PDF technical sheet
24140EMK30W33C3

Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, one-piece machined cage centred on inner ring, groove and lubrication holes on outer ring, tapered bore 01:30

Product definition	
d	7.8740 "
D	13.3858 "
B	5.5118 "
D1	11.4567 "
rs min	0.1181 "
Number of lubrication holes	3
b	0.6693 "
k	0.3150 "
e	0.39
Y1	1.74
Y2	2.59
Y0	1.7
Radial clearance class	C3
Mass	185.54 oz
Brand	SNR

Product performance	
Dynamic load, C	2,130 kN
Static load, C0	2,930 kN
Fatigue limit load, Cu	153 kN
Nref	1,000 RPM
Nlim	1,500 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	7.05 Hz
Characteristic outer ring frequency, BPF0	8.65 Hz
Characteristic inner ring frequency, BPFI	11.35 Hz

Abutment dimensions	
da min	8.4252 "
Da max	12.8346 "
ra max	0.0984 "

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 .