

**FAG****2309-2RS-TVH**

Self-aligning ball bearing

Self-aligning ball bearing 23..-2RS-TVH,  
seals, plastic cage

## Technical information



## Your current product variant

Bore type	Z	Cylindrical
Sealing	2RS	Contact seal on both sides
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	GA13	Ball bearing and insert bearing grease

## Main Dimensions &amp; Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	36 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
$n_G$	4,550 1/min	Limiting speed
$\approx m$	1.299 kg	Weight

## Mounting dimensions

$d_{a \min}$	54 mm	Minimum diameter shaft shoulder
$D_{a \max}$	91 mm	Maximum diameter of housing shoulder
$r_{a \max}$	1.5 mm	Maximum fillet radius



## Dimensions

$r_{\min}$	1.5 mm	Minimum chamfer dimension
$D_1$	83.684 mm	Shoulder diameter outer ring
$D_2$	85.81 mm	Caliber diameter outer ring
$d_1$	63.9 mm	Shoulder diameter inner ring
$d_2$	57.45 mm	Caliber diameter inner ring

## Temperature range

$T_{\min}$	-20 °C	Operating temperature min.
$T_{\max}$	100 °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



Lifetime lubrication, freedom from maintenance



Grease Lubrication



Sealed on both sides



Static angular error and misalignment



Dynamic angular error and misalignment