

**FAG****X-life****3309-BD-XL-2Z-TVH**

Angular contact ball bearing

Angular contact ball bearing 33.-BD-XL-2Z-TVH, double row, X-life, shields, plastic cage

Technical information

**Your current product variant**

Design variant	B	Bearing without filling slot
Changed internal design	D	D
Sealing	2Z	Non-contact shield on both sides
Cage	TVH	Solid cage made of glass-fiber reinforced polyamide PA66
Tolerance class	P6	Class 6 (ISO 492:2023)
Dimensional / heat stabilization	S0	Rings dimensional stabilized up to 150°
Lubricant	GA13	Ball bearing and insert bearing grease
Axial internal clearance	CN	Group N (CN)

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	39.7 mm	Width
C _r	72,000 N	Basic dynamic load rating, radial
C _{0r}	54,000 N	Basic static load rating, radial
C _{ur}	3,700 N	Fatigue load limit, radial
n _G	5,500 1/min	Limiting speed
n _{gr}	6,700 1/min	Reference speed
m	1.33 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	84.39 mm	Shoulder diameter outer ring
D_2	87.32 mm	Caliber diameter outer ring
d_1	65.45 mm	Shoulder diameter inner ring
d_2	63.25 mm	Caliber diameter inner ring
a	57.8 mm	Distance between the apexes of the pressure cones
α	30 °	Contact angle

Temperature range

T_{\min}	-20 °C	Operating temperature min.
T_{\max}	120 °C	Operating temperature max.

Characteristics

	Radial load
	Axial load in one direction
	Axial load in two directions
	Lifetime lubrication, freedom from maintenance
	Grease Lubrication
	Sealed on both sides