

**FAG****2311-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 23..-TVH, plastic cage

Technical information



Your current product variant

Bore type	Z	Cylindrical
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	55 mm	Bore diameter
D	120 mm	Outside diameter
B	43 mm	Width
C_r	77,000 N	Basic dynamic load rating, radial
C_{0r}	24,000 N	Basic static load rating, radial
C_{ur}	1,520 N	Fatigue load limit, radial
n_G	5,700 1/min	Limiting speed
n_{gr}	7,100 1/min	Reference speed
$\approx m$	2.125 kg	Weight

Mounting dimensions

$d_{a \min}$	66 mm	Minimum diameter shaft shoulder
$D_{a \max}$	109 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2 mm	Maximum fillet radius



Dimensions

r_{min}	2 mm	Minimum chamfer dimension
D_1	100.2 mm	Shoulder diameter outer ring
d_1	71.68 mm	Shoulder diameter inner ring









Temperature range

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

Calculation factors

e	0.42	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	1.5	Dynamic axial load factor
Y_2	2.33	Dynamic axial load factor
Y_0	1.58	Static axial load factor

Characteristics

-  F_r Radial load
-  F_a Axial load in one direction
-  F_a Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed
-  Static angular error and misalignment
-  Dynamic angular error and misalignment