

## PDF technical sheet 24160VMK30W33

### 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	11.8110 "
D	19.6850 "
B	7.8740 "
D1	16.5709 "
rs min	0.1969 "
Number of lubrication holes	3
b	0.5472 "
k	0.2953 "
e	0.37
Y1	1.8
Y2	2.69
Y0	1.76
Radial clearance class	CN
Mass	564.38 oz
Brand	SNR

Product performance	
Dynamic load, C	3,350 kN
Static load, C0	6,620 kN
Fatigue limit load, Cu	307 kN
Nref	530 RPM
Nlim	1,000 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	8.22 Hz
Characteristic outer ring frequency, BPF0	10.16 Hz
Characteristic inner ring frequency, BPF1	12.84 Hz

Abutment dimensions	
da min	12.5984 "
Da max	18.8976 "
ra max	0.1575 "

### 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 <sub>0</sub>	Y <sub>0</sub>
1	Y0

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