



6003-Z Deep groove ball bearings

- SKF Explorer

Deep groove ball bearings

Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

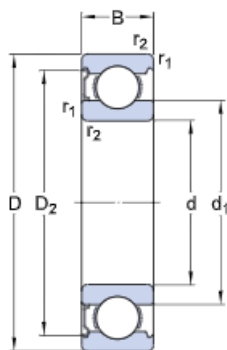
$d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

Technical specification

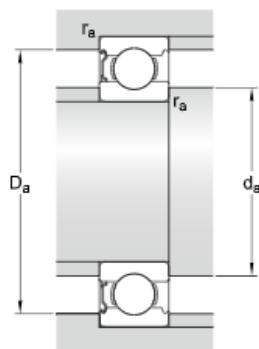


DIMENSIONS

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_{ξ} min. 19 mm	Diameter of shaft abutment
d_{ξ} max. 22.9 mm	Diameter of shaft abutment
D_{ξ} 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
	28 000 r/min	Limiting speed
k _r	0.025	Minimum load factor
f ₀	14	Calculation factor

MASS

0.039 kg	Mass bearing
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TOLERANCE CLASS

P6	Dimensional tolerances
P5	Radial run-out