

**FAG****1209-K-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 12..-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	85 mm	Outside diameter
B	19 mm	Width
$C_r$	22.000 N	Basic dynamic load rating, radial
$C_{0r}$	7.300 N	Basic static load rating, radial
$C_{ur}$	465 N	Fatigue load limit, radial
$n_G$	9.300 1/min	Limiting speed
$n_{gR}$	8.200 1/min	Reference speed
$\approx m$	0,446 kg	Weight



### Mounting dimensions

$d_{a \min}$	52 mm	Minimum diameter shaft shoulder
$d_{a \max}$	57 mm	Maximum diameter shaft shoulder
$D_{a \max}$	78 mm	Maximum diameter of housing shoulder
$d_{b \min}$	48 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	5 mm	Minimum cavity width of the sleeve
$r_{a \max}$	1 mm	Maximum fillet radius

### Dimensions

$r_{\min}$	1,1 mm	Minimum chamfer dimension
$D_1$	72,11 mm	Shoulder diameter outer ring
$d_1$	57,7 mm	Shoulder diameter inner ring

### Temperature range

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

### Calculation factors

$e$	0,21	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	3,03	Dynamic axial load factor
$Y_2$	4,68	Dynamic axial load factor
$Y_0$	3,17	Static axial load factor

### Additional information

H209

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