

PDF technical sheet 23948EMD1C3



Double row spherical roller bearings

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

Product definition	
d	9.4488 "
D	12.5984 "
B	2.3622 "
d2	10.3150 "
D1	11.8504 "
rs min	0.0827 "
Number of lubrication holes	4
b	0.3543 "
k	0.1969 "
e	0.15
Y1	4.4
Y2	6.56
Y0	4.31
Radial clearance class	C3
Brand	NTN



Product performance	
Dynamic load, C	815 kN
Static load, C0	1,190 kN
Fatigue limit load, Cu	129 kN
Nref	1,300 RPM
Nlim	2,000 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.47 Hz
Characteristic rolling element frequency, BSF	14.05 Hz
Characteristic outer ring frequency, BPF0	17.66 Hz
Characteristic inner ring frequency, BPF1	20.34 Hz



Abutment dimensions

da min	9.8504 "
Da max	12.1969 "
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 .