



FAG

**23024-E1-XL-K-TVPB-C3**

## Spherical Roller Bearing

Spherical roller bearings 230..-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

## Technical information



## Your current product variant

Design	E1	Without central rip
Bore type	K	Tapered, taper 1:12
Cage	TVPB	Plastic cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
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
$\approx m$	3,704 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
$B_{a \min}$	7 mm	Minimum cavity width of the sleeve
$d_{a \max}$	133 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	127 mm	Minimum cavity diameter of the sleeve

### Dimensions

$r_{\min}$	2 mm	Minimum chamfer dimension
$D_1$	164,7 mm	Bore diameter outer ring
$d_2$	133 mm	Raceway diameter of the inner 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.
$T_{\max}$	120 °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

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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