

K 7X10X10 TN

Needle roller and cage assemblies are self-contained, ready-to-mount bearings without inner and outer rings. In applications where the shaft and housing bore can serve as raceways, the assemblies can be used to create bearing arrangements that require minimal radial space. As the clearance of the bearing arrangement is only affected by the roller sorting and the finish of shaft and housing, very precise bearing arrangements can be achieved.



- High radial load carrying capacity
- High stiffness
- High precision
- Lowest cross-sectional height among rolling bearings
- Accommodate axial displacement in both directions



| Dimensions     |       |                                       |
|----------------|-------|---------------------------------------|
| F <sub>w</sub> | 7 mm  | Diameter under rollers                |
| E <sub>w</sub> | 10 mm | Outside diameter roller complement    |
| U              | 10 mm | Width needle roller and cage assembly |

Calculation data

|                           |                |              |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | C              | 3.58 kN      |
| Basic static load rating  | C <sub>0</sub> | 3.75 kN      |
| Fatigue load limit        | P <sub>u</sub> | 0.415 kN     |
| Reference speed           |                | 32 000 r/min |
| Limiting speed            |                | 36 000 r/min |

Associated products

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: gauges
- Radial internal clearance

### DESIGN CONSIDERATIONS

- Shaft and housing tolerances

AGA BEARINGS