

PDF technical sheet 30334



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	6.6929 "
D	14.1732 "
B	2.8346 "
C	2.4409 "
T	3.1496 "
d1	10.0000 "
a	2.7362 "
rs min	0.1575 "
r1s min	0.1575 "
e	0.37
Y2	1.6
Y0	0.88
Mass	122.75 oz
Brand	NTN



Product performance	
Dynamic load, C	845 kN
Rating life coefficient, A2	1
Static load, C0	1,100 kN
Fatigue limit load, Cu	100 kN
Nlim (oil)	1,400 RPM
Nlim (grease)	1,000 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling element frequency, BSF	5.80 Hz
Characteristic outer ring frequency, BPF0	6.28 Hz
Characteristic inner ring frequency, BPFI	8.72 Hz



Abutment dimensions

da max	8.4843 "
db min	7.5591 "
Da min	11.6929 "
Da max	13.4646 "
Db min	12.8740 "
Ca min	0.3937 "
Cb min	0.7087 "
ra max	0.1575 "
r1a max	0.1181 "

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	0	0.4	Y2

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
0.5	Y0

If $P_0 \leq F_r$, then use $P_0 = F_r$

The values for e, Y2 and Y0 are shown in the above table