



Brand of NTN corporation

Technical data

6201HT200ZZ

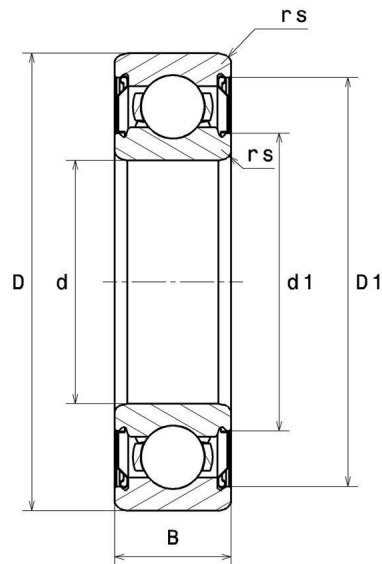
Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 200°C.

TOPLINE

VISUAL (S)

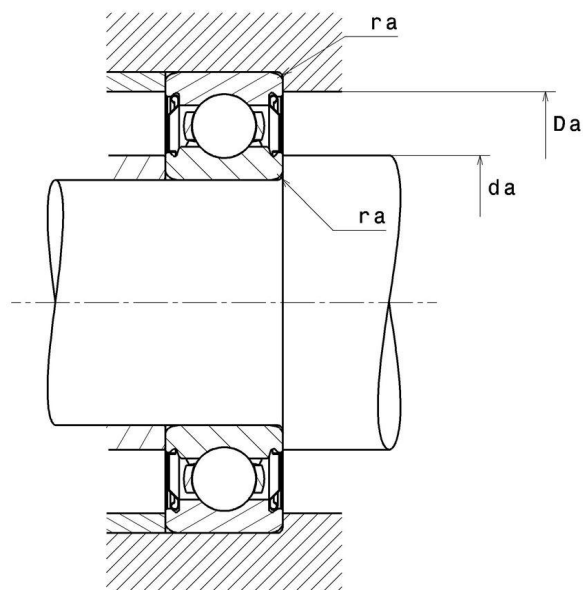


NTN Europe

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

6201HT200ZZ

Single row deep groove ball bearings



PRODUCT DEFINITION

| | |
|--|----------|
| Brand | SNR |
| d - Internal diameter | 12 mm |
| D - External diameter | 32 mm |
| B - Bearing/Inner ring width | 10 mm |
| d1 - External diameter inner ring | 18,3 mm |
| D1 - Inner diameter outer ring | 27,9 mm |
| rs - Min fillet radius | 0,6 mm |
| Radial clearance class | C4 |
| Mass | 0,038 kg |

PRODUCT PERFORMANCE

| | |
|--------------------------------|------------|
| C - Dynamic load | 7300000 mN |
| C0 - Static load | 3100000 mN |
| Cu - Fatigue limit load | 140000 mN |



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

6201HT200ZZ

Single row deep groove ball bearings

PRODUCT PERFORMANCE

| | |
|---|-----------|
| f0 - Coefficient | 12.2 |
| N lim - Mechanical Limit Speed | 66000 °/s |
| Tmin - Min operating temperature | 233,15 °K |
| Tmax - Max operating temperature | 473,15 °K |

BEARING FREQUENCIES

| | |
|---|----------|
| BPFO - Over rolling frequency on outer ring (60 rpm) | 2.545 Hz |
| BPFI - Over rolling frequency on inner (60 rpm) | 4.455 Hz |
| BSF - Over rolling frequency on rolling element (60 rpm) | 3.394 Hz |
| BRF - Rotational frequency - rolling element (60 rpm) | 1.697 Hz |
| FTF - Rotational frequency - cage (60 rpm) | 0.364 Hz |

ABUTMENT

| | |
|---|---------|
| da min - Min shoulder diameter IR | 16 mm |
| da max - Max shoulder diameter IR | 18,3 mm |
| Da max - Max shoulder diameter OR | 28 mm |
| ra max - Max shaft & housing fillet radius | 0,6 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 $P_0 = F_r$

