Ferotec Friction Ltd

D3923 Product Data Sheet

General Description

D3923 is one of the Ferotec range of non-asbestos friction materials. It is a flexible, semi-cured, moulded product and is manufactured from a variety of mineral fibres and other non-metallic substances in random dispersion. D3923 has a marginally lower friction coefficient when compared with D3915 but has been developed to retain its excellent friction stability and wear resistant properties. This material is also ground on both surfaces during manufacture and is therefore suitable for bonding on either side. As supplied, D3923 is sufficiently flexible to make fitting to curved metal parts a relatively simple operation, after which the heat generated in service will increase its strength and stiffness. Alternatively, D3923 can be heat treated in an oven at a temperature of between 200 & 230°C for a period of not less than 60 minutes, either before or after fitting. If supplied in the fully heat treated form (fully cured) it is known by the reference D3924 D3923 is not suitable for operating in oil.

Applications

Automotive rear brake shoes
Industrial drum and band-brake
Crane and excavator brake and clutch linings
Miscellaneous industrial devices

Bonding

D3923 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

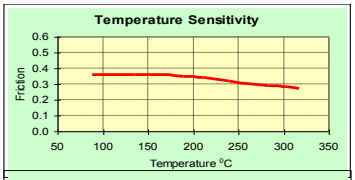
A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

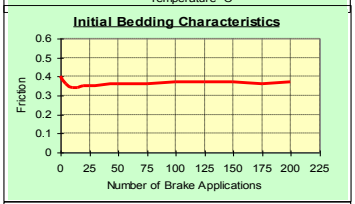
Availability

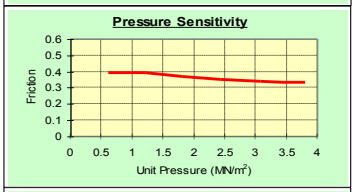
- Roll

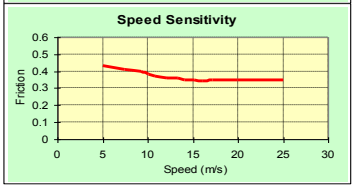
Length	5M
Width	20 to 330mm
Thickness range	3.2mm to 10.0mm

- Sheet size 710mm x 330mm x 3.2 up to 10.0mm thick
- Special shapes and discs on request









TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.32
	Dynamic	0.35

Recommended Operating Range

Pressure	Dynamic	70-860 kN/m²
	Static	70-2,410 kN/m²
Max. rubbing speed	25 m/s	
Max. continuous temperature	150°C	
Max. intermittent temperature	225°C	
Max. temperature	325°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	1.98 g/cc
Ultimate tensile strength	4.1.0 MN/m² (595 ibf/in²)
Ultimate compressive strength	31.0 MN/m² (4,500 ibf/in²)
Ultimate shear strength	3.1 MN/m² (450 ibf/in²)
Hardness (Shore D)	50 +/-5

(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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