

Water Flow Sensor with temperature probe

Water Flow Sensor (½") with temperature probe 9900027

TECHNICAL DOCUMENTATION

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.



Figure 1. Water Flow Sensor with temperature probe

1. G½" output	2 . G½" input	3. Flow sensor	4. 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	108g	
Housing material	Brass	

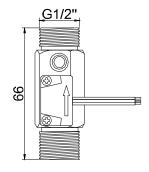
FLOW SENSOR SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Power supply voltage	5VDC	
Maximum current consumption	15mA	
Output type	Square pulse with duty cycle of 4060%	
Output frequency ¹	$f[Hz] = K/3600 \cdot Q[I/h]$	
Water flow range ²	400 to 1500l/h	
Accuracy	5%	
Cable cross-section	0.34mm ² (IEC) / 22AWG (UL)	
Cable length	0.5m	
Wiring	Black=0VDC, Red=5VDC, Yellow=output signal	

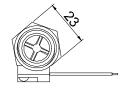
¹ To obtain the K-factor value please refer to the QR code supplied with the flow sensor.

² 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.

EMPERATURE 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 ² (IEC) / 26AWG (UL)	
Cable length	0.5m	

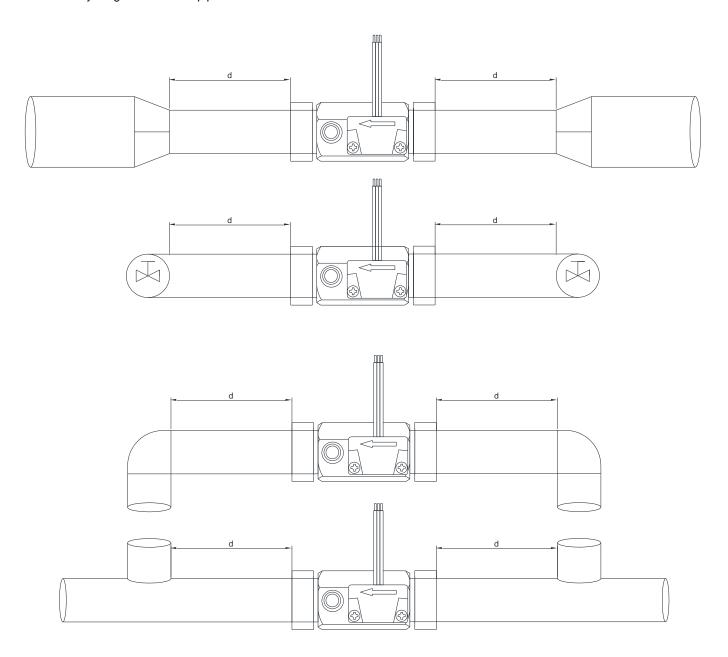
DIMENSIONS (mm)





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 20cm (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.