

PDF technical sheet 32960XUE1



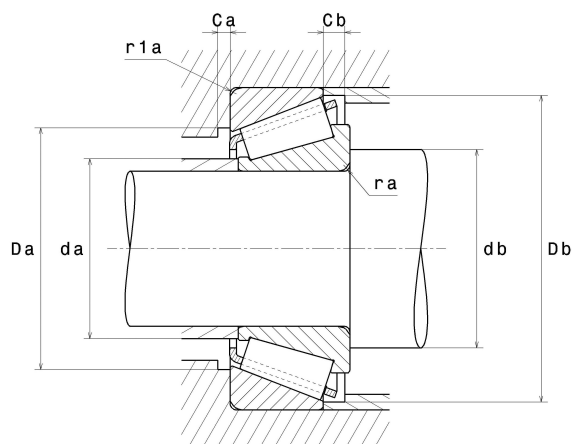
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	11.8110 "
D	16.5354 "
B	2.9921 "
C	2.2441 "
T	2.9921 "
d1	14.2126 "
a	3.1496 "
rs min	0.1575 "
r1s min	0.1181 "
e	0.39
Y2	1.52
Y0	0.84
Mass	110.76 oz
ISO 355 reference	T3FD300
Brand	NTN



Product performance	
Dynamic load, C	1,010 kN
Rating life coefficient, A2	1
Static load, C0	2,090 kN
Fatigue limit load, Cu	173.30 kN
Nlim (oil)	970 RPM
Nlim (grease)	720 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	12.44 Hz
Characteristic outer ring frequency, BPF0	16.15 Hz
Characteristic inner ring frequency, BPFI	18.85 Hz



Abutment dimensions

da max	12.7559 "
db min	12.5197 "
Da min	14.9213 "
Da max	15.9843 "
Db min	15.9449 "
Ca min	0.5118 "
Cb min	0.7480 "
ra max	0.1181 "
r1a 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	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