



# PLANIGRAPH™ - LGRF

## Composition

- High-purity expanded mineral graphite Industrial Grade
- Tanged sheet SS316L

## Characteristics

The expanded mineral graphite of LGRF Planigraph™ meets the requirements of the latest update of the EU directive 2011/65/EC (RoHS). This type of gasket ensures a reliable and durable sealing, making it an ideal option for all industrial applications, from the simplest to the most demanding.

## Applications

Expanded mineral graphite is also known for its chemical resistance, making it suitable for applications involving almost all fluids except for oxidants. In addition, expanded mineral graphite gaskets can be easily cut and shaped to fit the specific needs of the application. Thanks to its high thermal resistance, expanded mineral graphite can withstand high temperatures without damage or deformation, ensuring a reliable and safe sealing.

## Tech Data

Planigraph™ LGRF		
Graphite density	gr/cm <sup>3</sup>	1.0
Carbon Content	%	≥ 98.0
Ash Content	%	< 2.0
Sulphur Content	ppm	≤ 1000
Halogen Content	ppm	≤ 200
Tensile Strength	MPa	≥ 4.0
Compression ratio	%	35 - 55
Recovery	%	≥ 9.0
Relaxation stress 16h, 300°C, initial stress 50 N/mm <sup>2</sup>	N/mm <sup>2</sup>	>45
Maximum assembly load RT	N/mm <sup>2</sup>	140
Temperature range service	°C	-200 / 550
Maximum operating pressure	bar	200

- The technical data provided refers to the foil with a thickness of 0.80 mm
- With steam and non-oxidizing fluids, the temperature must be limited to 550°C
- Never use the product to the maximum temperature and pressure associated. Consult the manufacturer for further information
- With weakly oxidizing agents and hot air the temperature must be limited to 450 °C
- Graphite and carbon cannot be used with oxidizing fluids

Size	1.000 x 1.000 1.500 x 1.500	40" x 40" 60" x 60"
Thickness	1.0 ÷ 3.0	3/64" ÷ 1/8"



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## Planigraph™ - LGRF

The Planigraph™ sales program includes the following items Premium grade (P) and Industrial Grade:

- LGP and LG without insert
- LGRP and LGR with single smooth insert
- LGRFP and LGRF with single or multiple tanged inserts
- LGRHDIP and LGRHDI with multiple smooth inserts

The maximum allowable load on the expanded graphite gasket depends on the type and number of metallic inserts and is strongly correlated with the effective sealing surface area of the gasket. It is always advisable to check the ratio between [De-Di], where De and Di refer to the diameters of the parts of the gasket effectively engaged by the flange compression, and the gasket thickness. The ratio should be at least 4. On WN RF flanges, gaskets can be applied up to the pressure class 300 psi. Please refer to the published technical data sheets for the application limits of the Planigraph™ line products.



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