



SKF 33024

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	2DE

Dimensions	
Bore diameter	120 mm
Outside diameter	180 mm
Bearing width, total	48 mm
Shoulder diameter of inner ring	149.38 mm
Width of inner ring	48 mm
Width of outer ring	38 mm
Chamfer dimension of inner ring	2.5 mm
Chamfer dimension of outer ring	2 mm
Distance side face to pressure point	36.3 mm
Width, total	48 mm
Width, inner ring	48 mm
Width, outer ring	38 mm
Contact angle	11.5 °

Abutment dimensions	
Diameter of shaft abutment	132 mm
Diameter of shaft abutment	133 mm
Diameter of housing abutment	160 mm
Diameter of housing abutment	169 mm
Diameter of housing abutment	171 mm
Minimum width of space required in housing on large side face	6 mm
Minimum width of space required in housing on small side face	10 mm
Radius of shaft fillet	2.5 mm
Radius of housing fillet	2 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	356 kN
Basic static load rating	540 kN
Fatigue load limit	56 kN
Reference speed	2800 r/min
Limiting speed	3400 r/min
Limiting value	0.3
Calculation factor	2
Calculation factor	1.1

Performance	
Basic dynamic load rating	356 kN
Basic static load rating	540 kN
Reference speed	2800 r/min
Limiting speed	3400 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	15 kg CO ₂ e

Logistics	
Product net weight	4.18 kg
eClass code	23-05-09-10
UNSPSC code	31171516

SKF drawings