

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

## SYNT 50 LTS

### Pillow block roller bearing unit, two-bolt, SKF ConCentra locking

Pillow (plummer) block roller bearing units and take-up roller bearing units consist of a spherical or tapered roller bearing mounted in a non-split housing that can be bolted to a support surface. This variant has a spherical roller bearing, a two-bolt base and SKF ConCentra locking, creating a true concentric tight fit, and setting the correct internal

clearance within the bearing. The units are sealed and lubricated and ready to use. This bearing unit covers a wide range of requirements, in metric dimensions.

- Ready to mount
- Robust
- Factory lubricated and sealed
- Quick mounting
- Long service life

## Overview

### Dimensions

Shaft diameter	50 mm
Centre height (pillow block)	70 mm
Housing overall width	70 mm
Centre distance between bolt holes	210 mm
Attachment bolt diameter	16 mm
Bearing width, total	65 mm

### Performance

Basic dynamic load rating	104 kN
Basic static load rating	108 kN
Limiting speed	4 500 r/min

### Properties

Housing type	Pillow block
Number of bolt holes for fasteners	2
Bearing insert	Spherical roller bearing
Retaining feature, inner ring	SKF ConCentra
Bearing position	Non-locating
Bore type	Cylindrical
Material, housing	Cast iron
Material, bearing	Bearing steel
Coating	Without
Bearing housing seal type	Labyrinth seal
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

### Logistics

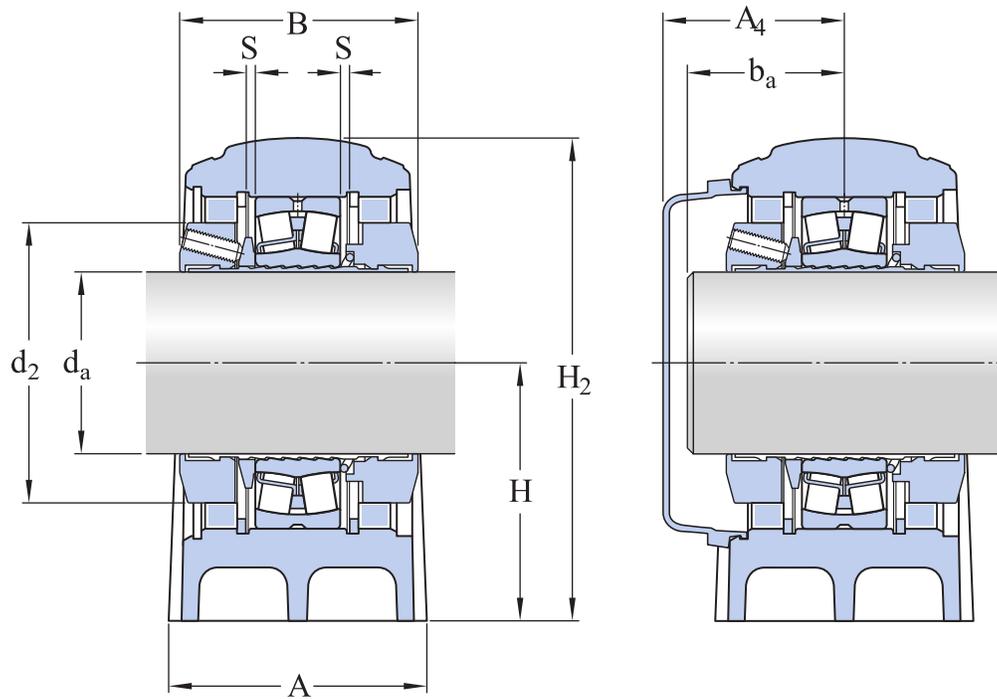
Product net weight	5.8 kg
eClass code	23-05-16-90

