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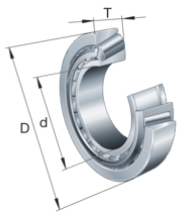


FAG

31316-XL

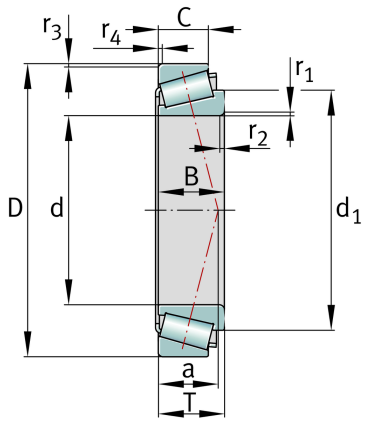
Tapered roller bearing

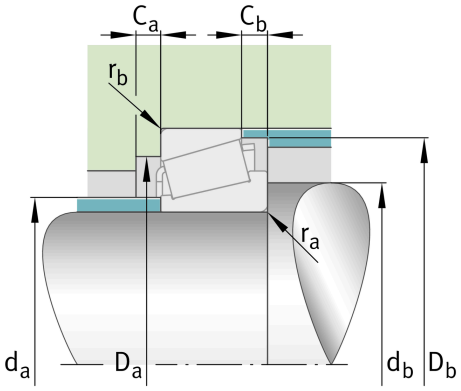
Schaeffler ID:
0854333220000

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

X-life

Technical information





Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	39 mm	Width, inner ring
C	27 mm	Width, outer ring
T	42.5 mm	Width, total
C_r	270,000 N	Basic dynamic load rating, radial
C_{0r}	270,000 N	Basic static load rating, radial
C_{ur}	39,500 N	Fatigue load limit, radial
n_G	5,000 1/min	Limiting speed
$n_{\vartheta r}$	3,150 1/min	Thermal speed rating
	4.045 kg	Weight

Dimensions

$r_{1, 2\ min}$	3 mm	Minimum chamfer dimension of inner ring back face
$r_{3, 4\ min}$	2.5 mm	Minimum chamfer dimension of outer ring back face
a	53 mm	Distance between the apexes of the pressure cones
d_1	124.4 mm	Guidance rib diameter of inner ring

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Mounting dimensions

$d_{a\ max}$	97 mm	Maximum diameter of shaft shoulder
$d_{b\ min}$	92 mm	Minimum diameter of shaft shoulder
$D_{a\ min}$	134 mm	Minimum diameter of housing shoulder
$D_{a\ max}$	158 mm	Maximum diameter of housing shoulder
$D_{b\ min}$	159 mm	Minimum diameter of housing shoulder
$C_{a\ min}$	6 mm	Minimum axial space
$C_{b\ min}$	15 mm	Minimum axial space
$r_{a\ max}$	3 mm	Maximum fillet radius of shaft
$r_{b\ max}$	2.5 mm	Maximum fillet radius of housing

Calculation factors

	T7GB080	Comparative designation to ISO 10317 and ISO 355
e	0.83	Limiting value of Fa/Fr 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.