

PDF technical sheet 23030EMKW33C3



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	5.9055 "
D	8.8583 "
B	2.2047 "
D1	8.1339 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.3937 "
k	0.1772 "
Associated sleeve reference	H3030
e	0.21
Y1	3.2
Y2	4.77
Y0	3.13
Radial clearance class	C3
Mass	26.46 oz
Brand	SNR



Product performance	
Dynamic load, C	660 kN
Static load, C0	893 kN
Fatigue limit load, Cu	76.60 kN
Nref	2,600 RPM
Nlim	3,100 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	9.30 Hz
Characteristic outer ring frequency, BPF0	11.63 Hz
Characteristic inner ring frequency, BPF1	14.37 Hz



Abutment dimensions

da min	6.3071 "
Da max	8.4567 "
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 .