

## F1 Very Fine Weave Phenolic Cotton Laminate

### Material Details

<b>Grade:</b>	F1
<b>Description:</b>	Phenolic Cotton. Very Fine Weave
<b>Comments:</b>	Very fine weave cotton phenolic laminate with good electrical and mechanical properties. Can be machined to a very fine finish. Suitable for instrument gears and other intricate machined components. Manufactured to comply with types BSEN60893-3-4-PFCC305
<b>Specifications:</b>	The closest NEMA equivalent to this specification is NEMA L
<b>Body Colour:</b>	Sandy Brown
<b>Cover Colour:</b>	Sandy Brown
<b>Finish:</b>	Satin/Glossy
<b>Size:</b>	2440 x 1220mm, 1220mm x 1220mm Thickness Range: 0.8 - 260.00mm

### Typical Applications

- Ball Race Cages
- Bolts and Screws
- Busbar Supports
- Cams and Camfollowers
- Conveyor Wheels
- Cryogenic Resistance Components
- Gasket Manufacture
- Gears - Fine Tooth
- High Performance Aerospace Components
- Insulating Bushes Spacers Sleeves
- Piston Rings
- Precision Machined Parts
- Pulleys and Sheaves
- Punched Components
- Rotor Blades (compressor)
- Scraper Blades
- Seal Rings
- Wear Resistant Components

### General Properties

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

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 $\Omega$	0.2
IR (Dry)	G $\Omega$	0.2
Electric Strength (Flat Rapid)	MV/m	4
Breakdown Voltage (Edge Step by Step)	kV	24
Tracking Index	V	110

### Mechanical Properties

Property	Unit of measure	Typical Value
Flexural Strength	MPa	140
Tensile Strength	MPa	85
Impact (Notched CHARPY)	kJ/m <sup>2</sup>	9

### 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.