

GPO-3 fibre glass laminate



GPO-3 is a fiberglass laminate consisting of polyester resin reinforced with fiberglass mat base for applications up to 155°C with good thermal, mechanical and electrical properties.

An excellent material to work with, it displays good mechanical strength. Thinner dimensions are also ideal for punching.



GPO-3 is a fibre glass laminate.

Applications

GPO-3 is suitable for a broad range of applications within the electrical and mechanical sectors and is used extensively in the manufacture of spacers, mechanical barriers, electrical components/spacers, etc.

Properties

- Low moisture absorption.
- Very high CTI value (Comparative Tracking Index)
- High heat resistance 155°C without major impact on the good mechanical properties.
- Classified flame resistant.
- High chemical resistance.
- Resistant against most impregnation varnishes.
- Very good dielectric properties.
- Highly suitable for punched parts.

Composition

Fiberglass mat base with polyester resin compressed and cured under high pressure to comply with defined industry standards.

Colours

GPO-3 förekommer i röd och vit färg.

Norms

GPO-3 glass fibre laminate is compliant with:

- NEMA-GPO-3
- DIN 7735-HM 2471
- EN60893/IEC893-UPGM 203

Dimensions

- Sheets in various dimensions: Thinner sheets usually 1220 x 1215 mm or 1220 x 2440 mm.
- Thicknesses from 0.8–50 mm.

Thickness tolerances

- 0.8 – 2.0 mm..... +/- 0.2 mm
- 2.4 – 3.2 mm..... +/- 0.25 mm
- 4 mm +/- 0.3 mm
- 5 mm +/- 0.35 mm
- 6 mm +/- 0.4 mm
- 8 mm +/- 0.45 mm
- 10 mm +/- 0.5 mm
- 12 mm +/- 0.55 mm
- 14 mm +/- 0.6 mm
- 16 mm +/- 0.65 mm
- 20 mm +/- 0.75 mm
- 25 mm +/- 0.85 mm
- 30 mm +/- 0.95 mm
- 35 mm +/- 1.0 mm
- 40 mm +/- 1.1 mm
- 45 mm +/- 1.15 mm
- 50 mm +/- 1.25 mm

We also deliver GPO-3 processed according to specification on request.

Packaging

Sold individually.

Technical data

Properties	Value	Unit
Mechanical properties		
Density	1.9	g/cm ³
Flexural strength perpendicular	130	N/mm ²
Flexural modulus of elasticity	9000	N/mm ²
Compressive strength perpendicular	250	N/mm ²
Tensile strength	70	N/mm ²
Impact strength parallel to laminations	40	kJ/m ²
Water absorption	<0.2	%
Thermal properties		
Temperature endurance (Temperature index)	155	T.I
Working temperature class F	155	°C
Flame resistance	FVO/>3mm	UL 94
Thermal conductivity	0.3	W/mK
Electrical properties		
Dielectric strength at 90°C in oil perpendicular	23	kV/mm
Dielectric strength at 90°C in oil parallel	47	kV/mm
Creep voltage strength	600	CTI
Insulation resistance after immersion in water	5x10 ⁸	Ω

Dimensions and weight

Item number	Name	Thickness (mm)	Sheet size (mm)	Weight/sheet (kg)
125433	GPO-3 red	1	1220 × 1215	2.75
125434	GPO-3 red	1.6	1220 × 1215	4.4
125435	GPO-3 red	2	1220 × 1215	5.5
125436	GPO-3 red	2.4	1220 × 1215	6.58
125437	GPO-3 red	3	1220 × 1215	8.25
125438	GPO-3 red	4	1220 × 1215	11
125439	GPO-3 red	5	1220 × 1215	13.75
125440	GPO-3 red	6	1220 × 1215	16.5
125441	GPO-3 red	8	1220 × 1215	22
125448	GPO-3 red	4	1220 × 2440	22
125449	GPO-3 red	5	1220 × 2440	28.3
125450	GPO-3 red	6	1220 × 2440	33.9
125451	GPO-3 red	8	1220 × 2440	45.2

How to contact BEVI

Contact details for all countries are continually updated on our website. Please visit www.bevi.com to access the information direct.

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