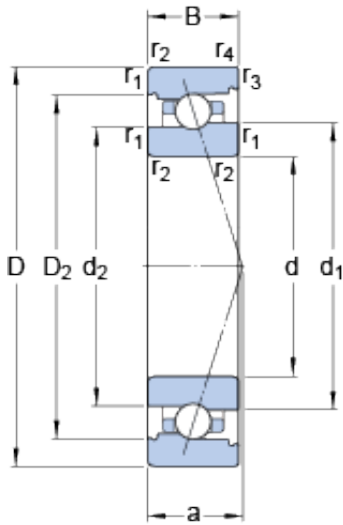




# ROLLWAY BEARING Sales Co., Ltd.



## 7014 CB/HCP4A SKF High Speed Angular Contact Ball Bearings

Bearing No. 7014 CB/HCP4A

7014 CB/HCP4A Bearing 2D drawings and 3D CAD models

Size	110x70x20 mm
Bore Diameter	110 mm
Outer Diameter	70 mm
Width	20 mm
d	70 mm
D	110 mm
B	20 mm
d <sub>1</sub>	85 mm
d <sub>2</sub>	83.2 mm
D <sub>2</sub>	97.8 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	22.2 mm
d <sub>a</sub> - min.	76 mm
d <sub>b</sub> - min.	76 mm
D <sub>a</sub> - max.	104 mm
D <sub>b</sub> - max.	106.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	86.1 mm
Basic dynamic load rating - C	19 kN
Basic static load rating - C <sub>0</sub>	16.3 kN
Fatigue load limit - P <sub>u</sub>	0.695 kN
Limiting speed for grease	19000 r/min



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Lubrication	
Limiting speed for oil lubrication	30000 mm/min
Ball - $D_w$	7.938 mm
Ball - $z$	28
$G_{ref}$	7.27 cm <sup>3</sup>
Calculation factor - $f_0$	9.6
Preload class A - $G_A$	64 N
Preload class B - $G_B$	130 N
Preload class C - $G_C$	390 N
Calculation factor - $f$	1.07
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Preload class A	53 N/micron
Preload class B	70 N/micron
Preload class C	110 N/micron
$d_1$	85 mm
$d_2$	83.2 mm
$D_2$	97.8 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	76 mm
$d_b$ min.	76 mm
$D_a$ max.	104 mm
$D_b$ max.	106.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	86.1 mm



## ROLLWAY BEARING Sales Co., Ltd.

Basic dynamic load rating C	26 kN
Basic static load rating $C_0$	28 kN
Fatigue load limit $P_u$	0.695 kN
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min
Ball diameter $D_w$	7.938 mm
Number of balls z	28
Reference grease quantity $G_{ref}$	7.27 cm <sup>3</sup>
Preload class A $G_A$	64 N
Static axial stiffness, preload class A	53 N/ $\mu$ m
Preload class B $G_B$	130 N
Static axial stiffness, preload class B	70 N/ $\mu$ m
Preload class C $G_C$	390 N
Static axial stiffness, preload class C	110 N/ $\mu$ m
Calculation factor f	1.07
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1.01
Calculation factor $f_0$	9.6
Mass bearing	0.63 kg