

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

SY 30 TF

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

Attachment bolt diameter	12 mm
Shaft diameter	30 mm
Centre height (pillow block)	42.9 mm
Housing overall width	40 mm
Centre distance between bolt holes	117.5 mm
Bearing width, total	38.1 mm

Performance

Basic dynamic load rating	19.5 kN
Basic static load rating	11.2 kN
Limiting speed	6 300 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	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	Optional end cover
Lubricant	Grease
Relubrication hole	With
Grease fitting	With

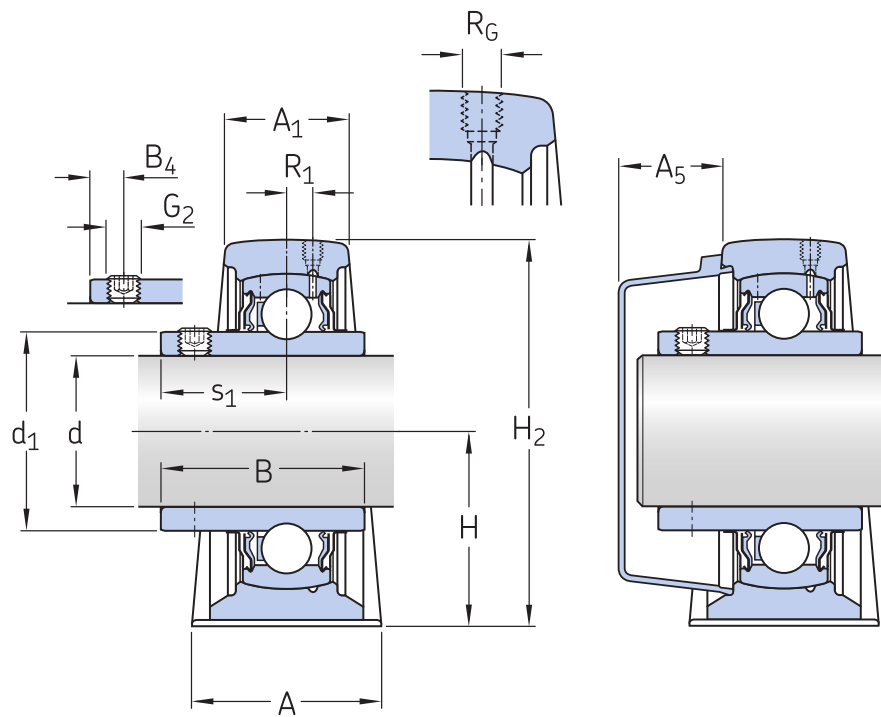
Logistics

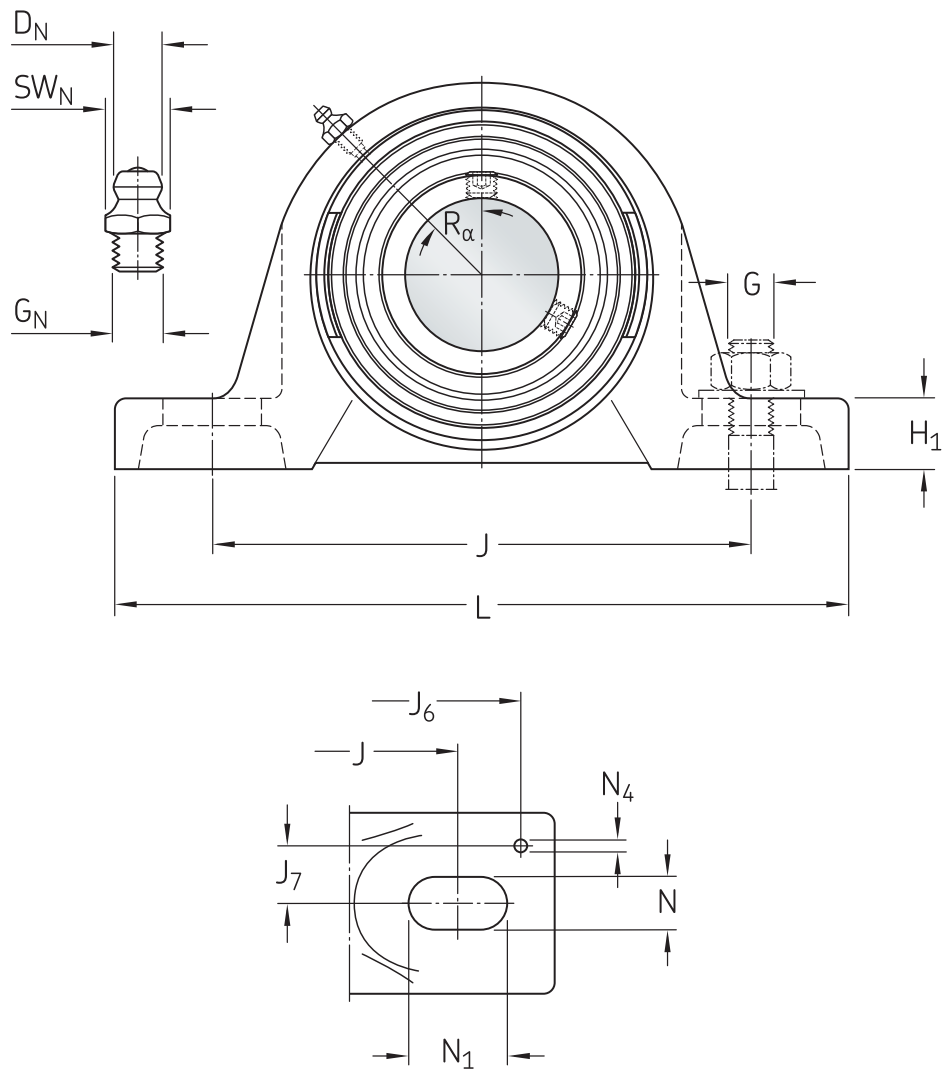
Product net weight	1.07 kg
eClass code	23-05-08-02
UNSPSC code	31171536



