



F4BC 50M-TPSS Square flanged ball bearing unit with set screw locking extended inner ring, composite housing, SKF Food Line

These square 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 an extended 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	111 mm
Bearing width, total	51.6 mm

Performance

Basic dynamic load rating	29.6 kN
Basic static load rating	23.2 kN
Limiting speed	2 200 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	Composite for the SKF Food Line
Material, bearing	Stainless steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, gutter
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	Without
Grease fitting	Without

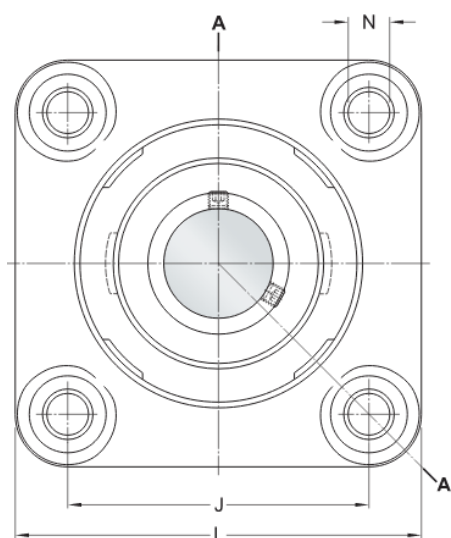
Technical Specification

Compliance with standard	Not standardized
Purpose specific	For food and beverage applications
Material, housing	Composite for the SKF Food Line
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, gutter
Sealing, unit	Optional end cover
Coating	Without



Dimensions

d	50 mm	Bore diameter
d_1	≈ 62.51 mm	Outer diameter of inner ring
A	42 mm	Width of housing
A_1	19 mm	Flange width
A_5	74 mm	Standout of end cover
B	51.6 mm	Width of inner ring
B_1	51.6 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_a	6 mm	Depth of housing centering recess
J	111 mm	Distance between attachment bolts
L	153 mm	Overall length
N	17.5 mm	Diameter of attachment bolt hole
s_1	32.6 mm	Distance from locking device side face to raceway centre



T 53.6
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		2 200 r/min
Limiting speed with shaft tolerance h6		

Mass

Mass bearing unit	1.2 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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