

PDF technical sheet

24152VMK30W33

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	10.2362 "
D	17.3228 "
B	7.0866 "
D1	14.5039 "
rs min	0.1575 "
Number of lubrication holes	3
b	0.5472 "
k	0.2953 "
e	0.39
Y1	1.75
Y2	2.6
Y0	1.71
Radial clearance class	CN
Mass	398.60 oz
Brand	SNR

Product performance	
Dynamic load, C	2,750 kN
Static load, C0	5,240 kN
Fatigue limit load, Cu	248 kN
Nref	640 RPM
Nlim	1,200 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	10.9055 "
Da max	16.6535 "
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 .