

PDF technical sheet 24020EAW33



Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring

Product definition	
d	3.9370 "
D	5.9055 "
B	1.9685 "
d2	4.3740 "
D1	5.3268 "
rs min	0.0591 "
Number of lubrication holes	3
b	0.2402 "
k	0.0984 "
e	0.29
Y1	2.35
Y2	3.5
Y0	2.3
Radial clearance class	CN
Mass	10.44 oz
Brand	SNR



Product performance	
Dynamic load, C	361 kN
Static load, C0	479 kN
Fatigue limit load, Cu	35.60 kN
Nref	3,000 RPM
Nlim	4,100 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	9.31 Hz
Characteristic outer ring frequency, BPF0	10.75 Hz
Characteristic inner ring frequency, BPF1	13.25 Hz



Abutment dimensions

da min	4.2126 "
Da max	5.6299 "
ra max	0.0591 "

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 .