



PLANIGRAPH™ PREMIUM LGRHDIP

Composition

- High-purity expanded mineral graphite Premium Grade with corrosion inhibitor and oxidation retardant
- Smooth sheet SS316L th. 0.05 mm

Characteristics

The expanded mineral graphite of Planigraph™ Premium LGRHDIP meets the requirements of the latest update of the EU directive 2011/65/EC (RoHS) and complies with the requirements of the oxidation test EN 14772 section 6.7. 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.

Tech Data

| Planigraph™ Premium LGRHDIP | | |
|--------------------------------------|---------|---------|
| Graphite density | gr/cm3 | 1.0 |
| Carbon Content | % | ≥ 99.0 |
| Ash Content | % | < 1.0 |
| Sulphur Content | ppm | ≤ 100 |
| Halogen Content | ppm | ≤ 100 |
| Inhibitor of oxidation and corrosion | - | Yes |
| Thermal Weight Loss 670°C/h | % | ≤ 4.0 |
| Tensile Strength | MPa | ≥ 4.0 |
| Reinforcing steel sheet | AISI | 316L |
| Thickness steel sheet | mm | 0.05 |
| Compression ratio | % | 25 - 35 |
| Recovery | % | > 15 |
| Gas Permeability DIN 3535 | cm3/min | < 0.6 |
| Relaxation stress DIN 52913 | N/mm2 | > 45 |
| Temperature max with steam | °C | 550 |
| Temperature max with weak oxidants | °C | 450 |
| Temperature min cryo | °C | -196 |
| Maximum assembly load RT | N/mm2 | 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
- The dimensional tolerances of the gasketing sheets are: W and L ± 3,0%, H ± 10,0%

| | | |
|-----------|----------------|--------------|
| Size | 1000 x 1000 mm | 40"x40" |
| Thickness | 1.0 ± 3.0 mm | 1/32" ÷ 1/8" |



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Planigraph™ Premium LGRHDIP

The Planigraph™ sales program includes the following items Premium grade 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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