



|| Epoxy Glass Studs ||

Material Grade: G10 / G11 / FR-4 Glass-Epoxy Composite
Product Type: Insulating Threaded Rod / Stud

1. General Description

Epoxy glass studs are high-strength electrically insulating fasteners manufactured from woven glass fabric reinforced with thermosetting epoxy resin. They are used where electrical insulation, mechanical strength, and corrosion resistance are required, such as in transformers, switchgear, and high-voltage equipment.



2. Electrical Properties

Property	Typical Value
Dielectric Strength	≥ 20 kV/mm
Dielectric Constant (1 MHz)	4.5 – 5.5
Dissipation Factor ($\tan \delta$)	≤ 0.04
Volume Resistivity	$\geq 10^{13}$ $\Omega \cdot \text{cm}$
Surface Resistivity	$\geq 10^{12}$ Ω
Arc Resistance	≥ 180 s

3. Standard Sizes

Parameter	Range
Thread Sizes	M4 – M30 (Metric) or 1/4" – 1" (UNC/UNF)
Length	20 – 1000 mm (custom available)
Thread Type	Metric, UNC, UNF
Tolerance	As per ISO / ANSI

4. Typical Applications

- Transformer and reactor clamping
- Busbar and insulator supports
- Switchgear and control panels
- High-voltage electrical equipment
- Structural insulating fasteners

5. Notes

All values are typical and may vary depending on grade and manufacturer. This datasheet is for general guidance only. Users should confirm specifications with the supplier for critical applications.