



Technical data

30314U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	70 mm
D	150 mm
B	35 mm
C	30 mm
T	38 mm
d1	107 mm
a	30 mm
rs min	3 mm
r1s min	2.5 mm
e	0.35
Y2	1.74
Y0	0.96
Mass	3.06 kg
ISO 355 reference	T2GB070
Brand	NTN

Product performance

Dynamic load, C	230 kN
Rating life coefficient, A2	1
Static load, C0	272 kN
Fatigue limit load, Cu	32.1 kN
Nlim (oil)	3,500 Tr/min
Nlim (grease)	2,600 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	89 mm
db min	84 mm
Da min	130 mm
Da max	138 mm
Db min	140 mm
Ca min	4 mm
Cb min	8 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