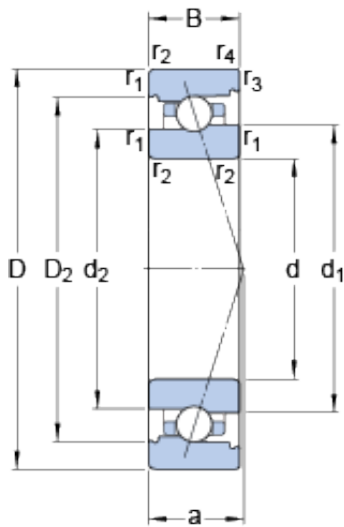




Bearing No. 7011 ACB/HCP4A

|                    |                      |
|--------------------|----------------------|
| D                  | 90 mm                |
| d                  | 55 mm                |
| B                  | 18 mm                |
| a                  | 26 mm                |
| Ball - z           | 26                   |
| Size (mm)          | 90x55x18             |
| Width (mm)         | 18                   |
| Mass bearing       | 0.4 kg               |
| $d_n$              | 69.2 mm              |
| $d_n$              | 69.2 mm              |
| $D_2$              | 79.39 mm             |
| $d_1$              | 68.18 mm             |
| $d_2$              | 66.65 mm             |
| $D_2$              | 79.39 mm             |
| $d_2$              | 66.65 mm             |
| $d_1$              | 68.18 mm             |
| Bearing number     | 7011 ACB/HCP4A       |
| Preload class A    | 112 N/micron         |
| $G_{ref}$          | 4.69 cm <sup>3</sup> |
| Preload class C    | 215 N/micron         |
| Preload class B    | 142 N/micron         |
| Number of balls z  | 26                   |
| Bore Diameter (mm) | 90                   |
| $r_b$ max.         | 0.6 mm               |
| $r_a$ max.         | 1 mm                 |
| $D_b$ max.         | 86.8 mm              |
| $D_a$ max.         | 84 mm                |
| $d_a$ min.         | 61 mm                |
| $d_b$ min.         | 61 mm                |
|                    |                      |

|                               |          |
|-------------------------------|----------|
| Outer Diameter (mm)           | 55       |
| $D_b$ - max.                  | 86.8 mm  |
| $d_a$ - min.                  | 61 mm    |
| Calculation factor e          | 0.68     |
| Calculation factor f          | 1.06     |
| $r_b$ - max.                  | 0.6 mm   |
| $D_a$ - max.                  | 84 mm    |
| $r_a$ - max.                  | 1 mm     |
| $r_{3,4}$ min.                | 0.6 mm   |
| $r_{1,2}$ min.                | 1.1 mm   |
| Ball - $D_w$                  | 6.747 mm |
| $d_b$ - min.                  | 61 mm    |
| $r_{1,2}$ - min.              | 1.1 mm   |
| $r_{3,4}$ - min.              | 0.6 mm   |
| Calculation factor - e        | 0.68     |
| Calculation factor - f        | 1.06     |
| Basic dynamic load rating C   | 17.8 kN  |
| Ball diameter $D_w$           | 6.747 mm |
| Preload class B $G_B$         | 155 N    |
| Preload class C $G_C$         | 470 N    |
| Basic dynamic load rating - C | 13.3 kN  |
| Preload class A $G_A$         | 78 N     |
| Preload class B - $G_B$       | 155 N    |
| Preload class C - $G_C$       | 470 N    |
| Preload class A - $G_A$       | 78 N     |
| Fatigue load limit $P_u$      | 0.44 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        | 36000 mm/min         |
| Fatigue load limit - $P_u$                | 0.44 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     | 24000 r/min          |
| Basic static load rating $C_0$            | 17.6 kN              |
| Static axial stiffness, preload class B   | 142 N/ $\mu$ m       |
| Static axial stiffness, preload class A   | 112 N/ $\mu$ m       |
| Attainable speed for grease lubrication   | 24000 r/min          |
| Static axial stiffness, preload class C   | 215 N/ $\mu$ m       |
| Basic static load rating - $C_0$          | 10.4 kN              |
| Attainable speed for oil-air lubrication  | 36000 r/min          |
| Reference grease quantity $G_{ref}$       | 4.69 cm <sup>3</sup> |
| Calculation factor (single, tandem) $Y_2$ | 0.87                 |
| Calculation factor                        | 0.38                 |

|                                                           |      |
|-----------------------------------------------------------|------|
| (single, tandem) $Y_0$                                    |      |
| Calculation factor<br>(single, tandem) $X_2$              | 0.41 |
| Calculation factor (back-<br>to-back, face-to-face) $Y_1$ | 0.92 |
| Calculation factor (back-<br>to-back, face-to-face) $Y_2$ | 1.41 |
| Calculation factor (back-<br>to-back, face-to-face) $Y_0$ | 0.76 |
| Calculation factor (back-<br>to-back, face-to-face) $X_2$ | 0.67 |