



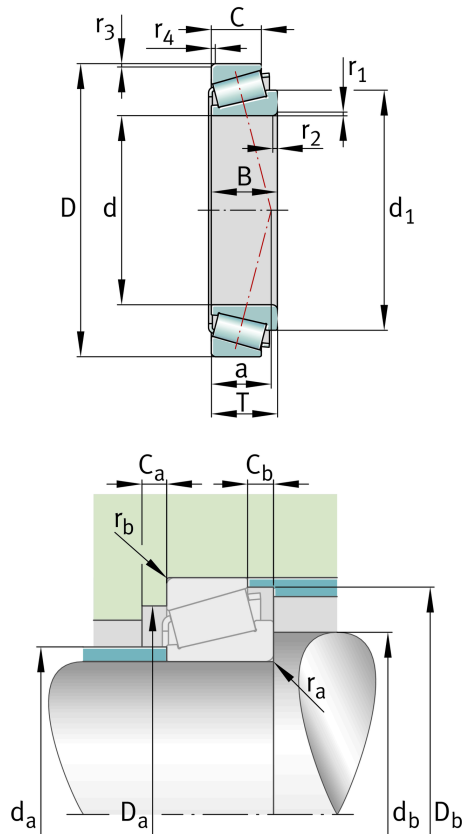
FAG

33114

Tapered roller bearing

Schaeffler ID:
0190023270000Tapered roller bearings 331, 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	120 mm	Outside diameter
B	37 mm	Width, inner ring
C	29 mm	Width, outer ring
T	37 mm	Width, total
C_r	174,000 N	Basic dynamic load rating, radial
C_{0r}	260,000 N	Basic static load rating, radial
C_{ur}	33,500 N	Fatigue load limit, radial
n_G	5,700 1/min	Limiting speed
n_{gr}	3,500 1/min	Thermal speed rating
	1.734 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	28 mm	Distance between the apexes of the pressure cones
d_1	96 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a \text{ max}}$	79 mm	Maximum diameter of shaft shoulder
$d_{b \text{ min}}$	79 mm	Minimum diameter of shaft shoulder
$D_{a \text{ min}}$	104 mm	Minimum diameter of housing shoulder
$D_{a \text{ max}}$	111 mm	Maximum diameter of housing shoulder
$D_{b \text{ min}}$	115 mm	Minimum diameter of housing shoulder
$C_{a \text{ min}}$	6 mm	Minimum axial space
$C_{b \text{ min}}$	8 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

	T3DE070	Comparative designation to ISO 10317 and ISO 355
e	0.38	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y	1.58	Dynamic axial load factor
Y ₀	0.87	Static axial load factor

Temperature range

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