



# NTN BEARING USA CORP.

45 mm x 85 mm x 23 mm SNR  
22209EMW33C4 Double row spherical roller  
bearings

Bearing No. 22209EMW33C4

d	45 mm
D	85 mm
B	23 mm
D1	75.6 mm
rs min	1.1 mm
Number of lubrication holes	3
b	5.8 mm
k	2.5 mm
e	0.26
Y1	2.64
Y2	3.94
Y0	2.58
Radial clearance class	C4
Mass	0.5 kg
Dynamic load, C	116 kN
Static load, C0	106 kN
Fatigue limit load, Cu	11.8 kN
Nref	7,500 rpm
Nlim	9,800 rpm
Min operating temperature, Tmin	-40 ° C
Max operating temperature, Tmax	200 ° C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling	6.07 Hz

22209EMW33C4 Bearing 2D drawings and 3D CAD  
models



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element frequency, BSF	
Characteristic outer ring frequency, BPF0	6.73 Hz
Characteristic inner ring frequency, BPF1	9.27 Hz
da min	52 mm
Da max	78 mm
ra max	1 mm