

PDF technical sheet

24056EMK30W33

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	11.0236 "
D	16.5354 "
B	5.5118 "
D1	14.8583 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.6457 "
k	0.3150 "
e	0.3
Y1	2.25
Y2	3.34
Y0	2.2
Radial clearance class	CN
Mass	228.93 oz
Brand	SNR

Product performance	
Dynamic load, C	2,720 kN
Static load, C0	4,120 kN
Fatigue limit load, Cu	223 kN
Nref	900 RPM
Nlim	1,500 RPM
Min operating temperature, Tmin	104 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	8.52 Hz
Characteristic outer ring frequency, BPF0	10.64 Hz
Characteristic inner ring frequency, BPFI	13.36 Hz

Abutment dimensions	
da min	11.5984 "
Da max	15.9606 "
ra max	0.1181 "

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 .