

PDF technical sheet

24030EAK30W33C3

Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:30, non ISO width, contact seals on both sides

Product definition	
d	5.9055 "
D	8.8583 "
B	2.9528 "
d2	6.4134 "
D1	7.9843 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.3504 "
k	0.1575 "
e	0.3
Y1	2.25
Y2	3.34
Y0	2.2
Radial clearance class	C3
Mass	34.82 oz
Brand	SNR

Product performance	
Dynamic load, C	832 kN
Static load, C0	1,140 kN
Fatigue limit load, Cu	77.10 kN
Nref	1,900 RPM
Nlim	2,700 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	8.55 Hz
Characteristic outer ring frequency, BPF0	10.64 Hz
Characteristic inner ring frequency, BPF1	13.36 Hz

Abutment dimensions	
da min	6.3071 "
Da max	8.4567 "
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 .