

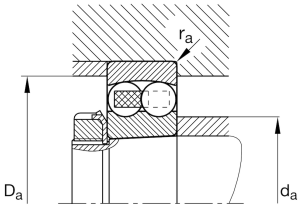
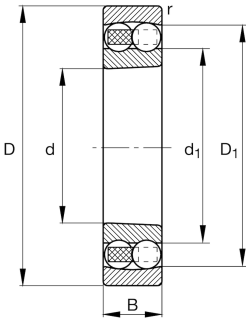
FAG

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
Type of 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 & 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
≈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 Fa/Fr 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



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