

FTL178

✓ **General description:**

FTL178 has been developed to produce a low wearing material suited to constant operation.

Having relatively high graphite content, not only the difference between dynamic and static friction coefficient is reduced, but also its operational noise level.

✓ **Application:**

FTL178 is suitable for:
 Industrial Clutches
 Friction Washers
 Gear Discs for Industrial Devices

✓ **Bonding:**

FTL178 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. The material is supplied ground on both surfaces, and so can be bonded on either surface without any preparation providing it is kept clean.

✓ **Mating Surface**

A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness between 150 - 200. Cast steels are not recommended.

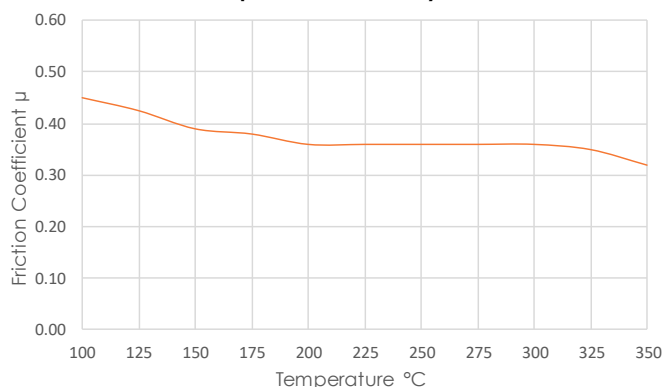
✓ **Recommended Operation Range:**

Max. continuous temperature 250 °C
 Max. intermittent temperature 350 °C

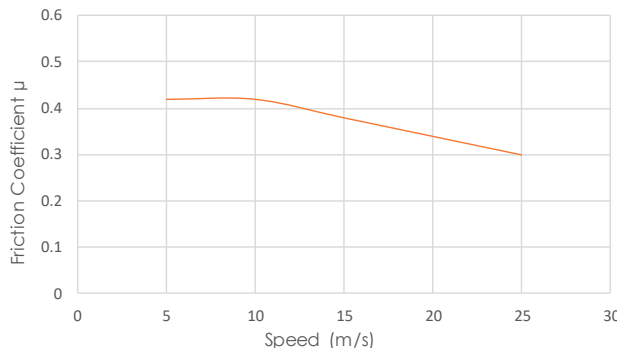
✓ **Technical Data**

Static Friction Coefficient (15bar, 20°C)	0.46
Static Friction Coefficient (15bar, 100°C)	0.52
Dynamic Friction Coefficient (10bar, 10m/s)	0.47
Density	1.78 g/cm ³
Tensile Strength (ASTM D638)	16N/mm ²
Compressive Strength (UNE 53205)	143N/mm ²
Shear resistance (ISO 6315:2001)	21N/mm ²
Young Modulus (ASTMD 638-10)	38890 N/mm ²
Poisson Coefficient:	0.29
Hardness (Shore - D)	87
Wear Rate (10bar, 15m/s)	123mm ³ /Kwh
Fading temperature (10bar, 10m/s)	>350 °C
Thermal Conductivity (ASTM E-1952-01)	0.43W/m ² K

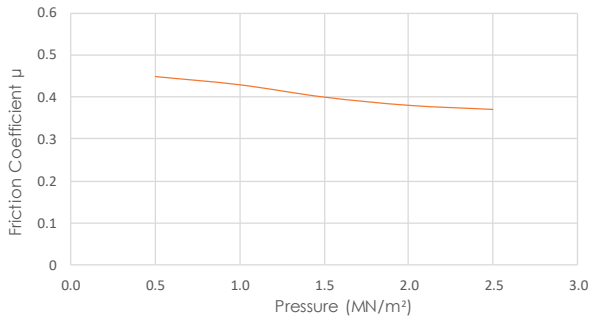
Temperature Sensitivity



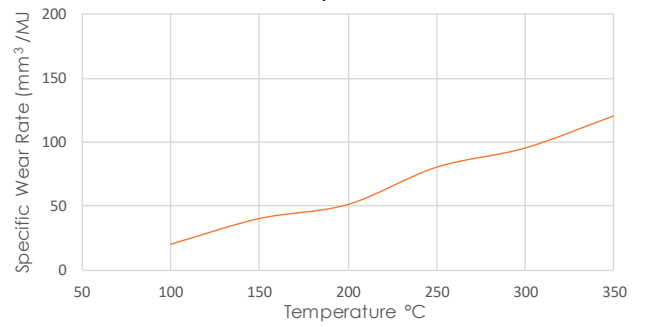
Speed Sensitivity



Pressure Sensitivity



Wear vs Temperature



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.