



# 7303 BEP Angular contact ball bearings, single row

- Popular item

## Angular contact ball bearings, single row

### Bearing data

[Tolerances,](#)

Normal (metric), P6, P5, Normal (inch),

[Internal clearance,](#)

CA+CB+CC, G,

[Preload,](#)

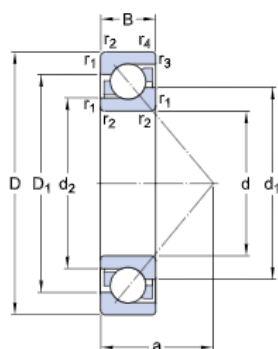
GA+GB+GC

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

## Technical specification



### DIMENSIONS

|                  |             |                                                |
|------------------|-------------|------------------------------------------------|
| d                | 17 mm       | Bore diameter                                  |
| D                | 47 mm       | Outside diameter                               |
| B                | 14 mm       | Width                                          |
| d1               | ≈ 28.6 mm   | Shoulder diameter inner ring (large side face) |
| d2               | ≈ 22.82 mm  | Shoulder diameter inner ring (small side face) |
| D1               | ≈ 36.2 mm   | Shoulder diameter outer ring (large side face) |
| a                | 20.4 mm     | Distance pressure point                        |
| r <sub>1,2</sub> | min. 1 mm   | Chamfer dimension                              |
| r <sub>3,4</sub> | min. 0.6 mm | Chamfer dimension outer ring small side face   |

### ABUTMENT DIMENSIONS

|                             |                           |
|-----------------------------|---------------------------|
| d <sub>e</sub> min. 22.6 mm | Abutment diameter shaft   |
| D <sub>i</sub> max. 41.4 mm | Abutment diameter housing |
| D <sub>j</sub> max. 42.8 mm | Abutment diameter housing |
| r <sub>a</sub> max. 1 mm    | Fillet radius             |
| r <sub>b</sub> max. 0.6 mm  | Fillet radius             |



## CALCULATION DATA

|                |              |                           |
|----------------|--------------|---------------------------|
| C              | 15.9 kN      | Basic dynamic load rating |
| C <sub>0</sub> | 8.3 kN       | Basic static load rating  |
| P <sub>u</sub> | 0.355 kN     | Fatigue load limit        |
|                | 20 000 r/min | Reference speed           |
|                | 19 000 r/min | Limiting speed            |
| A              | 0.001        | Calculation factor        |
| k <sub>r</sub> | 0.1          | Calculation factor        |
| e              | 1.14         | Calculation factor        |

## SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

|                |      |                    |
|----------------|------|--------------------|
| X              | 0.35 | Calculation factor |
| Y <sub>0</sub> | 0.26 | Calculation factor |
| Y <sub>2</sub> | 0.57 | Calculation factor |

## BEARING PAIR ARRANGED BACK-TO-BACK OR FACE-TO-FACE

|                |      |                    |
|----------------|------|--------------------|
| X              | 0.57 | Calculation factor |
| Y <sub>0</sub> | 0.52 | Calculation factor |
| Y <sub>1</sub> | 0.55 | Calculation factor |
| Y <sub>2</sub> | 0.93 | Calculation factor |