



Bearing No. 7008 ACB/HCP4A

D	68 mm
d	40 mm
B	15 mm
a	20.2 mm
Ball - z	26
Size (mm)	68x40x15
Width (mm)	15
Mass bearing	0.2 kg
d_n	51.6 mm
d_n	51.6 mm
D_2	58.88 mm
d_1	50.95 mm
d_2	49.87 mm
D_2	58.88 mm
d_2	49.87 mm
d_1	50.95 mm
Bearing number	7008 ACB/HCP4A
Preload class A	80 N/micron
G_{ref}	2.22 cm ³
Preload class C	153 N/micron
Preload class B	102 N/micron
Number of balls z	26
Bore Diameter (mm)	68
r_b max.	0.6 mm
r_a max.	1 mm
D_b max.	64.8 mm
D_a max.	63.4 mm
d_a min.	44.6 mm
d_b min.	44.6 mm

Outer Diameter (mm)	40
D_b - max.	64.8 mm
d_a - min.	44.6 mm
Calculation factor e	0.68
Calculation factor f	1.04
r_b - max.	0.6 mm
D_a - max.	63.4 mm
r_a - max.	1 mm
$r_{3,4}$ min.	0.6 mm
$r_{1,2}$ min.	1 mm
Ball - D_w	4.762 mm
d_b - min.	44.6 mm
$r_{1,2}$ - min.	1 mm
$r_{3,4}$ - min.	0.6 mm
Calculation factor - e	0.68
Calculation factor - f	1.04
Basic dynamic load rating C	9.36 kN
Ball diameter D_w	4.762 mm
Preload class B G_B	82 N
Preload class C G_C	245 N
Basic dynamic load rating - C	6.9 kN
Preload class A G_A	41 N
Preload class B - G_B	82 N
Preload class C - G_C	245 N
Preload class A - G_A	41 N
Fatigue load limit P_u	0.224 kN
Calculation factor f_1	0.99
Calculation factor f_{2C}	1.05
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.01

Calculation factor f_{2B}	1.02
Limiting speed for oil lubrication	48000 mm/min
Fatigue load limit - P_u	0.224 kN
Calculation factor - f_1	0.99
Calculation factor - Y_2	1.41
Calculation factor - X_2	0.67
Calculation factor - Y_1	0.92
Calculation factor - Y_0	0.76
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2B}	1.02
Limiting speed for grease lubrication	32000 r/min
Basic static load rating C_0	8.65 kN
Static axial stiffness, preload class B	102 N/ μ m
Static axial stiffness, preload class A	80 N/ μ m
Attainable speed for grease lubrication	32000 r/min
Static axial stiffness, preload class C	153 N/ μ m
Basic static load rating - C_0	5.3 kN
Attainable speed for oil-air lubrication	48000 r/min
Reference grease quantity G_{ref}	2.22 cm ³
Calculation factor (single, tandem) Y_2	0.87
Calculation factor	0.38

(single, tandem) Y_0	
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