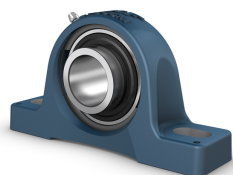


## SKF SY 1.1/4 TF



Pillow block ball bearing unit with extended inner ring and set screw locking, cast iron housing

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.

### Technical specifications

| General                                                  |                                    |
|----------------------------------------------------------|------------------------------------|
| 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                                               |                                    |
| Bore diameter                                            | 31.75 mm                           |
| Shoulder diameter of inner ring                          | 46.1 mm                            |
| Base width                                               | 45 mm                              |
| Top width                                                | 27 mm                              |
| Standout of end cover                                    | 24.5 mm                            |
| Width of inner ring                                      | 42.9 mm                            |
| Distance from locking device side face to thread centre  | 6 mm                               |
| Height of spherical seat centre                          | 47.6 mm                            |
| Foot height                                              | 19 mm                              |
| Overall height                                           | 93 mm                              |
| Distance between attachment bolts                        | 126 mm                             |
| Maximum distance between attachment bolts                | 133 mm                             |
| Minimum distance between attachment bolts                | 119 mm                             |
| Overall length                                           | 160 mm                             |
| Diameter of attachment bolt hole                         | 14 mm                              |
| Length of attachment bolt hole                           | 21 mm                              |
| Distance from locking device side face to raceway centre | 25.4 mm                            |
| Housing thread for the grease fitting                    | 1/4-28 UNF                         |
| Axial position of the housing thread                     | 3 mm                               |
| Angular position of the housing thread                   | 45 °                               |
| Diameter of head sphere of grease fitting                | 6.5 mm                             |
| Hexagonal key size for the grease fitting                | 7 mm                               |
| Thread of grease fitting                                 | 1/4-28 SAE-LT                      |
| Distance of dowel pins                                   | 146 mm                             |
| Axial offset of dowel pins                               | 15.5 mm                            |
| Recommended diameter for dowel pins                      | 4 mm                               |
| Attachment bolt diameter                                 | 12.7 mm                            |
| Shaft diameter                                           | 31.75 mm                           |
| Centre height (pillow block)                             | 47.6 mm                            |
| Housing overall width                                    | 45 mm                              |
| Centre distance between bolt holes                       | 126 mm                             |
| Bearing width, total                                     | 42.9 mm                            |
| Calculation data                                         |                                    |
| Basic dynamic load rating                                | 25.5 kN                            |
| Basic static load rating                                 | 15.3 kN                            |
| Fatigue load limit                                       | 0.655 kN                           |
| Limiting speed                                           | 5300 r/min                         |

**Mounting information**

|                                                 |             |
|-------------------------------------------------|-------------|
| Set screw                                       | 5/16-24 UNF |
| Hexagonal key size for set screw                | 3.969 mm    |
| Recommended tightening torque for set screw     | 6.5 N·m     |
| Recommended diameter for attachment bolts, mm   | 12 mm       |
| Recommended diameter for attachment bolts, inch | 0.5 in      |

**Performance**

|                           |                                        |
|---------------------------|----------------------------------------|
| Basic dynamic load rating | 25.5 kN                                |
| Basic static load rating  | 15.3 kN                                |
| Limiting speed            | 5300 r/min                             |
| Note                      | Limiting speed with shaft tolerance h6 |

**Properties**

|                                    |                                |
|------------------------------------|--------------------------------|
| Housing type                       | Pillow block, normal base      |
| 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 | 1.57 kg     |
| eClass code        | 23-05-08-02 |
| UNSPSC code        | 31171536    |

**SKF drawings**

