PDF technical sheet
24160EMK30W33C4

Double row spherical roller bearings
Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:30

Product definition	
d	11.8110 "
D	19.6850 "
B	7.8740 "
d2	13.8150 "
D1	16.9488 "
rs min	0.1969 "
Number of lubrication holes	8
b	1.3701 "
k	0.7874 "
e	0.38
Y1	1.76
Y2	2.62
Y0	1.72
Radial clearance class	C4
Mass	546.75 oz
Brand	SNR

Product performance	
Dynamic load, C	4,600 kN
Static load, C0	6,810 kN
Fatigue limit load, Cu	314 kN
Nref	510 RPM
Nlim	1,000 RPM
Min operating temperature, Tmin	−40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	7.08 Hz
Characteristic outer ring frequency, BPF0	9.09 Hz
Characteristic inner ring frequency, BPFI	11.91 Hz

Abutment dimensions	
da min	12.5984 "
Da max	18.8976 "
ra max	0.1575 "

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

Fa / Fr ≤ e		Fa / Fr > e	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$P_0 = X_0.Fr + Y_0.Fa$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .