



## FLEXIMAT VENTILATION GLANDS

### Pressure equalization elements. The reasons and the need for

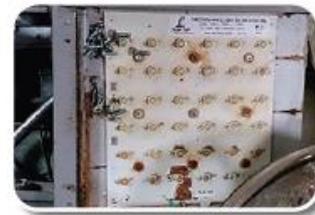
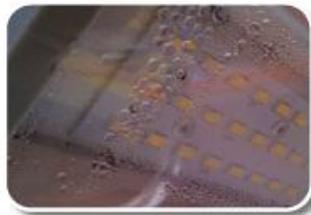
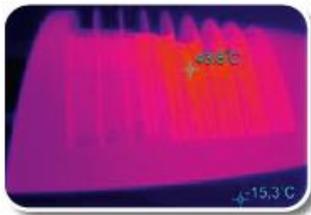
#### Why the high tightness of the boxes - not always well?

Sealed enclosures are protected against dust and moisture from the outside, but can not be prevented the formation of condensation inside the product due to the temperature differences.

During the working process the pressure and temperature level of inside of the box increases. When it cools down the pressure is reduced and the air starts to be sucked out. Upon reaching the "dew point" the condensation is come out which causes oxidation of the internal parts.

In addition, due to sudden temperature changes leads microcracks on the walls of the boxes.

#### What makes matter worse..?



**\*The temperature difference in the housing and outside leads to negative pressure drops**

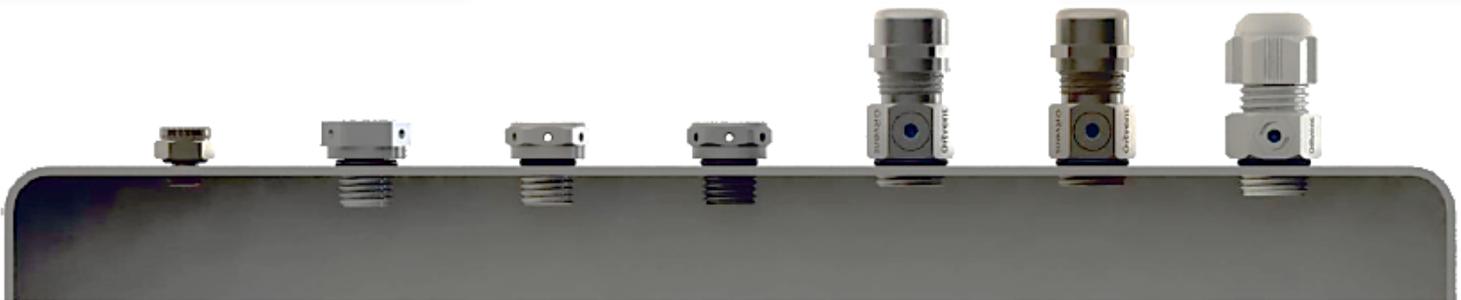
**\*The effects of condensation in the junction box**

The contact tracks of the PCB, solder wires and where the lamp components starts to be oxidized. As a result, the durability of the life of the products (lamps or boxes) could decrease and extra service costs should be spent.

To drill a hole for ventilation not the best solution, because of the water and dust threat is increased with rainy or windy weather conditions.

Changes in weather conditions have a direct impact on the state of hermetic housings of street devices. When there is thunderstorms or moving from cold night to hot day the internal pressure of the boxes can increase up to 1000mbar. As a result, microscopic cracks can occur which may cause losing of IP feature of the products. Besides this problem, the oxidation of the internal parts of electrical equipment increases and accelerates failure.

There is so effective solution to avoid such problems...



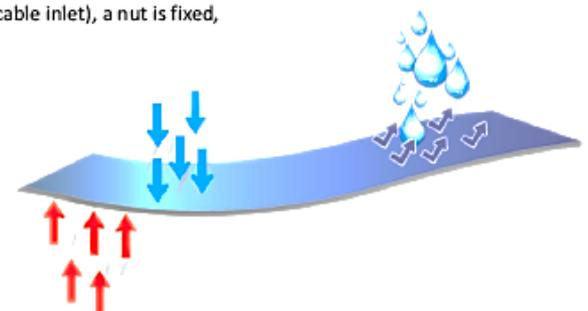
This vicious circle can be broken with the pressure equalization parts thanks to its main feature of which hydrophobic, oleophobic membrane of special composition.

Air passes through but block dust and water. The ventilation glands or plugs allows hot air to go outside and controls the temperature of the lamps or boxes while keeping its waterproof feature.

The principle of operation is simple: the gland or plug is mounted in the body (typically –near the cable inlet), a nut is fixed, where is not threaded entry on the inner side and provides ventilation to your devices.

The pressure equalization parts has a degree of protection IP68. After installations, it protects against your product ingress of unwanted elements. At the same time it ensures the circulation of air while maintaining the tightness.

Equalized pressure and the negative effect in the form of condensation does not occur. This is especially crucial in the different regions where the air temperature is unsteady.



### Metal or plastic

The materials of ORvent products are Plastic PA6, Brass nickel plated or Stainless steel which is appropriate to be used for both indoor and outdoor applications.

The test results have shown that ORvent pressure equalization parts is able to withstand an overload of up to 5 bar with strong water pressure.