

PRODUCT DATASHEET

WILLIAM JOHNSTON & COMPANY LIMITED

I-FLEX LP FLANGE INSULATING SET



The Flexitallic I-Flex Flange Insulating Set (LP) is comprised of an Insulating Gasket, Insulating Sleeves, Insulating Washers and Metal Washers.

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. The Insulating Gasket is a 3mm soft cut Sigma[®] 500 material.

Colour: Blue

Service:

The Flexitallic I-Flex gasket is capable of effecting a seal over a wide range of applied stress making the product suitable for use in an extensive range of standard and non-standard bolted connections. Soft compressive materials and a relatively wide sealing face make the product more robust with regard to use on a wide range of flange sealing face conditions when compared with 'O' Ring and/or spring energised based gasket insulation technology.

Insulating Gasket Properties:

| ° 1 | |
|-------------------------------|-----------|
| Gasket Thickness | 3mm |
| Gasket Factor (m) | 1.4 |
| Min Design Seating Stress (y) | 1885 psi |
| Minimum Temperature | -200°C |
| Maximum Temperature | 260°C |
| Dielectric Strength | 9.8 kV/mm |

Operational pressure range: Maximum flange pressure class: 300 Class ASME 16.5 EN1514-1 PN40

Operational temperature range: Up to 150°C

The SIGMA® 500 material is suitable for sealing all chemicals across the whole pH range (0-14) with the exception of molten alkali metals, fluorine gas or hydrogen fluoride. The insulating gasket and washers have been designed and developed for use in pipelines that require cathodic protection. This special design exceeds the requirements of 'Saudi Aramco Std. 02-SAMSS-010'.









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Insulating Sleeves / Tubes – Thermal / Dielectric Properties:

| G10 | – Temperature Range | 150°C |
|-----|---|------------|
| G10 | Dielectric Strength | 19.7 kV/mm |

(Note: Other materials, for example Mylar, Phenolic and Nomex, are available on request.)

Insulating Washers - Thermal / Dielectric Properties:

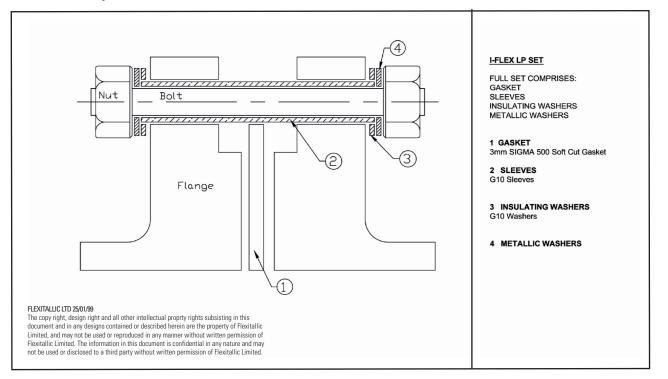
| G10 | – Temperature Range | 150ºC |
|-----|-----------------------|------------|
| | – Dielectric Strength | 19.5 kV/mm |

Metallic Backing Washers:

| Stainless Steel 316 | (as standard) | 3mm thk. |
|---------------------|---------------|----------|

(Note: Other metals can be provided to suit the application)

General Assembly:



The Standard I-Flex Set comprises of the following components:

| I-Flex Insulating Gasket | soft cut | up to 150/300 class PN40 | 1 pc |
|--------------------------|----------|--|------------------------|
| G10 Insulating Sleeves | | | 1 pc per flange bolt |
| G10 Insulating Washers | | | 2 pc's per flange bolt |
| Backing Washers 316SS | | | 2 pc's per flange bolt |

Maximum temperature: 150°C

Please contact the Flexitallic Applications Engineering Team when specific operating parameters requires confirmation of appropriate materials.



Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.