



Brand of NTN corporation

## Technical data

### 6001FT150ZZ

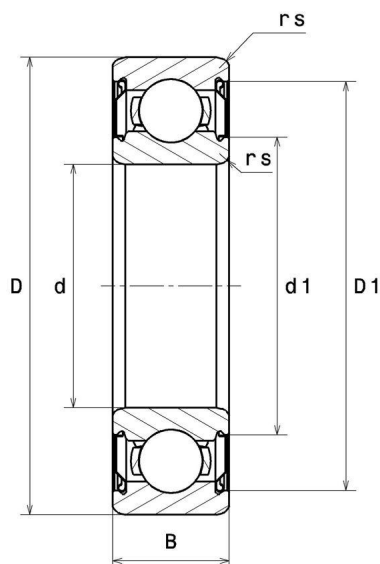
Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 150°C.

**TOPLINE**

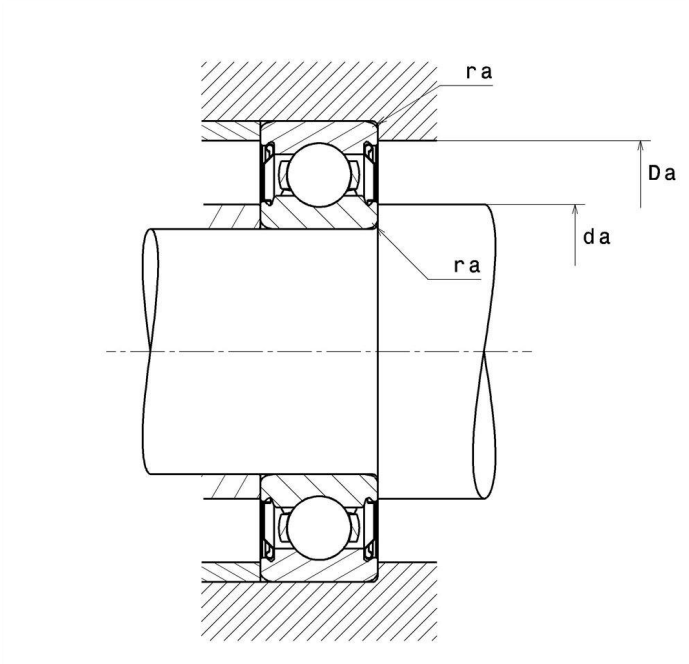
## VISUAL (S)



**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  
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

6001FT150ZZ  
Single row deep groove ball bearings



PRODUCT DEFINITION

|                                   |         |
|-----------------------------------|---------|
| Brand                             | SNR     |
| d - Internal diameter             | 12 mm   |
| D - External diameter             | 28 mm   |
| B - Bearing/Inner ring width      | 8 mm    |
| d1 - External diameter inner ring | 17,2 mm |
| D1 - Inner diameter outer ring    | 25,5 mm |
| rs - Min fillet radius            | 0,3 mm  |
| Radial clearance class            | C3      |
| Mass                              | 0,21 kg |

PRODUCT PERFORMANCE

|                         |            |
|-------------------------|------------|
| C - Dynamic load        | 5400000 mN |
| C0 - Static load        | 2370000 mN |
| Cu - Fatigue limit load | 110000 mN  |



# 6001FT150ZZ

Single row deep groove ball bearings

## PRODUCT PERFORMANCE

|                                         |            |
|-----------------------------------------|------------|
| <b>f0 - Coefficient</b>                 | 13.1       |
| <b>N lim - Mechanical Limit Speed</b>   | 150000 %/s |
| <b>Tmin - Min operating temperature</b> | 243,15 °K  |
| <b>Tmax - Max operating temperature</b> | 423,15 °K  |

## BEARING FREQUENCIES

|                                                                 |          |
|-----------------------------------------------------------------|----------|
| <b>BPFO - Over rolling frequency on outer ring (60 rpm)</b>     | 3.047 Hz |
| <b>BPFI - Over rolling frequency on inner (60 rpm)</b>          | 4.953 Hz |
| <b>BSF - Over rolling frequency on rolling element (60 rpm)</b> | 3.961 Hz |
| <b>BRF - Rotational frequency - rolling element (60 rpm)</b>    | 1.981 Hz |
| <b>FTF - Rotational frequency - cage (60 rpm)</b>               | 0.381 Hz |

## ABUTMENT

|                                                       |         |
|-------------------------------------------------------|---------|
| <b>da min - Min shoulder diameter IR</b>              | 14 mm   |
| <b>da max - Max shoulder diameter IR</b>              | 17,2 mm |
| <b>Da max - Max shoulder diameter OR</b>              | 26 mm   |
| <b>ra max - Max shaft &amp; housing fillet radius</b> | 0,3 mm  |



**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  
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$P = X.F_r + Y.F_a$

| $\frac{f_0 F_a}{C_0}$ | e    | Fa / Fr ≤ e |   | Fa / Fr > e |      |
|-----------------------|------|-------------|---|-------------|------|
|                       |      | X           | Y | X           | Y    |
| 0.172                 | 0.19 | 1           | 0 | 0.56        | 2.3  |
| 0.345                 | 0.22 |             |   |             | 1.99 |
| 0.689                 | 0.26 |             |   |             | 1.71 |
| 1.03                  | 0.28 |             |   |             | 1.55 |
| 1.38                  | 0.3  |             |   |             | 1.45 |
| 2.07                  | 0.34 |             |   |             | 1.31 |
| 3.45                  | 0.38 |             |   |             | 1.15 |
| 5.17                  | 0.42 |             |   |             | 1.04 |
| 6.89                  | 0.44 |             |   |             | 1    |

Equivalent static radial load

$P_0 = X_0.F_r + Y_0.F_a$

| $X_0$ | $Y_0$ |
|-------|-------|
| 0.6   | 0.5   |

For single or DT bearing arrangement :

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

