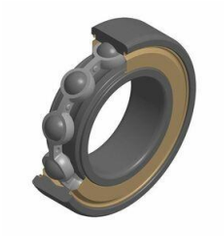


Technical data

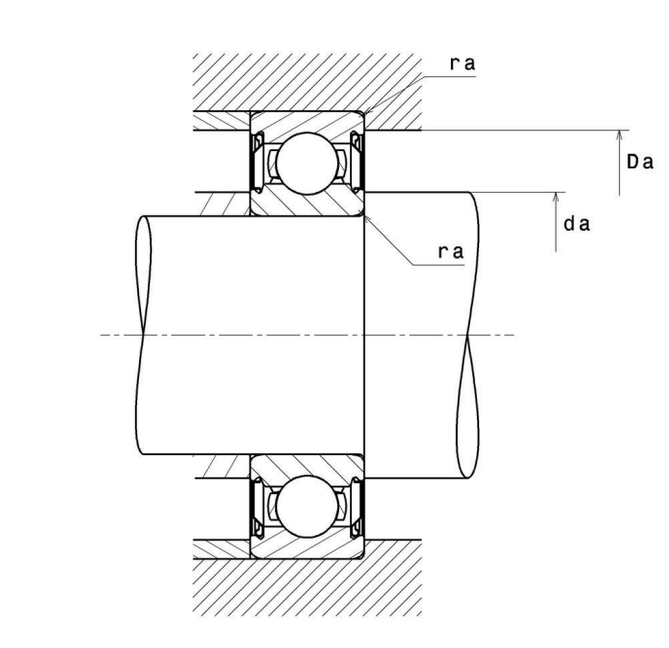
6309HT200ZZ

Single row deep groove ball bearings

TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 200°C.

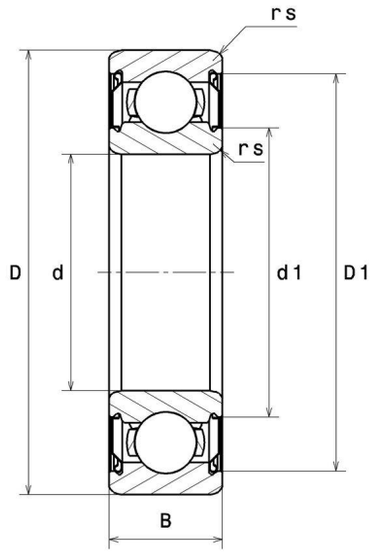
TOPLINE

VISUAL (S)



6309HT200ZZ

Single row deep groove ball bearings



PRODUCT DIMENSIONS	
Internal diameter d	45 mm
External diameter D	100 mm
Bearing/Inner ring width(B)	25 mm
External diameter inner ring d1	59,3 mm
Inner diameter outer ring D1	87,1 mm
Min fillet radius rs	1,5 mm
Radial clearance class	C4
Mass	0,825 kg
Brand	SNR

PRODUCT PERFORMANCE	
Dynamic load, C	52,3 kN
Static load, C0	31,7 kN
Fatigue limit load, Cu	1,44 kN
Coefficient f0	13.0
Reference thermal speed (Nref)	8300 tr/min
Mechanical Limit Speed Nlim	3200 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C

6309HT200ZZ
Single row deep groove ball bearings

PRODUCT PERFORMANCE	
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	3.911 Hz
Characteristic outer ring frequency, BPF0	3.037 Hz
Characteristic inner ring frequency, BPFI	4.963 Hz

ABUTMENT	
Min shoulder diameter IR da min	53 mm
Max shoulder diameter IR da max	59,3 mm
Max shoulder diameter OR Da max	92 mm
Max shaft & housing fillet radius ra max	1,5 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

P = X.Fr + Y.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

Po = Xo.Fr + Yo.Fa

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr