

SL180100

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

Cable length	2 m
Degree of protection (IP) of evaluation electronics	IP67
Degree of protection (IP) of measuring head	IP67
Depth	82 mm
Housing design	Cylinder, screw-thread
Housing material	PBT
Material of cable sheath	PVC
Number of wires	3
Thread length	61 mm
Thread pitch	1 mm
Thread size, metric	18
Type of process connection	M18 x 1.5
ELECTRICAL DATA	
	15 m/s
Adjustable responding value for flow for gases (MAX)	
Adjustable responding value for flow for gases (MIN)	0.5 m/s
Air conditioning / ventilation systems	Yes
Max. output current	200 mA
Measuring principle of flow	Calorimetric
No-load current	70 mA
Operating voltage (MAX)	24 V
Operating voltage (MIN)	24 V
Readiness delay	40 ms
Residual ripple	20 %
Response time	2000 ms
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Type of electrical connection	Cable
Type of switching function	Normally open contact (NO)
Type of switching output	PNP

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IPF ELECTRONIC

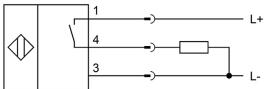
ELECTRICAL DATA

Voltage drop	2 V
Voltage type	DC
With LED display	Yes

OTHER DATA

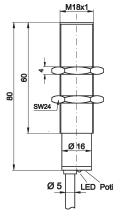
Suitable for gases	Yes
Suitable for liquids	No

CONNECTION



Colors: 1 = BN (brown), 3 = BU (blue), 4 = BK (black) **Functions:** 1 = L+, 3 = L-, 4 = PNP NO

DIMENSIONAL DRAWING



INSTALLATION



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.