



FAG

**231/500-BEA-XL-MB1-H40** [↗](#)

Spherical Roller Bearing

Spherical roller bearing 231..-BEA-XL-MB1-H40, symmetric 2 outer ribs with rib washer

X-life

## Technical information



## Your current product variant

Design	BEA	With lose center lip ring
Bore type	Z	Cylindrical
Cage	MB1	Solid brass cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication facility	H40	Without lubricating groove and holes

## Main Dimensions &amp; Performance Data

d	500 mm	Bore diameter
D	830 mm	Outside diameter
B	264 mm	Width
$C_r$	8.300.000 N	Basic dynamic load rating, radial
$C_{0r}$	13.900.000 N	Basic static load rating, radial
$C_{ur}$	890.000 N	Fatigue load limit, radial
$n_G$	690 1/min	Limiting speed
$n_{gr}$	350 1/min	Reference speed
$\approx m$	578,5 kg	Weight

## Mounting dimensions

$d_{a \min}$	532 mm	Minimum diameter shaft shoulder
$D_{a \max}$	798 mm	Maximum diameter of housing shoulder
$r_{a \max}$	6 mm	Maximum recess radius



## Dimensions

$r_{\min}$	7,5 mm	Minimum chamfer dimension
$D_1$	723,1 mm	Bore diameter outer ring









## Temperature range

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

## Calculation factors

$e$	0,31	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	2,2	Dynamic axial load factor
$Y_2$	3,27	Dynamic axial load factor
$Y_0$	2,15	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