



# PLANIGRAPH V48E

## Composition

Flexible Mineral Graphite

## Characteristics

The Planigraph V48E graphite sealing ring gaskets for valves offer high thermal and chemical resistance, making them virtually universal and suitable for all industrial applications. The density of the molded product ranges from 1.40 to 1.70 g/cm<sup>3</sup>, but limitations may occur depending on the size of the graphite sealing ring. The density can be adjusted to the customer's requirements, if technically feasible.

## Applications

Planigraph V48E graphite gaskets seals are available both as individual components for general sealing applications and as pre-packaged sets for valves. Thanks to their high thermal and chemical resistance, these gaskets are suitable for use across a wide range of industrial sectors. Planigraph V48E graphite rings can be used to seal all fluids except oxidizing ones.

## Tech Data

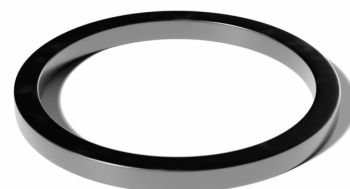
Typical properties of the Planigraph rings Style V48E	Units	Value
Density	g/cm <sup>3</sup>	1.40 ÷ 1.70
Ash content	%	≤ 1
Carbon content	%	≥ 99
Chloride content	ppm	≤ 10
Fluoride content	ppm	≤ 10
Halogen content	ppm	≤ 40
Sulfur content	ppm	< 300
Oxidation rate at 670°C	%	< 4
Oxidation inhibitor	-	Y
Passive corrosion inhibitor	-	Y
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.
- When used in a stuffing box at pressures above 100 bar, the product must be used with anti-extrusion rings or in its reinforced version.
- The dimensional tolerances of the molded products refer to the Carrara S.p.A. standard, unless otherwise agreed.



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## Planigraph V48E

To answer to the significant expansion of the industrial valve market, Carrara has organized its graphite gaskets 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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