



SKF 61903

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	17 mm
Deviation limits of mid-range bore diameter	-0.007..0 mm
Outside diameter	30 mm
Deviation limits of mid-range outside diameter	-0.008..0 mm
Width	7 mm
Deviation limits of ring width	-0.12..0 mm
Shoulder diameter	21 mm
Recess diameter	27.7 mm
Chamfer dimension	0.3 mm
ISO tolerance class for dimensions	P6

Abutment dimensions	
Diameter of shaft abutment	19 mm
Diameter of housing abutment	28 mm
Radius of shaft or housing fillet	0.3 mm

Calculation data	
Basic dynamic load rating	4.62 kN
Basic static load rating	2.55 kN
Fatigue load limit	0.108 kN
Reference speed	50000 r/min
Limiting speed	32000 r/min
Minimum load factor	0.02
Calculation factor	14.7

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	7 µm
Range of section height at outer ring of assembled bearing	9 µm
ISO tolerance class for geometrical tolerances	P6

Performance	
Basic dynamic load rating	4.62 kN
Basic static load rating	2.55 kN
Reference speed	50000 r/min
Limiting speed	32000 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	0.06 kg CO ₂ e

Logistics	
Product net weight	0.0154 kg
eClass code	23-05-08-01
UNSPSC code	31171504

SKF drawings