



SKF SY 50 WF

Pillow block ball bearing unit with extended 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 an extended inner ring on both sides 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; For air handling applications
Material, housing	Cast iron
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Optional end cover
Coating	Without

Dimensions	
Bore diameter	50 mm
Shoulder diameter of inner ring	62.51 mm
Outside diameter of locking ring	67.2 mm
Base width	54 mm
Top width	34 mm
Standout of end cover	33 mm
Width of inner ring	49.2 mm
Overall bearing width	62.7 mm
Distance from locking device side face to thread centre	6.75 mm
Height of spherical seat centre	57.2 mm
Foot height	22 mm
Overall height	114 mm
Distance between attachment bolts	157 mm
Maximum distance between attachment bolts	165 mm
Minimum distance between attachment bolts	149 mm
Overall length	203 mm
Diameter of attachment bolt hole	18 mm
Length of attachment bolt hole	26 mm
Distance from locking device side face to raceway centre	38.1 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	187 mm
Axial offset of dowel pins	19 mm
Recommended diameter for dowel pins	4 mm
Attachment bolt diameter	16 mm
Shaft diameter	50 mm
Centre height (pillow block)	57.2 mm
Housing overall width	54 mm
Centre distance between bolt holes	157 mm
Bearing width, total	62.7 mm

Calculation data	
Basic dynamic load rating	35.1 kN

Basic static load rating	23.2 kN
Fatigue load limit	0.98 kN
Limiting speed	4000 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	16 mm
Recommended diameter for attachment bolts, inch	0.625 in

Performance	
Basic dynamic load rating	35.1 kN
Basic static load rating	23.2 kN
Limiting speed	4000 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 and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

Logistics	
Product net weight	2.78 kg
eClass code	23-05-08-02
UNSPSC code	31171536

SKF drawings



