

## PDF technical sheet

### N313



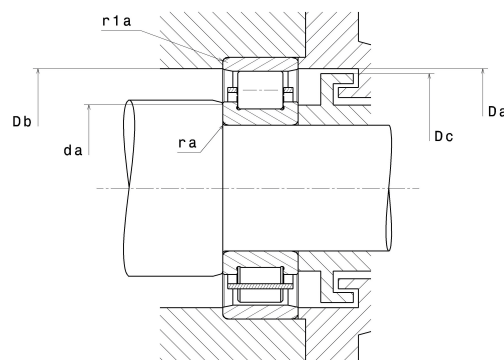
## Single row cylindrical roller bearings

Single row cylindrical roller bearing, floating, separable, pressed steel cage

| Product definition     |          |
|------------------------|----------|
| d                      | 2.5591 " |
| D                      | 5.5118 " |
| B                      | 1.2992 " |
| E                      | 4.7835 " |
| F                      | 3.2874 " |
| d1                     | 3.5827 " |
| rs min                 | 0.0827 " |
| r1s min                | 0.0827 " |
| Radial clearance class | CN       |
| Mass (without HJ ring) | 7.88 oz  |
| Brand                  | NTN      |



| Product performance                           |           |
|-----------------------------------------------|-----------|
| Dynamic load, C                               | 135 kN    |
| Static load, C0                               | 139 kN    |
| Fatigue limit load, Cu                        | 16.80 kN  |
| Nlim (oil)                                    | 6,000 RPM |
| Nlim (grease)                                 | 5,100 RPM |
| Min operating temperature, Tmin               | -40 °C    |
| Max operating temperature, Tmax               | 248 °C    |
| Characteristic cage frequency, FTF            | 0.41 Hz   |
| Characteristic rolling element frequency, BSF | 5.21 Hz   |
| Characteristic outer ring frequency, BPF0     | 4.89 Hz   |
| Characteristic inner ring frequency, BPFI     | 7.11 Hz   |



| Abutment dimensions |          |
|---------------------|----------|
| da min              | 2.9921 " |
| Da max              | 5.0787 " |
| Db min              | 4.8819 " |
| Dc max              | 4.7244 " |
| ra max              | 0.0787 " |
| r1a max             | 0.0787 " |

### Calculation factors

Equivalent dynamic radial load

$$P = Fr$$

Equivalent static radial load

$$P_0 = Fr$$