



# PLANIGRAPH™ LGRHDI

## Composition

- Expanded Graphite Industrial Grade
- Multiple smooth SS316L inserts with a thickness of 0.05 mm

## Characteristics

The Planigraph™ LGRHDI graphite gasketing sheets are suitable for high-temperature and high-pressure applications on RF, FF, LMF, and LTG flanges in piping or industrial machinery. Planigraph™ LGRHDI features low relaxation values combined with excellent mechanical strength.

## Applications

The gaskets Planigraph™ LGRHDI are suitable for all flanges, including RF, FF, LMF, and LTG. Graphite cannot be used with oxidizing fluids.

## Tech Data

Planigraph™ LGRHDI		
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
Reinforcing steel sheet	AISI	316L
Thickness steel sheet	mm	0.05
Tensile Strenght	MPa	≥ 4.0
Compressibility	%	25 - 35
Recovery	%	> 15
Relaxation stress DIN 52913	N/mm <sup>2</sup>	> 45
Temperature max with steam	°C	550
Temperature max with weak oxidants	°C	450
Temperature min cryo	°C	-196
Maximum assembly load RT	N/mm <sup>2</sup>	200
Maximum operating pressure	bar	200

- 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
- With steam and non-oxidizing fluids, the temperature must be limited to 550°C
- The dimensional tolerances of the gasketing sheets are: W and L ± 3,0%, H ± 10,0%

Size	1000 x 1000 - 1500 x 1500 mm	40"x40" - 60"x60"
Thickness	1.0 ÷ 3.0 mm	1/32" ÷ 1/8"



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## Planigraph™ LGRHDI

The graphite gasketing sheets Planigraph™ LGRHDI are reinforced with multiple metallic layers and are designed for high-pressure applications, although they can be successfully installed in all applications. The operating pressure of the gasket is strongly correlated with the sealing surface, and it is always advisable to verify the ratio between [De-Di] and the gasket thickness, where De and Di refer to the diameters of the gasket parts effectively engaged by the flange compression. The ratio must be at least 4, and in this case, the maximum compression allowed on the gasket is 200 MPa. The maximum exposed pressure is only indicative because the maximum assembly load requirements must always be met in correlation with the temperature and the active sealing surface (EN 1591-2:2020).



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