



W 6003-2Z Deep groove ball bearings

- Popular item

Deep groove ball bearings

Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

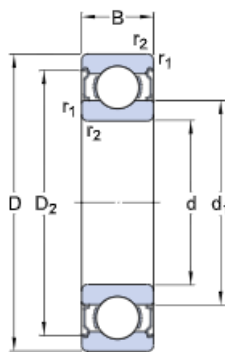
$d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fits](#)

Technical specification

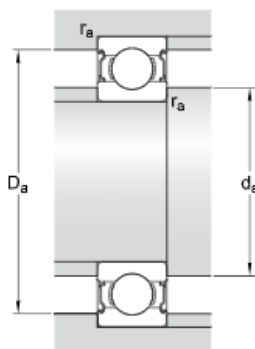


DIMENSIONS

d	17 mm	Bore diameter
D	35 mm	Outside diameter
B	10 mm	Width
d_1	≈ 23.5 mm	Shoulder diameter
d_2	≈ 23.5 mm	Recess diameter
D_2	≈ 31.85 mm	Recess diameter
$r_{1,2}$	min. 0.3 mm	Chamfer dimension

ABUTMENT DIMENSIONS

d_{ε} min. 19 mm	Diameter of shaft abutment
d_{ε} max. 23 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	4.94 kN	Basic dynamic load rating
C ₀	3.15 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	0.03	Minimum load factor
f ₀	14.1	Calculation factor

MASS

0.038 kg	Mass bearing
----------	--------------

TOLERANCE CLASS

Normal	Dimensional tolerances
Normal	Radial run-out