# Technical data

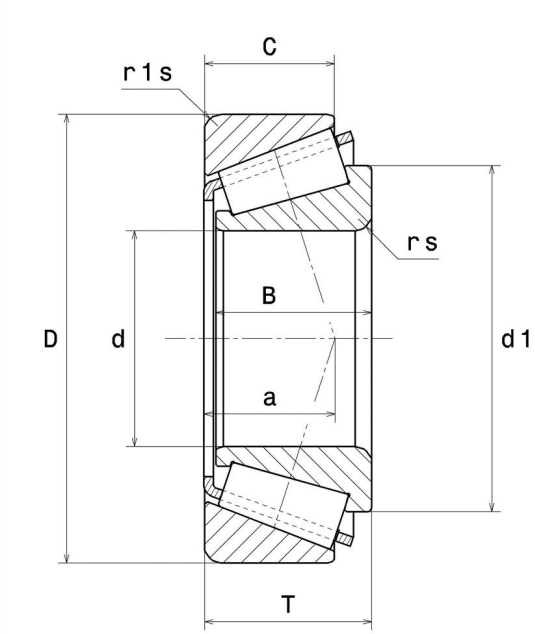
## 4T-30210

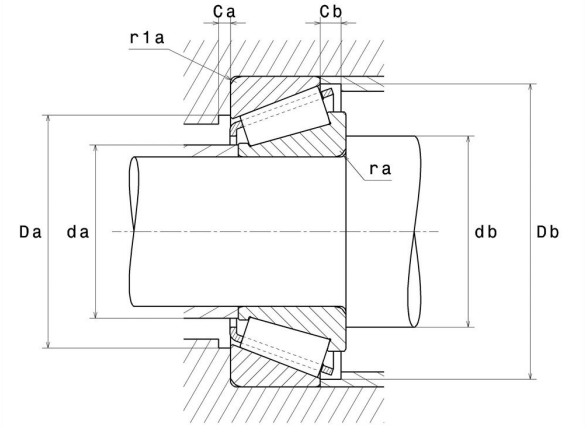
Single row tapered roller bearings



Tapered roller bearing, pressed steel cage

## Visual(s)




## Product definition

| | |
|---|---|
| **d** | 50 mm |
| **D** | 90 mm |
| **B** | 20 mm |
| **C** | 17 mm |
| **T** | 21.75 mm |
| **d1** | 69 mm |
| **a** | 19.5 mm |
| **rs min** | 1.5 mm |
| **r1s min** | 1.5 mm |
| **e** | 0.42 |
| **Y2** | 1.43 |
| **Y0** | 0.79 |
| **Mass** | 0.56 kg |
| **ISO 355 reference** | T3DB050 |
| **Brand** | NTN |

## Product performance

| | |
|---|---|
| **Dynamic load, C** | 77 kN |
| **Rating life coefficient, A2** | 1.4 |
| **Static load, C0** | 93 kN |
| **Fatigue limit load, Cu** | 11.3 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** | 0.43 Hz |
| **Characteristic rolling element frequency, BSF** | 6.63 Hz |
| **Characteristic outer ring frequency, BPF0** | 8.15 Hz |
| **Characteristic inner ring frequency, BPFI** | 10.85 Hz |

## Abutment dimensions

| | |
|---|---|
| **da max** | 58 mm |
| **db min** | 58.5 mm |
| **Da min** | 79 mm |
| **Da max** | 81.5 mm |
| **Db min** | 85 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

$P = X.Fr + Y.Fa$

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