

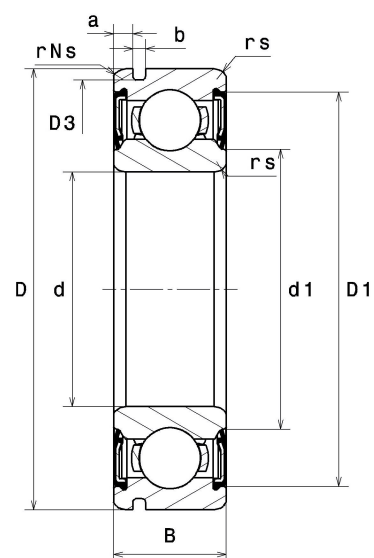
PDF technical sheet 6304NEEC3



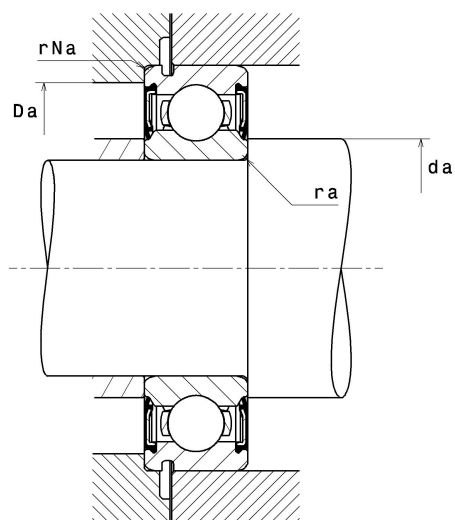
Single row deep groove ball bearings

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

Product definition	
d	20 mm
D	52 mm
B	15 mm
d1	30 mm
D1	45.50 mm
a min	2.31 mm
a max	2.46 mm
rs min	1.10 mm
rNs min	0.50 mm
D3 max	49.73 mm
b min	1.35 mm
b max	1.65 mm
r0 max	0.40 mm
Radial clearance class	C3
Mass	0.14 kg
Brand	SNR



Product performance	
Dynamic load, C	15.80 kN
Static load, C0	7.90 kN
Fatigue limit load, Cu	0.36 kN
f0	12.4
Nlim	9,500 Tr/min
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.37 Hz
Characteristic rolling element frequency, BSF	3.52 Hz
Characteristic outer ring frequency, BPF0	2.57 Hz
Characteristic inner ring frequency, BPFI	4.43 Hz



Abutment dimensions

da min	26.50 mm
da max	30 mm
Da max	45.50 mm
ra max	1 mm
rNa max	0.50 mm
Db min	58.50 mm

Calculation factors

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

$\frac{f_0 F_a}{C_0}$	e	$F_a / Fr \leq e$		$F_a / Fr > e$	
		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

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement:

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