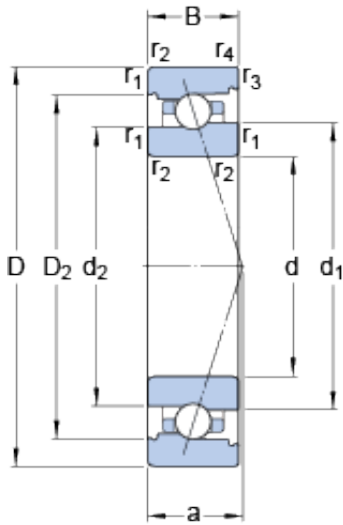




## DPA Bearing Sales Corp.



7009 CB/HCP4A Bearing 2D drawings and 3D CAD models

### 45 mm x 75 mm x 16 mm SKF 7009 CB/HCP4A High Speed Main Shaft Spindle Bearings

Bearing No. 7009 CB/HCP4A

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>	56.44 mm
d <sub>2</sub>	55.17 mm
D <sub>2</sub>	65.58 mm
r <sub>1,2</sub> - min.	1 mm
r <sub>3,4</sub> - min.	0.6 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.	71.8 mm
r <sub>a</sub> - max.	1 mm
r <sub>b</sub> - max.	0.6 mm
d <sub>n</sub>	57.2 mm
Basic dynamic load rating - C	9.6 kN
Basic static load rating - C <sub>0</sub>	7.2 kN
Fatigue load limit - P <sub>u</sub>	0.305 kN
Limiting speed for grease	30000 r/min



## DPA Bearing Sales Corp.

Lubrication	
Limiting speed for oil lubrication	48000 mm/min
Ball - $D_w$	5.556 mm
Ball - $z$	25
$G_{ref}$	2.93 cm <sup>3</sup>
Calculation factor - $f_0$	9.6
Preload class A - $G_A$	31 N
Preload class B - $G_B$	62 N
Preload class C - $G_C$	185 N
Calculation factor - $f$	1.05
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	34 N/micron
Preload class B	45 N/micron
Preload class C	70 N/micron
$d_1$	56.44 mm
$d_2$	55.17 mm
$D_2$	65.58 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
$D_b$ max.	71.8 mm
$r_a$ max.	1 mm
$r_b$ max.	0.6 mm
$d_n$	57.2 mm



## DPA Bearing Sales Corp.

Basic dynamic load rating C	13 kN
Basic static load rating $C_0$	12.2 kN
Fatigue load limit $P_u$	0.305 kN
Attainable speed for grease lubrication	30000 r/min
Attainable speed for oil-air lubrication	48000 r/min
Ball diameter $D_w$	5.556 mm
Number of balls z	25
Reference grease quantity $G_{ref}$	2.93 cm <sup>3</sup>
Preload class A $G_A$	31 N
Static axial stiffness, preload class A	34 N/ $\mu$ m
Preload class B $G_B$	62 N
Static axial stiffness, preload class B	45 N/ $\mu$ m
Preload class C $G_C$	185 N
Static axial stiffness, preload class C	70 N/ $\mu$ m
Calculation factor f	1.05
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	0.25 kg