

PDF technical sheet 32940XUE1



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	7.8740 "
D	11.0236 "
B	2.0079 "
C	1.5354 "
T	2.0079 "
d1	9.4094 "
a	2.1063 "
rs min	0.1181 "
r1s min	0.0984 "
e	0.39
Y2	1.52
Y0	0.84
Mass	31.32 oz
ISO 355 reference	T3EC200
Brand	NTN



Product performance	
Dynamic load, C	485 kN
Rating life coefficient, A2	1
Static load, C0	895 kN
Fatigue limit load, Cu	84 kN
Nlim (oil)	1,500 RPM
Nlim (grease)	1,100 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	11.47 Hz
Characteristic outer ring frequency, BPF0	14.66 Hz
Characteristic inner ring frequency, BPFI	17.34 Hz



Abutment dimensions

da max	8.4252 "
db min	8.4252 "
Da min	10.0000 "
Da max	10.5512 "
Db min	10.6693 "
Ca min	0.3543 "
Cb min	0.4724 "
ra max	0.0984 "
r1a max	0.0787 "

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

Fa / Fr ≤ e		Fa / Fr > 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