

# Oval flanged ball bearing unit with set screw locking, cast iron housing, JIS

These oval flanged ball bearing units are compliant with Japanese Industrial Standards (JIS). They consist of an insert bearing, with an extended inner ring and set screw locking, and are suitable for applications where the direction of rotation is constant or alternating. 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

#### Dimensions

Bearing width, total	1.937 in
Centre distance between bolt holes	5.669 in
Housing overall width	1.417 in
Shaft diameter	1.575 in

#### Performance

Overview

Basic dynamic load rating	6 902 lbf
Basic static load rating	4 271 lbf
Limiting speed	4 800 r/min
Note	Limiting speed with shaft tolerance h6

#### Properties

Bore type	Cylindrical
Coating	Without
Fastening bolt hole type	Plain
Flanged housing type	Oval
Grease fitting	With
Housing type	Flanged
Lubricant	Grease
Material, bearing	Bearing steel
Material, housing	Cast iron
Number of bolt holes for fasteners	2
Relubrication hole	With
Retaining feature, inner ring	Set screws

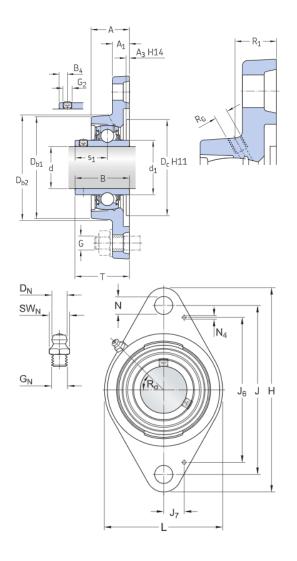


Rubber seating ring	Without
Sealing type	Contact, standard
Sealing, bearing	Seal and flinger on both sides
Sealing, unit	Without



## Technical Specification

Compliance with standard	JIS
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Without
Coating	Without



Dim	ensions	
	1.575 in	Bore diameter
1	≈ 2.039 in	Outer diameter of inner ring
	1.417 in	Overall width
$A_1$	0.63 in	Flange width
5	0.126 in	Depth of centring recess
В	1.937 in	Width of inner ring
	0.315 in	Distance from locking device side face to thread centre
	3.819 in	Top external diameter
D <sub>b2</sub>	3.937 in	Base external diameter
$D_{c}$	3.5 in	Diameter of housing centering recess
Н	6.89 in	Overall height
	5.669 in	Distance between attachment bolts
	3.937 in	Overall length
Ν	0.63 in	Diameter of attachment bolt hole



s <sub>1</sub>	1.189 in	Distance from locking device side face to raceway centre
Т	2.016 in	Overall unit width
Т	2.016 in	Overall unit width

#### Threaded hole

R <sub>c</sub> 1/4-28 UNF	Housing thread for grease fitting
$R_{1} 0.846$ in	Axial position of the housing thread
R <sub>α</sub> 45 °	Angular position of the housing thread

#### Grease fitting

D <sub>1</sub> 0.256 in	Diameter of head sphere of grease fitting
S\ 0.276 in	Hexagonal key size for the grease fitting
G <sub>↑</sub> 1/4-28 SAE-LT	Thread of grease fitting

#### Dowel pins

J <sub>6</sub> 4.567 in	Distance of dowel pins
J <sub>7</sub> 0.63 in	Axial offset of dowel pins
N <sub>4</sub> 0.079 in	Recommended diameter for dowel pins

### Calculation data

Basic dynamic load rating	С	6 902 lbf
Basic static load rating	C <sub>0</sub>	4 271 lbf
Fatigue load limit	Pu	180 lbf
Limiting speed		4 800 r/min
		Limiting speed with shaft tolerance h6

#### Mass



Mass bearing unit	3.417 lb
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## Mounting information

Set screw	G <sub>2</sub>	M8x1
Hexagonal key size for set screw		0.157 in
Recommended tightening torque for set screw		57.53 lbf-in
Recommended diameter for attachment bolts, mm	G	13.995 mm
Recommended diameter for attachment bolts, inch	G	0.563 in

## Included products

Housing	FYTJ 508
Bearing	YAR 208-2F



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