



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

6084 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 | 420 mm |
|------------------|--------|
| Outside diameter | 620 mm |
| Width | 90 mm |

Performance

| Basic dynamic load rating | 507 kN |
|---------------------------|-------------|
| Basic static load rating | 880 kN |
| Reference speed | 2 000 r/min |
| Limiting speed | 1 600 r/min |

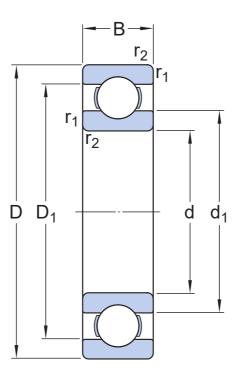
Properties

| 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

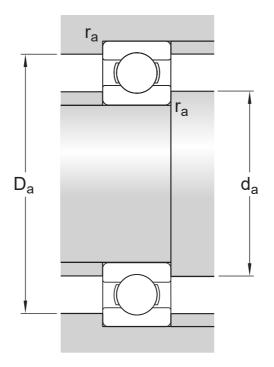
| Product net weight | 95.3 kg |
|--------------------|-------------|
| eClass code | 23-05-08-01 |
| UNSPSC code | 31171504 |

Technical specification



Dimensions

| d | 420 mm | Bore diameter |
|------------------|---------------|--|
| $t_{\Delta dmp}$ | -0.045 – 0 mm | Deviation limits of mid-range bore diameter |
| D | 620 mm | Outside diameter |
| $t_{\Delta Dmp}$ | -0.05 – 0 mm | Deviation limits of mid-range outside diameter |
| В | 90 mm | Width |
| $t_{\Delta Bs}$ | -0.45 – 0 mm | Deviation limits of ring width |
| d ₁ | ≈ 482.3 mm | Shoulder diameter |
| D1 | ≈ 556.2 mm | Shoulder diameter |
| ٢1,2 | min. 5 mm | Chamfer dimension |
| | Normal | ISO tolerance class for dimensions |



Abutment dimensions

| d _a | min. 438 mm | Diameter of shaft abutment |
|----------------|-------------|-----------------------------------|
| Da | max. 602 mm | Diameter of housing abutment |
| ra | max. 4 mm | Radius of shaft or housing fillet |

Calculation data

| Basic dynamic load rating | С | 507 kN |
|---------------------------|----------------|-------------|
| Basic static load rating | C ₀ | 880 kN |
| Fatigue load limit | Pu | 16.3 kN |
| Reference speed | | 2 000 r/min |
| Limiting speed | | 1 600 r/min |
| Minimum load factor | k _r | 0.025 |
| Calculation factor | fo | 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} | 100 μm |
| ISO tolerance class for geometrical tolerances | | Normal |

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