

# Plastic bearing LVK

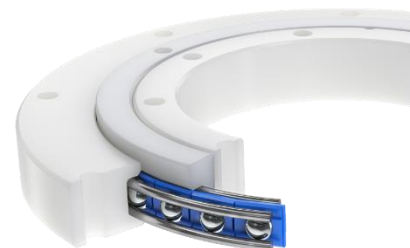
Superlight Bearing Assemblies for the Food and Pharmaceutical industries



## Franke launches another innovative product on the market

The use of a plastic bearing in the food, medical technology and pharmaceutical industries presents very special challenges, for which Franke has developed a bearing solution adapted to them in cooperation with experts from these industries. For example, the new plastic bearings have a high level of corrosion resistance and price sensitivity and are a good alternative to products made of stainless steels and can also be offered in small installation sizes.

This can meet the interests of target groups for whom cleanliness, freedom from maintenance and corrosion resistance are particularly important and require the use of lubricants suitable for foodstuffs and cleanrooms. The drive operates by means of gearing directly on the bearing assembly. The favorable price and rapid availability for customers are also important features that speak in favor of the new bearings.



# Plastic bearing LVK

Housing rings made of plastic (polyoxymethylene (POM)) make type LVK bearing assemblies real lightweights. Equipped with NIRO races and balls, they are a cost-effective alternative to expensive stainless steel bearing assemblies. This makes Franke's new plastic bearings 60 percent lighter and 50 percent cheaper than comparable products made of aluminum.

The plastic bearings are initially offered in ball circle diameters (KKØ) of 100, 150 and 200 mm. In addition to the standard series, it is also possible to manufacture variants with splines.

## What advantages do the new plastic bearings offer?

In addition to the low weight and low cost, the LVK plastic bearing has other convincing advantages: an adjustable resistance to rotation, low moisture absorption, suitability for food contact, chemical resistance, sea water resistance and dirt resistance.



These characteristics make the new products particularly interesting for certain areas of application with great social relevance. They are particularly suitable for the food industry, medical technology and the pharmaceutical industry, as well as for all applications with low load-bearing requirements.

They are installed in food and pharmaceutical plants with a medium range of requirements, such as equipment for handling, transfer systems, rotary systems and ejectors. In addition, the bearings can be used in humid environments, offering an optimal alternative to products made of corrosive materials that cannot be used here.

## What added value do the new plastic bearings offer?

Plastic bearings of type LVK are standard products at Franke and are available without long delivery times. Only materials and lubricants approved for the target industries are used. The design as a so-called "complete solution" facilitates planning and installation in the respective applications. In the long term, the low maintenance requirement, which saves a lot of effort and money, and the possibility of simply extending the service life at the end of the service life by replacing the bearing elements, are worthwhile.

Customized designs can be developed for individual customer requirements, and expert advice is available from Franke. The plastic from which the new bearings are made makes them particularly light and, in combination with the compact design, they can also be installed in small installation spaces.

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## Is the Franke Plastics Bearing your solution?

The main arguments of the new Franke plastic bearing make them an ideal solution for use in many applications in the food, medical technology and pharmaceutical industries. The low price makes them a low-cost alternative to stainless steel designs and the quick availability makes them attractive for numerous customers. Thanks to Franke's preload, the bearings have no play, which clearly sets them apart positively from competitor products on the market. The lightweight design offers a great advantage for use in many areas and gives customers more options and freedom in the overall design of applications. The plastic bearing is adaptable to Franke's standard range of steel and aluminum bearings.

At one glance

### Characteristic

- Light weight
- Adjustable rotation resistance
- Low moisture absorption
- Suitable for food contact
- Chemical resistant
- Sea water resistant
- Dirt resistant
- Cost effective

### Technincal data

#### Material

Inner/Outer ring: Polyoxymethylen (POM)  
 Ball races: Non corrosive Steel (1.4310)  
 Rolling elements: Nin corrosive Steel  
 Cage: Polyamid (PA12)

#### Operating temperature

-10 °C to +80 °C, short-term up to +100 °C

#### Peripheral speed

Max. 4 m/s

#### Lubricant

Klüber UH1 14-151 / food grade lubricant

#### Relubrication

Via grease nipple according to DIN 3405