



FAG

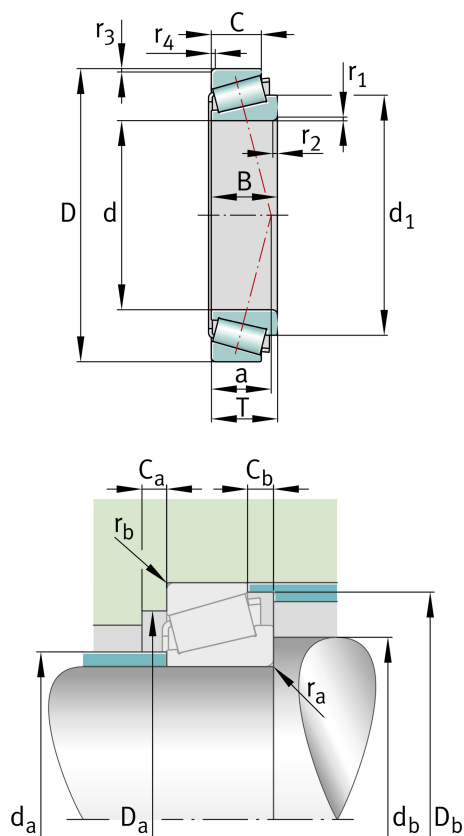
30309-A

Tapered roller bearing

Schaeffler ID:
0167109240000

Tapered roller bearings 303, 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	22 mm	Width, outer ring
T	27,25 mm	Width, total
C_r	111 000 N	Basic dynamic load rating, radial
C_{0r}	125 000 N	Basic static load rating, radial
C_{ur}	15 200 N	Fatigue load limit, radial
n_G	7 600 1/min	Limiting speed
n_{gr}	5 100 1/min	Thermal speed rating
	1 kg	Weight

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	21 mm	Distance between the apexes of the pressure cones
d_1	70,7 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a \text{ max}}$	59 mm	Maximum diameter of shaft shoulder
$d_{b \text{ min}}$	54 mm	Minimum diameter of shaft shoulder
$D_{a \text{ min}}$	86 mm	Minimum diameter of housing shoulder
$D_{a \text{ max}}$	91 mm	Maximum diameter of housing shoulder
$D_{b \text{ min}}$	92 mm	Minimum diameter of housing shoulder
$C_{a \text{ min}}$	3 mm	Minimum axial space
$C_{b \text{ min}}$	5 mm	Minimum axial space
$r_{a \text{ max}}$	2 mm	Maximum fillet radius of shaft
$r_{b \text{ max}}$	1,5 mm	Maximum fillet radius of housing

Calculation factors

e	0,35	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y	1,74	Dynamic axial load factor
Y ₀	0,96	Static axial load factor

Temperature range

	T2FB045	Comparative designation to ISO 10317 and ISO 355
T _{min}	-30 °C	Operating temperature min.
T _{max}	120 °C	Operating temperature max.