

PDF technical sheet 23168EMW33



Double row spherical roller bearings

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

Product definition	
d	13.3858 "
D	22.8346 "
B	7.4803 "
D1	19.9449 "
rs min	0.1969 "
Number of lubrication holes	8
b	0.8780 "
k	0.4724 "
e	0.31
Y1	2.18
Y2	3.24
Y0	2.13
Radial clearance class	CN
Mass	791.90 oz
Brand	SNR



Product performance	
Dynamic load, C	5,100 kN
Static load, C0	7,770 kN
Fatigue limit load, Cu	394 kN
Nref	620 RPM
Nlim	1,100 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	7.72 Hz
Characteristic outer ring frequency, BPF0	10.07 Hz
Characteristic inner ring frequency, BPF1	12.94 Hz



Abutment dimensions

da min	14.1732 "
Da max	22.0472 "
ra max	0.1575 "

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 .