



Technical data

32309U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	45 mm
D	100 mm
B	36 mm
C	30 mm
T	38.25 mm
d1	71.5 mm
a	25.5 mm
rs min	2 mm
r1s min	1.5 mm
e	0.35
Y2	1.74
Y0	0.96
Mass	1.46 kg
ISO 355 reference	T2FD045
Brand	NTN

Product performance

Dynamic load, C	154 kN
Rating life coefficient, A2	1
Static load, C0	191 kN
Fatigue limit load, Cu	23.3 kN
Nlim (oil)	5,300 Tr/min
Nlim (grease)	4,000 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	5.28 Hz
Characteristic outer ring frequency, BPF0	6.57 Hz
Characteristic inner ring frequency, BPFI	9.43 Hz

Abutment dimensions

da max	56 mm
db min	55 mm
Da min	82 mm
Da max	91.5 mm
Db min	93 mm
Ca min	3 mm
Cb min	8 mm
ra max	2 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