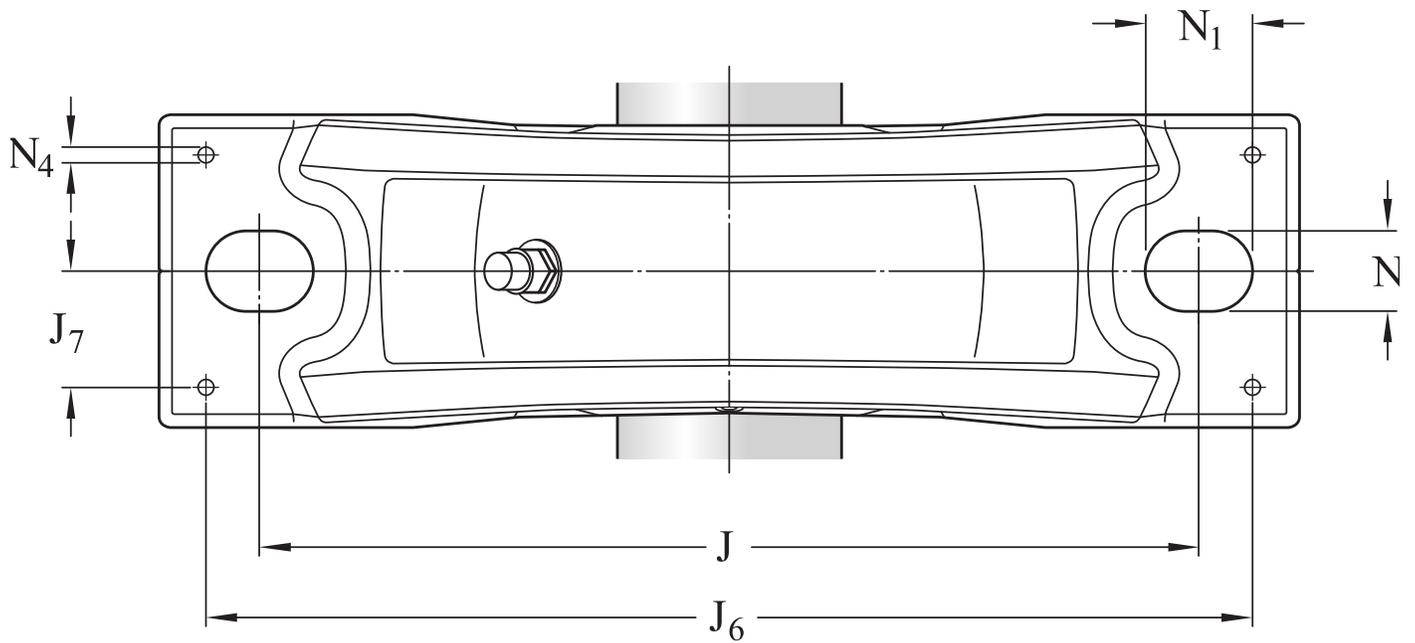
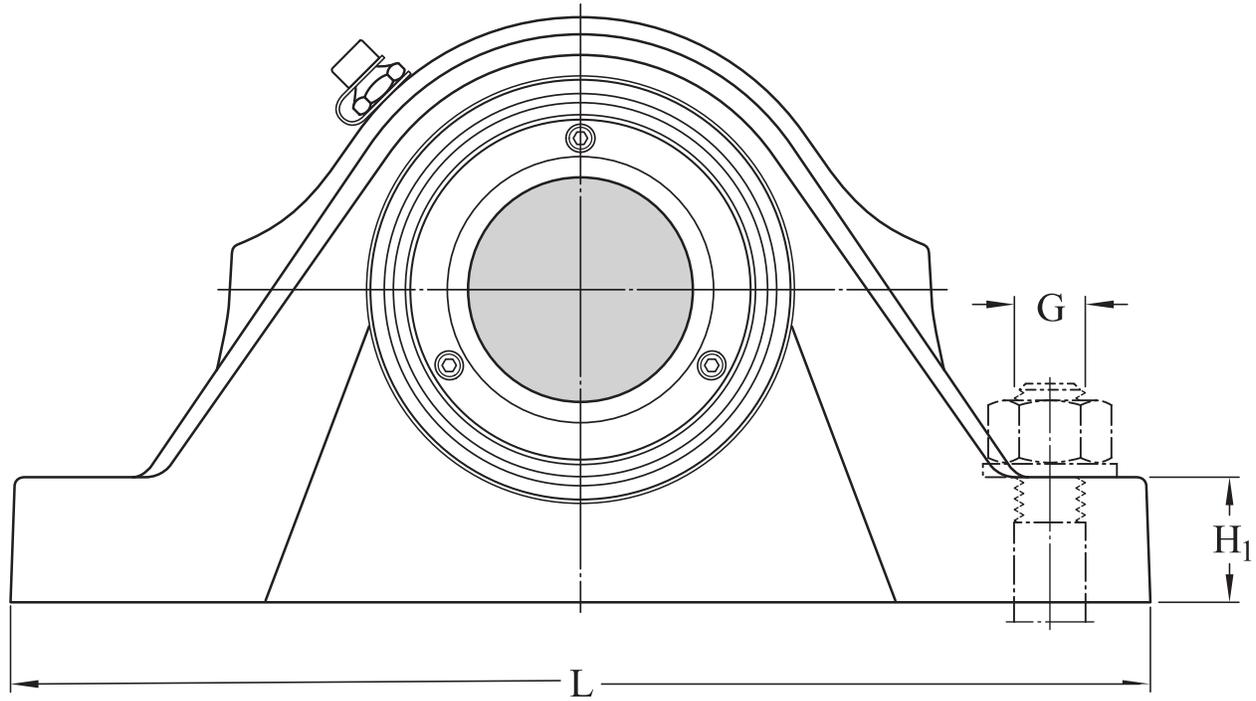
UNSPSC code

31171537

## Technical specification

Metric/inch series	Metric
Bearing insert	Spherical roller bearing
Bearing position	Non-locating
Locking method	SKF ConCentra
Bearing housing seal type	Labyrinth seal





### Dimensions

$d_a$	50 mm	Shaft diameter
$d_2$	76 mm	Collar outer diameter
A	70 mm	Housing foot width
B	65 mm	Inner ring width

