



### Product data

- Carrier/Retainer: 316L Stainless Steel with Fully Encapsulating GPT Proprietary Coating
- Primary Sealing Element: Silica Filled PTFE ID-Seal
- Secondary Fire-Safe Sealing Element: NACE MR0175/ISO 15156 Inconel 718 C-ring with GPT Proprietary Coating
- Color: Dark Brown Retainer
- Fluid Service: Oil & Gas
- Maximum Operating Temperature (°F/°C): 500°F/260°C\*
- Minimum Operating Temperature: (minus): -300°F/-184°C
- Size: ½ - 48 inch NPS\*\*
- Full Face (Type E) & Type F Available
- Pressure Class: ASME B16.5 150# - 2500#, API 6A 2K- 10K\*\*\*

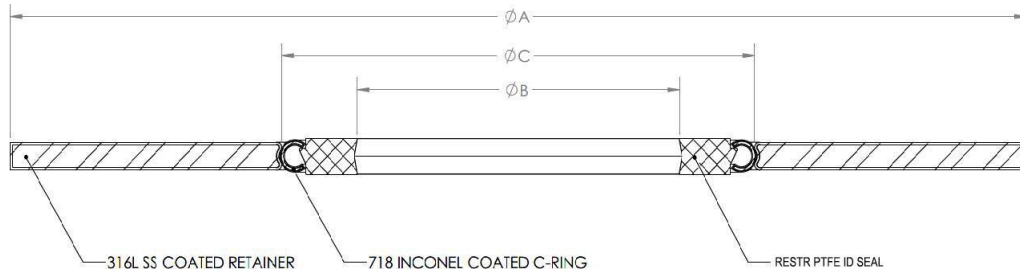
*\*Note: Temperature rating when using Mica*

*\*\* Note: API, DN available upon request*

*\*\*\* Note: ASME B16.47, API 6A, EN 1092, and DIN 2501 flange specification and pressure classes available upon request*

### Product Description

Flange isolation gasket composed of a fully encapsulating high dielectric strength thin-film coated stainless steel grade 316L gasket retainer, NACE MR0175/ISO 15156 Inconel 718 C-ring with high dielectric strength thin-film coating, and Silica Filled PTFE ID-Seal where applicable. Lasered with unique identifying markings (e.g. size, pressure class, part number). Standard compressed gasket thickness (T) is 0.125" (~3.2mm).



Production Location

GPT Industries

4990 Iris Street

Wheat Ridge, CO 80033

USA

Phone Number: +1-303-988-1242

Performance/Functional Testing

<u>Type of Test</u>	<u>Testing Facility</u>	<u>Completion Date</u>	<u>Test Value</u> (if applicable)	<u>Acceptance Criteria Met</u>
API PR2 (AMB-260C)  2in 2500#  Evolution with Gylon ID-Seal	GPT Industries	10.07.2019	Leakage within 5% allowable at all pressure/temperature cycle steps	Passed
API PR2 (AMB-260C)  2in 2500#  Evolution with C-ring Only	GPT Industries	10.07.2019	Leakage within 5% allowable at all pressure/temperature cycle steps	Passed

Hydro-Test 6in 1500# Evolution with Gylon ID-Seal	GPT Industries	10.01.2019	No visible leakage 100% RF-IT Flange to Flange (pre and post-test) 45 GΩ @ 1,000 Vdc Flange to Flange (pre-test)	Passed
Hydro-Test 12in 900# Evolution with Gylon ID-Seal	GPT Industries	8.8.2019	No visible leakage 100% RF-IT Flange to Flange (pre and post-test) 15 GΩ @ 1,000 Vdc Flange to Flange (pre-test)	Passed
Isolation Bolt-Up Test 20in 900#	Ideal Completion Yard	09.23.2019	100% RF-IT Flanges to Core 7.0 GΩ @ 1,000 Vdc Flanges to Core	Passed
Isolation Bolt-Up Test 20in 600#	Ideal Completion Yard	09.23.2019	100% RF-IT Flanges to Core 20 GΩ @ 1,000 Vdc Flanges to Core	Passed
Hydro-Test 6in 1500# Evolution without ID-Seal	GPT Industries	9.04.2019	No visible leakage 100% RF-IT Flange to Flange (pre and post-test) 70 GΩ @ 1,000 Vdc Flange to Flange (pre-test)	Passed
API 6FB Fire Test 6in 300# Evolution with Gylon ID-Seal	Yarmouth Research & Technology	5.29.2019	No leakage	Passed
API 6FB Fire Test 2in 2500# Evolution with Gylon ID-Seal	Yarmouth Research & Technology	12.10.2019	No leakage	Passed

