



SKF 31307

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	35 mm
Outside diameter	80 mm
Bearing width, total	22.75 mm
Shoulder diameter of inner ring	59.6 mm
Width of inner ring	21 mm
Width of outer ring	15 mm
Chamfer dimension of inner ring	2 mm
Chamfer dimension of outer ring	1.5 mm
Distance side face to pressure point	24.95 mm
Width, total	22.75 mm
Width, inner ring	21 mm
Width, outer ring	15 mm
Contact angle	28.8 °

Abutment dimensions	
Diameter of shaft abutment	45 mm
Diameter of shaft abutment	44.5 mm
Diameter of housing abutment	62 mm
Diameter of housing abutment	72.5 mm
Diameter of housing abutment	76 mm
Minimum width of space required in housing on large side face	3 mm
Minimum width of space required in housing on small side face	7.5 mm
Radius of shaft fillet	2 mm
Radius of housing fillet	1.5 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	75.4 kN
Basic static load rating	67 kN
Fatigue load limit	7.8 kN
Reference speed	6300 r/min
Limiting speed	8500 r/min
Limiting value	0.83
Calculation factor	0.72
Calculation factor	0.4

Performance	
Basic dynamic load rating	75.4 kN
Basic static load rating	67 kN
Reference speed	6300 r/min
Limiting speed	8500 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	1.9 kg CO ₂ e

Logistics	
Product net weight	0.522 kg
eClass code	23-05-09-10
UNSPSC code	31171516

SKF drawings