Technical data

24020EA.W33C3

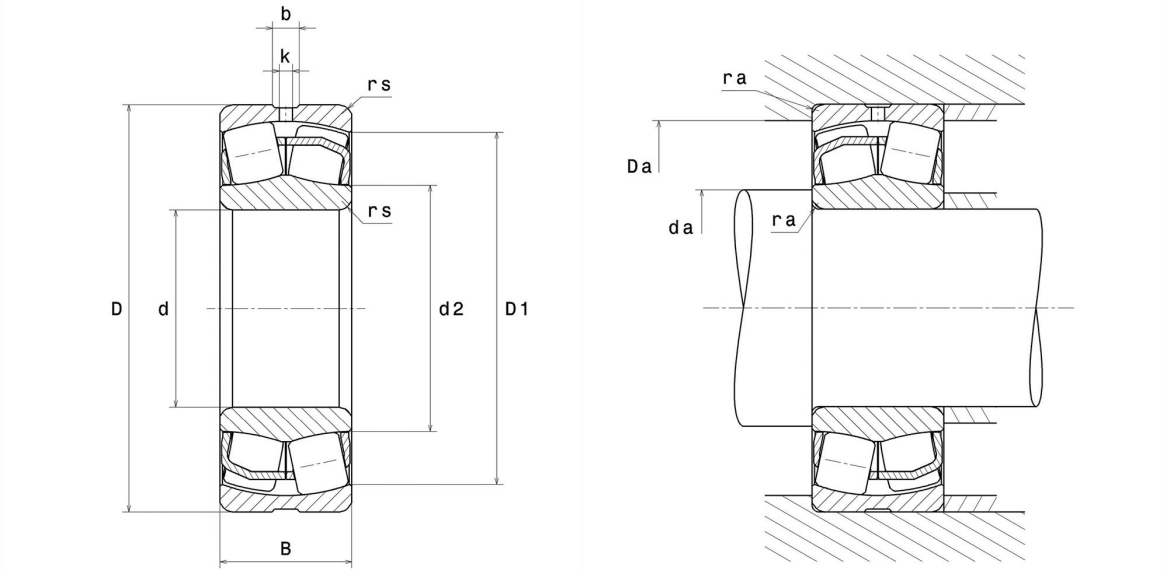
Double row spherical roller bearings



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

ULTAGE

Visual(s)



Product definition

d	100 mm
D	150 mm
B	50 mm
d2	111.1 mm
D1	135.3 mm
rs min	1.5 mm
Number of lubrication holes	3
b	6.1 mm
k	3.5 mm
Associated sleeve reference	P0
e	0.29
Y1	2.35
Y2	3.5
Y0	2.3
Radial clearance class	C3
Mass	2.96 kg
Brand	SNR

Product performance

Dynamic load, C	361 kN
Static load, C0	479 kN
Fatigue limit load, Cu	35.6 kN
Nref	3,000 Tr/min
Nlim	4,100 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	9.31 Hz
Characteristic outer ring frequency, BPF0	10.75 Hz
Characteristic inner ring frequency, BPFI	13.25 Hz

Abutment dimensions

da min	107 mm
da max	1.5 mm
Da max	143 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

$Po = Xo.Fr + Yo.Fa$

X_0	Y_0
1	Y0

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