



Brand of NTN corporation

Technical data

24130EAW33

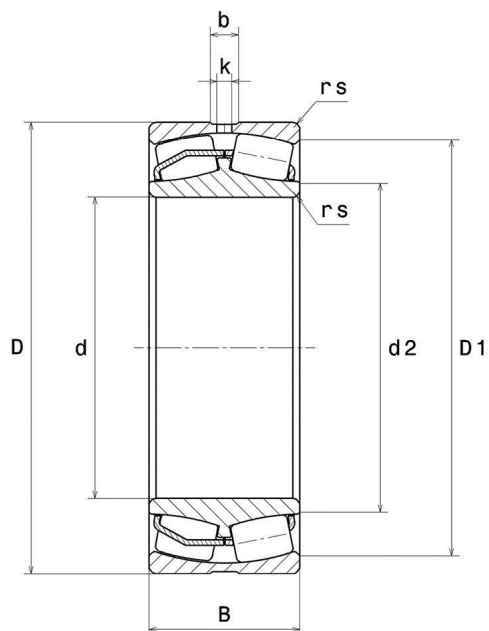
Spherical roller bearings



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

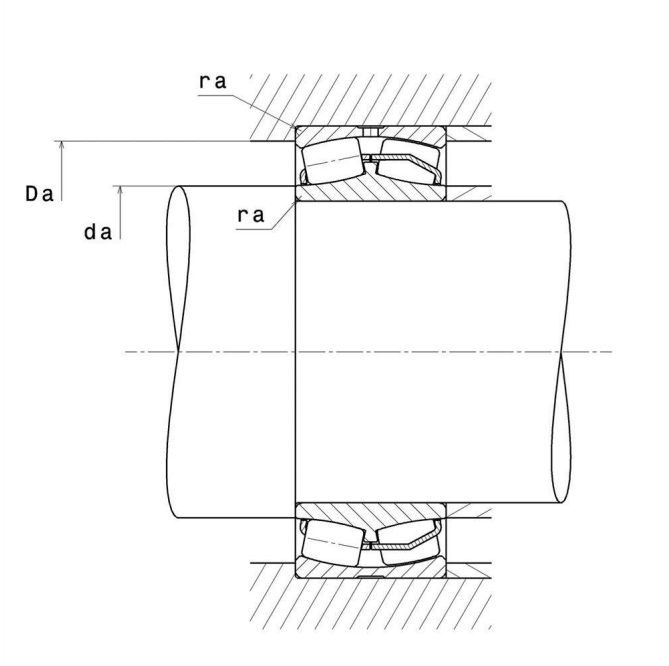
ULTAGE

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	165,8 mm
D1 - Inner diameter outer ring	218,1 mm
rs - Min fillet radius	2,1 mm
Number of lubrication holes	3 ou 4
b - Groove width	10,4 mm
k - Hole diameter	5 mm
Radial clearance class	CN
Mass	19,9 kg

PRODUCT PERFORMANCE



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C - Dynamic load	1120000000 mN
C0 - Static load	1400000000 mN
Cu - Fatigue limit load	138000000 mN
e - Coefficient	0.38
Y0 - Static axial load coefficient	1.74
Y1 - Lower axial load coefficient	1.78
Y2 - Upper axial load coefficient	2.66
N ref - Reference thermal speed	9600 °/s
N lim - Mechanical Limit Speed	12000 °/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)	8.17 Hz
BPFI - Over rolling frequency on inner (60 rpm)	10.83 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	6.789 Hz
BRF - Rotational frequency - rolling element (60 rpm)	3.395 Hz
FTF - Rotational frequency - cage (60 rpm)	0.43 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 .

