



FAG

24038-BE-XL

Spherical Roller Bearing

Spherical roller bearing 240..-BE-XL,
symmetric with rib washer

X-life

Technical information



Your current product variant

Design	BE	With lose center lip ring
Bore type	Z	Cylindrical
Cage	JPB	Sheet metal cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	190 mm	Bore diameter
D	290 mm	Outside diameter
B	100 mm	Width
C_r	1.160.000 N	Basic dynamic load rating, radial
C_{0r}	1.860.000 N	Basic static load rating, radial
C_{ur}	197.000 N	Fatigue load limit, radial
n_G	2.140 1/min	Limiting speed
n_{gr}	1.330 1/min	Reference speed
$\approx m$	23,441 kg	Weight



Mounting dimensions

$d_{a \min}$	200,2 mm	Minimum diameter shaft shoulder
$D_{a \max}$	279,8 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius

Dimensions

r_{\min}	2,1 mm	Minimum chamfer dimension
D_1	255 mm	Bore diameter outer ring
d_2	211,9 mm	Raceway diameter of the inner ring
d_s	4,8 mm	Diameter lubrication hole
n_s	9,5 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	2,2	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