

airflow monitor

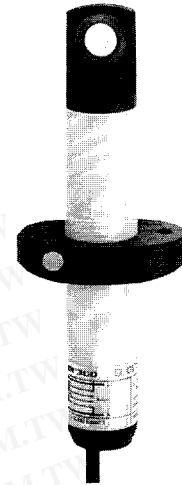
order no. supply voltage

SL 0101	230 V AC
SL 1101	110 V AC
SL 5101 RS 182-988	24 V DC
SL 0301 RS 182-994	80 - 250VAC

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

type SLG
 cylindrical housing
 Ø 23 mm with
 integrated control
 monitor

relay output
 adjustment display
 temperature of the
 medium
 - 10°C to + 50°C
 2-year warranty



Ø 23 mm; L: 140 mm

technical data at +20°C, medium air, 40% RH

temperature of the medium	- 10°C to + 50°C																
pressure resistance	1 bar																
setting range	1 m/s to 10 m/s (air)																
response time	3 s to 60 s																
temperature coefficient	max. ± 2 cm / s/K																
max. permissible temperature gradient of the medium	max. 5 K/min																
protection rating	IP 65																
housing material	sensor head and sleeve: POCAN active face: nickel silver																
connection	cable PUR 2 m/4 × 0.5 mm ²																
operating voltage	230 V AC ± 10 %, 110 V AC ± 10 %; 50-60 Hz; 24 V DC ± 10 %																
current consumption/ power consumption	< 30 mA at 24 V DC < 3 VA at 230 V AC; < 1.5 VA at 110 V AC																
ambient temperature	- 10°C to + 50°C																
switch-on delay	60s after application of the operating voltage output on; LED red and LED green are lit																
adjustment of the switching point	continuous with potentiometer																
output	relay with 1 contact (normally open) 3A/250V AC																
switching function	relay energised when flow present																
adjustment display	by 2 LED's <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>switch-on delay</th> <th>no flow</th> <th>flow</th> </tr> </thead> <tbody> <tr> <td>LED red</td> <td>LED is lit</td> <td>LED is lit</td> <td>LED off</td> </tr> <tr> <td>LED green</td> <td>LED is lit</td> <td>LED off</td> <td>LED is lit</td> </tr> <tr> <td>output</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		switch-on delay	no flow	flow	LED red	LED is lit	LED is lit	LED off	LED green	LED is lit	LED off	LED is lit	output			
	switch-on delay	no flow	flow														
LED red	LED is lit	LED is lit	LED off														
LED green	LED is lit	LED off	LED is lit														
output																	

accessories mounting clamp and other mounting accessories

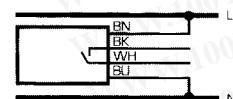
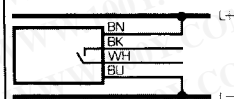
wiring diagrams

DC version

AC versions

core colours

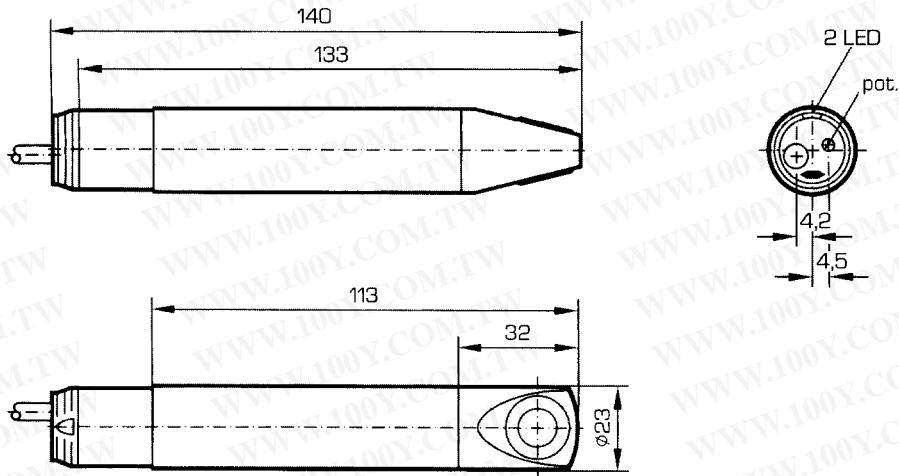
brown: BN
 black: BK
 white: WH
 blue: BU } output



airflow monitor

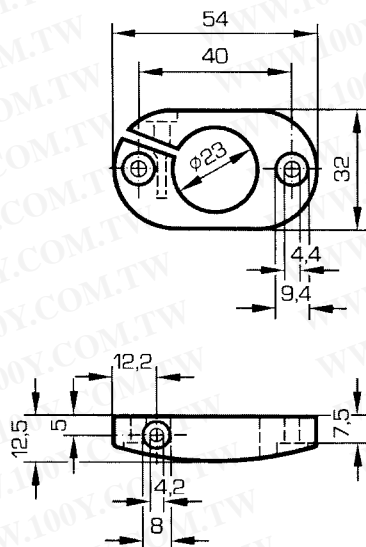
scale drawings

SLG



scale of 1 : 2

scale drawings mounting clamp



scale of 1 : 2

Technical details and applications

Function

The airflow monitor detects and signals changing air flow.

The sensor system is based on the calorimetric principle (thermal conductivity).

Design

The airflow monitor type SLG consists of a smooth cylindrical plastic housing which contains evaluation circuitry, output relay, potentiometer for setting the switch points and two LED's (red/green) for signalling the switching states.

The aerodynamic probe in the front part of the plastic body contains the sensor elements and the heat source which are put on metal plates in order to achieve a good heat transfer.

The dimensions of the cylindrical plastic body allow a variable depth of insertion into the air duct. The airflow monitor can be mounted and fixed by means of a supplied mounting clamp.

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Function

After applying the operating voltage the switch-on delay comes on for a minimum of 60 sec.

During this time

- both LED's (red/green) are on;
- the output relay is energised;
contact is closed.

After this time the airflow monitor passes into the monitoring state.

- Flow present or above the switch point
 - green LED on;
 - relay energised; contact closed
- No flow or flow below the switch point
 - red LED on;
 - relay de-energised; contact open

The switch point can be continuously set by means of a potentiometer.

Mounting instructions

The airflow monitor should be mounted by means of the mounting clamp in such a way that the sensor tip is completely immersed into the medium (min. 32 mm). In tubes or ducts with large diameters the airflow monitor can be mounted up to a max. depth of 120mm.

To avoid malfunction of the sensor caused by turbulences in the medium bends, valves or such like should be at a distance of 5 x dia before or 3 x dia after the place where the sensor is installed. Please ensure proper sealing.

Technical terms

Temperature gradient: The temperature gradient of the airflow monitor indicates the permissible temperature fluctuation of the medium per time unit. During a change of temperature within this range the set switch point can differ by $\pm 15\%$.

Temperature coefficient: The temperature coefficient indicates the shift of the set switch point in cm/sec per K temperature change.

Switch-on delay: Switch-on delay is the time after the application of the operating voltage when both LED's (red/green) light and the output relay is energised.