

FAG

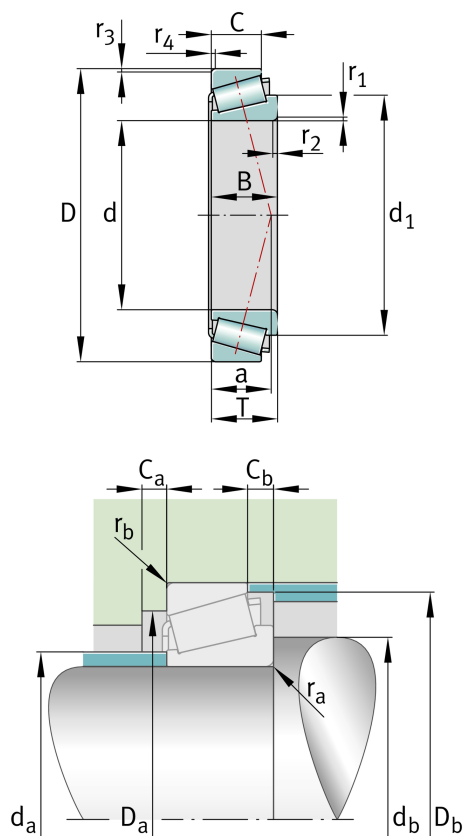
30314-A

Tapered roller bearing

Schaeffler ID:
0167109750000

Tapered roller bearings 303, main dimensions to DIN ISO 355 / DIN 720, separable, adjusted or in pairs

Technical information



Main Dimensions & Performance Data

d	70 mm	Bore diameter
D	150 mm	Outside diameter
B	35 mm	Width, inner ring
C	30 mm	Width, outer ring
T	38 mm	Width, total
C_r	223,000 N	Basic dynamic load rating, radial
C_{0r}	260,000 N	Basic static load rating, radial
C_{ur}	31,500 N	Fatigue load limit, radial
n_G	4,900 1/min	Limiting speed
n_{gr}	3,650 1/min	Thermal speed rating
	2.989 kg	Weight

Dimensions

$r_{1,2 \text{ min}}$	3 mm	Minimum chamfer dimension of inner ring back face
$r_{3,4 \text{ min}}$	2.5 mm	Minimum chamfer dimension of outer ring back face
a	30 mm	Distance between the apexes of the pressure cones
d_1	106.6 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a \text{ max}}$	89 mm	Maximum diameter of shaft shoulder
$d_{b \text{ min}}$	82 mm	Minimum diameter of shaft shoulder
$D_{a \text{ min}}$	130 mm	Minimum diameter of housing shoulder
$D_{a \text{ max}}$	138 mm	Maximum diameter of housing shoulder
$D_{b \text{ min}}$	140 mm	Minimum diameter of housing shoulder
$C_{a \text{ min}}$	5 mm	Minimum axial space
$C_{b \text{ min}}$	8 mm	Minimum axial space
$r_{a \text{ max}}$	3 mm	Maximum fillet radius of shaft
$r_{b \text{ max}}$	2.5 mm	Maximum fillet radius of housing

Calculation factors

e	0.35	Limiting value of F_a/F_r 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

	T2GB070	Comparative designation to ISO 10317 and ISO 355
T_{\min}	-30 °C	Operating temperature min.
T_{\max}	120 °C	Operating temperature max.