

## Technical data

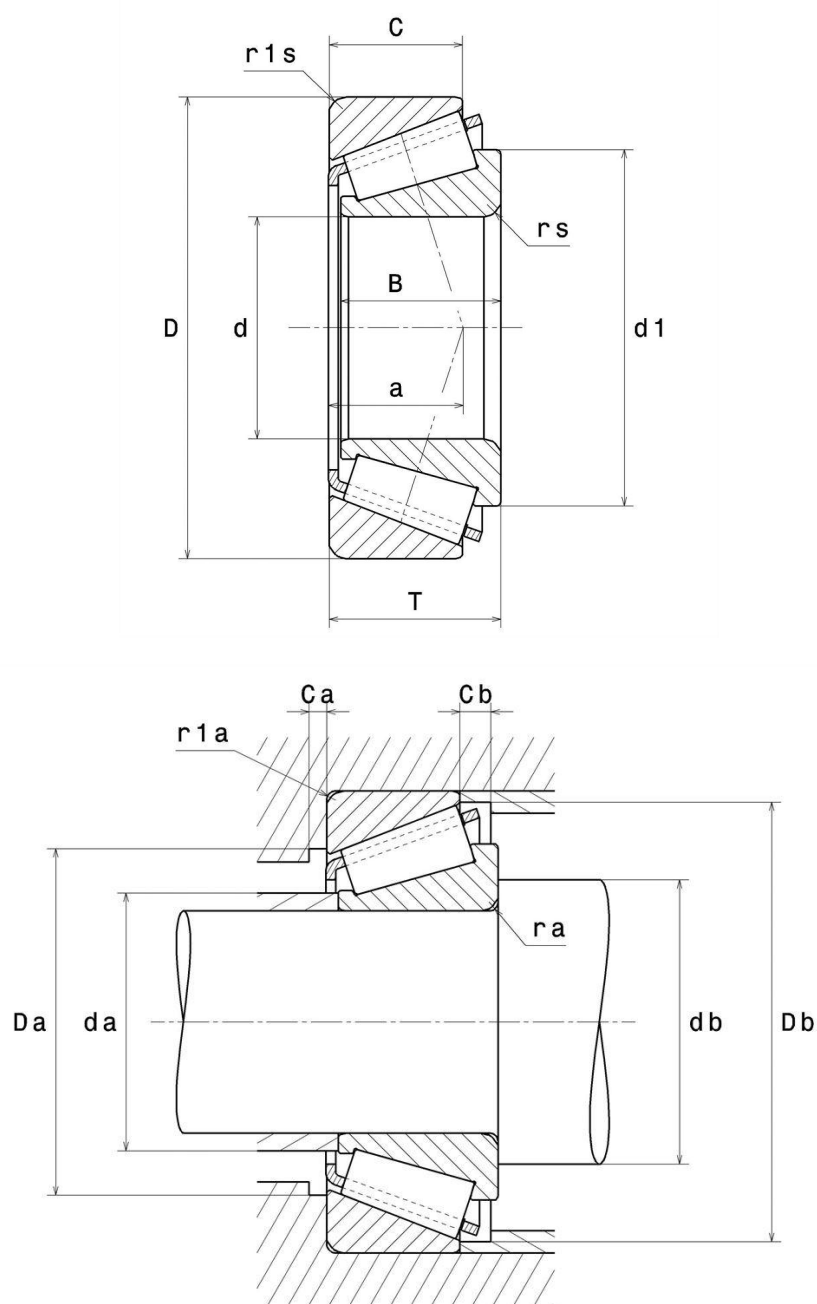
### 4T-30209

Single row tapered roller bearings



Tapered roller bearing, pressed steel cage

#### VISUAL (S)



## PRODUCT DEFINITION

|                                          |          |
|------------------------------------------|----------|
| <b>Brand</b>                             | NTN      |
| <b>d - Internal diameter</b>             | 45 mm    |
| <b>D - External diameter</b>             | 85 mm    |
| <b>B - Bearing/Inner ring width</b>      | 19 mm    |
| <b>C - Outer ring width</b>              | 16 mm    |
| <b>T - Total width</b>                   | 20,75 mm |
| <b>d1 - External diameter inner ring</b> | 64 mm    |
| <b>a - Charge load application point</b> | 18 mm    |
| <b>rs - Min fillet radius</b>            | 1,5 mm   |
| <b>r1s - Min fillet radius</b>           | 1,5 mm   |
| <b>Mass</b>                              | 0,493 kg |
| <b>ISO 355 reference</b>                 | T3DB045  |

## PRODUCT PERFORMANCE

|                                               |             |
|-----------------------------------------------|-------------|
| <b>C - Dynamic load</b>                       | 75 kN       |
| <b>C0 - Static load</b>                       | 78,5 kN     |
| <b>Cu - Fatigue limit load</b>                | 9,6 kN      |
| <b>A2 - Rating life coefficient</b>           | 1           |
| <b>e - Coefficient</b>                        | 0.4         |
| <b>Y0 - Static axial load coefficient</b>     | 0.81        |
| <b>Y2 - Upper axial load coefficient</b>      | 1.48        |
| <b>N lim - Oil lubrication limit speed</b>    | 5900 tr/min |
| <b>N lim - Grease lubrication limit speed</b> | 4400 tr/min |
| <b>Tmin - Min operating temperature</b>       | -40 °C      |



# 4T-30209

Single row tapered roller bearings

## PRODUCT PERFORMANCE

|                                         |        |
|-----------------------------------------|--------|
| <b>Tmax - Max operating temperature</b> | 120 °C |
|-----------------------------------------|--------|

## ABUTMENT

|                                          |         |
|------------------------------------------|---------|
| <b>da max - Max shoulder diameter IR</b> | 54 mm   |
| <b>db min - Min IR shoulder diameter</b> | 53,5 mm |
| <b>Da min - Min shoulder diameter OR</b> | 74 mm   |
| <b>Da max - Max shoulder diameter OR</b> | 76,5 mm |
| <b>Db min - Min OR shoulder diameter</b> | 80 mm   |
| <b>Ca - Min clearance</b>                | 3 mm    |
| <b>Cb - Min clearance</b>                | 4,5 mm  |
| <b>ra max - Max fillet radius</b>        | 1,5 mm  |
| <b>r1a - Max fillet radius</b>           | 1,5 mm  |

## ESHOPDONOTDISPLAY

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Tracepart</b>                | Oui/Yes                         |
| <b>Reference</b>                | 4T-30209                        |
| <b>Image</b>                    | TRB_1.jpg, TRB_2.jpg, TRB_3.jpg |
| <b>ULTAGE</b>                   | Non/No                          |
| <b>Rolling element material</b> | Acier de cémentation            |



**NTN Europe**

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00  
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072  
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INDUSTRY CALCUL 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

$P_0 = X_0.F_r + Y_0.F_a$

| $X_0$ | $Y_0$ |
|-------|-------|
| 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

