



FAG

**241/500-BEA-XL-MB1-C3** [↗](#)

Spherical Roller Bearing

Spherical roller bearings 241...-BEA, main dimensions to DIN 635-2

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	C3 (Group 3)	Internal clearance larger than CN
Relubrication	Standard	

## Main Dimensions &amp; Performance Data

d	500 mm	Bore diameter
D	830 mm	Outside diameter
B	325 mm	Width
$C_r$	10.000.000 N	Basic dynamic load rating, radial
$C_{0r}$	17.300.000 N	Basic static load rating, radial
$C_{ur}$	1.190.000 N	Fatigue load limit, radial
$n_G$	600 1/min	Limiting speed
$n_{gr}$	209 1/min	Reference speed
$\approx m$	695 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
$D_1$	705,2 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

$e$	0,38	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	1,78	Dynamic axial load factor
$Y_2$	2,65	Dynamic axial load factor
$Y_0$	1,74	Static axial load factor

## Characteristics

	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