PLANIGRAPH™ METALBOND LGPC

Composition

- Pure flexible graphite C > 98.00 %
- Covered on both side with 2 special polimeric films
- Inner protection ring

Characteristics

Planigraph™ Metalbond LGPC is a gasket with inner eyelet made by pure expanded mineral graphite protected on both sides by two polimeric films. This solution allows the graphite to maintain its integrity during all the handling and punching steps guaranteeing finally gaskets capable of performing the seal with extreme efficiency. Planigraph ™ Metalbond LGPC pure graphite flat gaskets are excellent substitutes of CSF gaskets - Compressed Synthetic Fibers - thanks to their smaller creep and for their moderate sensitivity to the thermal cycles. The style Metalbond LGPC is suitable for food applications.

Applications

Planigraph™ Metalbond LGPC pure graphite gaskets are great for sealing flanges 150 to 300 psi classes. These gaskets style Metalbond LGPC thicknesses 2.0 and 3.0 mm with stainless steel inner eyelet which are suitable for application intended in contact with food applications.

Tech Data

Planigraph™ Metalbond LGPC 2.00 mm th.

Graphite density	gr/cm3	1.0
Carbon Content	%	> 98.0
Ash Content	%	< 2.0
Compressibility	%	40 - 50
Recovery	%	3 - 5
Gas Permeability DIN 3535	cm3/min	< 0.6
Relaxation stress DIN 52913	N/mm2	> 45
Temperature max with steam	°C	450
Temperature max with weak oxidants	°C	450
Temperature min cryo	°C	-196
Maximum assembly load RT	N/mm2	40
Maximum operating pressure	bar	40

- Never use the product at its maximum rated temperature and pressure simultaneously. Consult the manufacturer for further information.
- When used with weakly oxidizing agents or hot air, the temperature shall not exceed **450 °C**.
- Flexible graphite and carbon yarn shall not be used with oxidizing fluids.

Planigraph™ Metalbond LGPC

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

- LG without insert
- LGR with single smooth insert
- LGRF with single or multiple tanged inserts
- LGRHDI with multiple smooth inserts

The maximum allowable load on expanded graphite gaskets depends on the type and number of metallic inserts and is closely related to the effective sealing area. Verification requires calculating the ratio [(De–Di)/thk], where **De** and **Di** are the diameters of the area actually compressed between the flanges and **thk** is the gasket thickness. The ratio must be ≥ 4. On WN RF flanges, the gaskets can be used up to class 300 psi.

The Planigraph™ line also includes corrugated graphite tapes for maintenance:

- NG – corrugated tape in expanded mineral graphite
- NGA – adhesive corrugated tape in expanded mineral graphite

The information provided in this publication, as well as that supplied to users in other forms, is based on our experience and communicated according to the best knowledge available. However, since numerous factors beyond our knowledge and control may influence the use of the products, no warranty, explicit or implicit, is given regarding such content. The operating limits indicated do not constitute confirmation that these values can be applied simultaneously. Avoid using the product at the maximum temperature and pressure limits. The maximum temperature is sustainable only for short periods under specific conditions. Specifications may be changed without notice. The images in the DS may not exactly represent the product, its color and/or marking.

GLOBAL SEALING SOLUTIONS

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