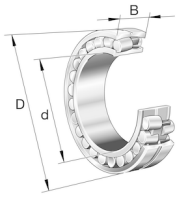


FAG

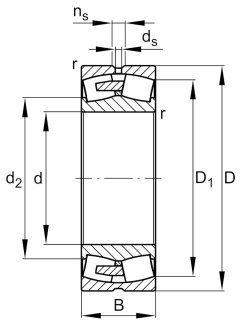
241/670-BEA-XL-MB1

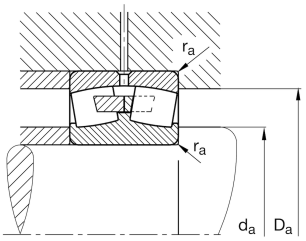
Spherical Roller Bearing

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	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	
Locating feature, bearing outer ring	Without	
Handling thread holes	Without	

Main Dimensions & Performance Data

d	670 mm	Bore diameter
D	1.090 mm	Outside diameter
B	412 mm	Width
C_r	16.100.000 N	Basic dynamic load rating, radial
C_{0r}	29.500.000 N	Basic static load rating, radial
C_{ur}	1.900.000 N	Fatigue load limit, radial
n_G	430 1/min	Limiting speed
$n_{\vartheta r}$	134 1/min	Reference speed
≈m	1.498 kg	Weight

Mounting dimensions

$d_{a\ min}$	702 mm	Minimum diameter shaft shoulder
$D_{a\ max}$	1.058 mm	Maximum diameter of housing shoulder
$r_{a\ max}$	6 mm	Maximum recess radius
$d_{a\ max}$	753 mm	Maximum diameter of shaft shoulder

Dimensions

r_{min}	7,5 mm	Minimum chamfer dimension
D_1	937 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	0,36	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y_1	1,87	Dynamic axial load factor
Y_2	2,79	Dynamic axial load factor
Y_0	1,83	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