Technical data

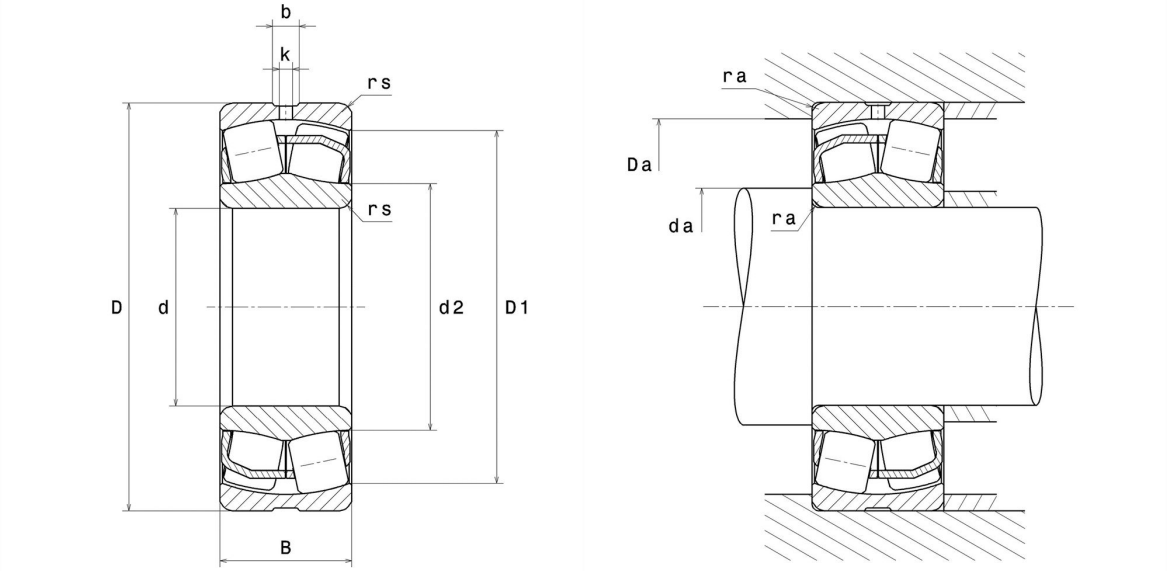
21307EAW33

Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring

ULTAGE

Visual(s)



Product definition

d	35 mm
D	80 mm
B	21 mm
d2	50.6 mm
D1	69 mm
rs min	1.5 mm
Number of lubrication holes	3
b	6.2 mm
k	2.5 mm
Associated sleeve reference	P0
e	0.24
Y1	2.79
Y2	4.15
Y0	2.73
Radial clearance class	CN
Mass	0.53 kg
Brand	SNR

Product performance

Dynamic load, C	88.5 kN
Static load, C0	78.5 kN
Fatigue limit load, Cu	9.6 kN
Nref	6,900 Tr/min
Nlim	10,000 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	6.14 Hz
Characteristic outer ring frequency, BPF0	6.75 Hz
Characteristic inner ring frequency, BPFI	9.25 Hz

Abutment dimensions

da min	44 mm
da max	1.5 mm
Da max	71 mm
ra max	1.5 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

$P_0 = X_0.Fr + Y_0.Fa$

X_0	Y_0
1	Y0

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