

SL270020

FLOW SENSORS • SENSORS FOR AIR

The function of the flow sensor is based on the calorimetric principle. The probe is heated up from the inside a few degrees Celsius in relation to the flow medium, in which it protrudes. When the medium flows, the heat generated in the probe is dissipated through the medium. The temperature within the sensor is measured and compared with the likewise measured medium temperature. From the obtained temperature difference the flow state of each medium can be derived. These sensors are applied in areas such as monitoring of cooling systems, ventilation systems, pump dry running by checking the presence of liquid or gas flows.



MECHANICAL DATA

Degree of protection (IP) of evaluation electronics	IP67
Degree of protection (IP) of measuring head	IP67
Depth	112 mm
Height	67 mm
Housing design	Cuboid
Housing material	PBT
Medium temperature (MAX)	80 °C
Pressure resistance	20 bar
Sensing element material	Stainless steel
Type of process connection	G1/4 inch
Width	27 mm

FLFCTRICAL DATA

ELECTRICAL DATA	
Adjustable responding value for flow for gases (MAX)	40 m/s
Adjustable responding value for flow for gases (MIN)	0.5 m/s
Measuring principle of flow	Calorimetric
No-load current	50 mA
Number of pins	4
Operating voltage (MAX)	24 V
Operating voltage (MIN)	24 V
Readiness delay	30 ms
Residual ripple	10 %
Response time	20000 ms
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Type of analog output	4 mA 20 mA
Type of electrical connection	Plug-in connection M12
Voltage drop	2 V
Voltage type	DC
With LED display	Yes



OTHER DATA

For pneumatic applications	Yes
Suitable for gases	Yes
Suitable for liquids	No

DIMENSIONAL DRAWING

INSTALLATION DISPOSAL



Mounting / Installation may only be carried out by a qualified electrician!



SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!

Never use these devices in applications where the safety of a person depends on their functionality.