



FAG

22220-E1A-XL-M-C4

Spherical Roller Bearing

Spherical roller bearing 222...-E1A-XL-M,
symmetric 2 outer ribs

X-life

Technical information



Your current product variant

Design	E1A	Without central rip
Bore type	Z	Cylindrical
Cage	M	Brass 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
$\approx m$	4,921 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



Static angular error and misalignment