



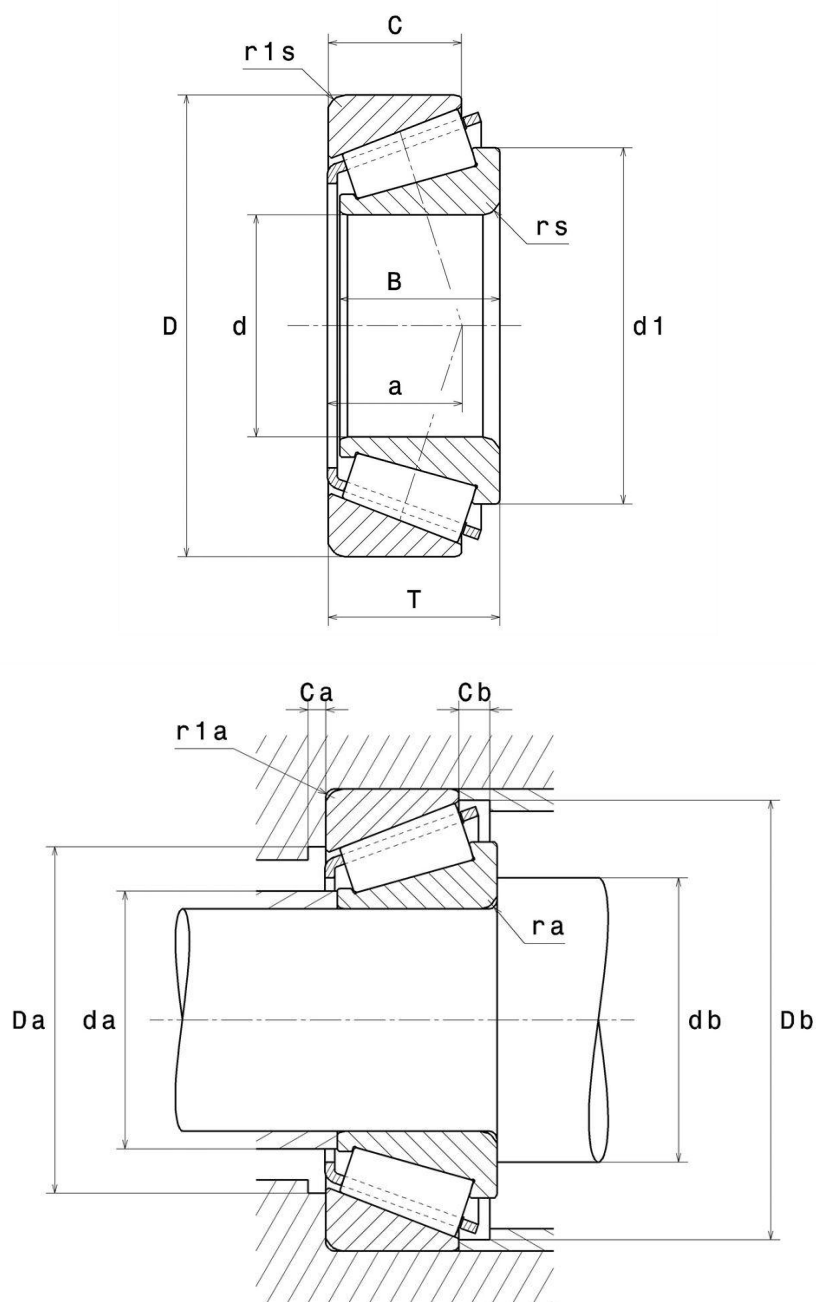
Technical data

4T-30209

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

VISUAL (S)



4T-30209

Single row tapered roller bearings

PRODUCT DEFINITION

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

PRODUCT PERFORMANCE

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

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PRODUCT PERFORMANCE

| | |
|---|--------|
| Tmax - Max operating temperature | 120 °C |
|---|--------|

ABUTMENT

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

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 | Y ₂ |

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

| X_0 | Y_0 |
|-------|----------------|
| 0.5 | Y ₀ |

If $P_0 < F_r$, then use $P_0 = F_r$

The values for e , Y_2 and Y_0 are shown in the above table