

## FKM-Based Carbon Composite Gasket

Catlog Number: FCSM-0091

### • Description

Conductive gasket material made from fluoroelastomer filled with carbon fibers, designed for simultaneous gas sealing and electrical grounding.

### • Basic Information

Material Composition: FKM / Carbon Fiber

Thickness ( $\mu\text{m}$ ): 1000

Density ( $\text{g}/\text{cm}^3$ ): 1.65

Surface Resistance ( $\text{m}\Omega\cdot\text{cm}^2$ ): < 45

Tensile Strength (MPa): 14

Thermal Conductivity ( $\text{W}/\text{m}\cdot\text{K}$ ): 1.8

Porosity (%): < 2

Operating Temp Max ( $^{\circ}\text{C}$ ): 230

Flexural Strength (MPa): N/A

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

Contact Angle ( $^{\circ}$ ): 105

Gas Permeability ( $\text{cm}^3/\text{cm}^2\cdot\text{s}$ ): <  $10^{-8}$

Coefficient of Thermal Expansion ( $10^{-6}/\text{K}$ ): 120

Shore Hardness: 75 (Shore A)

Water Uptake (%): < 0.4

Ash Content (%): 20 (Carbon)

Mean Pore Size ( $\mu\text{m}$ ): N/A

Compressive Strength (MPa): 15

Electrical Conductivity (S/cm): 35

Specific Surface Area ( $\text{m}^2/\text{g}$ ): 10

Young's Modulus (GPa): 0.05

Chemical Stability: Acid Stable

Coating Material: None

Surface Roughness (Ra): 1.8

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