

# F2BC 50M-CPSS-DFHOval flanged ball bearing unit with set screw locking and narrow inner ring, composite housing, SKF Food Line

These oval flanged ball bearing units are designed especially for the food and beverage industries. They are chemical resistant, lightweight and strong. The unit consists of an insert bearing, with a narrow inner ring and set screw locking, and is suitable for applications where the direction of rotation is constant or alternating. The bearing is mounted in a composite 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.

- Chemical resistant
- Lubricated for life with a non-toxic food grade grease
- Lightweight
- Strong

## Overview

### Dimensions

Shaft diameter	50 mm
Housing overall width	42 mm
Centre distance between bolt holes	157 mm
Bearing width, total	43.6 mm

### Performance

Basic dynamic load rating	29.6 kN
Basic static load rating	23.2 kN
Limiting speed	500 r/min

### Properties

Housing type	Flanged
Flanged housing type	Oval
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws

Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Composite for the SKF Food Line
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

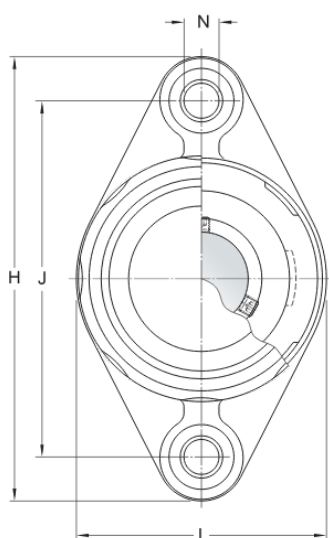
# Technical Specification

Compliance with standard	Not standardized
Purpose specific	For food and beverage applications
Material, housing	Composite for the SKF Food Line
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	50 mm	Bore diameter
$d_1$	$\approx 62.51$ mm	Outer diameter of inner ring
A	42 mm	Width of housing
$A_1$	19 mm	Flange width
$A_5$	74 mm	Width including end cover
B	43.6 mm	Width of inner ring
$B_1$	43.6 mm	Overall bearing width
$B_4$	9 mm	Distance from locking device side face to thread centre
$D_b$	102 mm	Top external diameter
$D_c$	98 mm	Diameter of housing centering recess
H	199 mm	Overall height
$H_a$	6 mm	Depth of housing centering recess
J	157 mm	Distance between attachment bolts
L	107 mm	Overall length
N	17.5	Diameter of attachment bolt hole



mm		
$s_1$	32.6 mm	Distance from locking device side face to raceway centre
T	53.8 mm	Overall width

## Calculation data

Basic dynamic load rating	C	29.6 kN
Basic static load rating	$C_0$	23.2 kN
Fatigue load limit	$P_u$	0.98 kN
Limiting speed		500 r/min

## Mass

Mass bearing unit	1 kg
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## Mounting information

Set screw	$G_2$	M10x1
Hexagonal key size for set screw		5 mm
Recommended tightening torque for set screw		16.5 N·m
Recommended diameter for attachment bolts, mm	G	16 mm
Recommended diameter for attachment bolts, inch	G	0.625 in

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