

**FAG****1309-TVH**

Self-aligning ball bearing

Self-aligning ball bearing 13..-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	CN (Group N)	Normal internal clearance
Lubricant	Without	Bearing not greased

## Main Dimensions &amp; Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
C <sub>r</sub>	38,500 N	Basic dynamic load rating, radial
C <sub>0r</sub>	12,700 N	Basic static load rating, radial
C <sub>ur</sub>	810 N	Fatigue load limit, radial
n <sub>G</sub>	7,500 1/min	Limiting speed
n <sub>gr</sub>	6,700 1/min	Reference speed
≈m	0.911 kg	Weight

## Mounting dimensions

d <sub>a min</sub>	54 mm	Minimum diameter shaft shoulder
D <sub>a max</sub>	91 mm	Maximum diameter of housing shoulder
r <sub>a max</sub>	1.5 mm	Maximum fillet radius



## Dimensions

$r_{\min}$	1.5 mm	Minimum chamfer dimension
$D_1$	83.53 mm	Shoulder diameter outer ring
$d_1$	64.05 mm	Shoulder diameter inner ring

## Temperature range

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

## Calculation factors

$e$	0.25	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	2.51	Dynamic axial load factor
$Y_2$	3.88	Dynamic axial load factor
$Y_0$	2.63	Static axial load factor

## 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