DOTACOL INDUSTRIAL S.A.S

ISO-9001:2015 CERTIFIED COMPANY - FM537405

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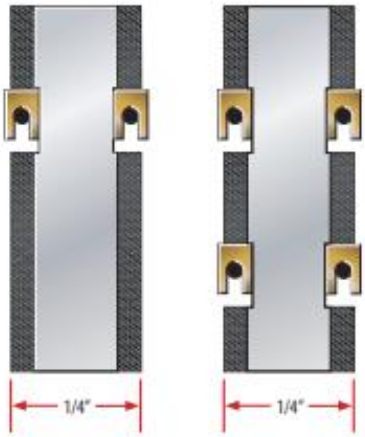
Integra II SSA® Cathodic Isolation Gaskets

The APS Integra II SSA® (Severe Service Application Stainless/Steel) Gasket is an exceptionally dependable gasket used for both insulating and general sealing purposes in Severe Service Applications. This gasket has been developed as an inimitable and effective seal for sealing flanges in which the opportunity for leakage must be held at zero allowance. The Integra II SSA® Gasket is suitable in all services up to and including ANSI 2500# and API 10,000# classes. The Integra II SSA® Gasket was exclusively designed for severe isolating service in harsh environmental applications especially where hydrocarbons are a factor.

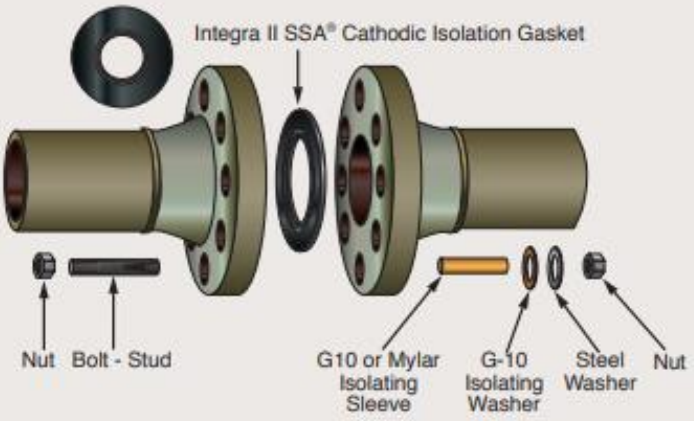


Cross-sections of the APS Integra II SSA® Gasket

All Integra II SSA® gaskets are manufactured in 1/4" thickness for all diameters.

Gaskets for API 10,000# flanges and require dual seals.

The Integra II SSA® gasket consists of a PTFE spring-energized face seal, seated in a highly compressed insulating glass laminate affixed to a concentrated stainless steel metal core. Because of its all-composite exclusive construction and its exceptional pressure-activated sealing properties, the gasket requires far less bolt stress to seal than most standard isolating gaskets in the industry. The Integra II SSA® gasket's inner diameter is machined to match the exact flange bore dimension specified by the customer to eradicate the possibility of turbulent flow and inner flange face corrosion. This gasket is engineered to be reusable with a replaceable sealing element.



Features:

- Exceptionally dependable for insulating and sealing purposes in severe service applications
- Highly suitable for all severe service applications up to and including ANSI 2500# and API 10,000# classes.
- Zero-free leaks for high sulfur content crude oil or H_2S gas fugitive emissions, proven through multiple applications.

Applications:

- Flange isolation with true cathodic protection.
- Isolating between dissimilar metals to prevent galvanic corrosion.
- Wellhead isolation from inter-connected flow lines.
- Mating mismatched dissimilar flanges.
- Eliminate turbulence and flow-induced erosion between ring-joint (RTJ) flanges.
- Protect against corrosion on uncoated or scarred flange faces.
- To seal between flanges subjected to vibration/cavitations
- Eliminate corrosion from forming in the cavities between RTJ flanges where intense modes of hostile chemicals may be present

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SUBMITTAL
APS FLANGE ISOLATION GASKET KITS

Advance Products & Systems, LLC, type **FI2G10DWG10MY** flange isolation kits contain one "F" (Raised Face) Integra II SSA style isolation gasket manufactured from Nema grade G-10 glass reinforced epoxy retainer with 316 stainless core and PTFE spring energized seal, two 1/8" thick isolating washers manufactured from Nema grade G-10, two SAE zinc plated steel back-up washers and one Mylar sleeve having a 1/32" wall thickness for each bolt.

APS flange isolation kits can be manufactured to fit the flange dimensions of ASME B16.47 SERIES B. ANSI, AWWA, MSSSP44, B.S. 10, DIN 2633, 2634, etc.

Advance Products & Systems, LLC, certifies that the flange isolation kits are of the highest quality and meet or exceed industry standards.

Country of Origin: USA

PTFE Sealing Element:	
Min Operating Temperature	- 425°F
Max Operating Temperature	450°F

G-10 Standard SSA S/S Retainer

Test Items	**ASTM Test**	**Specification**
Compressive Strength:	D695	66,000 PSI
Dielectric Strength:	D149	800 VPM
Max. Continuous Operating Temp:	N/A	302° F (150° C)
Water Absorption:	D570	0.04%
Flexural Strength:	D790	65,000 PSI
Tensile Strength:	D638	51,000 PSI
Bond Strength:	D229	2,600 lb.
Shear Strength:	D732	22,000 lb.

