

# SY 12 TF



NOT FOUND

Pillow block ball bearing unit with extended inner ring and set screw locking, cast iron, ISO standards

Pillow (plummer) block ball bearing units consist of an insert bearing mounted in a cast iron housing that can be bolted to a support surface. This variant is suitable for applications with both constant and alternating directions of rotation. It has an inner ring extended on both sides and is locked onto the shaft by tightening a set screw on the inner ring, making it easy to mount.

- Strong
- Ready to mount
- Lubricated and sealed bearing
- Quick locking onto the shaft
- Cost-effective

## Overview

### Dimensions

Bearing width, total	1.079 in
Centre distance between bolt holes	3.819 in
Centre height (pillow block)	1.189 in
Housing overall width	1.26 in
Shaft diameter	0.472 in

### Performance

Basic dynamic load rating	2 149 lbf
Basic static load rating	1 068 lbf
Limiting speed	9 500 r/min
Note	Limiting speed with shaft tolerance h6

### Properties

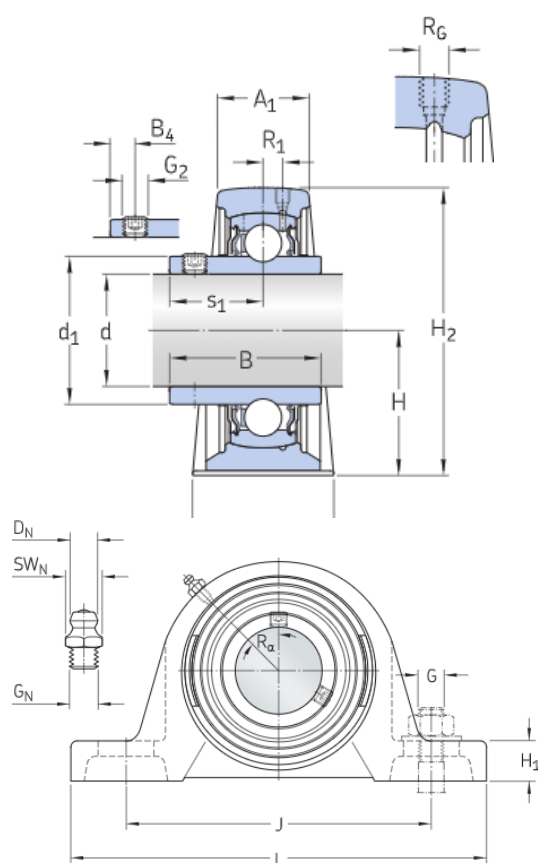
Bore type	Cylindrical
Coating	Without
Fastening bolt hole type	Plain
Grease fitting	With
Housing type	Pillow block
Lubricant	Grease
Material, bearing	Bearing steel
Material, housing	Cast iron
Number of bolt holes for fasteners	2
Relubrication hole	With
Retaining feature, inner ring	Set screws

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

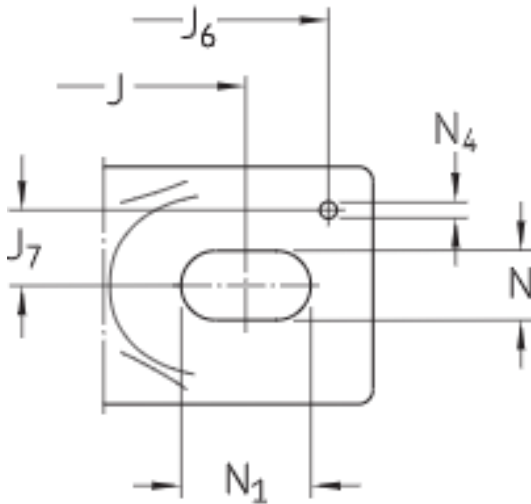
# Technical Specification

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	Without
Coating	Without

## Dimensions



$d$	0.472 in	Bore diameter
$d_1$	$\approx 0.953$ in	Shoulder diameter of inner ring
$A$	1.26 in	Base width
$A_1$	0.709 in	Top width
$B$	1.079 in	Width of inner ring
$B_4$	0.157 in	Distance from locking device side face to thread centre
$H$	1.189 in	Height of spherical seat centre
$H_1$	0.551 in	Foot height
$H_2$	2.244 in	Overall height
$J$	3.819 in	Distance between attachment bolts
$J$	max. 4.173 in	Distance between attachment bolts
$J$	min. 3.465 in	Distance between attachment bolts
$L$	5 in	Overall length
$N$	0.453 in	Diameter of attachment bolt hole
$N_1$	0.807 in	Length of attachment bolt hole
$s_1$	0.626 in	Distance from locking device side face to raceway centre



#### Threaded hole

$R_C$ 1/4-28 UNF	Housing thread for the grease fitting
$R_1$ 0.039 in	Axial position of the housing thread
$R_0$ 45 °	Angular position of the housing thread

#### Grease fitting

$D_1$ 0.256 in	Diameter of head sphere of grease fitting
$S_1$ 0.276 in	Hexagonal key size for the grease fitting
$G_1$ 1/4-28 SAE-LT	Thread of grease fitting

#### Dowel pins

$J_6$ 4.646 in	Distance of dowel pins
$J_7$ 0.453 in	Axial offset of dowel pins
$N_4$ 0.079 in	Recommended diameter for dowel pins

### Calculation data

Basic dynamic load rating	C	2 149 lbf
Basic static load rating	$C_0$	1 068 lbf
Fatigue load limit	$P_u$	45 lbf
Limiting speed		9 500 r/min
		Limiting speed with shaft tolerance h6

### Mass

Mass bearing unit	1.08 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		SY 503 M
Bearing		YAR 203/12-2F

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