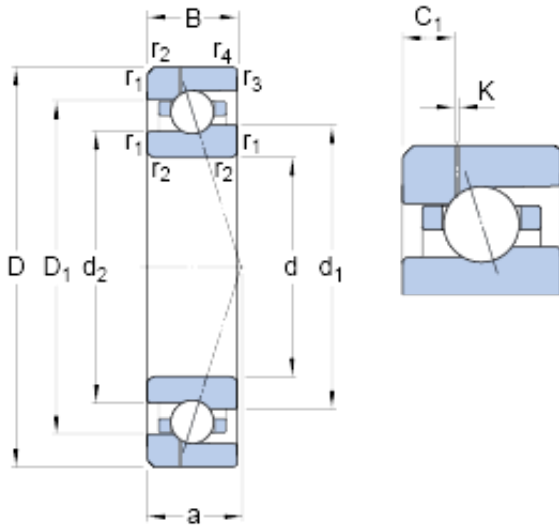




NTN Bearing Rolamentos do Brasil Ltda.



45 mm x 75 mm x 16 mm skf 7009
CE/HCP4AH1 Super-precision Angular contact
ball bearings

Bearing No. 7009 CE/HCP4AH1

7009 CE/HCP4AH1 Bearing 2D drawings and 3D CAD
models

Size	75x45x16 mm
Bore Diameter	75 mm
Outer Diameter	45 mm
Width	16 mm
d	45 mm
D	75 mm
B	16 mm
d ₁	55.7 mm
d ₂	53.6 mm
D ₁	64.25 mm
K	0.5 mm
C ₁	5.53 mm
r _{1,2} - min.	1 mm
r _{3,4} - min.	0.6 mm
a	16.1 mm
d _a - min.	49.6 mm
d _b - min.	49.6 mm
D _a - max.	70.4 mm
D _b - max.	70.8 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _n	57.6 mm
Basic dynamic load rating - C	13 kN



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Basic static load rating - C_0	8.5 kN
Fatigue load limit - P_u	0.36 kN
Limiting speed for grease lubrication	32000 r/min
Limiting speed for oil lubrication	50000 mm/min
Ball - D_w	7.144 mm
Ball - z	21
G_{ref}	3.4 cm ³
Calculation factor - f_0	8.2
Preload class A - G_A	70 N
Preload class B - G_B	210 N
Preload class C - G_C	410 N
Calculation factor - f	1.06
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	42 N/micron
Preload class B	65 N/micron
Preload class C	88 N/micron
d_1	55.7 mm
d_2	53.6 mm
D_1	64.25 mm
C_1	5.53 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.6 mm
d_a min.	49.6 mm
d_b min.	49.6 mm
D_a max.	70.4 mm



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D_b max.	70.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
d_n	57.6 mm
Basic dynamic load rating C	13 kN
Basic static load rating C_0	8.5 kN
Fatigue load limit P_u	0.36 kN
Attainable speed for grease lubrication	32000 r/min
Attainable speed for oil-air lubrication	50000 r/min
Ball diameter D_w	7.144 mm
Number of balls z	21
Reference grease quantity G_{ref}	3.4 cm ³
Preload class A G_A	70 N
Static axial stiffness, preload class A	42 N/ μ m
Preload class B G_B	210 N
Static axial stiffness, preload class B	65 N/ μ m
Preload class C G_C	410 N
Static axial stiffness, preload class C	88 N/ μ m
Calculation factor f	1.06
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	8.2
Mass bearing	0.22 kg