



FAG

22316-E1-XL-K

Spherical Roller Bearing

Spherical roller bearings 223...-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 facility	Standard	

Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	58 mm	Width
C_r	495.000 N	Basic dynamic load rating, radial
C_{0r}	510.000 N	Basic static load rating, radial
C_{ur}	46.500 N	Fatigue load limit, radial
n_G	4.250 1/min	Limiting speed
n_{gr}	3.400 1/min	Reference speed
$\approx m$	6,132 kg	Weight



Mounting dimensions

$d_{a \min}$	92 mm	Minimum diameter shaft shoulder
$d_{a \max}$	98 mm	Maximum diameter of shaft shoulder
$D_{a \max}$	158 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius
$d_{b \min}$	88 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	5 mm	Minimum cavity width of the sleeve

Dimensions

r_{\min}	2,1 mm	Minimum chamfer dimension
D_1	145,1 mm	Bore diameter outer ring
d_2	98,3 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	0,34	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	1,99	Dynamic axial load factor
Y_2	2,96	Dynamic axial load factor
Y_0	1,94	Static axial load factor

Additional information

H2316	Adapter sleeve
AHX2316	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