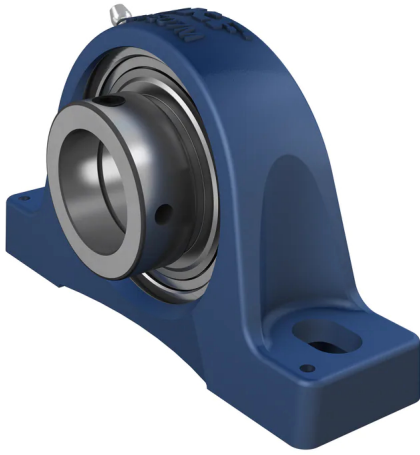


# SY 50 FM



Pillow block ball bearing unit with narrow inner ring and eccentric locking collar, 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 intended for use in applications where the direction of rotation is constant. It has a narrow inner ring and is locked onto the shaft by an eccentric locking collar, making it easy to mount.

- Strong
- Ready to mount
- Lubricated and sealed bearing
- Designed for rotation in one direction
- Accommodate static initial misalignment

## Overview

### Dimensions

Bearing width, total	43.7 mm
Centre distance between bolt holes	157 mm
Centre height (pillow block)	57.2 mm
Housing overall width	54 mm
Shaft diameter	50 mm

### Performance

Basic dynamic load rating	35.1 kN
Basic static load rating	23.2 kN
Limiting speed	4 000 r/min
Note	Limiting speed with shaft tolerance h6

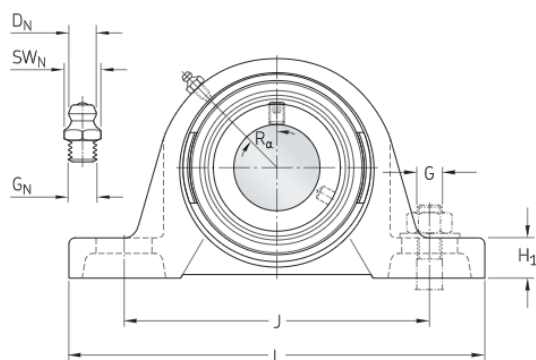
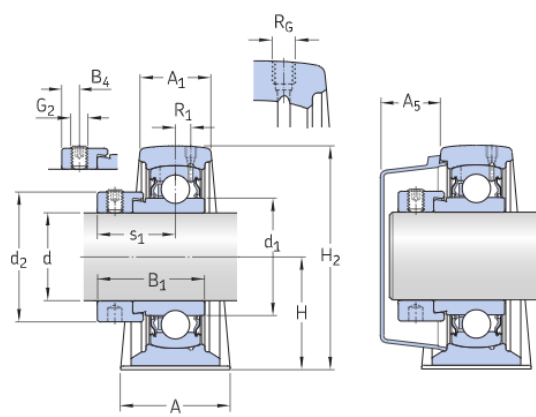
### Properties

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	Eccentric collar
Rubber seating ring	Without

Sealing type	Contact, standard
Sealing, bearing	Seal on both sides
Sealing, unit	Optional end cover

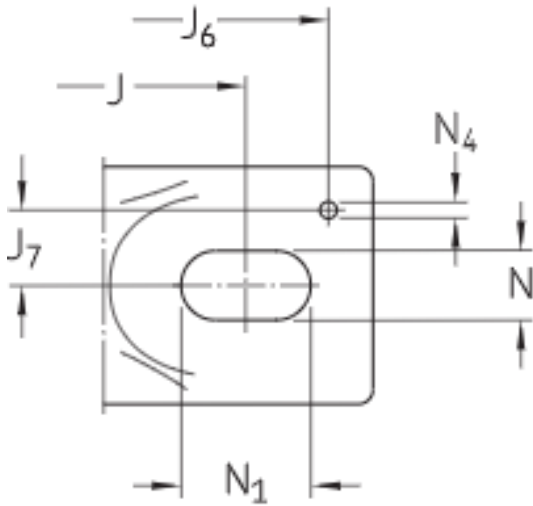
# Technical Specification

Compliance with standard	ISO
Purpose specific	For material handling applications
Material, housing	Cast iron
Sealing, bearing	Seal on both sides
Sealing type, bearing	Contact, standard
Sealing, unit	Optional end cover
Coating	Without



## Dimensions

d	50 mm	Bore diameter
d <sub>1</sub>	≈ 62.51 mm	Shoulder diameter inner ring
d <sub>2</sub>	67.2 mm	Outside diameter locking ring
A	54 mm	Base width
A <sub>1</sub>	34 mm	Top width
A <sub>5</sub>	33 mm	Standout of end cover
B <sub>1</sub>	43.7 mm	Overall bearing width
B <sub>4</sub>	6.75 mm	Distance from locking device side face to thread centre
H	57.2 mm	Height of spherical seat centre
H <sub>1</sub>	22 mm	Foot height
H <sub>2</sub>	114 mm	Overall height
J	157 mm	Distance between attachment bolts
J	max. 165 mm	Distance between attachment bolts
J	min. 149 mm	Distance between attachment bolts
L	203 mm	Overall length
N	18 mm	Diameter of attachment bolt hole
N <sub>1</sub>	26 mm	Length of attachment bolt hole



$s_1$  32.7 mm Distance from locking device side face to raceway centre

Threaded hole

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

Grease fitting

$D_f$ 6.5 mm	Diameter of head sphere of grease fitting
$S_f$ 7 mm	Hexagonal key size for the grease fitting
$G_f$ 1/4-28 SAE-LT	Thread of grease fitting

Dowel pins

$J_6$ 187 mm	Distance of dowel pins
$J_7$ 19 mm	Axial offset of dowel pins
$N_4$ 4 mm	Recommended diameter for dowel pins

## Calculation data

Basic dynamic load rating	C	35.1 kN
Basic static load rating	$C_0$	23.2 kN
Fatigue load limit	$P_u$	0.98 kN
Limiting speed		4 000 r/min
		Limiting speed with shaft tolerance h6

## Mass

Mass bearing unit	2.6 kg
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## Mounting information

Set screw	G <sub>2</sub>	M10x1
Hexagonal key size for set screw		5 mm
Recommended tightening torque for set screw		16.5 Nm
Recommended diameter for attachment bolts, mm	G	16 mm
Recommended diameter for attachment bolts, inch	G	0.625 in

### Included products

Housing		SY 510 M
Bearing		YET 210

### Associated products

End cover		ECY 210
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