

# P2BTC 20M-TPSSShort base pillow

block ball bearing unit with extended inner ring and set screw

## locking, composite

Short base pillow block ball bearing unit with extended inner ring and set screw locking, composite

Short base pillow (plummer) block ball bearing units consist of an insert bearing mounted in a composite housing. This variant has threads for attachment bolts and 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

|                                    |         |
|------------------------------------|---------|
| Shaft diameter                     | 20 mm   |
| Centre height (pillow block)       | 33.3 mm |
| Housing overall width              | 27 mm   |
| Centre distance between bolt holes | 51 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           | Threaded     |
| 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                         |

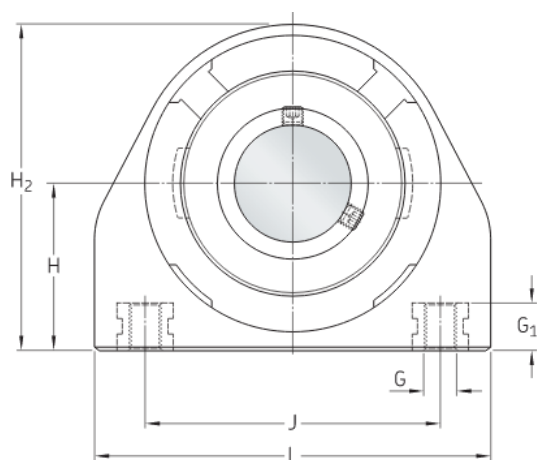
# Technical Specification

|                          |                                    |
|--------------------------|------------------------------------|
| 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                                            |
| $d_1$ | $\approx 28.2$ mm | Shoulder diameter of inner ring                          |
| $D_c$ | 52 mm             | Centring diameter                                        |
| $H_a$ | 6 mm              | Groove height for backseal                               |
| A     | 27 mm             | Base width                                               |
| $A_1$ | 36 mm             | Top width                                                |
| $A_5$ | 63.1 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                          |
| $H_2$ | 64.6 mm           | Overall height                                           |
| J     | 51 mm             | Distance between attachment bolts                        |
| L     | 75 mm             | Overall length                                           |
| $s_1$ | 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 |       |             |

## Mass

|                   |         |
|-------------------|---------|
| Mass bearing unit | 0.25 kg |
|-------------------|---------|

## Mounting information

|                                             |       |         |
|---------------------------------------------|-------|---------|
| Thread for attachment bolts                 | G     | M8      |
| Thread length                               | $G_1$ | 12 mm   |
| Set screw                                   | $G_2$ | M6x0.75 |
| Hexagonal key size for set screw            |       | 3 mm    |
| Recommended tightening torque for set screw |       | 4 N·m   |

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