

**FAG****22205-E1-XL-C2**

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	C2 (Group 2)	Internal clearance smaller than CN
Relubrication facility	Standard	

**Main Dimensions & Performance Data**

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
$C_r$	48.500 N	Basic dynamic load rating, radial
$C_{0r}$	42.500 N	Basic static load rating, radial
$C_{ur}$	4.900 N	Fatigue load limit, radial
$n_G$	14.400 1/min	Limiting speed
$n_{gr}$	9.200 1/min	Reference speed
$\approx m$	0,171 kg	Weight

**Mounting dimensions**

$d_{a \min}$	30,6 mm	Minimum diameter shaft shoulder
$D_{a \max}$	46,4 mm	Maximum diameter of housing shoulder
$r_{a \max}$	1 mm	Maximum recess radius



## Dimensions

$r_{\min}$	1 mm	Minimum chamfer dimension
$D_1$	44,4 mm	Bore diameter outer ring
$d_2$	31,5 mm	Raceway diameter of the inner ring
$d_s$	3,2 mm	Diameter lubrication hole
$n_s$	4,8 mm	Width of lubricating groove

## Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	200 °C	Operating temperature max.

## Calculation factors

$e$	0,33	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	2,07	Dynamic axial load factor
$Y_2$	3,09	Dynamic axial load factor
$Y_0$	2,03	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