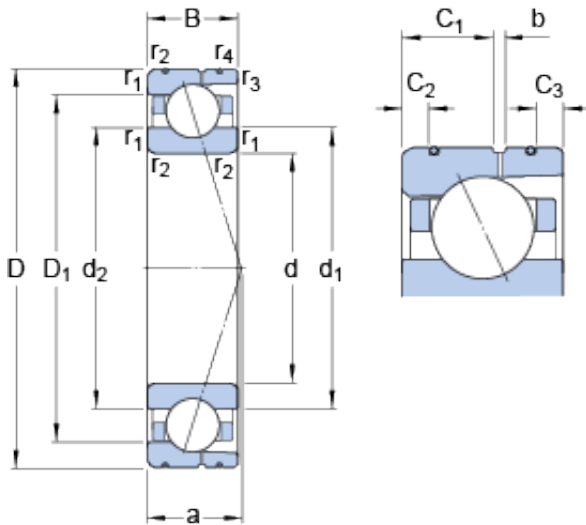




# NUP BEARING LTD



95 mm x 130 mm x 18 mm skf 71919 CD/P4AL  
Super-precision Angular contact ball bearings

Bearing No. 71919 CD/P4AL

71919 CD/P4AL Bearing 2D drawings and 3D CAD models

|                         |              |
|-------------------------|--------------|
| Size                    | 130x95x18 mm |
| Bore Diameter           | 130 mm       |
| Outer Diameter          | 95 mm        |
| Width                   | 18 mm        |
| d                       | 95 mm        |
| D                       | 130 mm       |
| B                       | 18 mm        |
| d <sub>1</sub>          | 105.8 mm     |
| d <sub>2</sub>          | 105.8 mm     |
| D <sub>1</sub>          | 119.2 mm     |
| b                       | 2.6 mm       |
| C <sub>1</sub>          | 9.3 mm       |
| C <sub>2</sub>          | 4.2 mm       |
| C <sub>3</sub>          | 3 mm         |
| r <sub>1,2</sub> - min. | 1.1 mm       |
| r <sub>3,4</sub> - min. | 0.6 mm       |
| a                       | 24.1 mm      |
| d <sub>a</sub> - min.   | 101 mm       |
| d <sub>b</sub> - min.   | 101 mm       |
| D <sub>a</sub> - max.   | 124 mm       |
| D <sub>b</sub> - max.   | 126 mm       |
| r <sub>a</sub> - max.   | 1 mm         |
| r <sub>b</sub> - max.   | 0.6 mm       |
| d <sub>n</sub>          | 108.6 mm     |
|                         |              |



## NUP BEARING LTD

|                                           |                     |
|-------------------------------------------|---------------------|
| Basic dynamic load rating - C             | 49.4 kN             |
| Basic static load rating - C <sub>0</sub> | 55 kN               |
| Fatigue load limit - P <sub>u</sub>       | 2.2 kN              |
| Limiting speed for grease lubrication     | 9000 r/min          |
| Limiting speed for oil lubrication        | 15000 mm/min        |
| Ball - D <sub>w</sub>                     | 11.112 mm           |
| Ball - z                                  | 28                  |
| G <sub>ref</sub>                          | 7.8 cm <sup>3</sup> |
| Calculation factor - f <sub>0</sub>       | 16.4                |
| Preload class A - G <sub>A</sub>          | 190 N               |
| Preload class B - G <sub>B</sub>          | 380 N               |
| Preload class C - G <sub>C</sub>          | 760 N               |
| Preload class D - G <sub>D</sub>          | 1520 N              |
| Calculation factor - f                    | 1.26                |
| Calculation factor - f                    | 1                   |
| Calculation factor - f <sub>2A</sub>      | 1                   |
| Calculation factor - f <sub>2B</sub>      | 1.04                |
| Calculation factor - f <sub>2C</sub>      | 1.09                |
| Calculation factor - f <sub>2D</sub>      | 1.15                |
| Calculation factor - f <sub>HC</sub>      | 1                   |
| Preload class A                           | 101 N/micron        |
| Preload class B                           | 139 N/micron        |
| Preload class C                           | 198 N/micron        |
| Preload class D                           | 291 N/micron        |
| d <sub>1</sub>                            | 105.8 mm            |
| d <sub>2</sub>                            | 105.8 mm            |
| D <sub>1</sub>                            | 119.2 mm            |
| C <sub>1</sub>                            | 9.3 mm              |



## NUP BEARING LTD

|                                          |                     |
|------------------------------------------|---------------------|
| $C_2$                                    | 4.2 mm              |
| $C_3$                                    | 3 mm                |
| $r_{1,2}$ min.                           | 1.1 mm              |
| $r_{3,4}$ min.                           | 0.6 mm              |
| $d_a$ min.                               | 101 mm              |
| $d_b$ min.                               | 101 mm              |
| $D_a$ max.                               | 124 mm              |
| $D_b$ max.                               | 126 mm              |
| $r_a$ max.                               | 1 mm                |
| $r_b$ max.                               | 0.6 mm              |
| $d_n$                                    | 108.6 mm            |
| Basic dynamic load rating C              | 49.4 kN             |
| Basic static load rating $C_0$           | 55 kN               |
| Fatigue load limit $P_u$                 | 2.2 kN              |
| Attainable speed for grease lubrication  | 9000 r/min          |
| Attainable speed for oil-air lubrication | 15000 r/min         |
| Ball diameter $D_w$                      | 11.112 mm           |
| Number of balls z                        | 28                  |
| Reference grease quantity $G_{ref}$      | 7.8 cm <sup>3</sup> |
| Preload class A $G_A$                    | 190 N               |
| Static axial stiffness, preload class A  | 101 N/ $\mu$ m      |
| Preload class B $G_B$                    | 380 N               |
| Static axial stiffness, preload class B  | 139 N/ $\mu$ m      |
| Preload class C $G_C$                    | 760 N               |
| Static axial stiffness, preload class C  | 198 N/ $\mu$ m      |
| Preload class D $G_D$                    | 1520 N              |
| Static axial stiffness, preload class D  | 291 N/ $\mu$ m      |
|                                          |                     |



## NUP BEARING LTD

|                             |         |
|-----------------------------|---------|
| Calculation factor $f$      | 1.26    |
| Calculation factor $f_1$    | 1       |
| Calculation factor $f_{2A}$ | 1       |
| Calculation factor $f_{2B}$ | 1.04    |
| Calculation factor $f_{2C}$ | 1.09    |
| Calculation factor $f_{2D}$ | 1.15    |
| Calculation factor $f_{HC}$ | 1       |
| Calculation factor $f_0$    | 16.4    |
| Mass bearing                | 0.58 kg |