

PDF technical sheet 23052EMKW33C4



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	10.2362 "
D	15.7480 "
B	4.0945 "
D1	14.3740 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.7205 "
k	0.3150 "
Associated sleeve reference	H3052H
e	0.23
Y1	2.95
Y2	4.4
Y0	2.89
Radial clearance class	C4
Mass	161.91 oz
Brand	SNR



Product performance	
Dynamic load, C	2,060 kN
Static load, C0	2,910 kN
Fatigue limit load, Cu	207 kN
Nref	1,300 RPM
Nlim	1,800 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	8.44 Hz
Characteristic outer ring frequency, BPF0	10.61 Hz
Characteristic inner ring frequency, BPF1	13.39 Hz



Abutment dimensions

da min	10.8110 "
Da max	15.1732 "
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 .