**Rotary Damper**

FRT-G2 Series

- Fixed Type
- Bi-Directional
- Uni-Directional
- Adjustable type
- Self-adjusting
- RoHS Compliant

- Products specification might be changed without notice.

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**Specifications**

<table>
<thead>
<tr>
<th>Model</th>
<th>Rated torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRT-G2-200(G+)</td>
<td>(2.5±0.7)×10⁻⁶ N·m</td>
</tr>
<tr>
<td></td>
<td>20±2 g·cm</td>
</tr>
<tr>
<td>FRT-G2-300(G+)</td>
<td>(3.3±0.8)×10⁻⁶ N·m</td>
</tr>
<tr>
<td></td>
<td>30±2 g·cm</td>
</tr>
<tr>
<td>FRT-G2-400(G+)</td>
<td>(4.5±1)×10⁻⁶ N·m</td>
</tr>
<tr>
<td></td>
<td>45±10 g·cm</td>
</tr>
<tr>
<td>FRT-G2-600(G+)</td>
<td>(6.2±1)×10⁻⁶ N·m</td>
</tr>
<tr>
<td></td>
<td>60±1 g·cm</td>
</tr>
<tr>
<td>FRT-G2-101(G+)</td>
<td>(10±2)×10⁻⁶ N·m</td>
</tr>
<tr>
<td></td>
<td>100±20 g·cm</td>
</tr>
</tbody>
</table>

- Max. rotation speed: 50rpm
- Max. cycle rate: 10 cycle/min
- Operating temperature: 0~50°C
- Weight: 0.6g (with gear: G1: 0.8g, G2: 1.0g, G3: 0.9g)
- Body and cap material: Polycarbonate (PC)
- Rotating shaft material: Polyacetal (POM)
- Gear material: Polyacetal (POM)
- Oil type: Silicone oil

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**Gear Specifications**

- Type: Standard spur gear, Profile shifted spur gear, Standard spur gear
- Module: 0.5, 1.0, 0.8
- Pressure angle: 20°
- Number of teeth: 14, 10, 11
- Pitch circle diameter: φ7, φ10, φ8.8
- Addendum modification: —, +0.375, —

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**Damper Characteristics**

1. Speed characteristics
   A rotary damper’s torque varies according to the rotation speed. In general, as shown in the graph to the right, the torque increases as the rotation speed increases, and the torque decreases as the rotation speed decreases. In addition, please note that the starting torque slightly differs from the rated torque.

2. Temperature characteristics
   A rotary damper’s torque varies according to the ambient temperature. In addition, as shown in the graph to the right, the torque decreases as the ambient temperature increases, and the torque increases as the ambient temperature decreases. This is because the viscosity of the silicone oil inside the damper varies according to the temperature. When the temperature returns to normal, the torque will return to normal as well.