



FAG

24180-BE-XL-K30-C3

Spherical Roller Bearing

Spherical roller bearings 241...-BE-K30, main dimensions to DIN 635-2, with tapered bore, taper 1:30

X-life

Technical information



Your current product variant

Design	BE	With lose center lip ring
Bore type	K30	Tapered, taper 1:30
Cage	JPB	Sheet metal cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	400 mm	Bore diameter
D	650 mm	Outside diameter
B	250 mm	Width
C_r	6.200.000 N	Basic dynamic load rating, radial
C_{0r}	10.600.000 N	Basic static load rating, radial
C_{ur}	790.000 N	Fatigue load limit, radial
n_G	800 1/min	Limiting speed
n_{gr}	300 1/min	Reference speed
$\approx m$	312 kg	Weight



Mounting dimensions

$d_{a \min}$	426 mm	Minimum diameter shaft shoulder
$D_{a \max}$	624 mm	Maximum diameter of housing shoulder
$r_{a \max}$	5 mm	Maximum recess radius

Dimensions

r_{\min}	6 mm	Minimum chamfer dimension
D_1	556,5 mm	Bore diameter outer ring
d_2	448,8 mm	Raceway diameter of the inner ring
d_s	12,5 mm	Diameter lubrication hole
n_s	23,5 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0,37	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	1,82	Dynamic axial load factor
Y_2	2,7	Dynamic axial load factor
Y_0	1,78	Static axial load factor

Additional information

AH24180-H

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