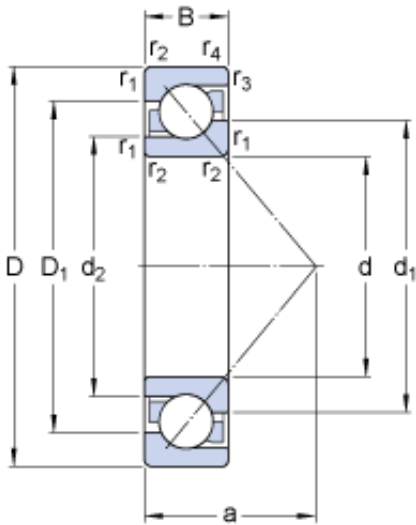




# NTN BEARUNG DRIVESHAFT, INC.



50 mm x 90 mm x 20 mm SKF 7210 BECBY  
angular contact ball bearings

Bearing No. 7210 BECBY

7210 BECBY Bearing 2D drawings and 3D CAD models

|   |             |
|---|-------------|
| Size                                      | 90x50x20 mm |
| Bore Diameter                             | 90 mm       |
| Outer Diameter                            | 50 mm       |
| Width                                     | 20 mm       |
| d   | 50 mm       |
| D   | 90 mm       |
| B   | 20 mm       |
| d <sub>1</sub>                            | 65.75 mm    |
| d <sub>2</sub>                            | 57.68 mm    |
| D <sub>1</sub>                            | 75.15 mm    |
| a   | 39 mm       |
| r <sub>1,2</sub> - min.                   | 1.1 mm      |
| r <sub>3,4</sub> - min.                   | 0.6 mm      |
| d <sub>a</sub> - min.                     | 57 mm       |
| D <sub>a</sub> - max.                     | 83 mm       |
| D <sub>b</sub> - max.                     | 85.8 mm     |
| r <sub>a</sub> - max.                     | 1 mm        |
| r <sub>b</sub> - max.                     | 0.6 mm      |
| Basic dynamic load rating - C             | 37.7 kN     |
| Basic static load rating - C <sub>0</sub> | 28.5 kN     |
| Fatigue load limit - P <sub>u</sub>       | 1.2 kN      |
| Reference speed                           | 8500 r/min  |
| Limiting speed                            | 8500 r/min  |
| Calculation factor - k <sub>r</sub>       | 0.095       |



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|                                 |                               |
|---------------------------------|-------------------------------|
| Calculation factor - $k_a$      | 1.4                           |
| Calculation factor - e          | 1.14                          |
| Calculation factor - X          | 0.57                          |
| Calculation factor - $Y_0$      | 0.52                          |
| Calculation factor - $Y_1$      | 0.55                          |
| Calculation factor - $Y_2$      | 0.93                          |
| Calculation factor - X          | 0.35                          |
| Calculation factor - $Y_0$      | 0.26                          |
| Calculation factor - $Y_1$      |                               |
| Calculation factor - $Y_2$      | 0.57                          |
| Category                        | Angular Contact Ball Bearings |
| Inventory                       | 2.0                           |
| Manufacturer Name               | SKF                           |
| Minimum Buy Quantity            | N/A                           |
| Weight / Kilogram               | 0.49                          |
| EAN                             | 7316576649950                 |
| Product Group                   | B00308                        |
| Enclosure                       | Open                          |
| Flush Ground                    | Yes                           |
| Rolling Element                 | Ball Bearing                  |
| Number of Rows of Balls         | Single Row                    |
| Precision Class                 | ABEC 3   ISO P6               |
| Maximum Capacity / Filling Slot | No                            |
| Snap Ring                       | No                            |
| Cage Material                   | Brass                         |
| Contact Angle                   | 40 Degree                     |
| Internal Clearance              | CB                            |
| Number of Bearings              | 1 (Single)                    |
| Mounting Arrangement            | Universal                     |
| Inch - Metric                   | Metric                        |



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|                              |   |
|------------------------------|---|
| Long Description             | 50MM Bore; 90MM Outside Diameter; 20MM Width; Open; Yes Flush Ground; Ball Bearing; Single Row of Balls; ABEC 3   ISO P6; No Filling Slot; No Snap Ring |
| Other Features               | Normal Axial Internal Clearance   |
| Category                     | Angular Contact Ball Bearing  |
| UNSPSC                       | 31171531  |
| Harmonized Tariff Code       | 8482.10.50.28   |
| Noun                         | Bearing   |
| Keyword String               | Angular Contact   |
| Manufacturer URL             | <a href="http://www.skf.com">http://www.skf.com</a>   |
| Manufacturer Item Number     | 7210 BECBY  |
| Weight / LBS                 | 1.082   |
| Width                        | 0.787 Inch   20 Millimeter  |
| Bore                         | 1.969 Inch   50 Millimeter  |
| Outside Diameter             | 3.543 Inch   90 Millimeter  |
| bore diameter:               | 50 mm   |
| radial static load capacity: | 28.5 kN   |
| outside diameter:            | 90 mm   |
| cage material:               | Brass   |
| overall width:               | 20 mm   |
| outer ring width:            | 20 mm   |
| contact angle:               | 40 °  |
| maximum rpm:                 | 8500 RPM  |
| row type & fill slot:        | Single-Row Non-Fill Slot  |
| finish/coating:              | Uncoated  |
| internal clearance:          | C0  |
| precision rating:            | ABEC 3 (ISO Class 6)  |
| closure type:                | Open  |
| fillet radius:               | 1 mm  |



## NTN BEARUNG DRIVESHAFT, INC.

|                                |          |
|--------------------------------|----------|
| radial dynamic load capacity:  | 37.7 kN  |
| series:                        | 72       |
| $d_1$                          | 65.75 mm |
| $d_2$                          | 57.68 mm |
| $D_1$                          | 75.15 mm |
| $r_{1,2}$ min.                 | 1.1 mm   |
| $r_{3,4}$ min.                 | 0.6 mm   |
| $d_a$ min.                     | 57 mm    |
| $D_a$ max.                     | 83 mm    |
| $D_b$ max.                     | 85.8 mm  |
| $r_a$ max.                     | 1 mm     |
| $r_b$ max.                     | 0.6 mm   |
| Basic dynamic load rating C    | 41.5 kN  |
| Basic static load rating $C_0$ | 33.5 kN  |
| Fatigue load limit $P_u$       | 1.4 kN   |
| Calculation factor A           | 0.015    |
| Calculation factor $k_r$       | 0.095    |
| Calculation factor e           | 1.14     |
| Calculation factor X           | 0.35     |
| Calculation factor $Y_0$       | 0.26     |
| Calculation factor $Y_2$       | 0.57     |
| Calculation factor X           | 0.57     |
| Calculation factor $Y_0$       | 0.52     |
| Calculation factor $Y_1$       | 0.55     |
| Calculation factor $Y_2$       | 0.93     |
| Mass bearing                   | 0.47 kg  |