



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

UCF 204

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

Attachment bolt diameter	10 mm
Shaft diameter	20 mm
Housing overall width	25.5 mm
Width, total	33.2 mm
Centre distance between bolt holes	64 mm
Bearing width, total	31 mm

Performance

Basic dynamic load rating	12.7 kN
Basic static load rating	6.7 kN
Limiting speed	6 500 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	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

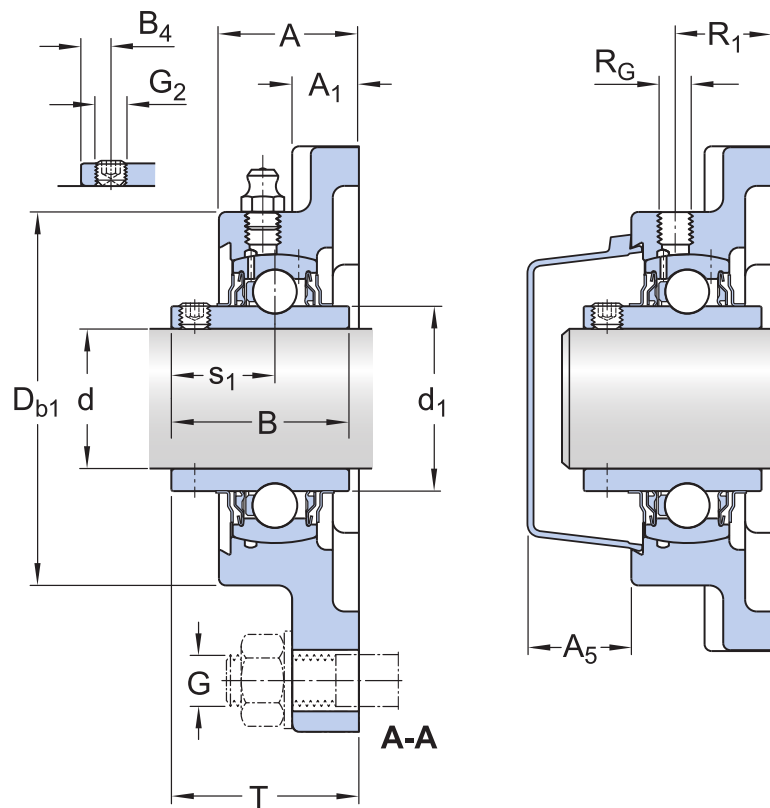
Logistics

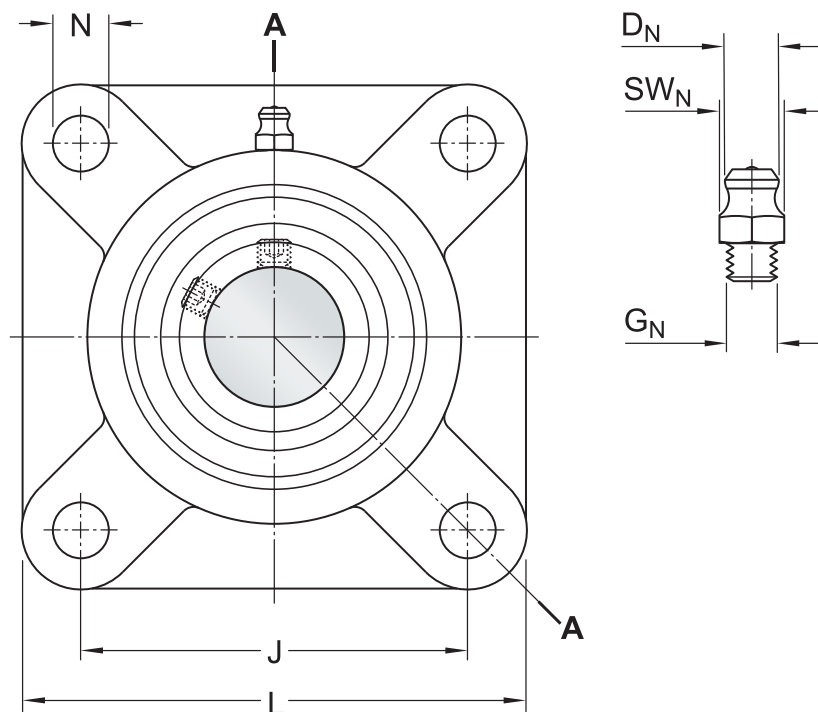
Product net weight	0.51 kg
eClass code	23-05-16-02
UNSPSC code	31171536



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	Optional end cover
Coating	Without





Dimensions

d	20 mm	Bore diameter
d ₁	≈ 28.7 mm	Outer diameter of inner ring
A	25.5 mm	Width of housing
A ₁	11 mm	Flange width
A ₅	20.5 mm	Standout of end cover
B	31 mm	Width of inner ring
B ₄	5 mm	Distance from locking device side face to thread centre
D _{b1}	60 mm	Top external diameter
J	64 mm	Distance between attachment bolts
L	86 mm	Overall length
N	12 mm	Diameter of attachment bolt hole
s ₁	18.3 mm	Distance from locking device side face to raceway centre
T	33.2 mm	Overall width

THREADED HOLE

R_G	1/4-28 UNF	Housing thread for grease fitting
R_1	17 mm	Axial position of the housing thread

GREASE FITTING

D_N	6.6 mm	Diameter of head sphere of grease fitting
SW_N	7.94 mm	Hexagonal key size for the grease fitting
G_N	1/4-28 UNF	Thread of grease fitting

Calculation data

Basic dynamic load rating	C	12.7 kN
Basic static load rating	C_0	6.7 kN
Fatigue load limit	P_u	0.285 kN
Limiting speed		6 500 r/min
		Limiting speed with shaft tolerance h_6

Mounting information

Set screw	G_2	M6x1
Hexagonal key size for set screw		3.05 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

Recommended product

End cover for bearing units

[ECY 204](#)



More Information

Product details

[Flanged units to ISO standards](#)

[Flanged units to North American standards](#)

[Flanged units to Japanese Industrial Standards \(JIS\)](#)

[Flanged units, not standardized \(SKF Food Line\)](#)

[Permissible misalignment](#)

[Locating/non-locating support](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)


[Lubrication](#)

[Mounting and dismounting](#)

[Ordering information](#)

[Designation system](#)

Engineering information

 [Principles of ball bearing units selection and application - Download catalogue \(4.9 MB\)](#)

[Principles of selecting mounted bearing solutions](#)

[Bearing failure and how to prevent it](#)

Tools

[SKF Product select](#)

[Bearing Frequency Calculator](#)



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