# Technical data

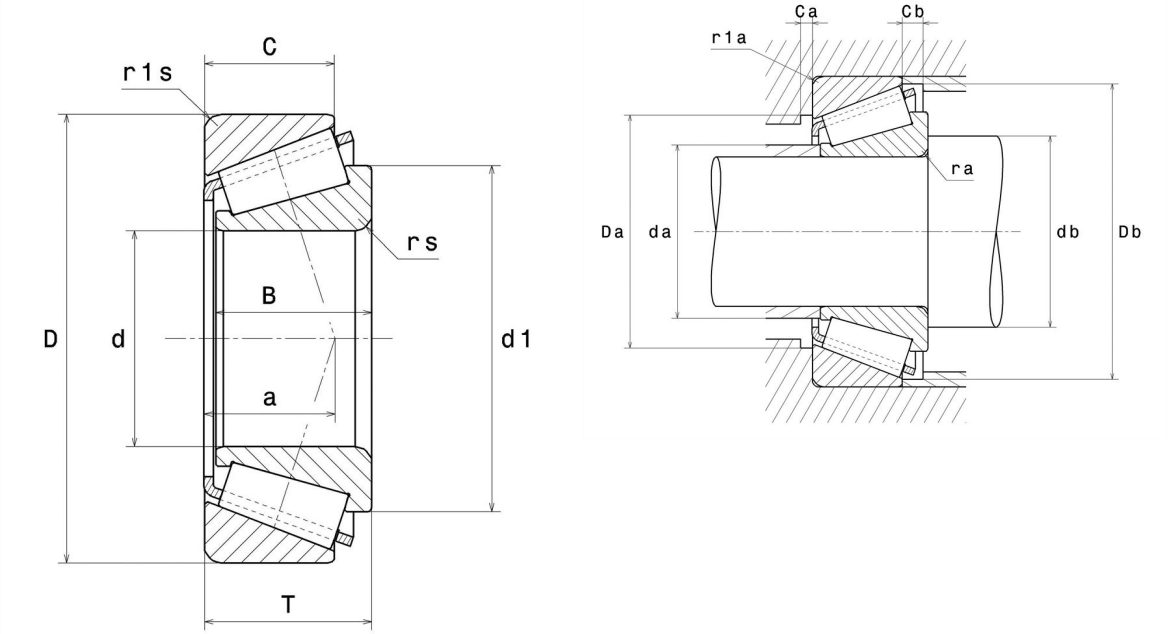
## 4T-78214/78551

Single row tapered roller bearings



Tapered roller bearing, pressed steel cage

## Visual(s)




## Product definition

| | |
|---|---|
| **d** | 53.98 mm |
| **D** | 140.03 mm |
| **B** | 33.24 mm |
| **C** | 23.52 mm |
| **T** | 36.51 mm |
| **d1** | 103.5 mm |
| **a** | 45.01 mm |
| **e** | 0.87 |
| **Y2** | 0.69 |
| **Y0** | 0.38 |
| **Mass** | 2.77 kg |
| **Brand** | NTN |

## Product performance

| | |
|---|---|
| **Dynamic load, C** | 171 kN |
| **Rating life coefficient, A2** | 1.4 |
| **Static load, C0** | 212 kN |
| **Fatigue limit load, Cu** | 25.9 kN |
| **Nlim (oil)** | 3,400 Tr/min |
| **Nlim (grease)** | 2,600 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** | 5.89 Hz |
| **Characteristic outer ring frequency, BPF0** | 7.28 Hz |
| **Characteristic inner ring frequency, BPFI** | 9.72 Hz |

## Abutment dimensions

| | |
|---|---|
| **ra max** | 0.8 mm |
| **r1a max** | 2.3 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