

## 81109 TN

Single row cylindrical roller thrust bearings are designed to accommodate heavy axial loads and peak loads in one direction, but not radial loads. They provide a high degree of stiffness and require little axial space. They are mainly used in applications where thrust ball bearings do not have sufficient load carrying capacity. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.



- High axial load carrying capacity
- High stiffness
- Long service life
- Require little axial space
- Separable design

### Dimensions

|                  |             |                                  |
|------------------|-------------|----------------------------------|
| d                | 45 mm       | Bore diameter                    |
| D                | 65 mm       | Outside diameter                 |
| H                | 14 mm       | Height                           |
| d <sub>1</sub>   | 65 mm       | Outside diameter shaft washer    |
| D <sub>1</sub>   | 47 mm       | Bore diameter housing washer     |
| B                | 4 mm        | Height shaft washer              |
| r <sub>1,2</sub> | min. 0.6 mm | Chamfer dimension housing washer |

### Abutment dimensions

|                |             |                           |
|----------------|-------------|---------------------------|
| d <sub>a</sub> | min. 63 mm  | Abutment diameter shaft   |
| D <sub>a</sub> | max. 47 mm  | Abutment diameter housing |
| r <sub>a</sub> | max. 0.6 mm | Fillet radius             |

### Calculation data

|                           |                |             |
|---------------------------|----------------|-------------|
| Basic dynamic load rating | C              | 45 kN       |
| Basic static load rating  | C <sub>0</sub> | 153 kN      |
| Fatigue load limit        | P <sub>u</sub> | 15.3 kN     |
| Reference speed           |                | 2 200 r/min |
| Limiting speed            |                | 4 500 r/min |
| Minimum axial load factor | A              | 0.00187     |

Included products

|                                 |            |
|---------------------------------|------------|
| Roller and cage thrust assembly | K 81109 TN |
| Shaft washer                    | WS 81109   |
| Housing washer                  | GS 81109   |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table, table, values

DESIGN CONSIDERATIONS

- table

BEARING INTERFACES

- Seat tolerances for standard conditions