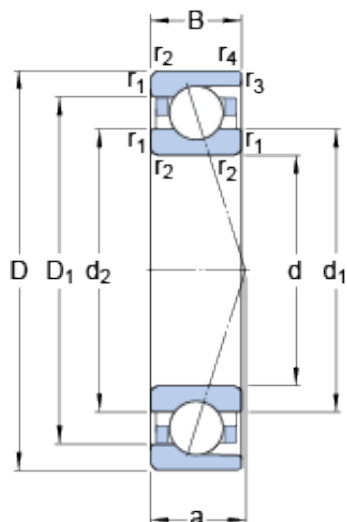




# UNF BRAINGS SALES JAPAN CO.,LTD.



## 45 mm x 75 mm x 16 mm SKF 7009 CD/HCP4A Easy Handling Precision Bearings

Bearing No. 7009 CD/HCP4A

7009 CD/HCP4A 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 <sub>1</sub>	54.2 mm
d <sub>2</sub>	54.2 mm
D <sub>1</sub>	65.8 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.3 mm
a	16.1 mm
d <sub>a</sub> - min.	49.6 mm
d <sub>b</sub> - min.	49.6 mm
D <sub>a</sub> - max.	70.4 mm
D <sub>b</sub> - max.	73 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.3 mm
d <sub>n</sub>	56.2 mm
Basic dynamic load rating - C	28.6 kN
Basic static load rating - C <sub>0</sub>	22.4 kN
Fatigue load limit - P <sub>u</sub>	0.95 kN
Limiting speed for grease	22000 r/min



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Lubrication	
Limiting speed for oil lubrication	34000 mm/min
Ball - $D_w$	9.525 mm
Ball - $z$	17
$G_{ref}$	3.3 cm <sup>3</sup>
Calculation factor - $f_0$	15.1
Preload class A - $G_A$	110 N
Preload class B - $G_B$	220 N
Preload class C - $G_C$	440 N
Preload class D - $G_D$	880 N
Calculation factor - $f$	1.09
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 - $f_{HC}$	1.02
Preload class A	62 N/micron
Preload class B	85 N/micron
Preload class C	119 N/micron
Preload class D	172 N/micron
$d_1$	54.2 mm
$d_2$	54.2 mm
$D_1$	65.8 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
$d_a$ min.	49.6 mm
$d_b$ min.	49.6 mm
$D_a$ max.	70.4 mm



## UNF BRAINGS SALES JAPAN CO.,LTD.

$D_b$ max.	73 mm
$r_a$ max.	1 mm
$r_b$ max.	0.3 mm
$d_n$	56.2 mm
Basic dynamic load rating C	28.6 kN
Basic static load rating $C_0$	22.4 kN
Fatigue load limit $P_u$	0.95 kN
Attainable speed for grease lubrication	22000 r/min
Attainable speed for oil-air lubrication	34000 r/min
Ball diameter $D_w$	9.525 mm
Number of balls z	17
Reference grease quantity $G_{ref}$	3.3 cm <sup>3</sup>
Preload class A $G_A$	110 N
Static axial stiffness, preload class A	62 N/ $\mu$ m
Preload class B $G_B$	220 N
Static axial stiffness, preload class B	85 N/ $\mu$ m
Preload class C $G_C$	440 N
Static axial stiffness, preload class C	119 N/ $\mu$ m
Preload class D $G_D$	880 N
Static axial stiffness, preload class D	172 N/ $\mu$ m
Calculation factor f	1.09
Calculation factor $f_1$	1
Calculation factor $f_{2A}$	1
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2C}$	1.05
Calculation factor $f_{2D}$	1.09
Calculation factor $f_{HC}$	1.02



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Calculation factor $f_0$	15.1
Mass bearing	0.2 kg