



Technical data

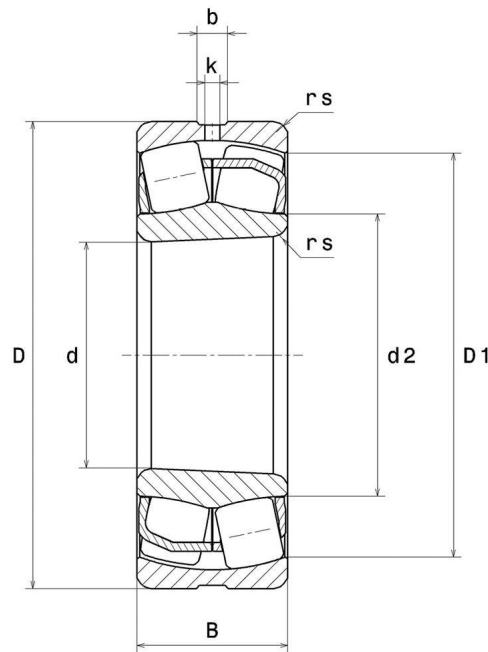
23218EAKW33

Spherical roller bearings

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

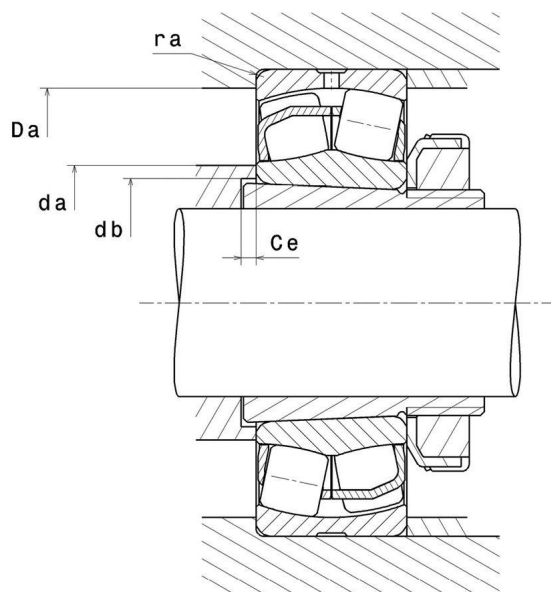
ULTAGE

VISUAL (S)



23218EAKW33

Spherical roller bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	90 mm
D - External diameter	160 mm
B - Bearing/Inner ring width	52,4 mm
d2 - External diameter inner ring	104,3 mm
D1 - Inner diameter outer ring	141 mm
rs - Min fillet radius	2 mm
Number of lubrication holes	3
b - Groove width	8,86 mm
k - Hole diameter	4 mm
Associated sleeve reference	H2318
Radial clearance class	CN
Mass	4,21 kg

PRODUCT PERFORMANCE

C - Dynamic load	467 kN
C0 - Static load	513 kN
Cu - Fatigue limit load	58,3 kN
e - Coefficient	0.3
Y0 - Static axial load coefficient	2.2
Y1 - Lower axial load coefficient	2.25
Y2 - Upper axial load coefficient	3.34
Nref - Reference thermal speed	2900 tr/min
Nlim - Mechanical Limit Speed	3700 tr/min
Tmin - Min operating temperature	-40 °C
Tmax - Max operating temperature	200 °C

BEARING FREQUENCIES

BPFO - Characteristic outer ring frequency (60 rpm)	7.621 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	10.379 Hz
FTF - Characteristic cage frequency (60 rpm)	0.423 Hz
BSF - Characteristic rolling element frequency (60 rpm)	6.249 Hz

ABUTMENT

da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	101 mm
db - Min diameter for Sleeve	100 mm
Ce - Min length fro Sleeve	18 mm
Da max - Max shoulder diameter OR	149 mm
ra max - Max shaft & housing fillet radius	2 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 .