

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

P2BC 20M-TPSS

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

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	36 mm
Centre distance between bolt holes	95 mm
Bearing width, total	31 mm

Performance

Basic dynamic load rating	10.8 kN
Basic static load rating	6.55 kN
Limiting speed	5 000 r/min
Note	Limiting speed with shaft tolerance h6

Properties

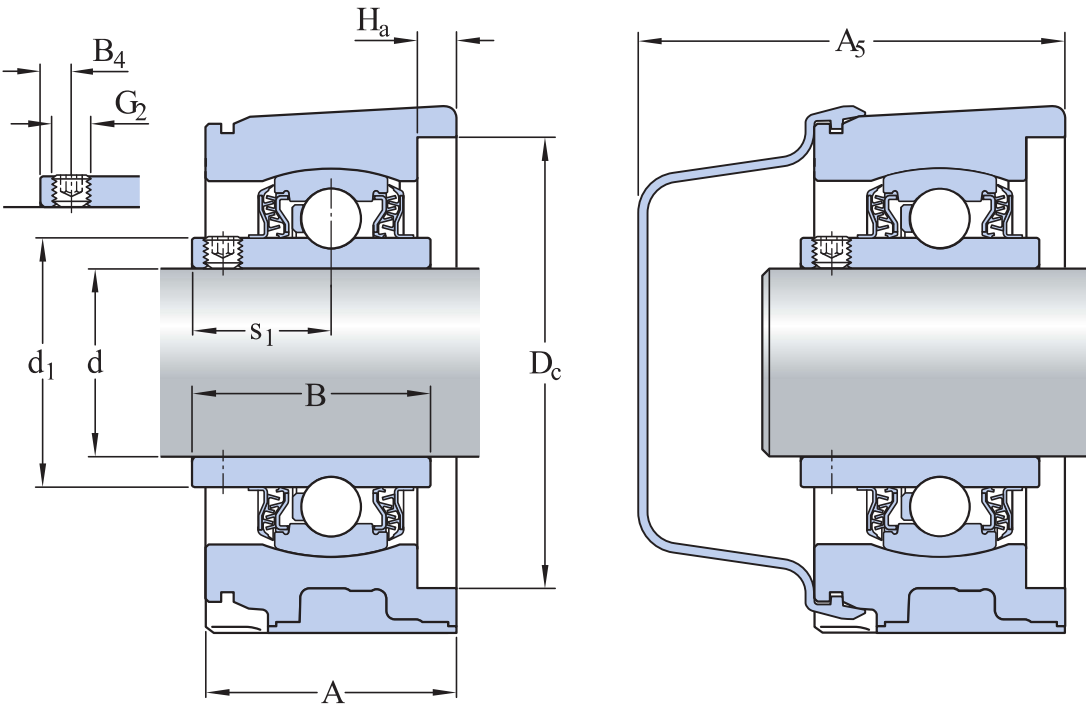
Housing type	Pillow block
Number of bolt holes for fasteners	2
Fastening bolt hole type	Plain
Retaining feature, inner ring	Set screws
Bore type	Cylindrical
Rubber seating ring	Without
Material, housing	Composite for the SKF Food Line
Material, bearing	Stainless steel
Coating	Without
Sealing, bearing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

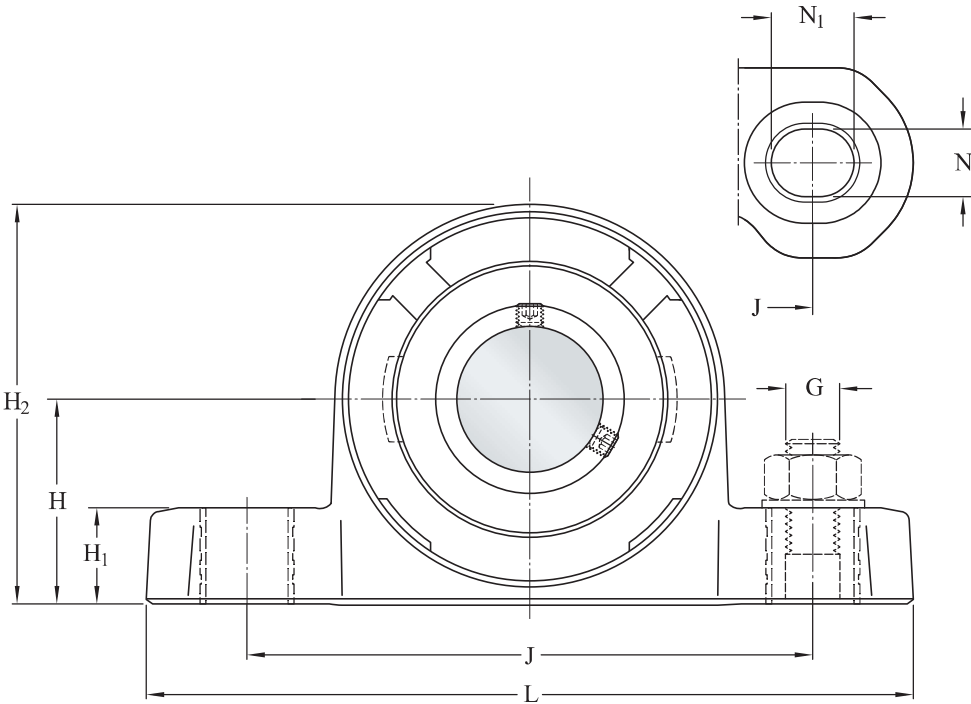
Logistics

Product net weight	0.255 kg
eClass code	23-05-08-02
UNSPSC code	31171536

Technical specification

Compliance with standard	Not standardized
Purpose specific	For food and beverage applications
Material, housing	Composite for the SKF Food Line
Sealing, bearing	Seal and flinger on both sides
Sealing type, bearing	Contact, gutter
Sealing, unit	Optional end cover
Coating	Without





Dimensions

d	20 mm	Bore diameter
d ₁	≈ 28.2 mm	Shoulder diameter of inner ring
D _c	52 mm	Centring diameter
H _a	6 mm	Groove height for backseal
A	36 mm	Base width
A ₁	36 mm	Top width
A ₅	29.6 mm	Width including end cover
B	31 mm	Width of inner ring
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	17 mm	Foot height
H ₂	64.6 mm	Overall height
J	95 mm	Distance between attachment bolts
J	max. 98 mm	Maximum distance between attachment bolts
J	min. 92 mm	Minimum distance between attachment bolts
L	129 mm	Overall length

N	11.5 mm	Diameter of attachment bolt hole
N ₁	14.3 mm	Length of attachment bolt hole
s ₁	18.3 mm	Distance from locking device side face to raceway centre

Calculation data

Basic dynamic load rating	C	10.8 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

Insert bearing with set screw locking and extended inner ring





[YAR 204-2LPW/SS](#)

Recommended product

End cover for bearing units

[ECB 504](#)

More Information

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