

# R001

ELASTOMER

## Material Description

**R001** is a rubber based friction material. This is a flexible but resilient material providing high mechanical fatigue resistance and a stable coefficient of friction.

- Good thermal stability
- Stable coefficient of friction
- Excellent engagement characteristics
- Good wear resistance

## Typical Applications

- Swing & travel brakes
- Powershift transmissions

## Average Friction Coefficient (wet)

- Static: 0.10 - 0.15
- Dynamic: 0.09 - 0.12

## Mating Material

- Surface finish < 0.5 $\mu$ m Ra (20 $\mu$ "
- Steel
- Cast steel
- Grey cast iron

## Recommended Max Load

- Dynamic pressure: 2.0 N/mm<sup>2</sup> (290 Lbf/in<sup>2</sup>)
- Rubbing speed: 35 m/s (115 Ft/sec)
- Specific power: 4.0 W/mm<sup>2</sup> (3.4 HP/in<sup>2</sup>)

## Oil Grooving

- Multi-pass groove patterns in variety of configurations
- Grooves are pressed

## Dimensions

- Friction thickness: Max 1.2 mm (0.047") to Min 0.60 mm (0.024")
- Friction diameter: Max 750 mm (29")

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

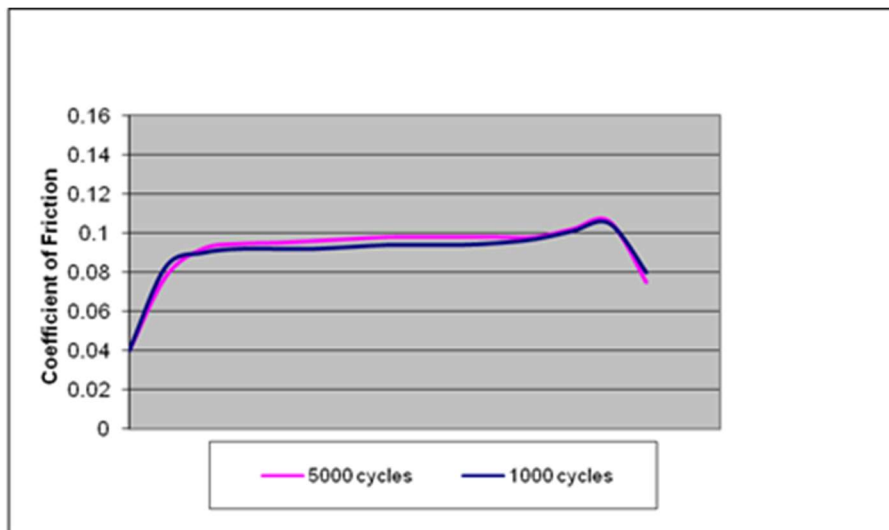
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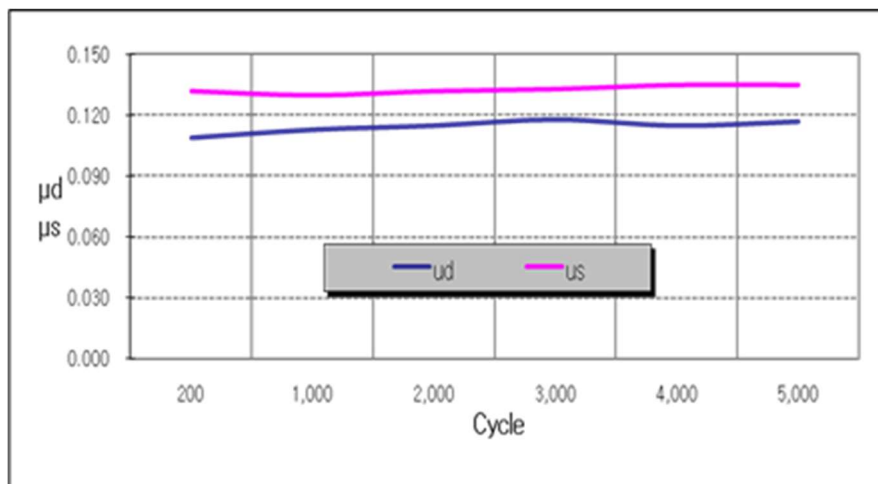
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DATA SHEET



**Torque Trace**



**Change of Dynamic Coefficient of Friction**

Total cycles	5,000 cycles
Dynamic rpm	5000
Friction facing dimensions	Ø160.0mm × Ø120.0mm
Friction surfaces	4
Unit energy	0.61J/mm <sup>2</sup>
Unit pressure	2.0 Mpa
Oil type	Dexron III
Oil temperature	120°C (±5°C)
Oil Volume	4cc/min cm <sup>2</sup>
Arrangement	pDpDp

**Test Conditions**