

314-Z

Deep groove ball bearings

Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

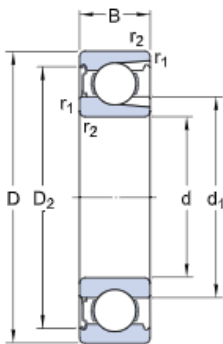
$d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

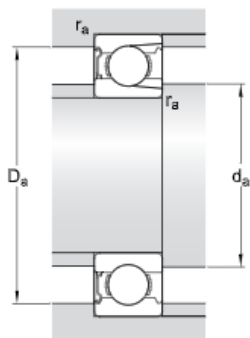
[Tolerances and resultant fits](#)

Technical specification



DIMENSIONS

d	70 mm
D	150 mm
B	35 mm
d_1	≈ 93.75 mm
D_2	≈ 129.9 mm
$r_{1,2}$	min. 2.1 mm



ABUTMENT DIMENSIONS

d_a	min. 82 mm
d_a	max. 93.7 mm
D_a	max. 138 mm
r_a	max. 2 mm

CALCULATION DATA

Basic dynamic load rating	C	114 kN
Basic static load rating	C ₀	102 kN
Fatigue load limit	P _u	4.15 kN
Reference speed		8 000 r/min
Limiting speed		5 000 r/min
Calculation factor	k _r	0.05

MASS

Mass bearing	2.75 kg
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More information

<p>Product details</p> <p>Single row deep groove ball bearings</p> <hr/> <p>Stainless steel deep groove ball bearings</p> <hr/> <p>Single row deep groove ball bearings with filling slots</p> <hr/> <p>Double row deep groove ball bearings</p> <hr/> <p>Bearing data</p> <hr/> <p>Loads</p> <hr/> <p>Temperature limits</p> <hr/> <p>Permissible speed</p> <hr/> <p>Designation system</p> <hr/>	<p>Engineering information</p> <p>Principles of rolling bearing selection</p> <hr/> <p>General bearing knowledge</p> <hr/> <p>Bearing selection process</p> <hr/> <p>Bearing interfaces</p> <hr/> <p>Seat tolerances for standard conditions</p> <hr/> <p>Selecting internal clearance</p> <hr/> <p>Lubrication</p> <hr/> <p>Sealing, mounting and dismounting</p> <hr/> <p>Bearing failure and how to prevent it</p> <hr/>	<p>Tools</p> <p>Bearing Select</p> <hr/> <p>SimPro Quick</p> <hr/> <p>Engineering Calculator</p> <hr/> <p>LubeSelect for SKF greases</p> <hr/> <p>Heater selection tool</p> <hr/> <p>Rolling bearings mounting and dismounting instructions</p> <hr/>
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