



Brand of NTN corporation

Technical data

24124EAW33

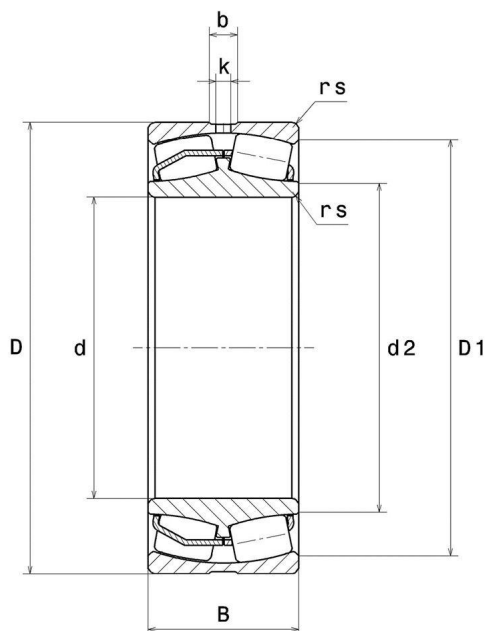
Spherical roller bearings



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

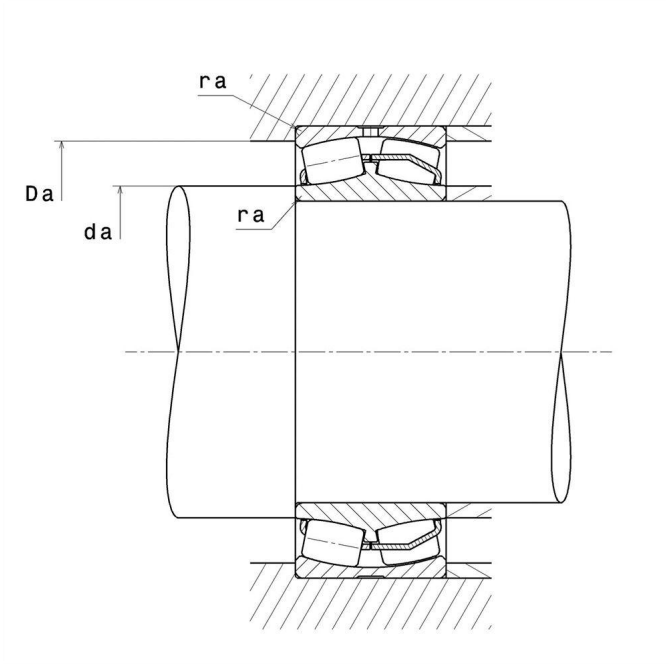
ULTAGE

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	120 mm
D - External diameter	200 mm
B - Bearing/Inner ring width	80 mm
d2 - External diameter inner ring	133,2 mm
D1 - Inner diameter outer ring	171,8 mm
rs - Min fillet radius	2 mm
Number of lubrication holes	3
b - Groove width	10,05 mm
k - Hole diameter	4,5 mm
Radial clearance class	CN
Mass	10 kg

PRODUCT PERFORMANCE



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C - Dynamic load	749000000 mN
C0 - Static load	948000000 mN
Cu - Fatigue limit load	100000000 mN
e - Coefficient	0.39
Y0 - Static axial load coefficient	1.7
Y1 - Lower axial load coefficient	1.74
Y2 - Upper axial load coefficient	2.59
N ref - Reference thermal speed	12000 °/s
N lim - Mechanical Limit Speed	15600 °/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)	8.684 Hz
BPFI - Over rolling frequency on inner (60 rpm)	11.316 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	7.231 Hz
FTF - Rotational frequency - cage (60 rpm)	0.434 Hz

ABUTMENT

da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	131 mm
Da max - Max shoulder diameter OR	189 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 .

