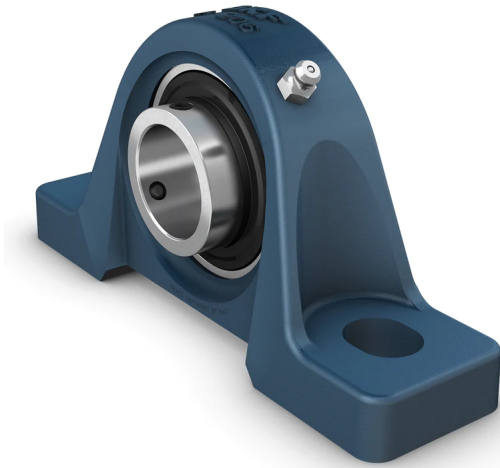


# P2BLM 203-TF

Pillow block ball bearing unit with extended inner ring and set screw locking, North American 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 where the direction of rotation is constant or alternating. It has an inner ring extended on both sides and is locked onto the shaft by tightening two set screws on the inner ring, making it easy to mount. The units are compliant with North American standards.

- Low centre height
- Ready to mount
- Lubricated and sealed bearing
- Quick locking onto the shaft
- Extended inner ring for minimized shaft misalignment



## Overview

### Dimensions

Bearing width, total	2.563 in
Centre distance between bolt holes	7.407 in
Centre height (pillow block)	2.687 in
Housing overall width	2.425 in
Shaft diameter	2.188 in

### Performance

Basic dynamic load rating	11 847 lbf
Basic static load rating	8 093 lbf
Limiting speed	3 400 r/min
Note	Limiting speed with shaft tolerance h6

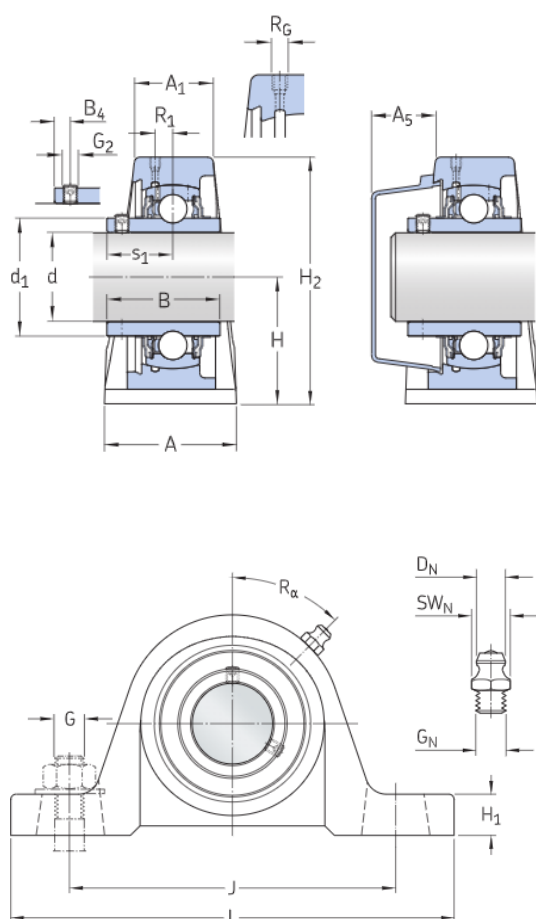
### Properties

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	Optional end cover

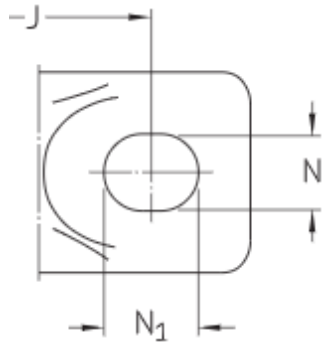
# Technical Specification

Compliance with standard	North American standard
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	2.188 in	Bore diameter
d <sub>1</sub>	≈ 2.978 in	Shoulder diameter of inner ring
A	2.425 in	Base width
A <sub>1</sub>	1.35 in	Top width
A <sub>5</sub>	1.398 in	Standout of end cover
B	2.563 in	Width of inner ring
B <sub>4</sub>	0.394 in	Distance from locking device side face to thread centre
H	2.687 in	Height of spherical seat centre
H <sub>1</sub>	0.813 in	Foot height
H <sub>2</sub>	5.5 in	Overall height
J	7.407 in	Distance between attachment bolts
J	max. 7.939 in	Distance between attachment bolts
J	min. 6.876 in	Distance between attachment bolts
L	9.5 in	Overall length
N	0.781 in	Diameter of attachment bolt hole
N <sub>1</sub>	1.157 in	Length of attachment bolt hole
s <sub>1</sub>	1.563 in	Distance from locking device side face to raceway centre



#### Threaded hole

$R_G$ 1/8-27 NPT	Housing thread for the grease fitting
$R_1$ 0.157 in	Axial position of the housing thread
$R_0$ 45 °	Angular position of the housing thread

#### Grease fitting

$D_f$ 0.259 in	Diameter of head sphere of grease fitting
$S_f$ 0.438 in	Hexagonal key size for the grease fitting
$G_f$ 1/8-27 NPT	Thread of grease fitting

### Calculation data

Basic dynamic load rating	C	11 847 lbf
Basic static load rating	$C_0$	8 093 lbf
Fatigue load limit	$P_u$	344 lbf
Limiting speed		3 400 r/min
		Limiting speed with shaft tolerance h6

### Mass

Mass bearing unit	10.362 lb
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### Mounting information

Set screw	$G_2$	3/8-24 UNF
Hexagonal key size for set screw		0.188 in
Recommended tightening torque for set screw		146.037 lbf-in
Recommended diameter for attachment bolts, mm	G	16.002 mm
Recommended diameter for attachment bolts, inch	G	0.625 in

### Included products

Housing	P2BL 512
Bearing	YAR 212-203-2F

### Associated products

End cover	ECY 212
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