

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

## SY 3. UTF

**Pillow block ball bearing unit with extended inner ring and set screw locking, 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 suitable for applications with both constant and alternating directions of rotation. It has an inner ring extended on both sides and is locked onto the shaft by tightening a set screw on the inner ring, making it easy to mount.

- Strong
- Ready to mount
- Lubricated and sealed bearing
- Quick locking onto the shaft
- Cost-effective

# Overview

## Dimensions

Shaft diameter	76.2 mm
Centre height (pillow block)	88.9 mm
Housing overall width	78 mm
Centre distance between bolt holes	228.5 mm
Bearing width, total	77.8 mm

## Properties

Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
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	Without
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

## Performance

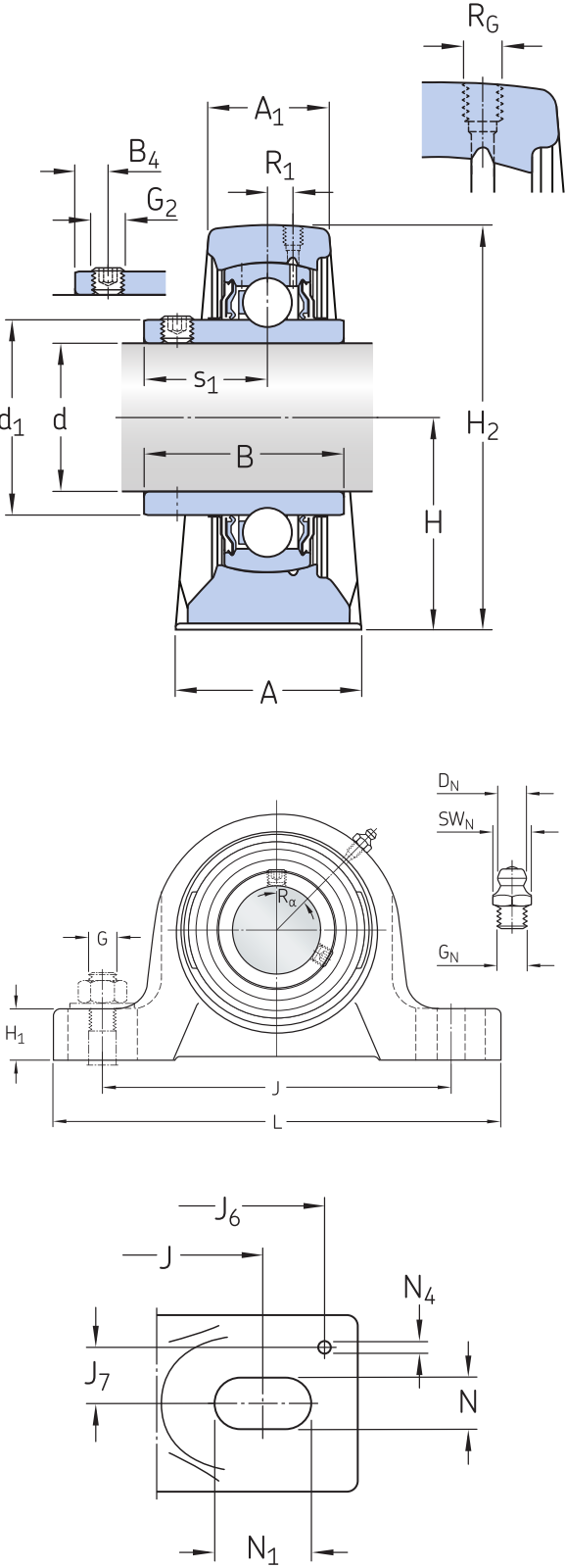
Basic dynamic load rating	72.8 kN
Basic static load rating	53 kN
Limiting speed	2 400 r/min
Note	Limiting speed with shaft tolerance h6

## Logistics

Product net weight	9.71 kg
eClass code	23-05-08-02
UNSPSC code	31171536

Technical specification

Compliance with standard	ISO with centre height deviation
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	Without
Coating	Without



Dimensions

d	76.2 mm	Bore diameter
d <sub>1</sub>	≈ 97.4 mm	Shoulder diameter of inner ring
A	78 mm	Base width
A <sub>1</sub>	48 mm	Top width
B	77.8 mm	Width of inner ring
B <sub>4</sub>	12 mm	Distance from locking device side face to thread centre
H	88.9 mm	Height of spherical seat centre
H <sub>1</sub>	47.5 mm	Foot height
H <sub>2</sub>	175.5 mm	Overall height
J	228.5 mm	Distance between attachment bolts
J	max. 241 mm	Distance between attachment bolts
J	min. 216 mm	Distance between attachment bolts
L	305 mm	Overall length
N	25.5 mm	Diameter of attachment bolt hole
N <sub>1</sub>	38 mm	Length of attachment bolt hole
s <sub>1</sub>	47.6 mm	Distance from locking device side face to raceway centre

THREADED HOLE

R <sub>G</sub>	1/8-27 NPT	Housing thread for the grease fitting
R <sub>1</sub>	5.5 mm	Axial position of the housing thread
R <sub>α</sub>	45 °	Angular position of the housing thread

### GREASE FITTING

D <sub>N</sub>	6.579 mm	Diameter of head sphere of grease fitting
SW <sub>N</sub>	11.113 mm	Hexagonal key size for the grease fitting
G <sub>N</sub>	1/8-27 NPT	Thread of grease fitting

### DOWEL PINS

J <sub>6</sub>	285 mm	Distance of dowel pins
J <sub>7</sub>	29 mm	Axial offset of dowel pins
N <sub>4</sub>	3 mm	Recommended diameter for dowel pins

### Calculation data

Basic dynamic load rating	C	72.8 kN
Basic static load rating	C <sub>0</sub>	53 kN
Fatigue load limit	P <sub>u</sub>	2.16 kN
Limiting speed		2 400 r/min
		Limiting speed with shaft tolerance h6

### Mass

Mass bearing unit	9.65 kg
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### Mounting information

Set screw	G <sub>2</sub>	7/16-20 UNF
Hexagonal key size for set		5.556 mm

screw		
Recommended tightening torque for set screw		28.5 N·m
Recommended diameter for attachment bolts, mm	G	20 mm
Recommended diameter for attachment bolts, inch	G	0.75 in

## Compatible products

### Component

Pillow block housing for insert bearings, cast iron, ISO standards	<a href="#">SY 516 U</a>
Insert bearing with set screw locking and extended inner ring	<a href="#">YAR 216-300-2F</a>