

**FAG****23120-E1A-XL-M-C3**

Spherical Roller Bearing

Spherical roller bearings 231...-E1A, main dimensions to DIN 635-2

**X-life**

## Technical information

**Your current product variant**

Design	E1A	Without central rip
Bore type	Z	Cylindrical
Cage	M	Brass Cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	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
$\approx m$	4,392 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



## 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

## 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