



FAG

22220-E1-XL-K

Spherical Roller Bearing

Spherical roller bearings 222...-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

Technical information



Your current product variant

Design	E1	Without central rip
Bore type	K	Tapered, taper 1:12
Cage	JPA	Sheet metal cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication	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
$\approx m$	4,839 kg	Weight



Mounting dimensions

$d_{a \min}$	112 mm	Minimum diameter shaft shoulder
$d_{a \max}$	118 mm	Maximum diameter of shaft shoulder
$D_{a \max}$	168 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius
$d_{b \min}$	108 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	8 mm	Minimum cavity width of the sleeve

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

Additional information

H320	Adapter sleeve
AHX320	Withdrawal sleeve



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