



Bearing No. 7009 ACD/P4AH

K	0.5 mm
a	22.1 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 ACD/P4AH
Preload class B	173 N/micron
Preload class A	132 N/micron
Preload class D	309 N/micron
G_{ref}	3.3 cm ³
Preload class C	229 N/micron
Number of balls z	17
Bore Diameter (mm)	75
r_b max.	0.3 mm
r_a max.	1 mm

D_b max.	73 mm
D_a max.	70.4 mm
d_a min.	49.6 mm
d_b min.	49.6 mm
Outer Diameter (mm)	45
r_a - max.	1 mm
D_a - max.	70.4 mm
d_b - min.	49.6 mm
d_a - min.	49.6 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
Ball - D_w	9.525 mm
r_b - max.	0.3 mm
D_b - max.	73 mm
Calculation factor f	1.09
Calculation factor e	0.68
Calculation factor - f	1.09
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Calculation factor - e	0.68
Ball diameter D_w	9.525 mm
Basic dynamic load rating C	27.6 kN
Preload class A G_A	170 N
Preload class B G_B	340 N
Preload class C G_C	680 N
Basic dynamic load rating - C	27.6 kN
Preload class D G_D	1360 N
Preload class B - G_B	340 N
Preload class A - G_A	170 N
Preload class D - G_D	1360 N

Preload class C - G_C	680 N
Fatigue load limit P_u	0.9 kN
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Calculation factor - f_1	0.99
Limiting speed for oil lubrication	26000 mm/min
Fatigue load limit - P_u	0.9 kN
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	17000 r/min
Basic static load rating C_0	21.6 kN
Static axial stiffness, preload class A	132 N/ μ m
Static axial stiffness, preload class D	309 N/ μ m
Static axial stiffness, preload class C	229 N/ μ m
Static axial stiffness,	173 N/ μ m

preload class B	
Attainable speed for grease lubrication	17000 r/min
Basic static load rating - C_0	21.6 kN
Attainable speed for oil-air lubrication	26000 r/min
Reference grease quantity G_{ref}	3.3 cm ³
Calculation factor (single, tandem) Y_2	0.87
Calculation factor (single, tandem) Y_0	0.38
Calculation factor (single, tandem) X_2	0.41
Calculation factor (back-to-back, face-to-face) Y_1	0.92
Calculation factor (back-to-back, face-to-face) Y_2	1.41
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67