



## SKF FYJ 55 KF

Square flanged ball bearing unit for adapter sleeve locking, cast iron housing, JIS

These square flanged ball bearing units are compliant with Japanese Industrial Standards (JIS). They consist of an insert bearing, locked to the shaft with an adapter sleeve, which enables the bearings to operate at higher speeds and run more smoothly. The bearing is mounted in a cast iron housing, which can be bolted to a machine wall or frame. Ball bearing units can accommodate moderate initial misalignment, but normally do not permit axial displacement. The adapter sleeve is not included in the unit and should be ordered separately.

### Technical specifications

| General                  |                                        |
|--------------------------|----------------------------------------|
| Compliance with standard | Order adapter sleeve separately<br>JIS |
| 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            | Without                                |
| Coating                  | Without                                |

| Dimensions                                               |                                                                                                                                                      |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bore diameter                                            | 50 mm                                                                                                                                                |
| Outer diameter of inner ring                             | 69.06 mm                                                                                                                                             |
| Outside diameter of lock nut                             | 75 mm                                                                                                                                                |
| Width of housing                                         | 43 mm                                                                                                                                                |
| Flange width                                             | 17 mm                                                                                                                                                |
| Depth of centring recess                                 | 3.2 mm                                                                                                                                               |
| Width of sleeve                                          | 59 mm                                                                                                                                                |
| Top external diameter                                    | 130 mm                                                                                                                                               |
| Base external diameter                                   | 130 mm                                                                                                                                               |
| Diameter of housing centering recess                     | 150.8 mm                                                                                                                                             |
| Centre distance between bolt holes                       | 130 mm                                                                                                                                               |
| Overall length                                           | 162 mm                                                                                                                                               |
| Diameter of attachment bolt hole                         | 19 mm                                                                                                                                                |
| Distance from locking device side face to raceway centre | 32.5 mm                                                                                                                                              |
| Overall width                                            | 57.5 mm                                                                                                                                              |
|                                                          | Value specified for $s_{>1}$ is approximate and before the sleeve is driven into the bearing bore (sleeve and inner ring bore at starting position). |
| Housing thread for grease fitting                        | 1/4-28 UNF                                                                                                                                           |
| Axial position of the housing thread                     | 25 mm                                                                                                                                                |
| 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                                   | 148 mm                                                                                                                                               |
| Axial offset of dowel pins                               | 45 mm                                                                                                                                                |
| Recommended diameter for dowel pins                      | 4 mm                                                                                                                                                 |
| Attachment bolt diameter                                 | 16 mm                                                                                                                                                |
| Shaft diameter                                           | 50 mm                                                                                                                                                |
| Housing overall width                                    | 43 mm                                                                                                                                                |
| Width, total                                             | 57.5 mm                                                                                                                                              |
| Bearing width, total                                     | 39.9 mm                                                                                                                                              |

| Calculation data          |         |
|---------------------------|---------|
| Basic dynamic load rating | 43.6 kN |
| Basic static load rating  | 29 kN   |
| Fatigue load limit        | 1.25 kN |

|                |            |
|----------------|------------|
| Limiting speed | 3600 r/min |
|----------------|------------|

### Mounting information

|                                                 |          |
|-------------------------------------------------|----------|
| Associated spanner                              | HN 11    |
| Recommended lock nut tightening angle           | 90 °     |
| Recommended diameter for attachment bolts, mm   | 16 mm    |
| Recommended diameter for attachment bolts, inch | 0.625 in |

### Performance

|                           |            |
|---------------------------|------------|
| Basic dynamic load rating | 43.6 kN    |
| Basic static load rating  | 29 kN      |
| Limiting speed            | 3600 r/min |

### Properties

|                                    |                                |
|------------------------------------|--------------------------------|
| Associated mounting tool           | HN 11                          |
| Housing type                       | Flanged                        |
| Flanged housing type               | Square                         |
| Number of bolt holes for fasteners | 4                              |
| Fastening bolt hole type           | Plain                          |
| Retaining feature, inner ring      | Adapter sleeve                 |
| Bore type                          | Tapered                        |
| 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                      | Without                        |
| Lubricant                          | Grease                         |
| Relubrication hole                 | With                           |
| Grease fitting                     | With                           |

### Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 2.98 kg     |
| eClass code        | 23-05-16-02 |
| UNSPSC code        | 31171536    |

**SKF drawings**

