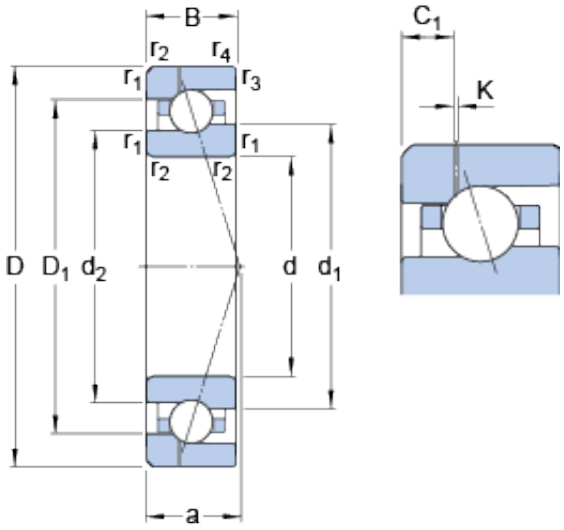
Loyal | 7007 ACE/HCP4AH1



Bearing No. 7007 ACE/HCP4AH1

K	0.5 mm
a	18.4 mm
d	35 mm
D	62 mm
B	14 mm
Ball - z	17
Size (mm)	62x35x14
Width (mm)	14
Mass bearing	0.13 kg
d_n	45.6 mm
D_1	52.25 mm
d_1	43.7 mm
C_1	4.52 mm
D_1	52.25 mm
d_2	41.6 mm
C_1	4.52 mm
d_1	43.7 mm
d_n	45.6 mm
d_2	41.6 mm
Bearing number	7007 ACE/HCP4AH1
Preload class A	88 N/micron
Preload class B	132 N/micron
Preload class C	171 N/micron
G_{ref}	2.4 cm3
Number of balls z	17
Bore Diameter (mm)	62
r_b max.	0.6 mm
r_a max.	1 mm
D_b max.	57.8 mm

D_a max.	57.4 mm
d_a min.	39.6 mm
d_b min.	39.6 mm
Outer Diameter (mm)	35
r_a - max.	1 mm
$r_{3,4}$ min.	0.6 mm
D_a - max.	57.4 mm
d_b - min.	39.6 mm
$r_{1,2}$ min.	1 mm
Ball - D_w	7.144 mm
r_b - max.	0.6 mm
D_b - max.	57.8 mm
Calculation factor f	1.06
Calculation factor e	0.68
d_a - min.	39.6 mm
Calculation factor - f	1.06
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Calculation factor - e	0.68
Ball diameter D_w	7.144 mm
Basic dynamic load rating C	11.1 kN
Preload class A G_A	100 N
Preload class B G_B	300 N
Preload class C G_C	590 N
Basic dynamic load rating - C	11.1 kN
Preload class B - G_B	300 N
Preload class C - G_C	590 N
Preload class A - G_A	100 N
Fatigue load limit P_u	0.265 kN
Calculation factor f_1	0.99

Calculation factor f_{2C}	1.06
Calculation factor f_{2B}	1.03
Calculation factor f_{HC}	1.01
Calculation factor f_{2A}	1
Calculation factor - f_1	0.99
Limiting speed for oil lubrication	56000 mm/min
Fatigue load limit - P_u	0.265 kN
Calculation factor - Y_0	0.76
Calculation factor - Y_1	0.92
Calculation factor - X_2	0.67
Calculation factor - Y_2	1.41
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2C}	1.06
Calculation factor - f_{2B}	1.03
Calculation factor - f_{2A}	1
Limiting speed for grease lubrication	36000 r/min
Basic static load rating C_0	6.3 kN
Static axial stiffness, preload class C	171 N/µm
Attainable speed for grease lubrication	36000 r/min
Static axial stiffness, preload class B	132 N/µm
Static axial stiffness, preload class A	88 N/µm
Attainable speed for oil-air lubrication	56000 r/min
Basic static load rating - C_0	6.3 kN
Reference grease	2.4 cm³

quantity G_{ref}	
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