**Material Description**

**P204** has an enhanced structure designed to provide superior energy capability, good engagement characteristic, low wear and long service life.

- Low ratio of static to dynamic coefficient of friction for enhanced engagement characteristics
- Smooth engagement
- Excellent energy capability
- Good wear resistance

**Typical Applications**

- Wheel brakes
- Transmissions
- Power shift and power take off transmissions

**Friction Coefficient (wet)**

- Static: 0.13 - 0.16
- Dynamic: 0.11 - 0.14

**Recommended Load**

- Max dynamic pressure: 3.2 N/mm² (464 Lbf/in²)
- Max rubbing speed: 45 m/s (148 Ft/sec)
- Max specific power: 4.0 W/mm² (3.4 HP/in²)

**Mating Material**

- Surface finish < 0.5μm Ra (20μ”)
- Steel
- Cast steel
- Grey cast iron

**Oil Grooving**

- Multi-pass tangential groove patterns in variety of configurations
- Grooves can either be pressed or machined

**Dimensions**

- Friction thickness: 1.5 mm (0.060”) max
  0.40 mm (0.016”) min
- Friction diameter: 1,000 mm (39”) max
  50 mm (2”) min

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

**Graph 1: Torque Trace**

- 1000 cycle
- 5000 cycle
- Speed

**Graph 2: Change of Dynamic Coefficient of Friction**

- $u_d$
- $u_d$

**Table: Test Condition**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cycles</td>
<td>5,000 cycles</td>
</tr>
<tr>
<td>Inertia</td>
<td>0.04 kgf-m-sec^2</td>
</tr>
<tr>
<td>Dynamic rpm</td>
<td>2940</td>
</tr>
<tr>
<td>Friction facing dimensions</td>
<td>Ø133.5mm × Ø99.0mm</td>
</tr>
<tr>
<td>Friction surfaces</td>
<td>4</td>
</tr>
<tr>
<td>Unit energy</td>
<td>0.74J/d</td>
</tr>
<tr>
<td>Unit pressure</td>
<td>2.0 Mpa</td>
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<tr>
<td>Oil type</td>
<td>Tractor oil</td>
</tr>
<tr>
<td>Oil temperature</td>
<td>80°C (±5°C)</td>
</tr>
<tr>
<td>Arrangement</td>
<td>pDpDp</td>
</tr>
</tbody>
</table>