



Bearing No. 7010 CB/HCP4AL

b	1.5 mm
d	50 mm
a	16.7 mm
B	16 mm
D	80 mm
Ball - z	27
Size (mm)	50x80x16
Width (mm)	16
Mass bearing	0.28 kg
d ₂	59.65 mm
D ₂	70.7 mm
d _n	61.8 mm
C ₁	8.6 mm
C ₂	3.6 mm
C ₃	2.6 mm
C ₂	3.6 mm
C ₁	8.6 mm
d _n	61.8 mm
D ₂	70.7 mm
d ₂	59.65 mm
d ₁	61.44 mm
d ₁	61.44 mm
C ₃	2.6 mm
Bearing number	7010 CB/HCP4AL
Preload class B	48 N/micron
G _{ref}	3.11 cm3
Preload class C	76 N/micron
Preload class A	37 N/micron
Number of balls z	27

d_a min.	54.6 mm
d_b min.	54.6 mm
D_a max.	75.4 mm
D_b max.	76.8 mm
r_a max.	1 mm
r_b max.	0.6 mm
Bore Diameter (mm)	50
Outer Diameter (mm)	80
$r_{1,2}$ min.	1 mm
d_a - min.	54.6 mm
d_b - min.	54.6 mm
D_a - max.	75.4 mm
Calculation factor f	1.06
r_b - max.	0.6 mm
$r_{3,4}$ min.	0.6 mm
r_a - max.	1 mm
D_b - max.	76.8 mm
Ball - D_w	5.556 mm
$r_{3,4}$ - min.	0.6 mm
$r_{1,2}$ - min.	1 mm
Calculation factor - f	1.06
Ball diameter D_w	5.556 mm
Basic dynamic load rating C	13.5 kN
Preload class B G_B	66 N
Preload class C G_C	200 N
Preload class A G_A	33 N
Basic dynamic load rating - C	10 kN
Preload class A - G_A	33 N
Preload class B - G_B	66 N
Preload class C - G_C	200 N

Calculation factor f_1	1
Calculation factor f_0	9.7
Fatigue load limit P_u	0.335 kN
Calculation factor f_{2C}	1.05
Calculation factor f_{2B}	1.02
Calculation factor - f	1
Calculation factor f_{2A}	1
Calculation factor f_{HC}	1.01
Calculation factor - f_0	9.7
Limiting speed for oil lubrication	45000 mm/min
Fatigue load limit - P_u	0.335 kN
Calculation factor - f_{HC}	1.01
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2A}	1
Calculation factor - f_{2C}	1.05
Limiting speed for grease lubrication	28000 r/min
Basic static load rating C_0	13.2 kN
Static axial stiffness, preload class A	37 N/ μ m
Static axial stiffness, preload class B	48 N/ μ m
Static axial stiffness, preload class C	76 N/ μ m
Attainable speed for grease lubrication	28000 r/min
Basic static load rating - C_0	7.8 kN
Attainable speed for oil-air lubrication	45000 r/min
Reference grease quantity G_{ref}	3.11 cm ³

