



# W 61809-2Z Deep groove ball bearings

## Deep groove ball bearings

### Bearing data

[Tolerances](#),

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

[Radial internal clearance](#),

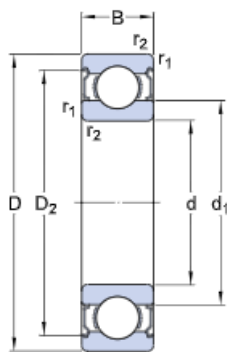
Matched bearing pairs, Stainless steel  
 $d < 10$  mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions](#),

[Tolerances and resultant fits](#)

## Technical specification

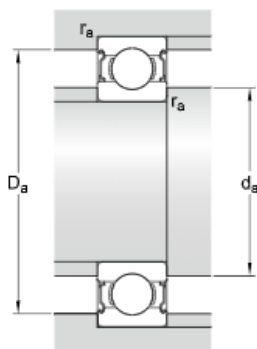


### DIMENSIONS

d	45 mm	Bore diameter
D	58 mm	Outside diameter
B	7 mm	Width
$d_1$	≈ 48.2 mm	Shoulder diameter
$d_2$	≈ 48.2 mm	Recess diameter
$D_2$	≈ 54.9 mm	Recess diameter
$r_{1,2}$	min. 0.3 mm	Chamfer dimension

### ABUTMENT DIMENSIONS

$d_{\varepsilon}$ min.	47 mm	Diameter of shaft abutment
$d_{\varepsilon}$ max.	48 mm	Diameter of shaft abutment
$D_i$ max.	56 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 <sub>0</sub>	5 kN	Basic static load rating
P <sub>u</sub>	0.212 kN	Fatigue load limit
	24 000 r/min	Reference speed
	12 000 r/min	Limiting speed
k <sub>r</sub>	0.02	Minimum load factor
f <sub>0</sub>	15.1	Calculation factor

## MASS

	0.036 kg	Mass bearing
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## TOLERANCE CLASS

Normal	Dimensional tolerances
Normal	Radial run-out