RIMOSTAT®-Torque Limiters RSHD
for heavy-duty applications

Features

• Better stability of slipping torque than Belleville spring torque limiters over duration of the operating period
• Adjustment of slipping torque setting according to the number of active springs – not through modification of spring pressure
• Superb wear-behaviour during high energy consumption
• High temperature resistant
• Nickel free friction pads

The RIMOSTAT® Principle

The contact pressure on the friction surfaces is produced by long coil springs. Because of the RIMOSTAT® Torque Limiter’s linear, flat-angle characteristic of the pressure force, practically no reduction of the slipping torque occurs even when friction linings are subjected to wear. As the diagram 68-3 shows, compared with Belleville spring torque limiters, assuming a friction wear of Δf the reduction of the slipping torque ΔM is negligible.

Function

• When the preset slipping torque has been reached the built-in component (e.g. v-belt pulley) slips.
• During the slipping process, input and output rotate relative to each other and the preset slipping torque continues to be transmitted.
• Inherent in the slipping process is a high energy consumption.
• Re-engagement is not necessary.
• No wear adjustment required due to coil springs.
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Technical Data and Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>Slipping torque</th>
<th>Max. speed¹</th>
<th>Bore²</th>
<th>A</th>
<th>Bx³</th>
<th>C³</th>
<th>D</th>
<th>E³</th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSHD 205</td>
<td>300 - 3 000</td>
<td>2 700</td>
<td>50</td>
<td>90</td>
<td>29,9</td>
<td>28,2</td>
<td>125</td>
<td>205</td>
<td>131</td>
<td>160</td>
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<tr>
<td>RSHD 250</td>
<td>1 200 - 6 000</td>
<td>2 100</td>
<td>55</td>
<td>115</td>
<td>36,9</td>
<td>35,2</td>
<td>160</td>
<td>250</td>
<td>166</td>
<td>185</td>
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<tr>
<td>RSHD 310</td>
<td>4 000 - 10 000</td>
<td>1 800</td>
<td>80</td>
<td>100</td>
<td>72,7</td>
<td>34,9</td>
<td>160</td>
<td>310</td>
<td>166</td>
<td>275</td>
</tr>
<tr>
<td>RSHD 400</td>
<td>8 000 - 22 000</td>
<td>1 500</td>
<td>130</td>
<td>140</td>
<td>77,9</td>
<td>63,0</td>
<td>250</td>
<td>400</td>
<td>256</td>
<td>313</td>
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<tr>
<td>RSHD 600</td>
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<td>1 000</td>
<td>150</td>
<td>300</td>
<td>77,9</td>
<td>63,0</td>
<td>450</td>
<td>600</td>
<td>460</td>
<td>313</td>
</tr>
</tbody>
</table>

¹ The max. speed relates to the dimensional stability of the Torque Limiter.
² Further bores as well as internal spline available on request.
³ If the part to be coupled is used without bearing bush, the bore should be made to dimension C (tolerance F8).

Keyway as per DIN 6885, page 1; Tolerance of keyway width P9. Further sizes available on request.

Supply

The Torque Limiters are full complement of springs, without slipping torque setting and without bearing bush. A factory slipping torque preset is only possible with a mounted output element e.g. V-belt pulley.

Accessories

Torque Limiter RSHD is available with the following accessories:

- Bearing bush Bx
- V-belt pulley

Types (optional)

- Organic friction linings
- Internal spline

Example for ordering

Type RSHD 400 with standard bore 130 mm and preset slipping torque 8 000 Nm:

- RSHD 400-130-8 000