



**Bearing No. 71802 CD/P4**

|                |                            |
|----------------|----------------------------|
| a              | 5.1 mm                     |
| d              | 15 mm                      |
| D              | 24 mm                      |
| B              | 5 mm                       |
| Noun           | Bearing                    |
| Bore           | 0.591 Inch   15 Millimeter |
| Width          | 0.197 Inch   5 Millimeter  |
| UNSPSC         | 31171531                   |
| Preload        | None                       |
| Ball - z       | 17                         |
| Category       | Precision Ball Bearings    |
| Size (mm)      | 24x15x5                    |
| Enclosure      | Open                       |
| Inventory      | 0.0                        |
| Width (mm)     | 5                          |
| Weight / LBS   | 0.028                      |
| Flush Ground   | No                         |
| Mass bearing   | 0.007 kg                   |
| d <sub>1</sub> | 18.1 mm                    |
| d <sub>2</sub> | 18.1 mm                    |
| D <sub>1</sub> | 21.1 mm                    |
| Inch - Metric  | Metric                     |
| Cage Material  | Phenolic                   |
| Raceway Style  | 1 Rib Outer Ring           |
| d <sub>n</sub> | 18.4 mm                    |
| Product Group  | B04270                     |
| Contact Angle  | 15 Degree                  |
| d <sub>1</sub> | 18.1 mm                    |
| d <sub>n</sub> | 18.4 mm                    |

|                     |  |
|---------------------|--|
| D <sub>1</sub>      | 21.1 mm  |
| d <sub>2</sub>      | 18.1 mm  |
| Bearing number      | 71802 CD/P4  |
| Keyword String      | Angular Contact Ball   |
| Other Features      | Single Row   Angular Contact   Super Precision   |
| Material - Ball     | Steel  |
| Rolling Element     | Ball Bearing   |
| G <sub>ref</sub>    | 0.08 cm3   |
| Preload class A     | 17 N/micron  |
| Preload class B     | 30 N/micron  |
| Preload class C     | 43 N/micron  |
| Precision Class     | ABEC 7   ISO P4  |
| Manufacturer URL    | <a href="http://www.skf.com">http://www.skf.com</a>  |
| Long Description    | 15MM Bore; 24MM Outside Diameter; 5MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 15 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Race |
| Outside Diameter    | 0.945 Inch   24 Millimeter   |
| Number of balls z   | 17   |
| Manufacturer Name   | SKF  |
| Weight / Kilogram   | 0.013  |
| D <sub>b</sub> max. | 23.2 mm  |
| Bore Diameter (mm)  | 24   |
| Number of Bearings  | 1 (Single)   |
| r <sub>b</sub> max. | 0.15 mm  |
| D <sub>a</sub> max. | 22 mm  |
|                     |  |

|                               |               |
|-------------------------------|---------------|
| $r_a$ max.                    | 0.3 mm        |
| $d_a$ min.                    | 17 mm         |
| $d_b$ min.                    | 17 mm         |
| Outer Diameter (mm)           | 15            |
| $r_{1,2}$ min.                | 0.3 mm        |
| $r_{3,4}$ min.                | 0.15 mm       |
| Calculation factor f          | 1.08          |
| $d_a$ - min.                  | 17 mm         |
| Ball - $D_w$                  | 2.381 mm      |
| $d_b$ - min.                  | 17 mm         |
| Minimum Buy Quantity          | N/A           |
| $D_a$ - max.                  | 22 mm         |
| $D_b$ - max.                  | 23.2 mm       |
| $r_a$ - max.                  | 0.3 mm        |
| $r_b$ - max.                  | 0.15 mm       |
| $r_{3,4}$ - min.              | 0.15 mm       |
| $r_{1,2}$ - min.              | 0.3 mm        |
| Harmonized Tariff Code        | 8482.10.50.28 |
| Calculation factor - f        | 1.08          |
| Manufacturer Item Number      | 71802 CD/P4   |
| Basic dynamic load rating C   | 2.29 kN       |
| Ball diameter $D_w$           | 2.381 mm      |
| Preload class A $G_A$         | 12 N          |
| Basic dynamic load rating - C | 2.3 kN        |
| Preload class C $G_C$         | 72 N          |
| Preload class B $G_B$         | 36 N          |
| Preload class A - $G_A$       | 12 N          |
| Preload class C - $G_C$       | 72 N          |
| Preload class B - $G_B$       | 36 N          |
|                               |               |

|  |                      |
|--|----------------------|
| Calculation factor $f_0$                 | 16                   |
| Fatigue load limit $P_u$                 | 0.063 kN             |
| Calculation factor $f_1$                 | 1                    |
| Calculation factor $f_{HC}$              | 1                    |
| Calculation factor $f_{2C}$              | 1.16                 |
| Calculation factor - $f$                 | 1                    |
| Calculation factor $f_{2B}$              | 1.09                 |
| Calculation factor $f_{2A}$              | 1                    |
| Calculation factor - $f_0$               | 16                   |
| Limiting speed for oil lubrication       | 90000 mm/min         |
| Fatigue load limit - $P_u$               | 0.063 kN             |
| Calculation factor - $f_{2A}$            | 1                    |
| Calculation factor - $f_{HC}$            | 1                    |
| Calculation factor - $f_{2B}$            | 1.09                 |
| Calculation factor - $f_{2C}$            | 1.16                 |
| Limiting speed for grease lubrication    | 60000 r/min          |
| Basic static load rating $C_0$           | 1.5 kN               |
| Static axial stiffness, preload class A  | 17 N/ $\mu$ m        |
| Static axial stiffness, preload class B  | 30 N/ $\mu$ m        |
| Static axial stiffness, preload class C  | 43 N/ $\mu$ m        |
| Attainable speed for grease lubrication  | 60000 r/min          |
| Attainable speed for oil-air lubrication | 90000 r/min          |
| Basic static load rating - $C_0$         | 1.5 kN               |
| Reference grease quantity $G_{ref}$      | 0.08 cm <sup>3</sup> |

