



FAG

**23024-E1A-XL-M-C4**

Spherical Roller Bearing

Spherical roller bearings 230...-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	C4 (Group 4)	Internal clearance larger than C3
Relubrication	Standard	

## Main Dimensions &amp; Performance Data

d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
$C_r$	430.000 N	Basic dynamic load rating, radial
$C_{0r}$	580.000 N	Basic static load rating, radial
$C_{ur}$	60.000 N	Fatigue load limit, radial
$n_G$	3.950 1/min	Limiting speed
$n_{gr}$	2.800 1/min	Reference speed
$\approx m$	4,023 kg	Weight

## Mounting dimensions

$d_{a \text{ min}}$	128,8 mm	Minimum diameter shaft shoulder
$D_{a \text{ max}}$	171,2 mm	Maximum diameter of housing shoulder
$r_{a \text{ max}}$	2 mm	Maximum recess radius



## Dimensions

$r_{\min}$	2 mm	Minimum chamfer dimension
$D_1$	164,7 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

$e$	0,22	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	3,04	Dynamic axial load factor
$Y_2$	4,53	Dynamic axial load factor
$Y_0$	2,97	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