



FTL135

FTL 135 is a rigid moulded friction material having a non-asbestos base. It is grey in colour and incorporates a blend of selected friction modifying agents. This complex matrix of ingredients is consolidated with a specially developed binder system.

FTL 135 has a high friction coefficient, which is combined with an excellent resistance to fade and wear. Its high performance characteristics are particularly suited to severe duty applications.

This material although not intended to operate in oil is not physically damaged by moderate oil contamination

APPLICATIONS

Industrial disc brakes
Disc brakes for off-highway equipment
Miscellaneous industrial devices

BONDING

FTL 135 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.

N.B. Care should be taken to ensure that the temperature to which the material is to be subjected does not exceed the recommendations of the adhesive manufacturer.

MATTING SURFACE

A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 200. Cast steels are not recommended.

FRICTION

μ for design purposes:
Static (cold) 0.38
Dynamic 0.42

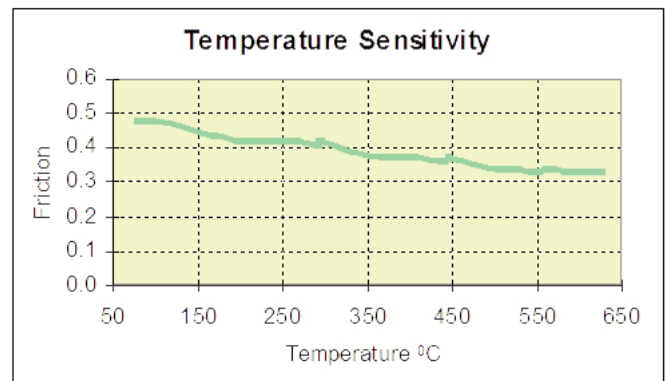
RECOMMENDED OPERATING RANGE

Pressure
Dynamic 0.35 - 5.2 MN/m² (50 - 750 lbf/in²)

Max. rubbing speed 25 m/s (82 ft/s)
Max. continuous temperature 225 0C
Max. intermittent temperature 400 0C
Max. temperature 650 0C

AVAILABILITY

Although primarily manufactured in the form of pads for disc brakes, integrally moulded onto steel backplates, the company can also supply this material in rectangular block and sheet form for machining into special shapes. Sizes are available on request.





FTL135

TEST CONDITIONS

Application speed 20 m/s
Clamping pressure 1.22 MN/m² (177 lbf/in²)
Temperatures ranging from 50 to 6000C in steps of 250C

INITIAL BEDDING

Application speed 15 m/s
Clamping pressure 1.22 MN/m² (177 lbf/in²)
Average Temperature 1500C

PRESSURE SENSITIVITY

Application speed 15 m/s
Average temperature 800C

SPEED SENSITIVITY

Clamping pressure 1.22 MN/m² (177 lbf/in²)
Average temperature 1500C

PHYSICAL PROPERTIES

Density 3.00 g/cc
Ultimate compressive strength 60.31 MN/m² (8,750 lbf/in²)
Ultimate shear strength 9.8 MN/m² (1,421 lbf/in²)
Thermal conductivity 1.4 W/m 0C
Gogan hardness 21

(All the physical properties shown above are all mean values)

