



FAG

23144-BE-XL-K-C4

Spherical Roller Bearing

Spherical roller bearings 231...-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

Technical information



Your current product variant

Design	BE	With lose center lip ring
Bore type	K	Tapered, taper 1:12
Cage	JPB	Sheet metal cage
Radial internal clearance	C4 (Group 4)	Internal clearance larger than C3
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	220 mm	Bore diameter
D	370 mm	Outside diameter
B	120 mm	Width
C_r	1.860.000 N	Basic dynamic load rating, radial
C_{0r}	2.700.000 N	Basic static load rating, radial
C_{ur}	223.000 N	Fatigue load limit, radial
n_G	1.860 1/min	Limiting speed
n_{gr}	1.080 1/min	Reference speed
$\approx m$	49,01 kg	Weight



Mounting dimensions

$d_{a \min}$	237 mm	Minimum diameter shaft shoulder
$d_{a \max}$	253 mm	Maximum diameter of shaft shoulder
$D_{a \max}$	353 mm	Maximum diameter of housing shoulder
$r_{a \max}$	3 mm	Maximum recess radius
$d_{b \min}$	233 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	10 mm	Minimum cavity width of the sleeve

Dimensions

r_{\min}	4 mm	Minimum chamfer dimension
D_1	323 mm	Bore diameter outer ring
d_2	254,8 mm	Raceway diameter of the inner ring
d_s	9,5 mm	Diameter lubrication hole
n_s	17,7 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0,31	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,15	Dynamic axial load factor
Y_2	3,2	Dynamic axial load factor
Y_0	2,1	Static axial load factor

Additional information

H3144X	Adapter sleeve
AH3144	Withdrawal sleeve



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Large bearing



Static angular error and misalignment



Dynamic angular error and misalignment