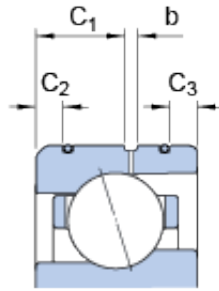
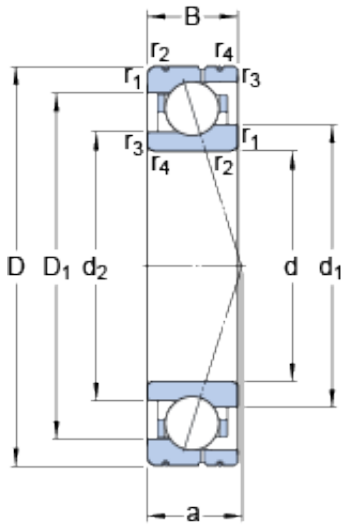




# ROLLWAY BEARING Sales Co., Ltd.



## 71911 CE/HCP4AL SKF High Speed Angular Contact Ball Bearings

Bearing No. 71911 CE/HCP4AL

71911 CE/HCP4AL Bearing 2D drawings and 3D CAD models

|                         |             |
|-------------------------|-------------|
| Size                    | 80x55x13 mm |
| Bore Diameter           | 80 mm       |
| Outer Diameter          | 55 mm       |
| Width                   | 13 mm       |
| d                       | 55 mm       |
| D                       | 80 mm       |
| B                       | 13 mm       |
| d <sub>1</sub>          | 62.75 mm    |
| d <sub>2</sub>          | 60.7 mm     |
| D <sub>1</sub>          | 72.3 mm     |
| b                       | 2.2 mm      |
| C <sub>1</sub>          | 6.5 mm      |
| C <sub>2</sub>          | 2.5 mm      |
| C <sub>3</sub>          | 2 mm        |
| r <sub>1,2</sub> - min. | 1 mm        |
| r <sub>3,4</sub> - min. | 0.3 mm      |
| a                       | 16.2 mm     |
| d <sub>a</sub> - min.   | 59.6 mm     |
| d <sub>b</sub> - min.   | 57 mm       |
| D <sub>a</sub> - max.   | 75.4 mm     |
| D <sub>b</sub> - max.   | 78 mm       |
| r <sub>a</sub> - max.   | 1 mm        |
| r <sub>b</sub> - max.   | 0.3 mm      |
| d <sub>n</sub>          | 64.6 mm     |
|                         |             |



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|   |                     |
|---|---------------------|
| Basic dynamic load rating - C             | 15.3 kN             |
| Basic static load rating - C <sub>0</sub> | 10.6 kN             |
| Fatigue load limit - P <sub>u</sub>       | 0.455 kN            |
| Limiting speed for grease lubrication     | 28000 r/min         |
| Limiting speed for oil lubrication        | 43000 mm/min        |
| Ball - D <sub>w</sub>                     | 7.938 mm            |
| Ball - z                                  | 21                  |
| G <sub>ref</sub>                          | 2.3 cm <sup>3</sup> |
| Calculation factor - f <sub>0</sub>       | 8.4                 |
| Preload class A - G <sub>A</sub>          | 83 N                |
| Preload class B - G <sub>B</sub>          | 250 N               |
| Preload class C - G <sub>C</sub>          | 500 N               |
| Calculation factor - f                    | 1.16                |
| Calculation factor - f                    | 1                   |
| Calculation factor - f <sub>2A</sub>      | 1                   |
| Calculation factor - f <sub>2B</sub>      | 1.05                |
| Calculation factor - f <sub>2C</sub>      | 1.09                |
| Calculation factor - f <sub>HC</sub>      | 1.01                |
| Preload class A                           | 46 N/micron         |
| Preload class B                           | 74 N/micron         |
| Preload class C                           | 102 N/micron        |
| d <sub>1</sub>                            | 62.75 mm            |
| d <sub>2</sub>                            | 60.7 mm             |
| D <sub>1</sub>                            | 72.3 mm             |
| C <sub>1</sub>                            | 6.5 mm              |
| C <sub>2</sub>                            | 2.5 mm              |
| C <sub>3</sub>                            | 2 mm                |
| r <sub>1,2</sub> min.                     | 1 mm                |



## ROLLWAY BEARING Sales Co., Ltd.

|  |                     |
|--|---------------------|
| $r_{3,4}$ min.                           | 0.3 mm              |
| $d_a$ min.                               | 59.6 mm             |
| $d_b$ min.                               | 57 mm               |
| $D_a$ max.                               | 75.4 mm             |
| $D_b$ max.                               | 78 mm               |
| $r_a$ max.                               | 1 mm                |
| $r_b$ max.                               | 0.3 mm              |
| $d_n$                                    | 64.6 mm             |
| Basic dynamic load rating C              | 15.3 kN             |
| Basic static load rating $C_0$           | 10.6 kN             |
| Fatigue load limit $P_u$                 | 0.455 kN            |
| Attainable speed for grease lubrication  | 28000 r/min         |
| Attainable speed for oil-air lubrication | 43000 r/min         |
| Ball diameter $D_w$                      | 7.938 mm            |
| Number of balls z                        | 21                  |
| Reference grease quantity $G_{ref}$      | 2.3 cm <sup>3</sup> |
| Preload class A $G_A$                    | 83 N                |
| Static axial stiffness, preload class A  | 46 N/ $\mu$ m       |
| Preload class B $G_B$                    | 250 N               |
| Static axial stiffness, preload class B  | 74 N/ $\mu$ m       |
| Preload class C $G_C$                    | 500 N               |
| Static axial stiffness, preload class C  | 102 N/ $\mu$ m      |
| Calculation factor f                     | 1.16                |
| Calculation factor $f_1$                 | 1                   |
| Calculation factor $f_{2A}$              | 1                   |
| Calculation factor $f_{2B}$              | 1.05                |
| Calculation factor $f_{2C}$              | 1.09                |
| Calculation factor $f_{HC}$              | 1.01                |



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|                          |         |
|--------------------------|---------|
| Calculation factor $f_0$ | 8.4     |
| Mass bearing             | 0.14 kg |