

# Precision angular contact ball bearings reference

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SKF precision angular contact ball bearings are available in three dimension series: contact angle is 15 degrees (name is suffixed with CD or Bearing series 719, 70 and 72 with CX and CE) or 25 degrees (named ACD or ACX and ACE). [Bearings with large contact angles are recommended for applications with high axial stiffness and high axial load carrying capacity.](#)

The CX and ACX series are designed for CD and ACD but are smaller in size while the internal shape has been modified.

CE and ACE design and standard CD or CX and ACD

Or a larger number of small diameter balls compared to the ACX design. All in all, there are four types of SKF precision angular contact ball bearings.

Different designs and three size series.

It is obvious that the space requirements are different, and the radial arrangement of the bearings can be adjusted as appropriate. Each bearing series has its own characteristics and is suitable for different applications.

When the speed is high or the radial clearance is extremely small, you can choose

719 or 70 series bearings. For heavy duty, medium speed applications, Series 72 bearings are suitable. Where the stiffness requirements are of paramount importance, the 719 Series bearings are suitable for larger diameter spindles due to the inclusion of multiple rolling body balls. These factors all contribute to the high stiffness of the spindle system: the stiffness of the spindle increases as the diameter of the spindle increases, and the number of balls on the bearing

The effect of stiffness is greater than the effect of ball size on bearing stiffness. In fact, the stiffness of these light series bearings is greater than the stiffness of the heavier series bearings.

