

**FAG****230/500-BEA-XL-K-MB1-C3**

## Spherical Roller Bearing

Spherical roller bearing 230..-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	Standard	

## Main Dimensions &amp; Performance Data

d	500 mm	Bore diameter
D	720 mm	Outside diameter
B	167 mm	Width
C <sub>r</sub>	4.700.000 N	Basic dynamic load rating, radial
C <sub>0r</sub>	8.700.000 N	Basic static load rating, radial
C <sub>ur</sub>	760.000 N	Fatigue load limit, radial
n <sub>G</sub>	890 1/min	Limiting speed
n <sub>gr</sub>	510 1/min	Reference speed
m	217,5 kg	Weight



### Mounting dimensions

$d_{a \min}$	523 mm	Minimum diameter shaft shoulder
$D_{a \max}$	697 mm	Maximum diameter of housing shoulder
$r_{a \max}$	5 mm	Maximum recess radius
$d_{a \max}$	550 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	519 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	18 mm	Minimum cavity width of the sleeve

### Dimensions

$r_{\min}$	6 mm	Minimum chamfer dimension
$D_1$	656,5 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

$e$	0,21	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	3,24	Dynamic axial load factor
$Y_2$	4,82	Dynamic axial load factor
$Y_0$	3,16	Static axial load factor

### Additional information

H30/500-HG	Adapter sleeve
AHX30/500-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