

## Technical data

22222EAKW33C3

Spherical roller bearings



**ULTAGE<sup>®</sup>**

### VISUAL (S)





PRODUCT DEFINITION

|                                   |          |
|-----------------------------------|----------|
| Brand                             | NTN      |
| d - Internal diameter             | 110 mm   |
| D - External diameter             | 200 mm   |
| B - Bearing/Inner ring width      | 53 mm    |
| d2 - External diameter inner ring | 130,1 mm |
| D1 - Inner diameter outer ring    | 178,4 mm |
| rs - Min fillet radius            | 2,1 mm   |
| Number of lubrication holes       | 3        |
| b - Groove width                  | 11,73 mm |
| k - Hole diameter                 | 6 mm     |
| Associated sleeve reference       | H322     |
| Radial clearance class            | C3       |
| Mass                              | 6,879 kg |



## PRODUCT PERFORMANCE

|                                           |             |
|-------------------------------------------|-------------|
| <b>C - Dynamic load</b>                   | 602 kN      |
| <b>C0 - Static load</b>                   | 643 kN      |
| <b>Cu - Fatigue limit load</b>            | 68,4 kN     |
| <b>e - Coefficient</b>                    | 0.25        |
| <b>Y0 - Static axial load coefficient</b> | 2.63        |
| <b>Y1 - Lower axial load coefficient</b>  | 2.69        |
| <b>Y2 - Upper axial load coefficient</b>  | 4           |
| <b>N ref - Reference thermal speed</b>    | 3300 tr/min |
| <b>N lim - Mechanical Limit Speed</b>     | 4100 tr/min |
| <b>Tmin - Min operating temperature</b>   | -40 °C      |
| <b>Tmax - Max operating temperature</b>   | 200 °C      |

## ABUTMENT

|                                                       |        |
|-------------------------------------------------------|--------|
| <b>da min - Min shoulder diameter IR</b>              | 122 mm |
| <b>db - Min diameter for Sleeve</b>                   | 118 mm |
| <b>Ce - Min length fro Sleeve</b>                     | 6 mm   |
| <b>Da max - Max shoulder diameter OR</b>              | 188 mm |
| <b>ra max - Max shaft &amp; housing fillet radius</b> | 2 mm   |

## ESHOPDONOTDISPLAY

|                        |                                                                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tracepart</b>       | Oui/Yes                                                                                                                                                 |
| <b>URL 3D Platform</b> | <a href="https://www.traceparts.com/els/ntn-snr/goto?PartNumber=22222EAKW33C3">https://www.traceparts.com/els/ntn-snr/goto?PartNumber=22222EAKW33C3</a> |
| <b>Reference</b>       | 22222EAKW33C3                                                                                                                                           |
| <b>Image</b>           | SRBEAKW33_1.jpg, SRBEAKW33_2.jpg, SRBEAKW33_3.jpg                                                                                                       |
| <b>ULTAGE</b>          | Oui/Yes                                                                                                                                                 |



ESHOPDONOTDISPLAY

|                          |              |
|--------------------------|--------------|
| Rolling element material | Acier 100Cr6 |
| Number of deflectors     | 0            |
| Number of seals          | 0            |

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

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

| $F_a / F_r \leq e$ |    | $F_a / F_r > e$ |    |
|--------------------|----|-----------------|----|
| X                  | Y  | X               | Y  |
| 1                  | Y1 | 0.67            | Y2 |

Equivalent static radial load

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

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

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



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