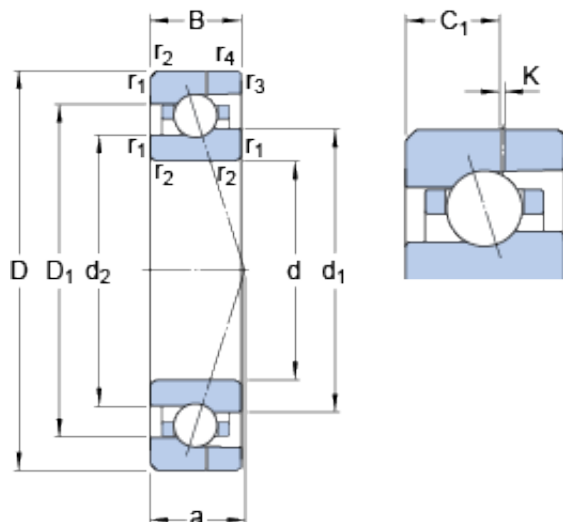




# ISOSTATIC BEARING LIMITED

## 7001 CE/HCP4AH SKF High Speed Angular Contact Ball Bearings

Bearing No. 7001 CE/HCP4AH



7001 CE/HCP4AH Bearing 2D drawings and 3D CAD models

Size	28x12x8 mm
Bore Diameter	28 mm
Outer Diameter	12 mm
Width	8 mm
d	12 mm
D	28 mm
B	8 mm
d <sub>1</sub>	17.5 mm
d <sub>2</sub>	16.5 mm
D <sub>1</sub>	22.45 mm
K	0.5 mm
C <sub>1</sub>	4.9 mm
r <sub>1,2</sub> - min.	0.3 mm
r <sub>3,4</sub> - min.	0.15 mm
a	6.7 mm
d <sub>a</sub> - min.	14 mm
d <sub>b</sub> - min.	14 mm
D <sub>a</sub> - max.	26 mm
D <sub>b</sub> - max.	26.6 mm
r <sub>a</sub> - max.	0.3 mm
r <sub>b</sub> - max.	0.15 mm
d <sub>n</sub>	18.5 mm
Basic dynamic load rating - C	3.2 kN
Basic static load rating - C <sub>0</sub>	1.3 kN



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Fatigue load limit - $P_u$	0.057 kN
Limiting speed for grease lubrication	98000 r/min
Limiting speed for oil lubrication	150000 mm/min
Ball - $D_w$	3.969 mm
Ball - $z$	12
$G_{ref}$	0.31 cm <sup>3</sup>
Calculation factor - $f_0$	7.3
Preload class A - $G_A$	17 N
Preload class B - $G_B$	53 N
Preload class C - $G_C$	110 N
Calculation factor - $f$	1.02
Calculation factor - $f$	1
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2B}$	1.03
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{HC}$	1.01
Preload class A	15 N/micron
Preload class B	24 N/micron
Preload class C	33 N/micron
$d_1$	17.5 mm
$d_2$	16.5 mm
$D_1$	22.45 mm
$C_1$	4.9 mm
$r_{1,2}$ min.	0.3 mm
$r_{3,4}$ min.	0.15 mm
$d_a$ min.	14 mm
$d_b$ min.	14 mm
$D_a$ max.	26 mm
$D_b$ max.	26.6 mm



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$r_a$ max.	0.3 mm
$r_b$ max.	0.15 mm
$d_n$	18.5 mm
Basic dynamic load rating C	3.19 kN
Basic static load rating $C_0$	1.34 kN
Fatigue load limit $P_u$	0.057 kN
Attainable speed for grease lubrication	98000 r/min
Attainable speed for oil-air lubrication	150000 r/min
Ball diameter $D_w$	3.969 mm
Number of balls z	12
Reference grease quantity $G_{ref}$	0.31 cm <sup>3</sup>
Preload class A $G_A$	17 N
Static axial stiffness, preload class A	15 N/ $\mu$ m
Preload class B $G_B$	53 N
Static axial stiffness, preload class B	24 N/ $\mu$ m
Preload class C $G_C$	110 N
Static axial stiffness, preload class C	33 N/ $\mu$ m
Calculation factor f	1.02
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.03
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{HC}$	1.01
Calculation factor $f_0$	7.3
Mass bearing	0.019 kg