Super Slim Crossed Roller Bearings now available with mounting hole specification!

Slim design and easy mounting can reduce the size and weight of your equipment.

**CRBTF Structure and Features**

1. **Make your equipment more compact with this super slim design!**
   
   Mounting Holed Type Super Slim Crossed Roller Bearings have an ultra-slim 5 mm bearing width, made possible thanks to IKO’s technological expertise in miniature bearing production.

2. **Easy bolt-on mounting eliminates complex mounting procedures.**
   
   Mounting Holed Type Super Slim Crossed Roller Bearings can be mounted directly to the mounting surface. No housing or pressure plates required.

**What are Crossed Roller Bearings?**

IKO Crossed Roller Bearings are compact bearings with their rollers alternately crossed at right angles to each other between inner and outer rings. The orthogonal array of the rollers allows a single bearing to handle complex loads simultaneously from any direction, making mounting possible without worrying about load direction.

**Mounting**

The shoulder height diameters (d1 and D2) which are related to mounting must meet the values shown in the dimension tables.

When used with a housing, it is recommended to use a slight interference fit adjusted to the actual measured dimensions of the outer and inner ring. In addition, the depth of the housing bore is recommended to be equal to or larger than the bearing width.

Mounting Holed Type Super Slim Crossed Roller Bearings have a plug hole for inserting cylindrical rollers. When mounting the bearings, position the plug away from the maximum load. The plug is located by the pin on the side.

**Dimensions/Accuracy/Clearance**

- **Nominal bore diameter**
  - High
  - Low
  - Minimum
  - Maximum

- **Outside diameter deviation**
  - High
  - Low

- **Inner/outer ring width deviation**
  - High
  - Low

- **Radial and axial runout of assembled bearing inner ring**
  - Maximum
  - Minimum

- **Radial and axial runout of assembled bearing outer ring**
  - Maximum
  - Minimum

**Table 1. Dimensions**

<table>
<thead>
<tr>
<th>Shaft diameter</th>
<th>Identification number</th>
<th>Mass (Ref.)</th>
<th>Boundary dimensions mm</th>
<th>Identification number of bearing</th>
<th>Boundary dimensions mm</th>
<th>Mounting holes</th>
<th>Basic dynamic load rating</th>
<th>Basic static load rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>CRBTF 105 AT</td>
<td>46</td>
<td>10 43 5 0.15 16 6-M2.5 through</td>
<td>35</td>
<td>21.5 28 1 500</td>
<td>1 410</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>CRBTF 205 AT</td>
<td>68</td>
<td>20 53 5 0.15 28 6-M2.5 through</td>
<td>45</td>
<td>31.5 38 1 890</td>
<td>2 150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>CRBTF 305 AT</td>
<td>83</td>
<td>30 63 5 0.15 38 8-M2.5 through</td>
<td>55</td>
<td>41.5 47.5 2 140</td>
<td>2 750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>CRBTF 405 AT</td>
<td>103</td>
<td>40 73 5 0.15 46 8-M2.5 through</td>
<td>65</td>
<td>51.5 58 2 440</td>
<td>3 490</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Minimum allowable single value of chamfer dimension r. Remarks: 1. No oil hole is provided. 2. Provided with pre-packed grease.*

1N ≈ 0.102 kgf