



Technical data

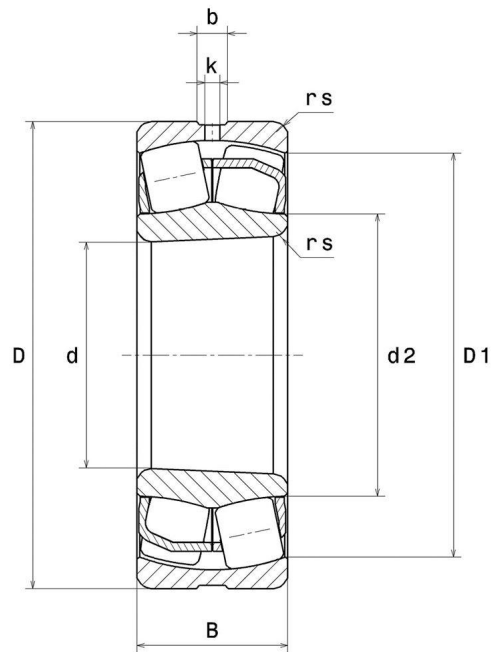
22209EAKW33

Spherical roller bearings

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

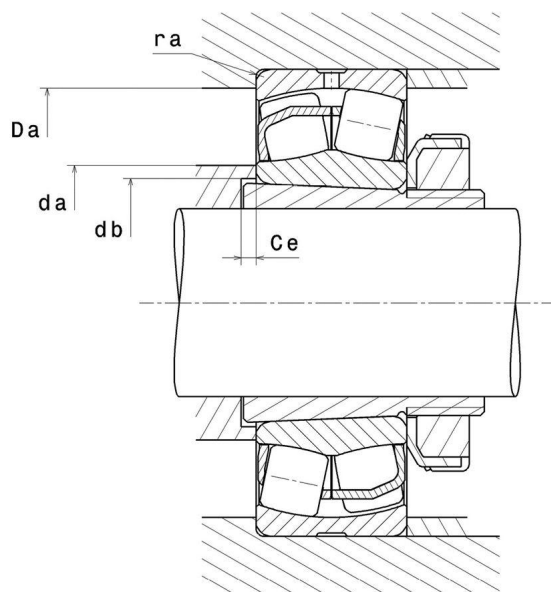
ULTAGE

VISUAL (S)



22209EAKW33

Spherical roller bearings



PRODUCT DIMENSIONS

Internal diameter d	45 mm
External diameter D	85 mm
Bearing/Inner ring width(B)	23 mm
External diameter inner ring d2	54,9 mm
Inner diameter outer ring D1	75,6 mm
Min fillet radius rs	1,1 mm
Number of lubrication holes	3 or 4
Groove width (b)	5,83 mm
Hole diameter (k)	2,5 mm
Associated sleeve reference	H309
Coef e	0.26
Lower axial load coef (Y1)	2.64
Upper axial load coef (Y2)	3.94
Static axial load coef (Y0)	2.58
Radial clearance class	CN
Mass	0,545 kg
Brand	SNR

PRODUCT PERFORMANCE

NTN-SNR ROULEMENTS

www.ntn-snr.com

1 rue des Usines - 74010 Annecy Cedex - France - Tel. +33 (0)4 50 65 30 00

S.A. au capital de 123 599 542 € - 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 PERFORMANCE

Dynamic load, C	121 kN
Static load, C0	113 kN
Fatigue limit load, Cu	13,8 kN
Reference thermal speed (Nref)	7400 tr/min
Mechanical Limit Speed Nlim	9800 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.421 Hz
Characteristic rolling element frequency, BSF	6.068 Hz
Characteristic outer ring frequency, BPF0	7.154 Hz
Characteristic inner ring frequency, BPGI	9.846 Hz

ABUTMENT

Max shoulder diameter IR da max	0 mm
Min shoulder diameter IR da min	52 mm
Min diameter for Sleeve db	50 mm
Min length fro Sleeve Ce	7 mm
Max shoulder diameter OR Da max	78 mm
Max shaft & housing fillet radius ra max	1 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

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

Fa / Fr ≤ e		Fa / Fr > 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 .