

PDF technical sheet 23944EMW33



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	11.8110 "
B	2.3622 "
D1	10.9252 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.5394 "
k	0.2362 "
e	0.18
Y1	3.76
Y2	5.59
Y0	3.67
Radial clearance class	CN
Mass	43.74 oz
Brand	SNR



Product performance	
Dynamic load, C	741 kN
Static load, C0	1,210 kN
Fatigue limit load, Cu	116 kN
Nref	1,800 RPM
Nlim	2,200 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	13.72 Hz
Characteristic outer ring frequency, BPF0	17.63 Hz
Characteristic inner ring frequency, BPF1	20.37 Hz



Abutment dimensions

da min	9.0630 "
Da max	11.4094 "
ra max	0.0787 "

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 .