



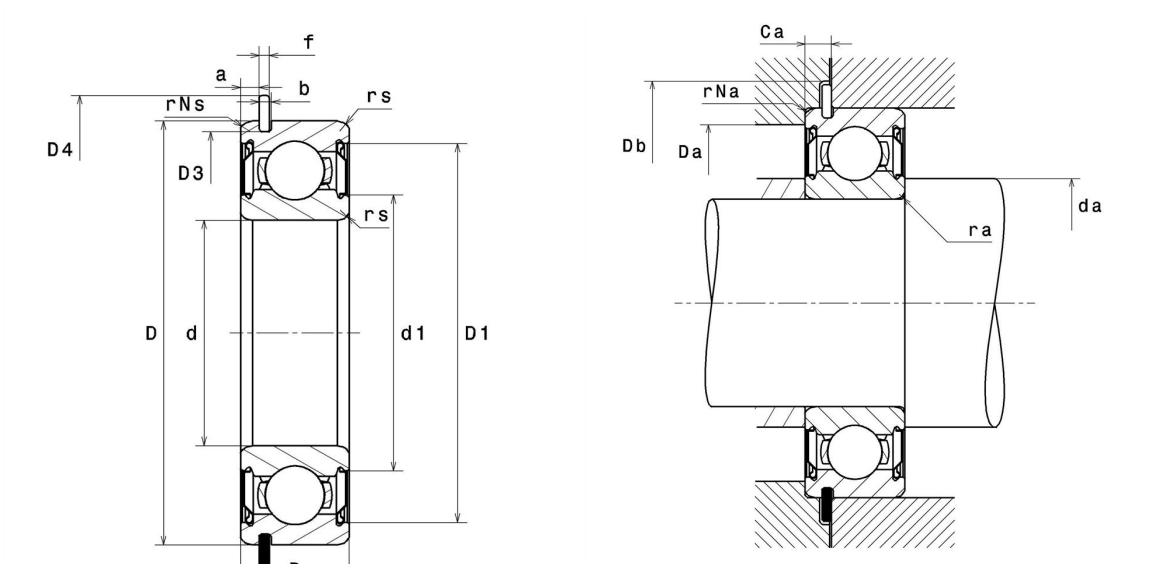
## Technical datasheet

### 6217ZZNR/2AS

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, snap ring & groove on outer diameter, shields on both sides

## Visual(s)



## Product definition

|                               |           |
|-------------------------------|-----------|
| <b>d</b>                      | 85 mm     |
| <b>D</b>                      | 150 mm    |
| <b>B</b>                      | 28 mm     |
| <b>a min</b>                  | 4.65 mm   |
| <b>a max</b>                  | 4.9 mm    |
| <b>Ca min</b>                 | 7.37 mm   |
| <b>Ca max</b>                 | 7.72 mm   |
| <b>rs min</b>                 | 2 mm      |
| <b>rNs min</b>                | 0.5 mm    |
| <b>D3 max</b>                 | 145.24 mm |
| <b>b min</b>                  | 3.1 mm    |
| <b>b max</b>                  | 3.4 mm    |
| <b>r0 max</b>                 | 0.6 mm    |
| <b>D4 max</b>                 | 159.7 mm  |
| <b>f</b>                      | 2.82 mm   |
| <b>Snap ring reference</b>    | R150      |
| <b>Radial clearance class</b> | CN        |
| <b>Mass</b>                   | 1.79 kg   |
| <b>Brand</b>                  | NTN       |

## Product performance

|                                                             |           |
|-------------------------------------------------------------|-----------|
| <b>Dynamic load, C</b>                                      | 83.5 kN   |
| <b>Static load, C<sub>0</sub></b>                           | 64 kN     |
| <b>Fatigue limit load, C<sub>u</sub></b>                    | 2.7 kN    |
| <b>f<sub>0</sub></b>                                        | 14.7      |
| <b>N<sub>lim</sub> (grease)</b>                             | 4,200 rpm |
| <b>Min operating temperature, T<sub>min</sub></b>           | -20 °C    |
| <b>Max operating temperature, T<sub>max</sub></b>           | 120 °C    |
| <b>Characteristic cage frequency, FTF</b>                   | 0.42 Hz   |
| <b>Characteristic rolling element frequency, BSF</b>        | 5.78 Hz   |
| <b>Characteristic outer ring frequency, BPF<sub>0</sub></b> | 4.58 Hz   |
| <b>Characteristic inner ring frequency, BPF<sub>i</sub></b> | 6.42 Hz   |

## Abutment dimensions

|                |        |
|----------------|--------|
| <b>da min</b>  | 94 mm  |
| <b>Da max</b>  | 141 mm |
| <b>ra max</b>  | 2 mm   |
| <b>rNa max</b> | 0.5 mm |
| <b>Db min</b>  | 162 mm |

## Calculation factors

Equivalent dynamic radial load

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

| $\frac{f_0 F_a}{C_0}$ | e    | F <sub>a</sub> / F <sub>r</sub> ≤ e |   | F <sub>a</sub> / F <sub>r</sub> > e |      |
|-----------------------|------|-------------------------------------|---|-------------------------------------|------|
|                       |      | X                                   | Y | X                                   | Y    |
| 0.172                 | 0.19 | 1                                   | 0 | 0.56                                | 2.3  |
| 0.345                 | 0.22 |                                     |   |                                     | 1.99 |
| 0.689                 | 0.26 |                                     |   |                                     | 1.71 |
| 1.03                  | 0.28 |                                     |   |                                     | 1.55 |
| 1.38                  | 0.3  |                                     |   |                                     | 1.45 |
| 2.07                  | 0.34 |                                     |   |                                     | 1.31 |
| 3.45                  | 0.38 |                                     |   |                                     | 1.15 |
| 5.17                  | 0.42 |                                     |   |                                     | 1.04 |
| 6.89                  | 0.44 |                                     |   |                                     | 1    |

Equivalent static radial load

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

|                |                |
|----------------|----------------|
| X <sub>0</sub> | Y <sub>0</sub> |
| 0.6            | 0.5            |

For single or DT bearing arrangement:

If P<sub>0</sub> < F<sub>r</sub>, then use P<sub>0</sub> = F<sub>r</sub>