

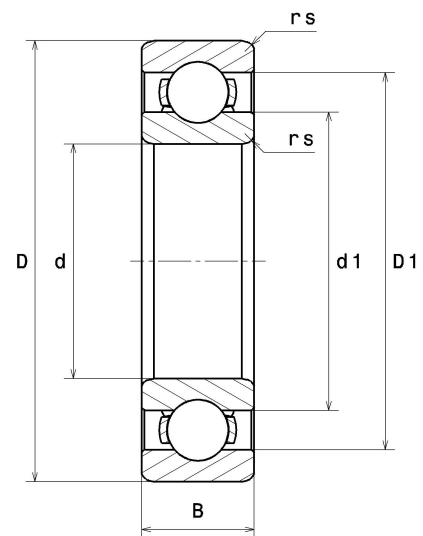
## PDF technical sheet 6228C3



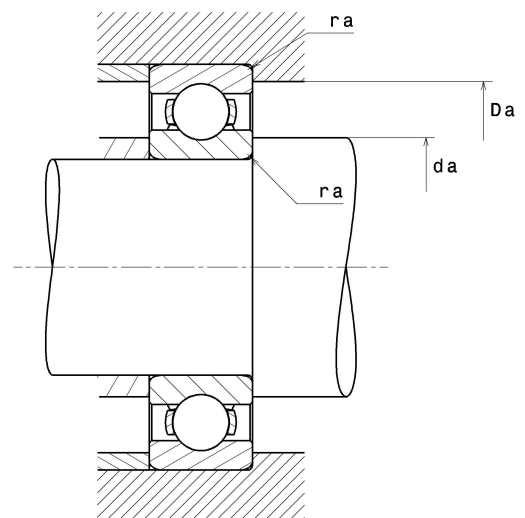
### Single row deep groove ball bearings

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

| Product definition     |         |
|------------------------|---------|
| d                      | 140 mm  |
| D                      | 250 mm  |
| B                      | 42 mm   |
| rs min                 | 3 mm    |
| Radial clearance class | C3      |
| Mass                   | 7.57 kg |
| Brand                  | NTN     |



| Product performance                           |              |
|---|--------------|
| Dynamic load, C                               | 166 kN       |
| Static load, C0                               | 150 kN       |
| Fatigue limit load, Cu                        | 4.90 kN      |
| f0  | 14.8         |
| Nlim (oil)                                    | 2,900 Tr/min |
| Nlim (grease)                                 | 2,500 Tr/min |
| Min operating temperature, Tmin               | -20 °C       |
| Max operating temperature, Tmax               | 120 °C       |
| Characteristic cage frequency, FTF            | 0.42 Hz      |
| Characteristic rolling element frequency, BSF | 5.98 Hz      |
| Characteristic outer ring frequency, BPF0     | 4.19 Hz      |
| Characteristic inner ring frequency, BPF1     | 5.81 Hz      |



### Abutment dimensions

|        |         |
|--------|---------|
| da min | 153 mm  |
| Da max | 237 mm  |
| ra max | 2.50 mm |

### Calculation 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 <sub>0</sub> | Y <sub>0</sub> |
|----------------|----------------|
| 0.6            | 0.5            |

For single or DT bearing arrangement:

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