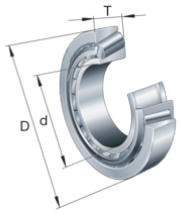


FAG

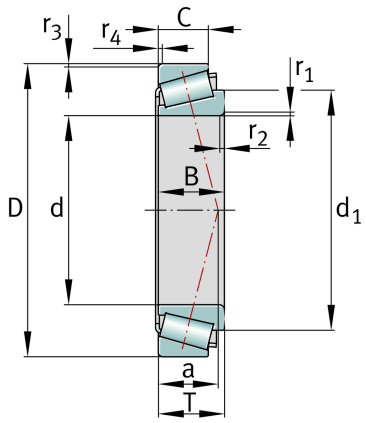
30319-A

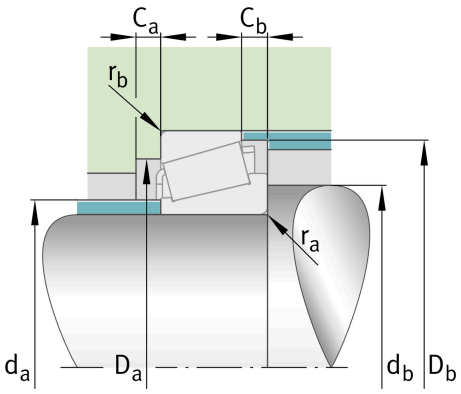
Tapered roller bearing

Schaeffler ID:
0167110250000

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

Technical information





Main Dimensions & Performance Data

d	95 mm	Bore diameter
D	200 mm	Outside diameter
B	45 mm	Width, inner ring
C	38 mm	Width, outer ring
T	49.5 mm	Width, total
C_r	360,000 N	Basic dynamic load rating, radial
C_{0r}	440,000 N	Basic static load rating, radial
C_{ur}	48,500 N	Fatigue load limit, radial
n_G	3,650 1/min	Limiting speed
$n_{\vartheta r}$	2,950 1/min	Thermal speed rating
	6.7 kg	Weight

Dimensions

$r_{1, 2\ min}$	4 mm	Minimum chamfer dimension of inner ring back face
$r_{3, 4\ min}$	3 mm	Minimum chamfer dimension of outer ring back face
a	40 mm	Distance between the apexes of the pressure cones
d_1	139 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a\ max}$	118 mm	Maximum diameter of shaft shoulder
$d_{b\ min}$	109 mm	Minimum diameter of shaft shoulder
$D_{a\ min}$	172 mm	Minimum diameter of housing shoulder
$D_{a\ max}$	186 mm	Maximum diameter of housing shoulder
$D_{b\ min}$	184 mm	Minimum diameter of housing shoulder
$C_{a\ min}$	6 mm	Minimum axial space
$C_{b\ min}$	11.5 mm	Minimum axial space
$r_{a\ max}$	4 mm	Maximum fillet radius of shaft
$r_{b\ max}$	3 mm	Maximum fillet radius of housing

Calculation factors

	T2GB095	Comparative designation to ISO 10317 and ISO 355
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

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