

PDF technical sheet

23924EMD1



Double row spherical roller bearings

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

Product definition	
d	4.7244 "
D	6.4961 "
B	1.3386 "
d2	5.2362 "
D1	6.0630 "
rs min	0.0433 "
Number of lubrication holes	3
b	0.2756 "
k	0.1181 "
e	0.17
Y1	3.9
Y2	5.81
Y0	3.81
Radial clearance class	CN
Brand	NTN



Product performance	
Dynamic load, C	240 kN
Static load, C0	354 kN
Fatigue limit load, Cu	37.40 kN
Nref	2,700 RPM
Nlim	4,000 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	13.61 Hz
Characteristic outer ring frequency, BPF0	15.77 Hz
Characteristic inner ring frequency, BPF1	18.23 Hz



Abutment dimensions

da min	4.9606 "
Da max	6.2598 "
ra max	0.0394 "

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 .