



SKF BK 3520

Drawn cup needle roller bearing with a closed end

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.

Technical specifications

Dimensions	
Diameter under rollers	35 mm
Outside diameter	42 mm
Width	20 mm
Depth of the drawn cup BK	17.3 mm
Chamfer dimension drawn cup (outer ring)	0.8 mm
Bore diameter of needle roller complement	35 mm

Calculation data	
Basic dynamic load rating	22.9 kN
Basic static load rating	46.5 kN
Fatigue load limit	5.6 kN
Reference speed	7000 r/min
Limiting speed	8000 r/min

Associated products	
Inner ring IR series	IR 30x35x20.5
Inner ring LR series	LR 30x35x20.5
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	22.9 kN
Basic static load rating	46.5 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 one closed end
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	0.2 kg CO ₂

Logistics	
Product net weight	0.055 kg
eClass code	23-05-09-03
UNSPSC code	31171512

SKF drawings

