

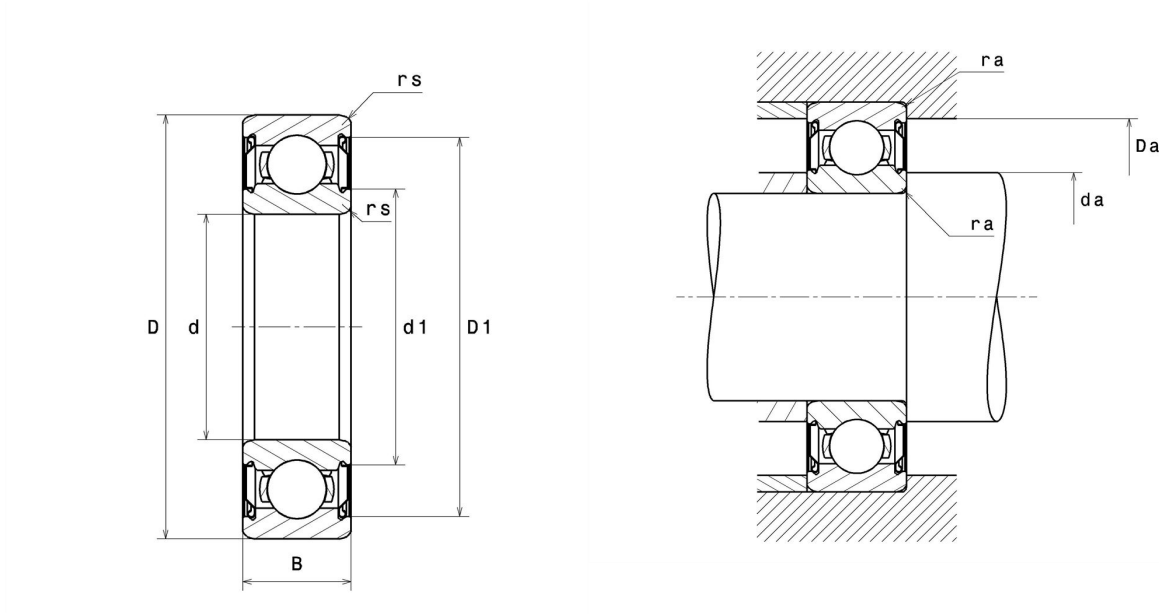
## Technical data

### 6311ZZC4/5K

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, shields on both sides

## Visual(s)



## Product definition

<b>d</b>	55 mm
<b>D</b>	120 mm
<b>B</b>	29 mm
<b>rs min</b>	2 mm
<b>Radial clearance class</b>	C4
<b>Mass</b>	1.37 kg
<b>Brand</b>	NTN

## Product performance

<b>Dynamic load, C</b>	71.5 kN
<b>Static load, C0</b>	45 kN
<b>Fatigue limit load, Cu</b>	2.05 kN
<b>f0</b>	13.2
<b>Nlim (grease)</b>	5,800 Tr/min
<b>Min operating temperature, Tmin</b>	-20 °C
<b>Max operating temperature, Tmax</b>	120 °C
<b>Characteristic cage frequency, FTF</b>	0.38 Hz
<b>Characteristic rolling element frequency, BSF</b>	4.08 Hz
<b>Characteristic outer ring frequency, BPF0</b>	3.07 Hz
<b>Characteristic inner ring frequency, BPIF</b>	4.93 Hz

## Abutment dimensions

<b>da min</b>	64 mm
<b>Da max</b>	111 mm
<b>ra max</b>	2 mm

## Calculation factors

Equivalent dynamic radial load

$$P = X.Fr + Y.Fa$$

$\frac{f_0 F_a}{C_0}$	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

$$P_0 = X_0.Fr + Y_0.Fa$$

$X_0$	$Y_0$
0.6	0.5

For single or DT bearing arrangement:

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