

PDF technical sheet

23144EMW33



Double row spherical roller bearings

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

Product definition	
d	8.6614 "
D	14.5669 "
B	4.7244 "
D1	12.9094 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.7520 "
k	0.3543 "
e	0.3
Y1	2.28
Y2	3.39
Y0	2.23
Radial clearance class	CN
Mass	184.17 oz
Brand	SNR



Product performance	
Dynamic load, C	2,190 kN
Static load, C0	2,940 kN
Fatigue limit load, Cu	185 kN
Nref	1,200 RPM
Nlim	1,700 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	7.16 Hz
Characteristic outer ring frequency, BPF0	9.09 Hz
Characteristic inner ring frequency, BPF1	11.91 Hz



Abutment dimensions

da min	9.3307 "
Da max	13.8976 "
ra max	0.1181 "

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 .