



Bearing No. 7007 ACD/HCP4A

D	62 mm
d	35 mm
B	14 mm
a	18.5 mm
Ball - z	16
Size (mm)	62x35x14
Width (mm)	14
Mass bearing	0.13 kg
d _n	45.3 mm
d _n	45.3 mm
D ₁	53.3 mm
d ₁	43.7 mm
d ₂	43.7 mm
D ₁	53.3 mm
d ₂	43.7 mm
d ₁	43.7 mm
Bearing number	7007 ACD/HCP4A
Preload class B	123 N/micron
Preload class A	95 N/micron
Preload class D	211 N/micron
Preload class C	160 N/micron
G _{ref}	1.98 cm ³
Number of balls z	16
Bore Diameter (mm)	62
r _b max.	0.3 mm
r _a max.	1 mm
D _b max.	60 mm
D _a max.	57.4 mm
d _a min.	39.6 mm

d_b min.	39.6 mm
Outer Diameter (mm)	35
D_b - max.	60 mm
d_b - min.	39.6 mm
Ball - D_w	7.938 mm
$r_{1,2}$ min.	1 mm
$r_{3,4}$ min.	0.3 mm
d_a - min.	39.6 mm
r_a - max.	1 mm
D_a - max.	57.4 mm
r_b - max.	0.3 mm
Calculation factor f	1.06
Calculation factor e	0.68
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.3 mm
Calculation factor - e	0.68
Calculation factor - f	1.06
Ball diameter D_w	7.938 mm
Basic dynamic load rating C	14.8 kN
Preload class C G_C	360 N
Preload class B G_B	180 N
Preload class A G_A	90 N
Preload class D G_D	720 N
Basic dynamic load rating - C	14.8 kN
Preload class B - G_B	180 N
Preload class D - G_D	720 N
Preload class C - G_C	360 N
Preload class A - G_A	90 N
Fatigue load limit P_u	0.38 kN
Calculation factor f_1	0.99

Calculation factor f_{2A}	1
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor f_{2D}	1.08
Calculation factor f_{HC}	1.02
Calculation factor - X_2	0.67
Calculation factor - f_1	0.99
Calculation factor - Y_1	0.92
Limiting speed for oil lubrication	38000 mm/min
Calculation factor - Y_0	0.76
Fatigue load limit - P_u	0.38 kN
Calculation factor - Y_2	1.41
Calculation factor - f_{HC}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2D}	1.08
Limiting speed for grease lubrication	24000 r/min
Basic static load rating C_0	9 kN
Static axial stiffness, preload class B	123 N/ μ m
Attainable speed for grease lubrication	24000 r/min
Static axial stiffness, preload class D	211 N/ μ m
Static axial stiffness, preload class C	160 N/ μ m
Static axial stiffness, preload class A	95 N/ μ m
Basic static load rating -	9 kN

C_0	
Attainable speed for oil-air lubrication	38000 r/min
Reference grease quantity G_{ref}	1.98 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