Technical data

22209EMW33C4

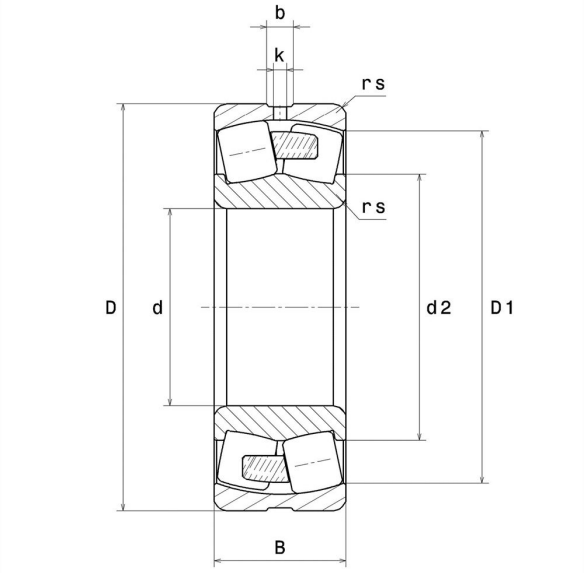
Double row spherical roller bearings

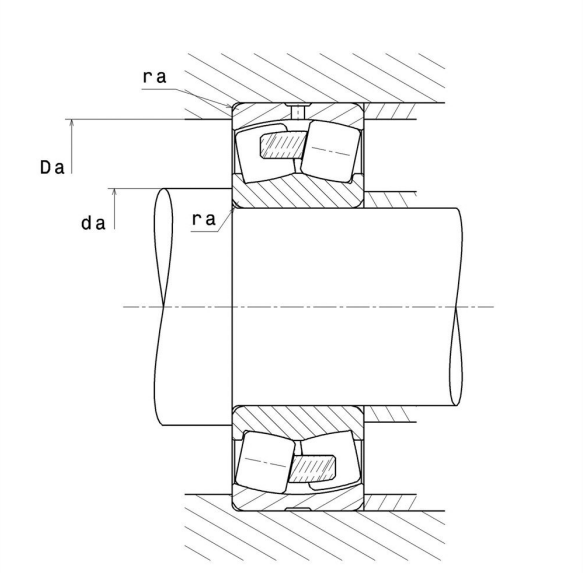


Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring

ULTAGE

Visual(s)





Product definition

d	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	P0
e	0.26
Y1	2.64
Y2	3.94
Y0	2.58
Radial clearance class	C4
Mass	0.5 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
Da max	78 mm
ra max	1 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

Fa / Fr ≤ e		Fa / Fr > e	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$P_0 = X_0.Fr + Y_0.Fa$

X_0	Y_0
1	Y0

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