



PLANIGRAPH V48ZR

Composition

Energized Expanded Mineral Graphite with SS316L steel foil.

Characteristics

The Planigraph V48ZR graphite sealing ring gaskets for valves, thanks to their variable specific density, offer an optimal combination of compressibility and strength, adapting to the different pressure requirements of industrial applications. The density can be adjusted to the customer's requirements, if technically feasible. Their construction with pure energized expanded graphite provides greater resilience and reliability.

Applications

These graphite rings are ideal for sealing industrial valves in services compatible with graphite. Thanks to their high thermal and chemical resistance, they are suitable for a wide range of industrial applications that require reliable performance and optimal sealing.

Tech Data

| Typical properties of the Planigraph rings Style V48ZR | Units | Value |
|--|-------------------|------------------|
| Density | g/cm ³ | 1.55 ÷ 1.75 |
| Ash content | % | ≤ 0.15 |
| Carbon content | % | ≥ 99.85 |
| Chloride content | ppm | ≤ 10 |
| Fluoride content | ppm | ≤ 10 |
| Halogen content | ppm | ≤ 40 |
| Sulfur content | ppm | < 300 |
| Oxidation rate at 670°C | % | < 4 |
| Oxidation inhibitor | - | Y |
| Passive corrosion inhibitor | - | Y |
| Metal reinforcement (others available on demand) | - | SS316L |
| Dimensions | mm | 10 ÷ 2300 |
| Temperature Range | °C | -200 ÷ 450 / 650 |
| pH | - | 0 ÷ 14 |

| Tolerances (mm) | Out. D. | Inn. D. | Th. | Wall | Bulk Density |
|---------------------|----------------|----------------|----------|----------------|--------------|
| up to 250 mm | [-0,20 ÷ 0,00] | [-0,00 ÷ 0,20] | +/- 0,20 | [-0,20 ÷ 0,00] | +/- 5,00% |
| from 251 to 500 mm | [-0,25 ÷ 0,00] | [-0,00 ÷ 0,25] | +/- 0,20 | [-0,25 ÷ 0,00] | +/- 5,00% |
| from 501 to 750 mm | [-0,30 ÷ 0,00] | [-0,00 ÷ 0,30] | +/- 0,25 | [-0,30 ÷ 0,00] | +/- 5,00% |
| from 751 to 2300 mm | [-0,40 ÷ 0,00] | [-0,00 ÷ 0,40] | +/- 0,75 | [-0,40 ÷ 0,00] | +/- 7,00% |

- The peak temperature can be sustained only for short exposure periods.
- With weakly oxidizing agents and hot air, the temperature must be limited to 450 °C.
- With steam and non-oxidizing fluids, the temperature must be limited to 650 °C.
- Flexible graphite and carbon yarns shall not be used with oxidizing fluids.
- The dimensional tolerances of the molded products refer to the Carrara S.p.A. standard, unless otherwise agreed.



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To answer to the significant expansion of the industrial valve market, Carrara has organized its Planigraph Ring production according to the most modern requirements. Carrara has designed its production facilities to flexibly meet customer needs and, thanks to a substantial equipment fleet and a modern, precise production schedule, it can manage production batches ranging from a few pieces to thousands, using high-quality materials.

CARRARA
GLOBAL SEALING SOLUTIONS

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