

**FAG****2307-K-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 23...-K-TVH, tapered bore taper 1:12, plastic cage

Technical information



Your current product variant

Bore type	K	Tapered, taper 1:12
Sealing	Without	Not sealed
Cage	TVH	Solid cage made of glass-fiber reinforced polyamide PA66
Tolerance class	PN	Normal (ISO 492:2023)
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Lubricant	Without	Bearing not greased

Main Dimensions & Performance Data

d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	31 mm	Width
C_r	40,500 N	Basic dynamic load rating, radial
C_{0r}	11,200 N	Basic static load rating, radial
C_{ur}	710 N	Fatigue load limit, radial
n_G	8,900 1/min	Limiting speed
n_{gR}	9,800 1/min	Reference speed
$\approx m$	0.647 kg	Weight



Mounting dimensions

$d_{a \min}$	44 mm	Minimum diameter shaft shoulder
$d_{a \max}$	45 mm	Maximum diameter shaft shoulder
$D_{a \max}$	71 mm	Maximum diameter of housing shoulder
$d_{b \min}$	40 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	5 mm	Minimum cavity width of the sleeve
$r_{a \max}$	1.5 mm	Maximum fillet radius

Dimensions

r_{\min}	1.5 mm	Minimum chamfer dimension
D_1	66.05 mm	Shoulder diameter outer ring
d_1	46.85 mm	Shoulder diameter inner ring

Temperature range

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

Calculation factors

e	0.46	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	1.36	Dynamic axial load factor
Y_2	2.1	Dynamic axial load factor
Y_0	1.42	Static axial load factor

Additional information

H2307

Adapter sleeve



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Static angular error and misalignment



Dynamic angular error and misalignment