

PDF technical sheet 4T25877/25821



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	1.3750 "
D	2.8750 "
B	0.9688 "
C	0.7500 "
T	0.9375 "
d1	2.0866 "
a	0.6186 "
e	0.29
Y2	2.07
Y0	1.14
Mass	1.67 oz
Brand	NTN



Product performance	
Dynamic load, C	71 kN
Rating life coefficient, A2	1.4
Static load, C0	85 kN
Fatigue limit load, Cu	10.40 kN
Nlim (oil)	7,100 RPM
Nlim (grease)	5,300 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	6 Hz
Characteristic outer ring frequency, BPF0	6.72 Hz
Characteristic inner ring frequency, BPFI	9.28 Hz



Abutment dimensions	
ra max	0.0591 "
r1a max	0.0315 "

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 $P_0 < F_r$, then use $P_0 = F_r$

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