



Brand of NTN corporation

## Technical data

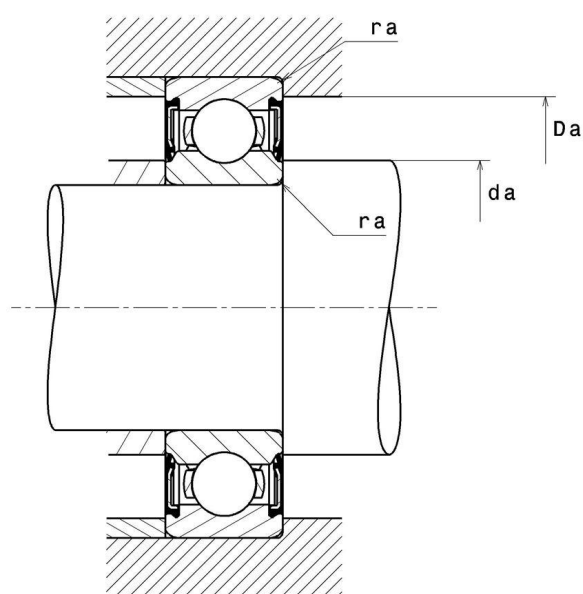
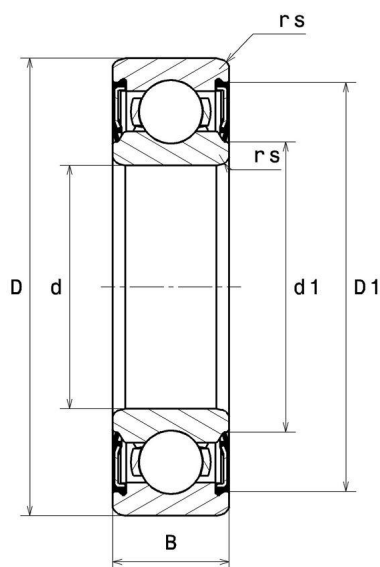
### 6016EEC3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides

#### 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

## PRODUCT DEFINITION

|                                          |          |
|------------------------------------------|----------|
| <b>Brand</b>                             | SNR      |
| <b>d - Internal diameter</b>             | 80 mm    |
| <b>D - External diameter</b>             | 125 mm   |
| <b>B - Bearing/Inner ring width</b>      | 22 mm    |
| <b>d1 - External diameter inner ring</b> | 89,3 mm  |
| <b>D1 - Inner diameter outer ring</b>    | 115,3 mm |
| <b>rs - Min fillet radius</b>            | 1,1 mm   |
| <b>Radial clearance class</b>            | C3       |
| <b>Mass</b>                              | 0,87 kg  |

## PRODUCT PERFORMANCE

|                                         |             |
|-----------------------------------------|-------------|
| <b>C - Dynamic load</b>                 | 50200000 mN |
| <b>C0 - Static load</b>                 | 39800000 mN |
| <b>Cu - Fatigue limit load</b>          | 1790000 mN  |
| <b>f0 - Coefficient</b>                 | 15.6        |
| <b>N lim - Mechanical Limit Speed</b>   | 19200 °/s   |
| <b>Tmin - Min operating temperature</b> | 243,15 °K   |
| <b>Tmax - Max operating temperature</b> | 393,15 °K   |

## BEARING FREQUENCIES

|                                                                 |          |
|-----------------------------------------------------------------|----------|
| <b>BPFO - Over rolling frequency on outer ring (60 rpm)</b>     | 6.078 Hz |
| <b>BPFI - Over rolling frequency on inner (60 rpm)</b>          | 7.922 Hz |
| <b>BSF - Over rolling frequency on rolling element (60 rpm)</b> | 7.464 Hz |
| <b>BRF - Rotational frequency - rolling element (60 rpm)</b>    | 3.732 Hz |
| <b>FTF - Rotational frequency - cage (60 rpm)</b>               | 0.434 Hz |



## ABUTMENT

|                                            |          |
|--------------------------------------------|----------|
| da min - Min shoulder diameter IR          | 86,5 mm  |
| da max - Max shoulder diameter IR          | 89,3 mm  |
| Da max - Max shoulder diameter OR          | 118,5 mm |
| ra max - Max shaft & housing fillet radius | 1 mm     |

## 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  $P_0 = F_r$

