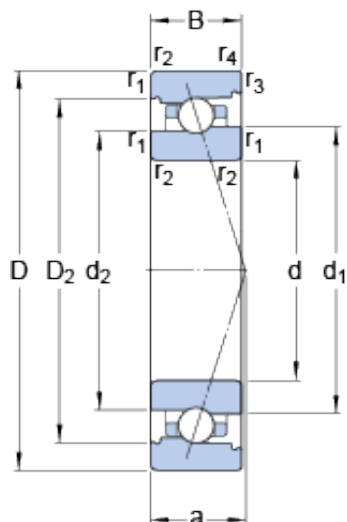




# BEARING CORP.OF AMERICA

## 90 mm x 125 mm x 18 mm SKF 71918 CB/HCP4A Angular contact ball bearings

Bearing No. 71918 CB/HCP4A



71918 CB/HCP4A Bearing 2D drawings and 3D CAD models

|   |              |
|---|--------------|
| Size                                      | 125x90x18 mm |
| Bore Diameter                             | 125 mm       |
| Outer Diameter                            | 90 mm        |
| Width                                     | 18 mm        |
| d   | 90 mm        |
| D   | 125 mm       |
| B   | 18 mm        |
| d <sub>1</sub>                            | 103 mm       |
| d <sub>2</sub>                            | 101.4 mm     |
| D <sub>2</sub>                            | 115 mm       |
| r <sub>1,2</sub> - min.                   | 1.1 mm       |
| r <sub>3,4</sub> - min.                   | 0.6 mm       |
| a   | 27.5 mm      |
| d <sub>a</sub> - min.                     | 96 mm        |
| d <sub>b</sub> - min.                     | 96 mm        |
| D <sub>a</sub> - max.                     | 119 mm       |
| D <sub>b</sub> - max.                     | 121.8 mm     |
| r <sub>a</sub> - max.                     | 1 mm         |
| r <sub>b</sub> - max.                     | 0.6 mm       |
| d <sub>n</sub>                            | 103.9 mm     |
| Basic dynamic load rating - C             | 17.8 kN      |
| Basic static load rating - C <sub>0</sub> | 17.6 kN      |
| Fatigue load limit - P <sub>u</sub>       | 0.72 kN      |
| Limiting speed for grease                 | 16000 r/min  |



## BEARING CORP.OF AMERICA

|                                    |                      |
|------------------------------------|----------------------|
| Lubrication                        |                      |
| Limiting speed for oil lubrication | 26000 mm/min         |
| Ball - $D_w$                       | 7.144 mm             |
| Ball - $z$                         | 36                   |
| $G_{ref}$                          | 7.37 cm <sup>3</sup> |
| Calculation factor - $f_0$         | 10                   |
| Preload class A - $G_A$            | 59 N                 |
| Preload class B - $G_B$            | 120 N                |
| Preload class C - $G_C$            | 355 N                |
| Calculation factor - $f$           | 1.12                 |
| Calculation factor - $f$           | 1                    |
| Calculation factor - $f_{2A}$      | 1                    |
| Calculation factor - $f_{2B}$      | 1.03                 |
| Calculation factor - $f_{2C}$      | 1.08                 |
| Calculation factor - $f_{HC}$      | 1.01                 |
| Preload class A                    | 59 N/micron          |
| Preload class B                    | 78 N/micron          |
| Preload class C                    | 124 N/micron         |
| $d_1$                              | 103 mm               |
| $d_2$                              | 101.4 mm             |
| $D_2$                              | 115 mm               |
| $r_{1,2}$ min.                     | 1.1 mm               |
| $r_{3,4}$ min.                     | 0.6 mm               |
| $d_a$ min.                         | 96 mm                |
| $d_b$ min.                         | 96 mm                |
| $D_a$ max.                         | 119 mm               |
| $D_b$ max.                         | 121.8 mm             |
| $r_a$ max.                         | 1 mm                 |
| $r_b$ max.                         | 0.6 mm               |
| $d_n$                              | 103.9 mm             |



## BEARING CORP.OF AMERICA

|  |                      |
|--|----------------------|
| Basic dynamic load rating C              | 23.8 kN              |
| Basic static load rating $C_0$           | 28.5 kN              |
| Fatigue load limit $P_u$                 | 0.72 kN              |
| Attainable speed for grease lubrication  | 16000 r/min          |
| Attainable speed for oil-air lubrication | 26000 r/min          |
| Ball diameter $D_w$                      | 7.144 mm             |
| Number of balls z                        | 36                   |
| Reference grease quantity $G_{ref}$      | 7.37 cm <sup>3</sup> |
| Preload class A $G_A$                    | 59 N                 |
| Static axial stiffness, preload class A  | 59 N/ $\mu$ m        |
| Preload class B $G_B$                    | 120 N                |
| Static axial stiffness, preload class B  | 78 N/ $\mu$ m        |
| Preload class C $G_C$                    | 355 N                |
| Static axial stiffness, preload class C  | 124 N/ $\mu$ m       |
| Calculation factor f                     | 1.12                 |
| Calculation factor $f_1$                 | 1                    |
| Calculation factor $f_{2A}$              | 1                    |
| Calculation factor $f_{2B}$              | 1.03                 |
| Calculation factor $f_{2C}$              | 1.08                 |
| Calculation factor $f_{HC}$              | 1.01                 |
| Calculation factor $f_0$                 | 10                   |
| Mass bearing                             | 0.56 kg              |