



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

UCFB 205/H

Three-bolt bracket flanged ball bearing unit with set screw locking, cast iron housing, JIS

These three-bolt bracket 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	8 mm
Shaft diameter	25 mm
Housing overall width	27 mm
Width, total	34.8 mm
Bearing width, total	34.1 mm

Performance

Basic dynamic load rating	14 kN
Basic static load rating	7.8 kN
Limiting speed	5 850 r/min
Note	Limiting speed with shaft tolerance h6

Properties

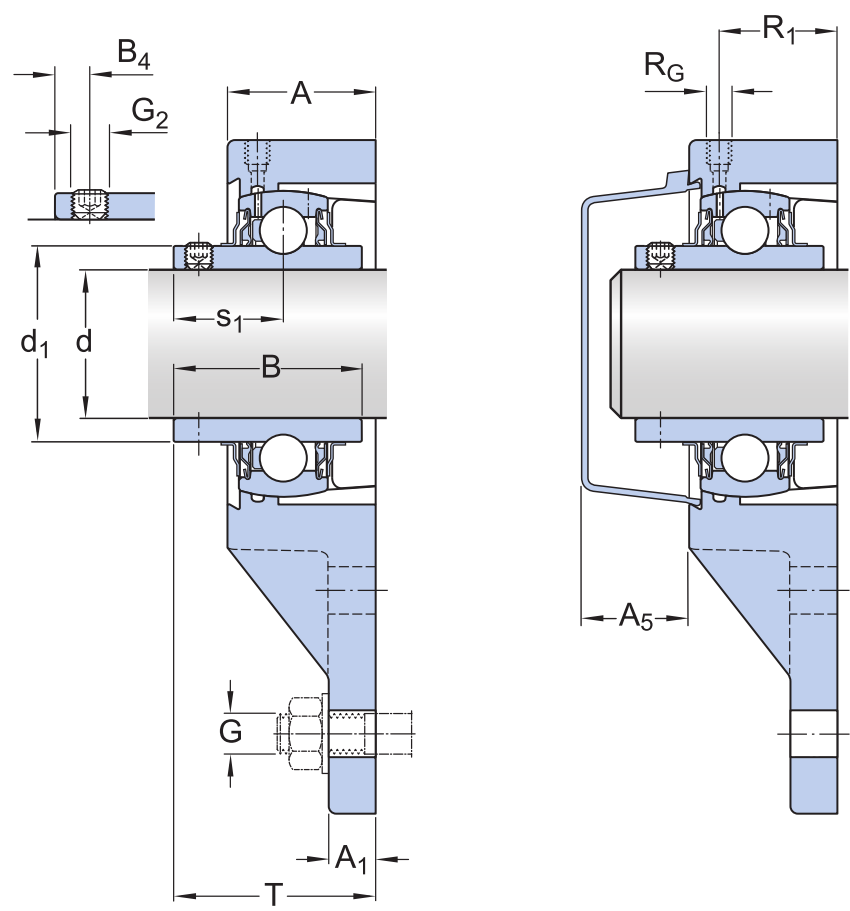
Housing type	Flanged
Flanged housing type	3-bolt bracket
Number of bolt holes for fasteners	3
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

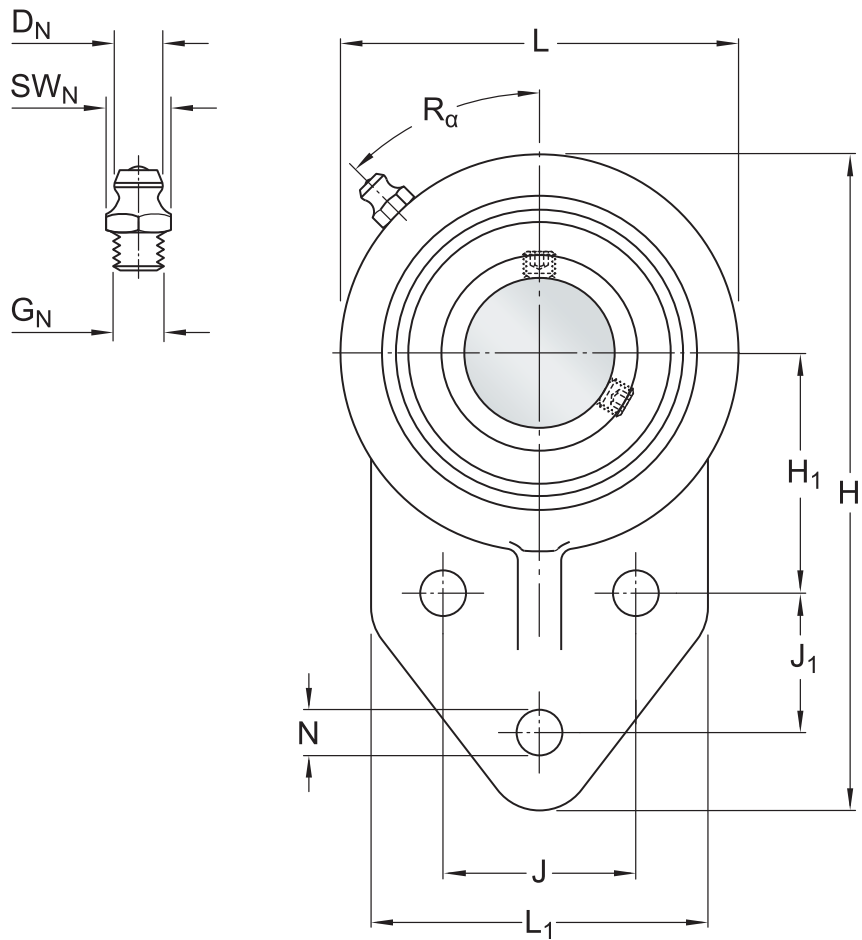
Logistics

Product net weight	0.636 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	25 mm	Bore diameter
d ₁	≈ 33.74 mm	Outer diameter of inner ring
A	27 mm	Width of housing
A ₁	10 mm	Flange width
A ₅	20.5 mm	Standout of end cover
B	34.1 mm	Width of inner ring
B ₄	5 mm	Distance from locking device side face to thread centre
J	34 mm	Distance between attachment bolt holes
J ₁	27 mm	Distance between attachment bolt holes
H	118 mm	Overall height
H ₁	45 mm	Radial position of the spherical seat
L	70 mm	Overall length
L ₁	66 mm	Flange length
N	9.5 mm	Diameter of attachment bolt hole
s ₁	19.8 mm	Distance from locking device side face to raceway centre

T	34.8 mm	Overall width
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THREADED HOLE

R _G	1/4-28 UNF	Housing thread for grease fitting
R ₁	17 mm	Axial position of the housing thread
R _α	45 °	Angular position of the housing thread

GREASE FITTING

D _N	6.6 mm	Diameter of head sphere of grease fitting
G _N	1/4-28 UNF	Thread of grease fitting
SW _N	7.94 mm	Hexagonal key size for the grease fitting

Calculation data

Basic dynamic load rating	C	14 kN
Basic static load rating	C ₀	7.8 kN
Fatigue load limit	P _u	0.335 kN
Limiting speed		5 850 r/min
		Limiting speed with shaft tolerance h6

Mounting information

Set screw	G ₂	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	8 mm
Recommended diameter for attachment bolts, inch	G	0.3125 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 205](#)

More Information

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