

Image may differ from product. See technical specification for details.

81216 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	80 mm
Outside diameter	115 mm
Height	28 mm

Performance

Basic dynamic load rating	160 kN
Basic static load rating	610 kN
Reference speed	1 200 r/min
Limiting speed	2 400 r/min

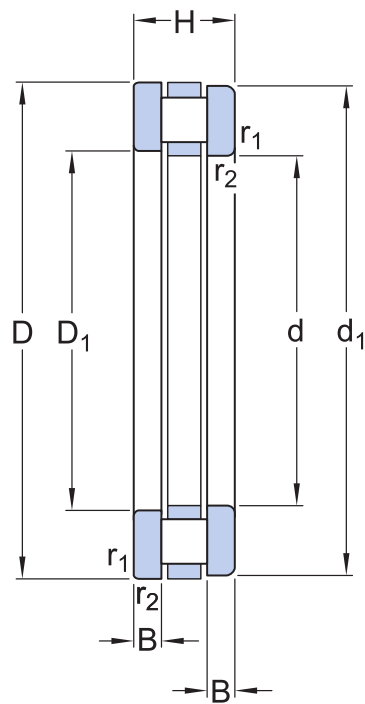
Properties

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

Logistics

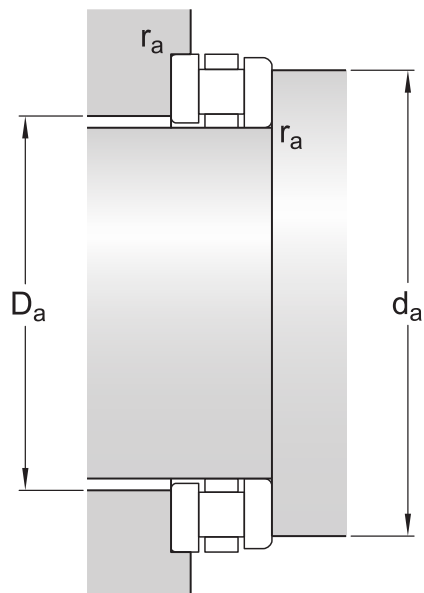
Product net weight	0.9 kg
UNSPSC code	31171505

Technical specification



Dimensions

d	80 mm	Bore diameter
D	115 mm	Outside diameter
H	28 mm	Height
d ₁	115 mm	Outside diameter shaft washer
D ₁	82 mm	Bore diameter housing washer
B	8.5 mm	Height shaft washer
r _{1,2}	min. 1 mm	Chamfer dimension housing washer






Abutment dimensions

d _a	min. 112 mm	Abutment diameter shaft
D _a	max. 84 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	160 kN
Basic static load rating	C ₀	610 kN
Fatigue load limit	P _u	63 kN
Reference speed		1 200 r/min
Limiting speed		2 400 r/min
Minimum axial load factor	A	0.0298

Included products

Roller and cage thrust assembly	 K 81216 TN
Shaft washer	 WS 81216
Housing washer	 GS 81216

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- [Tolerances](#): table, table, values

DESIGN CONSIDERATIONS

- table

BEARING INTERFACES




- [Seat tolerances for standard conditions](#)

Compatible products

Component

Cylindrical roller and cage thrust assembly	K 81216 TN
WS shaft washer for cylindrical and needle roller thrust bearings	WS 81216
GS housing washer for cylindrical and needle roller thrust bearings	GS 81216

More Information

<div> Product details</div> <div><div>Designs and variants</div><div>General bearing specifications</div><div>Loads</div><div>Temperature limits</div><div>Permissible speed</div><div>Design considerations</div><div>Designation system</div></div>	<div> Engineering information</div> <div><div>Principles of rolling bearing selection</div><div>General bearing knowledge</div><div>Bearing selection process</div><div>Bearing failure and how to prevent it</div></div>	<div> Tools</div> <div><div>SimPro Quick</div><div>SKF Product select</div><div>Bearing Frequency Calculator</div><div>LubeSelect for SKF greases</div><div>Heater selection tool</div></div>
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