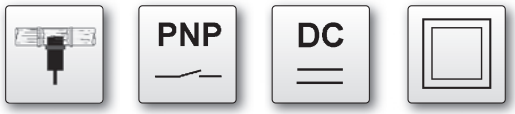
flow sensors 1500

design	**M18x1** **Ø 20mm** **M22x1**	
flow	air	**0.5 ... 25m/sec**

- ✓ **integrated amplifier**
- ✓ **20 turn potentiometer**
- ✓ **status display by LED**
- ✓ **fully electronic mode of operation**
- ✓ **housing made of brass or plastic**

aerator monitor for controlling of an air or gas flow



description

The effectiveness of the flow sensors is based on the calorimetric principle. The measuring probe is heated by a few degrees (Celsius) above the temperature of the medium. Heat is conducted through the medium flowing past it. The difference in temperature between the medium and the sensor is a measure for the flow condition which occurs.
A corresponding switch signal can be assigned for a specific flow condition using the potentiometer of the integrated amplifier electronics.
In addition, turn-on delay is active for 5 to 20sec. This is dependent on the set response sensitivity and makes sure that no alert is made when (for example) a fan is started.
When mounting, a basic principle is to make sure that the head of the sensor is completely surrounded by the medium which is to be monitored not only when idle but also when flowing.

notes on adjustment:
After specification of the nominal flow the potentiometer is turned to the left stop. The light emitting diode must light up for 5sec at least.
After about 20sec turn the potentiometer to the right until the light emitting diode goes out.
Switch-point accuracy is obtained by turning the potentiometer 1 to 1.5 turns to the left again.

application examples

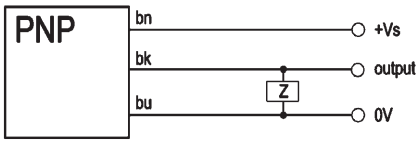
- assuring a specific flow value in the case of applications using ventilator control
- continual monitoring of the presence of a gas / air flow
- avoidance of fan failures

1500 flow sensors

TECHNICAL DATA

operating voltage	24V DC ±20%	
current consumption / leakage current	approx. 70mA	
voltage drop (max. load)	< 2V	
current-carrying capacity	see article list	
residual ripple DC	max. 10%	
adjustment range	SL18 SL20/SL22	500 ... 1500cm/sec 100 ... 2500cm/sec
stand-by time	SL18/SL20/SL22 approx. 20sec	
turn-on time	SL18 approx. 2sec	SL20/SL22 approx. 6sec
turn-off time	SL18 approx. 2sec	SL20/SL22 approx. 6sec
system of protection (EN 60529)	IP67	
ambient temperature	-20°C ... +70°C	
connection	2m cable	
housing	SL20: plastic, SL18/SL22: brass nickel-plated	

connection cable device DC



wire colors: bn = brown, bu = blue, bk = black

fig. 1 M18x1

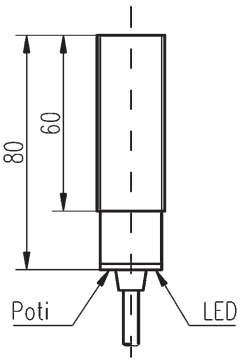


fig. 2 20 round

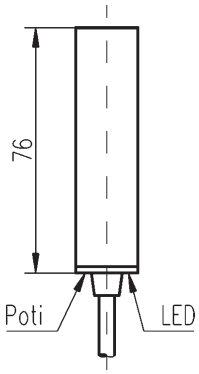


fig. 3 M22x1

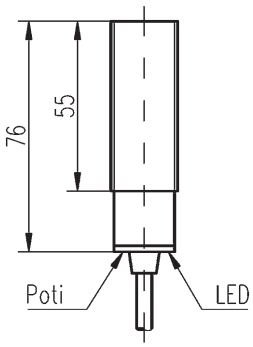
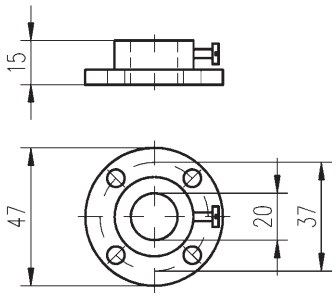


fig. 4 collar



article-no.	design	description	length	housing	output	current	connection	fig.
SL180100	M18x1	sensor air	80	Ms nickel-plated	pnp,no	200mA	2m cable	1
SL200100	20round	sensor air	76	plastic	pnp,no	200mA	2m cable	2
SL220100	M22x1	sensor air	76	Ms nickel-plated	pnp,no	200mA	2m cable	3
AS000006	47/20Ø	accessories / collar		plastic			for SL20	4

The list of articles contains the standard versions only. Kindly request the availability of other output- and connection functions.

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