



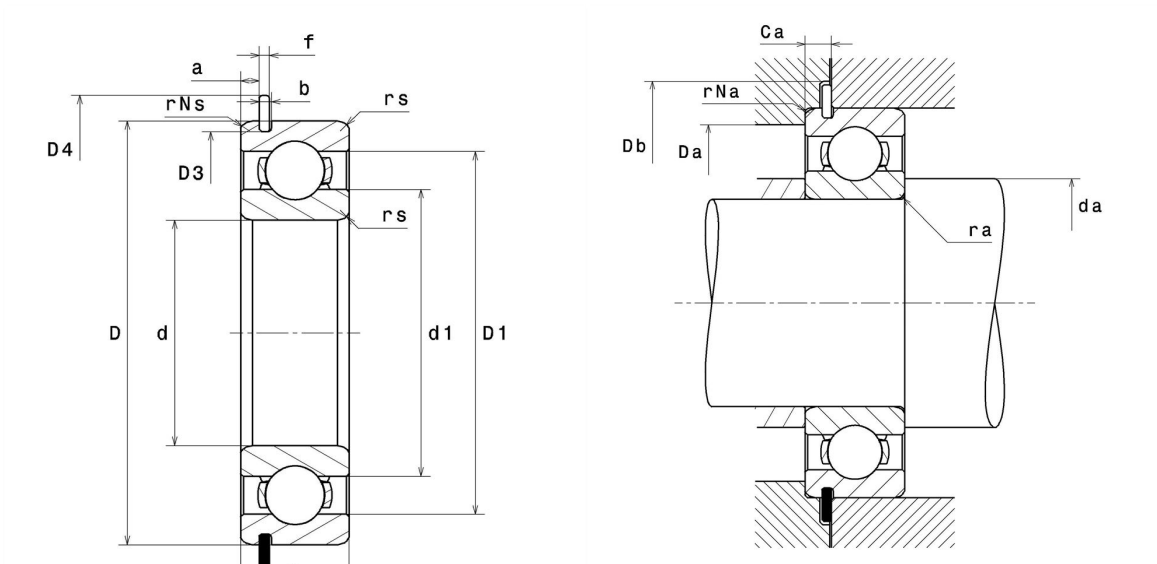
Technical datasheet

6214NRC3

Single row deep groove ball bearings

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

Visual(s)



Product definition

d	70 mm
D	125 mm
B	24 mm
a min	3.86 mm
a max	4.06 mm
Ca min	6.68 mm
Ca max	6.88 mm
rs min	1.5 mm
rNs min	0.5 mm
D3 max	120.22 mm
b min	3.1 mm
b max	3.4 mm
r0 max	0.6 mm
D4 max	134.7 mm
f	2.82 mm
Snap ring reference	R125
Radial clearance class	C3
Mass	1.07 kg
Brand	NTN

Product performance

Dynamic load, C	62 kN
Static load, C₀	44 kN
Fatigue limit load, C_u	2 kN
f₀	14.5
N_{lim} (oil)	6,000 rpm
N_{lim} (grease)	5,100 rpm
Min operating temperature, T_{min}	-60 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.4 Hz
Characteristic outer ring frequency, BPF₀	4.1 Hz
Characteristic inner ring frequency, BPF_i	5.9 Hz

Abutment dimensions

da min	78 mm
Da max	117 mm
ra max	1.5 mm
rNa max	0.5 mm
Db min	136.5 mm

Calculation factors

Equivalent dynamic radial load

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

$\frac{f_0 F_a}{C_0}$	e	F _a / F _r ≤ e		F _a / F _r > 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 P₀ < F_r, then use P₀ = F_r