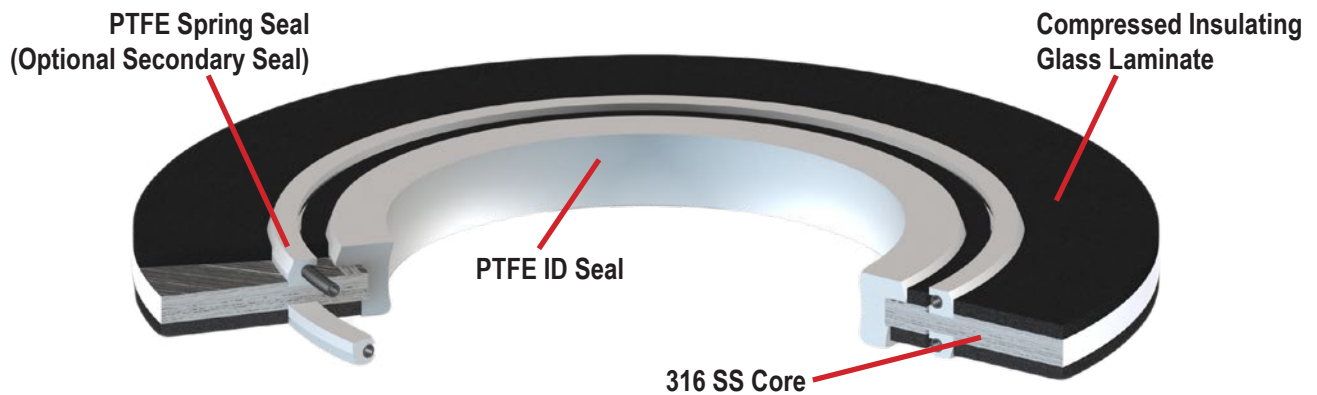
ISO-9001 CERTIFIED COMPANY - FM537405

WHAT IS INTEGRA II SSAID® GASKET & WHY IS IT USED?

The Patent Pending SSAID® Gasket Kit provides a reliable PTFE seal at the flange bore. PTFE is well known for having excellent chemical resistance. By placing this seal at the bore, it enables the gasket retainer material to be impervious to the most aggressive media within the pipe. This extends the range of applications for the standard 316SS core, G10 and G11 laminates in aggressive environments, and eliminates the use of exotic core materials in the retainer, saving time and money.

The seal has a unique, patent pending method of being secured in the retainer that prevents the seal

from dislodging during handling or operation. The seal fits tightly on the retainer ID, and wraps around both sides. The edge groove on one side is equipped with Kammprofile grooves. The PTFE is compressed into these grooves when installed between two flanges. This provides radial retention of the seal during operation, preventing the seal from being sucked into the pipe bore. The SSAID® is available with a secondary seal such as a Teflon Spring Seal or Viton O-Ring seal. The gasket is suitable for sizes and pressure classes ranging from ½" to 42" and Class 150 ANSI to 10,000# API. For other gasket sizes, please contact APS Sales.

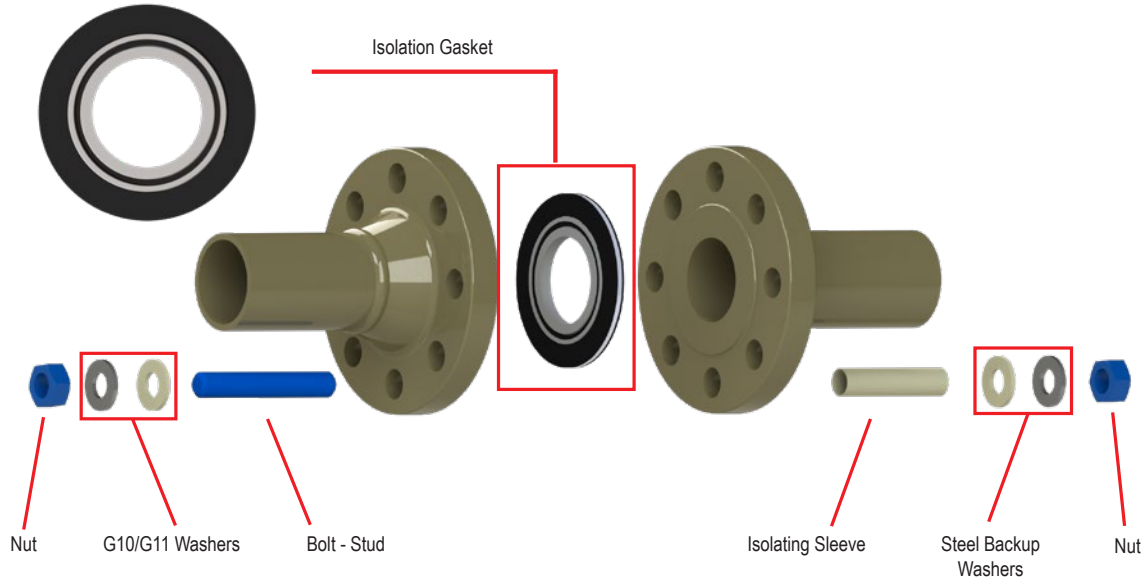


FEATURES & BENEFITS:

1. Exceptionally dependable for isolating and sealing purposes for Severe Service applications.
2. Extends the range of applications for the standard 316 SS core, G10 and G11 laminates in aggressive environments.
3. Specifically, suitable for applications with high Chloride content or other highly corrosive media.
4. Zero-free leaks for high sulfur content crude oil or H₂S gas fugitive emissions, proven through multiple applications.