H	70 mm	Height base to center
H <sub>1</sub>	28 mm	Housing foot height
H <sub>2</sub>	131 mm	Housing height
J	210 mm	Distance of attachment bolts
L	255 mm	Housing length
N	18 mm	Width foot slot width
N <sub>1</sub>	24 mm	Length of attachment bolt hole
S	2.5 mm	Axial displacement

## SHAFT END

A <sub>4</sub>	62 mm	Distance bearing centre line to end cover
b <sub>a</sub>	max. 55 mm	Distance bearing centre line to shaft end
b <sub>a</sub>	min. 34 mm	Distance bearing centre line to shaft end

## DOWEL PINS

J <sub>6</sub>	234 mm	Distance dowel pins
J <sub>7</sub>	26 mm	Distance dowel pins
N <sub>4</sub>	8 mm	Pin hole diameter

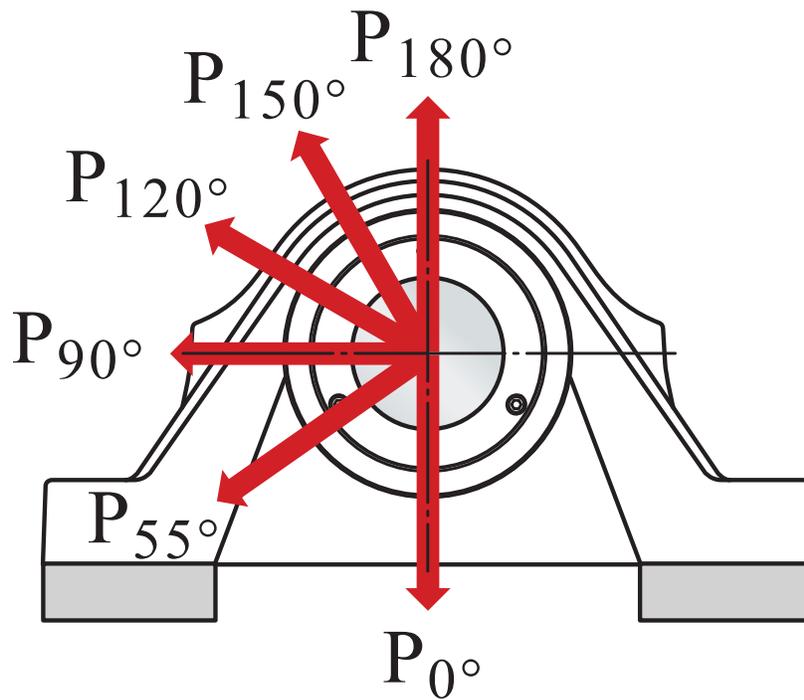
## Calculation data

Basic dynamic load rating	C	104 kN
Basic static load rating	C <sub>0</sub>	108 kN
Fatigue load limit	P <sub>u</sub>	11.8 kN
Limiting speed		4 500 r/min
Limiting value	e	0.24
Calculation factor	Y <sub>1</sub>	2.8
Calculation factor	Y <sub>2</sub>	4.2
Calculation factor	Y <sub>0</sub>	2.8
Bearing mean diameter	d <sub>m</sub>	70 mm

Axial holding force of the locking mechanism

$P_a$

15 kN



## Breaking loads

$P_{0^\circ}$	190 kN	Breaking load
$P_{55^\circ}$	330 kN	Breaking load
$P_{90^\circ}$	200 kN	Breaking load
$P_{120^\circ}$	130 kN	Breaking load
$P_{150^\circ}$	115 kN	Breaking load
$P_{180^\circ}$	140 kN	Breaking load

## Mounting information

Attachment bolt diameter	G	16 mm
Tightening torque for attachment bolts		200 N·m
Set screws		M6
Number of set screws		3
Tightening torque for set screws		8 N·m
Grease quantity for relubrication		4 g

## Compatible products

### Recommended product

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End cover for bearing units

[ECY 210](#)

## More Information

 <b>Product details</b>	 <b>Engineering information</b>	 <b>Engineering tools</b>
<p><a href="#">Pillow block units - metric series</a></p> <hr/> <p><a href="#">Pillow block units - inch series</a></p> <hr/> <p><a href="#">Permissible misalignment</a></p> <hr/> <p><a href="#">Locating / non-locating support</a></p> <hr/> <p><a href="#">Loads</a></p> <hr/> <p><a href="#">Temperature limits</a></p> <hr/> <p><a href="#">Permissible speed</a></p> <hr/> <p><a href="#">Lubrication</a></p> <hr/> <p><a href="#">Mounting and dismounting</a></p> <hr/> <p><a href="#">Condition Monitoring</a></p> <hr/> <p><a href="#">Associated products</a></p> <hr/> <p><a href="#">Ordering information</a></p> <hr/> <p><a href="#">Designation system for SKF Pillow block roller bearing units</a></p> <hr/>	<p><a href="#">Principles of selecting mounted bearing solutions</a></p> <hr/> <p><a href="#">Bearing failure and how to prevent it</a></p> <hr/>	<p><a href="#">SKF Product select</a></p> <hr/> <p><a href="#">SKF mounting and dismounting instructions</a></p> <hr/>



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