

PDF technical sheet

24148VMK30W33C2

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	9.4488 "
D	15.7480 "
B	6.2992 "
D1	13.2559 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.4370 "
k	0.2362 "
e	0.38
Y1	1.79
Y2	2.67
Y0	1.75
Radial clearance class	C2
Mass	286.78 oz
Brand	SNR

Product performance	
Dynamic load, C	2,280 kN
Static load, C0	4,260 kN
Fatigue limit load, Cu	211 kN
Nref	750 RPM
Nlim	1,300 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	7.86 Hz
Characteristic outer ring frequency, BPF0	9.66 Hz
Characteristic inner ring frequency, BPFI	12.34 Hz

Abutment dimensions	
da min	10.1181 "
Da max	15.0787 "
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 .