



## 6003 Deep groove ball bearings

- Popular item  
- SKF Explorer

### Deep groove ball bearings

#### Bearing data

[Tolerances](#),

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

[Radial internal clearance](#),

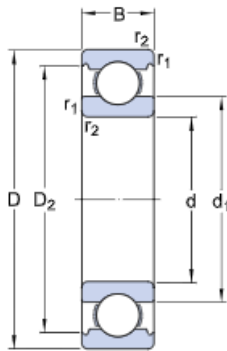
Matched bearing pairs, Stainless steel  
 $d < 10$  mm, Other bearings

#### Bearing interfaces

[Seat tolerances for standard conditions](#),

[Tolerances and resultant fits](#)

### Technical specification

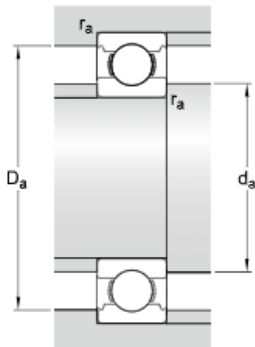


#### DIMENSIONS

d	17 mm	Bore diameter
D	35 mm	Outside diameter
B	10 mm	Width
$d_1$	≈ 23 mm	Shoulder diameter
$D_2$	≈ 31.2 mm	Recess diameter
$r_{1,2}$	min. 0.3 mm	Chamfer dimension

#### ABUTMENT DIMENSIONS

$d_c$ min. 19 mm	Diameter of shaft abutment
$D_i$ max. 33 mm	Diameter of housing abutment
$r_a$ max. 0.3 mm	Radius of shaft or housing fillet



## CALCULATION DATA

C	6.37 kN	Basic dynamic load rating
C <sub>0</sub>	3.25 kN	Basic static load rating
P <sub>u</sub>	0.137 kN	Fatigue load limit
	45 000 r/min	Reference speed
	28 000 r/min	Limiting speed
k <sub>r</sub>	0.025	Minimum load factor
f <sub>0</sub>	14	Calculation factor

## MASS

	0.038 kg	Mass bearing
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## TOLERANCE CLASS

P6	Dimensional tolerances
P5	Radial run-out