

**FAG****30209-A**

Tapered roller bearing

Tapered roller bearings 302, main dimensions
acc. to DIN 720, separable

Technical information



Your current product variant

Tolerance class	PN	Normal (ISO 492:2023)
Heat treatment	Standard	
Cage	Standard	Sheet steel cage, window cage, roller-guided
Internal design	Standard	
Quality level	Standard	
Number of rows	1	Single-row design

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	19 mm	Width, inner ring
C	16 mm	Width, outer ring
T	20,75 mm	Width, total
C _r	70.000 N	Basic dynamic load rating, radial
C _{0r}	82.000 N	Basic static load rating, radial
C _{ur}	9.800 N	Fatigue load limit, radial
n _G	8.800 1/min	Limiting speed
n _{gr}	5.400 1/min	Thermal speed rating
≈m	484,4 g	Weight



Mounting dimensions

$d_{a \max}$	54 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	52 mm	Minimum diameter of shaft shoulder
$D_{a \min}$	74 mm	Minimum diameter of housing shoulder
$D_{a \max}$	78 mm	Maximum diameter of housing shoulder
$D_{b \min}$	80 mm	Minimum diameter of housing shoulder
$C_{a \min}$	3 mm	Minimum axial space
$C_{b \min}$	4,5 mm	Minimum axial space
$r_{a \max}$	1,5 mm	Maximum fillet radius of shaft
$r_{b \max}$	1,5 mm	Maximum fillet radius of housing

Dimensions

$r_{1, 2 \min}$	1,5 mm	Minimum chamfer dimension of inner ring back face
$r_{3, 4 \min}$	1,5 mm	Minimum chamfer dimension of outer ring back face
a	18 mm	Distance between the apexes of the pressure cones
d_1	64 mm	Guidance rib diameter of inner ring

Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.

Calculation factors

e	0,4	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y	1,48	Dynamic axial load factor
Y_0	0,81	Static axial load factor

Additional information

T3DB045

Comparative designation to ISO 10317 and ISO 355



Characteristics



Radial load



Axial load in one direction



Grease Lubrication



Oil Lubrication



Not sealed