

PDF technical sheet 31324XU



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	4.7244 "
D	10.2362 "
B	2.4409 "
C	1.6535 "
T	2.6772 "
a	3.2480 "
rs min	0.1181 "
r1s min	0.0984 "
e	0.83
Y2	0.73
Y0	0.4
Mass	54.32 oz
ISO 355 reference	T7GB120
Brand	NTN



Product performance	
Dynamic load, C	515 kN
Rating life coefficient, A2	1
Static load, C0	655 kN
Nlim (oil)	2,000 RPM
Nlim (grease)	1,500 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C



Abutment dimensions

da max	5.4331 "
db min	5.7087 "
Da max	9.6850 "
Db min	9.6063 "
ra max	0.1181 "
r1a max	0.0984 "

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

$$P_o = X_o.F_r + Y_o.F_a$$

X ₀	Y ₀
0.5	Y0

If $P_o < F_r$, then use $P_o = F_r$

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