

PDF technical sheet 23040EAKW33



Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:12

Product definition	
d	7.8740 "
D	12.2047 "
B	3.2283 "
d2	8.9488 "
D1	11.1142 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.5622 "
k	0.2756 "
Associated sleeve reference	H3040
e	0.23
Y1	2.95
Y2	4.4
Y0	2.89
Radial clearance class	CN
Mass	77.25 oz
Brand	SNR



Product performance	
Dynamic load, C	1,310 kN
Static load, C0	1,790 kN
Fatigue limit load, Cu	136 kN
Nref	1,800 RPM
Nlim	2,300 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	8.37 Hz
Characteristic outer ring frequency, BPF0	10.60 Hz
Characteristic inner ring frequency, BPF1	13.40 Hz



Abutment dimensions

da min	8.2756 "
db min	8.2677 "
Ce min	0.3543 "
Da max	11.8031 "
ra max	0.0787 "

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 .