

29420 ESpherical roller thrust bearing with stamped steel cage

Spherical roller thrust bearing with stamped steel cage

Spherical roller thrust bearings accommodate very heavy axial and considerable radial loads. They have the highest load rating of all thrust bearings, enabling compact, high power density bearing arrangements. By combining two or more spherical roller thrust bearings, it is possible to create a bearing arrangement that is either self-aligning, allowing misalignment of the shaft, or very stiff.

- High load carrying capacity
- Can accommodate combined loads
- Allow misalignment or create very stiff bearing arrangements
- Long service life and low friction
- Separable design

Overview

Dimensions

Bore diameter	100 mm
Outside diameter	210 mm
Height	67 mm

Performance

Basic dynamic load rating	980 kN
Basic static load rating	2 500 kN
Reference speed	1 700 r/min
Limiting speed	3 000 r/min
SKF performance class	SKF Explorer

Properties

Locating feature, housing washer	None
Bore type	Cylindrical
Cage	Sheet metal
Tolerance class	Normal

Technical Specification

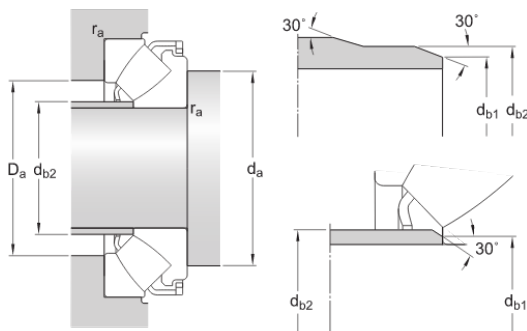


Dimensions

d	100 mm	Bore diameter
D	210 mm	Outside diameter
H	67 mm	Height
d_1	≈ 182 mm	Outside diameter of shaft washer end side face
D_1	≈ 142 mm	Shoulder diameter outer ring
B	43 mm	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B_1	57.3 mm	Height shaft washer + cage
C	32 mm	Height housing washer
s	62 mm	Distance from shaft washer end side face to pressure point
$r_{1,2}$	min. 3 mm	Chamfer dimension shaft washer

Abutment dimensions

d_a	min. 150 mm	Diameter of shaft abutment
d_{b1}	max. 110 mm	Abutment diameter of spacer ring
d_{b2}	max. 110 mm	Outside diameter of spacer ring
D_a	max. 175 mm	Diameter of housing abutment
r_a	max. 2.5 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	980 kN
Basic static load rating	C_0	2 500 kN
Fatigue load limit	P_u	275 kN
Reference speed		1 700 r/min
Limiting speed		3 000 r/min
Minimum axial load factor	A	0.59

Mass

Mass bearing		10.5 kg
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