

PDF technical sheet 23044EMKW33C3



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	8.6614 "
D	13.3858 "
B	3.5433 "
D1	12.2047 "
rs min	0.1181 "
Number of lubrication holes	3
b	0.6063 "
k	0.2756 "
Associated sleeve reference	H3044H
e	0.23
Y1	2.95
Y2	4.4
Y0	2.89
Radial clearance class	C3
Mass	110.94 oz
Brand	SNR



Product performance	
Dynamic load, C	1,530 kN
Static load, C0	2,110 kN
Fatigue limit load, Cu	157 kN
Nref	1,600 RPM
Nlim	2,100 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	8.45 Hz
Characteristic outer ring frequency, BPF0	10.62 Hz
Characteristic inner ring frequency, BPF1	13.39 Hz



Abutment dimensions

da min	9.1496 "
Da max	12.8976 "
ra max	0.0984 "

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 .