

# C5050

WOVEN CARBON FRICTION MATERIAL

## Material Description

**C5050™** has carbon fibre rovings that are entwined into a plain weave pattern and reinforced with a unique resin binder. Carbon fibres provide excellent heat resistance and superior heat dissipation.

- Stable coefficient of friction over speed and pressure
- Close relationship between static to dynamic coefficient of friction giving smooth engagement & quiet operation
- Excellent energy capability
- Good wear resistance

## Typical Applications

- High load differentials & clutches

## Average Friction Coefficient (wet)

- Static: 0.095 - 0.105
- Dynamic: 0.090 - 0.105

## Mating Material

- Surface finish < 0.5µm Ra (20µ")
- Steel

## Recommended Max Load

- Dynamic pressure: 6 N/mm<sup>2</sup> (870 Lbf/in<sup>2</sup>)
- Rubbing speed: 17 m/s (56 Ft/sec)
- Specific power: 4.0 W/mm<sup>2</sup> (3.40 HP/in<sup>2</sup>)

## Oil Grooving

- Segmented

## Dimensions

- Friction thickness: 0.54mm (0.021")
- Friction diameter: Non Segmented 200mm (8")

The above data is taken from specific test parameters therefore results can vary in different application conditions

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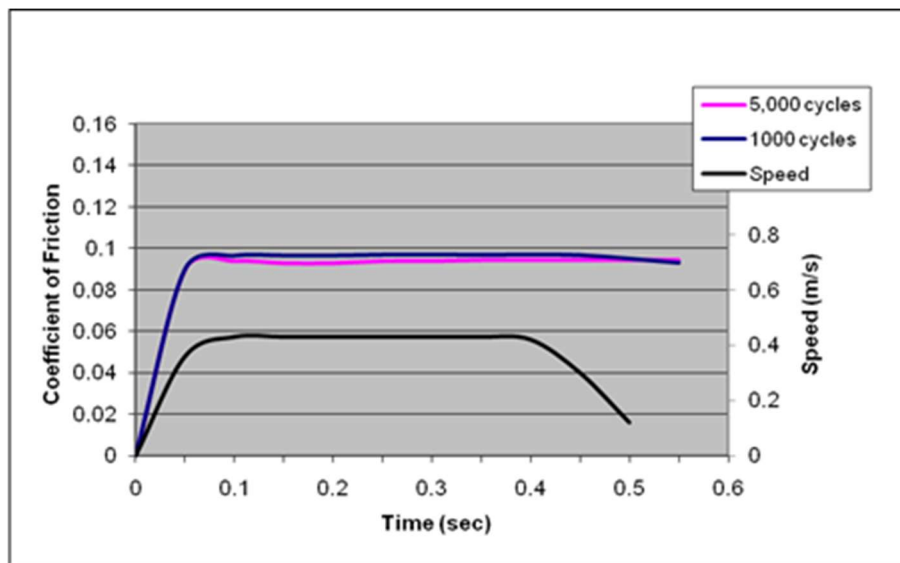
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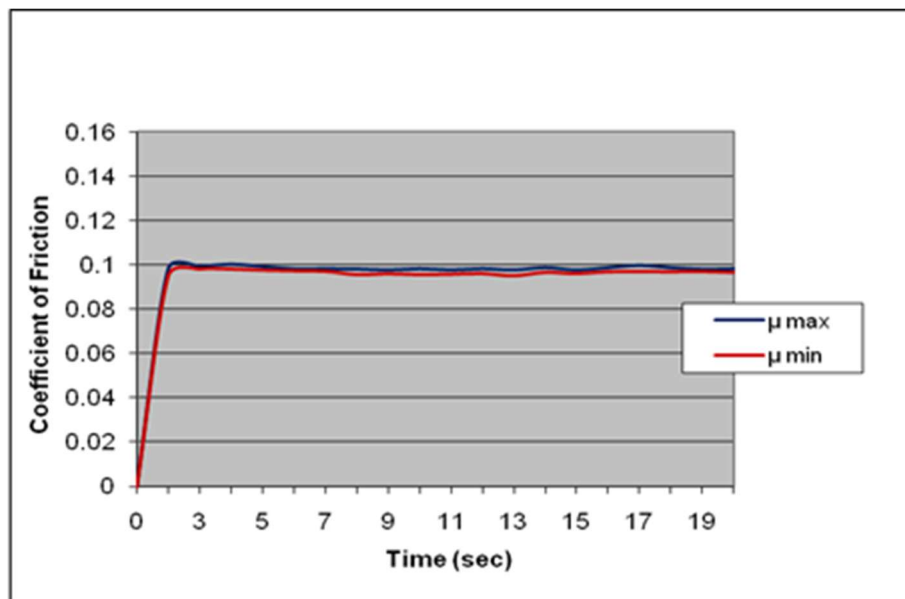


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**Torque Trace**



**NVH CHARACTERISTIC  $\mu$ MAX &  $\mu$ MIN**

Unit pressure	5.0 MPa
Friction facing dimensions	Ø133.5mm × Ø99.0mm
Spec. Energy	0.74J/mm <sup>2</sup>
Slip time	5.00 s
Oil type	SAE 80W-90
Oil Temperature	80°C +/- 5°C
Rubbing speed	0.5 m/s

**Test Conditions**

DATA SHEET