



638/8-2Z

Deep groove ball bearings

Bearing data

Tolerances,

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

Radial internal clearance,

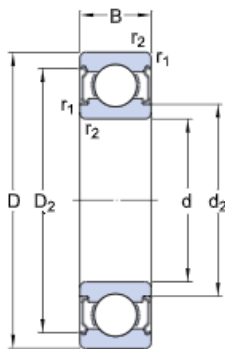
Matched bearing pairs, Stainless steel
 $d < 10$ mm, Other bearings

Bearing interfaces

Seat tolerances for standard conditions,

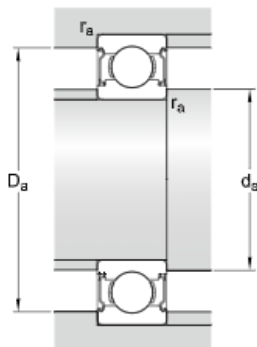
Tolerances and resultant fits

Technical specification



DIMENSIONS

| | |
|-----------|-------------|
| d | 8 mm |
| D | 16 mm |
| B | 6 mm |
| d_2 | ≈ 9.65 mm |
| D_2 | ≈ 14.2 mm |
| $r_{1,2}$ | min. 0.2 mm |



ABUTMENT DIMENSIONS

| | |
|-------|--------------|
| d_a | min. 9.4 mm |
| d_a | max. 9.5 mm |
| D_a | max. 14.6 mm |
| r_a | max. 0.2 mm |

CALCULATION DATA

| | | |
|---------------------------|-------|--------------|
| Basic dynamic load rating | C | 0.819 kN |
| Basic static load rating | C_0 | 0.3 kN |
| Fatigue load limit | P_u | 0.012 kN |
| Reference speed | | 90 000 r/min |
| Limiting speed | | 45 000 r/min |
| Calculation factor | k_r | 0.015 |
| Calculation factor | f_0 | 7.5 |

MASS

| | | |
|--------------|--|----------|
| Mass bearing | | 0.004 kg |
|--------------|--|----------|

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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