ASTM Salt Fog Test  2" 300/400/600# & 6" 600# EVOLUTION with PTFE ID-Seal	GPT Industries	3.23.2026	No Red Rust	<5% red rust after 2000 hours
ISO 15848-1 Shell Leakage Test – Room Temp 25°C - Helium	Amtec North America, Inc.	12.13.2019	1.78E-08 Pa*m <sup>3</sup> /s/mm	Pass for Class AH
ISO 15848-1 Shell Leakage Test - 260°C - Helium	Amtec North America, Inc.	12.13.2019	1.78E-07 Pa*m <sup>3</sup> /s/mm Class BH	Pass for Class BH
DIN EN 13555 Max Allowable Gasket Stress - Q <sub>smax</sub> at 25°C	Amtec North America, Inc.	12.13.2019	260 MPa (Q <sub>smax</sub> )	Exceeded Test Unit Limits
DIN EN 13555 Max Allowable Gasket Stress - Q <sub>smax</sub> at 260°C	Amtec North America, Inc.	12.13.2019	260 MPa (Q <sub>smax</sub> )	Exceeded Test Unit Limits
DIN EN 13555 Modulus of Elasticity - E <sub>G</sub> at 25°C	Amtec North America, Inc.	12.13.2019	180,000 Mpa (E <sub>G</sub> )	Exceeded Test Unit Limits
DIN EN 13555 Modulus of Elasticity - E <sub>G</sub> at 260°C	Amtec North America, Inc.	12.13.2019	180,000 Mpa (E <sub>G</sub> )	Exceeded Test Unit Limits
DIN EN 13555 Creep Relaxation Factor – P <sub>QR</sub> at 25°C (Q = 260 MPa, k = 500 kN/mm)	Amtec North America, Inc.	12.13.2019	1.00 (P <sub>QR</sub> )	No Creep

DIN EN 13555 Creep Relaxation Factor – P <sub>QR</sub> at 260°C (Q = 260 MPa, k = 500 kN/mm)	Amtec North America, Inc.	12.13.2019	1.00 (P <sub>QR</sub> )			No Creep
DIN EN 13555 Min Required Gasket Stress in Assembly - Q <sub>min(L)</sub> (L=mg/m/s) – (p = 40 bar, 25°C)	Amtec North America, Inc.	12.13.2019	18 MPa (L <sub>0.01</sub> )	61 MPa (L <sub>0.00001</sub> )	144 MPa (L <sub>0.000001</sub> )	N/A
DIN EN 13555 Min Required Gasket Stress in Service - Q <sub>smin(L)</sub> (L=mg/m/s) - (p = 40 bar, 25°C)	Amtec North America, Inc.	12.13.2019	10 MPa (L <sub>0.01</sub> )	18 MPa (L <sub>0.00001</sub> )	105 MPa (L <sub>0.000001</sub> )	N/A
High Operational Temperature Test (HOTT) – 260°C, 154.9 MPa, 41.5 bar Helium	Amtec North America, Inc.	12.13.2019	0			No Leakage
Hot Blow-Out Test (HOBT-1) – T <sub>g</sub> =260°C, S <sub>g</sub> =59.9 MPa, 62 bar Test Pressure	Amtec North America, Inc.	12.13.2019	N/A			No Blow-Out
ASTM F37-06 Part B – Nitrogen Sealability Test	Amtec North America, Inc.	12.13.2019	0.00 ml/h			No Leakage
Room Operational Tightness Test (ROTT) – Load Stress Intercept	Garlock Sealing Technologies	9.27.2019	30.56 (G <sub>b</sub> )			N/A

Room Operational Tightness Test (ROTT) – Slope of Line	Garlock Sealing Technologies	9.27.2019	0.622 (a)	N/A		
Room Operational Tightness Test (ROTT) – Unload-Reload Constant	Garlock Sealing Technologies	9.27.2019	62.25 (G <sub>s</sub> )	N/A		
Room Operational Tightness Test (ROTT) – Tightness Parameters	Garlock Sealing Technologies	9.27.2019	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Min 5.68E+2 (T<sub>p</sub>)</td> <td style="text-align: center;">Max 1.75E+5 (T<sub>p</sub>)</td> </tr> </table>	Min 5.68E+2 (T <sub>p</sub> )	Max 1.75E+5 (T <sub>p</sub> )	N/A
Min 5.68E+2 (T <sub>p</sub> )	Max 1.75E+5 (T <sub>p</sub> )					
Steam Resistance – 2000 Hour – 350 psig, 430°F	Garlock Sealing Technologies	2000 Hour Still in Process	>1000 hrs no leakage to date 12.20.2019	No Leakage		