Full Complement Cylindrical Roller Bearings

Rollway Product Info

WHY?
Full complement cylindrical roller bearings are capable of carrying higher radial loads than bearings that utilize a cage and roller design.

PRODUCT FEATURES:
- Full complement construction, no cage included
- Largest possible amount of rolling elements, so very high radial load carrying capacity, high rigidity and suitable for particularly compact designs
- The design of the outer ring facilitates a great amount of internal axial float capacity

APPLICATIONS:
- General machine industry
- Gear drives
- Rolling mills
- Crop shears

PRIMARY TYPES:
- Non locating bearings: only radial load carrying capacity
- Semi locating bearings: besides a high radial load carrying capacity, also a small axial load carrying capacity in one direction. This enables the bearing to locate a shaft unidirectional.
- Locating bearings: in addition to high radial load capacity also capable of carrying small axial load in both directions.

DIMENSIONS:

<table>
<thead>
<tr>
<th>Interchange code</th>
<th>Type</th>
<th>d (bore diameter) mm</th>
<th>D (outer diameter) mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>min</td>
<td>max</td>
</tr>
<tr>
<td>NCF SL 18</td>
<td>semi locating</td>
<td>20</td>
<td>670</td>
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<tr>
<td>NJG SL 19</td>
<td>semi locating</td>
<td>25</td>
<td>110</td>
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<td>NNF SL 04</td>
<td>locating</td>
<td>20</td>
<td>300</td>
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<td>NNC SL 01</td>
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<td>380</td>
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<tr>
<td>NNCF SL 18 50</td>
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<tr>
<td>NNCL SL 02</td>
<td>non locating</td>
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</tbody>
</table>
**SINGLE ROW: NCF**
- Single inner ring with two fixed flanges
- Single outer ring with one fixed flange
- On the flangeless side of the outer ring is a retaining ring inserted which keeps the bearing components together
- The retaining ring is for handling purposes only, it cannot be exposed to axial load
- Outer ring is located with a snap ring

**SINGLE ROW: NJG**
- Inner ring with one flange and one free side
- Single outer ring with two fixed flanges
- Special: Mainly for applications with very high radial load at low rotational speed
- Standard: self-retaining set of rollers so the rollers cannot fall out even if the inner ring is removed, which simplifies the assembly

**DOUBLE ROW: NNC**
- Inner ring with 3 fixed flanges
- Two outer rings with internal flange
- Oil groove and holes in outer ring

**DOUBLE ROW: NNF**
- 2 identical inner rings held together with metallic spring
- Single outer ring with a fixed central flange
- Oil groove and holes in both rings
- PP: sealed on both sides and lubricated
- 2NR: 2 snap rings

**DOUBLE ROW: NNCF**
- Inner ring with 3 fixed flanges
- Single outer ring with one fixed flange
- Outer ring located with one snap ring which keeps all bearing components together
- Oil groove and holes in outer ring

**DOUBLE ROW: NNCL**
- Inner ring with 3 fixed flanges
- Single outer ring with one fixed flange
- Outer ring located with a central snap ring to keep all bearing components together
- Oil groove and holes in outer ring
APPLICATION INFO: ROPE SHEAVES

A rope sheave is a pulley with a grooved wheel that holds a rope. Spinning inside the frame of the sheave, the grooved wheel allows the rope to move freely minimizing wear and abrasion. Application fields of rope sheaves are redirecting cables or lifting loads; they are often used in vessel cranes as shown in the picture.

What makes these bearings suited for rope sheaves:
- very high radial load carrying capacity
- high rigidity
- easy relubrication
- effective sealing
- suitable for particularly compact designs

Full complement cylindrical roller bearings are located here in the vessel crane.