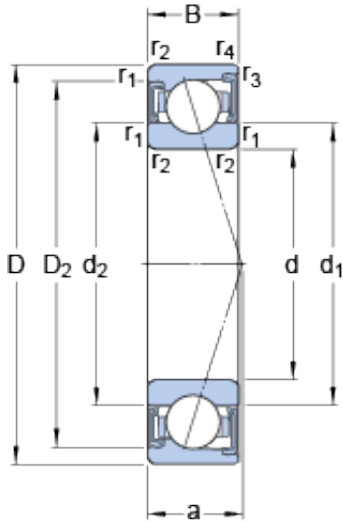




BEARING PRECISION AXLE CORP.



S7011 ACD/HCP4A Bearing 2D drawings and 3D CAD models

S7011 ACD/HCP4A SKF High Speed Angular Contact Ball Bearings

Bearing No. S7011 ACD/HCP4A

| | |
|---|-------------|
| Size | 90x55x18 mm |
| Bore Diameter | 90 mm |
| Outer Diameter | 55 mm |
| Width | 18 mm |
| d | 55 mm |
| D | 90 mm |
| B | 18 mm |
| d ₁ | 65.8 mm |
| d ₂ | 65.8 mm |
| D ₂ | 81.8 mm |
| r _{1,2} - min. | 1.1 mm |
| r _{3,4} - min. | 0.6 mm |
| a | 26 mm |
| d _a - min. | 61 mm |
| d _a - max. | 65.2 mm |
| d _b - min. | 61 mm |
| d _b - max. | 65.2 mm |
| D _a - max. | 84 mm |
| D _b - max. | 86.8 mm |
| r _a - max. | 1 mm |
| r _b - max. | 0.6 mm |
| Basic dynamic load rating - C | 37.1 kN |
| Basic static load rating - C ₀ | 31 kN |
| Fatigue load limit - P _u | 1.3 kN |



BEARING PRECISION AXLE CORP.

| | |
|---------------------------------------|--------------|
| Limiting speed for grease lubrication | 17000 r/min |
| Ball - D_w | 11.112 mm |
| Ball - z | 18 |
| Calculation factor - e | 0.68 |
| Calculation factor - Y_2 | 0.87 |
| Calculation factor - Y_0 | 0.38 |
| Calculation factor - X_2 | 0.41 |
| Calculation factor - Y_1 | 0.92 |
| Calculation factor - Y_2 | 1.41 |
| Calculation factor - Y_0 | 0.76 |
| Calculation factor - X_2 | 0.67 |
| Preload class A - G_A | 230 N |
| Preload class B - G_B | 460 N |
| Preload class C - G_C | 920 N |
| Preload class D - G_D | 1840 N |
| Calculation factor - f | 1.1 |
| Calculation factor - f_1 | 0.99 |
| Calculation factor - f_{2A} | 1 |
| Calculation factor - f_{2B} | 1.02 |
| Calculation factor - f_{2C} | 1.05 |
| Calculation factor - f_{2D} | 1.08 |
| Calculation factor - f_{HC} | 1.02 |
| Preload class A | 176 N/micron |
| Preload class B | 230 N/micron |
| Preload class C | 305 N/micron |
| Preload class D | 413 N/micron |
| d_1 | 65.8 mm |
| d_2 | 65.8 mm |
| D_2 | 81.8 mm |



BEARING PRECISION AXLE CORP.

| | |
|---|----------------|
| $r_{1,2}$ min. | 1.1 mm |
| $r_{3,4}$ min. | 0.6 mm |
| d_a min. | 61 mm |
| d_a max. | 65.2 mm |
| d_b min. | 61 mm |
| d_b max. | 65.2 mm |
| D_a max. | 84 mm |
| D_b max. | 86.8 mm |
| r_a max. | 1 mm |
| r_b max. | 0.6 mm |
| Basic dynamic load rating C | 37.1 kN |
| Basic static load rating C_0 | 31 kN |
| Fatigue load limit P_u | 1.32 kN |
| Attainable speed for grease lubrication | 17000 r/min |
| Ball diameter D_w | 11.112 mm |
| Number of balls z | 18 |
| Preload class A G_A | 230 N |
| Static axial stiffness, preload class A | 176 N/ μ m |
| Preload class B G_B | 460 N |
| Static axial stiffness, preload class B | 230 N/ μ m |
| Preload class C G_C | 920 N |
| Static axial stiffness, preload class C | 305 N/ μ m |
| Preload class D G_D | 1840 N |
| Static axial stiffness, preload class D | 413 N/ μ m |
| Calculation factor f | 1.1 |
| Calculation factor f_1 | 0.99 |
| Calculation factor f_{2A} | 1 |
| Calculation factor f_{2B} | 1.02 |
| Calculation factor f_{2C} | 1.05 |



BEARING PRECISION AXLE CORP.

| | |
|---|---------|
| Calculation factor f_{2D} | 1.08 |
| Calculation factor f_{HC} | 1.02 |
| Calculation factor e | 0.68 |
| 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 |
| Mass bearing | 0.32 kg |