

FAG

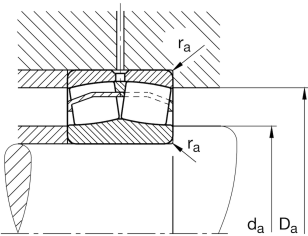
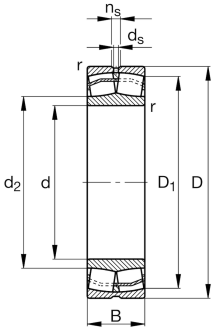
X-life

22309-E1-XL-C3

Spherical Roller Bearing

Spherical roller bearings 223...-E1, main dimensions to DIN 635-2

Technical information



Your current product variant

Design	E1	without central rip
Bore type	Z	Cylindrical
Cage	JPA	Sheet metal cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication feature	Standard	

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	36 mm	Width
C _r	187,000 N	Basic dynamic load rating, radial
C _{0r}	183,000 N	Basic static load rating, radial
C _{ur}	16,500 N	Fatigue load limit, radial
n _G	6,800 1/min	Limiting speed
n _{gr}	5,000 1/min	Reference speed
≈m	1.368 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 recess radius

Dimensions

r _{min}	1.5 mm	Minimum chamfer dimension
D ₁	84.7 mm	Bore diameter outer ring
d ₂	58.9 mm	Raceway diameter of the inner ring
d _s	3.2 mm	Diameter lubrication hole
n _s	6.5 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0.36	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y ₁	1.9	Dynamic axial load factor
Y ₂	2.83	Dynamic axial load factor
Y ₀	1.86	Static axial load factor



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