



FAG

## 31309-XL

Tapered roller bearing

Schaeffler ID:  
0849956880000Tapered roller bearings 313, main  
dimensions to DIN ISO 355 / DIN 720,  
separable, adjusted or in pairs

X-life

## Technical information



## Main Dimensions &amp; Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width, inner ring
C	18 mm	Width, outer ring
T	27,25 mm	Width, total
$C_r$	114.000 N	Basic dynamic load rating, radial
$C_{0r}$	108.000 N	Basic static load rating, radial
$C_{ur}$	16.400 N	Fatigue load limit, radial
$n_G$	7.800 1/min	Limiting speed
$n_{gr}$	4.650 1/min	Thermal speed rating
	0,96 kg	Weight

## Dimensions

	T7FB045	Comparative designation to ISO 10317 and ISO 355
$r_{1,2 \text{ min}}$	2 mm	Minimum chamfer dimension of inner ring back face
$r_{3,4 \text{ min}}$	1,5 mm	Minimum chamfer dimension of outer ring back face
a	32 mm	Distance between the apexes of the pressure cones
$d_1$	74,7 mm	Guidance rib diameter of inner ring

**Mounting dimensions**

$d_{a \max}$	56 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	54 mm	Minimum diameter of shaft shoulder
$D_{a \min}$	79 mm	Minimum diameter of housing shoulder
$D_{a \max}$	91 mm	Maximum diameter of housing shoulder
$D_{b \min}$	95 mm	Minimum diameter of housing shoulder
$C_{a \min}$	4 mm	Minimum axial space
$C_{b \min}$	9 mm	Minimum axial space
$r_{a \max}$	2 mm	Maximum fillet radius of shaft
$r_{b \max}$	1,5 mm	Maximum fillet radius of housing

**Calculation factors**

e	0,83	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
Y	0,73	Dynamic axial load factor
$Y_0$	0,4	Static axial load factor

**Temperature range**

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