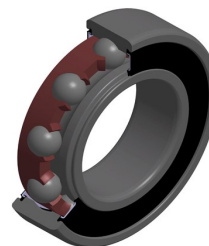


PDF technical sheet

6307T2XLLBC3P5/5KQ19

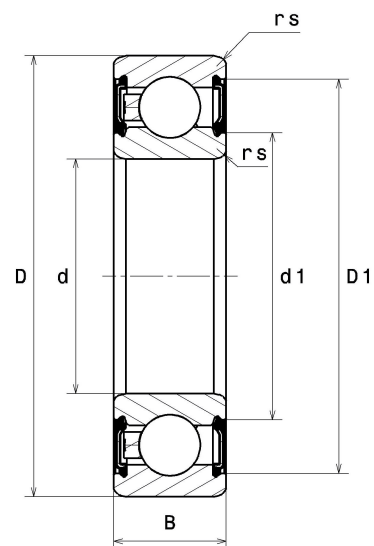


Single row deep groove ball bearings

Deep groove ball bearing, radial contact, polyamide cage, non-contact seals on both sides

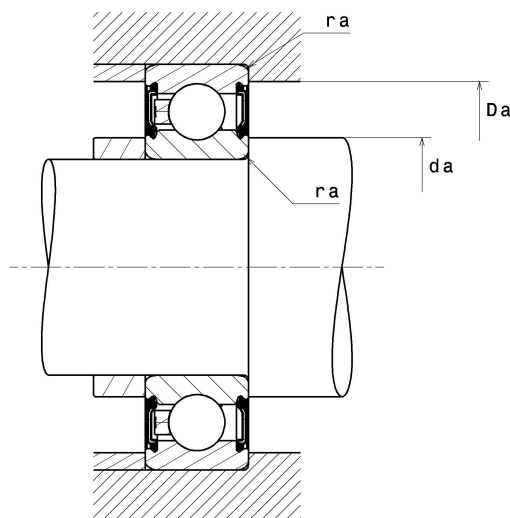
Product definition

d	1.3780 "
D	3.1496 "
B	0.8268 "
rs min	0.0591 "
Radial clearance class	C3
Mass	1.61 oz
Brand	NTN



Product performance

Dynamic load, C	33.50 kN
Static load, C0	19.10 kN
Fatigue limit load, Cu	0.87 kN
f0	13.1
Nlim (grease)	8,800 RPM
Min operating temperature, Tmin	-13 °C
Max operating temperature, Tmax	230 °C
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	4.03 Hz
Characteristic outer ring frequency, BPF0	3.06 Hz
Characteristic inner ring frequency, BPF1	4.94 Hz



Abutment dimensions

da min	1.6929 "
da max	1.8504 "
Da max	2.8346 "
ra max	0.0591 "

Calculation factors

Equivalent dynamic radial load

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

$\frac{f_0 F_a}{C_0}$	e	$F_a / F_r \leq e$		$F_a / F_r > e$	
		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 $P_0 < F_r$, then use $P_0 = F_r$