



Image may differ from product. See technical specification for details.

## NK 55/35

### Single row needle roller bearing with machined rings, with flanges, without inner ring

Single row needle roller bearings without an inner ring consist of an outer ring with a needle roller and cage assembly. They are an excellent choice for compact bearing arrangements in applications where hardened and ground raceways can be provided on the shaft. The outer ring includes two integral flanges to guide the bearing axially and an annular groove with one or more lubrication holes to facilitate relubrication.

- High radial load carrying capacity
- High stiffness
- Low cross-sectional height
- Accommodate axial displacement in both directions

# Overview

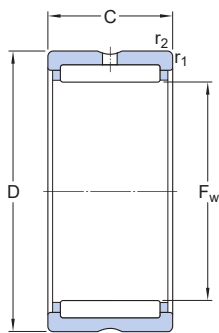
## Dimensions

|                                           |       |
|-------------------------------------------|-------|
| Bore diameter of needle roller complement | 55 mm |
| Outside diameter                          | 68 mm |
| Width                                     | 35 mm |

## Properties

|                                             |                            |
|---------------------------------------------|----------------------------|
| Bearing part                                | Bearing without inner ring |
| Number of rows                              | 1                          |
| Outer ring type                             | Machined (solid)           |
| Aligning feature                            | Without                    |
| Cage                                        | Sheet steel                |
| Number of flanges, outer ring               | 2                          |
| Tolerance class                             | Normal                     |
| Material, bearing                           | Bearing steel              |
| Coating                                     | Without                    |
| Sealing                                     | Without                    |
| Lubricant                                   | None                       |
| Relubrication feature                       | With                       |
| Indicative carbon footprint for new product | 1 kg CO <sub>2</sub> e     |

## Technical specification



## Performance

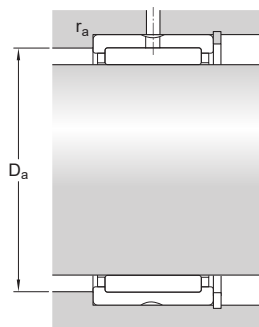
|                           |              |
|---------------------------|--------------|
| Basic dynamic load rating | 60 kN        |
| Basic static load rating  | 122 kN       |
| Reference speed           | 7 500 r/min  |
| Limiting speed            | 8 500 r/min  |
| SKF performance class     | SKF Explorer |

## Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 0.273 kg    |
| eClass code        | 23-05-09-03 |
| UNSPSC code        | 31171512    |

## Dimensions

|                  |             |                              |
|------------------|-------------|------------------------------|
| F <sub>w</sub>   | 55 mm       | Diameter under rollers       |
| D                | 68 mm       | Outside diameter             |
| C                | 35 mm       | Width                        |
| r <sub>1,2</sub> | min. 0.6 mm | Chamfer dimension outer ring |

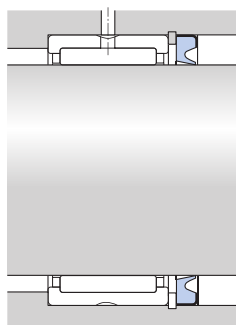


## Abutment dimensions

|       |             |                              |
|-------|-------------|------------------------------|
| $D_a$ | max. 64 mm  | Diameter of housing abutment |
| $r_a$ | max. 0.6 mm | Fillet radius                |

## Calculation data

|                           |       |              |
|---------------------------|-------|--------------|
| SKF performance class     |       | SKF Explorer |
| Basic dynamic load rating | C     | 60 kN        |
| Basic static load rating  | $C_0$ | 122 kN       |
| Fatigue load limit        | $P_u$ | 15.6 kN      |
| Reference speed           |       | 7 500 r/min  |
| Limiting speed            |       | 8 500 r/min  |



## Associated seals

55x68x8 HMS5 RG

Radial shaft seal

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5, ISO - F6 ( $F_w$ )
- Radial internal clearance: table

DESIGN CONSIDERATIONS

- [Housing tolerances: table](#)
- [Shaft tolerances: Operating clearance](#)

Compatible products

Recommended product

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|                                                                                          |                                 |
|------------------------------------------------------------------------------------------|---------------------------------|
| Radial shaft seal with rubber outside diameter and single sealing lip, for oil or grease | <a href="#">55X68X8 HMS5 RG</a> |
|------------------------------------------------------------------------------------------|---------------------------------|

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