# Technical data

## 24036EAK30W33

Double row spherical roller bearings

ULTAGE

## Product definition

| | |
|---|---|
| **d** | 180 mm |
| **D** | 280 mm |
| **B** | 100 mm |
| **d2** | 202.5 mm |
| **D1** | 249 mm |
| **rs min** | 2.1 mm |
| **Number of lubrication holes** | 3 |
| **b** | 11.8 mm |
| **k** | 5 mm |
| **e** | 0.31 |
| **Y1** | 2.21 |
| **Y2** | 3.29 |
| **Y0** | 2.16 |
| **Radial clearance class** | CN |
| **Mass** | 21.2 kg |
| **Brand** | SNR |

## Product performance

| | |
|---|---|
| **Dynamic load, C** | 1,270 kN |
| **Static load, C0** | 1,830 kN |
| **Fatigue limit load, Cu** | 109 kN |
| **Nref** | 1,500 Tr/min |
| **Nlim** | 2,200 Tr/min |
| **Min operating temperature, Tmin** | -40 °C |
| **Max operating temperature, Tmax** | 200 °C |
| **Characteristic cage frequency, FTF** | 0.44 Hz |
| **Characteristic rolling element frequency, BSF** | 8.59 Hz |
| **Characteristic outer ring frequency, BPF0** | 10.65 Hz |
| **Characteristic inner ring frequency, BPFI** | 13.35 Hz |

## Abutment dimensions

| | |
|---|---|
| **da min** | 190.2 mm |
| **Da max** | 269.8 mm |
| **ra max** | 2 mm |

## Calculation factors

### Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

| $Fa/Fr \leq e$ | | $Fa/Fr > e$ | |
|---|---|---|---|
| X | Y | X | Y |
| 1 | Y1 | 0.67 | Y2 |

### Equivalent static radial load

$P_0 = X_0.Fr + Y_0.Fa$

| $X_0$ | $Y_0$ |
|---|---|
| 1 | Y0 |

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