

FYTB 50 FMOval flanged ball bearing unit with eccentric locking, cast iron housing, ISO

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

These oval 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.

- Resist high levels of contamination
- Designed for high temperatures and speeds
- Accommodate relatively heavy loads
- Cost-effective

Overview

Dimensions

Shaft diameter	50 mm
Housing overall width	43 mm
Width, total	60.7 mm
Centre distance between bolt holes	157 mm
Bearing width, total	43.7 mm

Performance

Basic dynamic load rating	35.1 kN
Basic static load rating	23.2 kN
Limiting speed	4 000 r/min
Note	Limiting speed with shaft tolerance h6

Properties

Housing type	Flanged
Flanged housing type	Oval
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

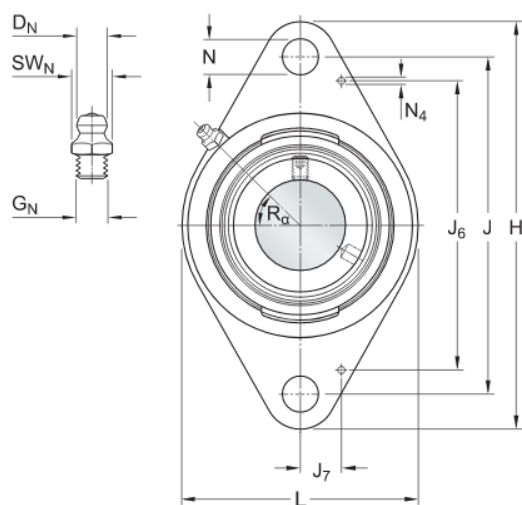
Technical Specification

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

d	50 mm	Bore diameter
d_1	≈ 62.51 mm	Outer diameter of inner ring
d_2	67.2 mm	Outside diameter of locking ring
A	43 mm	Overall width
A_1	15 mm	Flange width
A_3	3.2 mm	Depth of centring recess
A_5	33 mm	Width including end cover
B	30.2 mm	Width of inner ring
B_1	43.7 mm	Overall bearing width
B_4	6.75 mm	Distance from locking device side face to thread centre
D_{b1}	107 mm	Top external diameter
D_{b2}	116 mm	Base external diameter
D_c	101.6 mm	Diameter of housing centering recess
H	189 mm	Overall height
J	157	Distance between attachment bolts



	mm	
L	116 mm	Overall length
N	18 mm	Diameter of attachment bolt hole
S ₁	32.7 mm	Distance from locking device side face to raceway centre
T	60.7 mm	Overall unit width

Threaded hole

R _G	1/4-28 UNF	Housing thread for grease fitting
R ₁	28.5 mm	Axial position of the housing thread
R _α	45 °	Angular position of the housing thread

Grease fitting

D _N	6.5 mm	Diameter of head sphere of grease fitting
SW	7 mm	Hexagonal key size for the grease fitting
G _N	1/4-28 SAE-LT	Thread of grease fitting

Dowel pins

J ₆	127 mm	Distance of dowel pins
J ₇	20 mm	Axial offset of dowel pins
N ₄	2 mm	Recommended diameter for dowel pins

Calculation data

Basic dynamic load rating	C	35.1 kN
Basic static load rating	C ₀	23.2 kN
Fatigue load limit	P _u	0.98 kN
Limiting speed		4 000 r/min
		Limiting speed with shaft tolerance h ₆

Mass

Mass bearing unit	2 kg
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Mounting information

Set screw	G ₂	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	G	16 mm
Recommended diameter for attachment bolts, inch	G	0.625 in

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