



6003-2Z Deep groove ball bearings

- Popular item
- SKF Explorer

Deep groove ball bearings

Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

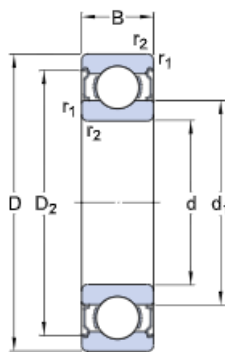
Matched bearing pairs, Stainless steel
 $d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

Technical specification

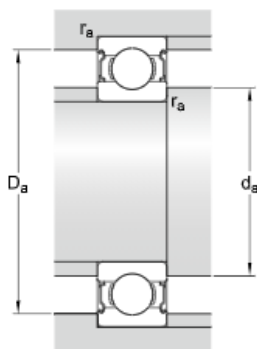


DIMENSIONS

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 _c max. 22.9 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 ₀	3.25 kN	Basic static load rating
P _u	0.137 kN	Fatigue load limit
	45 000 r/min	Reference speed
	22 000 r/min	Limiting speed
k _r	0.025	Minimum load factor
f ₀	14	Calculation factor

MASS

0.041 kg	Mass bearing
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TOLERANCE CLASS

P6	Dimensional tolerances
P5	Radial run-out