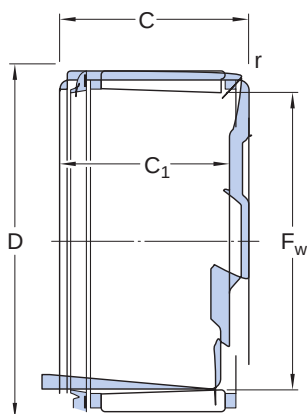


## BK 1414 RS

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 the large number of rollers, the bearings have a high load carrying capacity and stiffness. The closed end makes them suitable for bearing arrangements where they are situated at the end of a shaft. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out. Sealed bearings are delivered with an initial grease fill.



- High radial load carrying capacity
- Accommodate small axial guidance forces
- High stiffness
- Very low cross-sectional height
- Sealed at open end for increased reliability



### Dimensions

|       |              |                                          |
|-------|--------------|------------------------------------------|
| $F_w$ | 14 mm        | Diameter under rollers                   |
| $D$   | 20 mm        | Outside diameter                         |
| $C$   | 14 mm        | Width                                    |
| $C_1$ | min. 11.3 mm | Depth of the drawn cup BK                |
| $r$   | min. 0.8 mm  | Chamfer dimension drawn cup (outer ring) |

### Calculation data

|                           |       |             |
|---------------------------|-------|-------------|
| Basic dynamic load rating | $C$   | 6.82 kN     |
| Basic static load rating  | $C_0$ | 8.65 kN     |
| Fatigue load limit        | $P_u$ | 0.98 kN     |
| Limiting speed            |       | 9 500 r/min |

### Associated products

## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- Tolerances: table

### DESIGN CONSIDERATIONS

- Shaft and housing tolerances: table

AGA BEARINGS