



FAG

23184-BEA-XL-MB1 [↗](#)

Spherical Roller Bearing

Spherical roller bearing 231..-BEA-XL-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	Z	Cylindrical
Cage	MB1	Solid brass cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication	Standard	
Handling thread holes	H78C	Handling thread holes, outer ring

Main Dimensions & Performance Data

d	420 mm	Bore diameter
D	700 mm	Outside diameter
B	224 mm	Width
C_r	6.000.000 N	Basic dynamic load rating, radial
C_{0r}	9.600.000 N	Basic static load rating, radial
C_{ur}	660.000 N	Fatigue load limit, radial
n_G	860 1/min	Limiting speed
n_{gr}	455 1/min	Reference speed
$\approx m$	344 kg	Weight



Mounting dimensions

$d_{a \min}$	446 mm	Minimum diameter shaft shoulder
$D_{a \max}$	674 mm	Maximum diameter of housing shoulder
$r_{a \max}$	5 mm	Maximum recess radius

Dimensions

r_{\min}	6 mm	Minimum chamfer dimension
D_1	609,8 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	0,31	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,18	Dynamic axial load factor
Y_2	3,24	Dynamic axial load factor
Y_0	2,13	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