



Bearing No. S7019 ACB/HCP4A

|                       |                 |
|-----------------------|-----------------|
| D                     | 145 mm          |
| d                     | 95 mm           |
| B                     | 24 mm           |
| a                     | 40.2 mm         |
| Ball - z              | 26              |
| Size (mm)             | 145x95x24       |
| Width (mm)            | 24              |
| Mass bearing          | 1.23 kg         |
| D <sub>2</sub>        | 130 mm          |
| d <sub>2</sub>        | 111.15 mm       |
| d <sub>1</sub>        | 113.7 mm        |
| d <sub>2</sub>        | 111.15 mm       |
| D <sub>2</sub>        | 130 mm          |
| d <sub>1</sub>        | 113.7 mm        |
| Bearing number        | S7019 ACB/HCP4A |
| Preload class A       | 165 N/micron    |
| Preload class B       | 211 N/micron    |
| Preload class C       | 318 N/micron    |
| Number of balls z     | 26              |
| r <sub>b</sub> max.   | 1 mm            |
| r <sub>a</sub> max.   | 1.5 mm          |
| D <sub>b</sub> max.   | 140.4 mm        |
| D <sub>a</sub> max.   | 138 mm          |
| d <sub>b</sub> max.   | 110.4 mm        |
| d <sub>b</sub> min.   | 102 mm          |
| d <sub>a</sub> max.   | 112.9 mm        |
| Bore Diameter (mm)    | 145             |
| d <sub>a</sub> min.   | 102 mm          |
| Outer Diameter (mm)   | 95              |
| d <sub>a</sub> - max. | 112.9 mm        |

|                                    |           |
|------------------------------------|-----------|
| d <sub>a</sub> - min.              | 102 mm    |
| Calculation factor e               | 0.68      |
| Calculation factor f               | 1.07      |
| d <sub>b</sub> - max.              | 110.4 mm  |
| D <sub>a</sub> - max.              | 138 mm    |
| r <sub>a</sub> - max.              | 1.5 mm    |
| r <sub>b</sub> - max.              | 1 mm      |
| d <sub>b</sub> - min.              | 102 mm    |
| r <sub>3,4</sub> min.              | 1 mm      |
| r <sub>1,2</sub> min.              | 1.5 mm    |
| Ball - D <sub>w</sub>              | 10.319 mm |
| D <sub>b</sub> - max.              | 140.4 mm  |
| r <sub>3,4</sub> - min.            | 1 mm      |
| Calculation factor - f             | 1.07      |
| Calculation factor - e             | 0.68      |
| r <sub>1,2</sub> - min.            | 1.5 mm    |
| Basic dynamic load rating C        | 35.8 kN   |
| Ball diameter D <sub>w</sub>       | 10.319 mm |
| Preload class A G <sub>A</sub>     | 165 N     |
| Basic dynamic load rating - C      | 27.6 kN   |
| Preload class C G <sub>C</sub>     | 990 N     |
| Preload class B G <sub>B</sub>     | 330 N     |
| Preload class B - G <sub>B</sub>   | 330 N     |
| Preload class A - G <sub>A</sub>   | 165 N     |
| Preload class C - G <sub>C</sub>   | 990 N     |
| Calculation factor f <sub>1</sub>  | 0.99      |
| Fatigue load limit P <sub>u</sub>  | 0.95 kN   |
| Calculation factor f <sub>HC</sub> | 1.01      |
| Calculation factor f <sub>2C</sub> | 1.05      |
| Calculation factor f <sub>2B</sub> | 1.02      |

|   |                      |
|---|----------------------|
| Calculation factor $f_{2A}$                           | 1                    |
| Calculation factor - $X_2$                            | 0.67                 |
| Calculation factor - $Y_0$                            | 0.76                 |
| Calculation factor - $Y_1$                            | 0.92                 |
| Calculation factor - $f_1$                            | 0.99                 |
| Calculation factor - $Y_2$                            | 1.41                 |
| Fatigue load limit - $P_u$                            | 0.95 kN              |
| Calculation factor - $f_{2A}$                         | 1                    |
| Calculation factor - $f_{2B}$                         | 1.02                 |
| Calculation factor - $f_{2C}$                         | 1.05                 |
| Calculation factor - $f_{HC}$                         | 1.01                 |
| Limiting speed for grease lubrication                 | 13000 r/min          |
| Basic static load rating $C_0$                        | 41.5 kN              |
| Static axial stiffness, preload class C               | 318 N/ $\mu\text{m}$ |
| Static axial stiffness, preload class B               | 211 N/ $\mu\text{m}$ |
| Attainable speed for grease lubrication               | 13000 r/min          |
| Static axial stiffness, preload class A               | 165 N/ $\mu\text{m}$ |
| Basic static load rating - $C_0$                      | 24.5 kN              |
| 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-                             | 1.41                 |

|   |      |
|---|------|
| to-back, face-to-face) $Y_2$                          |      |
| Calculation factor (back-to-back, face-to-face) $Y_0$ | 0.76 |
| Calculation factor (back-to-back, face-to-face) $X_2$ | 0.67 |