



FAG

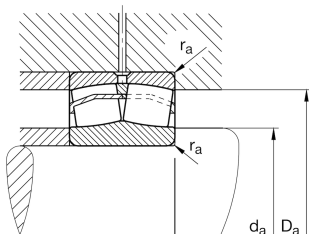
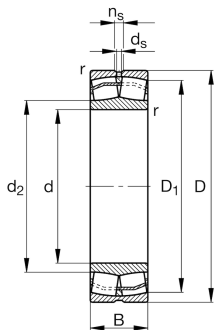
X-life

22311-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	55 mm	Bore diameter
D	120 mm	Outside diameter
B	43 mm	Width
C _r	265,000 N	Basic dynamic load rating, radial
C _{0r}	260,000 N	Basic static load rating, radial
C _{ur}	24,600 N	Fatigue load limit, radial
n _G	5,800 1/min	Limiting speed
n _{gr}	4,500 1/min	Reference speed
≈m	2.354 kg	Weight



Mounting dimensions

d _{a min}	66 mm	Minimum diameter shaft shoulder
D _{a max}	109 mm	Maximum diameter of housing shoulder
r _{a max}	2 mm	Maximum recess radius

Dimensions

r _{min}	2 mm	Minimum chamfer dimension
D ₁	101.4 mm	Bore diameter outer ring
d ₂	68.9 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	1.89	Dynamic axial load factor
Y ₂	2.81	Dynamic axial load factor
Y ₀	1.84	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