

# 6309/HC5C3



## Hybrid deep groove ball bearing

Hybrid single row deep groove ball bearings have rings made of bearing steel and rolling elements made of bearing grade silicon nitride (Si<sub>3</sub>N<sub>4</sub>), which make the bearings electrically insulating. Deep groove ball bearings are the most widely used bearing type, especially in electric motors. The silicon nitride elements not only provide protection from electric current damage but also, when compared to same-sized bearings with steel rolling elements, provide enhanced bearing performance, extended bearing service life, higher speed capability, high wear-resistance, high bearing stiffness, reduced risk of smearing and false (brinelling, and less sensitivity to temperature gradients. These characteristics make them suitable for use in difficult conditions and contaminated environments.

- Protected against electric current damage
- Especially suited for use in difficult conditions and contaminated environments
- Typical benefits of single row deep groove ball bearings

## Overview

### Dimensions

Bore diameter	45 mm
Outside diameter	100 mm
Width	25 mm

### Performance

Basic dynamic load rating	52.7 kN
Basic static load rating	31.5 kN
Reference speed	18 000 r/min
Limiting speed	11 000 r/min

### Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	C3
Material, bearing	Hybrid
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

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