



Bearing No. 7008 ACD/HCP4AH

K	0.5 mm
a	20.2 mm
d	40 mm
D	68 mm
B	15 mm
Ball - z	18
Size (mm)	68x40x15
Width (mm)	15
Mass bearing	0.17 kg
d_n	50.8 mm
D_1	58.8 mm
d_1	49.2 mm
C_1	8.95 mm
D_1	58.8 mm
d_2	49.2 mm
C_1	8.95 mm
d_1	49.2 mm
d_n	50.8 mm
d_2	49.2 mm
Bearing number	7008 ACD/HCP4AH
Preload class B	138 N/micron
Preload class A	107 N/micron
Preload class D	238 N/micron
G_{ref}	2.4 cm ³
Preload class C	180 N/micron
Number of balls z	18
Bore Diameter (mm)	68
r_b max.	0.3 mm
r_a max.	1 mm

D_b max.	66 mm
D_a max.	63.4 mm
d_a min.	44.6 mm
d_b min.	44.6 mm
Outer Diameter (mm)	40
r_a - max.	1 mm
D_a - max.	63.4 mm
d_b - min.	44.6 mm
d_a - min.	44.6 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
Ball - D_w	7.938 mm
r_b - max.	0.3 mm
D_b - max.	66 mm
Calculation factor f	1.06
Calculation factor e	0.68
Calculation factor - f	1.06
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Calculation factor - e	0.68
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	15.9 kN
Preload class A G_A	100 N
Preload class B G_B	200 N
Preload class C G_C	400 N
Basic dynamic load rating - C	15.9 kN
Preload class D G_D	800 N
Preload class B - G_B	200 N
Preload class A - G_A	100 N
Preload class D - G_D	800 N

Preload class C - G_C	400 N
Fatigue load limit P_u	0.44 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}	1.02
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	34000 mm/min
Fatigue load limit - P_u	0.44 kN
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	22000 r/min
Basic static load rating C_0	10.4 kN
Static axial stiffness, preload class A	107 N/ μ m
Static axial stiffness, preload class D	238 N/ μ m
Static axial stiffness, preload class C	180 N/ μ m
Static axial stiffness,	138 N/ μ m

preload class B	
Attainable speed for grease lubrication	22000 r/min
Basic static load rating - C_0	10.4 kN
Attainable speed for oil-air lubrication	34000 r/min
Reference grease quantity G_{ref}	2.4 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