

## **FIL 39G** **attenuation optical filter**

Sometimes the presence of strong noise, coming from sun or incandescent lights modulated by moving trees or other things, that cannot be avoided by changing the detector position, needs to decrease the detector sensitivity in order to avoid false alarms. For this purpose one or more attenuation optical filters are provided, which do reduce the detector sensitivity.

These optical filters are yellow adhesive plastic (poly-carbonate) discs, 39mm in diameter and 0.25mm thick, that can be placed externally over the optical window.

The sensitivity reduction prevents the detector from issuing false alarms, still assuring a good sensitivity level.

One filter disc decreases the detector sensitivity from the standard value of 2% to 3%.

Then the smallest detectable flame size becomes 3% of the distance. This means that at a 10m distance the smallest detectable flame size is increased from 20cm to 30cm.

With two filter discs the sensitivity becomes 4% of the distance, that is, at a 10m distance the smallest detectable flame size is 40cm.

With three filter discs the sensitivity becomes 6%, that is, at a 10m distance the smallest detectable flame size is 60cm.

When needed, usually only one filter disc is used. The use of more than three filter discs is wrong.

