



FL 1494
For technical personnel only!
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PRODUCT APPLICATION

PERMAGLIDE® PLAIN BEARINGS: BEARING OF THE LAMELLAE IN FIRE DAMPERS

SECTOR: FIRE SAFETY TECHNOLOGY, BUILDING TECHNOLOGY

FUNCTION

Fire dampers must function reliably. If there is a fire, the lamellae of the fire damper must open smoothly and correctly. Environmental influences such as heat, cold, dirt or dust must not impede the function of the lamellae. If used frequently – or indeed rarely – this correct opening must not be impeded. Jamming caused by corrosion, dirt or the influence of certain temperatures must be prevented.

Bearing with Permaglide® P180 plain bearing bushes

Permaglide® P180 plain bearings, which are implemented in pairs, are an ideal solution for the bearing of the lamellae in fire dampers. The maintenance-free Permaglide® P180 plain bearings prevent the bearing from corroding and freezing solid, and prevent the lubricant from dripping out due to heat. The bearing

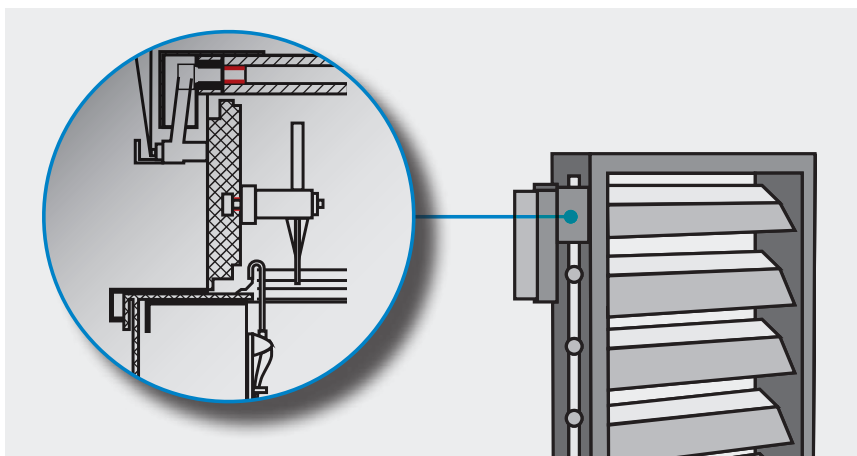
clearance may not become too low, e.g. due to high temperatures, as this can lead to the lamellae becoming stuck. The reliable function of the fire damper – even after long periods of use – is guaranteed by using Permaglide® P180 plain bearings.

Advantage: Reliable function of the bearing thanks to Permaglide® P180 plain bearings

- Impervious to temperature, dirt and dust
- Maintenance-free, even when used very frequently or rarely
- Protected against corrosion

Use of Permaglide® P180 plain bearings in fire dampers

Bearing of the lamellae pivots: Permaglide® bushes in the locating hole of the lamellae



Bearing of the lamellae using Permaglide® P180 plain bearings



Permaglide® P180 plain bearing bush

**Description of material**

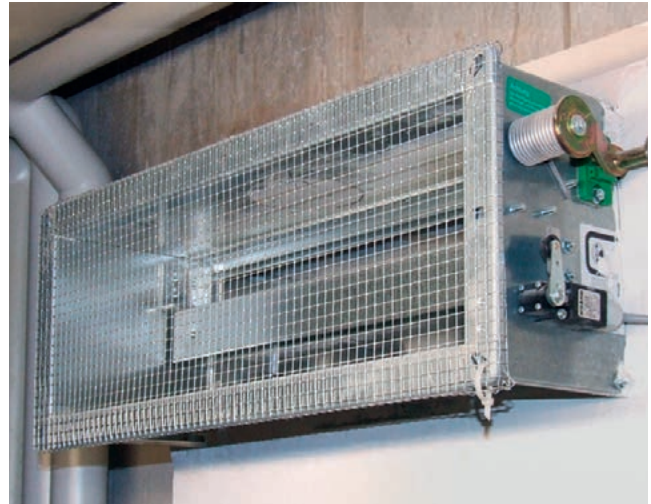
Permaglide® P180 – robust and reliable

- Universally usable plain bearing material for dry and lubricated applications
- High rigidity
- Durability
- High chemical resistance
- Good emergency running properties
- Material: Bronze sintered onto a steel base, with friction-reducing additives (PTFE).

The P180 sliding layer system provides sufficient protection even in damp environments. It is chemically inert and prevents fluid ingress into the material. This effectively suppresses the swelling of the material. As a result, the material exhibits high dimensional stability during application.

Application description

In normal operation, the lamellae of the fire damper are closed and are never opened, or if so, then very rarely. Fire dampers are installed in building ventilation systems in order to prevent fire and smoke spreading via ventilation lines. In the event of fire, fire dampers are opened so that toxic fumes can be extracted. Fire dampers are sometimes mandatory as safety components according to § 14 of the German Model Building Ordinance (MBO). Fire dampers are also used for normal ventilation in building technology.



Fire damper



Ventilation system

**Further information on Permaglide® P180 plain bearing bushes**

- Permaglide® catalogue, item no. 50003863-02
- Permaglide® online catalogue shop.shop.permaglide.de