



## **UCF 216**

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

These square 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

## Overview

### **Dimensions**

Shaft diameter	80 mm
Housing overall width	58 mm
Width, total	83.3 mm
Centre distance between bolt holes	165 mm
Bearing width, total	82.6 mm

#### Performance

Basic dynamic load rating	71.5 kN
Basic static load rating	54 kN
Limiting speed	1 900 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	Set screws
Bore type	Cylindrical
Rubber seating ring	Without

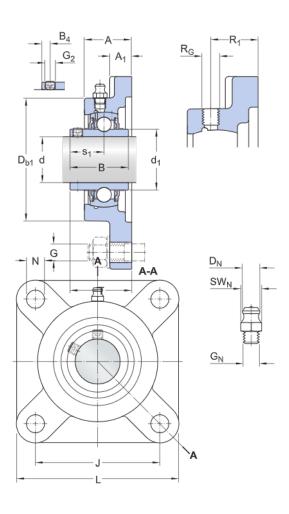


Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With



# **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



## Dimensions

d	80 mm	Bore diameter
$d_1$	≈ 98.5 mm	Outer diameter of inner ring
Α	58 mm	Width of housing
$A_1$	22 mm	Flange width
В	82.6 mm	Width of inner ring
B <sub>4</sub>	14 mm	Distance from locking device side face to thread centre
D <sub>b1</sub>	180 mm	Top external diameter
J	165 mm	Distance between attachment bolts
L	208 mm	Overall length
Ν	23 mm	Diameter of attachment bolt hole
s <sub>1</sub>	49.3 mm	Distance from locking device side face to raceway centre
Т	83.3 mm	Overall width

Threaded hole



$R_{G}$	1/8-27 NPT	Housing thread for grease fitting
$R_1$	39 mm	Axial position of the housing thread

## Grease fitting

D <sub>N</sub> 6.589 mm	Diameter of head sphere of grease fitting
SW <sub>11.11</sub> mm	Hexagonal key size for the grease fitting
G <sub>N 1/8-27</sub> NPT	Thread of grease fitting

## Calculation data

Basic dynamic load rating	С	71.5 kN
Basic static load rating	$C_0$	54 kN
Fatigue load limit	$P_{u}$	2.2 kN
Limiting speed		1 900 r/min
		Limiting speed with shaft tolerance h6

## Mass

Mass bearing unit	7.35 kg
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## Mounting information

Set screw	$G_2$	M12x1.5
Hexagonal key size for set screw		6.08 mm
Recommended tightening torque for set screw		28.5 N·m
Recommended diameter for attachment bolts, mm	G	20 mm
Recommended diameter for attachment bolts, inch	G	0.75 in



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