

PDF technical sheet 23056EMW33C4



Double row spherical roller bearings

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

Product definition	
d	11.0236 "
D	16.5354 "
B	4.1732 "
D1	15.1654 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.7205 "
k	0.3150 "
e	0.22
Y1	3.07
Y2	4.58
Y0	3
Radial clearance class	C4
Mass	180.60 oz
Brand	SNR



Product performance	
Dynamic load, C	2,170 kN
Static load, C0	3,150 kN
Fatigue limit load, Cu	218 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	0.45 Hz
Characteristic rolling element frequency, BSF	8.86 Hz
Characteristic outer ring frequency, BPF0	11.12 Hz
Characteristic inner ring frequency, BPF1	13.88 Hz



Abutment dimensions

da min	11.5984 "
Da max	15.9606 "
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 .