



## 638/4-2Z

### 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

$d$	4 mm
$D$	9 mm
$B$	4 mm
$d_1$	≈ 5.2 mm
$D_2$	≈ 8.1 mm
$r_{1,2}$	min. 0.1 mm



#### ABUTMENT DIMENSIONS

$d_a$	min. 4.6 mm
$d_a$	max. 5.1 mm
$D_a$	max. 8.4 mm
$r_a$	max. 0.1 mm

## CALCULATION DATA

Basic dynamic load rating	C	0.423 kN
Basic static load rating	$C_0$	0.116 kN
Fatigue load limit	$P_u$	0.005 kN
Reference speed		140 000 r/min
Limiting speed		70 000 r/min
Calculation factor	$k_f$	0.015
Calculation factor	$f_0$	6.5

## MASS

Mass bearing		0.001 kg
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## More information

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

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