

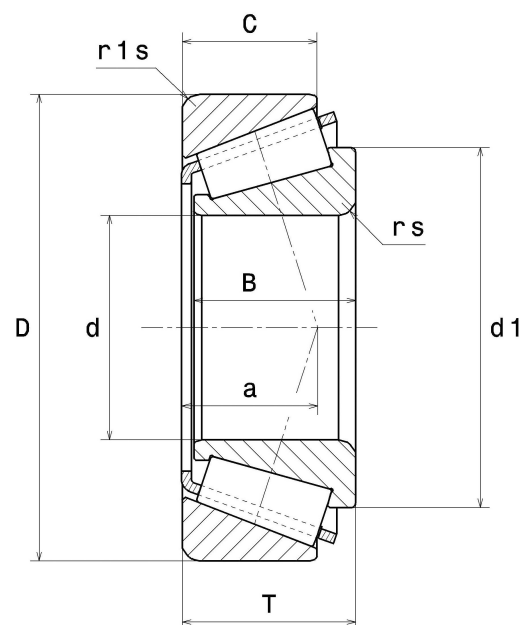
PDF technical sheet ETA32009XSAT#G



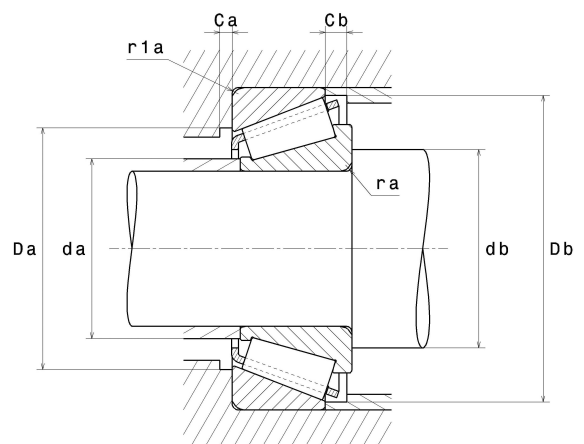
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

| Product definition | |
|--------------------|----------|
| d | 1.7717 " |
| D | 2.9528 " |
| B | 0.7874 " |
| C | 0.6102 " |
| T | 0.7874 " |
| d1 | 2.3819 " |
| a | 0.6496 " |
| rs min | 0.0394 " |
| r1s min | 0.0394 " |
| e | 0.39 |
| Y2 | 1.53 |
| Y0 | 0.84 |
| Mass | 1.22 oz |
| ISO 355 reference | T3CC045 |
| Brand | NTN |



| Product performance | |
|---|-----------|
| Dynamic load, C | 57.50 kN |
| Rating life coefficient, A2 | 1.4 |
| Static load, C0 | 76.50 kN |
| Fatigue limit load, Cu | 9.30 kN |
| Nlim (oil) | 6,400 RPM |
| Nlim (grease) | 4,800 RPM |
| Min operating temperature, Tmin | -40 °C |
| Max operating temperature, Tmax | 248 °C |
| Characteristic cage frequency, FTF | 0.44 Hz |
| Characteristic rolling element frequency, BSF | 8.09 Hz |
| Characteristic outer ring frequency, BPF0 | 9.26 Hz |
| Characteristic inner ring frequency, BPF1 | 11.74 Hz |



Abutment dimensions

| | |
|---------|----------|
| da max | 2.0079 " |
| db min | 1.9882 " |
| Da min | 2.6378 " |
| Da max | 2.7362 " |
| Db min | 2.8346 " |
| Ca min | 0.1575 " |
| Cb min | 0.1772 " |
| ra max | 0.0394 " |
| r1a max | 0.0394 " |

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 ₀ | Y ₀ |
|----------------|----------------|
| 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