



SKF 31317/DF

Matched tapered roller bearings arranged face-to-face

Matched tapered roller bearings arranged face-to-face (X-arrangement, load lines diverge towards the bearing axis) accommodate high radial loads and axial loads in both directions. The precision manufactured intermediate ring between the outer rings enables a defined internal clearance or preload to be achieved when mounted. Matched tapered roller bearings are typically used in gearboxes, hoisting equipment, rolling mills, and machines in the mining industry.

Technical specifications

Dimensions	
Bore diameter	85 mm
Outside diameter	180 mm
Total width	89 mm
Width of inner rings	82 mm
Width of lubrication groove	15 mm
Diameter of lubrication hole	10 mm
Chamfer dimension	3 mm
Chamfer dimension	1 mm
Width, total	89 mm
Width, inner ring	82 mm
Width, outer ring	89 mm
Contact angle	28.8 °

Abutment dimensions	
Diameter of shaft abutment	104 mm
Diameter of housing abutment	143 mm
Diameter of housing abutment	167.5 mm
Minimum width of space required in housing on large side face	5 mm
Radius of fillet	4 mm
Radius of fillet	1 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	510 kN
Basic static load rating	570 kN
Fatigue load limit	64 kN
Reference speed	2200 r/min
Limiting speed	3800 r/min
Limiting value	0.83
Calculation factor	0.81
Calculation factor	1.2
Calculation factor	0.8

Performance	
Basic dynamic load rating	510 kN
Basic static load rating	570 kN
Reference speed	2200 r/min
Limiting speed	3800 r/min
SKF performance class	SKF Explorer

Properties	
Bearing part	Complete bearing
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	Face-to-face (X)

Number of bearings in matched set	2
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	With
Indicative carbon footprint for new product	35.2 kg CO ₂ e

Logistics	
Product net weight	9.78 kg
eClass code	23-05-09-10

SKF drawings