



Bearing No. S7200 ACD/P4A

|                     |               |
|---------------------|---------------|
| D                   | 30 mm         |
| d                   | 10 mm         |
| B                   | 9 mm          |
| a                   | 9.3 mm        |
| Ball - z            | 10            |
| Size (mm)           | 30x10x9       |
| Width (mm)          | 9             |
| Mass bearing        | 0.032 kg      |
| D <sub>2</sub>      | 24.3 mm       |
| d <sub>2</sub>      | 17.3 mm       |
| d <sub>1</sub>      | 17.3 mm       |
| d <sub>2</sub>      | 17.3 mm       |
| D <sub>2</sub>      | 24.3 mm       |
| d <sub>1</sub>      | 17.3 mm       |
| Bearing number      | S7200 ACD/P4A |
| Preload class B     | 45 N/micron   |
| Preload class A     | 35 N/micron   |
| Preload class D     | 78 N/micron   |
| Preload class C     | 59 N/micron   |
| Number of balls z   | 10            |
| r <sub>b</sub> max. | 0.3 mm        |
| r <sub>a</sub> max. | 0.6 mm        |
| D <sub>b</sub> max. | 27.6 mm       |
| D <sub>a</sub> max. | 25.8 mm       |
| d <sub>b</sub> max. | 16.7 mm       |
| d <sub>b</sub> min. | 14.2 mm       |
| d <sub>a</sub> max. | 16.7 mm       |
| Bore Diameter (mm)  | 30            |
| d <sub>a</sub> min. | 14.2 mm       |
| Outer Diameter (mm) | 10            |

|                                   |          |
|-----------------------------------|----------|
| d <sub>a</sub> - max.             | 16.7 mm  |
| d <sub>a</sub> - min.             | 14.2 mm  |
| Calculation factor e              | 0.68     |
| Calculation factor f              | 1.02     |
| d <sub>b</sub> - max.             | 16.7 mm  |
| D <sub>b</sub> - max.             | 27.6 mm  |
| r <sub>a</sub> - max.             | 0.6 mm   |
| r <sub>b</sub> - max.             | 0.3 mm   |
| d <sub>b</sub> - min.             | 14.2 mm  |
| r <sub>3,4</sub> min.             | 0.3 mm   |
| r <sub>1,2</sub> min.             | 0.6 mm   |
| Ball - D <sub>w</sub>             | 4.762 mm |
| D <sub>a</sub> - max.             | 25.8 mm  |
| r <sub>3,4</sub> - min.           | 0.3 mm   |
| r <sub>1,2</sub> - min.           | 0.6 mm   |
| Calculation factor - f            | 1.02     |
| Calculation factor - e            | 0.68     |
| Ball diameter D <sub>w</sub>      | 4.762 mm |
| Basic dynamic load rating C       | 4.36 kN  |
| Preload class A G <sub>A</sub>    | 27 N     |
| Basic dynamic load rating - C     | 4.4 kN   |
| Preload class B G <sub>B</sub>    | 54 N     |
| Preload class C G <sub>C</sub>    | 108 N    |
| Preload class D G <sub>D</sub>    | 216 N    |
| Preload class B - G <sub>B</sub>  | 54 N     |
| Preload class C - G <sub>C</sub>  | 108 N    |
| Preload class A - G <sub>A</sub>  | 27 N     |
| Preload class D - G <sub>D</sub>  | 216 N    |
| Calculation factor f <sub>1</sub> | 0.99     |
| Fatigue load limit P <sub>u</sub> | 0.078 kN |

|   |               |
|---|---------------|
| Calculation factor $f_{2A}$             | 1             |
| Calculation factor $f_{2B}$             | 1.01          |
| Calculation factor $f_{2C}$             | 1.02          |
| Calculation factor $f_{2D}$             | 1.05          |
| Calculation factor $f_{HC}$             | 1             |
| Calculation factor - $X_2$              | 0.67          |
| Calculation factor - $Y_1$              | 0.92          |
| Calculation factor - $Y_2$              | 1.41          |
| Fatigue load limit - $P_u$              | 0.078 kN      |
| Calculation factor - $Y_0$              | 0.76          |
| Calculation factor - $f_1$              | 0.99          |
| Calculation factor - $f_{HC}$           | 1             |
| Calculation factor - $f_{2D}$           | 1.05          |
| Calculation factor - $f_{2C}$           | 1.02          |
| Calculation factor - $f_{2B}$           | 1.01          |
| Calculation factor - $f_{2A}$           | 1             |
| Limiting speed for grease lubrication   | 53000 r/min   |
| Basic static load rating $C_0$          | 1.86 kN       |
| Static axial stiffness, preload class D | 78 N/ $\mu$ m |
| Attainable speed for grease lubrication | 53000 r/min   |
| Static axial stiffness, preload class C | 59 N/ $\mu$ m |
| Static axial stiffness, preload class B | 45 N/ $\mu$ m |
| Static axial stiffness, preload class A | 35 N/ $\mu$ m |
| Basic static load rating - $C_0$        | 1.9 kN        |
|   |               |

|   |      |
|---|------|
| Calculation factor<br>(single, tandem) $Y_2$          | 0.87 |
| Calculation factor<br>(single, tandem) $Y_0$          | 0.38 |
| Calculation factor<br>(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 |