

Technical data

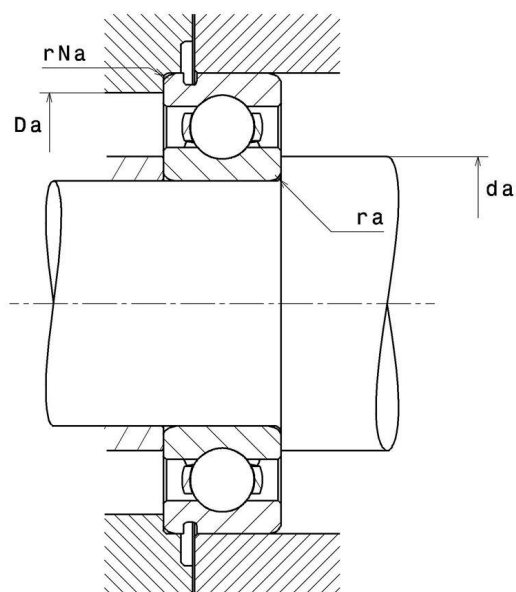
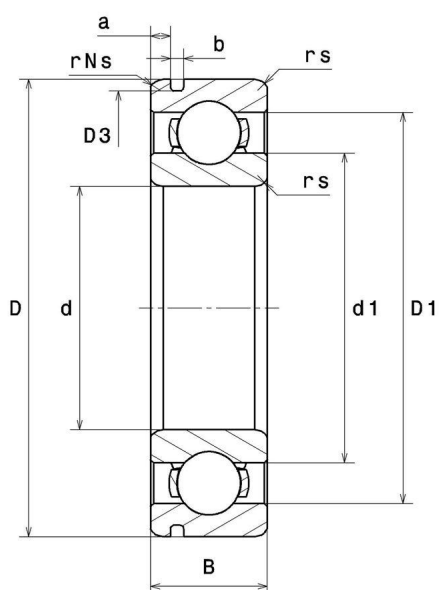
6207N

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, snap ring groove on outer diameter, open

VISUAL (S)



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	35 mm
D - External diameter	72 mm
B - Bearing/Inner ring width	17 mm
d1 - External diameter inner ring	44 mm
D1 - Inner diameter outer ring	62,7 mm
a min - Min position Groove	3,07 mm
a max - Max position groove	3,28 mm
rs - Min fillet radius	1,1 mm
rNs - Min fillet radius	0,5 mm
D3 - Max bottom groove diameter	68,81 mm
b min - Min groove width	1,9 mm
b max - Max groove width	2,2 mm
r0 max - Max bottom groove radius	0,6 mm
Radial clearance class	CN
Mass	0,285 kg

PRODUCT PERFORMANCE

C - Dynamic load	27100000 mN
C0 - Static load	15300000 mN
Cu - Fatigue limit load	700000 mN
f0 - Coefficient	13.8
N ref - Reference thermal speed	60000 °/s
N lim - Mechanical Limit Speed	96000 °/s



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PRODUCT PERFORMANCE

Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	3.565 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.435 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.606 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.303 Hz
FTF - Rotational frequency - cage (60 rpm)	0.396 Hz

ABUTMENT

da min - Min shoulder diameter IR	41,5 mm
Da max - Max shoulder diameter OR	65,5 mm
ra max - Max shaft & housing fillet radius	1 mm
rNa max - Max fillet radius on segment side	0,5 mm
Db min - Min stop ring position diameter	0 mm



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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

$$Po = X_0.Fr + Y_0.Fa$$

X ₀	Y ₀
0.6	0.5

For single or DT bearing arrangement :

If Po ≤Fr, then use Po = Fr