FAG

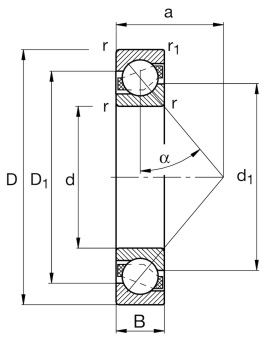
7220-B-XL-MP-UA

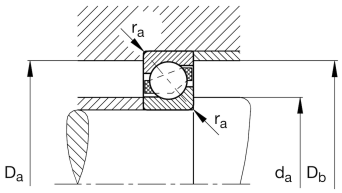
Angular contact ball bearing

Angular contact ball bearing 72..-B-XL-MP, single row, X-life, solid brass cage

X-life

Technical information





Your current product variant

Design variant	B	B
Sealing	Without	Not sealed
Cage	MP	Solid brass cage, ball guided
Tolerance class	PN	Normal (ISO 492:2023)
Dimensional / heat stabilization	S0	Rings dimensional stabilized up to 150°
Bearing with matched conditions for fitting in pairs	UA	Bearing set with small axial internal clearance
Lubricant	Without	Bearing not greased

Main Dimensions & Performance Data

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	34 mm	Width
C_r	142,000 N	Basic dynamic load rating, radial
C_{0r}	124,000 N	Basic static load rating, radial
C_{ur}	7,300 N	Fatigue load limit, radial
n_G	6,300 1/min	Limiting speed
$n_{\vartheta r}$	4,250 1/min	Reference speed
≈m	3.575 kg	Weight

Mounting dimensions

$d_{a\ min}$	112 mm	Minimum diameter of shaft shoulder
$D_{a\ max}$	168 mm	Maximum diameter of housing shoulder
$D_{b\ max}$	173 mm	Maximum diameter of housing shoulder
$r_{a\ max}$	2.1 mm	Maximum fillet radius of shaft
$r_{a1\ max}$	1 mm	Maximum fillet radius of housing

Dimensions

r_{min}	2.1 mm	Minimum chamfer dimension
$r_{1\ min}$	1.1 mm	Minimum chamfer dimension
D_1	149.56 mm	Shoulder diameter on outer ring wide side face
d_1	132.32 mm	Shoulder diameter on inner ring wide side face
a	75.7 mm	Distance between the apexes of the pressure cones
α	40 °	Contact angle

Temperature range

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

Additional information

A_{min}	54 µm	Axial clearance per set min.
$Tol_{(+)}$	12 µm	Tolerance for axial clearance or preload per set

Characteristics

Radial load

Axial load in one direction


Grease Lubrication


Oil Lubrication


Not sealed