



SKF UCP 309

Pillow block ball bearing unit with extended inner ring and set screw locking, cast iron housing

Pillow (plummer) block ball bearing units consist of an insert bearing mounted in a cast iron housing that can be bolted to a support surface. This variant is strong and stiff, and is suitable for applications with both constant and alternating directions of rotation. It has an inner ring extended on both sides and is locked onto the shaft by tightening a set screw on the inner ring, making it easy to mount.

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
Shoulder diameter of inner ring	63 mm
Base width	63 mm
Top width	42 mm
Width of inner ring	57 mm
Distance from locking device side face to thread centre	10 mm
Height of spherical seat centre	67 mm
Foot height	25 mm
Overall height	136 mm
Distance between attachment bolts	190 mm
Maximum distance between attachment bolts	199 mm
Minimum distance between attachment bolts	181 mm
Overall length	247 mm
Diameter of attachment bolt hole	20 mm
Length of attachment bolt hole	29 mm
Distance from locking device side face to raceway centre	35 mm
Housing thread for the grease fitting	1/4-28 UNF
Axial position of the housing thread	5.5 mm
Angular position of the housing thread	45 °
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
Centre height (pillow block)	67 mm
Housing overall width	63 mm
Centre distance between bolt holes	190 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	Pillow block, normal base
Number of bolt holes for fasteners	2
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	5.05 kg
eClass code	23-05-16-02
UNSPSC code	31171536



