Technical data

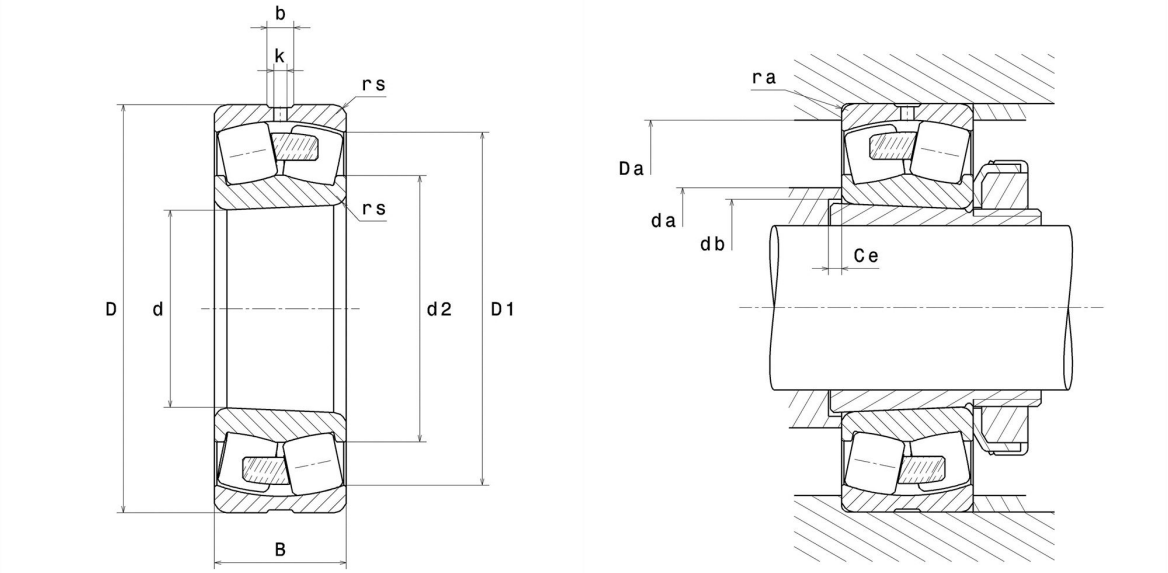
22209EMKW33C4

Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:12

ULTAGE

Visual(s)



Product definition

d	45 mm
D	85 mm
B	23 mm
D1	75.6 mm
rs min	1.1 mm
Number of lubrication holes	3
b	5.8 mm
k	2.5 mm
Associated sleeve reference	H309
e	0.26
Y1	2.64
Y2	3.94
Y0	2.58
Radial clearance class	C4
Mass	0.45 kg
Brand	SNR

Product performance

Dynamic load, C	116 kN
Static load, C0	106 kN
Fatigue limit load, Cu	11.8 kN
Nref	7,500 Tr/min
Nlim	9,800 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling element frequency, BSF	6.07 Hz
Characteristic outer ring frequency, BPF0	6.73 Hz
Characteristic inner ring frequency, BPFI	9.27 Hz

Abutment dimensions

da min	52 mm
da max	1 mm
db min	50 mm
Ce min	7 mm
Da max	78 mm
ra max	1 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

$Fa/Fr \leq e$		$Fa/Fr > e$	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$Po = Xo.Fr + Yo.Fa$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .