HGW 2088 phenolic bakelite rods



Round rods made of woven bakelite HGW 2088 consist of a base of cotton cloth fabric layers impregnated with phenolic resin. The material can be used for applications up to 120°C. A coreless roll of the material is wound in several layers up to the desired dimension and subsequently cured under high temperature and high mechanical pressure to provide it with unique rigidity and tensile strength properties. A material displaying excellent durability and weatherability. Typical applications include insulation of low voltage machines and installations where high mechanical strength is required as well machined parts in various executions. Compliant with: DIN 7735-2 / NEMA – HGW 2088, IEC – PF CC 42

Typical applications

HGW 2088 rods are used widely across a range of applications, primarily where high mechanical resistance properties are required. Typical applications include insulation of low voltage machines, installations and equipment as well as machined parts in various executions.

The material is often used for bushings, guide rings for hydraulic, gliding bearings, etc. HGW 2088 rods are highly suitable for use when thermoplastics cannot handle the high pressure that the application requires.

The material may be lubricated with water, oil or grease if necessary. Lubricant compatibility with HGW 2088 should be verified with the supplier of the relevant lubricant.

Properties

- Good mechanical properties
- High wear resistance
- Good resistance to water, oils and greases as lubricants
- Very good weatherability and resistance against salt water
- Heat resistance at 120°C
- Good chemical resistance
- Good machining properties
- Good temperature properties

Composition

Consists of woven cotton cloth fabric laminated with a phenolic resin that is coreless wound around a rod and subsequently cured under high temperature and high mechanical pressure in accordance with defined industrial standards.

Colour

Brown

Dimensions

- Diameter range 6-200 mm
- Standard length 1000 mm

Rods cut and machined according to specification are available on request, readily milled, lathed or drilled

Packaging

• Usually non stock order item.

Technical data

Rods comply with standard: HGW 2088

Properties	Value	Unit
Mechanical		
Density	1.3 - 1.42	g/cm³
Flexural strength	100	N/mm²
Compressive strength	100	N/mm²
Tensile strength	50	N/mm²
Thermal		
Thermal endurance (Temperature Index)	120	T.I
Electrical		
Dielectric strength at 90°C in oil parallel diam. 20 mm (min)	10	kV
Insulation resistance	10	ΜΩ

access the information direct.

