



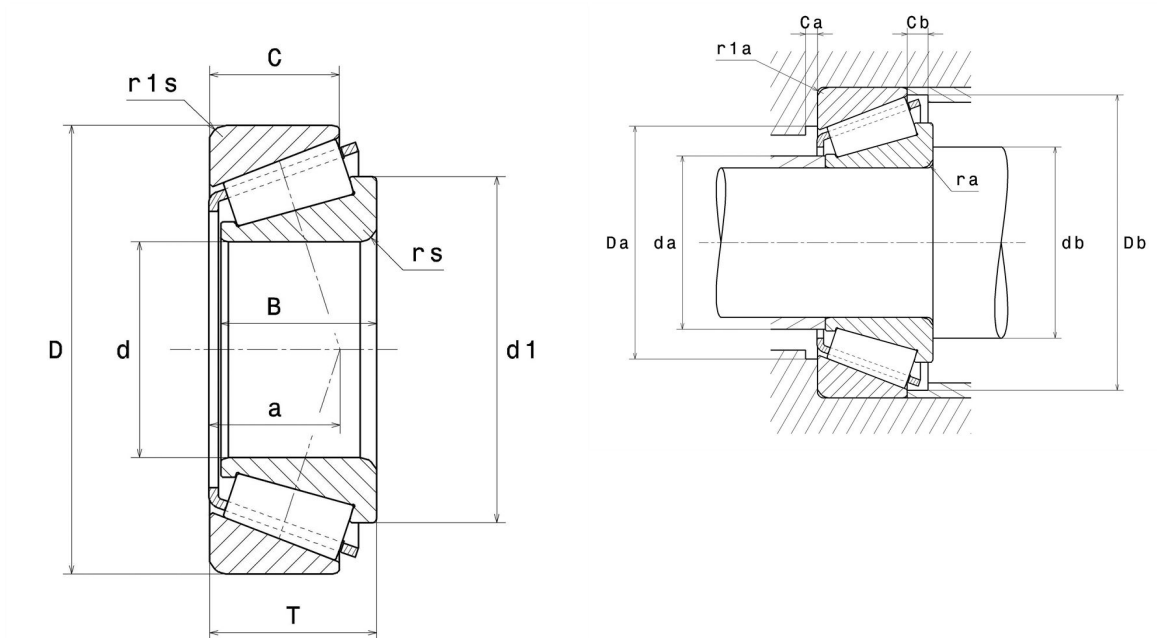
Technical data

30209U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	45 mm
D	85 mm
B	19 mm
C	16 mm
T	20.75 mm
d1	64 mm
a	18 mm
rs min	1.5 mm
r1s min	1.5 mm
e	0.4
Y2	1.48
Y0	0.81
Mass	0.5 kg
ISO 355 reference	T3DB045
Brand	NTN

Product performance

Dynamic load, C	67.5 kN
Rating life coefficient, A2	1
Static load, C0	78.5 kN
Fatigue limit load, Cu	9.6 kN
Nlim (oil)	5,900 Tr/min
Nlim (grease)	4,400 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	6.36 Hz
Characteristic outer ring frequency, BPF0	7.66 Hz
Characteristic inner ring frequency, BPFI	10.34 Hz

Abutment dimensions

da max	54 mm
db min	53.5 mm
Da min	74 mm
Da max	76.5 mm
Db min	80 mm
Ca min	3 mm
Cb min	4.5 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