

PDF technical sheet 23036EMW33



Double row spherical roller bearings

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

Product definition	
d	7.0866 "
D	11.0236 "
B	2.9134 "
D1	10.0394 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.5197 "
k	0.2362 "
e	0.23
Y1	2.95
Y2	4.4
Y0	2.89
Radial clearance class	CN
Mass	59.61 oz
Brand	SNR



Product performance	
Dynamic load, C	1,080 kN
Static load, C0	1,450 kN
Fatigue limit load, Cu	113 kN
Nref	2,000 RPM
Nlim	2,500 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	8.42 Hz
Characteristic outer ring frequency, BPF0	10.61 Hz
Characteristic inner ring frequency, BPF1	13.39 Hz



Abutment dimensions

da min	7.4882 "
Da max	10.6220 "
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 .