



SKF SY 45 FM

Pillow block ball bearing unit with narrow inner ring and eccentric locking collar,

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 intended for use in applications where the direction of rotation is constant. It has a narrow inner ring and is locked onto the shaft by an eccentric locking collar, making it easy to mount.

Technical specifications

General	
Compliance with standard	ISO
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Optional end cover
Coating	Without

Dimensions	
Bore diameter	45 mm
Shoulder diameter of inner ring	56.8 mm
Outside diameter of locking ring	62 mm
Base width	48 mm
Top width	32 mm
Standout of end cover	26.5 mm
Width of inner ring	30.2 mm
Overall bearing width	43.7 mm
Distance from locking device side face to thread centre	6.75 mm
Height of spherical seat centre	54 mm
Foot height	21 mm
Overall height	107 mm
Distance between attachment bolts	143.5 mm
Maximum distance between attachment bolts	152 mm
Minimum distance between attachment bolts	135 mm
Overall length	187 mm
Diameter of attachment bolt hole	14 mm
Length of attachment bolt hole	22.5 mm
Distance from locking device side face to raceway centre	32.7 mm
Housing thread for the grease fitting	1/4-28 UNF
Axial position of the housing thread	4 mm
Angular position of the housing thread	45 °
Diameter of head sphere of grease fitting	6.5 mm
Hexagonal key size for the grease fitting	7 mm
Thread of grease fitting	1/4-28 SAE-LT
Distance of dowel pins	173 mm
Axial offset of dowel pins	17 mm
Recommended diameter for dowel pins	4 mm
Attachment bolt diameter	12 mm
Shaft diameter	45 mm
Centre height (pillow block)	54 mm
Housing overall width	48 mm
Centre distance between bolt holes	143.5 mm
Bearing width, total	43.7 mm

Calculation data	
Basic dynamic load rating	33.2 kN
Basic static load rating	21.6 kN

Fatigue load limit	0.915 kN
Limiting speed	4300 r/min
	Limiting speed with shaft tolerance h6

Mounting information	
Set screw	M10x1
Hexagonal key size for set screw	5 mm
Recommended tightening torque for set screw	16.5 N·m
Recommended diameter for attachment bolts, mm	12 mm
Recommended diameter for attachment bolts, inch	0.5 in

Performance	
Basic dynamic load rating	33.2 kN
Basic static load rating	21.6 kN
Limiting speed	4300 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	Eccentric collar
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal on both sides
Sealing type	Contact, standard
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

Logistics	
Product net weight	2.1 kg
eClass code	23-05-08-02
UNSPSC code	31171536

SKF drawings



