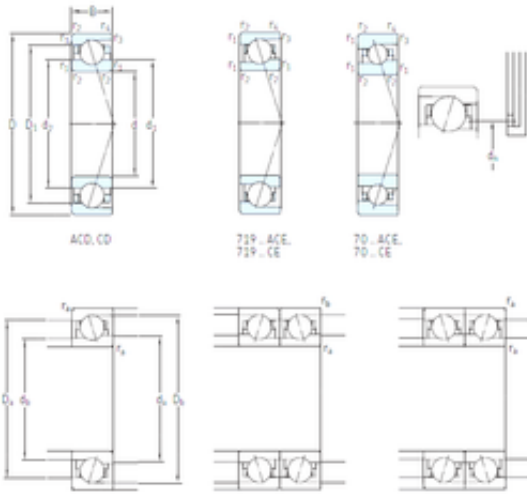




# NACHI BEARINGS TRAINING INDUSTRY



35 mm x 62 mm x 14 mm SKF 7007 CB/HCP4A angular contact ball bearings

Bearing No. 7007 CB/HCP4A

7007 CB/HCP4A Bearing 2D drawings and 3D CAD models

|                               |             |
|-------------------------------|-------------|
| Size                          | 35x62x14 mm |
| Bore Diameter                 | 35 mm       |
| Outer Diameter                | 62 mm       |
| Width                         | 14 mm       |
| d                             | 35 mm       |
| D                             | 62 mm       |
| B                             | 14 mm       |
| C                             | 14 mm       |
| d1                            | 45,5 mm     |
| d2                            | 44,3 mm     |
| r1 min.                       | 1 mm        |
| r2 min.                       | 1 mm        |
| r3 min.                       | 0,6 mm      |
| r4 min.                       | 0,6 mm      |
| D1                            | 53,4 mm     |
| D2                            | 53,4 mm     |
| da min.                       | 39,6 mm     |
| Da max.                       | 57,4 mm     |
| db min                        | 39,6 mm     |
| ra max.                       | 1 mm        |
| rb max.                       | 0,6 mm      |
| dh                            | 46,1 mm     |
| Db max                        | 58,8 mm     |
| Weight                        | 0,16 Kg     |
| Basic dynamic load rating (C) | 6,89 kN     |



## NACHI BEARINGS TRAINING INDUSTRY

|  |                      |
|--|----------------------|
| Basic static load rating (C <sub>0</sub> ) | 4,8 kN               |
| (Grease) Lubrication Speed                 | 38 000 r/min         |
| (Oil) Lubrication Speed                    | 60 000 r/min         |
| Fatigue load limit (P <sub>u</sub> )       | 0,204                |
| d <sub>1</sub>                             | 45.45 mm             |
| d <sub>2</sub>                             | 44.34 mm             |
| D <sub>2</sub>                             | 53.38 mm             |
| r <sub>1,2</sub> min.                      | 1 mm                 |
| r <sub>3,4</sub> min.                      | 0.6 mm               |
| a  | 13.6 mm              |
| d <sub>a</sub> min.                        | 39.6 mm              |
| d <sub>b</sub> min.                        | 39.6 mm              |
| D <sub>a</sub> max.                        | 57.4 mm              |
| D <sub>b</sub> max.                        | 58.8 mm              |
| r <sub>a</sub> max.                        | 1 mm                 |
| r <sub>b</sub> max.                        | 0.6 mm               |
| d <sub>n</sub>                             | 46.1 mm              |
| Basic dynamic load rating C                | 9.36 kN              |
| Basic static load rating C <sub>0</sub>    | 8.3 kN               |
| Fatigue load limit P <sub>u</sub>          | 0.204 kN             |
| Attainable speed for grease lubrication    | 38000 r/min          |
| Attainable speed for oil-air lubrication   | 60000 r/min          |
| Ball diameter D <sub>w</sub>               | 4.762 mm             |
| Number of balls z                          | 23                   |
| Reference grease quantity G <sub>ref</sub> | 1.81 cm <sup>3</sup> |
| Preload class A G <sub>A</sub>             | 23 N                 |
| Static axial stiffness, preload class A    | 28 N/ μ m            |
| Preload class B G <sub>B</sub>             | 46 N                 |
| Static axial stiffness, preload class B    | 36 N/ μ m            |



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|   |               |
|---|---------------|
| Preload class C $G_C$                   | 140 N         |
| Static axial stiffness, preload class C | 58 N/ $\mu$ m |
| Calculation factor $f$                  | 1.04          |
| Calculation factor $f_1$                | 1             |
| Calculation factor $f_{2A}$             | 1             |
| Calculation factor $f_{2B}$             | 1.02          |
| Calculation factor $f_{2C}$             | 1.05          |
| Calculation factor $f_{HC}$             | 1.01          |
| Calculation factor $f_0$                | 9.6           |
| Mass bearing                            | 0.16 kg       |