

# F4BSS 35M-TPSS Square flanged ball bearing unit with set screw locking, stainless steel housing



These square flanged ball bearing units are designed especially for the food and beverage industries. 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 stainless steel 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
- Strong
- Lubricated for life with a non-toxic food grade grease
- Designed for high temperatures and speeds

## Overview

### Dimensions

Shaft diameter	35 mm
Housing overall width	35.7 mm
Width, total	46 mm
Centre distance between bolt holes	92.1 mm
Bearing width, total	42.9 mm

### Performance

Basic dynamic load rating	21.6 kN
Basic static load rating	15.3 kN
Limiting speed	3 200 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	Stainless steel
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

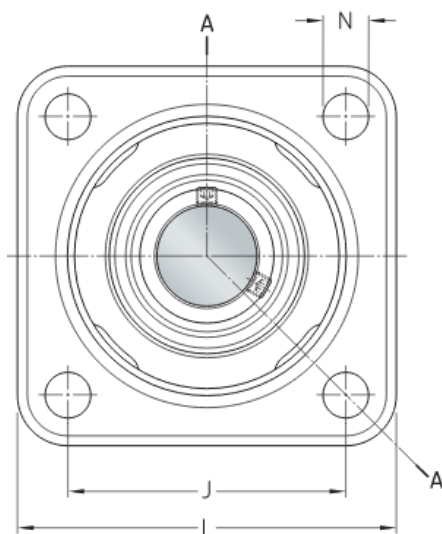
# Technical Specification

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



## Dimensions

d	35 mm	Bore diameter
d <sub>1</sub>	≈ 46.1 mm	Outer diameter of inner ring
A	35.7 mm	Width of housing
A <sub>1</sub>	14.3 mm	Flange width
A <sub>5</sub>	64.3 mm	Standout of end cover
B	42.9 mm	Width of inner ring
B <sub>4</sub>	6 mm	Distance from locking device side face to thread centre
D <sub>c</sub>	82 mm	Diameter of housing centering recess
H <sub>a</sub>	6 mm	Depth of housing centering recess
J	92.1 mm	Distance between attachment bolts
L	117.5 mm	Overall length
N	14.3 mm	Diameter of attachment bolt hole
s <sub>1</sub>	25.4 mm	Distance from locking device side face to raceway centre



T 46  
mm

Overall width

## Calculation data

Basic dynamic load rating	C	21.6 kN
Basic static load rating	C <sub>0</sub>	15.3 kN
Fatigue load limit	P <sub>u</sub>	0.655 kN
Limiting speed		3 200 r/min
Limiting speed with shaft tolerance h6		

## Mass

Mass bearing unit	1.8 kg
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## Mounting information

Set screw	G <sub>2</sub>	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	12 mm
Recommended diameter for attachment bolts, inch	G	0.5 in

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