



PLANIGRAPH™ LGR

Composition

The LGR gaskets offer an excellent performances for sealing the bonnet flanges of the valves and for sealing the heat exchangers. Improved permeability resistance can be achieved with the inner eyelet. For a perfect seal with this gasket it is recommended to use a thickness of 1.5 mm.

Characteristics

Flexible graphite C > 98,00% with smooth stainless steel core.

Applications

Graphite gasket for bonnet flanges and heat exchangers. The graphite doesn't work with oxidizing fluids.



Tech Data

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Graphite density	gr/cm3	1.0
Carbon Content	%	> 98.0
Ash Content	%	< 2.0
Material of insert	AISI	316L
Thickness of insert	mm	0.05
Compressibility	%	40 - 50
Recovery	%	> 7
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	60
Maximum operating pressure	bar	75

- 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	0.5 ÷ 3.0	1/64" ÷ 1/8"

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LGR is a gasketing expanded graphite sheet with smooth insertion. The maximum pressure for using these gaskets is strongly correlated to the gasket sealing surface. It is always suggested to calculate the ratio between [De-Di] and the thickness of the gasket, where De and Di refer to the effective diameters of the parts of the gasket compressed by the flanges. The ratio must be at least 4 and in this case the maximum compression allowed on the gasket is 35 MPa. In any case the maximum load allowed on the gasket is 60 Mpa. For sealing on WN RF flanges LGR gaskets are suitable until pressure class 300 psi. The maximum operating pressure pointed in the grid is only for reference because the maximum assembly load requirements must always be met in correlation to the temperature and the active sealing surface (EN 1591-2: 2020). The dimensionals tolerances are +/-5.0%.



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