

# 2303 E-2RS1TN9

- Popular item

## Self-aligning ball bearings

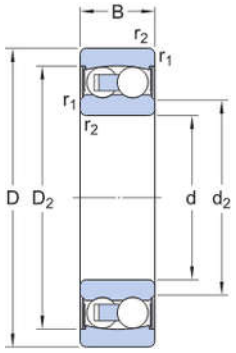
Bearing data

Tolerances,
Normal, JS7,
Radial internal clearance,
table

Bearing interfaceS

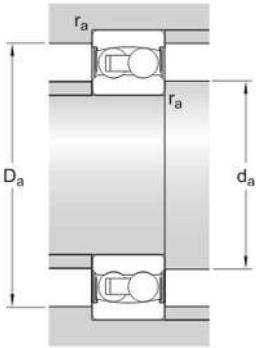
Seat tolerances for standard conditions,
Tolerances and resultant fits

## Technical specification




### DIMENSIONS

| | | |
|---|---|---|
| d | 17 mm | Bore diameter |
| D | 47 mm | Outside diameter |
| B | 19 mm | Width |
| $d_2$ | ≈ 25.5 mm | Recess diameter inner ring |
| $D_2$ | ≈ 41.23 mm | Recess diameter outer ring |
| $r_{1,2}$ | min. 1 mm | Chamfer dimension |




### ABUTMENT DIMENSIONS

| | | |
|---|---|---|
| $d_a$ | min. 22 mm | Abutment diameter shaft |
| $d_a$ | max. 25.5 mm | Abutment diameter shaft |
| $D_a$ | max. 41.4 mm | Abutment diameter housing |
| $r_a$ | max. 1 mm | Fillet radius |

## CALCULATION DATA

| | | |
|---|---|---|
| Basic dynamic load rating | C | 12.7 kN |
| Basic static load rating | $C_0$ | 3.4 kN |
| Fatigue load limit | $P_u$ | 0.176 kN |
| Limiting speed | | 10 000 r/min |
| Permissible angular misalignment | α | 1.5 ° |
| Calculation factor | $k_r$ | 0.05 |
| Calculation factor | e | 0.3 |
| Calculation factor | $Y_0$ | 2.2 |
| Calculation factor | $Y_1$ | 2.1 |
| Calculation factor | $Y_2$ | 3.3 |

## MASS

| | | |
|---|---|---|
| Mass bearing | | 0.16 kg |

## More information

### Product details

- Designs and variants
- Bearing data
- Loads
- Temperature limits
- Permissible speed
- Design considerations
- Mounting
- Designation system

### Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Selecting internal clearance
- Lubrication
- Sealing, mounting and dismounting
- Bearing failure and how to prevent it

### Tools

- Bearing Select
- SimPro Quick
- Engineering Calculator
- LubeSelect for SKF greases
- Heater selection tool
- Drive-up Method Program
- Oil Injection Method Program
- Tool and Accessory Selector for sleeves and shafts
- Housing Select
- Rolling bearings mounting and dismounting instructions

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