



## Sean-NTN Driveshaft CORP.



35 mm x 62 mm x 14 mm SKF 7007 ACD/P4A  
GERMANY Bearing 35\*62\*14

Bearing No. 7007 ACD/P4A

7007 ACD/P4A Bearing 2D drawings and 3D CAD models

|   |             |
|---|-------------|
| Size                                      | 62x35x14 mm |
| Bore Diameter                             | 62 mm       |
| Outer Diameter                            | 35 mm       |
| Width                                     | 14 mm       |
| d   | 35 mm       |
| D   | 62 mm       |
| B   | 14 mm       |
| d <sub>1</sub>                            | 43.7 mm     |
| d <sub>2</sub>                            | 43.7 mm     |
| D <sub>1</sub>                            | 53.3 mm     |
| r <sub>1,2</sub> - min.                   | 1 mm        |
| r <sub>3,4</sub> - min.                   | 0.3 mm      |
| a   | 18.5 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.                     | 60 mm       |
| r <sub>a</sub> - max.                     | 1 mm        |
| r <sub>b</sub> - max.                     | 0.3 mm      |
| d <sub>n</sub>                            | 45.3 mm     |
| Basic dynamic load rating - C             | 14.8 kN     |
| Basic static load rating - C <sub>0</sub> | 9 kN        |
| Fatigue load limit - P <sub>u</sub>       | 0.38 kN     |
| Limiting speed for grease                 | 20000 r/min |



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|                                    |                      |
|------------------------------------|----------------------|
| Lubrication                        |                      |
| Limiting speed for oil lubrication | 32000 mm/min         |
| Ball - $D_w$                       | 7.938 mm             |
| Ball - $z$                         | 16                   |
| $G_{ref}$                          | 1.98 cm <sup>3</sup> |
| Calculation factor - $e$           | 0.68                 |
| Calculation factor - $Y_2$         | 0.87                 |
| Calculation factor - $Y_0$         | 0.38                 |
| Calculation factor - $X_2$         | 0.41                 |
| Calculation factor - $Y_1$         | 0.92                 |
| Calculation factor - $Y_2$         | 1.41                 |
| Calculation factor - $Y_0$         | 0.76                 |
| Calculation factor - $X_2$         | 0.67                 |
| Preload class A - $G_A$            | 90 N                 |
| Preload class B - $G_B$            | 180 N                |
| Preload class C - $G_C$            | 360 N                |
| Preload class D - $G_D$            | 720 N                |
| Calculation factor - $f$           | 1.06                 |
| Calculation factor - $f_1$         | 0.99                 |
| Calculation factor - $f_{2A}$      | 1                    |
| Calculation factor - $f_{2B}$      | 1.02                 |
| Calculation factor - $f_{2C}$      | 1.05                 |
| Calculation factor - $f_{2D}$      | 1.08                 |
| Calculation factor - $f_{HC}$      | 1                    |
| Preload class A                    | 86 N/micron          |
| Preload class B                    | 110 N/micron         |
| Preload class C                    | 144 N/micron         |
| Preload class D                    | 190 N/micron         |
|                                    |                      |



## Sean-NTN Driveshaft CORP.

|                          |  |
|--------------------------|--|
| Category                 | Precision Ball Bearings  |
| Inventory                | 0.0  |
| Manufacturer Name        | SKF  |
| Minimum Buy Quantity     | N/A  |
| Weight / Kilogram        | 0.162  |
| Product Group            | B04270   |
| Enclosure                | Open   |
| Precision Class          | ABEC 7   ISO P4  |
| Material - Ball          | Steel  |
| Number of Bearings       | 1 (Single)   |
| Contact Angle            | 25 Degree  |
| Preload                  | None   |
| Raceway Style            | 1 Rib Outer Ring   |
| Cage Material            | Phenolic   |
| Rolling Element          | Ball Bearing   |
| Flush Ground             | No   |
| Inch - Metric            | Metric   |
| Other Features           | Single Row   Angular Contact   High Precision  |
| Long Description         | 35MM Bore; 62MM Outside Diameter; 14MM Width; Open Enclosure; ABEC 7   ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Rac |
| Category                 | Precision Ball Bearings  |
| UNSPSC                   | 31171531   |
| Harmonized Tariff Code   | 8482.10.50.28  |
| Noun                     | Bearing  |
| Keyword String           | Angular Contact Ball   |
| Manufacturer URL         | <a href="http://www.skf.com">http://www.skf.com</a>  |
| Manufacturer Item Number | 7007 ACD/P4A   |



