



Bearing No. 7009 CB/HCP4A

D	75 mm
d	45 mm
B	16 mm
a	16.1 mm
Ball - z	25
Size (mm)	75x45x16
Width (mm)	16
Mass bearing	0.25 kg
d_n	57.2 mm
d_n	57.2 mm
D_2	65.58 mm
d_1	56.44 mm
d_2	55.17 mm
D_2	65.58 mm
d_2	55.17 mm
d_1	56.44 mm
Bearing number	7009 CB/HCP4A
Preload class A	34 N/micron
Preload class B	45 N/micron
Preload class C	70 N/micron
G_{ref}	2.93 cm ³
Number of balls z	25
D_a max.	70.4 mm
d_a min.	49.6 mm
d_b min.	49.6 mm
D_b max.	71.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
Bore Diameter (mm)	75

Outer Diameter (mm)	45
d_a - min.	49.6 mm
r_a - max.	1 mm
$r_{1,2}$ min.	1 mm
Calculation factor f	1.05
D_b - max.	71.8 mm
$r_{3,4}$ min.	0.6 mm
r_b - max.	0.6 mm
D_a - max.	70.4 mm
Ball - D_w	5.556 mm
d_b - min.	49.6 mm
Calculation factor - f	1.05
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Basic dynamic load rating C	13 kN
Ball diameter D_w	5.556 mm
Preload class B G_B	62 N
Preload class A G_A	31 N
Basic dynamic load rating - C	9.6 kN
Preload class C G_C	185 N
Preload class A - G_A	31 N
Preload class C - G_C	185 N
Preload class B - G_B	62 N
Calculation factor f_1	1
Fatigue load limit P_u	0.305 kN
Calculation factor f_0	9.6
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.01

Calculation factor - f	1
Fatigue load limit - P_u	0.305 kN
Calculation factor - f_0	9.6
Limiting speed for oil lubrication	48000 mm/min
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1.01
Limiting speed for grease lubrication	30000 r/min
Basic static load rating C_0	12.2 kN
Static axial stiffness, preload class A	34 N/ μ m
Static axial stiffness, preload class B	45 N/ μ m
Static axial stiffness, preload class C	70 N/ μ m
Attainable speed for grease lubrication	30000 r/min
Attainable speed for oil-air lubrication	48000 r/min
Basic static load rating - C_0	7.2 kN
Reference grease quantity G_{ref}	2.93 cm ³