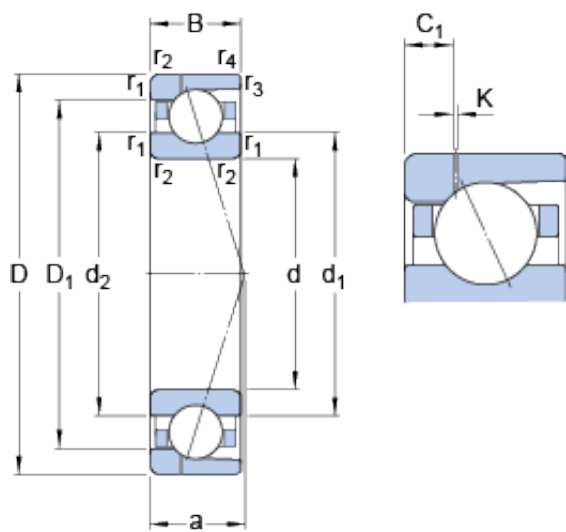




Bearing No. 7024 CD/HCP4AH1

|                     |                 |
|---------------------|-----------------|
| K                   | 0.5 mm          |
| a                   | 34.2 mm         |
| d                   | 120 mm          |
| D                   | 180 mm          |
| B                   | 28 mm           |
| Ball - z            | 22              |
| Size (mm)           | 180x120x28      |
| Width (mm)          | 28              |
| Mass bearing        | 1.76 kg         |
| d <sub>n</sub>      | 142.6 mm        |
| D <sub>1</sub>      | 161.5 mm        |
| d <sub>1</sub>      | 138.5 mm        |
| C <sub>1</sub>      | 7.41 mm         |
| D <sub>1</sub>      | 161.5 mm        |
| d <sub>2</sub>      | 138.5 mm        |
| C <sub>1</sub>      | 7.41 mm         |
| d <sub>1</sub>      | 138.5 mm        |
| d <sub>n</sub>      | 142.6 mm        |
| d <sub>2</sub>      | 138.5 mm        |
| Bearing number      | 7024 CD/HCP4AH1 |
| Preload class A     | 146 N/micron    |
| Preload class D     | 404 N/micron    |
| Preload class B     | 198 N/micron    |
| Preload class C     | 278 N/micron    |
| G <sub>ref</sub>    | 27 cm3          |
| Number of balls z   | 22              |
| r <sub>b</sub> max. | 1 mm            |
| r <sub>a</sub> max. | 2 mm            |
| D <sub>b</sub> max. | 175 mm          |
|                     |                 |

|                               |          |
|-------------------------------|----------|
| $D_a$ max.                    | 171 mm   |
| $d_b$ min.                    | 129 mm   |
| $d_a$ min.                    | 129 mm   |
| Bore Diameter (mm)            | 180      |
| Outer Diameter (mm)           | 120      |
| $d_b$ - min.                  | 129 mm   |
| $r_b$ - max.                  | 1 mm     |
| $r_{1,2}$ min.                | 2 mm     |
| $d_a$ - min.                  | 129 mm   |
| Calculation factor f          | 1.17     |
| $r_a$ - max.                  | 2 mm     |
| $r_{3,4}$ min.                | 1 mm     |
| $D_a$ - max.                  | 171 mm   |
| Ball - $D_w$                  | 19.05 mm |
| $D_b$ - max.                  | 175 mm   |
| Calculation factor - f        | 1.17     |
| $r_{3,4}$ - min.              | 1 mm     |
| $r_{1,2}$ - min.              | 2 mm     |
| Ball diameter $D_w$           | 19.05 mm |
| Basic dynamic load rating C   | 114 kN   |
| Preload class D $G_D$         | 3440 N   |
| Preload class A $G_A$         | 430 N    |
| Preload class C $G_C$         | 1720 N   |
| Preload class B $G_B$         | 860 N    |
| Basic dynamic load rating - C | 114 kN   |
| Preload class A - $G_A$       | 430 N    |
| Preload class B - $G_B$       | 860 N    |
| Preload class C - $G_C$       | 1720 N   |
| Preload class D - $G_D$       | 3440 N   |
| Fatigue load limit $P_u$      | 4.25 kN  |

|                                          |                |
|------------------------------------------|----------------|
| Calculation factor $f_1$                 | 1              |
| Calculation factor $f_0$                 | 15.7           |
| Calculation factor $f_{2D}$              | 1.09           |
| Calculation factor - $f$                 | 1              |
| Calculation factor $f_{2C}$              | 1.05           |
| Calculation factor $f_{HC}$              | 1.02           |
| Calculation factor $f_{2B}$              | 1.02           |
| Calculation factor $f_{2A}$              | 1              |
| Limiting speed for oil lubrication       | 13000 mm/min   |
| Fatigue load limit - $P_u$               | 4.2 kN         |
| Calculation factor - $f_0$               | 15.7           |
| Calculation factor - $f_{2D}$            | 1.09           |
| Calculation factor - $f_{HC}$            | 1.02           |
| Calculation factor - $f_{2A}$            | 1              |
| Calculation factor - $f_{2C}$            | 1.05           |
| Calculation factor - $f_{2B}$            | 1.02           |
| Limiting speed for grease lubrication    | 8500 r/min     |
| Basic static load rating $C_0$           | 122 kN         |
| Static axial stiffness, preload class B  | 198 N/ $\mu$ m |
| Static axial stiffness, preload class C  | 278 N/ $\mu$ m |
| Static axial stiffness, preload class A  | 146 N/ $\mu$ m |
| Static axial stiffness, preload class D  | 404 N/ $\mu$ m |
| Attainable speed for grease lubrication  | 8500 r/min     |
| Attainable speed for oil-air lubrication | 13000 r/min    |
|                                          |                |



|                                        |                    |
|----------------------------------------|--------------------|
| Basic static load rating -<br>$C_0$    | 122 kN             |
| Reference grease<br>quantity $G_{ref}$ | 27 cm <sup>3</sup> |