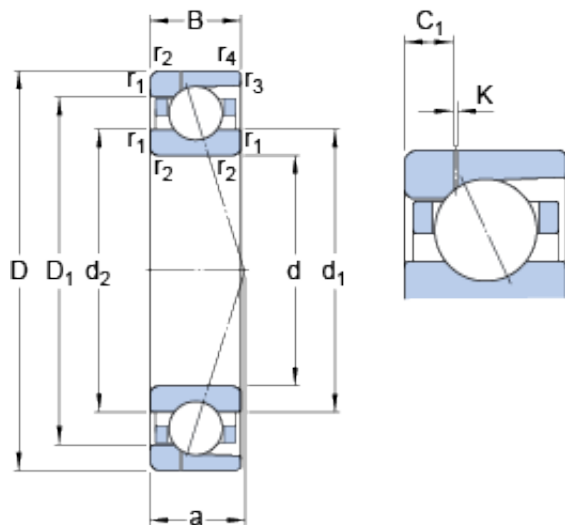




# NUP BEARING LTD



## 70 mm x 110 mm x 20 mm skf 7014 CD/P4AH1 Super-precision Angular contact ball bearings

Bearing No. 7014 CD/P4AH1

7014 CD/P4AH1 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>	82.3 mm
d <sub>2</sub>	82.3 mm
D <sub>1</sub>	97.7 mm
K	0.5 mm
C <sub>1</sub>	5.39 mm
r <sub>1,2</sub> - min.	1.1 mm
r <sub>3,4</sub> - min.	0.6 mm
a	22.1 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 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	85 mm
Basic dynamic load rating - C	52 kN
Basic static load rating - C <sub>0</sub>	45.5 kN



## NUP BEARING LTD

Fatigue load limit - $P_u$	1.9 kN
Limiting speed for grease lubrication	12000 r/min
Limiting speed for oil lubrication	19000 mm/min
Ball - $D_w$	12.7 mm
Ball - $z$	19
$G_{ref}$	8.1 cm <sup>3</sup>
Calculation factor - $f_0$	15.5
Preload class A - $G_A$	200 N
Preload class B - $G_B$	400 N
Preload class C - $G_C$	800 N
Preload class D - $G_D$	1600 N
Calculation factor - $f$	1.12
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.02
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2D}$	1.09
Calculation factor - $f_{HC}$	1
Preload class A	81 N/micron
Preload class B	111 N/micron
Preload class C	156 N/micron
Preload class D	227 N/micron
$d_1$	82.3 mm
$d_2$	82.3 mm
$D_1$	97.7 mm
$C_1$	5.39 mm
$r_{1,2}$ min.	1.1 mm
$r_{3,4}$ min.	0.6 mm
$d_a$ min.	76 mm



## NUP BEARING LTD

$d_b$ min.	76 mm
$D_a$ max.	104 mm
$D_b$ max.	106 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	85 mm
Basic dynamic load rating C	52 kN
Basic static load rating $C_0$	45.5 kN
Fatigue load limit $P_u$	1.93 kN
Attainable speed for grease lubrication	12000 r/min
Attainable speed for oil-air lubrication	19000 r/min
Ball diameter $D_w$	12.7 mm
Number of balls z	19
Reference grease quantity $G_{ref}$	8.1 cm <sup>3</sup>
Preload class A $G_A$	200 N
Static axial stiffness, preload class A	81 N/ $\mu$ m
Preload class B $G_B$	400 N
Static axial stiffness, preload class B	111 N/ $\mu$ m
Preload class C $G_C$	800 N
Static axial stiffness, preload class C	156 N/ $\mu$ m
Preload class D $G_D$	1600 N
Static axial stiffness, preload class D	227 N/ $\mu$ m
Calculation factor f	1.12
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05



## NUP BEARING LTD

Calculation factor $f_{2D}$	1.09
Calculation factor $f_{HC}$	1
Calculation factor $f_0$	15.5
Mass bearing	0.59 kg