

PDF technical sheet 23068EMKW33C3



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	13.3858 "
D	20.4724 "
B	5.2362 "
d2	15.8189 "
D1	18.6969 "
rs min	0.1969 "
Number of lubrication holes	8
b	0.7874 "
k	0.4724 "
Associated sleeve reference	H3068H
e	0.23
Y1	2.9
Y2	4.31
Y0	2.83
Radial clearance class	C3
Mass	360.15 oz
Brand	SNR



Product performance	
Dynamic load, C	3,220 kN
Static load, C0	4,970 kN
Fatigue limit load, Cu	331 kN
Nref	900 RPM
Nlim	1,400 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	9.21 Hz
Characteristic outer ring frequency, BPF0	12.07 Hz
Characteristic inner ring frequency, BPF1	14.93 Hz



Abutment dimensions

da min	14.0945 "
db min	13.9764 "
Ce min	0.5512 "
Da max	19.7638 "
ra max	0.1575 "

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 .