



FAG

61809-Y [🔗](#)

Deep groove ball bearing

Deep groove ball bearing 618..-Y, single row,
brass sheet metal cage

Technical information



Your current product variant

Sealing	Without	Not sealed
Cage	Y	Brass sheet metal
Tolerance class	PN	Normal (PN)
Dimensional / heat stabilization	SN	Rings dimensional stabilized up to 120°
Lubricant	Without	Bearing not greased
Radial internal clearance	CN (Group N)	Normal internal clearance
Bore type	Z	Cylindrical

Main Dimensions & Performance Data

d	45 mm	Bore diameter
D	58 mm	Outside diameter
B	7 mm	Width
C _r	7,000 N	Basic dynamic load rating, radial
C _{0r}	5,900 N	Basic static load rating, radial
C _{ur}	400 N	Fatigue load limit, radial
n _G	21,900 1/min	Limiting speed
n _{gr}	7,300 1/min	Reference speed
≈m	0.039 kg	Weight



Mounting dimensions

$d_{a\min}$	47 mm	Minimum diameter shaft shoulder
$D_{a\max}$	56 mm	Maximum diameter of housing shoulder
$r_{a\max}$	0.3 mm	Maximum fillet radius

Dimensions

$r_{\min}$	0.3 mm	Minimum chamfer dimension
D_1	53.9 mm	Shoulder diameter outer ring
D_2	55.22 mm	Caliber diameter outer ring
d_1	49.1 mm	Shoulder diameter inner ring

Temperature range

$T_{\min}$	-30 °C	Operating temperature min.
$T_{\max}$	120 °C	Operating temperature max.

Calculation factors

f_0	16.3	Calculation factor
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Characteristics

	Radial load
	Axial load in one direction
	Axial load in two directions
	Grease Lubrication
	Oil Lubrication
	Not sealed