

## PDF technical sheet 4T33008

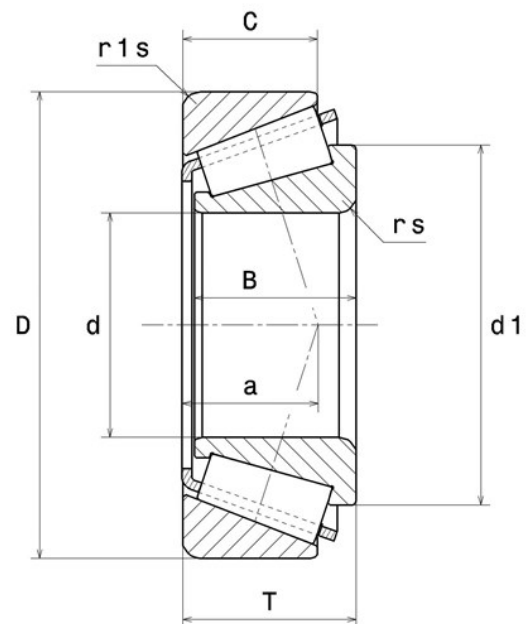


### Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

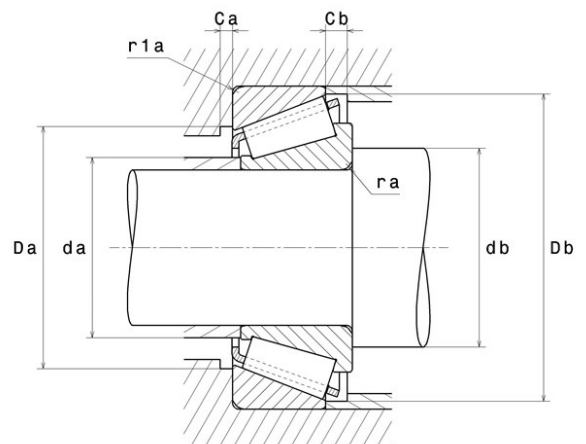
#### Product definition

|                   |         |
|-------------------|---------|
| d                 | 40 mm   |
| D                 | 68 mm   |
| B                 | 22 mm   |
| C                 | 18 mm   |
| T                 | 22 mm   |
| d1                | 54 mm   |
| a                 | 15 mm   |
| rs min            | 1 mm    |
| r1s min           | 1 mm    |
| e                 | 0.28    |
| Y2                | 2.12    |
| Y0                | 1.17    |
| Mass              | 0.31 kg |
| ISO 355 reference | T2BE040 |
| Brand             | NTN     |



#### Product performance

|   |            |
|---|------------|
| Dynamic load, C                               | 59,500 daN |
| Rating life coefficient, A2                   | 1.4        |
| Static load, C0                               | 82,500 daN |
| Fatigue limit load, Cu                        | 10,100 daN |
| Nlim (oil)                                    | 7,100 rpm  |
| Nlim (grease)                                 | 5,300 rpm  |
| Min operating temperature, Tmin               | -40 °C     |
| Max operating temperature, Tmax               | 120 °C     |
| Characteristic cage frequency, FTF            | 0.44 Hz    |
| Characteristic rolling element frequency, BSF | 7.99 Hz    |
| Characteristic outer ring frequency, BPF0     | 9.67 Hz    |
| Characteristic inner ring frequency, BPF1     | 12.33 Hz   |



### Abutment dimensions

|         |          |
|---------|----------|
| da max  | 46 mm    |
| db min  | 45.50 mm |
| Da min  | 60 mm    |
| Da max  | 62.50 mm |
| Db min  | 64 mm    |
| Ca min  | 2.50 mm  |
| Cb min  | 4 mm     |
| ra max  | 1 mm     |
| r1a max | 1 mm     |

### Calculation factors

#### Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

| Fa / Fr ≤ e |   | Fa / Fr > 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 <sub>0</sub> | Y <sub>0</sub> |
|----------------|----------------|
| 0.5            | Y0             |

If  $P_0 \leq F_r$ , then use  $P_0 = F_r$

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