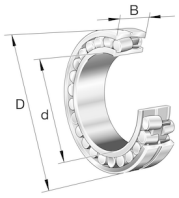


FAG

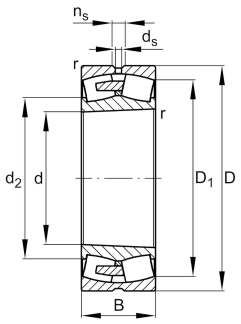
23160-BEA-XL-K-MB1

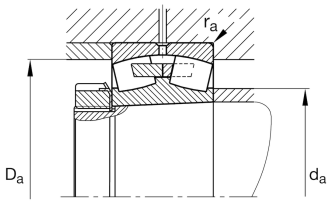
Spherical Roller Bearing

Spherical roller bearing 231..-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	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	300 mm	Bore diameter
D	500 mm	Outside diameter
B	160 mm	Width
C_r	3.250.000 N	Basic dynamic load rating, radial
C_{0r}	4.950.000 N	Basic static load rating, radial
C_{ur}	375.000 N	Fatigue load limit, radial
n_G	1.300 1/min	Limiting speed
$n_{\vartheta r}$	720 1/min	Reference speed
≈m	121,095 kg	Weight

Mounting dimensions

$d_{a\ min}$	320 mm	Minimum diameter shaft shoulder
$D_{a\ max}$	480 mm	Maximum diameter of housing shoulder
$r_{a\ max}$	4 mm	Maximum recess radius
$d_{a\ max}$	347 mm	Maximum diameter of shaft shoulder
$d_{b\ min}$	318 mm	Minimum cavity diameter of the sleeve
$B_{a\ min}$	12 mm	Minimum cavity width of the sleeve

Dimensions

r_{min}	5 mm	Minimum chamfer dimension
D_1	436,8 mm	Bore diameter outer ring
d_s	9,5 mm	Diameter lubrication hole
n_s	17,7 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 Fa/Fr 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

Additional information

	H3160	Adapter sleeve
	AH3160G	Withdrawal sleeve

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