



FAG

241/500-BEA-XL-K30-MB1-C3

Spherical Roller Bearing

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

X-life

Technical information



Your current product variant

Design	BEA	With lose center lip ring
Bore type	K30	Tapered, taper 1:30
Cage	MB1	Solid brass cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	500 mm	Bore diameter
D	830 mm	Outside diameter
B	325 mm	Width
C_r	10.000.000 N	Basic dynamic load rating, radial
C_{0r}	17.300.000 N	Basic static load rating, radial
C_{ur}	1.190.000 N	Fatigue load limit, radial
n_G	600 1/min	Limiting speed
n_{gr}	209 1/min	Reference speed
$\approx m$	684 kg	Weight

Mounting dimensions

$d_{a \min}$	532 mm	Minimum diameter shaft shoulder
$D_{a \max}$	798 mm	Maximum diameter of housing shoulder
$r_{a \max}$	6 mm	Maximum recess radius



Dimensions

r_{\min}	7,5 mm	Minimum chamfer dimension
D_1	705,2 mm	Bore diameter outer 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	0,38	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	1,78	Dynamic axial load factor
Y_2	2,65	Dynamic axial load factor
Y_0	1,74	Static axial load factor

Additional information

AH241/500-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