



FAG

30316-A

Tapered roller bearing

Schaeffler ID:
0167109910000

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

Technical information



Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	39 mm	Width, inner ring
C	33 mm	Width, outer ring
T	42.5 mm	Width, total
C_r	285,000 N	Basic dynamic load rating, radial
C_{0r}	345,000 N	Basic static load rating, radial
C_{ur}	40,000 N	Fatigue load limit, radial
n_G	4,250 1/min	Limiting speed
n_{gr}	3,200 1/min	Thermal speed rating
	4.247 kg	Weight

Dimensions

$r_{1,2 \text{ min}}$	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	34 mm	Distance between the apexes of the pressure cones
d_1	121.7 mm	Guidance rib diameter of inner ring

Mounting dimensions

$d_{a \text{ max}}$	102 mm	Maximum diameter of shaft shoulder
$d_{b \text{ min}}$	92 mm	Minimum diameter of shaft shoulder
$D_{a \text{ min}}$	148 mm	Minimum diameter of housing shoulder
$D_{a \text{ max}}$	158 mm	Maximum diameter of housing shoulder
$D_{b \text{ min}}$	159 mm	Minimum diameter of housing shoulder
$C_{a \text{ min}}$	5 mm	Minimum axial space
$C_{b \text{ min}}$	9.5 mm	Minimum axial space
$r_{a \text{ max}}$	3 mm	Maximum fillet radius of shaft
$r_{b \text{ max}}$	2.5 mm	Maximum fillet radius of housing

Calculation factors

	T2GB080	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.