



SKF 6414

Deep groove ball bearing

Single row deep groove ball bearings are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than many other bearing types.

Technical specifications

Dimensions	
Bore diameter	70 mm
Deviation limits of mid-range bore diameter	-0.015..0 mm
Outside diameter	180 mm
Deviation limits of mid-range outside diameter	-0.025..0 mm
Width	42 mm
Deviation limits of ring width	-0.15..0 mm
Shoulder diameter	103.5 mm
Shoulder diameter	145.95 mm
Chamfer dimension	3 mm
ISO tolerance class for dimensions	Normal

Abutment dimensions	
Diameter of shaft abutment	86 mm
Diameter of housing abutment	164 mm
Radius of shaft or housing fillet	2.5 mm

Calculation data	
Basic dynamic load rating	143 kN
Basic static load rating	104 kN
Fatigue load limit	3.9 kN
Reference speed	8500 r/min
Limiting speed	5300 r/min
Minimum load factor	0.04
Calculation factor	12.1

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	20 µm
Range of section height at outer ring of assembled bearing	45 µm
ISO tolerance class for geometrical tolerances	Normal

Performance	
Basic dynamic load rating	143 kN
Basic static load rating	104 kN
Reference speed	8500 r/min
Limiting speed	5300 r/min

Properties	
Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without

Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	17.4 kg CO ₂ e

Logistics	
Product net weight	4.83 kg
eClass code	23-05-08-01
UNSPSC code	31171504

SKF drawings