



Bearing No. 7009 CE/HCP4A

D	75 mm
d	45 mm
B	16 mm
a	16.1 mm
Ball - z	21
Size (mm)	75x45x16
Width (mm)	16
Mass bearing	0.22 kg
d _n	57.6 mm
d _n	57.6 mm
D ₁	64.25 mm
d ₁	55.7 mm
d ₂	53.6 mm
D ₁	64.25 mm
d ₂	53.6 mm
d ₁	55.7 mm
Bearing number	7009 CE/HCP4A
Preload class A	42 N/micron
Preload class B	65 N/micron
Preload class C	88 N/micron
G _{ref}	3.4 cm ³
Number of balls z	21
D _a max.	70.4 mm
d _a min.	49.6 mm
d _b min.	49.6 mm
D _b max.	70.8 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	1.06
D_b - max.	70.8 mm
$r_{3,4}$ min.	0.6 mm
r_b - max.	0.6 mm
D_a - max.	70.4 mm
Ball - D_w	7.144 mm
d_b - min.	49.6 mm
Calculation factor - f	1.06
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Basic dynamic load rating C	13 kN
Ball diameter D_w	7.144 mm
Preload class B G_B	210 N
Preload class A G_A	70 N
Basic dynamic load rating - C	13 kN
Preload class C G_C	410 N
Preload class A - G_A	70 N
Preload class C - G_C	410 N
Preload class B - G_B	210 N
Calculation factor f_1	1
Fatigue load limit P_u	0.36 kN
Calculation factor f_0	8.2
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.03
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.01

Calculation factor - f	1
Fatigue load limit - P_u	0.36 kN
Calculation factor - f_0	8.2
Limiting speed for oil lubrication	50000 mm/min
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1.01
Limiting speed for grease lubrication	32000 r/min
Basic static load rating C_0	8.5 kN
Static axial stiffness, preload class A	42 N/ μ m
Static axial stiffness, preload class B	65 N/ μ m
Static axial stiffness, preload class C	88 N/ μ m
Attainable speed for grease lubrication	32000 r/min
Attainable speed for oil-air lubrication	50000 r/min
Basic static load rating - C_0	8.5 kN
Reference grease quantity G_{ref}	3.4 cm ³