



## Technical data

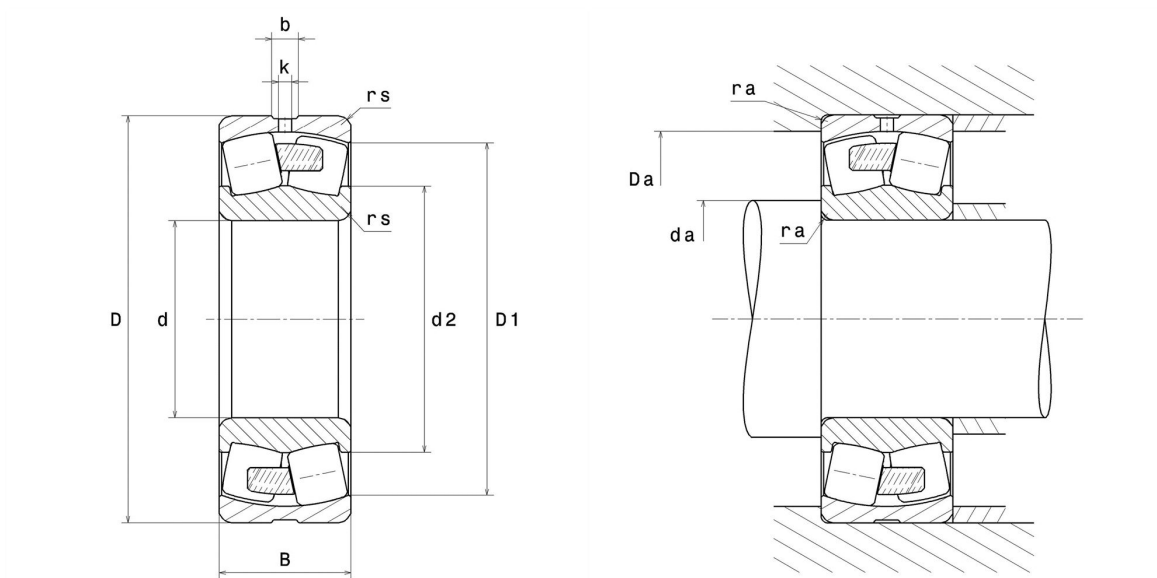
### 23936EMD1

Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, groove and lubrication holes on outer ring

# ULTAGE

## Visual(s)



## Product definition

|                                    |        |
|------------------------------------|--------|
| <b>d</b>                           | 180 mm |
| <b>D</b>                           | 250 mm |
| <b>B</b>                           | 52 mm  |
| <b>rs min</b>                      | 2 mm   |
| <b>Number of lubrication holes</b> | 4      |
| <b>b</b>                           | 9 mm   |
| <b>k</b>                           | 5 mm   |
| <b>e</b>                           | 0.17   |
| <b>Y1</b>                          | 3.9    |
| <b>Y2</b>                          | 5.81   |
| <b>Y0</b>                          | 3.81   |
| <b>Radial clearance class</b>      | CN     |
| <b>Brand</b>                       | NTN    |

## Product performance

|                                                      |          |
|------------------------------------------------------|----------|
| <b>Dynamic load, C</b>                               | 573 kN   |
| <b>Static load, C0</b>                               | 869 kN   |
| <b>Fatigue limit load, Cu</b>                        | 81.4 kN  |
| <b>Nref</b>                                          | 0 Tr/min |
| <b>Nlim</b>                                          | 0 Tr/min |
| <b>Min operating temperature, Tmin</b>               | -40 °C   |
| <b>Max operating temperature, Tmax</b>               | 200 °C   |
| <b>Characteristic cage frequency, FTF</b>            | 0.46 Hz  |
| <b>Characteristic rolling element frequency, BSF</b> | 12.45 Hz |
| <b>Characteristic outer ring frequency, BPF0</b>     | 15.19 Hz |
| <b>Characteristic inner ring frequency, BPFI</b>     | 17.81 Hz |

## Abutment dimensions

|               |          |
|---------------|----------|
| <b>da min</b> | 188.8 mm |
| <b>Da max</b> | 241.2 mm |
| <b>ra max</b> | 2 mm     |

## Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

| Fa / Fr ≤ e |    | Fa / Fr > e |    |
|-------------|----|-------------|----|
| X           | Y  | X           | Y  |
| 1           | Y1 | 0.67        | Y2 |

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

| X <sub>0</sub> | Y <sub>0</sub> |
|----------------|----------------|
| 1              | Y0             |

The values for e, Y1, Y2 and Y0 are shown in the above table .