

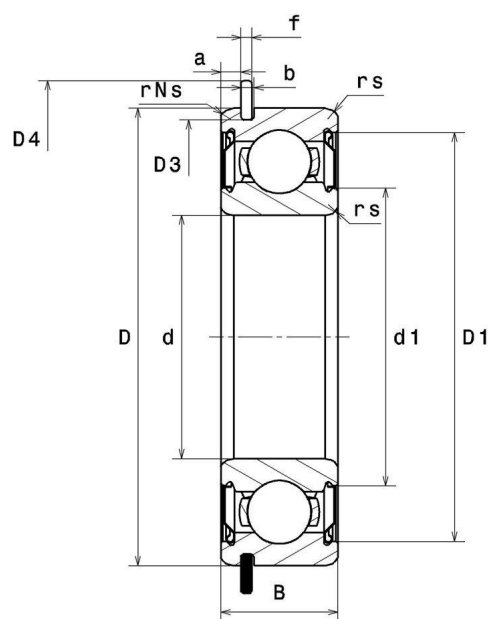
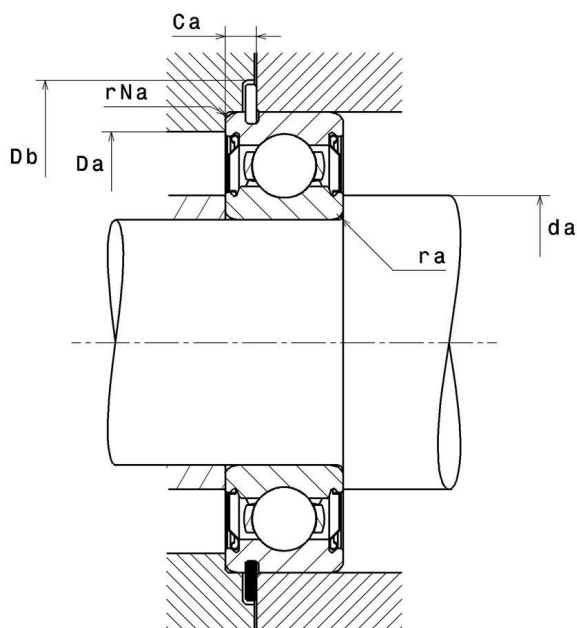
**Technical data**

**6205ZZNR/5K**

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, snap ring & groove on outer diameter, shields on both sides

**VISUAL (S)**



# 6205ZZNR/5K

Single row deep groove ball bearings

## PRODUCT DIMENSIONS

<b>Internal diameter d</b>	25 mm
<b>External diameter D</b>	52 mm
<b>Bearing/Inner ring width(B)</b>	15 mm
<b>Min position Groove a min</b>	2,31 mm
<b>Max position groove a max</b>	2,46 mm
<b>Mini segment position Ca min</b>	3,33 mm
<b>Max segment position Ca max</b>	3,58 mm
<b>Min fillet radius rs</b>	1 mm
<b>Min fillet radius rNs</b>	0,5 mm
<b>Max bottom groove diameter D3</b>	49,73 mm
<b>Min groove width b min</b>	1,35 mm
<b>Max groove width b max</b>	1,65 mm
<b>Max bottom groove radius r0 max</b>	0,4 mm
<b>Max outside diameter of assembled stop ring D4 max</b>	57,9 mm
<b>Stop ring thickness f</b>	1,12 mm
<b>Snap ring reference</b>	R52
<b>Radial clearance class</b>	CN
<b>Mass</b>	0,128 kg
<b>Brand</b>	NTN

## PRODUCT PERFORMANCE

<b>Dynamic load, C</b>	15,5 kN
<b>Static load, C0</b>	7,85 kN
<b>Fatigue limit load, Cu</b>	0,55 kN
<b>Coefficient f0</b>	13.9
<b>Nlim (grease)</b>	13000 tr/min
<b>Min operating temperature, Tmin</b>	-40 °C
<b>Max operating temperature, Tmax</b>	150 °C
<b>Characteristic cage frequency, FTF</b>	0.398 Hz
<b>Characteristic rolling element frequency, BSF</b>	4.71 Hz
<b>Characteristic outer ring frequency, BPF0</b>	3.584 Hz
<b>Characteristic inner ring frequency, BPGI</b>	5.416 Hz

# 6205ZZNR/5K

Single row deep groove ball bearings

## ABUTMENT

Min shoulder diameter IR da min	30 mm
Max shoulder diameter OR Da max	47 mm
Max shaft & housing fillet radius ra max	1 mm
Max fillet radius on segment side rNa max	0,5 mm
Min stop ring position diameter Db min	58,5 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  $P_0 = F_r$