

**FAG****22205-E1-XL-C3**

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	C3 (Group 3)	Internal clearance larger than CN
Relubrication	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