

FAG

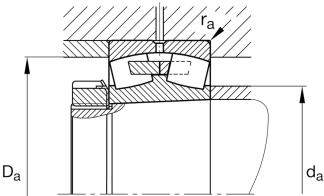
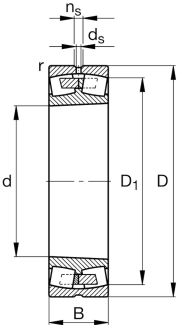
23120-E1A-XL-K-M-C3

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	100 mm	Bore diameter
D	165 mm	Outside diameter
B	52 mm	Width
C _r	450,000 N	Basic dynamic load rating, radial
C _{0r}	570,000 N	Basic static load rating, radial
C _{ur}	54,000 N	Fatigue load limit, radial
n _G	4,000 1/min	Limiting speed
n _{gr}	2,750 1/min	Reference speed
≈m	4.38 kg	Weight



Mounting dimensions

d _{a min}	111 mm	Minimum diameter shaft shoulder
D _{a max}	154 mm	Maximum diameter of housing shoulder
r _{a max}	2 mm	Maximum recess radius
d _{a max}	115 mm	Maximum diameter of shaft shoulder
d _{b min}	107 mm	Minimum cavity diameter of the sleeve
B _{a min}	7 mm	Minimum cavity width of the sleeve

Dimensions

r _{min}	2 mm	Minimum chamfer dimension
D ₁	146.3 mm	Bore diameter outer 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	0.28	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y ₁	2.37	Dynamic axial load factor
Y ₂	3.53	Dynamic axial load factor
Y ₀	2.32	Static axial load factor

Additional information

H3120	Adapter sleeve
AHX3120	Withdrawal sleeve



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