## Sean-NTN Driveshaft CORP.

|  |                            |
|--|----------------------------|
| Weight / LBS                             | 0.355                      |
| Width                                    | 0.551 Inch   14 Millimeter |
| Bore                                     | 1.378 Inch   35 Millimeter |
| Outside Diameter                         | 2.441 Inch   62 Millimeter |
| $d_1$                                    | 43.7 mm                    |
| $d_2$                                    | 43.7 mm                    |
| $D_1$                                    | 53.3 mm                    |
| $r_{1,2}$ min.                           | 1 mm                       |
| $r_{3,4}$ min.                           | 0.3 mm                     |
| $d_a$ min.                               | 39.6 mm                    |
| $d_b$ min.                               | 39.6 mm                    |
| $D_a$ max.                               | 57.4 mm                    |
| $D_b$ max.                               | 60 mm                      |
| $r_a$ max.                               | 1 mm                       |
| $r_b$ max.                               | 0.3 mm                     |
| $d_n$                                    | 45.3 mm                    |
| Basic dynamic load rating C              | 14.8 kN                    |
| Basic static load rating $C_0$           | 9 kN                       |
| Fatigue load limit $P_u$                 | 0.38 kN                    |
| Attainable speed for grease lubrication  | 20000 r/min                |
| Attainable speed for oil-air lubrication | 32000 r/min                |
| Ball diameter $D_w$                      | 7.938 mm                   |
| Number of balls z                        | 16                         |
| Reference grease quantity $G_{ref}$      | 1.98 cm <sup>3</sup>       |
| Preload class A $G_A$                    | 90 N                       |
| Static axial stiffness, preload class A  | 86 N/ $\mu$ m              |
| Preload class B $G_B$                    | 180 N                      |
| Static axial stiffness, preload class B  | 110 N/ $\mu$ m             |
| Preload class C $G_C$                    | 360 N                      |



## Sean-NTN Driveshaft CORP.

|   |                |
|---|----------------|
| Static axial stiffness, preload class C               | 144 N/ $\mu$ m |
| Preload class D $G_D$                                 | 720 N          |
| Static axial stiffness, preload class D               | 190 N/ $\mu$ m |
| Calculation factor f                                  | 1.06           |
| Calculation factor $f_1$                              | 0.99           |
| Calculation factor $f_{2A}$                           | 1              |
| Calculation factor $f_{2B}$                           | 1.02           |
| Calculation factor $f_{2C}$                           | 1.05           |
| Calculation factor $f_{2D}$                           | 1.08           |
| Calculation factor $f_{HC}$                           | 1              |
| Calculation factor e                                  | 0.68           |
| Calculation factor (single, tandem) $Y_2$             | 0.87           |
| Calculation factor (single, tandem) $Y_0$             | 0.38           |
| Calculation factor (single, tandem) $X_2$             | 0.41           |
| Calculation factor (back-to-back, face-to-face) $Y_1$ | 0.92           |
| Calculation factor (back-to-back, face-to-face) $Y_2$ | 1.41           |
| Calculation factor (back-to-back, face-to-face) $Y_0$ | 0.76           |
| Calculation factor (back-to-back, face-to-face) $X_2$ | 0.67           |
| Mass bearing  | 0.15 kg        |