

**FAG****1220-K-M-C3**

Self-aligning ball bearing

Self-aligning ball bearing 12.-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 &amp; Performance Data

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	34 mm	Width
$C_r$	70,000 N	Basic dynamic load rating, radial
$C_{0r}$	29,500 N	Basic static load rating, radial
$C_{ur}$	1,590 N	Fatigue load limit, radial
$n_G$	6,000 1/min	Limiting speed
$n_{gr}$	4,500 1/min	Reference speed
$\approx m$	3.833 kg	Weight



### Mounting dimensions

$d_{a \min}$	112 mm	Minimum diameter shaft shoulder
$d_{a \max}$	124 mm	Maximum diameter shaft shoulder
$D_{a \max}$	168 mm	Maximum diameter of housing shoulder
$d_{b \min}$	106 mm	Minimum cavity diameter of the sleeve
$B_{a \min}$	7 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
$D_1$	155.2 mm	Shoulder diameter outer ring
$d_1$	127.3 mm	Shoulder diameter inner ring

### Temperature range

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

### Calculation factors

$e$	0.18	Limiting value of $F_a/F_r$ for the applicability of diff. Values of factors X and Y
$Y_1$	3.58	Dynamic axial load factor
$Y_2$	5.53	Dynamic axial load factor
$Y_0$	3.75	Static axial load factor

### Additional information

H220

Adapter sleeve



### Characteristics

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-  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