

Image may differ from product. See technical specification for details.

## P4BE 307-SRB-SRH

### Pillow block roller bearing unit, inch series

Roller bearing units are robust, ready-to-mount units that are lubricated and sealed at the factory for maximum service life. Pillow (plummer) block units can support rotating shafts while standing on a flat surface, or hanging on a wall or ceiling. Locking on the shaft by set screws is easy and reliable. Optional end covers provide additional protection at shaft ends.

- Factory lubricated and sealed, ready to mount
- Long service life with minimal or no maintenance
- Quick mounting on the support surface, quick locking on the shaft

# Overview

## Dimensions

Shaft diameter	87.313 mm
Centre height (pillow block)	95.25 mm
Housing overall width	114.3 mm
Centre distance between bolt holes	282.575 mm
Attachment bolt diameter	19.05 mm
Bearing width, total	102.394 mm

## Performance

Basic dynamic load rating	253 kN
Basic static load rating	340 kN
Limiting speed	2 300 r/min

## Properties

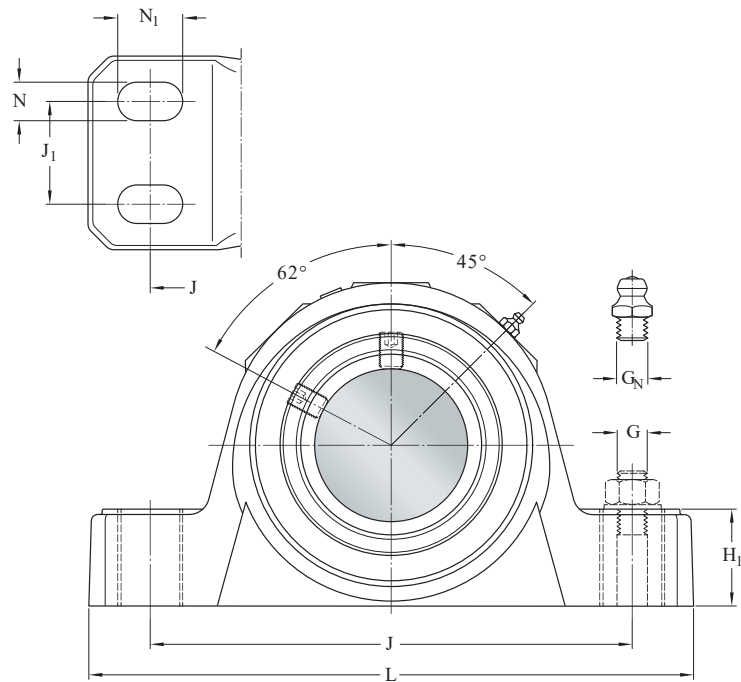
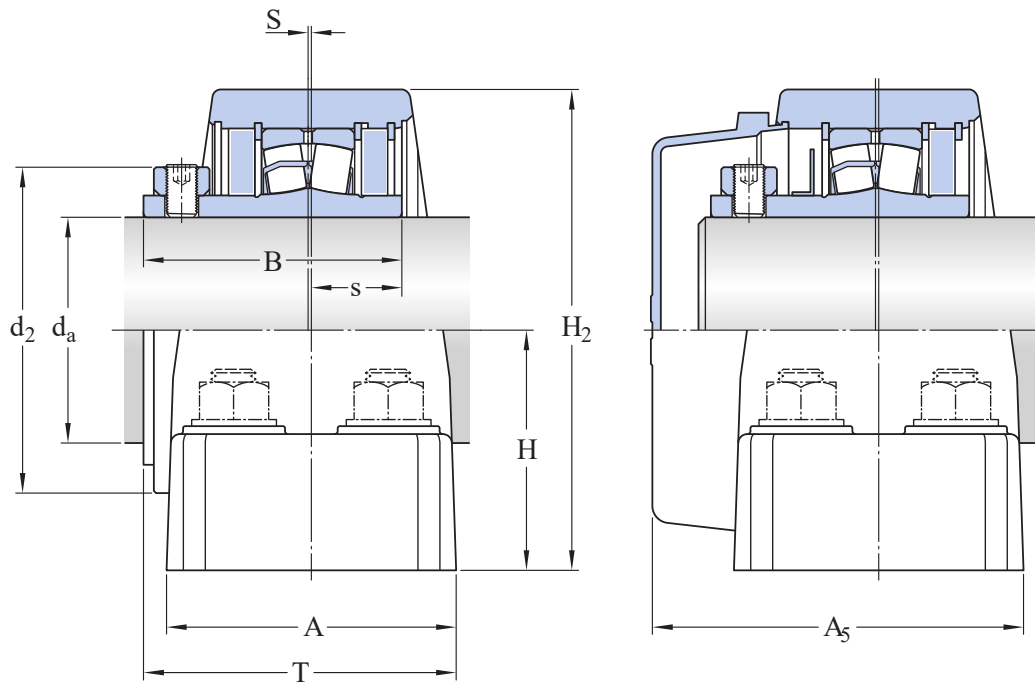
Housing type	Pillow block
Number of bolt holes for fasteners	4
Bearing insert	Spherical roller bearing
Retaining feature, inner ring	Set screws
Bearing position	Locating
Bore type	Cylindrical
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Bearing housing seal type	Radial lip seal
Sealing, unit	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

