

FAG

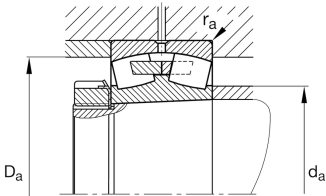
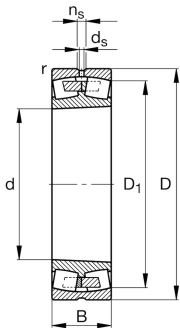
23138-E1A-XL-K-M

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	CN (Group N)	Normal internal clearance
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 <sub>r</sub>	1,610,000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	2,220,000 N	Basic static load rating, radial
C <sub>ur</sub>	222,000 N	Fatigue load limit, radial
n <sub>G</sub>	2,070 1/min	Limiting speed
n <sub>gr</sub>	1,260 1/min	Reference speed
≈m	32.723 kg	Weight



Mounting dimensions

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

Dimensions

r <sub>min</sub>	3 mm	Minimum chamfer dimension
D <sub>1</sub>	281.6 mm	Bore diameter outer ring
d <sub>s</sub>	8 mm	Diameter lubrication hole
n <sub>s</sub>	15 mm	Width of lubricating groove

Temperature range

T <sub>min</sub>	-30 °C	Operating temperature min.
T <sub>max</sub>	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 <sub>1</sub>	2.28	Dynamic axial load factor
Y <sub>2</sub>	3.39	Dynamic axial load factor
Y <sub>0</sub>	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