

7040 BGM



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	200 mm	Bore diameter
D	310 mm	Outside diameter
B	51 mm	Width
d ₁	≈ 243.6 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 224 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 269.8 mm	Shoulder diameter of outer ring (large side face)
a	145 mm	Distance side face to pressure point
r _{1,2}	min. 2.1 mm	Chamfer dimension
r _{3,4}	min. 1.1 mm	Chamfer dimension



Abutment dimensions		
d _a	min. 234 mm	Diameter of shaft abutment
D _a	max. 285 mm	Abutment diameter housing
D _b	max. 333 mm	Diameter of housing abutment
r _a	max. 2.5 mm	Radius of fillet
r _b	max. 1.1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	225 kN
Basic static load rating	C ₀	290 kN
Fatigue load limit	P _u	7.8 kN
Reference speed		2 200 r/min
Limiting speed		2 200 r/min
Minimum axial load factor	A	1.37
Minimum radial load factor	k _r	0.083
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