

## SL550705

### Flow sensors • Sensors for air

Sensor flow, air, calorimetric, 92x50x17mm, OD 8mm, 12-24V DC, cable tail 2m PVC, plastic PC, pressure resistance 10bar, 0-100l/min, with LCD display, parameterization, IP40, integrated pressure sensor



### LCD display integrated pressure sensor

The function of the flow sensor is based on the calorimetric principle. The sensor is heated by a few degrees Celsius from the inside in relation to the flow medium into which it projects. If the medium flows, the heat generated in the sensor is dissipated by the medium. The temperature generated in the sensor is measured and compared with the temperature of the medium, which is also measured. The flow condition for each medium can be derived from the temperature difference obtained. Applications for these sensors include monitoring cooling systems, ventilation systems, dry running of pumps and monitoring the presence of liquid or gas flows.

#### Electrical features

|                                            |                                                               |
|--------------------------------------------|---------------------------------------------------------------|
| Number of digital inputs                   | 1                                                             |
| Number of switching outputs                | 2                                                             |
| Display                                    | LCD display                                                   |
| Type of switching function                 | Programmable/configurable                                     |
| Type of analog output                      | 4 - 20mA                                                      |
| Type of electrical connection              | Cable                                                         |
| Type of switching output                   | PNP                                                           |
| Rated switching current                    | 125 mA                                                        |
| Setting procedure                          | Parameterization                                              |
| Short-circuit protection                   | Yes                                                           |
| Measuring range pressure                   | -0,9 - 8 bar                                                  |
| Reverse polarity protection                | Yes                                                           |
| Measurement principle                      | calorimetric                                                  |
| Operating voltage (DC)                     | 12 - 24 V                                                     |
| Number of analog output channels           | 1                                                             |
| ardSOCA_ElektrischerAnschluss              | Cable tail 2m                                                 |
| ardTEEL_Linearitaet                        | ±3% of the measuring range                                    |
| ardTEEL_GarantierterMessbereichBeiDruck    | 0 - 100% of measuring range                                   |
| ardTEEL_GarantierterMessbereichBeiStrömung | 2 - 100% of the measuring range                               |
| ardTEEL_GenauigkeitAnalogausgangBeiDruck   | ±2.5% of the measuring range                                  |
| ardTEEL_GenauigkeitAnalogausgangStrömung   | ±5% of measuring range                                        |
| ardTEEL_GenauigkeitDerAnzeigeBeiDruck      | ±2% of the measuring range                                    |
| ardTEEL_GenauigkeitDerAnzeigeBeiStrömung   | ±3% of the measuring range                                    |
| ardTEEL_WiederholgenauigkeitBeiDruck       | ±0.2% of the measuring range                                  |
| ardTEEL_WiederholgenauigkeitBeiStrömung    | ±1% of the measuring range (±2% with a reaction time of 50ms) |

**Mechanical features**

|                             |                      |
|-----------------------------|----------------------|
| Number of cores             | 6                    |
| Wire cross section          | 0,15 mm <sup>2</sup> |
| Type of process connection  | Hose AD 8mm          |
| Design                      | Cuboid, compact      |
| Width                       | 17 mm                |
| Pressure resistance         | 10 bar               |
| Height                      | 50 mm                |
| Cable length                | 2 m                  |
| Storage temperature         | -10 - 60 °C          |
| Length                      | 92.2 mm              |
| Medium temperature          | 0 - 50 °C            |
| Degree of protection (IP)   | IP40                 |
| Housing material            | Plastic              |
| Sensing element material    | Stainless steel      |
| Measuring range flow volume | 0 - 100 l/min        |
| Ambient temperature         | 0 - 50 °C            |
| ardSOCA_Abmessungen         | 92,2x17x50mm         |
| ardTEME_Stroemungsrichtung  | Unidirectional       |
| Line diameter               | 4 mm                 |

**Other features**

|                                        |                       |
|----------------------------------------|-----------------------|
| Relative air humidity (non-condensing) | 35 - 85 %             |
| Reference medium / object              | Air                   |
| ardTE00_Anwendungen                    | Pneumatik-Anwendungen |

