

SL450020

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	160 mm
Height	78 mm
Housing design	Cuboid
Housing material	PA
Medium temperature (MAX)	80 °C
Pressure resistance	3 bar
Sensing element material	Stainless steel 1.4305
Type of process connection	G1 inch
Width	50 mm

ELECTRICAL DATA

Adjustable responding value for flow for gases	0.5 m/s ... 30 m/s
Air conditioning / ventilation systems	Yes
IO-Link compatible	No
Measuring principle of flow	Calorimetric
No-load current	80 mA
Operating voltage	24 V ... 24 V
Pressure resistance of measuring head	3 bar
Readiness delay	90 ms
Residual ripple	15 %
Type of analog output	4 mA ... 20 mA
Type of electrical connection	Plug-in connection M12
Voltage type	DC
With LED display	Yes

OTHER DATA

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

DIMENSIONAL DRAWING**INSTALLATION**

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

DISPOSAL**SAFETY WARNINGS**

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