

FAG

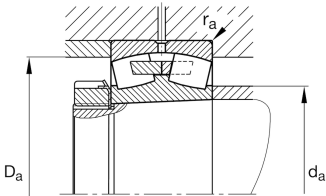
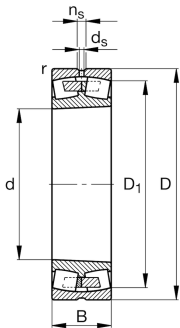
22220-E1A-XL-K-M-C3

Spherical Roller Bearing

Spherical roller bearing 222...-E1A-XL-K-M,
symmetric 2 outer ribs

X-life

Technical information



Your current product variant

Design	E1A	without central rip
Bore type	K	Tapered, taper 1:12
Cage	M	Brass Cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication feature	Standard	

Main Dimensions & Performance Data

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
C _r	430,000 N	Basic dynamic load rating, radial
C _{0r}	475,000 N	Basic static load rating, radial
C _{ur}	53,000 N	Fatigue load limit, radial
n _G	4,550 1/min	Limiting speed
n _{gr}	3,150 1/min	Reference speed
≈m	4.939 kg	Weight



Mounting dimensions

d _{a min}	112 mm	Minimum diameter shaft shoulder
D _{a max}	168 mm	Maximum diameter of housing shoulder
r _{a max}	2.1 mm	Maximum recess radius
d _{a max}	118 mm	Maximum diameter of shaft shoulder
d _{b min}	108 mm	Minimum cavity diameter of the sleeve
B _{a min}	8 mm	Minimum cavity width of the sleeve

Dimensions

r _{min}	2.1 mm	Minimum chamfer dimension
D ₁	161.4 mm	Bore diameter outer ring
d ₂	119 mm	Raceway diameter of the inner ring
d _s	4.8 mm	Diameter lubrication hole
n _s	9.5 mm	Width of lubricating groove

Temperature range

T _{min}	-30 °C	Operating temperature min.
T _{max}	200 °C	Operating temperature max.

Calculation factors








e	0.24	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y ₁	2.84	Dynamic axial load factor
Y ₂	4.23	Dynamic axial load factor
Y ₀	2.78	Static axial load factor

Additional information

H320	Adapter sleeve
AHX320	Withdrawal sleeve



Characteristics

-  Radial load
-  Axial load in one direction
-  Axial load in two directions
-  Grease Lubrication
-  Oil Lubrication
-  Not sealed
-  Dynamic angular error and misalignment