## 81220 TN





### Single row cylindrical roller thrust bearing, single direction

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

### Overview

### **Dimensions**

Bore diameter	100 mm
Outside diameter	150 mm
Height	38 mm

#### Performance

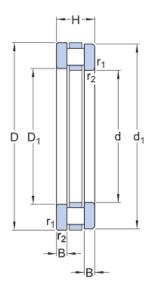
Basic dynamic load rating	270 kN
Basic static load rating	1 060 kN
Reference speed	900 r/min
Limiting speed	1 800 r/min

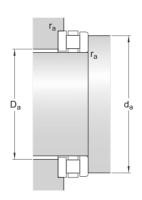
### **Properties**

Bearing part	Complete bearing
Axial load capability	Single-direction
Number of rows	1
Cage	Non-metallic
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without



# Technical Specification





### Dimensions

d	100 mm	Bore diameter
D	150 mm	Outside diameter
Н	38 mm	Height
$d_1$	150 mm	Outside diameter shaft washer
$D_1$	103 mm	Bore diameter housing washer
В	11.5 mm	Height shaft washer
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension housing washer

### Abutment dimensions

d <sub>a</sub> min. 142 mm	Abutment diameter shaft
D <sub>a max. 107 mm</sub>	Abutment diameter housing
r <sub>a</sub> max. 1.1 mm	Fillet radius

## Calculation data

Basic dynamic load rating	С	270 kN
Basic static load rating	$C_0$	1 060 kN
Fatigue load limit	$P_{u}$	104 kN
Reference speed		900 r/min
Limiting speed		1 800 r/min
Minimum axial load factor	А	0.0899



### Mass

## Included products

Roller and cage thrust assembly	K 81220 TN
Shaft washer	WS 81220
Housing washer	GS 81220



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