Technical data

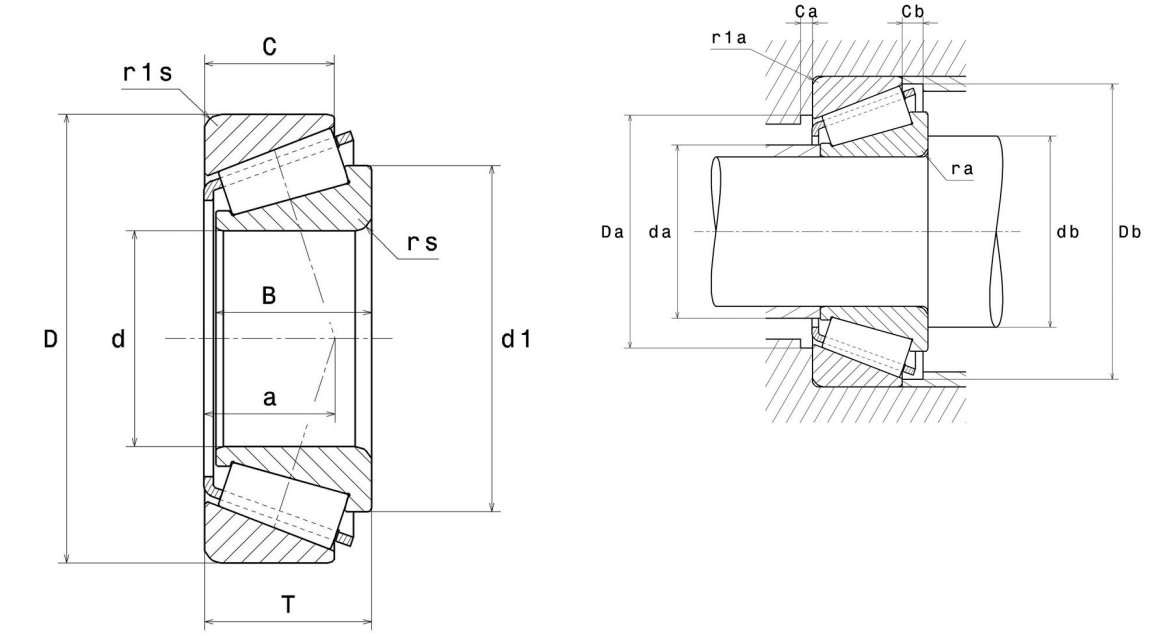
4T-420/414

Single row tapered roller bearings



Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	40 mm
D	88.5 mm
B	29.08 mm
C	22.22 mm
T	26.99 mm
d1	59.5 mm
a	17.89 mm
e	0.26
Y2	2.28
Y0	1.25
Mass	0.81 kg
Brand	NTN

Product performance

Dynamic load, C	95.5 kN
Rating life coefficient, A2	1.4
Static load, C0	107 kN
Fatigue limit load, Cu	13 kN
Nlim (oil)	6,100 Tr/min
Nlim (grease)	4,600 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	5.09 Hz
Characteristic outer ring frequency, BPF0	5.69 Hz
Characteristic inner ring frequency, BPFI	8.31 Hz

Abutment dimensions

ra max	3.5 mm
r1a max	1.5 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

Fa / Fr ≤ e		Fa / Fr > e	
X	Y	X	Y
1	0	0.4	Y2

Equivalent static radial load

$Po = Xo.Fr + Yo.Fa$

X_0	Y_0
0.5	Y0

If Po <Fr, then use Po = Fr

The values for e, Y2 and Y0 are shown in the above table