



General and technical information

#### Stepping foreard together with our customers

For more than 50 years, *SANKYO OILLESS* has been one of the leading manufacturers of maintenance-free sliding elements. As a leading supplier and pioneer in the production of stamping and press tool components for the automotive industry, *SANKYO OILLESS* supplies an products for many other applications such as mold making, engineering, packaging, heavy industry, aerospace and many more.

The technologies developed by **SANKYO OILLESS** have reduced or eliminated friction, wear and tear. In addition, **SANKYO OILLESS** provides services and quality products to offer you the best possible solutions for your requirements at all times.

#### The benefits of slide bearings versus roller bearings

In a variety of applications, designers are increasingly replacing roller bearings with slide bearings. In addition to ease of installation and cost effectiveness, slide bearings offer a number of distinct advantages. Slide bearings require less installation space, have a larger load bearing capacity, are maintenance-free or require little maintenance, are easier to assemble and are less susceptible to noise and vibration.

The following list gives an overview of the general advantages of bearings compared to bearings.

#### Slide bearing

- Higher load bearing capacity and reduced footperint
- Higher resistance to vibration and increased lifetime
- Easier installation
- Lower installation costs
- Increased shaft tolerances possible
- Compensates misalignment and reduces the edge load

#### Roller bearing

- sensitive to shock, vibration and edge load
- high costs for bearings, housings, counterfaces and
  fixing materials
- large space required
- is prone to noise development

### **Technologies for top performance**

SANKYO products are manufactured in our own plants and distributed worldwide.

We offer high quality maintenance-free sliding elements acc. to international standards and standards for use in

- pressing tools
- injection molds
- general engineering

As an experienced specialist, we have the appropriate know-how in tribology to always offer the best solutions for your needs. We supply a large portfolio of lubrication-free sliding elements and also offer custom products acc. to customer drawing.

Quality and performance are our constant commitment!



Information about product groups

#### Plates, angle strips and the like

According to the case of application and the desired accuracy, between 0.02 and 0.15 mm. In general, guide slides are made to give a clearance of 0.05 mm and a vertical clearance of 0.1 mm.

#### **Attention**

The graphite cannot be deposited on the entire surface with very small movements. Please contact the technical department if you want to realise very small movements.

#### **Sliding partners**

Suitable sliding partners for Sankyo Oilless Bushes and Plates are **gas nitrated or hardened steel** alloys with **HRC** > **35**.

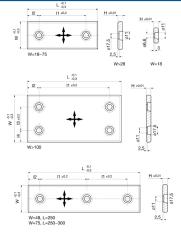
In order to ensure an optimal sliding beahaviour, the difference in hardeness between the sliding material and sliding partner should at least be **100 HB**.

The surface roughness of the sliding partner should be  $Rz = 3...6,3 \mu m$  (grinding).

If guides, like in large dies of punching tools, are continuously moved apart during operation, the counterpart partner should be provided with correspondingly generous centering chamfers.



## Article informationen



#### **Properties:**

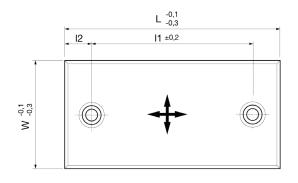
Base material	Sinter layer (SO#220)
Self-lubricating	Yes
Basic material	Steel
Max. surface pressure P	40 N/mm <sup>2</sup>
Max. sliding speed v	30 m/min
Max. P*v-Wert	100 N/mm² x m/min
Operating temperature	-40°C / +120°C
Friction coefficient	0,095

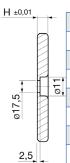
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2773010050	TWX 18x100	18	100		50					Me		
2773010075	TWX 18x125		125		75	25			-	M6		
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