



FAG

230/500-BEA-XL-K-MB1-C3

Spherical Roller Bearing

Spherical roller bearing 230..-BEA-XL-K-MB1, symmetric 2 outer ribs with rib washer

X-life

Technical information



Your current product variant

Design	BEA	With lose center lip ring
Bore type	K	Tapered, taper 1:12
Cage	MB1	Solid brass cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication feature	Standard	

Main Dimensions & Performance Data

d	500 mm	Bore diameter
D	720 mm	Outside diameter
B	167 mm	Width
C_r	4.700.000 N	Basic dynamic load rating, radial
C_{0r}	8.700.000 N	Basic static load rating, radial
C_{ur}	760.000 N	Fatigue load limit, radial
n_G	890 1/min	Limiting speed
n_{gr}	510 1/min	Reference speed
m	217,5 kg	Weight



Mounting dimensions

$d_{a \min}$	523 mm	Minimum diameter shaft shoulder
$D_{a \max}$	697 mm	Maximum diameter of housing shoulder
$r_{a \max}$	5 mm	Maximum recess radius
$d_{a \max}$	550 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	519 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	18 mm	Minimum cavity width of the sleeve

Dimensions

r_{\min}	6 mm	Minimum chamfer dimension
D_1	656,5 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	0,21	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	3,24	Dynamic axial load factor
Y_2	4,82	Dynamic axial load factor
Y_0	3,16	Static axial load factor

Additional information

H30/500-HG	Adapter sleeve
AHX30/500-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