

PDF technical sheet

23938EMD1



Double row spherical roller bearings

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

Product definition	
d	7.4803 "
D	10.2362 "
B	2.0472 "
rs min	0.0787 "
Number of lubrication holes	4
b	0.3543 "
k	0.1969 "
e	0.17
Y1	4.05
Y2	6.04
Y0	3.96
Radial clearance class	CN
Brand	NTN



Product performance	
Dynamic load, C	603 kN
Static load, C0	935 kN
Fatigue limit load, Cu	89.40 kN
Nref	1,700 RPM
Nlim	2,500 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	12.90 Hz
Characteristic outer ring frequency, BPF0	16.16 Hz
Characteristic inner ring frequency, BPF1	18.84 Hz



Abutment dimensions

da min	7.8268 "
Da max	9.8898 "
ra max	0.0787 "

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

Fa / Fr ≤ e		Fa / Fr > 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 .