



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

SYK 20 TF

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	8 500 r/min
Note	Limiting speed with shaft tolerance h6

Properties

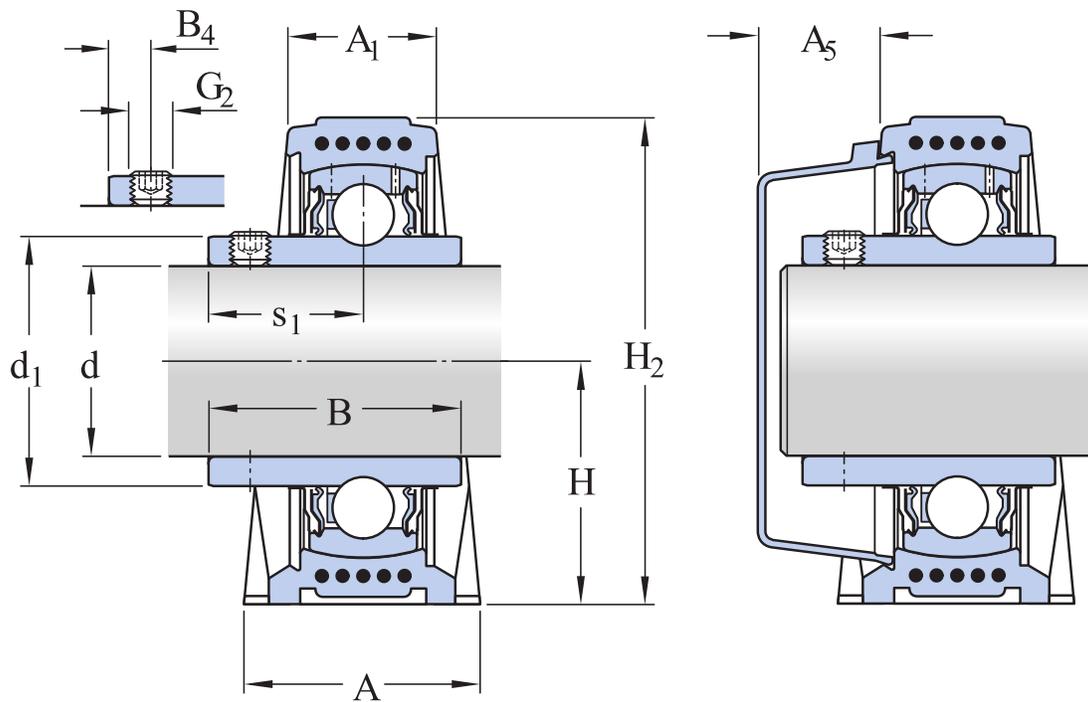
Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Composite
Material, bearing	Bearing steel
Coating	Without
Sealing, bearing	Seal and flinger on both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

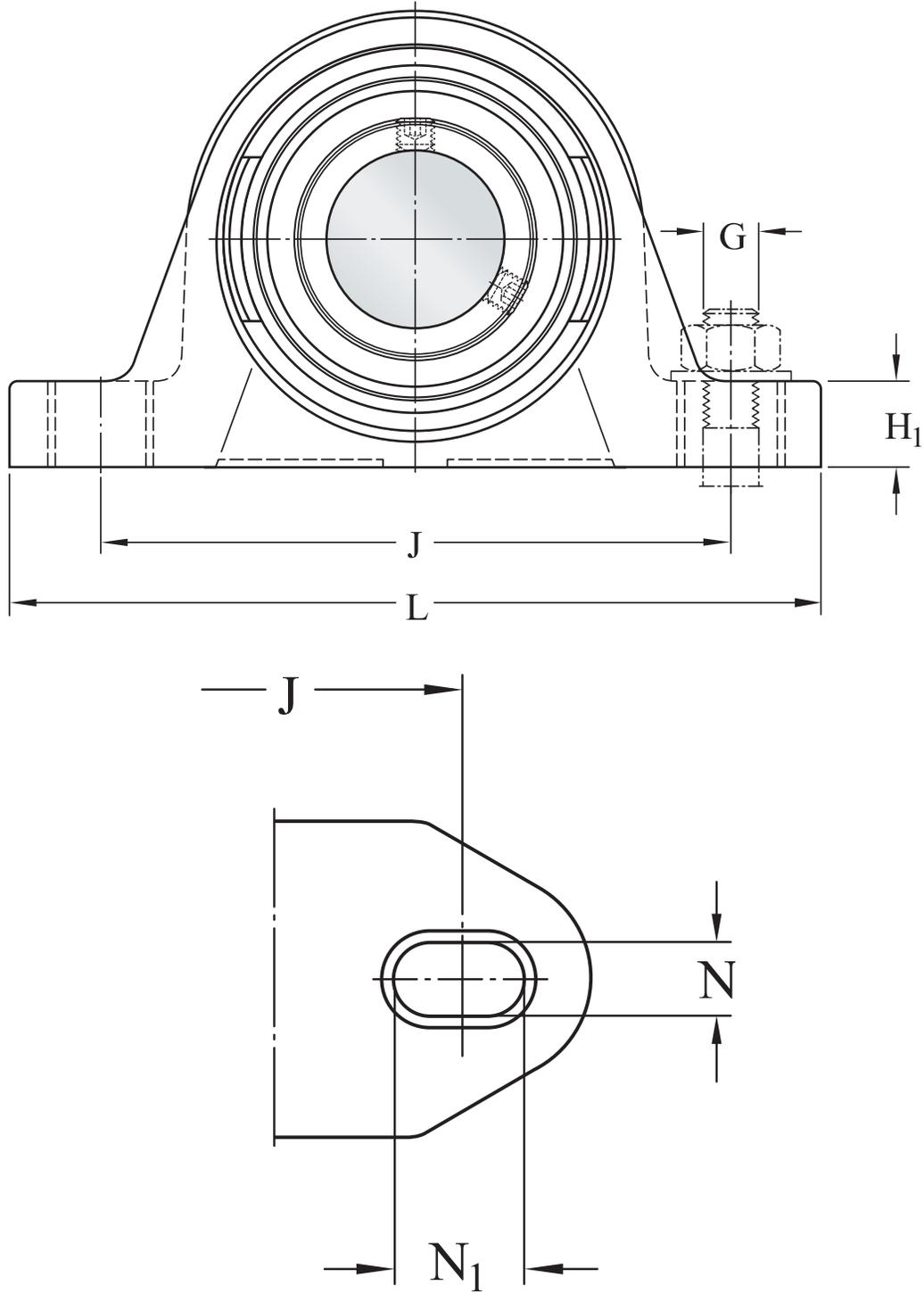
Logistics

Product net weight	0.253 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, standard
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		8 500 r/min
		Limiting speed with shaft tolerance h ₆

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 204-2F

Recommended product

End cover for bearing units	ECY 204
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More Information

 Product details	 Engineering information	 Tools
Pillow block units to ISO standards		SKF Product select
Pillow block units to North American standards	 Principles of ball bearing units selection and application - Download catalogue (4.9 MB)	Bearing Frequency Calculator
Pillow block units to Japanese Industrial Standards (JIS)	Principles of selecting mounted bearing solutions	
Pillow block units, not standardized (incl. SKF Food Line)	Bearing failure and how to prevent it	
Permissible misalignment		
Locating/non-locating support		
Loads		
Temperature limits		
Permissible speed		
Lubrication		
Mounting and dismantling		
Ordering information		
Designation system		



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