

### FEATURES

- Water flow sensor with brass body and temperature sensor.
- Temperature probe with 0.5°C accuracy (@25°C).
- Helicoidal rotor and Hall sensor measurement technology.
- Conformity with the CE directives.

1. G3/4" output 2. G3/4" input 3. Flow sensor 4. Temperature probe

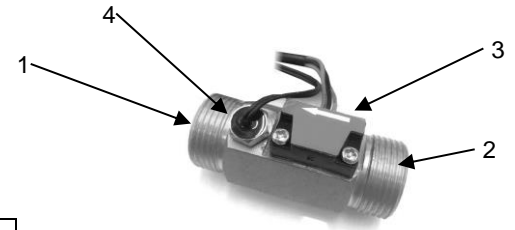


Figure 1. Water Flow Sensor with temperature probe

### GENERAL SPECIFICATIONS

| CONCEPT               | DESCRIPTION                                |
|-----------------------|--|
| Operation temperature | -20°C to +80°C                             |
| Storage temperature   | -25°C to +80°C                             |
| Operation humidity    | 35% to 95% RH                              |
| Storage humidity      | 25% to 95% RH                              |
| Fluid pressure        | Up to 17.5bar (1.75MPa)                    |
| Installation          | In pipe in horizontal or vertical position |
| Weight                | 170g                                       |
| Housing material      | Brass                                      |

### FLOW SENSOR SPECIFICATIONS AND CONNECTIONS

| CONCEPT                       | DESCRIPTION                                 |
|-------------------------------|---|
| Power supply voltage          | 5VDC  |
| Maximum current consumption   | 15mA  |
| Output type                   | Square pulse with duty cycle of 40..60%     |
| Output frequency <sup>1</sup> | $f[\text{Hz}] = K/3600 \cdot Q[\text{l/h}]$ |
| Water flow range <sup>2</sup> | 400 to 1800l/h                              |
| Accuracy                      | 5%  |
| Cable cross-section           | 0.34mm <sup>2</sup> (IEC) / 22AWG (UL)      |
| Cable length                  | 0.5m  |
| Wiring                        | Black=0VDC, Red=5VDC, Yellow=output signal  |

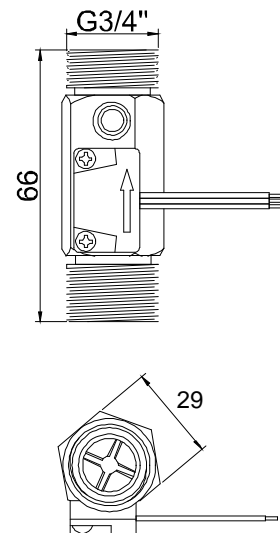
<sup>1</sup> To obtain the K-factor value please refer to the QR code supplied with the flow sensor.

<sup>2</sup> Using this sensor for flow rates lower than those specified in this datasheet is not advisable as the accuracy of the measurement may be compromised.

