

PDF technical sheet 24032EAK30W33

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	6.2992 "
D	9.4488 "
B	3.1496 "
d2	6.8425 "
D1	8.5118 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.3740 "
k	0.1772 "
e	0.29
Y1	2.32
Y2	3.45
Y0	2.26
Radial clearance class	CN
Mass	40.49 oz
Brand	SNR

Product performance	
Dynamic load, C	953 kN
Static load, C0	1,320 kN
Fatigue limit load, Cu	87.30 kN
Nref	1,800 RPM
Nlim	2,600 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	8.46 Hz
Characteristic outer ring frequency, BPF0	10.63 Hz
Characteristic inner ring frequency, BPF1	13.38 Hz

Abutment dimensions	
da min	6.7008 "
Da max	9.0472 "
ra max	0.0787 "

Calculation factors

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

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

Equivalent static radial load

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X ₀	Y ₀
1	Y0

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