



FAG

23164-BEA-XL-MB1-H151-C3 [↗](#)

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	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	Standard	
Locating feature, bearing outer ring	H151	1 Locking feature, bearing outer ring

Main Dimensions & Performance Data

d	320 mm	Bore diameter
D	540 mm	Outside diameter
B	176 mm	Width
C _r	3.800.000 N	Basic dynamic load rating, radial
C _{0r}	5.900.000 N	Basic static load rating, radial
C _{ur}	425.000 N	Fatigue load limit, radial
n _G	1.170 1/min	Limiting speed
n _{gr}	650 1/min	Reference speed
m	164,7 kg	Weight



Mounting dimensions

$d_{a \min}$	340 mm	Minimum diameter shaft shoulder
$D_{a \max}$	520 mm	Maximum diameter of housing shoulder
$r_{a \max}$	4 mm	Maximum recess radius

Dimensions

r_{\min}	5 mm	Minimum chamfer dimension
D_1	469,3 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	0,32	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,13	Dynamic axial load factor
Y_2	3,17	Dynamic axial load factor
Y_0	2,08	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