

Angular Contact Ball Bearing

Miniature angular contact ball bearing-7003C



Bearing designations	7003C
Boundary dimensions (mm)	
a	17
d	35
D	10
B	0.3
r	0.15
R	8
Load rating (KN)	
Cr	6.7
Co	4.9
Limited speed (r/min)	
Grease	45000
Oil	67000
Weight	
kg (≈)	0.04

Miniature angular contact ball Bearings

MONTON can produce Miniature bearings from 705 to 7008 open type and sealed type. Miniature angular contact ball bearings also known as small bearings or micro contact ball bearings are designed to operate in applications that require precision. Miniature angular contact ball bearings fall between 3mm inner diameter to 25mm inner diameter. Spindle bearings are single row angular contact bearings with a nominal contact angle of 15° or 25°. They can be subjected to both radial and (in one direction) axial loads. The direction of axial load is shown by a marking on the outer ring. Miniature spindle ball bearings are suitable for applications combined with high speed.

Miniature bearings are used in many applications, such as Linear transmission equipment, Machine tool work piece shaft and grinding wheel shaft, High speed electric shaft (wood carving, stone carving, Servo motor winding, automatic production line, 5G base station small fan, motor Control probe Precision Measuring Instruments 3D Printer ,Aerospace etc.

MONTON miniature angular contact ball Bearings list:

7000Series(C ,AC and A contact angle):

Open ? 7 0 5 ? 7 0 6 ? 7 0 7 ? 7 0 8 ? 7 0 9 ? 7 0 0 0 ? 7 0 0 1 ? 7 0 0 2 ? 7 0 0 3 ?
7 0 0 4 ? 7 0 0 5 ? 7 0 0 6 ? 7 0 0 7 ? 7 0 0 8 ?

Sealed? 7 0 6 - Z Z ? 7 0 8 - 2 R S ? 7 0 0 0 - 2 R S ? 7 0 0 1 - 2 R S ? 7 0 0 2 - 2
7 0 0 3 - 2 R S ? 7 0 0 4 - 2 R S ? 7 0 0 5 - 2 R S ? 7 0 0 6 - 2 R S ? 7 0 0 7 - 2 R S
7 0 0 8 - 2 R S .

7200Series(C ,AC and A contact angle):Open?

7 2 3 ? 7 2 4 ? 7 2 5 ? 7 2 6 ? 7 2 7 ? 7 2 8 ? 7 2 9 ? 7 2 0 0 ? 7 2 0 1 ? 7 2 0 2 ?
7 2 0 3 ? 7 2 0 4 ? 7 2 0 5 ? 7 2 0 6 ? 7 2 0 7 ? 7 2 0 8 ? 7 2 0 9 ? 7 2 1 0 ? 7 2 1 1 ?
Sealed? 7 2 0 2 - 2 R S ? 7 2 0 5 - 2 R S ? 7 2 0 6 - 2 R S .

71800Series(C ,AC and A contact angle):

Open? 7 1 8 0 0 ? 7 1 8 0 1 ? 7 1 8 0 2 ? 7 1 8 0 3 ? 7 1 8 0 4 ? 7 1 8 0 5 ? 7 1 8 1
7 1 8 1 6 ?

Sealed? 7 1 8 0 0 - 2 R S ? 7 1 8 0 1 - 2 R S ? 7 1 8 0 2 - 2 R S ? 7 1 8 0 3 - 2 R
7 1 8 0 4 - 2 R S ? 7 1 8 0 5 - 2 R S
71900Series(C ,AC and A contact angle):
Open? 7 1 9 / 4 ? 7 1 9 / 5 ? 7 1 9 / 6 ? 7 1 9 / 7 ? 7 1 9 / 8 ? 7 1 9 / 9 ? 7 1 9 0 0 ?
7 1 9 0 1 ? 7 1 9 0 2 ? 7 1 9 0 3 ? 7 1 9 0 4 ? 7 1 9 0 5 ?
Sealed? 7 1 9 0 0 - 2 R S ? 7 1 9 0 1 - 2 R S ? 7 1 9 0 2 - 2 R S

Our normal stock items:

7 0 6 ? 7 0 8 ? 7 0 9 ? 7 0 0 0 ? 7 0 0 1 ? 7 0 0 2 ? 7 1 9 / 6 ? 7 1 9 / 8 ? 7 1 9 0 0 ?

MONTON Miniature Angular Contact ball bearings have following

- 1.Precision level: P4 (ABEC7)
- 2.Rings:Rings made Gcr15 bearing steel,440C Stainless or 52100 Chromium steel;
- 3.Balls:Steel or ceramic balls;
- 4.Cage:Solid retainer made from fiber-reinforced phenolic resin, peek;
- 5.Contact angle:15° (C) or 25° (E) contact angles
- 6.Pairs, with three predefined preload classes (L, M, or S) or to a customer request;
- 7.Oil or grease lubrication;
- 8.Open and seals both available;
- 9.Cleanroom assembly, lubrication, and packaging.

High-precision angular contact bearings are critical components in high-speed and deep working applications. Their design and working principles enable them to handle both axial and radial loads. they have excellent performance characteristics in harsh environments. The choice of material and design of the bearing determine the load capacity small size and high load capacity miniature angular contact bearings play a applications.



Contact **MONTON** for more information.