



**Bearing No. 7009 CD/P4AH**

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	0.23 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/P4AH
Preload class A	56 N/micron
Preload class D	155 N/micron
Preload class B	76 N/micron
Preload class C	107 N/micron
$G_{ref}$	3.3 cm <sup>3</sup>
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
Calculation factor $f_{2B}$	1.02
Calculation factor $f_{2A}$	1
Limiting speed for oil lubrication	30000 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
Calculation factor - $f_{2A}$	1
Calculation factor - $f_{2C}$	1.05
Calculation factor - $f_{2B}$	1.02
Limiting speed for grease lubrication	19000 r/min
Basic static load rating $C_0$	22.4 kN
Static axial stiffness, preload class B	76 N/ $\mu$ m
Static axial stiffness, preload class C	107 N/ $\mu$ m
Static axial stiffness, preload class A	56 N/ $\mu$ m
Static axial stiffness, preload class D	155 N/ $\mu$ m
Attainable speed for grease lubrication	19000 r/min
Attainable speed for oil-air lubrication	30000 r/min

Basic static load rating - $C_0$	22.4 kN
Reference grease quantity $G_{ref}$	3.3 cm <sup>3</sup>