



# igubal<sup>®</sup> Mounted Spherical Bearings

igus<sup>®</sup> igubal<sup>®</sup> mounted spherical bearings are made with high quality engineered polymers. They are lubrication-free and maintenance-free. These bearings are lighter and more economical than traditional mounted spherical bearings.

## Features

- Five popular mounting configurations
- Four popular shaft sizes
- Maintenance-free
- Excellent wear resistance
- L280 polymer type bearing material



| igus <sup>®</sup> igubal <sup>®</sup> Mounted Spherical Bearings                    |                           |                                  |                  |                     |                  |             |         |                     |
|-------------------------------------------------------------------------------------|---------------------------|----------------------------------|------------------|---------------------|------------------|-------------|---------|---------------------|
| Item Photo                                                                          | Part Number               | Style                            | Size I.D. (inch) | Thread/Housing Type | Qty. per Package | Weight (lb) | Price   | Drawing Link        |
|   | <a href="#">A-KBRI-04</a> | K Series, Female Thread, Rod End | 1/4              | 1/4-28 UNF female   | 4                | 0.06        | \$16.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KBRI-08</a> |                                  | 1/2              | 1/2-20 UNF female   | 2                | 0.12        | \$24.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KBRI-12</a> |                                  | 3/4              | 3/4-16 UNF female   | 1                | 0.14        | \$18.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KBRI-16</a> |                                  | 1                | 1-12 UNF female     | 1                | 0.46        | \$22.50 | <a href="#">PDF</a> |
|  | <a href="#">A-KARI-04</a> | K Series, Male Thread, Rod End   | 1/4              | 1/4-28 UNF male     | 4                | 0.04        | \$15.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KARI-08</a> |                                  | 1/2              | 1/2-20 UNF male     | 2                | 0.10        | \$15.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KARI-12</a> |                                  | 3/4              | 3/4-16 UNF male     | 1                | 0.10        | \$12.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KARI-16</a> |                                  | 1                | 1-12 UNF male       | 1                | 0.34        | \$20.00 | <a href="#">PDF</a> |
|  | <a href="#">A-KSTI-04</a> | K Series, Pillow Block           | 1/4              | Pillow block        | 4                | 0.02        | \$12.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KSTI-08</a> |                                  | 1/2              |                     | 2                | 0.07        | \$16.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KSTI-12</a> |                                  | 3/4              |                     | 1                | 0.09        | \$10.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-KSTI-16</a> |                                  | 1                |                     | 1                | 0.20        | \$16.50 | <a href="#">PDF</a> |
|  | <a href="#">A-EFOI-04</a> | E Series, 2-Bolt Flange          | 1/4              | 2-bolt flange       | 4                | 0.03        | \$15.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFOI-08</a> |                                  | 1/2              |                     | 2                | 0.05        | \$16.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFOI-12</a> |                                  | 3/4              |                     | 1                | 0.09        | \$14.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFOI-16</a> |                                  | 1                |                     | 1                | 0.14        | \$18.00 | <a href="#">PDF</a> |
|  | <a href="#">A-EFSI-04</a> | E Series, 4-Bolt Flange          | 1/4              | 4-bolt flange       | 4                | 0.04        | \$22.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFSI-08</a> |                                  | 1/2              |                     | 2                | 0.04        | \$17.00 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFSI-12</a> |                                  | 3/4              |                     | 1                | 0.12        | \$13.50 | <a href="#">PDF</a> |
|                                                                                     | <a href="#">A-EFSI-16</a> |                                  | 1                |                     | 1                | 0.17        | \$16.00 | <a href="#">PDF</a> |

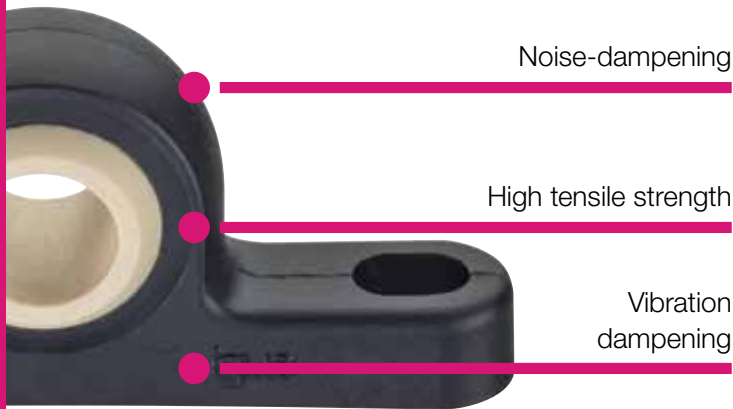


# igubal® Pillow Block

- Maintenance-free, dry running
- High tensile strength
- High endurance strength
- Can be used in combination with E series rod ends
- Lightweight

