

Mounting the Sensing Probe

Whenever possible place the entire probe inside the space to be monitored.

In case of mounting the probe into a partition wall, it is of paramount importance for accurate measurement to avoid T gradients along the probe. In case of large T difference between the two sides of the wall, it is highly recommended to insert the probe completely (up to the cable outlet) into the wall.

Should this not be possible, place a thermal isolation layer on the part of the probe outside the wall (on the cable side).

For probe mounting into a partition wall use the mounting flanges P-F-401 for probe diameter 12 mm and P-F-411 for probe diameter 15 mm.



P-F-401



P-F-400



P-F-411

Maintenance

In certain applications even the correct choice of filter cap cannot stop all pollutants from getting inside the sensing head.

Deposits of dirt or dust inside the sensing head can lead to wrong measurements results, mostly by acting like a low parallel impedance on the sensing elements. Such effects are usually stronger in applications with high humidity.

In such situations the sensing head can be cleaned by the user.



1. Disconnect the device from the power supply.

2. Wipe clean the probe for preventing contamination of the sensing head with pollutants possibly deposited on the exterior of the probe. Use a clean soft cloth, wet or dry depending on the deposits on the probe. Wipe clean also the other parts of the device. Depending on the type, these can be the enclosure with electronics and the probe cable.

Caution:

- Use only water and/or isopropyl alcohol for cleaning the probe and the other parts of the device. Other cleaning agents might affect the sensing elements.
- Do not attempt to clean the filter cap. This would only lead to its clogging. A dirty filter cap must be replaced by a new, original one, at the end of the cleaning process.

3. Remove (unscrew the filter cap with utmost care, so that the filter cap does not touch at any time the sensing elements of the sensing head.

Caution:

- Do never touch the sensing elements.
- Any attempt to clean mechanically the sensing elements such as rubbing or brushing leads certainly to their irreversible damage.

4. Place two glass vessels in the tray of an ultrasonic cleaner, one with clean Isopropyl alcohol and the other with clean deionized water. Then fill the tray of the ultrasonic cleaner with tap water up to the maximum level mark.

5. Switch on the ultrasonic cleaner.

Hold onto the sensing probe and place the sensing head in isopropyl alcohol for

3 minutes . The sensing element, the leads and the sensor socket shall be immersed in the liquid.

In case of heavy pollution, as in case of deposits which can be seen with the bare eye, continue this until the deposits are dissolved.

Caution

The sensing elements may not touch the vessels!

6. Hold onto the sensing probe and place the sensing head in deionized water for 3 minutes.

7. Let the sensing head dry free for about 30 minutes at room condition temperature

8. Make sure by optical inspection that there are not water droplets on any part of the sensing head. Place on a new, original filter cap. This must be done with utmost care not to touch the sensing elements.

Caution

Never reuse the old filter cap after cleaning the sensing head.

9. For each device to be cleaned use new clean isopropyl alcohol and deionized water, as well as clean glass vessels.

Caution

Do not reuse the isopropyl alcohol and the deionized water for cleaning a second sensor.

Note:

Best cleaning results are achieved by using an ultrasonic cleaner as described above. In case this is not available, perform the entire procedure without it, shaking gently the probe when placed in isopropyl alcohol and in deionized water.

