



SKF FY 50 FM

Square flanged ball bearing unit with eccentric locking, cast iron housing, ISO

These square flanged ball bearing units are compliant with ISO standards. They consist of an insert bearing, with a narrow inner ring and eccentric locking, and are intended primarily for use in applications where the direction of rotation is constant. 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	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	50 mm
Outer diameter of inner ring	62.51 mm
Outside diameter of locking ring	67.2 mm
Width of housing	43 mm
Flange width	15 mm
Depth of centring recess	3.2 mm
Standout of end cover	33 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
Top external diameter	107 mm
Base external diameter	118 mm
Diameter of housing centering recess	125.4 mm
Centre distance between bolt holes	111 mm
Overall length	143 mm
Diameter of attachment bolt hole	18 mm
Distance from locking device side face to raceway centre	32.7 mm
Overall width	60.7 mm
Housing thread for grease fitting	1/4-28 UNF
Axial position of the housing thread	28.5 mm
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	129 mm
Axial offset of dowel pins	35.5 mm
Recommended diameter for dowel pins	4 mm
Attachment bolt diameter	16 mm
Shaft diameter	50 mm
Housing overall width	43 mm
Width, total	60.7 mm
Bearing width, total	43.7 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	Flanged
Flanged housing type	Square
Number of bolt holes for fasteners	4
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	2.23 kg
eClass code	23-05-08-02
UNSPSC code	31171536

SKF drawings

