



Image may differ from product. See technical specification for details.

# W 6305

#### Stainless steel deep groove ball bearing

Stainless steel single row deep groove ball bearings provide greater chemical and corrosion resistance. As with deep groove ball bearings generally, they are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than many other bearing types.

- Greater chemical and corrosion resistance
- Simple, versatile and robust design
- Low friction and high-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

#### Overview

#### Dimensions

Bore diameter	25 mm
Outside diameter	62 mm
Width	17 mm

#### Performance

Basic dynamic load rating	17.8 kN
Basic static load rating	11.2 kN
Reference speed	26 000 r/min
Limiting speed	17 000 r/min

## Properties

Filling slotsWithoutNumber of rows1Locating feature, bearing outer ringNoneBore typeCylindricalBore typeSheet metalCageSheet metalMatched arrangementNoRadial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutLubricantNoneRelubrication featureWithout	•	
Locating feature, bearing outer ringNoneBore typeCylindricalCageSheet metalMatched arrangementNoRadial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithout	Filling slots	Without
ringBore typeCylindricalCageSheet metalMatched arrangementNoRadial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithout	Number of rows	1
CageSheet metalMatched arrangementNoRadial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithoutLubricantNone		None
AutorialNoMatched arrangementNoRadial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithoutLubricantNone	Bore type	Cylindrical
Radial internal clearanceCNTolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithoutLubricantNone	Cage	Sheet metal
Tolerance classNormalMaterial, bearingStainless steelCoatingWithoutSealingWithoutLubricantNone	Matched arrangement	No
Material, bearingStainless steelCoatingWithoutSealingWithoutLubricantNone	Radial internal clearance	CN
CoatingWithoutSealingWithoutLubricantNone	Tolerance class	Normal
Sealing Without Lubricant None	Material, bearing	Stainless steel
Lubricant None	Coating	Without
	Sealing	Without
Relubrication feature Without	Lubricant	None
	Relubrication feature	Without

# Logistics

Product net weight	0.232 kg
eClass code	23-05-08-01
UNSPSC code	31171504

## **Technical specification**



# Dimensions

d	25 mm	Bore diameter
D	62 mm	Outside diameter
В	17 mm	Width
d <sub>1</sub>	≈ 38.1 mm	Shoulder diameter
D <sub>2</sub>	≈ 53.22 mm	Recess diameter
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension



## Abutment dimensions

d <sub>a</sub>	min. 31.5 mm	Diameter of shaft abutment
D <sub>a</sub>	max. 55.5 mm	Diameter of housing abutment
r <sub>a</sub>	max. 1 mm	Radius of shaft or housing fillet

# Calculation data

Basic dynamic load rating	С	17.8 kN
Basic static load rating	C <sub>0</sub>	11.2 kN
Fatigue load limit	Pu	0.48 kN
Reference speed		26 000 r/min
Limiting speed		17 000 r/min
Minimum load factor	k <sub>r</sub>	0.035
Calculation factor	f <sub>0</sub>	13.2

#### Mass

#### Tolerance class

 Dimensional tolerances
 Normal

 Radial run-out
 Normal