



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

6088 M

Deep groove ball bearing

Single row deep groove ball bearings 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.

- Simple, versatile and robust design
- Low friction
- High-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	440 mm
Outside diameter	650 mm
Width	94 mm

Performance

Basic dynamic load rating	553 kN
Basic static load rating	965 kN
Reference speed	1 900 r/min
Limiting speed	1 500 r/min

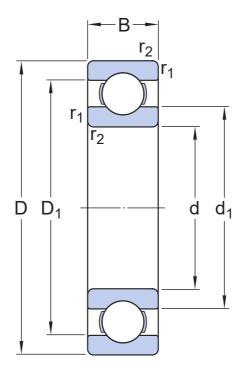
Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Machined metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Candidate for remanufacturing	Yes

Logistics

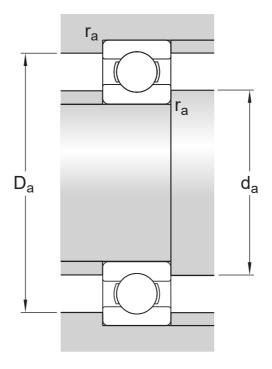
Product net weight	105 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

	-	
d	440 mm	Bore diameter
t_{\Deltadmp}	-0.045 – 0 mm	Deviation limits of mid-range bore diameter
D	650 mm	Outside diameter
t_{\DeltaDmp}	-0.075 – 0 mm	Deviation limits of mid-range outside diameter
В	94 mm	Width
t∆Bs	-0.45 - 0 mm	Deviation limits of ring width
d_1	≈ 506.9 mm	Shoulder diameter
D_1	≈ 583.1 mm	Shoulder diameter
r _{1,2}	min. 6 mm	Chamfer dimension
	Normal	ISO tolerance class for dimensions



Abutment dimensions

da	min. 463 mm	Diameter of shaft abutment
Da	max. 627 mm	Diameter of housing abutment
ra	max. 5 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	С	553 kN
Basic static load rating	C ₀	965 kN
Fatigue load limit	P _u	17.6 kN
Reference speed		1 900 r/min
Limiting speed		1 500 r/min
Minimum load factor	k _r	0.025
Calculation factor	f ₀	16

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	65 μm
Range of section height at outer ring of assembled bearing	t _{Kea}	120 μm
ISO tolerance class for geometrical tolerances		Normal

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

Engineering Tools Product details information Single row deep groove ball bearings SKF Product select Principles of rolling bearing selection Stainless steel deep groove ball SimPro Quick General bearing knowledge Bearing Frequency Calculator Single row deep groove ball bearings Bearing selection process with filling slots LubeSelect for SKF greases Bearing interfaces Double row deep groove ball bearings Heater selection tool Seat tolerances for standard General bearing specifications conditions 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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