

PDF technical sheet

24156VMK30W33C3

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	11.0236 "
D	18.1102 "
B	7.0866 "
D1	15.3228 "
rs min	0.1969 "
Number of lubrication holes	3
b	0.5472 "
k	0.2953 "
e	0.37
Y1	1.85
Y2	2.75
Y0	1.8
Radial clearance class	C3
Mass	426.81 oz
Brand	SNR

Product performance	
Dynamic load, C	2,850 kN
Static load, C0	5,560 kN
Fatigue limit load, Cu	266 kN
Nref	590 RPM
Nlim	1,100 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	8.28 Hz
Characteristic outer ring frequency, BPF0	10.17 Hz
Characteristic inner ring frequency, BPF1	12.83 Hz

Abutment dimensions	
da min	11.8110 "
Da max	17.3228 "
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 ₀	Y ₀
1	Y0

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