



## **FY 25 TF**

# Square flanged ball bearing unit with set screw locking, cast iron housing, ISO

These square flanged ball bearing units are compliant with ISO standards. 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**

Bearing width, total	1.343 in
Centre distance between bolt holes	2.756 in
Housing overall width	1.181 in
Shaft diameter	0.984 in

#### Performance

Basic dynamic load rating	3 147 lbf
Basic static load rating	1 754 lbf
Limiting speed	7 000 r/min
Note	Limiting speed with shaft tolerance h6

#### **Properties**

Bore type	Cylindrical
Coating	Without
Fastening bolt hole type	Plain
Flanged housing type	Square
Grease fitting	With
Housing type	Flanged
Lubricant	Grease
Material, bearing	Bearing steel
Material, housing	Cast iron
Number of bolt holes for fasteners	4
Relubrication hole	With
Retaining feature, inner ring	Set screws

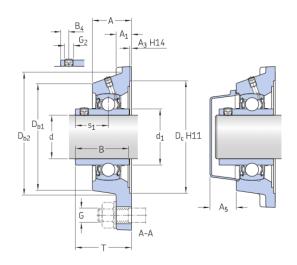


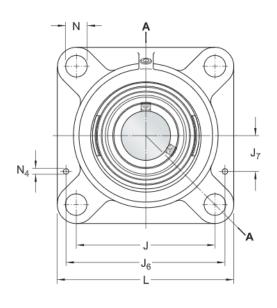
Rubber seating ring	Without
Sealing type	Contact, standard
Sealing, bearing	Seal and flinger on both sides
Sealing, unit	Optional end cover



## Technical Specification

Compliance with standard	ISO
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	0.984 in	Bore diameter
$d_1$	≈ 1.328 in	Outer diameter of inner ring
Α	1.181 in	Overall width
A <sub>1</sub>	0.472 in	Flange width
A <sub>3</sub>	0.126 in	Depth of centring recess
A <sub>5</sub>	0.807 in	Standout of end cover
В	1.343 in	Width of inner ring
B <sub>4</sub>	0.197 in	Distance from locking device side face to thread centre
D <sub>b1</sub>	2.559 in	Top external diameter
D <sub>b2</sub>	2.795 in	Base external diameter
D <sub>c</sub>	2.937 in	Diameter of housing centering recess
	2.756 in	Distance between attachment bolts
L	3.74 in	Overall length



Ν	0.453 in	Diameter of attachment bolt hole
s <sub>1</sub>	0.78 in	Distance from locking device side face to raceway centre
Τ	1.528 in	Overall unit width

#### Dowel pins

J <sub>6</sub>	3.268	in	Distance of dowel pins
J <sub>7</sub>	0.748	in	Axial offset of dowel pins
N <sub>4</sub>	0.157	in	Recommended diameter for dowel pins

#### Calculation data

Basic dynamic load rating	С	3 147 lbf
Basic static load rating	$C_0$	1 754 lbf
Fatigue load limit	$P_{u}$	75 lbf
Limiting speed		7 000 r/min
		Limiting speed with shaft tolerance h6

#### Mass

Mass bearing unit	1.521 lb
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## Mounting information

Set screw	$G_2$	M6x0.75
Hexagonal key size for set screw		0.118 in
Recommended tightening torque for set screw		35.403 lbf-in
Recommended diameter for attachment bolts, mm	G	10.008 mm
Recommended diameter for attachment bolts, inch	G	0.375 in

## Included products



Housing FY 505 M
Bearing YAR 205-2F

#### Associated products

End cover ECY 205



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