Ultra High-Speed Angular Contact Ball Bearings

NSKROBUST™ Series E Type

New NSKROBUST series which achieved higher heat-seizure resistance and longer life than conventional steel ball bearing, by adopting NSK’s original technology.

■ Features

Higher heat-seizure resistance and longer life

Newly developed steel ball: Ultra long life rolling element (EQTF™) enables higher heat-seizure resistance and longer life.
Feature of NSKROBUST Series  E Type

Higher heat-seizure resistance and longer life

Newly developed steel ball: Ultra long life rolling element (EQTF™) enables higher heat-seizure resistance and longer life. That contributes to even higher reliability, and expands feasible operating area of steel ball bearings.

Seizure Resistance Test Result

Test Condition

<table>
<thead>
<tr>
<th>Bearing Number</th>
<th>50BNR10 (DB Arrangement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling Condition</td>
<td>With Jacket Cooling 24°C Constant</td>
</tr>
<tr>
<td>Speed</td>
<td>1000min⁻¹ increase /20h</td>
</tr>
<tr>
<td>Preload Type</td>
<td>Position Preload</td>
</tr>
<tr>
<td>Preload After Mounting</td>
<td>1175N (4.7 times of M preload)</td>
</tr>
<tr>
<td>Lubrication</td>
<td>NSK MTE Grease</td>
</tr>
<tr>
<td>Grease Quantity</td>
<td>15% of bearing internal space (1.2g)</td>
</tr>
</tbody>
</table>

Test Bench Structure

Supporting Spindle  Torque Meter

Bearing Torque

Bearing number example:

Nominal bore diameter  Bearing type  Dimension Series  Material

Accuracy  Preload  Arrangement  Cage

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CAT. No.ESP-121026 2015 Z-10 Printed in Japan ©NSK Ltd. 2012