



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

W 6004-2RS1/VP311

SKF Food line stainless steel deep groove ball bearing with integral sealing

SKF Food line deep groove ball bearings are compliant with food safety regulations. Designed with food grade seals and grease, they enhance food safety, increase reliability and support sustainable development in corrosive environments (VP311). 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.

- Compliant with food safety regulations
- 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	20 mm
Outside diameter	42 mm
Width	12 mm

Performance

Basic dynamic load rating	8.06 kN
Basic static load rating	5 kN
Limiting speed	11 000 r/min

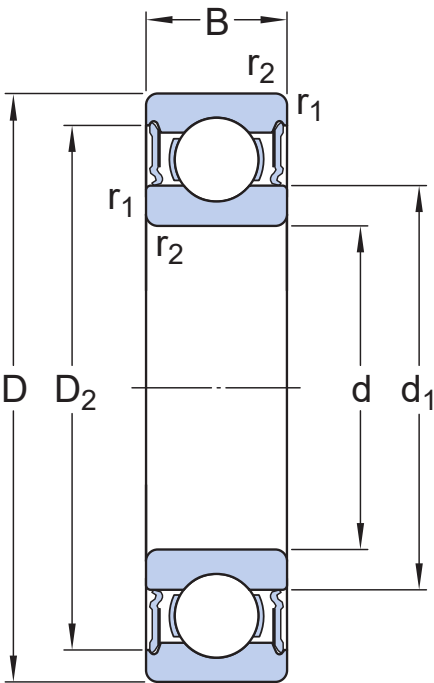
Properties

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	CN
Material, bearing	Stainless steel
Coating	Without
Sealing	Seal on both sides
Sealing type	Contact
Lubricant	Food grade grease
Relubrication feature	Without

Logistics

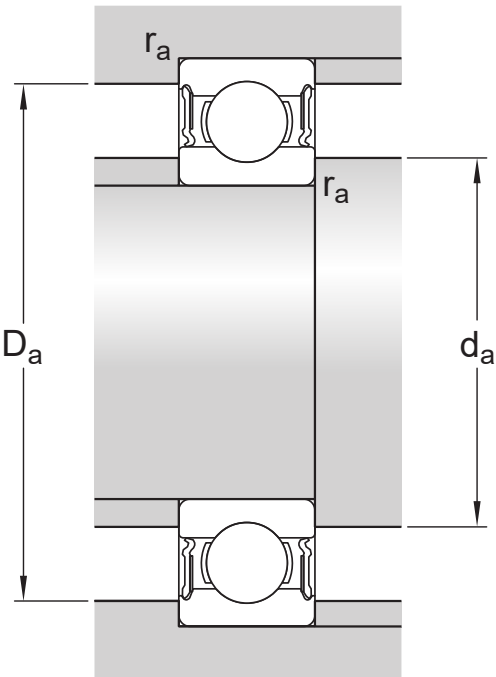
Product net weight	0.0647 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	20 mm	Bore diameter
D	42 mm	Outside diameter
B	12 mm	Width
d ₁	≈ 27.6 mm	Shoulder diameter
D ₂	≈ 38.75 mm	Recess diameter
r _{1,2}	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d_a	min. 24 mm	Diameter of shaft abutment
d_a	max. 27.5 mm	Diameter of shaft abutment
D_a	max. 39.5 mm	Diameter of housing abutment
r_a	max. 0.6 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	8.06 kN
Basic static load rating	C_0	5 kN
Fatigue load limit	P_u	0.212 kN
Limiting speed		11 000 r/min
Minimum load factor	k_f	0.03
Calculation factor	f_0	13.9

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Radial internal clearance: Classes C2 to C5

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

 Product details	 Engineering information	 Tools
Single row deep groove ball bearings	Principles of rolling bearing selection	SKF Product select
Stainless steel deep groove ball bearings	General bearing knowledge	SimPro Quick
Single row deep groove ball bearings with filling slots	Bearing selection process	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing interfaces	LubeSelect for SKF greases
General bearing specifications	Seat tolerances for standard conditions	Heater selection tool
Loads	Selecting internal clearance	
Temperature limits	Lubrication	
Permissible speed	Sealing, mounting and dismounting	
Designation system	Bearing failure and how to prevent it	

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