

# SY 50 WFPillow block ball bearing unit with extended inner ring and eccentric locking collar, cast iron,

## ISO standards

Pillow block ball bearing unit with extended 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 an extended inner ring on both sides 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

Shaft diameter	50 mm
Centre height (pillow block)	57.2 mm
Housing overall width	54 mm
Centre distance between bolt holes	157 mm
Bearing width, total	62.7 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

Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Eccentric collar ring
Bore type	Cylindrical
Rubber seating ring	Without

Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, standard
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

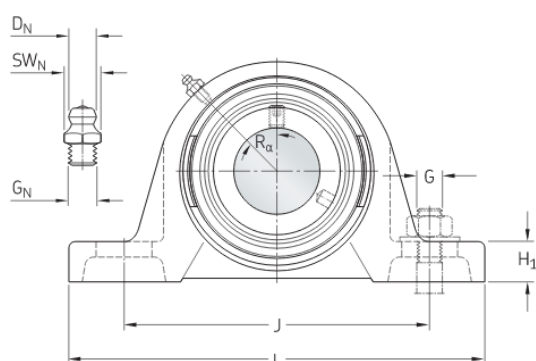
# Technical Specification

Compliance with standard	ISO
Purpose specific	For material handling applications, For air 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	50 mm	Bore diameter
d <sub>1</sub>	≈ 62.51 mm	Shoulder diameter of inner ring
d <sub>2</sub>	67.2 mm	Outside diameter of 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	49.2 mm	Width of inner ring
B <sub>1</sub>	62.7 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
$N_1$	26 mm	Length of attachment bolt hole
$s_1$	38.1 mm	Distance from locking device side face to raceway centre

#### Threaded hole

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

#### Grease fitting

$D_N$	6.5 mm	Diameter of head sphere of grease fitting
SW	7 mm	Hexagonal key size for the grease fitting
$G_N$	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	2.8 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 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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