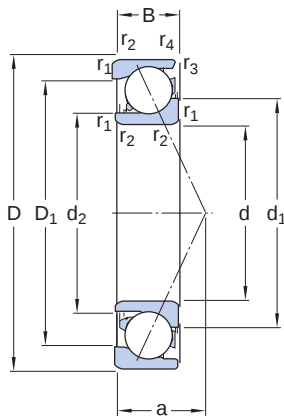


### 7305 ACCBM

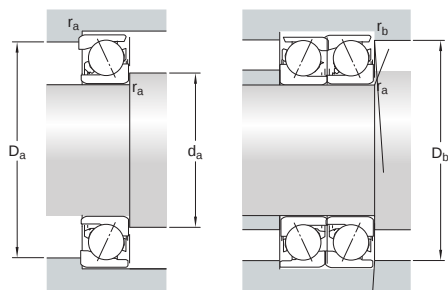
These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.



- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads



| Dimensions       |             |                                                   |
|------------------|-------------|---------------------------------------------------|
| d                | 25 mm       | Bore diameter                                     |
| D                | 62 mm       | Outside diameter                                  |
| B                | 17 mm       | Width                                             |
| d <sub>1</sub>   | ≈ 39.52 mm  | Shoulder diameter of inner ring (large side face) |
| d <sub>2</sub>   | ≈ 32.26 mm  | Shoulder diameter of inner ring (small side face) |
| D <sub>1</sub>   | ≈ 48.07 mm  | Shoulder diameter of outer ring (large side face) |
| a                | 18 mm       | Distance side face to pressure point              |
| r <sub>1,2</sub> | min. 1.1 mm | Chamfer dimension                                 |
| r <sub>3,4</sub> | min. 0.6 mm | Chamfer dimension                                 |



### Abutment dimensions

|       |              |                              |
|-------|--------------|------------------------------|
| $d_a$ | min. 32 mm   | Diameter of shaft abutment   |
| $D_a$ | max. 55 mm   | Abutment diameter housing    |
| $D_b$ | max. 57.8 mm | Diameter of housing abutment |
| $r_a$ | max. 1 mm    | Radius of fillet             |
| $r_b$ | max. 0.6 mm  | Radius of fillet             |

### Calculation data

|                            |       |              |
|----------------------------|-------|--------------|
| performance class          |       | Explorer     |
| Basic dynamic load rating  | C     | 29 kN        |
| Basic static load rating   | $C_0$ | 17 kN        |
| Fatigue load limit         | $P_u$ | 0.72 kN      |
| Reference speed            |       | 15 000 r/min |
| Limiting speed             |       | 23 000 r/min |
| Minimum axial load factor  | A     | 0.00158      |
| Minimum radial load factor | $k_r$ | 0.1          |
| Limiting value             | e     | 0.68         |

### Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal ( ), 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