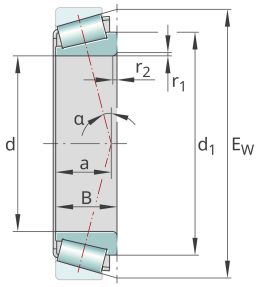
FAG

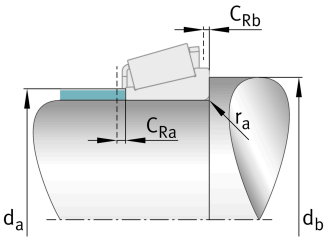
R33114

Tapered roller bearing

Tapered roller bearings without outer ring
(Cone) 331, main dimensions acc. to DIN 720

Technical information





Your current product variant

Tolerance class	P6X	Class 6X (ISO 492:2014)
Heat treatment	Standard	
Cage	Standard	Sheet steel cage, window cage, roller-guided
Internal design	Standard	
Quality level	Standard	
Number of rows	1	Single-row design

Main Dimensions & Performance Data

d	70 mm	Bore diameter
B	37 mm	Width, inner ring
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
$n_{\vartheta r}$	3.550 1/min	Thermal speed rating
≈m	1,19 kg	Weight

Mounting dimensions

$d_{a\ max}$	79 mm	Maximum diameter of shaft shoulder
$d_{b\ min}$	79 mm	Minimum diameter of shaft shoulder
$C_{Ra\ min}$	6 mm	Minimum axial space
$r_{a\ max}$	2 mm	Maximum fillet radius of shaft

Dimensions

$r_{1,\ 2\ min}$	2 mm	Minimum chamfer dimension of inner ring back face
a	28 mm	Distance between the apexes of the pressure cones
d_1	96,6 mm	Guidance rib diameter of inner ring
E_w	118,412 mm	Outer envelope circle
α	14,167 °	Contact angle

Temperature range

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

Calculation factors

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

Additional information

	T3DE070	Comparative designation to ISO 10317 and ISO 355

Characteristics

Radial load

Axial load in one direction


Grease Lubrication


Oil Lubrication


Not sealed