



Brand of NTN corporation

Technical data

22205EAKW33

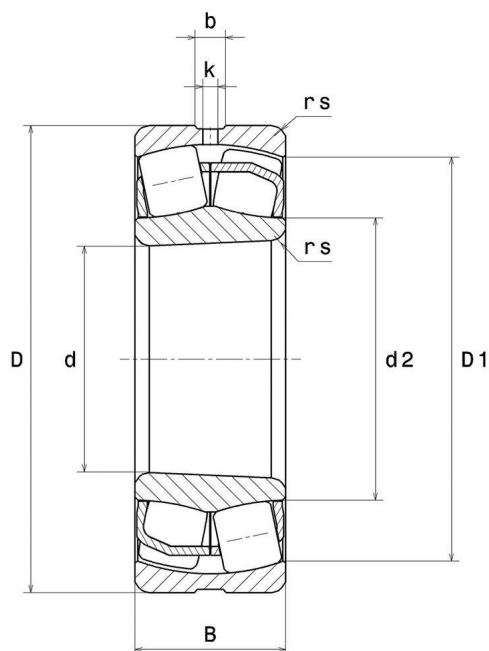
Spherical roller bearings



Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:12

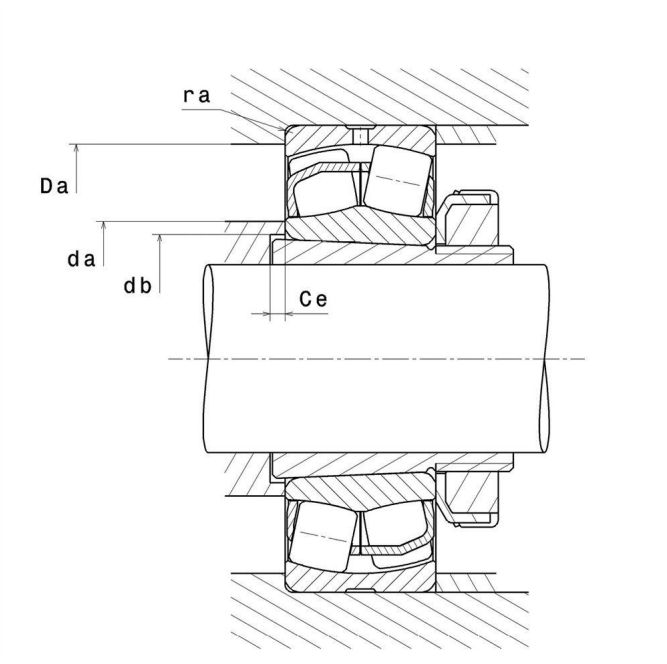
ULTAGE

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	25 mm
D - External diameter	52 mm
B - Bearing/Inner ring width	18 mm
d2 - External diameter inner ring	30,5 mm
D1 - Inner diameter outer ring	45,5 mm
rs - Min fillet radius	1 mm
Number of lubrication holes	3
b - Groove width	3 mm
k - Hole diameter	1,5 mm
Associated sleeve reference	H305
Radial clearance class	CN
Mass	0,15 kg



PRODUCT PERFORMANCE

C - Dynamic load	57,3 kN
C0 - Static load	46,1 kN
Cu - Fatigue limit load	5,6 kN
e - Coefficient	0.34
Y0 - Static axial load coefficient	1.96
Y1 - Lower axial load coefficient	2
Y2 - Upper axial load coefficient	2.98
N ref - Reference thermal speed	13000 tr/min
N lim - Mechanical Limit Speed	17000 tr/min
Tmin - Min operating temperature	-40 °C
Tmax - Max operating temperature	200 °C

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	5.645 Hz
BPFI - Over rolling frequency on inner (60 rpm)	8.355 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.85 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.425 Hz
FTF - Rotational frequency - cage (60 rpm)	0.403 Hz

ABUTMENT

da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	30,6 mm
db - Min diameter for Sleeve	28 mm
Ce - Min length fro Sleeve	5 mm
Da max - Max shoulder diameter OR	46,4 mm



ABUTMENT

ra max - Max shaft & housing fillet radius	1 mm
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ESHOPDONOTDISPLAY

Reference	22205EAKW33
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Image	SRBEAKW33_1.jpg, SRBEAKW33_2.jpg, SRBEAKW33_3.jpg
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KIZEI	Non/No
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TOPLINE	Non/No
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ULTAGE	Oui/Yes
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Tracepart	Oui/Yes
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Bore	Conique 1:12
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- Contact angle	12.67 °
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Number of deflectors	0
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Number of seals	0
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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 .

