



Bearing No. 7022 ACD/HCP4A

|                     |                |
|---------------------|----------------|
| D                   | 170 mm         |
| d                   | 110 mm         |
| B                   | 28 mm          |
| a                   | 46.8 mm        |
| Ball - z            | 20             |
| Size (mm)           | 170x110x28     |
| Width (mm)          | 28             |
| Mass bearing        | 1.63 kg        |
| d <sub>n</sub>      | 132.6 mm       |
| d <sub>n</sub>      | 132.6 mm       |
| D <sub>1</sub>      | 151.5 mm       |
| d <sub>1</sub>      | 128.5 mm       |
| d <sub>2</sub>      | 128.5 mm       |
| D <sub>1</sub>      | 151.5 mm       |
| d <sub>2</sub>      | 128.5 mm       |
| d <sub>1</sub>      | 128.5 mm       |
| Bearing number      | 7022 ACD/HCP4A |
| Preload class B     | 421 N/micron   |
| Preload class A     | 322 N/micron   |
| Preload class D     | 755 N/micron   |
| Preload class C     | 558 N/micron   |
| G <sub>ref</sub>    | 25.5 cm3       |
| Number of balls z   | 20             |
| Bore Diameter (mm)  | 170            |
| r <sub>b</sub> max. | 1 mm           |
| r <sub>a</sub> max. | 2 mm           |
| D <sub>b</sub> max. | 165 mm         |
| D <sub>a</sub> max. | 161 mm         |
| d <sub>a</sub> min. | 119 mm         |
|                     |                |

|                               |          |
|-------------------------------|----------|
| $d_b$ min.                    | 119 mm   |
| Outer Diameter (mm)           | 110      |
| $D_b$ - max.                  | 165 mm   |
| $d_b$ - min.                  | 119 mm   |
| Ball - $D_w$                  | 19.05 mm |
| $r_{1,2}$ min.                | 2 mm     |
| $r_{3,4}$ min.                | 1 mm     |
| $d_a$ - min.                  | 119 mm   |
| $r_a$ - max.                  | 2 mm     |
| $D_a$ - max.                  | 161 mm   |
| $r_b$ - max.                  | 1 mm     |
| Calculation factor f          | 1.14     |
| Calculation factor e          | 0.68     |
| $r_{1,2}$ - min.              | 2 mm     |
| $r_{3,4}$ - min.              | 1 mm     |
| Calculation factor - e        | 0.68     |
| Calculation factor - f        | 1.14     |
| Ball diameter $D_w$           | 19.05 mm |
| Basic dynamic load rating C   | 104 kN   |
| Preload class C $G_C$         | 2600 N   |
| Preload class B $G_B$         | 1300 N   |
| Preload class A $G_A$         | 650 N    |
| Preload class D $G_D$         | 5200 N   |
| Basic dynamic load rating - C | 104 kN   |
| Preload class B - $G_B$       | 1300 N   |
| Preload class D - $G_D$       | 5200 N   |
| Preload class C - $G_C$       | 2600 N   |
| Preload class A - $G_A$       | 650 N    |
| Fatigue load limit $P_u$      | 3.75 kN  |
| Calculation factor $f_1$      | 0.99     |

|                                         |                |
|-----------------------------------------|----------------|
| Calculation factor $f_{2A}$             | 1              |
| Calculation factor $f_{2C}$             | 1.05           |
| Calculation factor $f_{2B}$             | 1.02           |
| Calculation factor $f_{2D}$             | 1.08           |
| Calculation factor $f_{HC}$             | 1.02           |
| Calculation factor - $X_2$              | 0.67           |
| Calculation factor - $f_1$              | 0.99           |
| Calculation factor - $Y_1$              | 0.92           |
| Limiting speed for oil lubrication      | 13000 mm/min   |
| Calculation factor - $Y_0$              | 0.76           |
| Fatigue load limit - $P_u$              | 3.8 kN         |
| Calculation factor - $Y_2$              | 1.41           |
| Calculation factor - $f_{HC}$           | 1.02           |
| Calculation factor - $f_{2A}$           | 1              |
| Calculation factor - $f_{2C}$           | 1.05           |
| Calculation factor - $f_{2B}$           | 1.02           |
| Calculation factor - $f_{2D}$           | 1.08           |
| Limiting speed for grease lubrication   | 8500 r/min     |
| Basic static load rating $C_0$          | 104 kN         |
| Static axial stiffness, preload class B | 421 N/ $\mu$ m |
| Attainable speed for grease lubrication | 8500 r/min     |
| Static axial stiffness, preload class D | 755 N/ $\mu$ m |
| Static axial stiffness, preload class C | 558 N/ $\mu$ m |
| Static axial stiffness, preload class A | 322 N/ $\mu$ m |
| Basic static load rating -              | 104 kN         |

|                                                       |                      |
|-------------------------------------------------------|----------------------|
| $C_0$                                                 |                      |
| Attainable speed for oil-air lubrication              | 13000 r/min          |
| Reference grease quantity $G_{ref}$                   | 25.5 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                 |