

## PDF technical sheet 32020XU



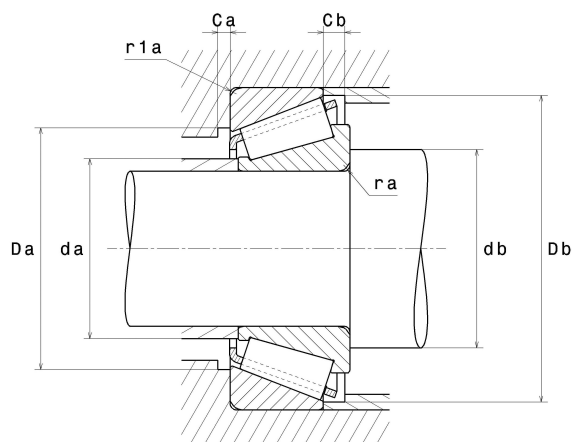
### Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

| Product definition |          |
|--------------------|----------|
| d                  | 3.9370 " |
| D                  | 5.9055 " |
| B                  | 1.2598 " |
| C                  | 0.9449 " |
| T                  | 1.2598 " |
| d1                 | 4.9606 " |
| a                  | 1.2795 " |
| rs min             | 0.0787 " |
| r1s min            | 0.0591 " |
| e                  | 0.46     |
| Y2                 | 1.31     |
| Y0                 | 0.72     |
| Mass               | 6.74 oz  |
| ISO 355 reference  | T4CC100  |
| Brand              | NTN      |



| Product performance                           |           |
|-----------------------------------------------|-----------|
| Dynamic load, C                               | 170 kN    |
| Rating life coefficient, A2                   | 1         |
| Static load, C0                               | 281 kN    |
| Fatigue limit load, Cu                        | 32 kN     |
| Nlim (oil)                                    | 3,000 RPM |
| Nlim (grease)                                 | 2,200 RPM |
| Min operating temperature, Tmin               | -40 °C    |
| Max operating temperature, Tmax               | 248 °C    |
| Characteristic cage frequency, FTF            | 0.46 Hz   |
| Characteristic rolling element frequency, BSF | 10.46 Hz  |
| Characteristic outer ring frequency, BPF0     | 13.19 Hz  |
| Characteristic inner ring frequency, BPFI     | 15.81 Hz  |



### Abutment dimensions

|         |          |
|---------|----------|
| da max  | 4.2913 " |
| db min  | 4.3307 " |
| Da min  | 5.2756 " |
| Da max  | 5.5709 " |
| Db min  | 5.6693 " |
| Ca min  | 0.2362 " |
| Cb min  | 0.3150 " |
| ra max  | 0.0787 " |
| r1a max | 0.0591 " |

### Calculation factors

#### Equivalent dynamic radial load

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

| $F_a / F_r \leq e$ |   | $F_a / F_r > e$ |    |
|--------------------|---|-----------------|----|
| X                  | Y | X               | Y  |
| 1                  | 0 | 0.4             | Y2 |

#### Equivalent static radial load

$$P_o = X_o.F_r + Y_o.F_a$$

| $X_o$ | $Y_o$ |
|-------|-------|
| 0.5   | Y0    |

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

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