



SKF 31312

Single row tapered roller bearing

Single row tapered roller bearings are designed to accommodate combined radial and axial loads and provide low friction during operation. The inner ring, with rollers and cage, can be mounted separately from the outer ring. These separable and interchangeable components facilitate mounting, dismounting and maintenance. By mounting one single row tapered roller bearing against another and applying a preload, a rigid bearing application can be achieved.

Technical specifications

General	
Dimension series	7FB

Dimensions	
Bore diameter	60 mm
Outside diameter	130 mm
Bearing width, total	33.5 mm
Shoulder diameter of inner ring	96 mm
Width of inner ring	31 mm
Width of outer ring	22 mm
Chamfer dimension of inner ring	3 mm
Chamfer dimension of outer ring	2.5 mm
Distance side face to pressure point	39.3 mm
Width, total	33.5 mm
Width, inner ring	31 mm
Width, outer ring	22 mm
Contact angle	28.8 °

Abutment dimensions	
Diameter of shaft abutment	74 mm
Diameter of shaft abutment	72.5 mm
Diameter of housing abutment	103 mm
Diameter of housing abutment	119.5 mm
Diameter of housing abutment	123 mm
Minimum width of space required in housing on large side face	5 mm
Minimum width of space required in housing on small side face	11.5 mm
Radius of shaft fillet	3 mm
Radius of housing fillet	2.5 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	177 kN
Basic static load rating	166 kN
Fatigue load limit	20.4 kN
Reference speed	3800 r/min
Limiting speed	5300 r/min
Limiting value	0.83
Calculation factor	0.72
Calculation factor	0.4

Performance	
Basic dynamic load rating	177 kN
Basic static load rating	166 kN
Reference speed	3800 r/min
Limiting speed	5300 r/min
SKF performance class	SKF Explorer

Properties	

Bearing part	Complete bearing
Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Arrangement of contact angle (double-row bearing)	Not applicable
Matched arrangement	No
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Unit system	Metric
Indicative carbon footprint for new product	6.9 kg CO ₂ e

Logistics	
Product net weight	1.93 kg
eClass code	23-05-09-10
UNSPSC code	31171516

SKF drawings