

Expanded Graphite Sealing Ring

Catlog Number: FCSM-0049

• Description

Precision-formed expanded graphite rings designed for high-temperature gas-tight sealing in SOFC stack manifolds and hydrogen distribution systems.

• Basic Information

Material Composition: Expanded Natural Graphite

Thickness (μm): 1500

Density (g/cm^3): 1.2

Surface Resistance ($\text{m}\Omega\cdot\text{cm}^2$): < 15

Tensile Strength (MPa): 4.5

Thermal Conductivity ($\text{W}/\text{m}\cdot\text{K}$): 120 (Radial)

Porosity (%): 8

Operating Temp Max ($^{\circ}\text{C}$): 600

Flexural Strength (MPa): N/A

Corrosion Resistance ($\mu\text{A}/\text{cm}^2$): N/A

Contact Angle ($^{\circ}$): 95

Gas Permeability ($\text{cm}^3/\text{cm}^2\cdot\text{s}$): $< 10^{-7}$

Coefficient of Thermal Expansion ($10^{-6}/\text{K}$): 1.2

Shore Hardness: 55 (Shore A)

Water Uptake (%): < 0.5

Ash Content (%): < 0.1

Mean Pore Size (μm): N/A

Compressive Strength (MPa): 25

Electrical Conductivity (S/cm): 900

Specific Surface Area (m^2/g): 30

Young's Modulus (GPa): 1.5

Chemical Stability: Chemically Inert

Coating Material: None

Surface Roughness (Ra): 1.2

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