

## HK 4520



Drawn cup needle roller bearings are typically used in applications where the housing bore cannot be used as a raceway for a needle roller and cage assembly, but where a very compact and economical bearing arrangement is required. Owing to their large number of rollers, the bearings have a high load carrying capacity and stiffness.

- High radial load carrying capacity
- High stiffness
- Very low cross-sectional height



### Dimensions

|       |             |                                          |
|-------|-------------|------------------------------------------|
| $F_w$ | 45 mm       | Diameter under rollers                   |
| $D$   | 52 mm       | Outside diameter                         |
| $C$   | 20 mm       | Width                                    |
| $r$   | min. 0.8 mm | Chamfer dimension drawn cup (outer ring) |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | $C$   | 26 kN       |
| Basic static load rating  | $C_0$ | 60 kN       |
| Fatigue load limit        | $P_u$ | 7.2 kN      |
| Reference speed           |       | 5 600 r/min |
| Limiting speed            |       | 6 300 r/min |

### Associated products

|                                                                 |               |
|-----------------------------------------------------------------|---------------|
| Inner ring IR series                                            | IR 40x45x20.5 |
| Radial shaft seal with a low cross-sectional height, single lip | G 45x52x4     |
| Radial shaft seal with a low cross-sectional height, double lip | SD 45x52x4    |

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: table

### DESIGN CONSIDERATIONS

- Shaft and housing tolerances: table

AGA BEARINGS