

**FAG****22220-E1-XL-C4**

Spherical Roller Bearing

Spherical roller bearings 222...-E1, main dimensions to DIN 635-2

**X-life**

## Technical information

**Your current product variant**

Design	E1	Without central rip
Bore type	Z	Cylindrical
Cage	JPA	Sheet metal cage
Radial internal clearance	C4 (Group 4)	Internal clearance larger than C3
Relubrication facility	Standard	

**Main Dimensions & Performance Data**

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
$C_r$	430.000 N	Basic dynamic load rating, radial
$C_{0r}$	475.000 N	Basic static load rating, radial
$C_{ur}$	53.000 N	Fatigue load limit, radial
$n_G$	4.550 1/min	Limiting speed
$n_{gr}$	3.150 1/min	Reference speed
$\approx m$	4,938 kg	Weight

**Mounting dimensions**

$d_{a \min}$	112 mm	Minimum diameter shaft shoulder
$D_{a \max}$	168 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius



## Dimensions

$r_{\min}$	2,1 mm	Minimum chamfer dimension
$D_1$	161,4 mm	Bore diameter outer ring
$d_2$	119 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

$e$	0,24	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	2,84	Dynamic axial load factor
$Y_2$	4,23	Dynamic axial load factor
$Y_0$	2,78	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