Technical specification

Compliance with standard	ISO
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	30 mm	Bore diameter
d_1	≈ 39.7 mm	Shoulder diameter of inner ring
A	40 mm	Base width
A_1	25 mm	Top width
A_5	22.5 mm	Standout of end cover
B	38.1 mm	Width of inner ring
B_4	5 mm	Distance from locking device side face to thread centre
H	42.9 mm	Height of spherical seat centre
H_1	17 mm	Foot height
H_2	82 mm	Overall height
J	117.5 mm	Distance between attachment bolts

J	max. 127 mm	Distance between attachment bolts
J	min. 108 mm	Distance between attachment bolts
L	152 mm	Overall length
N	14 mm	Diameter of attachment bolt hole
N ₁	23.5 mm	Length of attachment bolt hole
s ₁	22.2 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	3 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 _N	7 mm	Hexagonal key size for the grease fitting
G _N	1/4-28 SAE-LT	Thread of grease fitting

DOWEL PINS

J ₆	140 mm	Distance of dowel pins
J ₇	14 mm	Axial offset of dowel pins
N ₄	4 mm	Recommended diameter for dowel pins

Calculation data

Basic dynamic load rating	C	19.5 kN
Basic static load rating	C ₀	11.2 kN
Fatigue load limit	P _u	0.475 kN
Limiting speed		6 300 r/min

Limiting speed with shaft tolerance h6

Mounting information

Set screw	G ₂	M6x0.75
Hexagonal key size for set screw		3 mm
Recommended tightening torque for set screw		4 N·m
Recommended diameter for attachment bolts, mm	G	12 mm
Recommended diameter for attachment bolts, inch	G	0.5 in

Tolerances and clearances

The values depend on the included bearing:

- Bore diameter tolerance → table 1
- Radial internal clearance → table 2
- Recommended fit → table 3
- Shaft tolerance → table 4



Compatible products

Component

Pillow block housing for insert bearings, cast iron, ISO standards

[SY 506 M](#)

Insert bearing with set screw locking and extended inner ring

[YAR 206-2F](#)

Recommended product

End cover for bearing units

[ECY 206](#)



More Information

Product details

[Pillow block units to ISO standards](#)

[Pillow block units to North American standards](#)

[Pillow block units to Japanese Industrial Standards \(JIS\)](#)

[Pillow block units, not standardized \(incl. SKF Food Line\)](#)

[Permissible misalignment](#)

[Locating/non-locating support](#)

[Loads](#)

[Temperature limits](#)

[Permissible speed](#)


[Lubrication](#)

[Mounting and dismantling](#)

[Ordering information](#)

[Designation system](#)

Engineering information

 [Principles of ball bearing units selection and application - Download catalogue \(4.9 MB\)](#)

[Principles of selecting mounted bearing solutions](#)

[Bearing failure and how to prevent it](#)

Tools

[SKF Product select](#)

[Bearing Frequency Calculator](#)



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