



Bearing No. 7009 CD/HCP4AH

K	0.5 mm
a	16.1 mm
d	45 mm
D	75 mm
B	16 mm
Ball - z	17
Size (mm)	75x45x16
Width (mm)	16
Mass bearing	0.2 kg
d_n	56.2 mm
D_1	65.8 mm
d_1	54.2 mm
C_1	9.45 mm
D_1	65.8 mm
d_2	54.2 mm
C_1	9.45 mm
d_1	54.2 mm
d_n	56.2 mm
d_2	54.2 mm
Bearing number	7009 CD/HCP4AH
Preload class A	62 N/micron
Preload class D	172 N/micron
Preload class B	85 N/micron
Preload class C	119 N/micron
G_{ref}	3.3 cm ³
Number of balls z	17
r_b max.	0.3 mm
r_a max.	1 mm
D_b max.	73 mm

D_a max.	70.4 mm
d_b min.	49.6 mm
d_a min.	49.6 mm
Bore Diameter (mm)	75
Outer Diameter (mm)	45
d_b - min.	49.6 mm
r_b - max.	0.3 mm
$r_{1,2}$ min.	1 mm
d_a - min.	49.6 mm
Calculation factor f	1.09
r_a - max.	1 mm
$r_{3,4}$ min.	0.3 mm
D_a - max.	70.4 mm
Ball - D_w	9.525 mm
D_b - max.	73 mm
Calculation factor - f	1.09
$r_{3,4}$ - min.	0.3 mm
$r_{1,2}$ - min.	1 mm
Ball diameter D_w	9.525 mm
Basic dynamic load rating C	28.6 kN
Preload class D G_D	880 N
Preload class A G_A	110 N
Preload class C G_C	440 N
Preload class B G_B	220 N
Basic dynamic load rating - C	28.6 kN
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
Fatigue load limit P_u	0.95 kN

Calculation factor f_1	1
Calculation factor f_0	15.1
Calculation factor f_{2D}	1.09
Calculation factor - f	1
Calculation factor f_{2C}	1.05
Calculation factor f_{HC}	1.02
Calculation factor f_{2B}	1.02
Calculation factor f_{2A}	1
Limiting speed for oil lubrication	34000 mm/min
Fatigue load limit - P_u	0.95 kN
Calculation factor - f_0	15.1
Calculation factor - f_{2D}	1.09
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Limiting speed for grease lubrication	22000 r/min
Basic static load rating C_0	22.4 kN
Static axial stiffness, preload class B	85 N/ μ m
Static axial stiffness, preload class C	119 N/ μ m
Static axial stiffness, preload class A	62 N/ μ m
Static axial stiffness, preload class D	172 N/ μ m
Attainable speed for grease lubrication	22000 r/min
Attainable speed for oil-air lubrication	34000 r/min

Basic static load rating - C_0	22.4 kN
Reference grease quantity G_{ref}	3.3 cm ³