



FAG

QJ309-XL-MPA

Four-point contact bearing

Four point contact bearing QJ3..-XL-MPA, X-life, solid brass cage

X-life

Technical information



Your current product variant

Tolerance class	PN	Normal (ISO 492:2023)
Cage	MPA	Solid brass cage, outer ring guided
Dimensional / heat stabilization	S0	Rings dimensional stabilized up to 150°
Axial internal clearance	CN	Group N (CN)

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
C _r	100,000 N	Basic dynamic load rating, radial
C _{0r}	75,000 N	Basic static load rating, radial
C _{ur}	5,700 N	Fatigue load limit, radial
n _G	13,700 1/min	Limiting speed
n _{gr}	5,900 1/min	Reference speed
m	1 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	81.65 mm	Shoulder diameter outer ring
d_1	63.35 mm	Shoulder diameter inner ring
a	50.8 mm	Distance between the apexes of the pressure cones
α	35 °	Contact angle

Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	150 °C	Operating temperature max.

Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed