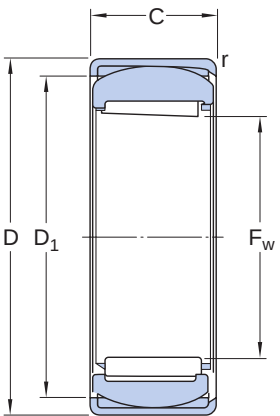


RPNA 18/32

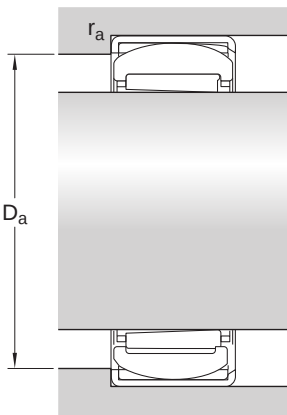
Alignment needle roller bearings are self-aligning and offer a compact solution in applications where less space is available. Owing to their large number of rollers, they have a high load carrying capacity. Their internal design, where a convex outer ring meets two concave seating rings encased in a drawn sleeve, enables the bearings to accommodate initial static misalignment. Bearings without an inner ring are an excellent choice for compact bearing arrangements, if the shaft can be hardened and ground.



- High radial load carrying capacity
- Accommodate static initial misalignment
- Low cross-sectional height
- Suitable for compact bearing arrangements



| Dimensions     |             |                                      |
|----------------|-------------|--------------------------------------|
| F <sub>w</sub> | 18 mm       | Diameter under rollers               |
| D              | 32 mm       | Outside diameter                     |
| C              | 16 mm       | Width                                |
| D <sub>1</sub> | 27 mm       | Shoulder diameter sleeve             |
| r              | min. 0.8 mm | Chamfer dimension sheet steel sleeve |



| Abutment dimensions |             |                                                |
|---------------------|-------------|------------------------------------------------|
| D <sub>a</sub>      | min. 26 mm  | Smallest permissible abutment diameter housing |
| D <sub>a</sub>      | max. 27 mm  | Diameter of housing abutment                   |
| r <sub>a</sub>      | max. 0.8 mm | Fillet radius                                  |

Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | C              | 12.8 kN      |
| Basic static load rating  | C <sub>0</sub> | 17.6 kN      |
| Fatigue load limit        | P <sub>u</sub> | 2.12 kN      |
| Reference speed           |                | 22 000 r/min |
| Limiting speed            |                | 24 000 r/min |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, ISO - F6 (F<sub>w</sub>)
- Radial internal clearance: table

DESIGN CONSIDERATIONS

- Shaft and housing tolerances: table