

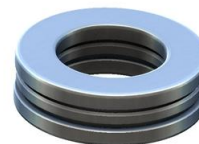


Brand of **NTN corporation**

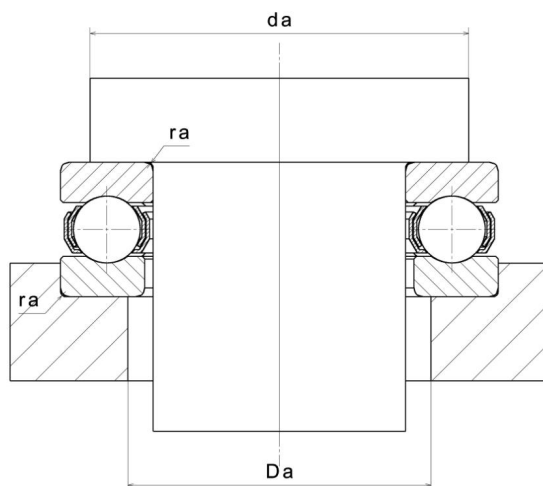
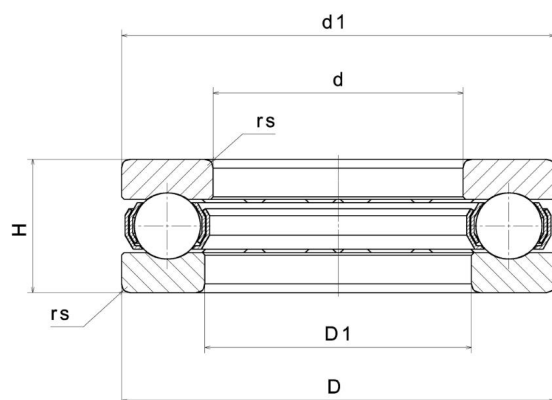
## Technical data

### 51109

One direction thrust ball bearings



#### VISUAL (S)



**NTN Europe**

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00  
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072  
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

## PRODUCT DEFINITION

|                                          |          |
|------------------------------------------|----------|
| <b>Brand</b>                             | SNR      |
| <b>d - Internal diameter</b>             | 45 mm    |
| <b>D - External diameter</b>             | 65 mm    |
| <b>D1 - Inner diameter outer ring</b>    | 47 mm    |
| <b>d1 - External diameter inner ring</b> | 65 mm    |
| <b>T - Thrust bearing height</b>         | 14 mm    |
| <b>rs - Min fillet radius</b>            | 0,6 mm   |
| <b>Mass</b>                              | 0,128 kg |

## PRODUCT PERFORMANCE

|                                         |             |
|-----------------------------------------|-------------|
| <b>Ca - Dynamic axial load rating</b>   | 27900000 mN |
| <b>C0a - Static axial load rating</b>   | 69200000 mN |
| <b>Tmin - Min operating temperature</b> | 233,15 °K   |
| <b>Tmax - Max operating temperature</b> | 393,15 °K   |

## BEARING FREQUENCIES

|                                                                 |          |
|-----------------------------------------------------------------|----------|
| <b>BPFO - Over rolling frequency on outer ring (60 rpm)</b>     | 11 Hz    |
| <b>BPFI - Over rolling frequency on inner (60 rpm)</b>          | 11 Hz    |
| <b>BSF - Over rolling frequency on rolling element (60 rpm)</b> | 7.698 Hz |
| <b>BRF - Rotational frequency - rolling element (60 rpm)</b>    | 3.849 Hz |
| <b>FTF - Rotational frequency - cage (60 rpm)</b>               | 0.5 Hz   |

## ABUTMENT

|                                                       |        |
|-------------------------------------------------------|--------|
| <b>ra max - Max shaft &amp; housing fillet radius</b> | 0,6 mm |
| <b>Da max - Max shoulder diameter OR</b>              | 53 mm  |
| <b>da min - Min shoulder diameter IR</b>              | 57 mm  |



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