



Brand of NTN corporation

Technical data

24130EAW33C3

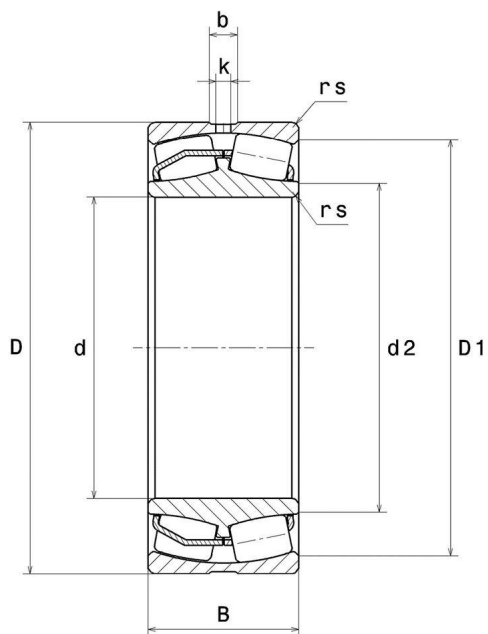
Spherical roller bearings



Spherical roller bearing, with central rib on inner ring, pressed steel cage, groove and lubrication holes on outer ring

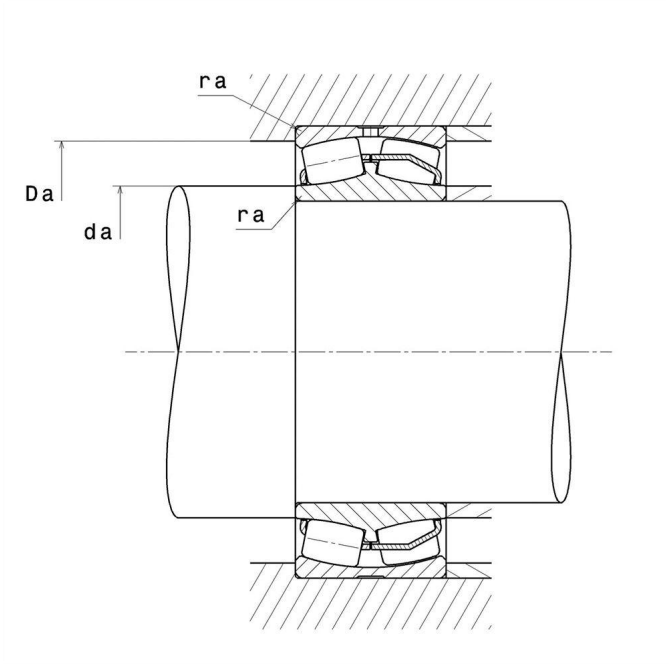
ULTAGE

VISUAL (S)



NTN Europe

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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	150 mm
D - External diameter	250 mm
B - Bearing/Inner ring width	100 mm
d2 - External diameter inner ring	167,067 mm
D1 - Inner diameter outer ring	216,4 mm
rs - Min fillet radius	2,1 mm
Number of lubrication holes	3 ou 4
b - Groove width	13,15 mm
k - Hole diameter	6 mm
Radial clearance class	C3
Mass	18,94 kg

PRODUCT PERFORMANCE



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C - Dynamic load	1140000000 mN
C0 - Static load	1510000000 mN
Cu - Fatigue limit load	1490000000 mN
e - Coefficient	0.36
Y0 - Static axial load coefficient	1.81
Y1 - Lower axial load coefficient	1.85
Y2 - Upper axial load coefficient	2.76
N ref - Reference thermal speed	9000 °/s
N lim - Mechanical Limit Speed	12600 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	473,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	8.704 Hz
BPFI - Over rolling frequency on inner (60 rpm)	11.296 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	7.373 Hz
BRF - Rotational frequency - rolling element (60 rpm)	3.687 Hz
FTF - Rotational frequency - cage (60 rpm)	0.435 Hz

ABUTMENT

da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	162 mm
Da max - Max shoulder diameter OR	238 mm
ra max - Max shaft & housing fillet radius	2 mm



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 .

