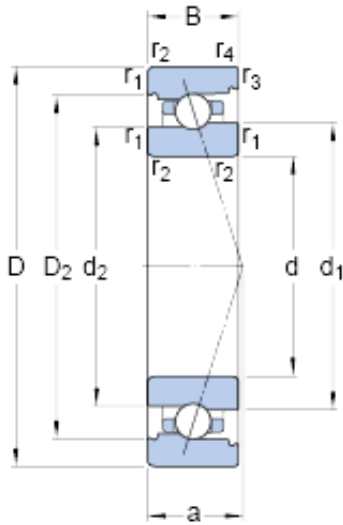




# Timken BEARINGS INDUSTRY



85 mm x 130 mm x 22 mm SKF 7017 ACB/P4A angular contact ball bearings

Bearing No. 7017 ACB/P4A

7017 ACB/P4A Bearing 2D drawings and 3D CAD models

|                                           |              |
|-------------------------------------------|--------------|
| Size                                      | 130x85x22 mm |
| Bore Diameter                             | 130 mm       |
| Outer Diameter                            | 85 mm        |
| Width                                     | 22 mm        |
| d                                         | 85 mm        |
| D                                         | 130 mm       |
| B                                         | 22 mm        |
| d <sub>1</sub>                            | 101.7 mm     |
| d <sub>2</sub>                            | 99.3 mm      |
| D <sub>2</sub>                            | 116.4 mm     |
| r <sub>1,2</sub> - min.                   | 1.1 mm       |
| r <sub>3,4</sub> - min.                   | 0.6 mm       |
| a                                         | 36.3 mm      |
| d <sub>a</sub> - min.                     | 91 mm        |
| d <sub>b</sub> - min.                     | 91 mm        |
| D <sub>a</sub> - max.                     | 124 mm       |
| D <sub>b</sub> - max.                     | 126.8 mm     |
| r <sub>a</sub> - max.                     | 1 mm         |
| r <sub>b</sub> - max.                     | 0.6 mm       |
| d <sub>n</sub>                            | 103 mm       |
| Basic dynamic load rating - C             | 25.1 kN      |
| Basic static load rating - C <sub>0</sub> | 22.4 kN      |
| Fatigue load limit - P <sub>u</sub>       | 0.915 kN     |
| Limiting speed for grease                 | 12000 r/min  |



## Timken BEARINGS INDUSTRY

|                                    |                       |
|------------------------------------|-----------------------|
| Lubrication                        |                       |
| Limiting speed for oil lubrication | 18000 mm/min          |
| Ball - $D_w$                       | 9.525 mm              |
| Ball - $z$                         | 28                    |
| $G_{ref}$                          | 11.02 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 - $G_A$            | 150 N                 |
| Preload class B - $G_B$            | 300 N                 |
| Preload class C - $G_C$            | 900 N                 |
| Calculation factor - $f$           | 1.08                  |
| Calculation factor - $f_1$         | 0.99                  |
| Calculation factor - $f_{2A}$      | 1                     |
| Calculation factor - $f_{2B}$      | 1.01                  |
| Calculation factor - $f_{2C}$      | 1.04                  |
| Calculation factor - $f_{HC}$      | 1                     |
| Preload class A                    | 148 N/micron          |
| Preload class B                    | 188 N/micron          |
| Preload class C                    | 284 N/micron          |
| $d_1$                              | 101.7 mm              |
| $d_2$                              | 99.3 mm               |
| $D_2$                              | 116.4 mm              |
| $r_{1,2}$ min.                     | 1.1 mm                |



## Timken BEARINGS INDUSTRY

|                                          |                       |
|------------------------------------------|-----------------------|
| $r_{3,4}$ min.                           | 0.6 mm                |
| $d_a$ min.                               | 91 mm                 |
| $d_b$ min.                               | 91 mm                 |
| $D_a$ max.                               | 124 mm                |
| $D_b$ max.                               | 126.8 mm              |
| $r_a$ max.                               | 1 mm                  |
| $r_b$ max.                               | 0.6 mm                |
| $d_n$                                    | 103 mm                |
| Basic dynamic load rating C              | 30.2 kN               |
| Basic static load rating $C_0$           | 33.5 kN               |
| Fatigue load limit $P_u$                 | 0.915 kN              |
| Attainable speed for grease lubrication  | 12000 r/min           |
| Attainable speed for oil-air lubrication | 18000 r/min           |
| Ball diameter $D_w$                      | 9.525 mm              |
| Number of balls z                        | 28                    |
| Reference grease quantity $G_{ref}$      | 11.02 cm <sup>3</sup> |
| Preload class A $G_A$                    | 150 N                 |
| Static axial stiffness, preload class A  | 148 N/ $\mu$ m        |
| Preload class B $G_B$                    | 300 N                 |
| Static axial stiffness, preload class B  | 188 N/ $\mu$ m        |
| Preload class C $G_C$                    | 900 N                 |
| Static axial stiffness, preload class C  | 284 N/ $\mu$ m        |
| Calculation factor f                     | 1.08                  |
| Calculation factor $f_1$                 | 0.99                  |
| Calculation factor $f_{2A}$              | 1                     |
| Calculation factor $f_{2B}$              | 1.01                  |
| Calculation factor $f_{2C}$              | 1.04                  |
| Calculation factor $f_{HC}$              | 1                     |



## Timken BEARINGS INDUSTRY

|                                                       |         |
|-------------------------------------------------------|---------|
| 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                                          | 0.96 kg |