

PDF technical sheet 32944XU



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	8.6614 "
D	11.8110 "
B	2.0079 "
C	1.5354 "
T	2.0079 "
d1	10.2559 "
a	2.3425 "
rs min	0.1181 "
r1s min	0.0984 "
e	0.43
Y2	1.41
Y0	0.78
Mass	35.98 oz
ISO 355 reference	T3EC220
Brand	NTN



Product performance	
Dynamic load, C	480 kN
Rating life coefficient, A2	1
Static load, C0	950 kN
Fatigue limit load, Cu	87 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	0.46 Hz
Characteristic rolling element frequency, BSF	13.19 Hz
Characteristic outer ring frequency, BPF0	16.23 Hz
Characteristic inner ring frequency, BPFI	18.77 Hz



Abutment dimensions

da max	9.2126 "
db min	9.2126 "
Da min	10.6693 "
Da max	11.3386 "
Db min	11.4173 "
Ca min	0.3937 "
Cb min	0.4724 "
ra max	0.0984 "
r1a max	0.0787 "

Calculation factors

Equivalent dynamic radial load

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

$F_a / F_r \leq e$		$F_a / F_r > e$	
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