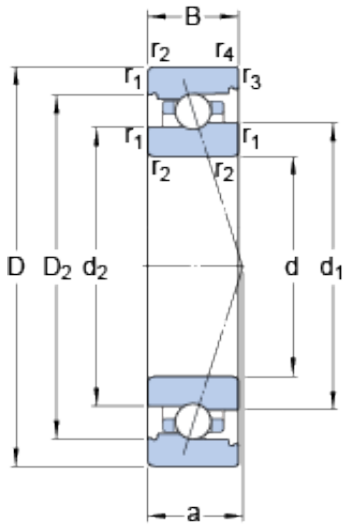




Off-the-shelf SKF shaft Co., Ltd



70 mm x 110 mm x 20 mm SKF 7014 CB/HCP4A Standard angular contact ball bearing

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 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
a	22.2 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
Basic dynamic load rating - C	19 kN
Basic static load rating - C ₀	16.3 kN
Fatigue load limit - P _u	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 ³
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



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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 ³
Preload class A G_A	64 N
Static axial stiffness, preload class A	53 N/ μ m
Preload class B G_B	130 N
Static axial stiffness, preload class B	70 N/ μ m
Preload class C G_C	390 N
Static axial stiffness, preload class C	110 N/ μ 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