



Technical datasheet

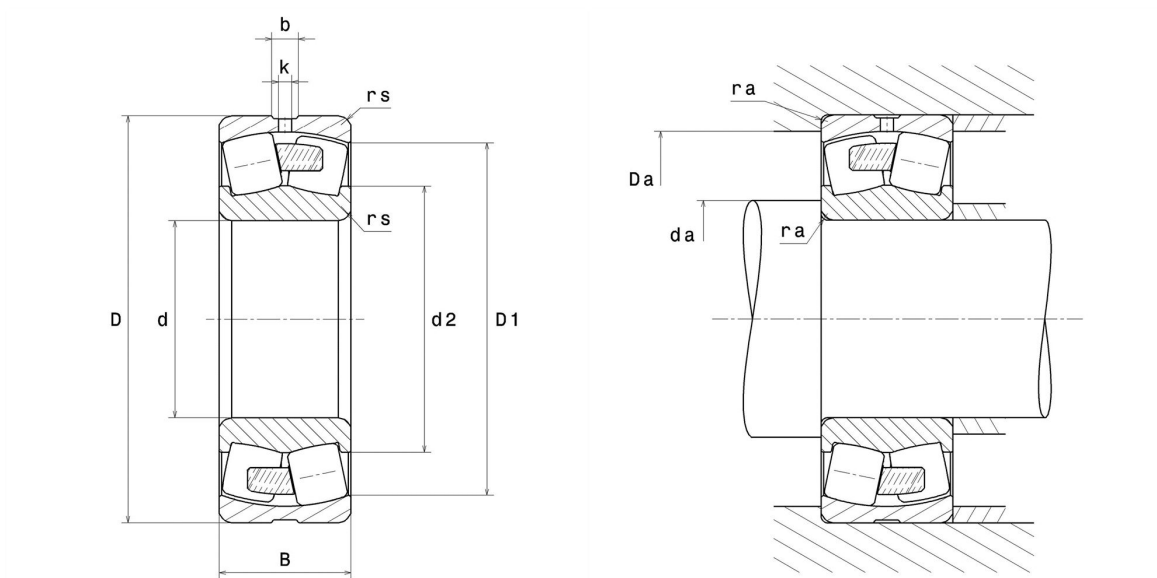
22308.EMW33

Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring

ULTAGE

Visual(s)



Product definition

d	40 mm
D	90 mm
B	33 mm
d2	52.5 mm
D1	77 mm
rs min	1.5 mm
Number of lubrication holes	3
b	5.9 mm
k	3 mm
e	0.36
Y1	1.87
Y2	2.79
Y0	1.83
Radial clearance class	CN
Mass	1.02 kg
Brand	SNR

Product performance

Dynamic load, C	169 kN
Static load, C₀	152 kN
Fatigue limit load, C_u	13.7 kN
N_{ref}	5,800 Tr/min
N_{lim}	7,400 Tr/min
Min operating temperature, T_{min}	-40 °C
Max operating temperature, T_{max}	200 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	4.94 Hz
Characteristic outer ring frequency, BPF₀	5.67 Hz
Characteristic inner ring frequency, BPF_i	8.33 Hz

Abutment dimensions

da min	49 mm
Da max	81 mm
ra max	1.5 mm

Calculation 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 .