

PDF technical sheet 21320D1



Double row spherical roller bearings

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

Product definition	
d	3.9370 "
D	8.4646 "
B	1.8504 "
d2	5.3937 "
D1	7.0354 "
rs min	0.1181 "
Number of lubrication holes	4
b	0.3543 "
k	0.1969 "
e	0.22
Y1	3.01
Y2	4.48
Y0	2.94
Radial clearance class	CN
Brand	NTN



Product performance	
Dynamic load, C	370 kN
Static load, C0	465 kN
Fatigue limit load, Cu	31.50 kN
Nref	3,200 RPM
Nlim	3,900 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.45 Hz
Characteristic outer ring frequency, BPF0	6.80 Hz
Characteristic inner ring frequency, BPF1	9.20 Hz



Abutment dimensions

da min	4.4882 "
Da max	7.9134 "
ra max	0.0984 "

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 .