# igubal® Pillow Block

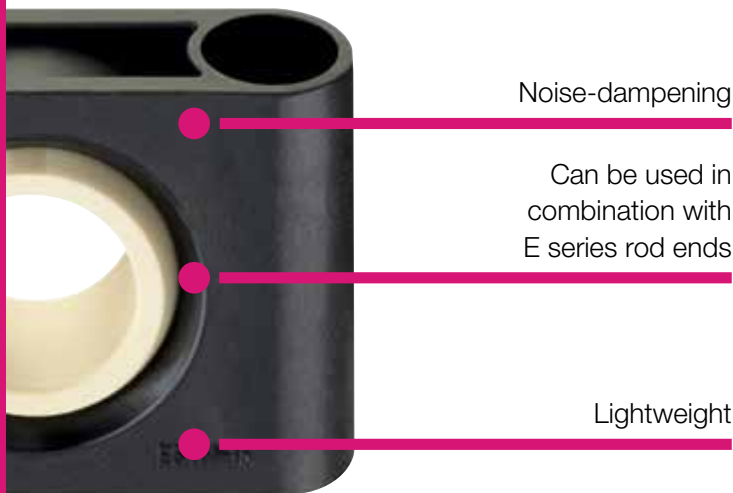
The igubal® pillow block bearings consist of a housing with a bearing insert. igubal® pillow block bearings are especially easy to install, able to compensate for misalignment and prevent edge loads.



Noise-dampening

High tensile strength

Vibration dampening



Noise-dampening

Can be used in combination with E series rod ends

Lightweight

## + Best Applications

- If chemical resistance is required
- If a cost-effective option is requested
- If you need dirt-resistant bearings
- To account for misalignment
- If you need split components

## — Not For Use In Applications

- If temperatures are higher than +176°F
- If an integrated fixing collar is required
- If diameters above 1 inch or 50 mm are required
- If rotation speeds higher than 98.4 fpm (0.5 m/s) are required



max. +176°F  
min. -22°F



Ø 1/4 to 1 inch  
more sizes available from igus



Ø 5 to 50 mm  
metric sizes available from igus

# igubal® Pillow Block - Application examples



## Typical application areas

- Plant design
- Machine building
- Packaging etc.



Stone processing



Solar technology



Paper industry



Packaging industry

## General information

igubal® pillow blocks are made of igumid G according to DIN 71752. The pillow blocks are available in a variety of configurations. igubal® pillow blocks can be used in difficult circumstances without any problems. The pillow blocks are corrosion resistant in moist or wet environments and the sliding bearings are resistant to weak acids and alkalis. The operating temperatures range from -22°F to +176°F. igubal® pillow blocks are made out of a high-wear resistant material which requires no external lubrication.

## Advantages

- Maintenance-free, self-lubricating
- High rigidity
- High strength under impact loads
- Compensation for misalignment
- Compensation for edge loads
- Corrosion-free
- Chemically resistant
- Vibration damping
- Suitable for rotating, oscillating and linear movements
- Lightweight
- High radial loads
- Can be used in liquid media
- Space-saving design
- Easy to install
- Predictable lifetime

## Chemical resistance

The ability to pivot allows igubal® pillow block bearings to compensate for misalignment and possible shaft deflection. Applications where these effects cannot be prevented are suited for igubal pillow block bearings.

## Tolerances

Maintenance-free igubal® pillow block bearings are designed with inside diameter tolerance of E10. The shaft should be made to tolerance class h6 to h9. These recommended tolerances allow for changes in the bearing due to temperature and moisture absorption.

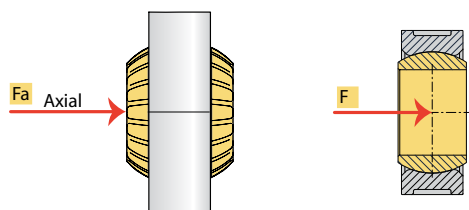
## Mounting

igubal® pillow block bearings are designed for mounting with 2 bolts. Precision mounting of the bearing is not necessary, since the spherical ball compensates for misalignment.

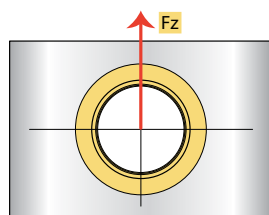
## Loads

The load capacity of the maintenance-free igubal® bearing elements is very high at normal ambient temperatures. igubal® bearings absorb high forces and weigh only one fifth of traditional, metal bearing housings. The excellent dampening properties are based on the fact that the polymer material of the two part bearing can absorb vibrations differently than steel.

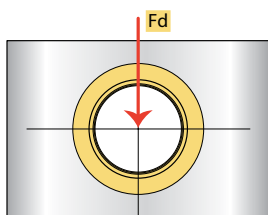
However, plastic specific properties, such as dependence on temperature and behavior under long-term stress, must be taken into consideration when using igubal® bearings. The load capacity of the pillow block should therefore be checked in a practical test, particularly if it will be used under continuous high loads and at elevated temperatures.



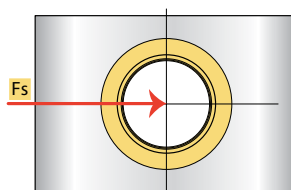
Axial Strength



Radial tensile strength  
(upward)



Radial compressive strength  
(downward)



Lateral strength  
(radial)

## Pivot angle

