

# SKF Double row angular contact ball bearing Series: 33 D

Angular contact ball bearings have raceways in the inner and outer rings that are displaced relative to each other in the direction of the bearing axis. This means that they are designed to accommodate combined loads, i.e. simultaneously acting radial and axial loads. The axial load carrying capacity of angular contact ball bearings increases with increasing contact angle. The contact angle is defined as the angle between the line joining the points of contact of the ball and the raceways in the radial plane, along which the load is transmitted from one raceway to another, and a line perpendicular to the bearing axis. Angular contact ball bearings are manufactured in a wide variety of designs and sizes. The most commonly used designs are:

- single row angular contact ball bearings
- double row angular contact ball bearings
- four-point contact ball bearings

### Double row angular contact ball bearings

Double row angular contact ball bearings correspond in design to two single row angular contact ball bearings arranged back-to-back, but take up less axial space. They can accommodate radial loads as well as axial loads acting in both directions. They provide stiff bearing arrangements and are able to accommodate tilting moments. The bearings are available in a basic open and a sealed design.

### Bearings with a two-piece inner ring

In addition to the bearings of the basic design, double row angular contact ball bearings are also available with a two piece inner ring. Bearings with a two-piece inner ring incorporate a large number of large balls, giving the bearing its high load carrying capacity, especially in the axial direction. Bearings in the 33 D series are separable, i.e. the outer ring with ball and cage assemblies can be mounted independently of the inner ring halves. Bearings in the 33 DNRCBM series are nonseparable. They have a snap ring groove with a snap ring in the outer ring, enabling simple and space-saving axial location in the housing. Bearings in the 33 DNRCBM series have been designed specifically for centrifugal pumps, but can also be used in other applications.

## **Characteristics**

Series: 33 D With sealing: No

#### **Application**

• Recommended in: Chemical

Manufacturer ID	Inner diameter	Outer diameter	Width	Contact angle	Cage	Article
	mm	mm	mm			
3307 DJ1	35	80	34.9	45	Steel	3307DJ-SKF

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