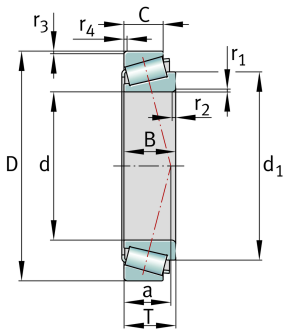
FAG

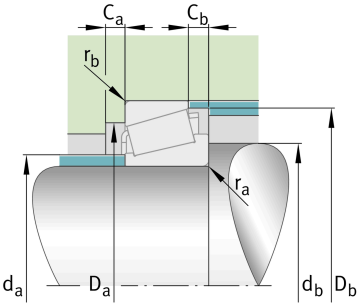
K90381-90744

Tapered roller bearing

Tapered roller bearings K-Series, in inch sizes, separable

Technical information





Your current product variant

Tolerance class	ABMA4	Class 4 (ANSI/ABMA 19.2:2013)
Heat treatment	Standard	
Cage	Standard	Sheet steel cage, window cage, roller-guided
Quality level	Standard	
Number of rows	1	Single-row design

Main Dimensions & Performance Data

d	96,838 mm	Bore diameter
D	188,912 mm	Outside diameter
B	46,038 mm	Width, inner ring
C	31,75 mm	Width, outer ring
T	50,8 mm	Width, total
C_r	270.000 N	Basic dynamic load rating, radial
C_{0r}	340.000 N	Basic static load rating, radial
C_{ur}	39.000 N	Fatigue load limit, radial
n_G	3.550 1/min	Limiting speed
$n_{\vartheta r}$	3.500 1/min	Thermal speed rating
≈m	5,6 kg	Weight

Mounting dimensions

$d_{a\ max}$	113 mm	Maximum diameter of shaft shoulder
$d_{b\ min}$	125 mm	Minimum diameter of shaft shoulder
$D_{a\ min}$	161 mm	Minimum diameter of housing shoulder
$D_{b\ min}$	179 mm	Minimum diameter of housing shoulder
$C_{a\ min}$	2,5 mm	Minimum axial space
$C_{b\ min}$	12 mm	Minimum axial space
$r_{a\ max}$	3,5 mm	Maximum fillet radius of shaft
$r_{b\ max}$	3,3 mm	Maximum fillet radius of housing

Dimensions

$r_{1,\ 2\ min}$	3,5 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	64 mm	Distance between the apexes of the pressure cones
d_1	142,9 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	0,87	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y	0,69	Dynamic axial load factor
Y_0	0,38	Static axial load factor

Characteristics

Radial load

Axial load in one direction


Grease Lubrication


Oil Lubrication


Not sealed