

**FAG****1316-K-M-C3**

Self-aligning ball bearing

Self-aligning ball bearing 13.-K-M, tapered bore taper 1:12, solid brass cage

Technical information



Your current product variant

Bore type	K	Tapered, taper 1:12
Sealing	Without	Not sealed
Cage	M	Solid brass cage, ball guided
Tolerance class	PN	Normal (ISO 492:2023)
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Lubricant	Without	Bearing not greased

Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	39 mm	Width
C_r	89,000 N	Basic dynamic load rating, radial
C_{0r}	33,000 N	Basic static load rating, radial
C_{ur}	1,870 N	Fatigue load limit, radial
n_G	6,200 1/min	Limiting speed
n_{gr}	4,500 1/min	Reference speed
$\approx m$	4.359 kg	Weight



Mounting dimensions

$d_{a \min}$	92 mm	Minimum diameter shaft shoulder
$d_{a \max}$	107 mm	Maximum diameter shaft shoulder
$D_{a \max}$	158 mm	Maximum diameter of housing shoulder
$d_{b \min}$	85 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	6 mm	Minimum cavity width of the sleeve
$r_{a \max}$	2.1 mm	Maximum fillet radius

Dimensions

r_{\min}	2.1 mm	Minimum chamfer dimension
D_1	144.25 mm	Shoulder diameter outer ring
d_1	110.62 mm	Shoulder diameter inner ring
C_1	0.1 mm	Overhang rolling element

Temperature range

T_{\min}	-30 °C	Operating temperature min.
T_{\max}	150 °C	Operating temperature max.

Calculation factors

e	0.22	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2.88	Dynamic axial load factor
Y_2	4.46	Dynamic axial load factor
Y_0	3.02	Static axial load factor

Additional information

H316

Adapter 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