

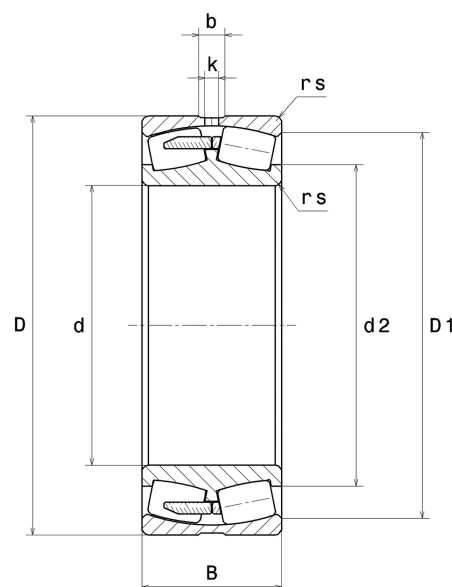
## PDF technical sheet 24196B



### Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, 2-part machined cage centred on inner ring, groove and lubrication holes on outer ring

| Product definition          |           |
|-----------------------------|-----------|
| d                           | 18.8976 " |
| D                           | 31.1024 " |
| B                           | 12.1260 " |
| d2                          | 22.4409 " |
| D1                          | 26.4055 " |
| rs min                      | 0.2953 "  |
| Number of lubrication holes | 8         |
| b                           | 1.2992 "  |
| k                           | 0.7874 "  |
| e                           | 0.39      |
| Y1                          | 1.74      |
| Y2                          | 2.59      |
| Y0                          | 1.7       |
| Radial clearance class      | CN        |
| Brand                       | NTN       |



| Product performance                           |           |
|-----------------------------------------------|-----------|
| Dynamic load, C                               | 7,450 kN  |
| Static load, C0                               | 15,300 kN |
| Fatigue limit load, Cu                        | 903 kN    |
| Nref                                          | 230 RPM   |
| Nlim                                          | 640 RPM   |
| Min operating temperature, Tmin               | -40 °C    |
| Max operating temperature, Tmax               | 248 °C    |
| Characteristic cage frequency, FTF            | 0.44 Hz   |
| Characteristic rolling element frequency, BSF | 8.05 Hz   |
| Characteristic outer ring frequency, BPF0     | 9.70 Hz   |
| Characteristic inner ring frequency, BPF1     | 12.30 Hz  |



### Abutment dimensions

|        |           |
|--------|-----------|
| da min | 20.1575 " |
| Da max | 29.8425 " |
| ra max | 0.2362 "  |

### 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 .