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G10 General Physical Properties*	
Specific Gravity	1.85
Rockwell Hardness +/- 10	98
Moisture Absorption (%) E-1/105 + D-24/23	.10
Flexural Strength (psi) - LW	65,000
Flexural Strength (psi) – CW	52,000
Modulus of Elasticity in Flexure	
Kpsi – LW	2,900
- CW	2,600
Tensile Strength (psi) -	51,000
Compressive Strength (psi)	66,000
Izod Impact Strength (ft/lbs/in)	
Cond E. –48/50 LW	7.90
Cond E. –48/50 CW	7.30
Bond Strength (lbs)	2,300
Shear Strength (psi)	21,500

SLEEVES:

Mylar

	Unit	Value
Max Operating Temperature	F°	300
Water Absorption (1/8" Thick)	%	.8
Dielectric Strength	VPM	4,000
Wall Thickness	Inch	1/32

BACK-UP WASHERS:

SAE Zinc-Plated Steel (manufactured to standard SAE thicknesses)

Joseph Wilson
Vice President

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INTEGRA SERIES GASKETS

SEVERE SERVICE CATHODIC ISOLATING GASKETS

The Integra Series gaskets are exceptionally dependable for isolating and sealing purposes in severe service applications. These gaskets are applicable for:

- Isolating between flanges of dissimilar metals to prevent galvanic corrosion.
- Wellhead isolation from inter-connected flow lines.
- Mating mismatched dissimilar flanges.
- Eliminate turbulence and flow-induced erosion between ring-joint (RTJ) flanges.
- Protect against corrosion on uncoated or scarred flange faces.
- Seal between flanges subjected to vibration/cavitations.
- Eliminate corrosion from forming in the cavities between RTJ flanges where intense modes of hostile chemicals may be present.

GASKETS ONLY						
	INTEGRA II SSA	INTEGRA II SSAFS	INTEGRA II SSAID	INTEGRA XT	INTEGRA HS	INTEGRA Z
Picture						
Applications	- Severe Service Applications up to and including ANSI 2500# and API 10,000# classes. -Designed fore severe isolating service in harsh environmental applications, especially where hydrocarbons are a factor. -Various sleeve & washer options available.	-Critical Fire Safe Applications -Incorporates high-temp sealing characteristics of kammprofile with a highly dielectric mineral secondary seal. -Highly suitable for all severe service applications up to and including ANSI 2500# and API 10,000# classes. -Zero-free leaks for high sulfur content crude oil or H2S gas fugitive emissions, proven through multiple applications. -API 6FB Approved. -Available with hardened-coated steel washers and various sleeve options.	-Suitable for applications with high chloride content or other highly corrosive media. -Zero-free leaks for high sulfur content crude oil or H2S gas fugitive emissions, proven through multiple applications. -Provides reliable PTFE seal at flange bore, providing excellent chemical resistance which enables the gasket retainer material to be impervious to the most aggressive media within the pipe. -Various sleeves & washer options available.	-Critical extreme temperature applications. -Suitable for steam applications. -Combines the reliability of a Kamm-profile retainer with the temperature capabilities of a highly dielectric mineral seal. -Kits are available with extreme temperature sleeves & washers.	-Suitable for aggressive chemicals (e.g.: hydrogen sulfide, dry and liquid chlorine). -Incorporates the reliability of a stainless steel Kamm-profile ring with a non-asbestos compressed outer retainer ring and hydrogen sulfide-resistant PTFE-based seals on both sides of the gasket. -Effective at sealing across a wide range of chemicals, hydrocarbons, and gaseous mixtures. -Various sleeve & washer options available.	-Cryogenic gasket -EC-5000 retainer material developed for and used by NASA for absolute zero operating temperatures. -Various sleeve & washer options available.
Max Operating Temp	G10: 302°F(150°C) G11: 400°F(205°C)	G10: 302°F(150°C) G11: 400°F(205°C)	G10: 302°F(150°C) G11: 400°F(205°C)	800°F(427°C)	Variable Depending on Washers/Sleeves	Absolute zero operating temperature? -273°C / -459°F
Compressive Strength	G10: 66,000 PSI G11: 58,000 PSI	G10: 66,000 PSI G11: 58,000 PSI	G10: 66,000 PSI G11: 58,000 PSI	316 SS: 85,000 PSI	316 SS: 85,000 PSI	65,000 PSI
Dielectric Strength	G10: 800 VPM G11: 550 VPM	G10: 800 VPM G11: 550 VPM	G10: 800 VPM G11: 550 VPM	635 V/mil (25 kV/mm)	406 V/mil (16 kV/mm)	670 VPM
Water Absorption	G10: 0.04% G11: 0.08%	G10: 0.04% G11: 0.08%	G10: 0.04% G11: 0.08%	Mica: 0.99%	Durlon 9000: .086%	0.10%
Flexural Strength	G10: 65,000 PSI G11: 58,000 PSI	G10: 65,000 PSI G11: 58,000 PSI	G10: 65,000 PSI G11: 58,000 PSI	316 SS: 30,000 PSI	316 SS: 30,000 PSI	75,000/65,000 PSI
Tensile Strength	G10: 51,000 PSI G11: 41,000 PSI	G10: 51,000 PSI G11: 41,000 PSI	G10: 51,000 PSI G11: 41,000 PSI	Mica: 20,300 PSI 316 SS: 44,000 PSI	316 SS: 44,000 PSI	45,000/38,000 PSI
Bond Strength	G10: 2,600 lb. G11: 2,200 lb.	G10: 2,600 lb. G11: 2,200 lb.	G10: 2,600 lb. G11: 2,200 lb.	N/A	N/A	2,300 lb.
Shear Strength	G10: 22,000 lb. G11: 21,200 lb.	G10: 22,000 lb. G11: 21,200 lb.	G10: 22,000 lb. G11: 21,200 lb.	316 SS: 71,800 PSI	316 SS: 71,800 PSI	22,000 lb.