



Technical data

30220U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	100 mm
D	180 mm
B	34 mm
C	29 mm
T	37 mm
d1	135.5 mm
a	36 mm
rs min	3 mm
r1s min	2.5 mm
e	0.42
Y2	1.43
Y0	0.79
Mass	3.78 kg
ISO 355 reference	T3FB100
Brand	NTN

Product performance

Dynamic load, C	258 kN
Rating life coefficient, A2	1
Static load, C0	335 kN
Fatigue limit load, Cu	37 kN
Nlim (oil)	2,700 Tr/min
Nlim (grease)	2,000 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.63 Hz
Characteristic outer ring frequency, BPF0	8.58 Hz
Characteristic inner ring frequency, BPFI	11.42 Hz

Abutment dimensions

da max	116 mm
db min	114 mm
Da min	157 mm
Da max	168 mm
Db min	168 mm
Ca min	5 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