

FAG

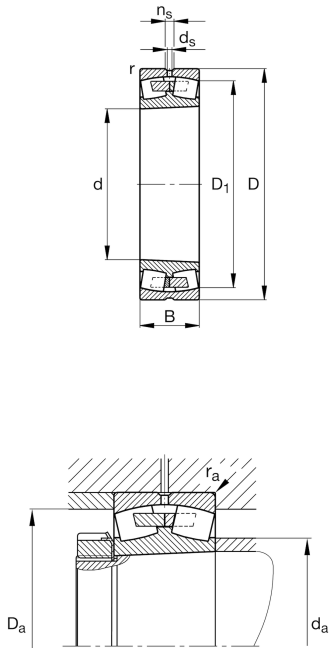
23138-E1A-XL-K-M-C3

Spherical Roller Bearing

Spherical roller bearings 231...E1A-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

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	
Special material	Standard	

Main Dimensions & Performance Data

d	190 mm	Bore diameter
D	320 mm	Outside diameter
B	104 mm	Width
C _r	1,610,000 N	Basic dynamic load rating, radial
C _{0r}	2,220,000 N	Basic static load rating, radial
C _{ur}	222,000 N	Fatigue load limit, radial
n _G	2,070 1/min	Limiting speed
n _{gr}	1,260 1/min	Reference speed
≈m	32.723 kg	Weight



Mounting dimensions

d _{a min}	204 mm	Minimum diameter shaft shoulder
D _{a max}	306 mm	Maximum diameter of housing shoulder
r _{a max}	2.5 mm	Maximum recess radius
d _{a max}	216 mm	Maximum diameter of shaft shoulder
d _{b min}	202 mm	Minimum cavity diameter of the sleeve
B _{a min}	9 mm	Minimum cavity width of the sleeve

Dimensions

r _{min}	3 mm	Minimum chamfer dimension
D ₁	281.6 mm	Bore diameter outer ring
d _s	8 mm	Diameter lubrication hole
n _s	15 mm	Width of lubricating groove

Temperature range

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

Calculation factors










e	0.3	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y ₁	2.28	Dynamic axial load factor
Y ₂	3.39	Dynamic axial load factor
Y ₀	2.23	Static axial load factor

Additional information

H3138	Adapter sleeve
AH3138G	Withdrawal sleeve



Characteristics

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