



Bearing No. S7010 ACB/HCP4A

D	80 mm
d	50 mm
B	16 mm
a	23.2 mm
Ball - z	27
Size (mm)	80x50x16
Width (mm)	16
Mass bearing	0.28 kg
D ₂	70.7 mm
d ₂	59.65 mm
d ₁	61.44 mm
d ₂	59.65 mm
D ₂	70.7 mm
d ₁	61.44 mm
Bearing number	S7010 ACB/HCP4A
Preload class A	97 N/micron
Preload class B	122 N/micron
Preload class C	183 N/micron
Number of balls z	27
r _b max.	0.6 mm
r _a max.	1 mm
D _b max.	76.8 mm
D _a max.	75.4 mm
d _b max.	59.1 mm
d _b min.	54.6 mm
d _a max.	60.8 mm
Bore Diameter (mm)	80
d _a min.	54.6 mm
Outer Diameter (mm)	50
d _a - max.	60.8 mm

d _a - min.	54.6 mm
Calculation factor e	0.68
Calculation factor f	1.06
d _b - max.	59.1 mm
D _a - max.	75.4 mm
r _a - max.	1 mm
r _b - max.	0.6 mm
d _b - min.	54.6 mm
r _{3,4} min.	0.6 mm
r _{1,2} min.	1 mm
Ball - D _w	5.556 mm
D _b - max.	76.8 mm
r _{3,4} - min.	0.6 mm
Calculation factor - f	1.06
Calculation factor - e	0.68
r _{1,2} - min.	1 mm
Basic dynamic load rating C	12.5 kN
Ball diameter D _w	5.556 mm
Preload class A G _A	56 N
Basic dynamic load rating - C	9.4 kN
Preload class C G _C	330 N
Preload class B G _B	110 N
Preload class B - G _B	110 N
Preload class A - G _A	56 N
Preload class C - G _C	330 N
Calculation factor f ₁	0.99
Fatigue load limit P _u	0.31 kN
Calculation factor f _{HC}	1.01
Calculation factor f _{2C}	1.05
Calculation factor f _{2B}	1.02

Calculation factor f_{2A}	1
Calculation factor - X_2	0.67
Calculation factor - Y_0	0.76
Calculation factor - Y_1	0.92
Calculation factor - f_1	0.99
Calculation factor - Y_2	1.41
Fatigue load limit - P_u	0.31 kN
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{HC}	1.01
Limiting speed for grease lubrication	26000 r/min
Basic static load rating C_0	12.2 kN
Static axial stiffness, preload class C	183 N/ μm
Static axial stiffness, preload class B	122 N/ μm
Attainable speed for grease lubrication	26000 r/min
Static axial stiffness, preload class A	97 N/ μm
Basic static load rating - C_0	7.4 kN
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-	1.41

to-back, face-to-face) Y_2	
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67