



Image may differ from product. See technical specification for details.

# FYTB 15 FM

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**

Attachment bolt diameter	10 mm
Shaft diameter	15 mm
Housing overall width	26 mm
Width, total	39.1 mm
Centre distance between bolt holes	76.5 mm
Bearing width, total	28.6 mm

## Performance

Basic dynamic load rating	9.56 kN
Basic static load rating	4.75 kN
Limiting speed	9 500 r/min
Note	Limiting speed with shaft tolerance h6

# **Properties**

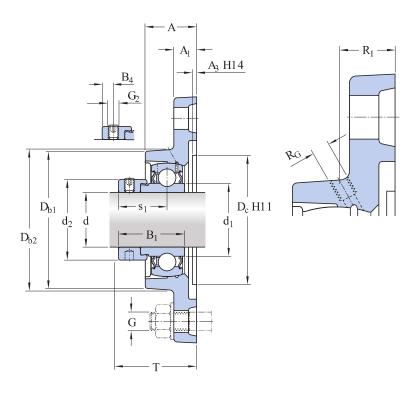
Housing type	Flanged
Flanged housing type	Oval
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Eccentric collar
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal on both sides
Sealing type	Contact, standard
Sealing, unit	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

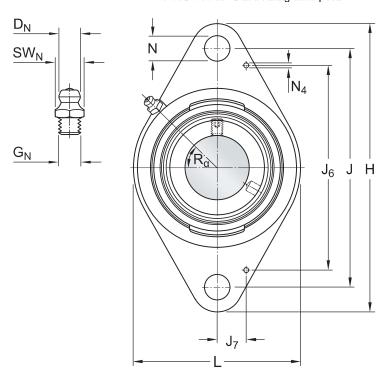
# Logistics

Product net weight	0.35 kg
eClass code	23-05-08-02
UNSPSC code	31171536

# **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	Without
Coating	Without





# Dimensions

d	15 mm	Bore diameter
$d_1$	≈ 24.2 mm	Outer diameter of inner ring
d <sub>2</sub>	27.2 mm	Outside diameter of locking ring
А	26 mm	Width of housing
$A_1$	11 mm	Flange width
A <sub>3</sub>	3.2 mm	Depth of centring recess
В	19.1 mm	Width of inner ring
$B_1$	28.6 mm	Overall bearing width
B <sub>4</sub>	4.75 mm	Distance from locking device side face to thread centre
$D_{b1}$	50 mm	Top external diameter
D <sub>b2</sub>	57 mm	Base external diameter
$D_{c}$	50.8 mm	Diameter of housing centering recess
Н	98.5 mm	Overall height
J	76.5 mm	Centre distance between bolt holes
L	57 mm	Overall length
N	11.5 mm	Diameter of attachment bolt hole
$s_1$	22.1 mm	Distance from locking device side face to raceway centre

Т	39.1 mm	Overall width

## **GREASE FITTING**

$D_N$	6.5 mm	Diameter of head sphere of grease fitting
$SW_N$	7 mm	Hexagonal key size for the grease fitting
$G_N$	1/4-28 SAE-LT	Thread of grease fitting

## **DOWEL PINS**

J <sub>6</sub>	61.5 mm	Distance of dowel pins
J <sub>7</sub>	11 mm	Axial offset of dowel pins
N <sub>4</sub>	2 mm	Recommended diameter for dowel pins

## THREADED HOLE

$R_{\mathrm{G}}$	1/4-28 UNF	Housing thread for grease fitting
$R_1$	19 mm	Axial position of the housing thread
$R_{\alpha}$	45 °	Angular position of the housing thread

## Calculation data

Basic dynamic load rating	С	9.56 kN
Basic static load rating	$C_0$	4.75 kN
Fatigue load limit	Pu	0.2 kN
Limiting speed		9 500 r/min
		Limiting speed with shaft tolerance h6

# Mounting information

Set screw	G <sub>2</sub>	M6x0.75
Hexagonal key size for set screw		3 mm

Recommended tightening torque for set screw		4 N·m
Recommended diameter for attachment bolts, mm	G	10 mm
Recommended diameter for attachment bolts, inch	G	0.375 in

## Tolerances and clearances

# The values depend on the included bearing:

- Bore diameter tolerance → table 1
- Radial internal clearance → table 2
- Recommended fit → table 3
- Shaft tolerance → table 4

# Compatible products

# Component

Oval flanged housing for insert bearings, cast iron	FYTB 503 M
Insert bearing with an eccentric locking collar and narrow inner ring	YET 203/15

# **More Information**

Product details	Engineering information	Tools
Flanged units to ISO standards	_	SKF Product select
Flanged units to North American standards	Principles of ball bearing units selection and application - Download catalogue (4.9 MB)	Bearing Frequency Calculator
Flanged units to Japanese Industrial Standards (JIS)	Principles of selecting mounted bearing solutions	
Flanged units, not standardized (SKF Food Line)	Bearing failure and how to prevent it	
Permissible misalignment		
Locating/non-locating support		
Loads		
Temperature limits		
Permissible speed		
Lubrication		
Mounting and dismounting		
Ordering information		
Designation system		



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