

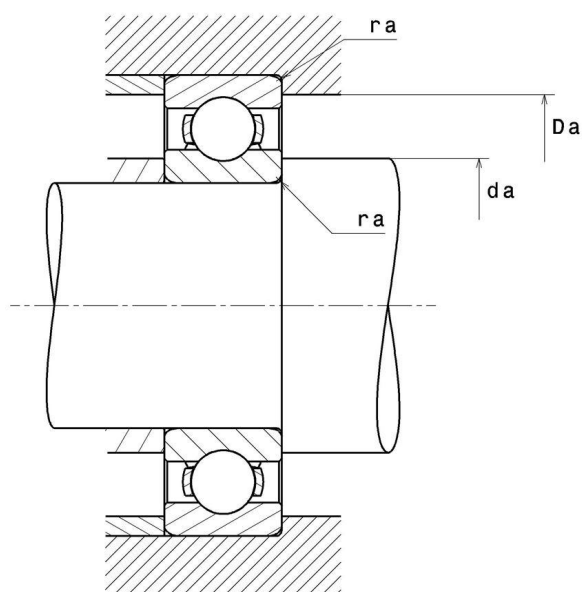
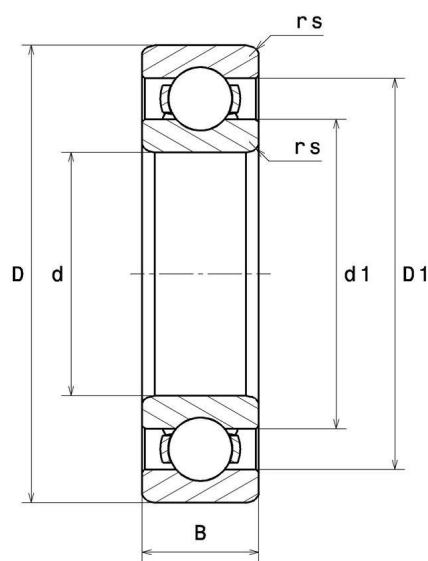
**Technical data**

**6209C3**

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, open

**VISUAL (S)**



# 6209C3

Single row deep groove ball bearings

## PRODUCT DEFINITION

<b>Brand</b>	NTN
<b>d - Internal diameter</b>	45 mm
<b>D - External diameter</b>	85 mm
<b>B - Bearing/Inner ring width</b>	19 mm
<b>rs - Min fillet radius</b>	1,1 mm
<b>Radial clearance class</b>	C3
<b>Mass</b>	0,398 kg

## PRODUCT PERFORMANCE

<b>C - Dynamic load</b>	36 kN
<b>C0 - Static load</b>	20,4 kN
<b>Cu - Fatigue limit load</b>	1,6 kN
<b>f0 - Coefficient</b>	14.1
<b>Nlim - Oil lubrication limit speed</b>	9200 tr/min
<b>Nlim - Grease lubrication limit speed</b>	7800 tr/min
<b>Tmin - Min operating temperature</b>	-40 °C
<b>Tmax - Max operating temperature</b>	120 °C

## ABUTMENT

<b>da min - Min shoulder diameter IR</b>	51,5 mm
<b>Da max - Max shoulder diameter OR</b>	78,5 mm
<b>ra max - Max shaft &amp; housing fillet radius</b>	1 mm

## INDUSTRY CALCUL FACTORS

## Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	e	Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y
0.172	0.19	1	0	0.56	2.3
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.3				1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1

## Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

$X_0$	$Y_0$
0.6	0.5

For single or DT bearing arrangement:

If  $P_0 < F_r$ , then use  $P_0 = F_r$