

# FTL207

## ✓ General description:

**FTL207** is a medium coefficient carbon composite friction material which is bonded on to an optional glass fibre reinforced supporting layer. The glass-fibre reinforced supporting layer provides higher load capacity and strength

The friction layer contains a combination of different solid lubricants fibres and fillers which offers smooth operation and guarantees a noise free solution.

**FTL207** has a low rate of wear and a consistent coefficient of friction across a range of operating pressures.

## ✓ Application:

**FTL207** has been specifically formulated and optimised for use in wind turbine yaw systems.

## ✓ Wear Rate:

**FTL207** offers excellent wear when compared to standard moulded organic friction material. The wear rate can vary depending on braking force, sliding speed, sliding distance, frequency of movement, hardness & surface finish of the mating material. Environmental conditions should also be taken in to consideration.

## ✓ Mating surface:

A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 160.

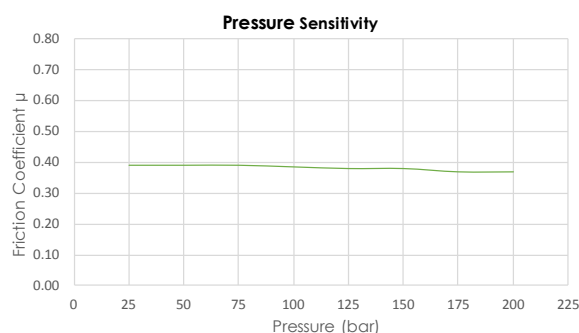
## ✓ Operation:

Sliding movement between the friction material and the mating surface will cause a micro-wear process to occur. This involves solid lubricants from sliding material being released onto the surface of the brake disc or brake rotor.

The micro-wear process builds up a separating layer of material which ensures smooth operation. This prevents the stick-slip effect often seen with standard organic type friction materials.

## ✓ Technical Data:

|                                     |                         |
|-------------------------------------|-------------------------|
| <b>Friction Coefficient</b>         | 0.30-0.40               |
| <b>Density (carbon composite)</b>   | 1.35 g/cm <sup>3</sup>  |
| <b>Max. Dynamic Load</b>            | 25 N/mm <sup>2</sup>    |
| <b>Max. Static Load</b>             | 50 N/mm <sup>2</sup>    |
| <b>Wear Rate</b>                    | 10 mm <sup>3</sup> /kWh |
| <b>Hardness of Counter Material</b> | >160HB                  |
| <b>Roughness Counter Surface</b>    | <3.2µm                  |
| <b>Max. Sliding Velocity</b>        | 15 mm/s                 |
| <b>Temperature Range</b>            | -40 to 140 °C           |



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 Friction Technology Ltd, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.