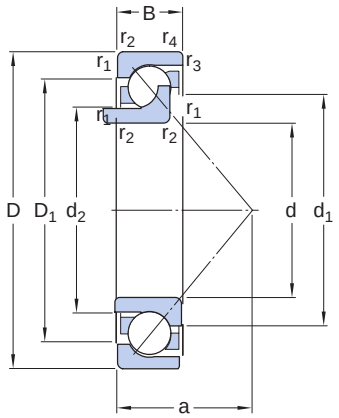
7411 BCBM

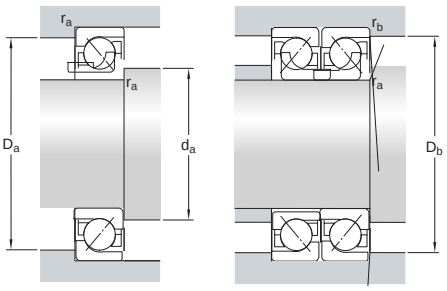
These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads



Dimensions

d	55 mm	Bore diameter
D	140 mm	Outside diameter
B	33 mm	Width
d_1	≈ 88.5 mm	Shoulder diameter of inner ring (large side face)
d_2	≈ 72.01 mm	Shoulder diameter of inner ring (small side face)
D_1	≈ 108.4 mm	Shoulder diameter of outer ring (large side face)
a	57.8 mm	Distance side face to pressure point
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
$r_{3,4}$	min. 2.1 mm	Chamfer dimension



Abutment dimensions

d_a	min. 67 mm	Diameter of shaft abutment
D_a	max. 128 mm	Abutment diameter housing
D_b	max. 126.7 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_b	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	111 kN
Basic static load rating	C_0	76.5 kN
Fatigue load limit	P_u	3.25 kN
Reference speed		6 300 r/min
Limiting speed		8 000 r/min
Minimum axial load factor	A	0.112
Minimum radial load factor	k_r	0.1
Limiting value	e	1.14

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