



6311

- Popular item
- SKF Explorer

Deep groove ball bearings

Bearing data

[Tolerances](#),

Normal (metric), P6, P5, Normal (inch),

[Radial internal clearance](#),

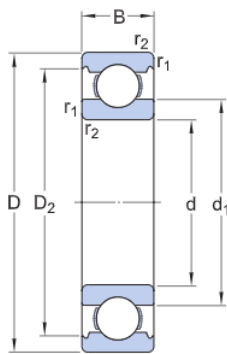
Matched bearing pairs, Stainless steel
 $d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions](#),

[Tolerances and resultant fits](#)

Technical specification

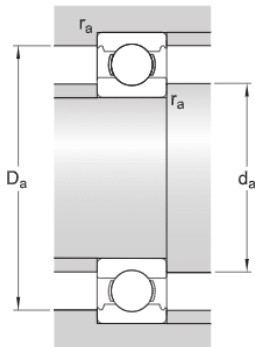


DIMENSIONS

| | | |
|------|-----------|-------------------|
| d | 55 mm | Bore diameter |
| D | 120 mm | Outside diameter |
| B | 29 mm | Width |
| d1 | ≈75.34 mm | Shoulder diameter |
| D2 | ≈103.7 mm | Recess diameter |
| r1,2 | min.2 mm | Chamfer dimension |

ABUTMENT DIMENSIONS

| | | |
|----|------------|-----------------------------------|
| da | min.66 mm | Diameter of shaft abutment |
| Da | max.109 mm | Diameter of housing abutment |
| ra | max.2 mm | Radius of shaft or housing fillet |



CALCULATION DATA

| | | |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | C | 74.1 kN |
| Basic static load rating | C ₀ | 45 kN |
| Fatigue load limit | P _u | 1.9 kN |
| Reference speed | | 12 000 r/min |
| Limiting speed | | 8 000 r/min |
| Minimum load factor | k _r | 0.03 |
| Calculation factor | f ₀ | 13.1 |

MASS

| | |
|--------------|---------|
| Mass bearing | 1.37 kg |
|--------------|---------|

TOLERANCE CLASS

| | |
|------------------------|--------|
| Dimensional tolerances | P6 |
| Radial run-out | Normal |

More information

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

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