

PDF technical sheet

24134EAK30W33C3

Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:30

Product definition	
d	6.6929 "
D	11.0236 "
B	4.2913 "
d2	7.4606 "
D1	9.5906 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.5197 "
k	0.2362 "
e	0.37
Y1	1.83
Y2	2.72
Y0	1.79
Radial clearance class	C3
Mass	91.36 oz
Brand	SNR

Product performance	
Dynamic load, C	1,370 kN
Static load, C0	1,840 kN
Fatigue limit load, Cu	111 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	7.36 Hz
Characteristic outer ring frequency, BPF0	9.14 Hz
Characteristic inner ring frequency, BPF1	11.86 Hz

Abutment dimensions	
da min	7.1654 "
Da max	10.5512 "
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 .