



## SKF HK 3516

### Drawn cup needle roller bearing with open ends

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.

## Technical specifications

| Dimensions                                |        |
|-------------------------------------------|--------|
| Diameter under rollers                    | 35 mm  |
| Outside diameter                          | 42 mm  |
| Width                                     | 16 mm  |
| Chamfer dimension drawn cup (outer ring)  | 0.8 mm |
| Bore diameter of needle roller complement | 35 mm  |

| Calculation data          |            |
|---------------------------|------------|
| Basic dynamic load rating | 17.9 kN    |
| Basic static load rating  | 34 kN      |
| Fatigue load limit        | 4 kN       |
| Reference speed           | 7000 r/min |
| Limiting speed            | 8000 r/min |

| Associated products                                             |               |
|-----------------------------------------------------------------|---------------|
| Inner ring IR series                                            | IR 30x35x17   |
| Inner ring LR series                                            | LR 30x35x16.5 |
| Radial shaft seal with a low cross-sectional height, single lip | G 35x42x4     |
| Radial shaft seal with a low cross-sectional height, double lip | SD 35x42x4    |

| Performance               |            |
|---------------------------|------------|
| Basic dynamic load rating | 17.9 kN    |
| Basic static load rating  | 34 kN      |
| Reference speed           | 7000 r/min |
| Limiting speed            | 8000 r/min |

| Properties                                  |                            |
|---------------------------------------------|----------------------------|
| Bearing part                                | Bearing without inner ring |
| Number of rows                              | 1                          |
| Outer ring type                             | Drawn cup with open ends   |
| 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                       | Without                    |
| Indicative carbon footprint for new product | 0.13 kg CO <sub>2</sub>    |

| Logistics          |             |
|--------------------|-------------|
| Product net weight | 0.0348 kg   |
| eClass code        | 23-05-09-03 |
| UNSPSC code        | 31171512    |

**SKF drawings**

