

**FAG****684>N**

## Deep groove ball bearing

Deep groove ball bearing 68..., single row,  
steel sheet metal cage

## Technical information



## Your current product variant

Version code	>N	Not marked on bearing
Sealing	Without	Not sealed
Cage	JN	Steel sheet metal
Tolerance class	PN	Normal (PN)
Dimensional / heat stabilization	SN	Rings dimensional stabilized up to 120°
Lubricant	Without	Bearing not greased
Radial internal clearance	CN (Group N)	Normal internal clearance
Bore type	Z	Cylindrical

## Main Dimensions &amp; Performance Data

d	4 mm	Bore diameter
D	9 mm	Outside diameter
B	2,5 mm	Width
C <sub>r</sub>	680 N	Basic dynamic load rating, radial
C <sub>0r</sub>	228 N	Basic static load rating, radial
C <sub>ur</sub>	14,1 N	Fatigue load limit, radial
n <sub>G</sub>	94.000 1/min	Limiting speed
n <sub>gr</sub>	47.000 1/min	Reference speed
≈m	0,65 g	Weight



### Mounting dimensions

$d_{a \min}$	4,6 mm	Minimum diameter shaft shoulder
$D_{a \max}$	8,4 mm	Maximum diameter of housing shoulder
$r_{a \max}$	0,1 mm	Maximum fillet radius

### Dimensions

$r_{\min}$	0,1 mm	Minimum chamfer dimension
$D_1$	7,7 mm	Shoulder diameter outer ring
$d_1$	5,3 mm	Shoulder diameter inner ring

### Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.

### Calculation factors

$f_0$	12,9	Calculation factor
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### Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed