

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

SYK 20 TR

Pillow block ball bearing unit with extended inner ring and set screw locking, composite, ISO standards

Pillow (plummer) block ball bearing units consist of an insert bearing mounted in a composite housing that is lightweight but robust and has excellent corrosion resistance. 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.

- Designed for a constant and alternating rotation
- Excellent corrosion resistance
- Lightweight
- Recyclable

Overview

Dimensions

Attachment bolt diameter	10 mm
Shaft diameter	20 mm
Centre height (pillow block)	33.3 mm
Housing overall width	32 mm
Centre distance between bolt holes	96.5 mm
Bearing width, total	31 mm

Performance

Basic dynamic load rating	12.7 kN
Basic static load rating	6.55 kN
Limiting speed	5 000 r/min
Note	Limiting speed with shaft tolerance h6

Properties

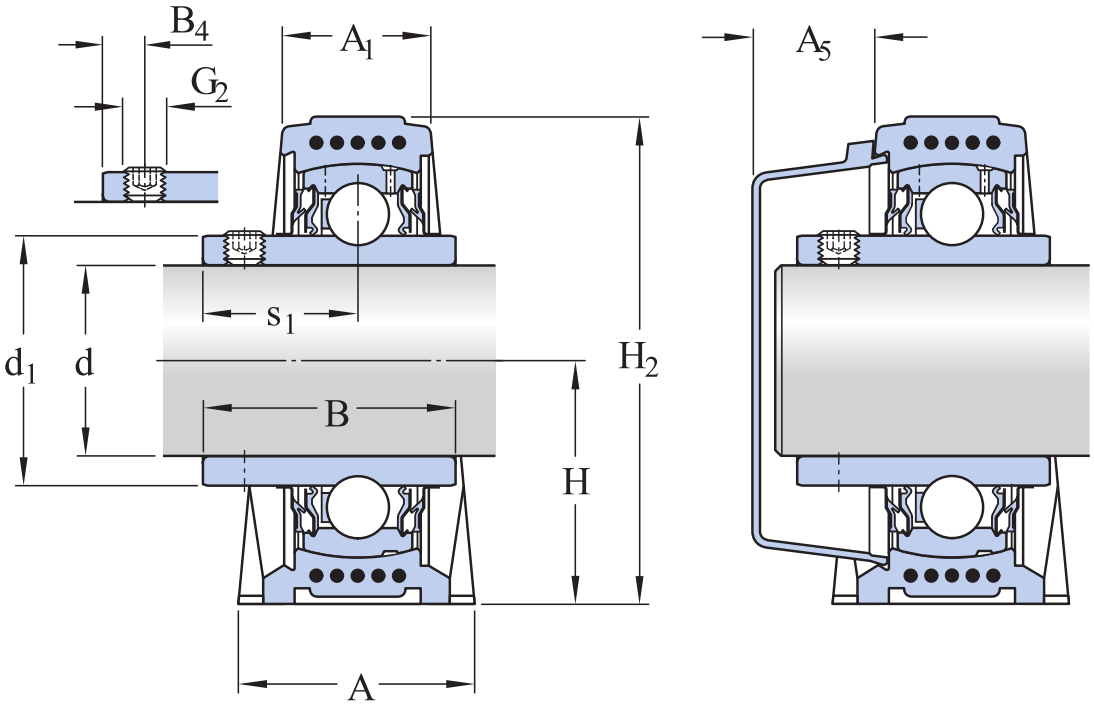
Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Composite
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both sides
Sealing type	Contact, multiple
Sealing, unit	Optional end cover
Lubricant	Grease
Relubrication hole	Without
Grease fitting	Without

