



Brand of **NTN corporation**

Technical data

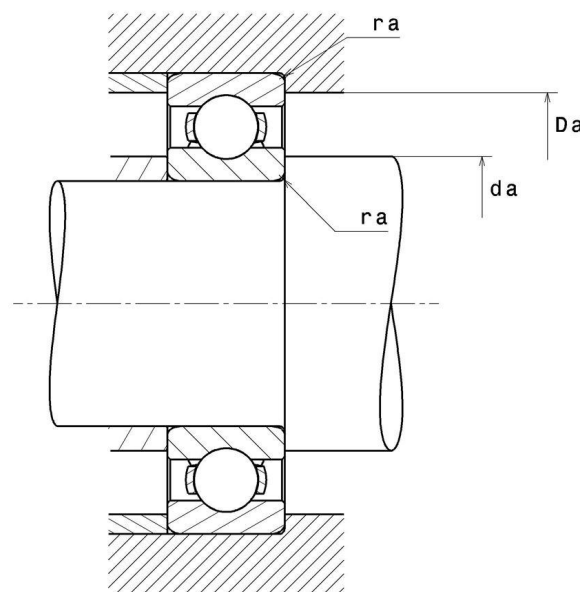
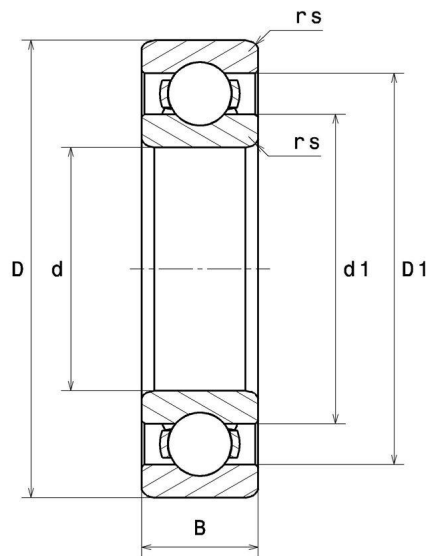
6002

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, open

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

| | |
|--|----------|
| Brand | SNR |
| d - Internal diameter | 15 mm |
| D - External diameter | 32 mm |
| B - Bearing/Inner ring width | 9 mm |
| d1 - External diameter inner ring | 19 mm |
| D1 - Inner diameter outer ring | 28,1 mm |
| rs - Min fillet radius | 0,3 mm |
| Radial clearance class | CN |
| Mass | 0,028 kg |

PRODUCT PERFORMANCE

| | |
|---|------------|
| C - Dynamic load | 5900000 mN |
| C0 - Static load | 2850000 mN |
| Cu - Fatigue limit load | 130000 mN |
| f0 - Coefficient | 13.9 |
| Nref - Reference thermal speed | 132000 °/s |
| Nlim - Mechanical Limit Speed | 234000 °/s |
| Tmin - Min operating temperature | 233,15 °K |
| Tmax - Max operating temperature | 393,15 °K |

BEARING FREQUENCIES

| | |
|--|----------|
| BPFO - Characteristic outer ring frequency (60 rpm) | 3.588 Hz |
| BPFI - Characteristic inner ring frequency (60 rpm) | 5.412 Hz |
| FTF - Characteristic cage frequency (60 rpm) | 0.399 Hz |
| BSF - Characteristic rolling element frequency (60 rpm) | 4.731 Hz |



ABUTMENT

| | |
|---|--------|
| da min - Min shoulder diameter IR | 17 mm |
| da max - Max shoulder diameter IR | 0 mm |
| Da max - Max shoulder diameter OR | 30 mm |
| ra max - Max shaft & housing fillet radius | 0,3 mm |

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

| $\frac{f_0 F_a}{C_0}$ | 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

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

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

For single or DT bearing arrangement :

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

