



SKF 6213/HC5C3

Hybrid ceramic deep groove ball bearing

Hybrid ceramic single row deep groove ball bearings have rings made of bearing steel and rolling elements made of bearing grade silicon nitride, which make the bearings electrically insulating. Deep groove ball bearings are the most widely used bearing type, especially in electric motors. The ceramic rolling elements not only provide protection from electric current damage but also, when compared to same-sized bearings with steel rolling elements, provide enhanced bearing performance, extended bearing service life, higher speed capability, high wear-resistance, high bearing stiffness, reduced risk of smearing and false brinelling, and less sensitivity to temperature gradients. These characteristics make them suitable for use in difficult conditions and contaminated environments.

Technical specifications

Dimensions	
Bore diameter	65 mm
Outside diameter	120 mm
Width	23 mm
Shoulder diameter inner ring	83.3 mm
Recess diameter outer ring shoulder	105.8 mm
Chamfer dimension	1.5 mm

Abutment dimensions	
Abutment diameter shaft	74 mm
Abutment diameter shaft	83.2 mm
Abutment diameter housing	111 mm
Fillet radius	1.5 mm

Calculation data	
Basic dynamic load rating	55.9 kN
Basic static load rating	40.5 kN
Fatigue load limit	1.25 kN
Reference speed	14000 r/min
Limiting speed	8500 r/min
Calculation factor	0.03
Calculation factor	14.7

Performance	
Basic dynamic load rating	55.9 kN
Basic static load rating	40.5 kN
Reference speed	14000 r/min
Limiting speed	8500 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	C3
Material, bearing	Hybrid (ceramic balls)
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	3.2 kg CO ₂

Logistics	
Product net weight	0.884 kg
eClass code	23-05-08-01
UNSPSC code	31171504

SKF drawings