### TEMPERATURE SENSOR SPECIFICATIONS AND CONNECTIONS

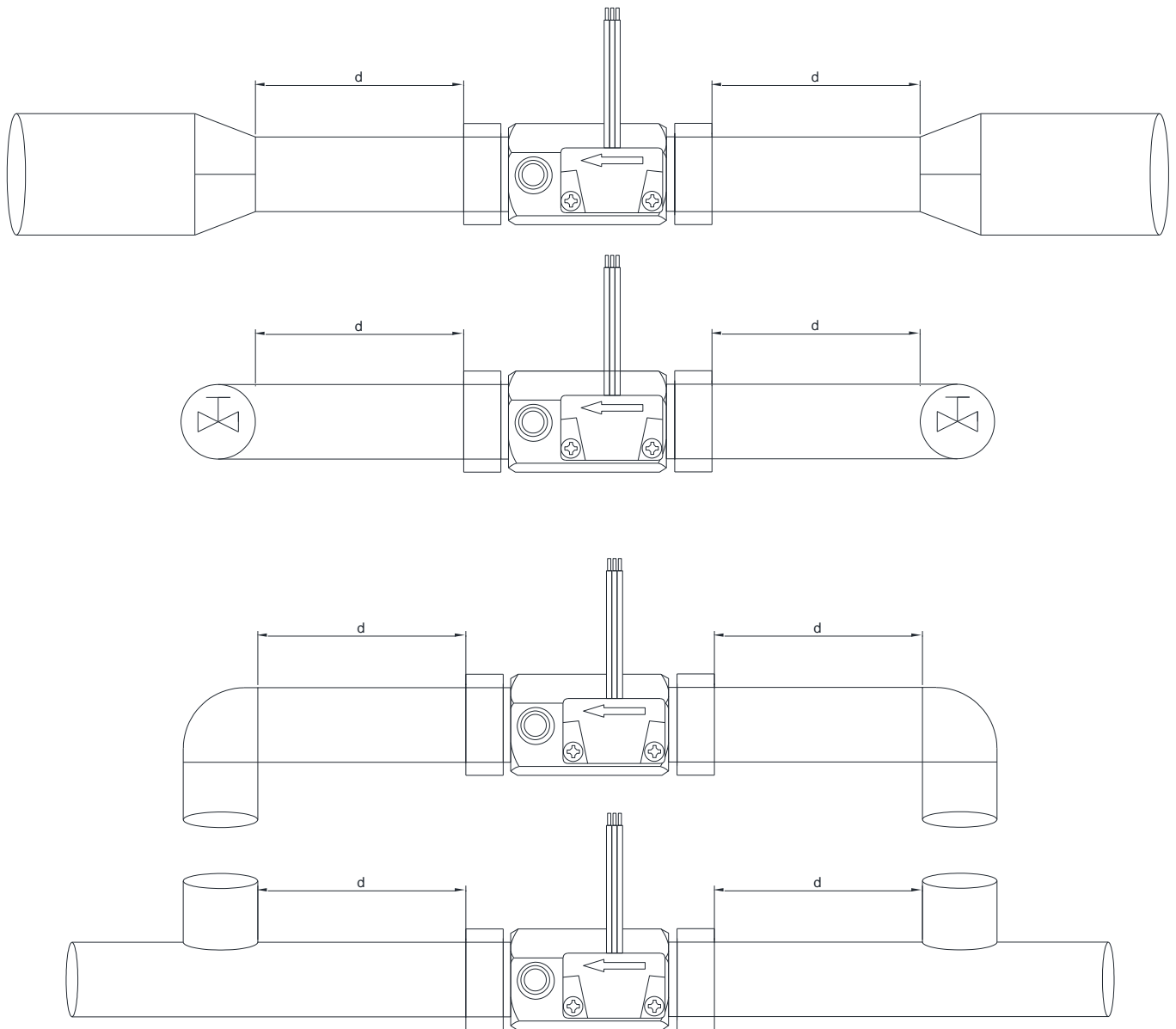
| CONCEPT                  | DESCRIPTION                            |
|--------------------------|--|
| NTC Probe Diameter       | M8x1.25                                |
| Housing                  | Epoxy resin and steel                  |
| Thermistor value (@25°C) | 10kΩ                                   |
| Accuracy (@25°C)         | 0.5°C                                  |
| Cable cross-section      | 0.14mm <sup>2</sup> (IEC) / 26AWG (UL) |
| Cable length             | 0.5m                                   |

### DIMENSIONS (mm)



## INSTALLATION ADVICES

- In order to achieve a reliable measurement, it is necessary to avoid the presence of air in the pipe.
- Do not install the water flow sensor near a pump input.
- It is recommended to install the water flow sensor in the return pipe (for both cooling and heating circuits).
- To avoid measurement errors, please observe a distance of at least **30cm** (noted as “d” in the figures below) between the flow sensor and any irregularities in the pipeline.



## SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- It must not be hit.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at <http://zennio.com/weee-regulation>.

