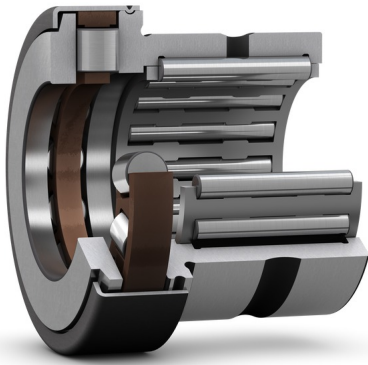


NKXR 45 ZCombined needle roller / cylindrical roller thrust bearing with a cover



Combined needle roller / cylindrical roller thrust bearing with a cover

These bearings consist of a radial needle roller bearing combined with a cylindrical roller thrust bearing. Together they can accommodate both radial loads and axial loads in one direction. Their low cross-sectional height makes the bearings particularly suitable for applications where other types of locating bearing arrangements occupy too much space. The thrust part is capped with a cover that forms a gap-type seal to retain the grease in the bearings.

- Accommodate radial and axial loads in one direction
- High load carrying capacity
- Low cross section
- Non-separable design

Overview

Dimensions

| | |
|------------------|-------|
| Bore diameter | 45 mm |
| Outside diameter | 58 mm |
| Width | 32 mm |

Performance

| | |
|-----------------|-------------|
| Reference speed | 2 200 r/min |
| Limiting speed | 4 500 r/min |

Properties

| | |
|-------------------------------|--------------------------------|
| Bearing part | Radial part without inner ring |
| Thrust part | With cage |
| Radial part | With cage |
| Axial load capability | Single-direction |
| Rolling element (thrust part) | Rollers |
| Tolerance class | Other |
| Material, | Bearing steel |

bearing

Coating

Without

Special
feature

Thrust part with stamped steel cover
without lubrication holes

Lubricant
(thrust
part)

Grease

Technical Specification

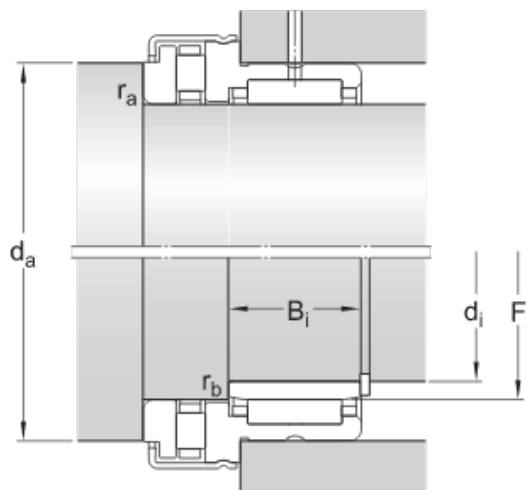


Dimensions

| | | |
|-----------|-------------|--|
| F_w | 45 mm | Diameter under rollers |
| D | 58 mm | Outside diameter |
| C | 32 mm | Width |
| C_1 | 14 mm | Width of thrust part |
| C_1 | 9 mm | Distance side face to lubrication hole |
| d | 45 mm | Bore diameter of thrust part |
| D_2 | 66.5 mm | Diameter of stamped steel cover |
| $r_{1,2}$ | min. 0.6 mm | Chamfer dimension |

Abutment dimensions

| | | |
|-------|--------------|--|
| d_a | min. 60.6 mm | Diameter of shaft abutment |
| r_a | max. 0.6 mm | Radius of fillet |
| r_b | max. 0.3 mm | Radius of fillet |
| d_i | 40 mm | Bore diameter of associated inner ring |
| F | 45 mm | Diameter of inner ring raceway |
| B_i | 20 mm | Width of associated inner ring |



Calculation data

| | | |
|-----------------------------------|-------|---------|
| Basic dynamic load rating, radial | C | 27.5 kN |
| Basic static load rating, radial | C_0 | 57 kN |
| Basic dynamic load rating, axial | C | 45 kN |
| Basic static load rating, axial | C_0 | 153 kN |
| Fatigue load limit, radial | P_u | 7.1 kN |
| Fatigue load limit, axial | P_u | 15.3 kN |
| Minimum axial load factor | A | 0.00187 |

| | |
|-----------------|-------------|
| Reference speed | 2 200 r/min |
| Limiting speed | 4 500 r/min |

Mass

| | |
|------|---------|
| Mass | 0.26 kg |
|------|---------|

Associated products

| | |
|------------|-------------|
| Inner ring | IR 40x45x20 |
|------------|-------------|

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