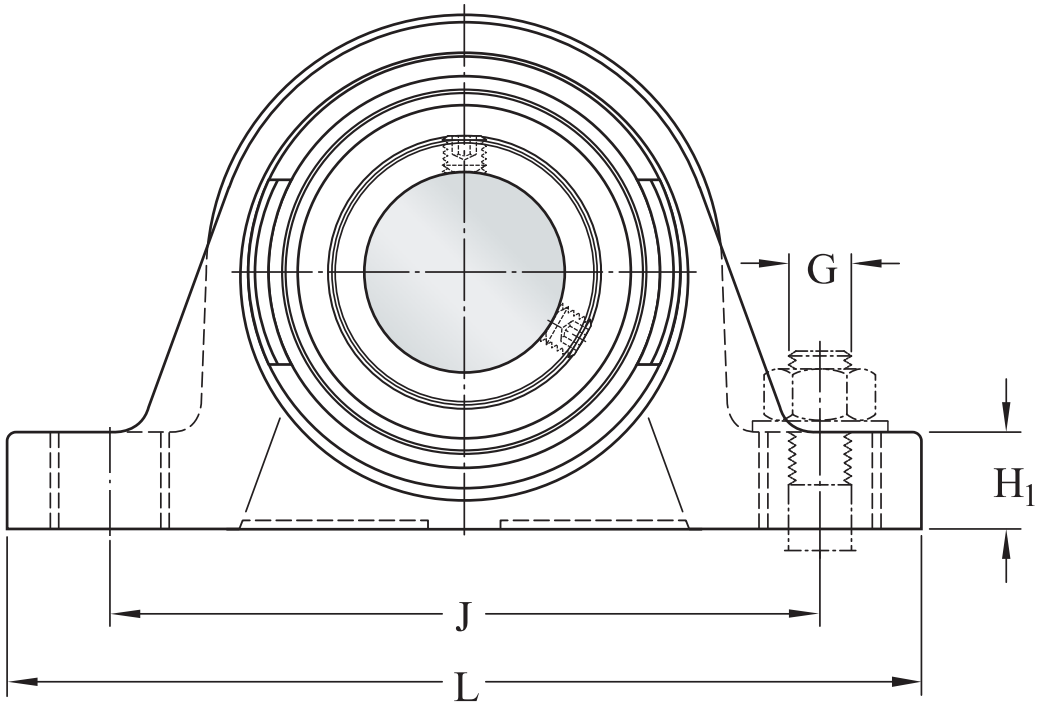
Logistics

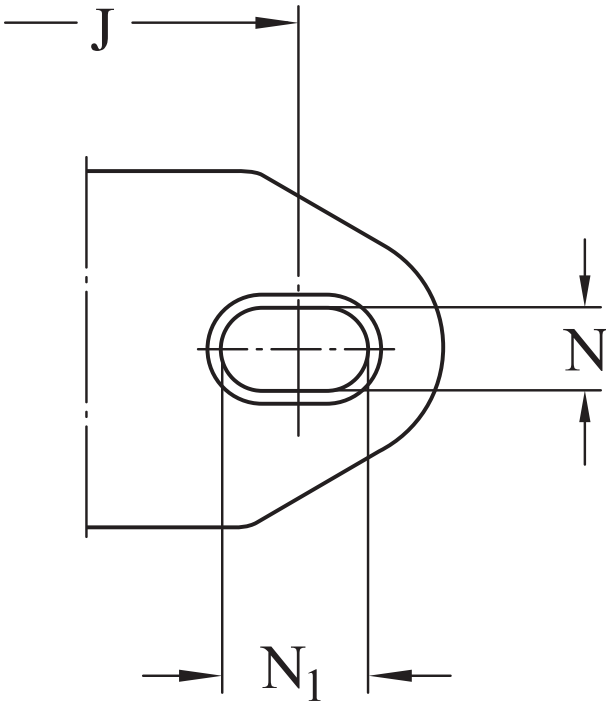
Product net weight	0.254 kg
eClass code	23-05-08-02
UNSPSC code	31171536

Technical specification

Compliance with standard	ISO
Purpose specific	For agricultural applications
Material, housing	Composite
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, multiple
Sealing, unit	Optional end cover
Coating	Without







Dimensions

d	20 mm	Bore diameter
d_1	≈ 28.2 mm	Shoulder diameter of inner ring
A	32 mm	Base width
A_1	21 mm	Top width

A_5	20 mm	Width including end cover
B	31 mm	Width of inner ring
B_1	31 mm	Overall bearing width
B_4	4.5 mm	Distance from locking device side face to thread centre
H	33.3 mm	Height of spherical seat centre
H_1	16 mm	Foot height
H_2	64.5 mm	Overall height
J	96.5 mm	Distance between attachment bolts
J	max. 102 mm	Maximum distance between attachment bolts
J	min. 91 mm	Minimum distance between attachment bolts
L	126 mm	Overall length
N	12 mm	Diameter of attachment bolt hole
N_1	17.5 mm	Length of attachment bolt hole
s_1	18.3 mm	Distance from locking device side face to raceway centre

GREASE FITTING

Calculation data

Basic dynamic load rating	C	12.7 kN
Basic static load rating	C_0	6.55 kN
Fatigue load limit	P_u	0.28 kN
Limiting speed		5 000 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	10 mm
Recommended diameter for attachment bolts, inch	G	0.375 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, composite, ISO standards	SYK 504
Insert bearing with set screw locking and extended inner ring	YAR 204-2RF

Recommended product

End cover for bearing units	ECY 204

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 dismounting
- 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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