

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

F4BSS 20M-CPSS-DFH

Flanged ball bearing unit with composite or cast metal housing

Flanged ball bearing units consisting of an insert bearing mounted in a composite or cast metal housing that can be bolted to a machine wall or frame. In addition to being part of a unit, some flanged housings for insert bearings are available as separate components. The SKF assortment includes ball bearing units compliant with several industrial standards, meeting many requirements regarding bolt patterns and mechanisms for locking onto the shaft.

- Ready to mount
- Lubricated and sealed bearings
- Quick locking on the shaft
- Large variety of housing shapes, housing materials, and locking methods
- Concentric locking options for high speeds and low vibration

Overview

Dimensions

Shaft diameter	20 mm
Housing overall width	25.8 mm
Width, total	33.6 mm
Centre distance between bolt holes	63.5 mm
Bearing width, total	25.3 mm
Attachment bolt diameter	10 mm

Performance

Basic dynamic load rating	10.8 kN
Basic static load rating	6.55 kN
Limiting speed	700 r/min

Properties

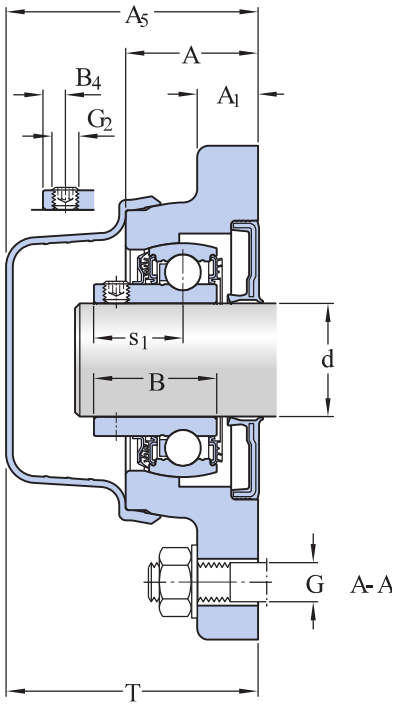
Housing type	Flanged
Flanged housing type	Square
Number of bolt holes for fasteners	4
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Stainless steel
Material, bearing	Stainless steel
Coating	Without
Sealing, bearing	Seal on both sides and flinger on one side
Sealing type	Contact, gutter
Sealing, unit	End cover and back seal
Lubricant	Grease
Relubrication hole	Without
Grease fitting	Without
Unit system	Metric

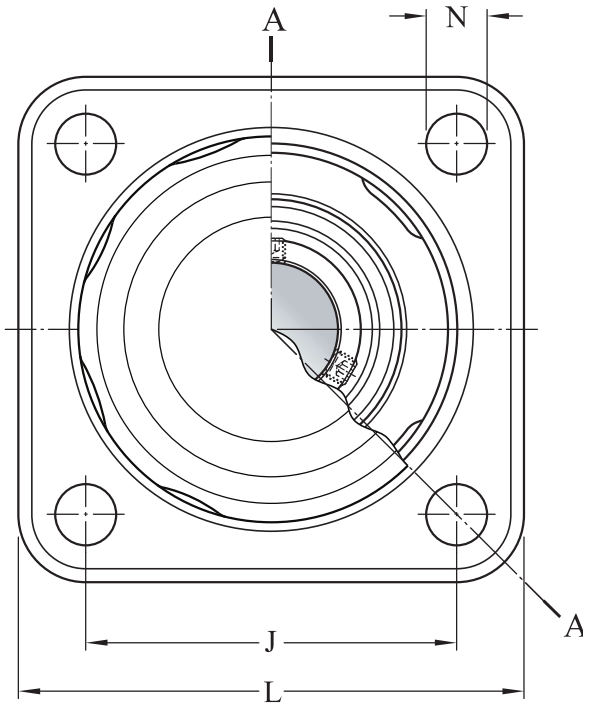
Logistics

Product net weight	0.71 kg
eClass code	23-05-08-02
UNSPSC code	31171536

Technical specification

Compliance with standard	Not standardized
Purpose specific	For food and beverage applications
Material, housing	Stainless steel
Sealing, bearing	Seal on both sides and flinger on one side
Sealing type, bearing	Contact, gutter
Sealing, unit	End cover and back seal
Coating	Without





Dimensions

d	20 mm	Bore diameter
d_1	≈ 28.2 mm	Outer diameter of inner ring
A	25.8 mm	Width of housing
A_1	11.1 mm	Flange width
A_5	52.9 mm	Standout of end cover
A_5	52.9 mm	Standout of end cover
B	25.3 mm	Width of inner ring
B_4	4.5 mm	Distance from locking device side face to thread centre
J	63.5 mm	Centre distance between bolt holes
L	85.7 mm	Overall length
N	11.1 mm	Diameter of attachment bolt hole
s_1	18.3 mm	Distance from locking device side face to raceway centre
T	33.6 mm	Overall width

Calculation data

Basic dynamic load rating	C	10.8 kN
Basic static load rating	C_0	6.55 kN

Fatigue load limit	P_u	0.28 kN
Limiting speed		700 r/min

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	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

End cover for bearing units	ECB 504

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