



Technical data

30316U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	80 mm
D	170 mm
B	39 mm
C	33 mm
T	42.5 mm
d1	122.5 mm
a	34 mm
rs min	3 mm
r1s min	2.5 mm
e	0.35
Y2	1.74
Y0	0.96
Mass	4.41 kg
ISO 355 reference	T2GB080
Brand	NTN

Product performance

Dynamic load, C	291 kN
Rating life coefficient, A2	1
Static load, C0	350 kN
Fatigue limit load, Cu	39.6 kN
Nlim (oil)	3,000 Tr/min
Nlim (grease)	2,300 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.27 Hz
Characteristic outer ring frequency, BPF0	6.57 Hz
Characteristic inner ring frequency, BPFI	9.43 Hz

Abutment dimensions

da max	102 mm
db min	94 mm
Da min	148 mm
Da max	158 mm
Db min	159 mm
Ca min	4 mm
Cb min	9.5 mm
ra max	2.5 mm
r1a max	2 mm

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