Brand of NTN corporation

Technical data



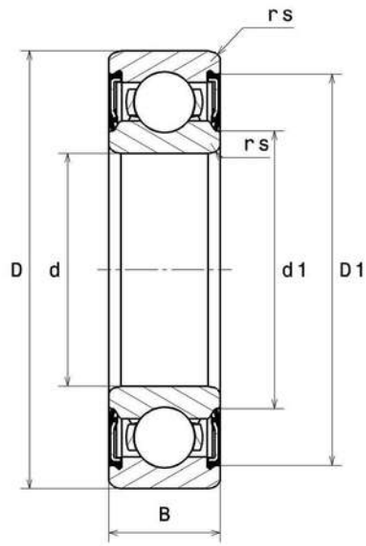
6204FT150

Single row deep groove ball bearings

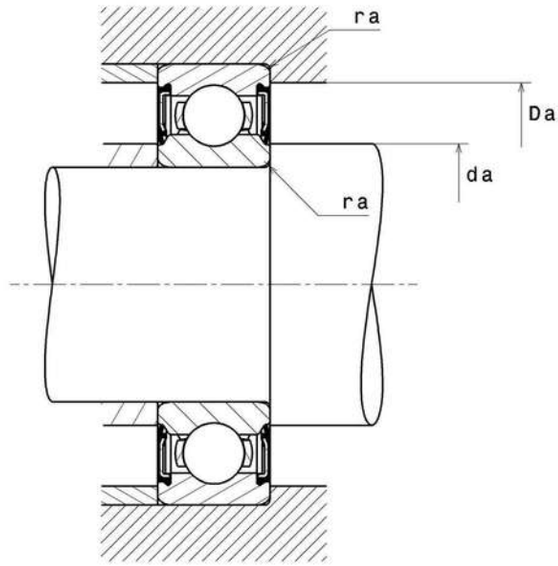
TOPLINE deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides, applications up to 150°C.

TOPLINE

VISUAL (S)



6204FT150
Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	20 mm
D - External diameter	47 mm
B - Bearing/Inner ring width	14 mm
d1 - External diameter inner ring	25,9 mm
D1 - Inner diameter outer ring	41,4 mm
rs - Min fillet radius	1 mm
Radial clearance class	C3
Mass	0,107 kg

PRODUCT PERFORMANCE	
C - Dynamic load	13,5 kN
C0 - Static load	6,6 kN
Cu - Fatigue limit load	0,3 kN

6204FT150
Single row deep groove ball bearings

PRODUCT PERFORMANCE	
f0 - Coefficient	13.1
Nlim - Mechanical Limit Speed	10000 tr/min
Tmin - Min operating temperature	-30 °C
Tmax - Max operating temperature	150 °C

BEARING FREQUENCIES	
BPFO - Characteristic outer ring frequency (60 rpm)	3.052 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	4.948 Hz
FTF - Characteristic cage frequency (60 rpm)	0.382 Hz
BSF - Characteristic rolling element frequency (60 rpm)	3.983 Hz

ABUTMENT	
da min - Min shoulder diameter IR	25 mm
da max - Max shoulder diameter IR	25,9 mm
Da max - Max shoulder diameter OR	42 mm
ra max - Max shaft & housing fillet radius	1 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