



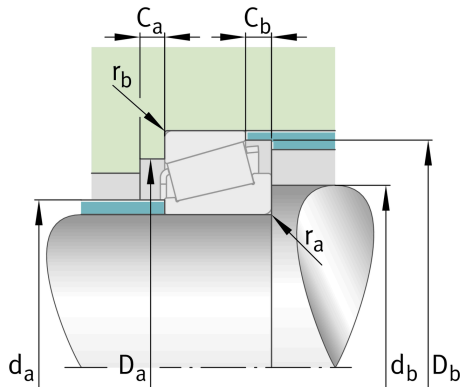
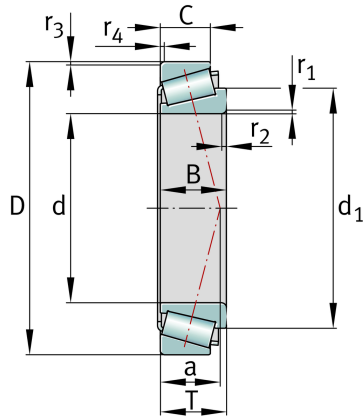
FAG

AK544091-544118

Tapered roller bearing

Tapered roller bearings K-Series, in inch sizes, separable, adjusted or in pairs

Technical information



Main Dimensions & Performance Data

d	231.775 mm	Bore diameter
D	300.038 mm	Outside diameter
B	31.75 mm	Width, inner ring
C	23.813 mm	Width, outer ring
T	33.338 mm	Width, total
C_r	250,000 N	Basic dynamic load rating, radial
C_{0r}	510,000 N	Basic static load rating, radial
C_{ur}	57,000 N	Fatigue load limit, radial
n_G	2,320 1/min	Limiting speed
$\approx m$	5.5 kg	Weight

Mounting dimensions

$d_{a \max}$	243 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	247 mm	Minimum diameter of shaft shoulder
$D_{a \min}$	282 mm	Minimum diameter of housing shoulder
$D_{a \max}$	285 mm	Maximum diameter of housing shoulder
$D_{b \min}$	287 mm	Minimum diameter of housing shoulder
$C_{a \min}$	4 mm	Minimum axial space
$C_{b \min}$	9.5 mm	Minimum axial space
$r_{a \max}$	3.6 mm	Maximum fillet radius of shaft
$r_{b \max}$	3.3 mm	Maximum fillet radius of housing

Dimensions

$r_{1,2 \min}$	3.6 mm	Minimum chamfer dimension of inner ring back face
$r_{3,4 \min}$	3.3 mm	Minimum chamfer dimension of outer ring back face
a	50 mm	Distance between the apexes of the pressure cones
d_1	262.5 mm	Guidance rib diameter of inner ring

Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	200 °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	1.49	Dynamic axial load factor
Y_0	0.82	Static axial load factor