



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/ μ m |
| Static axial stiffness, preload class B | 122 N/ μ m |
| Attainable speed for grease lubrication | 26000 r/min |
| Static axial stiffness, preload class A | 97 N/ μ m |
| 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 |