Ferotec Friction Ltd

D3867 Product Data Sheet

General Description

D3867 is a closely woven, semi-flexible friction material. It is based on yarn spun from a blend of glass and synthetic fibres together with a fine copper wire to enhance its strength and heat dissipation properties. The impregnant has been specially developed to give it good frictional properties combined with a good degree of flexibility. It has a high coefficient of friction and performs well in wet and damp environments which makes it particularly suited for marine applications. To help during fitting to brake shoes and bands it can be softened and made more pliable by warming in a bonding oven to between 150 & 180°C for sufficient time for the heat to penetrate the fabric. This material is not suited to operate in oil-immersed conditions

Applications

Industrial drum and band-brakes
Industrial clutches
Marine mooring & towing winches
Miscellaneous industrial devices

Bonding

D3867 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive.

Mating Surface

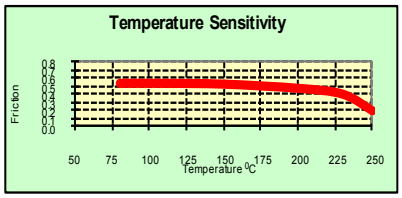
A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

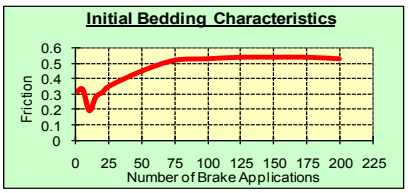
Availability

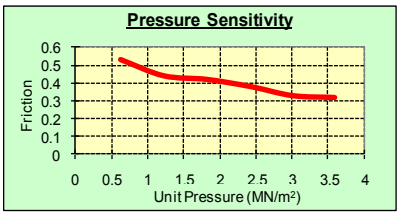
- Sheet size 1000mm x 660mm x 3.2 up to 12.7mm thick
- Roll

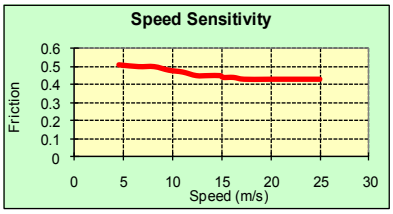
Length	7.5M
Maximum width	510mm
Thickness range	3.2mm to 20.0mm

- Special shapes on request









TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.43
	Dynamic	0.42

Recommended Operating Range

Pressure	Dynamic	0.10—1.00 MPa
	Static	0.10—2.50 MPa
Max. rubbing speed	25 m/s	
Max. continuous temperature	140°C	
Max. intermittent temperature	180°C	
Max. temperature	200°C	

Test Conditions

Application Speed	15m/s
Clamping pressure	0.61 MN/m³ (88.5 ibf/in²)
Average temperature	Initial Bedding 140°C
Average temperature	Pressure Sensitivity / Speed Sensitivity 80°C

PHYSICAL PROPERTIES

Density	1.06 - 1.20 g/cc	
Ultimate tensile strength	47 - 75 MPa	
Ultimate compressive strength	100 - 155 MPa	
Resistance to compression (Test thickness 9.5mm)	2.5%	3.3 MPa
	5.0%	6.8 MPa
	7.5%	9.7 MPa
Ultimate shear strength	13 - 25 MPa	
Rivet holding capacity	61-100 MPa	

(All physical properties shown above are all mean values)

The information supplied in this data sheet is believed to be accurate and reliable, and was obtained by scientific and laboratory testing. However, since actual conditions of use are largely outside the control of FEROTEC FRICTION LIMITED, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.

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