

**FAG****1309-K-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 13.-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 &amp; Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
$C_r$	38,500 N	Basic dynamic load rating, radial
$C_{0r}$	12,700 N	Basic static load rating, radial
$C_{ur}$	810 N	Fatigue load limit, radial
$n_G$	7,500 1/min	Limiting speed
$n_{gr}$	6,700 1/min	Reference speed
$\approx m$	0.941 kg	Weight



### Mounting dimensions

$d_{a \min}$	54 mm	Minimum diameter shaft shoulder
$d_{a \max}$	61 mm	Maximum diameter shaft shoulder
$D_{a \max}$	91 mm	Maximum diameter of housing shoulder
$d_{b \min}$	50 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
$D_1$	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

### Additional information

H309

Adapter sleeve



### Characteristics

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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