



FAG

30220-A

Tapered roller bearing

Schaeffler ID:
0167107030000Tapered roller bearings 302, main
dimensions to DIN ISO 355 / DIN 720,
separable, adjusted or in pairs

Technical information

**Main Dimensions & Performance Data**

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	34 mm	Width, inner ring
C	29 mm	Width, outer ring
T	37 mm	Width, total
C_r	250.000 N	Basic dynamic load rating, radial
C_{0r}	325.000 N	Basic static load rating, radial
C_{ur}	36.500 N	Fatigue load limit, radial
n_G	4.000 1/min	Limiting speed
n_{gr}	2.850 1/min	Thermal speed rating
	3,711 kg	Weight

Dimensions

	T3FB100	Comparative designation to ISO 10317 and ISO 355
$r_{1,2 \text{ min}}$	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	36 mm	Distance between the apexes of the pressure cones
d_1	135 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a \max}$	116 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	112 mm	Minimum diameter of shaft shoulder
$D_{a \min}$	157 mm	Minimum diameter of housing shoulder
$D_{a \max}$	168 mm	Maximum diameter of housing shoulder
$D_{b \min}$	168 mm	Minimum diameter of housing shoulder
$C_{a \min}$	5 mm	Minimum axial space
$C_{b \min}$	8 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

e	0,42	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y	1,43	Dynamic axial load factor
Y_0	0,79	Static axial load factor

Temperature range

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