



FAG

23120-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	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	4,262 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 F_a/F_r 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