

**FAG****23024-E1A-XL-K-M**

## Spherical Roller Bearing

Spherical roller bearings 230..-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 facility	Standard	
Special material	Standard	

## Main Dimensions &amp; Performance Data

d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
C <sub>r</sub>	430.000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	580.000 N	Basic static load rating, radial
C <sub>ur</sub>	60.000 N	Fatigue load limit, radial
n <sub>G</sub>	3.950 1/min	Limiting speed
n <sub>gr</sub>	2.800 1/min	Reference speed
≈m	3,906 kg	Weight



### Mounting dimensions

$d_{a \min}$	128,8 mm	Minimum diameter shaft shoulder
$D_{a \max}$	171,2 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2 mm	Maximum recess radius
$d_{a \max}$	133 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	127 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
$D_1$	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

### Additional information

H3024	Adapter sleeve
AHX3024	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