



FAG

**23180-BEA-XL-K-MB1-C3**

## Spherical Roller Bearing

Spherical roller bearing 231...-BEA-XL-K-MB1, symmetric 2 outer ribs with rib washer

X-life

## Technical information



## Your current product variant

Design	BEA	With lose center lip ring
Bore type	K	Tapered, taper 1:12
Cage	MB1	Solid brass cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	Standard	

## Main Dimensions &amp; Performance Data

d	400 mm	Bore diameter
D	650 mm	Outside diameter
B	200 mm	Width
$C_r$	5.000.000 N	Basic dynamic load rating, radial
$C_{0r}$	8.100.000 N	Basic static load rating, radial
$C_{ur}$	590.000 N	Fatigue load limit, radial
$n_G$	950 1/min	Limiting speed
$n_{gr}$	495 1/min	Reference speed
$m$	248 kg	Weight



### Mounting dimensions

$d_{a \min}$	426 mm	Minimum diameter shaft shoulder
$D_{a \max}$	624 mm	Maximum diameter of housing shoulder
$r_{a \max}$	5 mm	Maximum recess radius
$d_{a \max}$	457 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	421 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	15 mm	Minimum cavity width of the sleeve

### Dimensions

$r_{\min}$	6 mm	Minimum chamfer dimension
$D_1$	571,4 mm	Bore diameter outer ring
$d_s$	12,5 mm	Diameter lubrication hole
$n_s$	23,5 mm	Width of lubricating groove

### Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	200 °C	Operating temperature max.

### Calculation factors

$e$	0,29	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	2,3	Dynamic axial load factor
$Y_2$	3,42	Dynamic axial load factor
$Y_0$	2,25	Static axial load factor

### Additional information

H3180-HG	Adapter sleeve
AH3180G-H	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
-  Large bearing
-  Static angular error and misalignment
-  Dynamic angular error and misalignment