

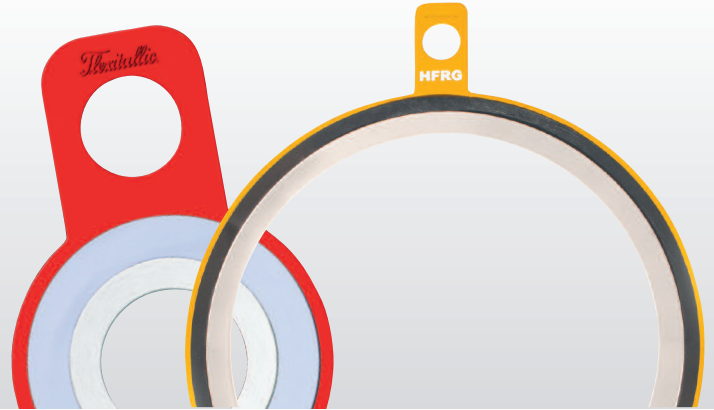
# Flexitallic



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## PRODUCT DATASHEET

# FLANGE RESCUE GASKETS (FRG)



The Flexitallic Flange Rescue Gasket is specially designed to offer a high integrity seal in bolted connections in which the flange sealing faces may be or have been subject to corrosion.



This Data Sheet refers to the material as supplied. The information contained herein is given in good faith, but no liability will be accepted by the Company in relation to same.

We reserve the right to change the details given on this Data Sheet as additional information is acquired. Customers requiring the latest version of this Data Sheet should contact our Applications Engineering Department.

The information given and, in particular, any parameters, should be used for guidance purposes only. The Company does not give any warranty that the product will be suitable for the use intended by the customer.

### Service:

The Flexitallic Flange Rescue Gasket has been primarily, but not exclusively, developed for use in the oil and gas exploration industry. The product has been designed for use in bolted connections that have, or may be subject to corrosion at the flange gasket surface, negating the requirement for costly and time consuming flange replacement or machining.

### Construction:

The standard FRG (Flange Rescue Gasket) comprises of a high integrity metal ring faced with Flexitallic's structurally modified PTFE sealing material (Sigma(R) 500). The primary sealing element is dimensioned to seat on the outer section on the flange sealing face.

A thicker highly conformable secondary seal, made from re-structured microcellular PTFE with corrosion inhibitor is located within the internal diameter of the primary seal. This secondary seal is carefully dimensioned to fill any voids or crevices formed between the pipe-bore and the internal diameter of conventional gaskets on flange closure. The highly conformable nature and optimized thickness of the inner secondary seal ensures that it is capable of adapting to extensively damaged flange sealing surfaces. Full closure of this corrosion/erosion sensitive area prevents fluid ingress reducing the potential for further flange damage.

For ASME B16.5 Class 150 pressure systems correct location on the flange is ensured by dimensioning the outer diameter of the gasket to sit snugly within the bolt circle. For higher pressure systems, ASME B16.5 Class 300 and above, integrated locating tags are included to ensure correct positioning.

### Styles:

- FRG (Flange Rescue Gasket)**  
– Standard design suitable for most applications.
- FRG-FS (Fire Safe)**  
– Meets the requirements of API 6FB for fire safety. Primary seal uses Thermiculite®.
- FRG-RJ (Ring Joint)**  
– Modified R-Oval or R-Octag with inner section matched to the bore.
- FRG-HF (Hydrofluoric Acid)**  
– Specially designed to suit the requirements of HF alkylation applications.
- FRG-CS (Cryogenic Service)**  
– Specially designed to suit the requirements of low temperature LNG applications.

**Maximum recommended temperature:**  
260°C (500°F)

**Pressure:**  
Up to ASME B16.5 class 2500

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### Physical Construction:

#### Primary Seal:

##### Core:

316 Stainless Steel\* – Standard; Monel - FRG-HF

##### Facing:

FRG – Sigma® (microsphere filled biaxially structured PTFE); FRG- FS (Thermiculite®); FRG-HF (Graphite)

#### Secondary Seal:

Sigma® 606 (Ultra high compression biaxially structured PTFE) with corrosion inhibitor.

#### Availability:

To suit ASME B16.5 Class 150 thru 2500 flat and raised face flanges.\*\*

*\*Alternative metallurgy may be available on request.*

*\*\*Gaskets to suit other flange standards or bespoke applications may be available on request.*