

# ELECTRON™ FSS

## Fire Safe Isolation Kit



- Cathodic protection in severe conditions
- High degree of sealability
- Certified to API 6FB standard
- Complete isolation kit

 **TEADIT®**  
Sealing for a Safer and Greener Tomorrow

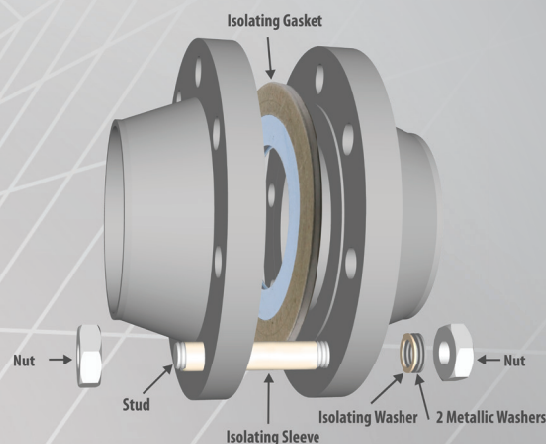


# ELECTRON™ FSS

***“ The most reliable and functional fire safe gasket in the market ”***

The Teadit **ELECTRON™ FSS** is designed to meet the most demanding corrosion resistance needs in a bolted joint assembly. It allows for a higher degree of gasket compression, a higher level of sealability, and retention of bolt-load during the event of a fire.

The **ELECTRON™ FSS** fire safe Isolation kit is composed of a sealing gasket, insulating washers, metal washers, and insulating sleeves. The gasket is manufactured using a metal core of 316 stainless steel, faced on both sides with Teadit's structured Tealon™ and TerMica™. Its robust construction enables it to simultaneously meet sealability, electrical isolation, and fire resistance requirements, even in high pressure applications.



**Certified to API 6FB Standard**

## APPLICATIONS



In the event of a fire, the **ELECTRON™ FSS** is designed to withstand elevated temperatures, per API 6FB. It also prevents the difficult to detect localized pitting (electrochemical corrosion), often observed in metal pipe connections with dissimilar flange materials.

Applications for **ELECTRON™ FSS** are found in all sectors of oil and gas.

- Onshore & Offshore Production
- Gas Processing
- Oil Refining
- Basic Petrochemical
- Pipeline & Distribution
- Petrochemical

Other applications in non-oil and gas industries include:

- Pulp & Paper
- Pharmaceutical
- Mining
- Chemical
- Food & Beverage
- Water & Waste Water
- Sugar & Ethanol
- Power Generation



***“The proof is in the results...”***

## API 6FB STANDARD

Variable	Test Requirements	Data Collected
Average System Pressure	555psi	557psi
Average Flame Temperature	1400°F (760°C)	1482°F (806°C)
Time to Reach Flame Temperature of 1400°F (760°C)	w/in 2:00 min	1:00 min
Average Calorimeter Temperature	1200°F (648°C)	1337°F (725°C)
Time to Reach Average Calorimeter Temp. of 1200°F (648°C)	w/in 15:00 min	14:00 min
Total Burn Time	30 minutes	zero leakage
Total Cool Down Time	30 minutes	zero leakage
Total Repressurization Hold Time	5 minutes	zero leakage
Average System Pressure During Repressurization	555psi	repressurization not needed

## FEATURES

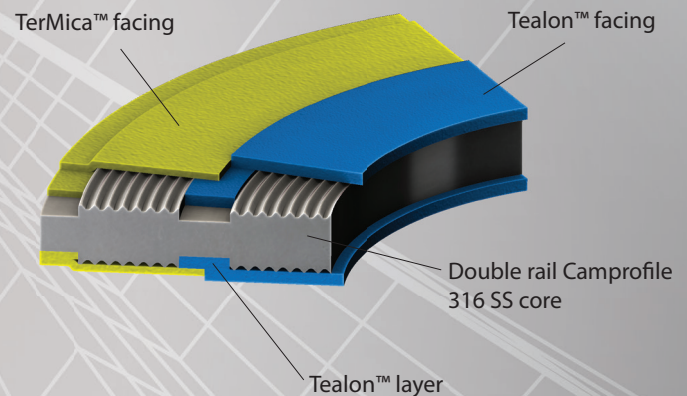
- Zero leakage per API 6FB Test
- Low load to seal
- No metal-to-metal contact after installation
- Higher gasket maximum operating temperature
- Specially formulated and designed Tealon™ PTFE for high and improved electrical resistance

