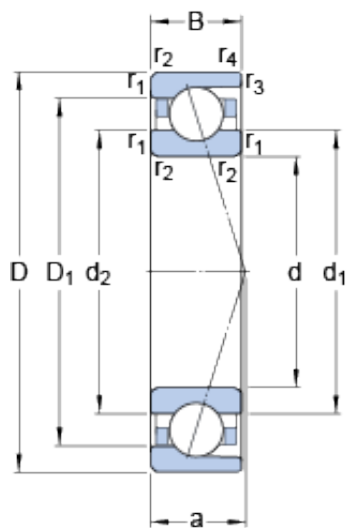




Bearing No. 7228 ACD/HCP4A

|                     |                |
|---------------------|----------------|
| D                   | 250 mm         |
| d                   | 140 mm         |
| B                   | 42 mm          |
| a                   | 66.7 mm        |
| Ball - z            | 18             |
| Size (mm)           | 250x140x42     |
| Width (mm)          | 42             |
| Mass bearing        | 6.92 kg        |
| d <sub>n</sub>      | 184.8 mm       |
| d <sub>n</sub>      | 184.8 mm       |
| D <sub>1</sub>      | 213.2 mm       |
| d <sub>1</sub>      | 176.8 mm       |
| d <sub>2</sub>      | 176.8 mm       |
| D <sub>1</sub>      | 213.2 mm       |
| d <sub>2</sub>      | 176.8 mm       |
| d <sub>1</sub>      | 176.8 mm       |
| Bearing number      | 7228 ACD/HCP4A |
| Preload class B     | 573 N/micron   |
| Preload class A     | 441 N/micron   |
| Preload class D     | 1011 N/micron  |
| Preload class C     | 754 N/micron   |
| G <sub>ref</sub>    | 83.931 cm3     |
| Number of balls z   | 18             |
| Bore Diameter (mm)  | 250            |
| r <sub>b</sub> max. | 1.5 mm         |
| r <sub>a</sub> max. | 2.5 mm         |
| D <sub>b</sub> max. | 241 mm         |
| D <sub>a</sub> max. | 236 mm         |
| d <sub>a</sub> min. | 154 mm         |
|                     |                |

|                               |           |
|-------------------------------|-----------|
| $d_b$ min.                    | 154 mm    |
| Outer Diameter (mm)           | 140       |
| $D_b$ - max.                  | 241 mm    |
| $d_b$ - min.                  | 154 mm    |
| Ball - $D_w$                  | 30.162 mm |
| $r_{1,2}$ min.                | 3 mm      |
| $r_{3,4}$ min.                | 1.5 mm    |
| $d_a$ - min.                  | 154 mm    |
| $r_a$ - max.                  | 2.5 mm    |
| $D_a$ - max.                  | 236 mm    |
| $r_b$ - max.                  | 1.5 mm    |
| Calculation factor f          | 1.09      |
| Calculation factor e          | 0.68      |
| $r_{1,2}$ - min.              | 3 mm      |
| $r_{3,4}$ - min.              | 1.5 mm    |
| Calculation factor - e        | 0.68      |
| Calculation factor - f        | 1.09      |
| Ball diameter $D_w$           | 30.162 mm |
| Basic dynamic load rating C   | 212 kN    |
| Preload class C $G_C$         | 5400 N    |
| Preload class B $G_B$         | 2700 N    |
| Preload class A $G_A$         | 1350 N    |
| Preload class D $G_D$         | 10800 N   |
| Basic dynamic load rating - C | 212 kN    |
| Preload class B - $G_B$       | 2700 N    |
| Preload class D - $G_D$       | 10800 N   |
| Preload class C - $G_C$       | 5400 N    |
| Preload class A - $G_A$       | 1350 N    |
| Fatigue load limit $P_u$      | 6.95 kN   |
| Calculation factor $f_1$      | 0.99      |

|                                         |                 |
|-----------------------------------------|-----------------|
| Calculation factor $f_{2A}$             | 1               |
| Calculation factor $f_{2C}$             | 1.03            |
| Calculation factor $f_{2B}$             | 1.01            |
| Calculation factor $f_{2D}$             | 1.06            |
| Calculation factor $f_{HC}$             | 1.01            |
| Calculation factor - $X_2$              | 0.67            |
| Calculation factor - $f_1$              | 0.99            |
| Calculation factor - $Y_1$              | 0.92            |
| Limiting speed for oil lubrication      | 9000 mm/min     |
| Calculation factor - $Y_0$              | 0.76            |
| Fatigue load limit - $P_u$              | 7 kN            |
| Calculation factor - $Y_2$              | 1.41            |
| Calculation factor - $f_{HC}$           | 1.01            |
| Calculation factor - $f_{2A}$           | 1               |
| Calculation factor - $f_{2C}$           | 1.03            |
| Calculation factor - $f_{2B}$           | 1.01            |
| Calculation factor - $f_{2D}$           | 1.06            |
| Limiting speed for grease lubrication   | 6000 r/min      |
| Basic static load rating $C_0$          | 228 kN          |
| Static axial stiffness, preload class B | 573 N/ $\mu$ m  |
| Attainable speed for grease lubrication | 6000 r/min      |
| Static axial stiffness, preload class D | 1011 N/ $\mu$ m |
| Static axial stiffness, preload class C | 754 N/ $\mu$ m  |
| Static axial stiffness, preload class A | 441 N/ $\mu$ m  |
| Basic static load rating -              | 228 kN          |

|                                                       |                        |
|-------------------------------------------------------|------------------------|
| $C_0$                                                 |                        |
| Attainable speed for oil-air lubrication              | 9000 r/min             |
| Reference grease quantity $G_{ref}$                   | 83.931 cm <sup>3</sup> |
| Calculation factor (single, tandem) $Y_2$             | 0.87                   |
| Calculation factor (single, tandem) $Y_0$             | 0.38                   |
| Calculation factor (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                   |