

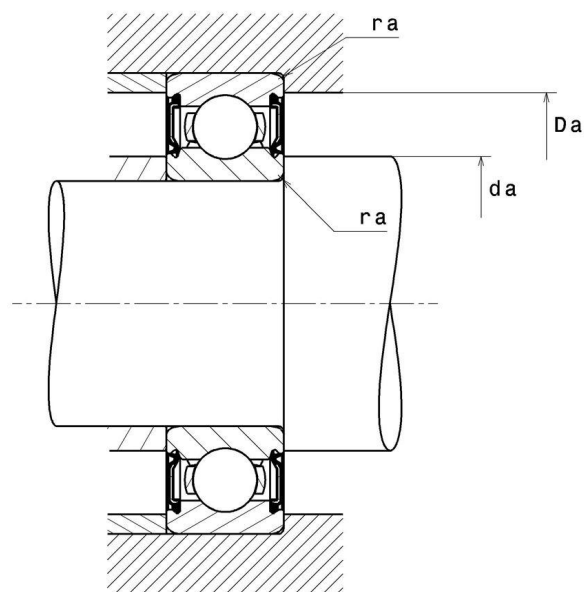
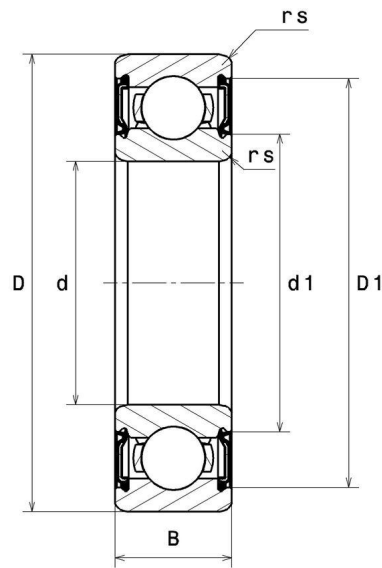
Technical data

6209LLUC3/5K

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides

VISUAL (S)



6209LLUC3/5K

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	45 mm
External diameter D	85 mm
Bearing/Inner ring width(B)	19 mm
Min fillet radius rs	1,1 mm
Radial clearance class	C3
Mass	0,398 kg
Brand	NTN

PRODUCT PERFORMANCE

Dynamic load, C	36 kN
Static load, C0	20,4 kN
Fatigue limit load, Cu	1,6 kN
Coefficient f0	14.1
Nlim (grease)	5200 tr/min
Min operating temperature, Tmin	-25 °C
Max operating temperature, Tmax	110 °C
Characteristic cage frequency, FTF	0.402 Hz
Characteristic rolling element frequency, BSF	4.923 Hz
Characteristic outer ring frequency, BPF0	3.621 Hz
Characteristic inner ring frequency, BPF1	5.379 Hz

ABUTMENT

Min shoulder diameter IR da min	51,5 mm
Max shoulder diameter IR da max	55,5 mm
Max shoulder diameter OR Da max	78,5 mm
Max shaft & housing fillet radius ra max	1 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 $P_0 = F_r$