## Logistics

Product net weight	19.7 kg
eClass code	23-05-16-90
UNSPSC code	31171537

# Technical specification

Metric/inch series	Inch
Bearing insert	Spherical roller bearing
Bearing position	Locating
Locking method	Set screws
Bearing housing seal type	Radial lip seal



## Dimensions

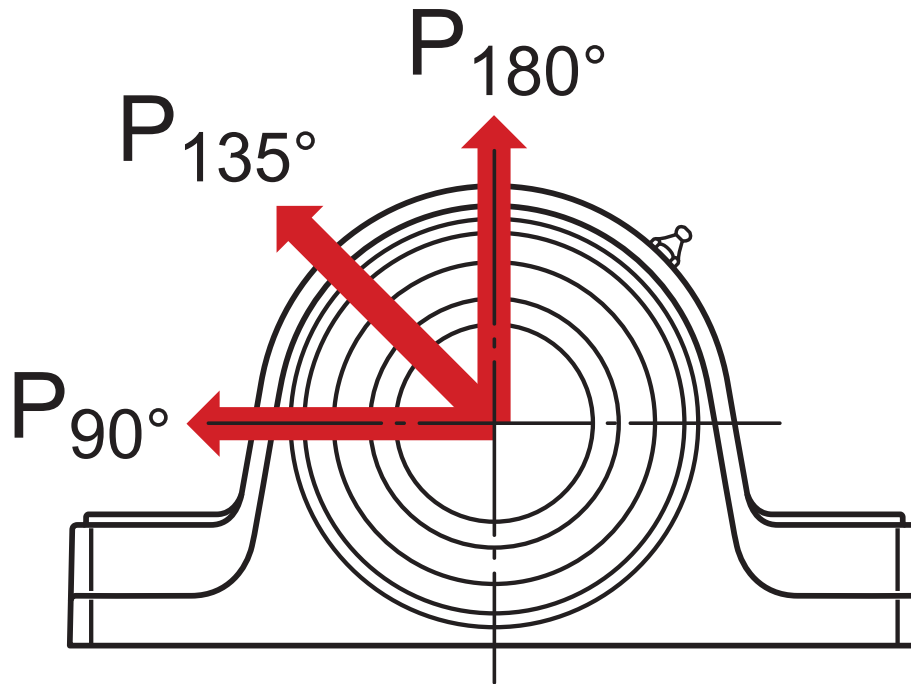
$d_a$	87.313 mm	Shaft diameter
$d_2$	130.175 mm	Collar outer diameter
A	114.3 mm	Housing foot width
$A_5$	142.875 mm	Width including end cover
B	102.394 mm	Inner ring width
H	95.25 mm	Height base to center
$H_1$	57.15 mm	Housing foot height
$H_2$	190.5 mm	Housing height
J	min. 266.7 mm	Distance of attachment bolts, min.
J	max. 298.45 mm	Distance of attachment bolts, max.
J	282.575 mm	Distance of attachment bolts
$J_1$	60.325 mm	Axial distance bolt to bolt
L	355.6 mm	Housing length
N	22.225 mm	Width of attachment bolt hole
$N_1$	38.1 mm	Length of attachment bolt hole
s	36.513 mm	Centre line unit to side face of inner ring
S	0.794 mm	Axial displacement
T	123.825 mm	Total width

## GREASE FITTING

$G_N$	1/8-27 NPT	Thread of grease fitting
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## Calculation data

Basic dynamic load rating	C	253 kN
Basic static load rating	$C_0$	340 kN
Fatigue load limit	$P_u$	37.5 kN
Limiting speed		2 300 r/min
Limiting value	e	0.31
Calculation factor	$Y_1$	2.2
Calculation factor	$Y_2$	3.3
Calculation factor	$Y_0$	2.2
Bearing mean diameter	$d_m$	124.968 mm
Axial holding force of the locking mechanism	$P_a$	4 kN



## Safe loads

$P_{90^\circ}$	105 kN	Safe load at $90^\circ$
$P_{135^\circ}$	60.5 kN	Safe load at $135^\circ$
$P_{180^\circ}$	64.1 kN	Safe load at $180^\circ$

## Mounting information

Attachment bolt diameter	G	0.75 in
Set screws		1/2"-20 UNF-3A x 7/8"
Number of set screws		2
Tightening torque for set screws		70.1 N·m
Grease quantity for relubrication		13 g

## Compatible products

## Recommended product

End cover for bearing units

[ECY 218](#)

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