



Technical data

33017U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	85 mm
D	130 mm
B	36 mm
C	29.5 mm
T	36 mm
d1	108 mm
a	26 mm
rs min	1.5 mm
r1s min	1.5 mm
e	0.29
Y2	2.06
Y0	1.13
Mass	1.7 kg
ISO 355 reference	T2CE085
Brand	NTN

Product performance

Dynamic load, C	176 kN
Rating life coefficient, A2	1
Static load, C0	296 kN
Fatigue limit load, Cu	35.3 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	0.45 Hz
Characteristic rolling element frequency, BSF	9.86 Hz
Characteristic outer ring frequency, BPF0	12.17 Hz
Characteristic inner ring frequency, BPFI	14.83 Hz

Abutment dimensions

da max	94 mm
db min	93.5 mm
Da min	118 mm
Da max	121.5 mm
Db min	125 mm
Ca min	6 mm
Cb min	6.5 mm
ra max	1.5 mm
r1a max	1.5 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