

FTL129

✓ General description:

FTL129 is a closely woven, semi flexible friction material. It is 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 good frictional properties alongside 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.

The material is not suited to operate in oil-immersed conditions.

✓ Application:

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

✓ Bonding:

FTL129 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 200. Cast steels are not recommended

✓ Recommended Operation Range:

| | |
|-------------------------------|-----------------------------|
| Pressure | |
| Dynamic (dry) | 70 - 860 kN/m ² |
| Static | 70 - 2410 kN/m ² |
| Max. rubbing speed | 25 m/s |
| Max. continuous temperature | 110 °C |
| Max. intermittent temperature | 180 °C |
| Max. temperature | 225 °C |

✓ Availability

Sheets

1067 long x 660 mm wide
Thickness range: 4.8 to 12.7mm

Roll

Lengths: 10 metres (nominal) x 15mm thick
7.5 metres (nominal) x 15 mm thick & above
Maximum width: 330mm x 15mm thick
510mm x 15mm thick & above
Thickness range: 3.2 to 20.0mm

Lining & Discs

Sizes on application.

✓ Technical Data

| | |
|-------------------------------------|------------------------|
| Static Friction Coefficient | 0.45 |
| Dynamic Friction Coefficient | 0.42 |
| Density | 1.2g/cm ³ |
| Tensile Strength | 24 N/mm ² |
| Compressive Strength | 100 N/mm ² |
| Shear Strength | 17.2 N/mm ² |
| Rivet Holding Capacity | 61.8 N/mm ² |
| Thermal Conductivity | 0.79 W/m°C |

✓ Test Conditions

Temperature Sensitivity

Application speed 15 m/s
Clamping pressure 0.61 MN/m²
Temperatures ranging from 50 to 350°C in steps of 25°C

Initial Bedding

Application speed 15 m/s
Clamping pressure 0.61 MN/m²
Average Temperature 140°C

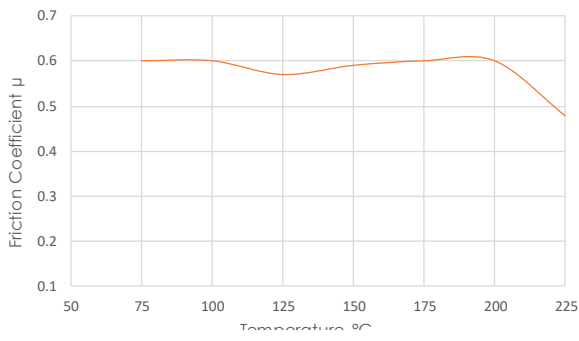
Pressure Sensitivity

Application speed 15 m/s
Average temperature 80°C

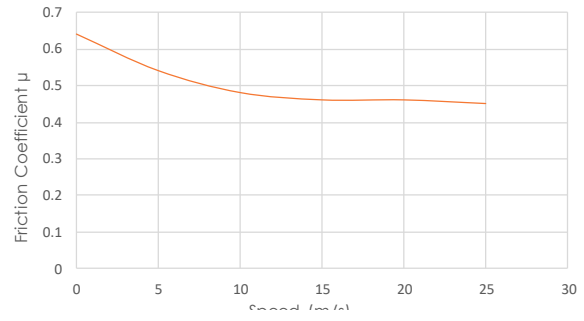
Speed Sensitivity

Clamping pressure 0.61 MN/m²
Average temperature 80°C

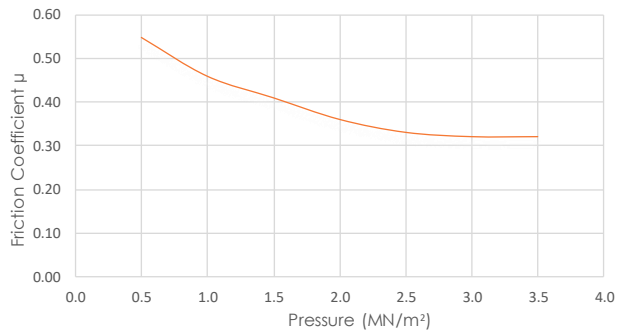
Temperature Sensitivity



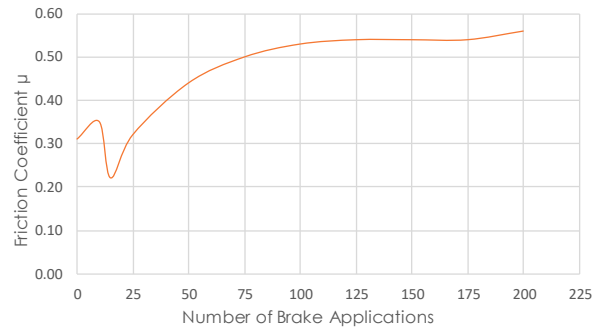
Speed Sensitivity



Pressure Sensitivity



Initial Bedding Characteristics



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