### Major competitors' design flaws include:

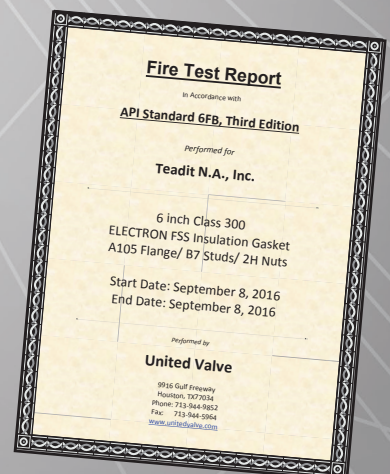
- Metal-to-metal contact created under compressive load
- Localized corrosion resulting from the transfer of electricity through gaps in the gasket material
- Metal-to-metal contact observed with coated washers
- Poor sealing performance

### The **ELECTRON™ FSS** solves competitors' design flaws by:

- Reducing potential electrical contact between flanges
- Creating an extra isolating area
- Utilizing TerMica™ washers
- Improving sealing performance



## API STANDARD 6FB



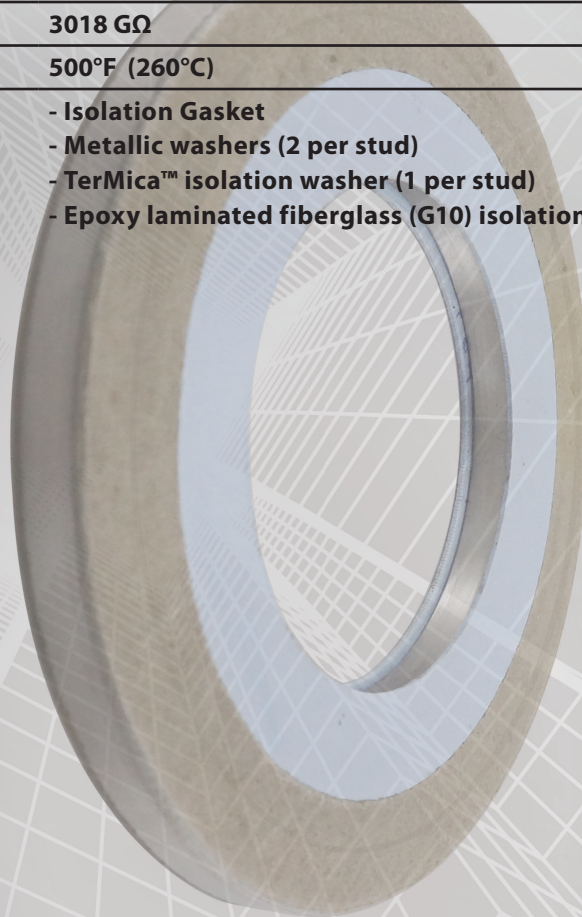


## ELECTRON™ FSS Kit

<b>Flanges (recommended)</b>	<b>RF, FF and RTJ in ASME classes 150# to 2500# and API 2K to 10K</b>
<b>Gasket Electrical Resistance</b>	<b>3018 GΩ</b>
<b>Max Temp Sealing Element</b>	<b>500°F (260°C)</b>

**ELECTRON™ FSS Kit Consists of:**

- Isolation Gasket
- Metallic washers (2 per stud)
- TerMica™ isolation washer (1 per stud)
- Epoxy laminated fiberglass (G10) isolation sleeves (1 per stud)



ELECTRON™ FSS U.S. Patent Pending

The application parameters indicated in this brochure are typical. Specific applications should be looked at independently for an evaluation on compatibility. Please consult Teadit engineering for recommendations about specific use.



Sealing for a Safer and Greener Tomorrow

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