



FAG

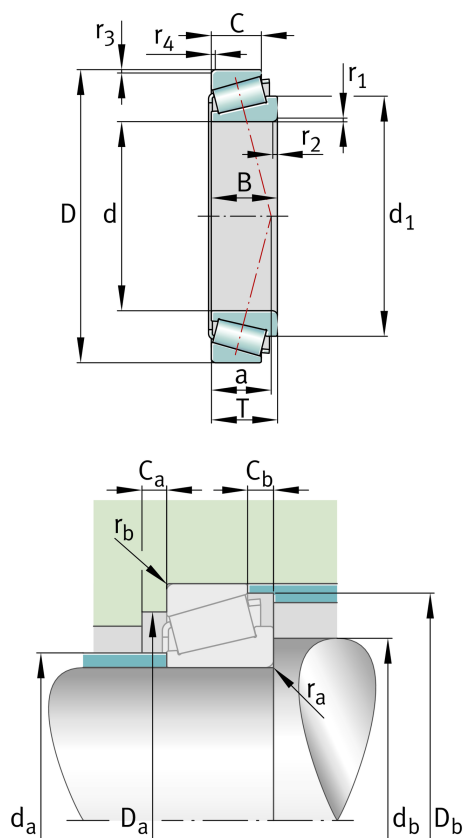
X-life

31309-XL

Tapered roller bearing

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

Technical information



Main Dimensions & 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}	16,300 N	Fatigue load limit, radial
n _G	8,600 1/min	Limiting speed
n _{gr}	4,650 1/min	Thermal speed rating
≈m	0.96 kg	Weight

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



Dimensions

$r_{1, 2 \text{ min}}$	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

Temperature range

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

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

Additional information

	T7FB045	Comparative designation to ISO 10317 and ISO 355
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