Technical datasheet

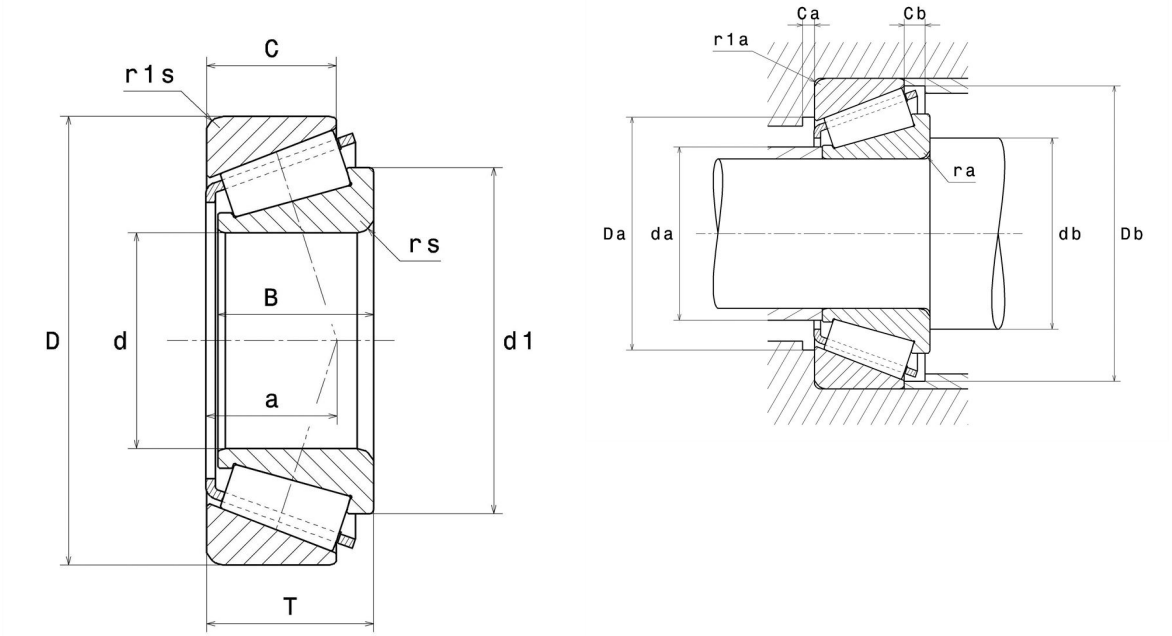
4T-594/593X

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage



Visual(s)



Product definition

d	95.25 mm
D	150 mm
B	36.32 mm
C	27 mm
T	35.99 mm
a	33.4 mm
rs min	3.5 mm
r1s min	3 mm
e	0.44
Y2	1.36
Y0	0.75
Mass	2.2 kg
Brand	NTN

Product performance

Dynamic load, C	174 kN
Rating life coefficient, A2	1.4
Static load, C0	267 kN
Nlim (oil)	3,100 rpm
Nlim (grease)	2,300 rpm
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	9.12 Hz
Characteristic outer ring frequency, BPF0	10.76 Hz
Characteristic inner ring frequency, BPFI	13.24 Hz

Abutment dimensions

ra max	3.5 mm
r1a max	3 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

$Fa/Fr \leq e$		$Fa/Fr > e$	
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