



**Bearing No. S7204 CD/HCP4A**

|                     |                |
|---------------------|----------------|
| D                   | 47 mm          |
| d                   | 20 mm          |
| B                   | 14 mm          |
| a                   | 11.6 mm        |
| Ball - z            | 11             |
| Size (mm)           | 47x20x14       |
| Width (mm)          | 14             |
| Mass bearing        | 0.092 kg       |
| D <sub>2</sub>      | 40.9 mm        |
| d <sub>2</sub>      | 29.1 mm        |
| d <sub>1</sub>      | 29.1 mm        |
| d <sub>2</sub>      | 29.1 mm        |
| D <sub>2</sub>      | 40.9 mm        |
| d <sub>1</sub>      | 29.1 mm        |
| Bearing number      | S7204 CD/HCP4A |
| Preload class A     | 28 N/micron    |
| Preload class B     | 37 N/micron    |
| Preload class D     | 70 N/micron    |
| Preload class C     | 50 N/micron    |
| Number of balls z   | 11             |
| r <sub>b</sub> max. | 0.3 mm         |
| r <sub>a</sub> max. | 1 mm           |
| D <sub>b</sub> max. | 44.6 mm        |
| D <sub>a</sub> max. | 41.4 mm        |
| d <sub>b</sub> max. | 28.5 mm        |
| d <sub>a</sub> max. | 28.5 mm        |
| d <sub>a</sub> min. | 25.6 mm        |
| Bore Diameter (mm)  | 47             |
| d <sub>b</sub> min. | 25.6 mm        |
| Outer Diameter (mm) | 20             |

|                               |          |
|-------------------------------|----------|
| $r_{3,4}$ min.                | 0.3 mm   |
| $d_b$ - min.                  | 25.6 mm  |
| Calculation factor $f$        | 1.03     |
| $d_a$ - max.                  | 28.5 mm  |
| $r_{1,2}$ min.                | 1 mm     |
| $d_a$ - min.                  | 25.6 mm  |
| $d_b$ - max.                  | 28.5 mm  |
| $D_a$ - max.                  | 41.4 mm  |
| $D_b$ - max.                  | 44.6 mm  |
| $r_a$ - max.                  | 1 mm     |
| $r_b$ - max.                  | 0.3 mm   |
| Ball - $D_w$                  | 7.938 mm |
| $r_{3,4}$ - min.              | 0.3 mm   |
| Calculation factor - $f$      | 1.03     |
| $r_{1,2}$ - min.              | 1 mm     |
| Ball diameter $D_w$           | 7.938 mm |
| Basic dynamic load rating C   | 11.9 kN  |
| Preload class A $G_A$         | 45 N     |
| Basic dynamic load rating - C | 11.9 kN  |
| Preload class C $G_C$         | 180 N    |
| Preload class D $G_D$         | 360 N    |
| Preload class B $G_B$         | 90 N     |
| Preload class C - $G_C$       | 180 N    |
| Preload class D - $G_D$       | 360 N    |
| Preload class B - $G_B$       | 90 N     |
| Preload class A - $G_A$       | 45 N     |
| Calculation factor $f_1$      | 1        |
| Fatigue load limit $P_u$      | 0.245 kN |
| Calculation factor $f_0$      | 8.7      |
| Calculation factor $f_{2D}$   | 1.06     |

|   |               |
|---|---------------|
| Calculation factor $f_{HC}$             | 1.01          |
| Calculation factor $f_{2C}$             | 1.03          |
| Calculation factor $f_{2B}$             | 1.01          |
| Calculation factor $f_{2A}$             | 1             |
| Calculation factor - $f$                | 1             |
| Calculation factor - $f_0$              | 8.7           |
| Fatigue load limit - $P_u$              | 0.245 kN      |
| Calculation factor - $f_{2C}$           | 1.03          |
| Calculation factor - $f_{2D}$           | 1.06          |
| Calculation factor - $f_{2B}$           | 1.01          |
| Calculation factor - $f_{2A}$           | 1             |
| Calculation factor - $f_{HC}$           | 1.01          |
| Limiting speed for grease lubrication   | 43000 r/min   |
| Basic static load rating $C_0$          | 5.85 kN       |
| Static axial stiffness, preload class A | 28 N/ $\mu$ m |
| Static axial stiffness, preload class B | 37 N/ $\mu$ m |
| Static axial stiffness, preload class C | 50 N/ $\mu$ m |
| Static axial stiffness, preload class D | 70 N/ $\mu$ m |
| Attainable speed for grease lubrication | 43000 r/min   |
| Basic static load rating - $C_0$        | 5.8 kN        |