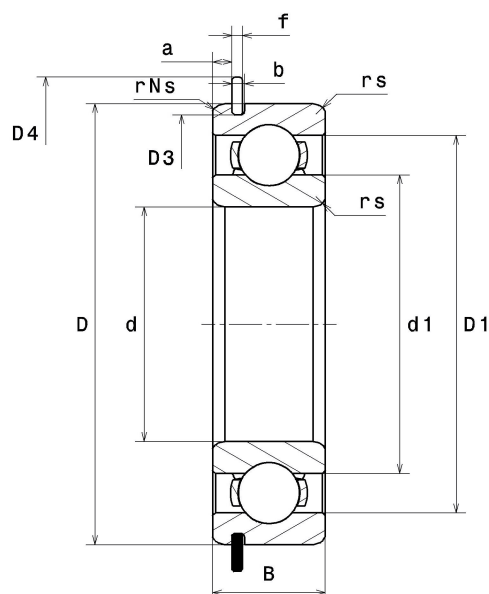


PDF technical sheet 6220NR

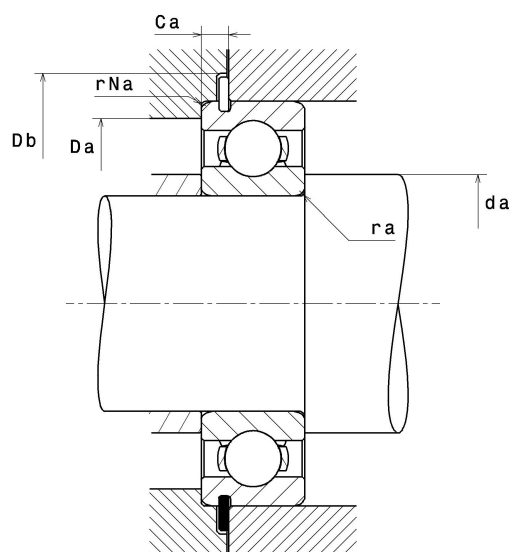


Single row deep groove ball bearings

Product definition	
d	100 mm
D	180 mm
B	34 mm
a min	5.44 mm
a max	5.69 mm
Ca min	8.54 mm
Ca max	8.79 mm
rs min	2.10 mm
rNs min	0.50 mm
D3 max	173.66 mm
b min	3.50 mm
b max	3.80 mm
r0 max	0.60 mm
D4 max	192.90 mm
f	3.10 mm
Snap ring reference	R180
Radial clearance class	CN
Mass	3.14 kg
Brand	NTN



Product performance	
Dynamic load, C	122 kN
Static load, C0	93 kN
Fatigue limit load, Cu	4.25 kN
f0	14.4
Nlim (oil)	4,200 Tr/min
Nlim (grease)	3,500 Tr/min
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	120 °C



Abutment dimensions

da min	111 mm
Da max	169 mm
ra max	2 mm
rNa max	0.50 mm
Db min	195 mm

Calculation factors

Equivalent dynamic radial load

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

$\frac{f_0 F_a}{C_0}$	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

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

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement:

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