

Date Generated: Monday 22nd of June 2026

B12S Product Data Sheet

B12S Medium Weave Treated Phenolic Cotton Laminate SRBF

Material Details

Grade:	B12S
Description:	Phenolic Cotton. B12S, treated cotton for higher temp & electricals
Comments:	Medium weave cotton phenolic laminate with very good mechanical and electrical properties. Suitable for packing blocks in large rotating machines, water lubricated bearings, pump rotor vanes. Very dimensionally stable under adverse conditions.
Specifications:	The closest NEMA equivalent to this specification is Nema CE & LE
Body Colour:	Sandy Brown
Cover Colour:	Sandy Brown
Finish:	Satin/Glossy
Size:	1220 x 1220 Thickness Range: 0.8 - 150.0

Typical Applications

- Chemical Resistance Components
- Cryogenic Resistance Components
- Gears - Coarse Tooth
- Gears - Medium Tooth
- Jigs and Fixtures
- Piston Rings
- Pump Sleeve Bearings
- Rolling Mill Bearings
- Scraper Blades
- Seal Rings
- Slideways
- Ventilation Louvre Bearing Brushes
- Water Lubricated Bearings
- Wear Resistant Components

General Properties

Property	Unit of measure	Typical Value
Density	g/cm ³	1.35
Water Absorption	mg	120 mg

¥ Where relevant, the flammability test method is used solely to control and monitor consistency of production. Under no conditions should the results be considered in relation to fire hazards under actual conditions of use.

Electrical Properties

Property	Unit of measure	Typical Value
IR (24hrs Water Immersed)	G Ω	0.8
IR (Dry)	G Ω	0.8
Electric Strength (Flat Rapid)	MV/m	4
Breakdown Voltage (Edge Step by Step)	kV	32
Tracking Index	V	155

Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	110
Tensile Strength	MPa	75
Impact (Notched CHARPY)	kJ/m ²	8.5

Thermal Properties

Property	Unit of measure	Typical Value
Thermal Rating Continuous	°C	115
Thermal Rating Intermittent	°C	125

Disclaimer: The above values are based upon routine test data and do not form the basis of a supply contract. These products may be used in a diverse range of applications and whilst every effort is made to ensure the information in this data sheet is accurate, it must be stressed that it is the user's responsibility to ensure suitability for the intended end use.

Source: <https://www.attwater.com/products/b12s/>