

Gra-Flex 5300

High purity graphite laminate reinforced with tanged 316L stainless steel core



PRODUCT FEATURES:

GRA-FLEX® 5300 is recommended for high temperature, high pressure sealing applications, for applications involving high sealing stresses and where high blow out resistance is required. The inclusion of stainless-steel reinforcing layers gives rise to robust shear with excellent handling characteristics.

It can be used to seal a wide range of media, with an exception of strong oxidizing agents, at extreme temperature and pressure.

The soft conformable nature of graphite facing material makes GRAF-FLEX 5300 suitable for sealing between worm or pitted flanges.

Typical industries where it is used include chemical and petrochemical plants, refineries and power generation.

TYPICAL PROPERTIES:

PROPERTIES	TEST METHOD	UNITS	VALUE
Colour			Gray
Max recommended Temperature (inert or reduceing media)		°C	- 196 / + 600
Max recommended Temperature (oxidising media)		°C	- 196 / + 370
Max Operating Pressure		bar	200
Density of graphite	ASTM D792	gr/cm3	1,00+/-0,05
Creep Relaxation	DIN 3535-6	%	< 3
Tensile Stenght	ASTM	Mpa	> 25
Compressibility	DIN 3535-6	%	> 35
Recovery	DIN 3535-6	%	> 5
Leackage rate	DIN 3535-6	mg/(s*m)	< 0,08
Purity of graphite			> 98%
Sulphure Content			< 1000 ppm
Leachable Chloride Ion Content			< 50 ppm
Leachable Fluoride Ion Content			< 50 ppm
Y	ASME VIII	MPa	17,2
m	ASME VIII	factor	2

Note : These are typical properties and not used for specification purpose

PRODUCT PROPERTIES:

- Reduced product loss and emissions
- Without creep relaxation and cold flow
- Excellent chemicalresistance
- Excellent bolt torque retention
- High range of operation temperature and pressure

All information in this document is based on years of experience in manufacture and use of the discussed products. Since sealing performance in the joint is subject to multiple factors such as mounting method, system parameters, and sealed medium, technical parameters specified herein are of informative nature only and cannot be used as grounds for any claims any special uses of products are subject to consulting with the manufacturer.