

**MODEL**

**PE**



## LOUVER DAMPER

The PE model is a louver damper for assembly between flanges on gas conduit systems. Louver dampers are made up of various parallel or opposed blades which allow good regulation and good closure and opening times. The ORBINOX standard model is designed for operation at pressures of 100 mbar, with recommended speeds of below 30 m/s and temperatures of 600 C°.

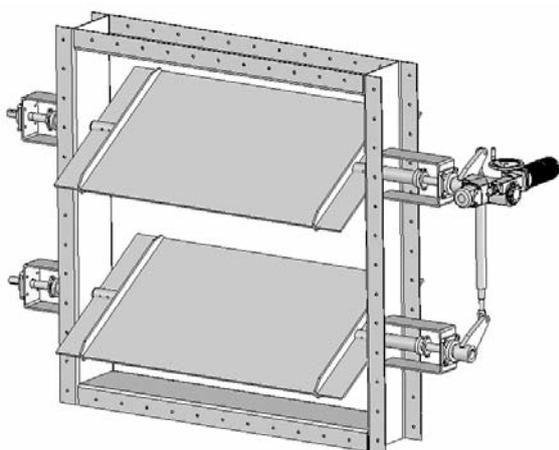
It is a relatively air tight valve with a closing degree of between 90% and 99%, which can reach 100% if an air sealing system is included.

The standard model of the louver dampers is designed so that the assembly is carried out in such a way that the drive shafts always remain in a horizontal position, although there is an option of assembly with the shafts in a vertical position on request.

### STANDARD LOUVER DAMPER (PE)

#### Description

The louver damper is made up of various blades which rotate on their central shaft. The ends are joined to the conduits by means of flanges. The louver damper is normally supplied as a single part, except for applications in which the dimensions of the unit require special transport.



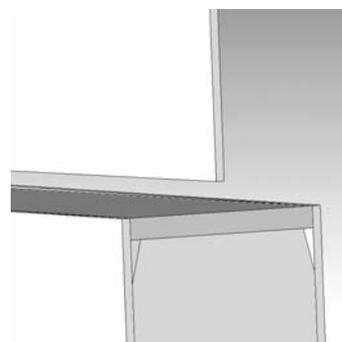
#### Construction

The body of the louver dampers is a fabricated construction which can be made of different materials. The standard construction range includes

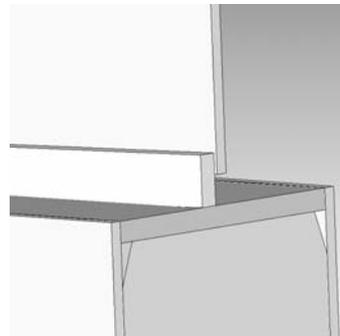
sizes ranging from 150x1500 mm (minimum) to 2000x2000 mm although, on request, larger sizes can be constructed.

The blades are constructed flat with reinforcing ribs and are supported on two semi-shafts. The flat disc system is sufficiently rigid for the operational pressures of these valves and does not cause significant losses.

#### Seating options



Swing-thru



Step seat

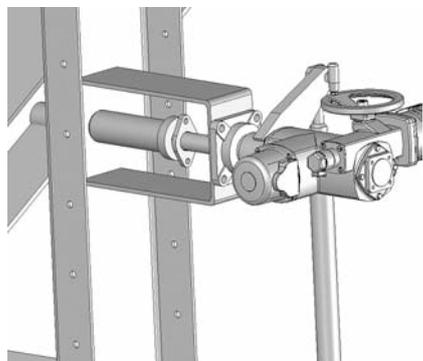
The louvers have two types seal design. Depending on the application, the options are: swing-thru (closure from 90 to 97%) for environments with a concentration of dust (of less than 1000 mg/Nm<sup>3</sup>); and the step seat (closure of 99%) suitable for other applications requiring a high level of air tightness.

#### Bearings

ORBINOX supplies its louvers with the bearings situated on the outside and separated from the packing. This way, they are kept away from sources of heat and corrosion, thus lengthening their useful life. This system also allows for the changing of the packing without having to remove

MODEL

PE



the bearing, which will make future maintenance tasks easier.

### Insulation

ORBINOX supplies its valves prepared for outer insulation of 200 mm. In order to change bearings and packings in the future without the need to remove said insulation, a space has been left free.

## LOUVER DAMPER WITH SEALING SYSTEM (PE2)

### Description

The louver damper with sealing system is made up of two parallel louvers. The seal is created in the space between these two louvers, injecting ambient air at a higher pressure than that of the gases circulating in the conduits. The system creates a pressurised chamber which prevents gases from escaping. This therefore guarantees the air tightness of the valve with the conduit. This system is designed for conduit pressures of less than 250 mmwc.

It has the following actuators: gear box, on/off pneumatic actuator, pneumatic actuator with regulation, and electric actuator. The sealing system is made up of an electroventilator, a sealing valve, a dilation compensator and a sealing pipe. The other characteristics are the same as the louver damper without sealing system.

