

PDF technical sheet 22236EMKW33C3



Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:12

Product definition	
d	7.0866 "
D	12.5984 "
B	3.3858 "
D1	11.2913 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.7087 "
k	0.3150 "
Associated sleeve reference	H3136
e	0.25
Y1	2.74
Y2	4.08
Y0	2.68
Radial clearance class	C3
Mass	101.24 oz
Brand	SNR



Product performance	
Dynamic load, C	1,450 kN
Static load, C0	1,660 kN
Fatigue limit load, Cu	144 kN
Nref	1,800 RPM
Nlim	2,600 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling element frequency, BSF	6.11 Hz
Characteristic outer ring frequency, BPF0	7.58 Hz
Characteristic inner ring frequency, BPF1	10.42 Hz



Abutment dimensions

da min	7.7559 "
Da max	11.9291 "
ra max	0.1181 "

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$	
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 .