



Brand of **NTN corporation**

Technical data

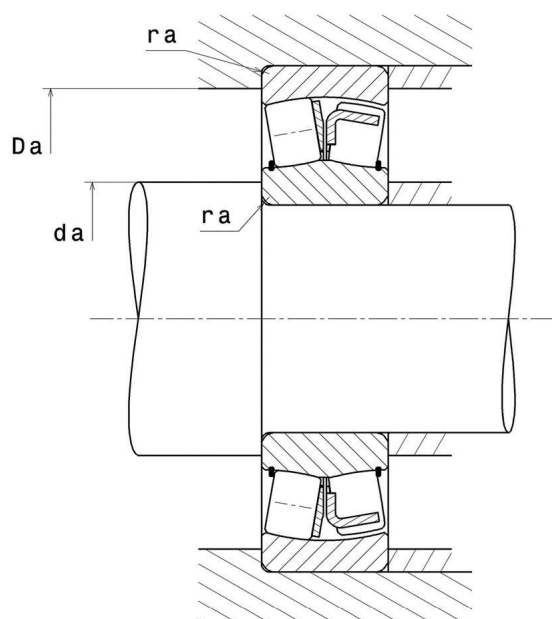
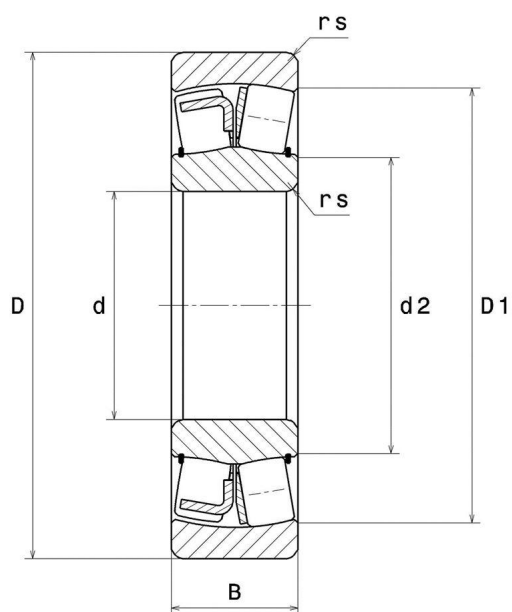
21311V

Spherical roller bearings



Spherical roller bearing, pressed steel cage

VISUAL (S)



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	55 mm
D - External diameter	120 mm
B - Bearing/Inner ring width	29 mm
d2 - External diameter inner ring	73,6 mm
D1 - Inner diameter outer ring	102 mm
rs - Min fillet radius	2 mm
Number of lubrication holes	0
b - Groove width	0 mm
k - Hole diameter	0 mm
Radial clearance class	CN
Mass	1,537 kg

PRODUCT PERFORMANCE	
C - Dynamic load	172 kN
C0 - Static load	164 kN
Cu - Fatigue limit load	20 kN
e - Coefficient	0.24
Y0 - Static axial load coefficient	2.76
Y1 - Lower axial load coefficient	2.83
Y2 - Upper axial load coefficient	4.21
N ref - Reference thermal speed	5000 tr/min
N lim - Mechanical Limit Speed	6900 tr/min
Tmin - Min operating temperature	-40 °C



PRODUCT PERFORMANCE

Tmax - Max operating temperature	200 °C
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BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	6.26 Hz
BPFI - Over rolling frequency on inner (60 rpm)	8.74 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.81 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.905 Hz
FTF - Rotational frequency - cage (60 rpm)	0.417 Hz

ABUTMENT

da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	66 mm
Da max - Max shoulder diameter OR	109 mm
ra max - Max shaft & housing fillet radius	2 mm

ESHOPDONOTDISPLAY

Reference	21311V
Image	SRB213V_1.jpg, SRB213V_2.jpg, SRB213V_3.jpg
KIZEI	Non/No
TOPLINE	Non/No
ULTAGE	Non/No
Tracepart	Oui/Yes
Bore	Cylindrique
- Contact angle	9.05 °
Number of deflectors	0
Number of seals	0



INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

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

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .



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