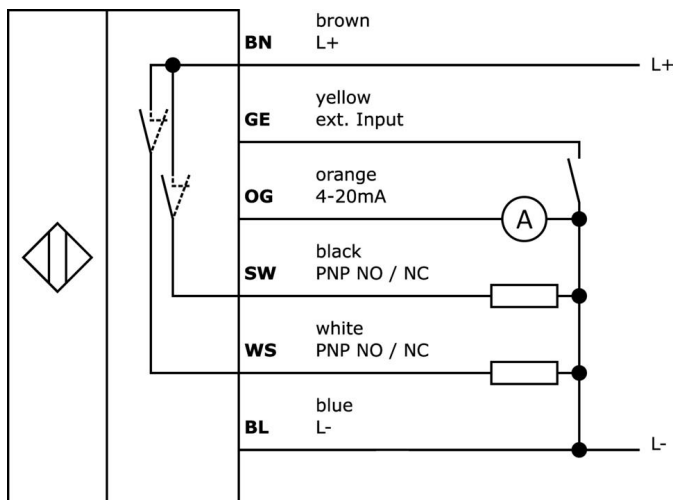
**Classification**

|        |
|--------|
| ETIM 8 |
|--------|

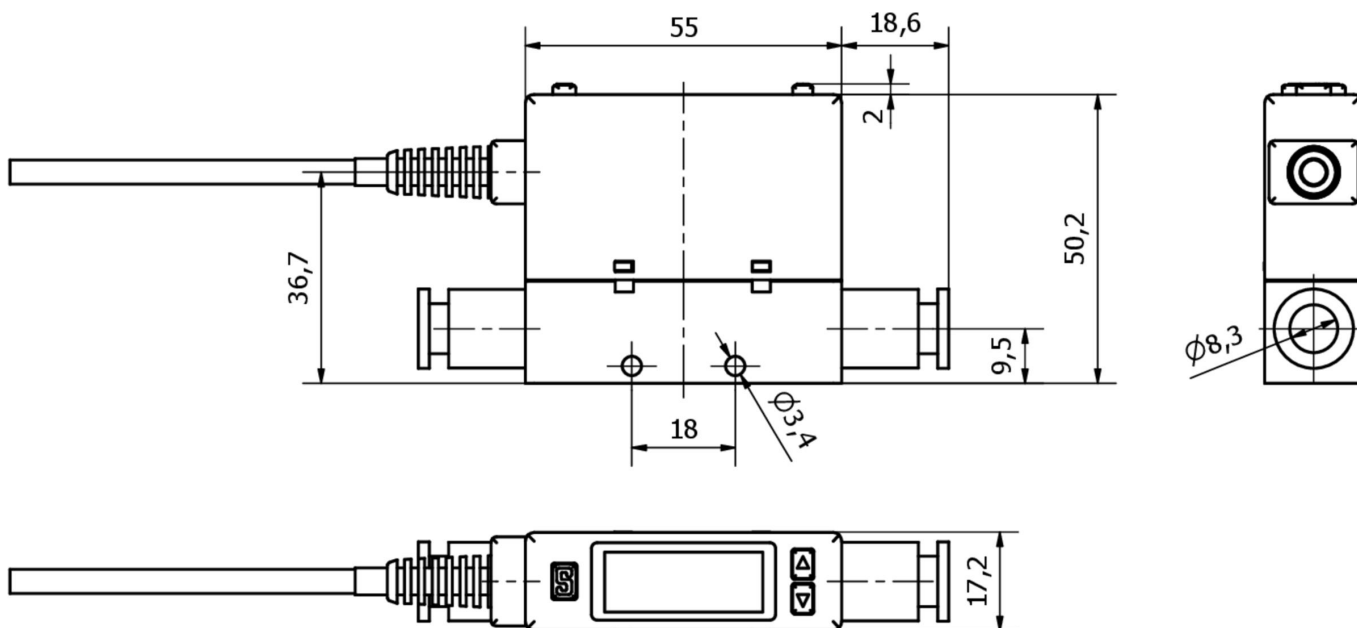
**More**

|                       |                  |
|-----------------------|------------------|
| IPF Product Group     | 300 flow sensors |
| packaging dimensions  | 125 x 70 x 40 mm |
| gross weight          | 133 g            |
| Customs tariff number | 90268020         |
| WEEE number           | 40951076         |
| Reach-compliant       | Yes              |
| RoHS-compliant        | Yes              |

## Connection



## Dimensional drawing



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**Extract accessories program****VK00382H**

Cable connector, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 2A, 30V, -25-85°C, M12 Male (connector) 8pin, IP67, PBT

**VK00302H**

Cable connector, straight, self-assembly, screw connection, Ø4-8mm, 2A, 30V, -30-80°C, M12 connector 8pin, IP67

**AS000021**

Accessories Holder, 40x33.6x5mm, stainless steel

**AS000022**

Accessories Mounting frame, 67x26mm, plastic, including front cover

You can find further accessories on our homepage

**Installation**

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

**Disposal**

WEEE number according to § 6 para. 3  
ElektroG: 40951076

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**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.