APPLICATIONS:

1. Flange Isolation with true cathodic protection.
2. Isolating between flanges of dissimilar metals to prevent galvanic corrosion.
3. Wellhead isolation from inter-connected flow lines.
4. Mating mismatched dissimilar flanges.
5. Eliminate turbulence and flow-induced erosion between ring-joint (RTJ) flanges.
6. Accommodates for potential irregularities in the flange face near the bore, such as pitting from corrosion from prior service.
7. To seal between flanges subjected to vibration/cavitation.
8. Eliminate corrosion from forming in the cavities between RTJ flanges where intense modes of hostile chemicals may be present.



G-10 Standard SSA S/S Retainer Material Specifications

NEMA Grade

Compression Glass-Reinforced Epoxy Laminate Material:

Compressive Strength	66,000 PSI
Dielectric Strength	800 VPM
Max. Continuous Operating Temp	302° F (150° C)
Water Absorption	0.04%
Flexural Strength.....	65,000 PSI
Tensile Strength	51,000 PSI
Bond Strength.....	2,600 lb.
Shear Strength	22,000 lb.

G-11 Optional SSA S/S Retainer Material Specifications

NEMA Grade

Compression Glass-Reinforced Epoxy Laminate Material:

Compressive Strength	58,000 PSI
Dielectric Strength	550 VPM
Max. Continuous Operating Temp	400° F (205° C)
Water Absorption	0.08%
Flexural Strength.....	58,000 PSI
Tensile Strength	41,000 PSI
Bond Strength.....	2,200 lb.
Shear Strength	21,200 lb.

Seal Material

The sealing element is intended to provide a non-penetrating barrier through which no restricted retained matter or other substance can pierce; as a result, the glass composite retainer material permanently holds the seal in place in a static, fully encapsulated manner.

Primary Seal Material: PTFE (ID Seal)

Pressure energizing, concaved ID to enhance sealing at higher pressures. Resists creep for a higher sealing pressure over time. High compression rate at installation accommodates for potential irregularities in the flange face, such as pitting from corrosion from prior service.

Temperature Range: -250° F to 450° F (note: gasket material is limiting factor)

Secondary Seal Material (Optional):

PTFE (Spring-Energized): A radial load is provided by the helical wound spring.

Encapsulation in the seal groove eliminates creep and cold flow.

Temperature Range: -250° F to +450° F

Viton (O-Ring): Designed for general Oil and Gas applications

Temperature Range: -75° F to +400° F

Isolating Sleeve Options

- G-10 /G-11** - Glass-Reinforced Epoxy tubing is suitable for continuous exposure to 350° F (400° F for G11). This material is an epoxy laminate that offers excellent resistance to crushing, cracking, breaking and thread pinch.
- Mylar** - Spiral wound Mylar is a general-purpose material recommended for bolting applications with flange temperatures below 300 °F. This material has generally fair resistance to crushing, cracking, breaking and thread pinch.

Isolating Washer: Coated, Hardened Steel Washer

G-10/G-11 - 1/8" (.125) thick washers cut to standard SAE washer dimensions.

Steel Washer Options

- Zinc Steel** - Zinc-Plated Steel washers cut to standard SAE washer dimensions.
- Stainless Steel** - Stainless Steel washers cut to standard SAE washer dimensions.

ORDER INSTRUCTIONS

1. Flange Specification (ANSI/ASME, API, MSS SP44, BSI or Din Standard)
2. RTJ or Raised Face
3. Nominal Pipe Size, Pressure Rating and Bore Size
4. Teflon or Viton Secondary Spring Seal, if applicable
5. Operating Pressure, Temperature and Media
6. G-10, G-11, or Mylar Sleeve Material

OTHER PRODUCTS AVAILABLE

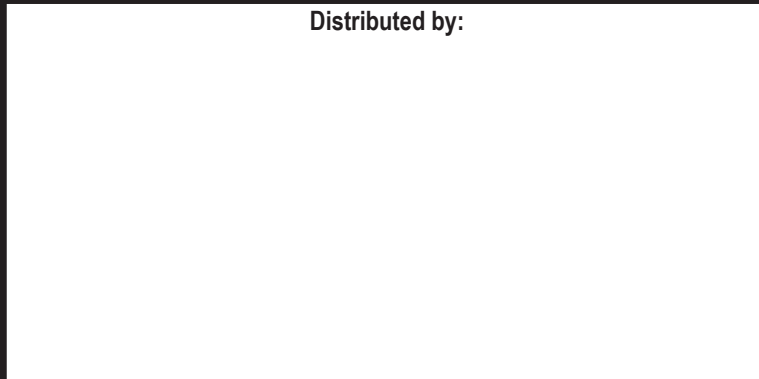
- Flange Isolating Gasket Kits
- Integra® Series Gaskets
- Kleerband® Flange Band Protectors
- Kleergel® Corrosion Inhibiting Grease
- Radolid® Nut & Bolt Protection Caps
- Casing Spacers & End Seals
- ApogeeAero® Roller Casing Spacers
- Bore & Duct Bank Spacers
- Innerlynx® Modular Mechanical Seals
- Wall Sleeves
- Foreman Nite Caps
- UBolt-Cote® & Atlas Pipe Support® Pads
- IsoJoint® Monolithic Isolating Joints
- Safety Spray Shields



PO Box 60399
Lafayette, Louisiana 70596-0399
800-315-6009 • 337-233-6116 • Fax 337-232-3860
E-Mail: sales@apsonline.com • Website: www.apsonline.com



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REV 070323