

PDF technical sheet 23028EMKW33



Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:12

Product definition	
d	5.5118 "
D	8.2677 "
B	2.0866 "
d2	6.1260 "
D1	7.5866 "
rs min	0.0787 "
Number of lubrication holes	3
b	0.3504 "
k	0.1575 "
Associated sleeve reference	H3028
e	0.22
Y1	3.14
Y2	4.67
Y0	3.07
Radial clearance class	CN
Mass	22.01 oz
Brand	SNR



Product performance	
Dynamic load, C	597 kN
Static load, C0	783 kN
Fatigue limit load, Cu	67 kN
Nref	2,800 RPM
Nlim	3,400 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	8.89 Hz
Characteristic outer ring frequency, BPF0	11.13 Hz
Characteristic inner ring frequency, BPF1	13.88 Hz



Abutment dimensions

da min	5.8583 "
db min	5.7874 "
Ce min	0.3150 "
Da max	7.9213 "
ra max	0.0787 "

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 .