

PDF technical sheet 23172EMW33



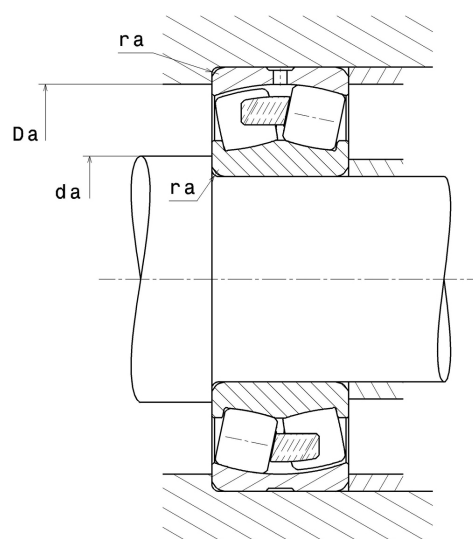
Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring

Product definition	
d	14.1732 "
D	23.6220 "
B	7.5591 "
d2	17.5512 "
D1	20.9331 "
rs min	0.1969 "
Number of lubrication holes	8
b	1.0630 "
k	0.6299 "
e	0.3
Y1	2.28
Y2	3.39
Y0	2.23
Radial clearance class	CN
Mass	796.13 oz
Brand	SNR



Product performance	
Dynamic load, C	5,180 kN
Static load, C0	8,220 kN
Fatigue limit load, Cu	407 kN
Nref	590 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	8.43 Hz
Characteristic outer ring frequency, BPF0	10.62 Hz
Characteristic inner ring frequency, BPF1	13.38 Hz



Abutment dimensions

da min	14.9606 "
Da max	22.8346 "
ra max	0.1575 "

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 .