



SKF UCF 309

Square flanged ball bearing unit with set screw locking, cast iron housing, JIS

These square flanged ball bearing units are compliant with Japanese Industrial Standards (JIS). They consist of an insert bearing, with an extended inner ring and set screw locking, and are suitable for applications where the direction of rotation is constant or alternating. The bearing is mounted in a cast iron housing, which can be bolted to a machine wall or frame. Ball bearing units can accommodate moderate initial misalignment, but normally do not permit axial displacement.

Technical specifications

General	
Compliance with standard	JIS
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Without
Coating	Without

Dimensions	
Bore diameter	45 mm
Outer diameter of inner ring	63 mm
Width of housing	46 mm
Flange width	19 mm
Width of inner ring	57 mm
Distance from locking device side face to thread centre	10 mm
Top external diameter	130 mm
Centre distance between bolt holes	125 mm
Overall length	162 mm
Diameter of attachment bolt hole	19 mm
Distance from locking device side face to raceway centre	35 mm
Overall width	60 mm
Housing thread for grease fitting	1/8-27 NPT
Axial position of the housing thread	30.5 mm
Diameter of head sphere of grease fitting	6.589 mm
Hexagonal key size for the grease fitting	11.11 mm
Thread of grease fitting	1/8-27 NPT
Attachment bolt diameter	16 mm
Shaft diameter	45 mm
Housing overall width	46 mm
Width, total	60 mm
Bearing width, total	57 mm

Calculation data	
Basic dynamic load rating	52.7 kN
Basic static load rating	32 kN
Fatigue load limit	1.34 kN
Limiting speed	3750 r/min
	Limiting speed with shaft tolerance h6

Mounting information	
Set screw	M10x1.25
Hexagonal key size for set screw	5.08 mm
Recommended tightening torque for set screw	16.5 N·m
Recommended diameter for attachment bolts, mm	16 mm
Recommended diameter for attachment bolts, inch	0.625 in

Performance	

Basic dynamic load rating	52.7 kN
Basic static load rating	32 kN
Limiting speed	3750 r/min
Note	Limiting speed with shaft tolerance h6

Properties	
Housing type	Flanged
Flanged housing type	Square
Number of bolt holes for fasteners	4
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

Logistics	
Product net weight	3.8 kg
eClass code	23-05-16-02
UNSPSC code	31171536

SKF drawings

