



APPLICATION INFO

PERMAGLIDE® PLAIN BEARINGS: SCISSOR JOINTS

SECTOR: ENGINEERING, CONSTRUCTION MACHINERY

Recommended product

Permaglide® plain bearing bush design **PAP ... P200**

Function

Scissor joints are used e.g. in lifting platforms, cranes, working platforms, trailer platforms, lifts and laboratory lifting platforms. The work area is lifted or lowered by the scissor joints in this case, for example. The scissor joint consists of legs of equal length that move around a centre axis via plain bearings. Static forces mainly act on the bearings. A rotary motion only occurs at very low velocity in the joint when lifting or lowering.

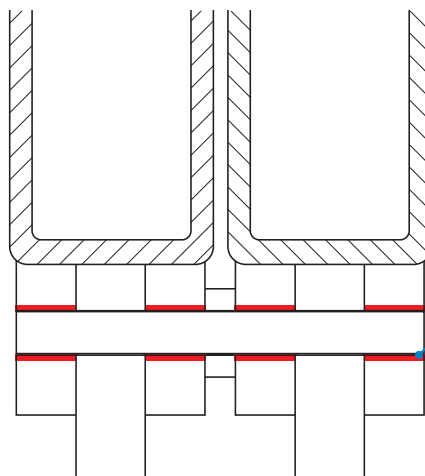
Requirements for the bearings in the scissor joint

- Jerk-free lifting and lowering of the lifting platform with and without load
- The plain bearing must offer long-term smooth running and run jerk-free in the joint
- No rusting of the joints, even during infrequent use and longer downtimes
- Lower maintenance requirements
- Low installation dimensions



Work platform with scissor joints

Bearings in a scissor joint with Permaglide® plain bearing bush in design PAP ... P200



**Bearing with Permaglide® P2 plain bearing bushes**

In the application, the bearing of the scissor joints can be achieved with maintenance-free plain bearing bushes made from the material Permaglide® P200. The plain bearing bushes are pressed into the legs of the scissor joints. This guarantees the smooth and jerk-free guidance of the scissor joint.

The material P200 is low-maintenance. The initial lubrication during mounting is sufficient for the entire service life in the application. This means that no maintenance of the plain bearing is required. The grease protects the pin from corrosion and guarantees smooth rotation of the pin in the bearing.

Advantages of the Permaglide® P200 plain bearing bushes for use in scissor joints

- Low-maintenance operation with lubrication
- Lifetime lubrication possible
- Smooth running
- Highly stressable
- High wear resistance
- Space-saving thanks to thin-wall design
- Good damping characteristics
- Constant and low friction value, which means no jerking
- Lead-free
- Compliant with Directive 2011/65/EU (RoHS II)



**Further information on
Permaglide® plain bearings**
Permaglide® catalogue, item
no. 50003863-02