

## SL920024

### Flow sensors • Consumption measurement for compressed air

Sensor flow, air, calorimetric, 109x55x135mm, G1", 12-36V DC, M12 plug connector 5-pin, plastic PC, pressure resistance 16bar, with display, parameterization, Ethernet PoE



The function of the flow sensor is based on the calorimetric principle. The sensor is heated by a few degrees Celsius from the inside relative 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 setting in the sensor is measured and compared with the medium temperature, which is also measured. From the temperature difference obtained, the flow condition can be derived for each medium. Applications for these sensors include measuring compressed air consumption.

#### Electrical features

|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| Display                                | TFT display                                               |
| Type of electrical connection          | Connector M12                                             |
| Type of interface connection           | Plug-in connection M12                                    |
| Setting procedure                      | Parameterization                                          |
| Coding of interface connection         | X-coded                                                   |
| Short-circuit protection               | Yes                                                       |
| No-load current                        | 140 mA                                                    |
| Number of pins                         | 5                                                         |
| Reverse polarity protection            | Yes                                                       |
| Measurement principle                  | calorimetric                                              |
| Number of pins of interface connection | 8                                                         |
| Supported communication interface      | Ethernet                                                  |
| Operating voltage (DC)                 | 12 - 36 V                                                 |
| Optional: PoE (Power over Ethernet)    | Yes                                                       |
| Measuring accuracy                     | ± 1.5 % of measuring range ± 0.3 % of measuring range end |

**Mechanical features**

|                               |                   |
|-------------------------------|-------------------|
| Type of process connection    | G1 inch           |
| Design                        | Cuboid, compact   |
| Width                         | 135 mm            |
| Pressure resistance           | 16 bar            |
| Height                        | 109.1 mm          |
| Length                        | 55 mm             |
| Medium temperature            | -20 - 60 °C       |
| Degree of protection (IP)     | IP65              |
| Housing material              | Plastic PC        |
| Sensing element material      | Aluminum          |
| with flow straightener        | Yes               |
| Measuring range flow volume   | 0 - 4833,33 l/min |
| Measuring range flow velocity | ,18 - 185 m/s     |
| Ambient temperature           | -20 - 70 °C       |

**Other features**

|                           |                       |
|---------------------------|-----------------------|
| Reference medium / object | Air                   |
| ardTE00_Anwendungen       | Pneumatik-Anwendungen |

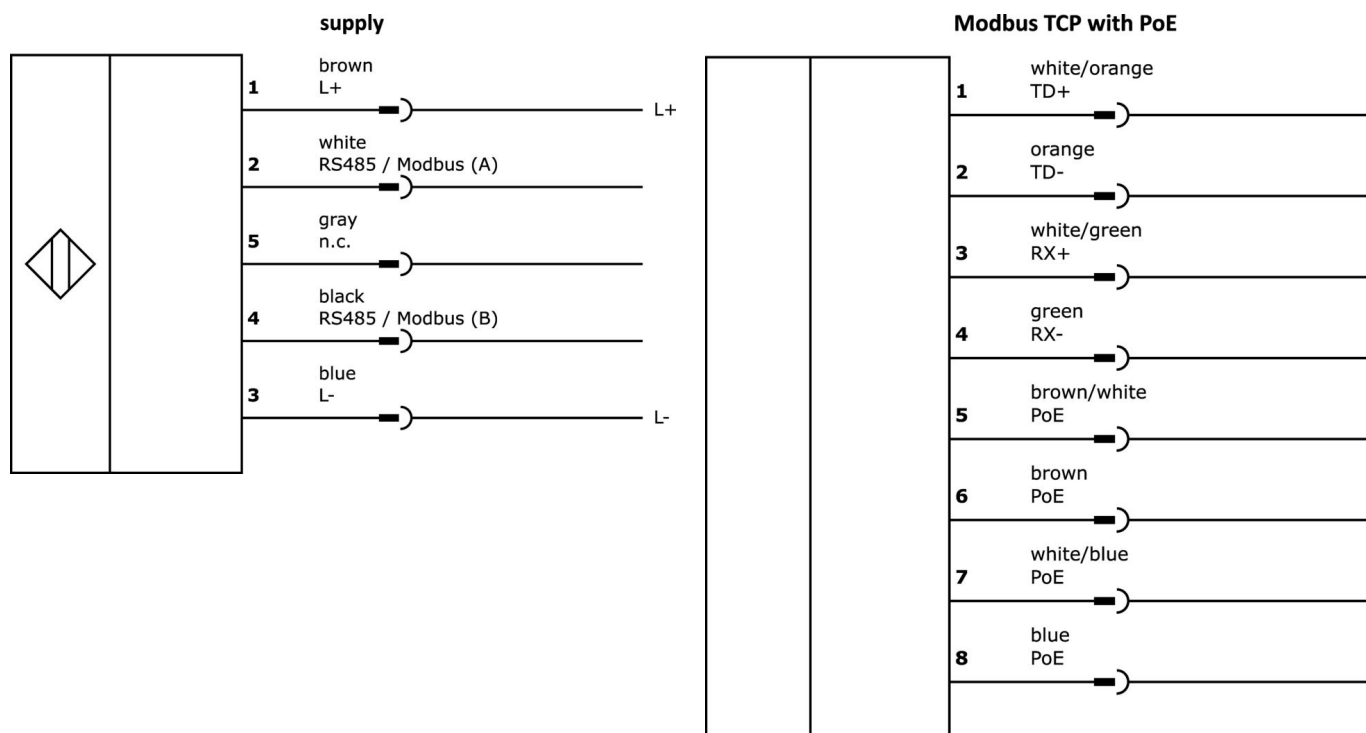
**Classification**

|        |                                 |
|--------|---------------------------------|
| ETIM 8 | EC002580 Flow monitoring device |
|--------|---------------------------------|

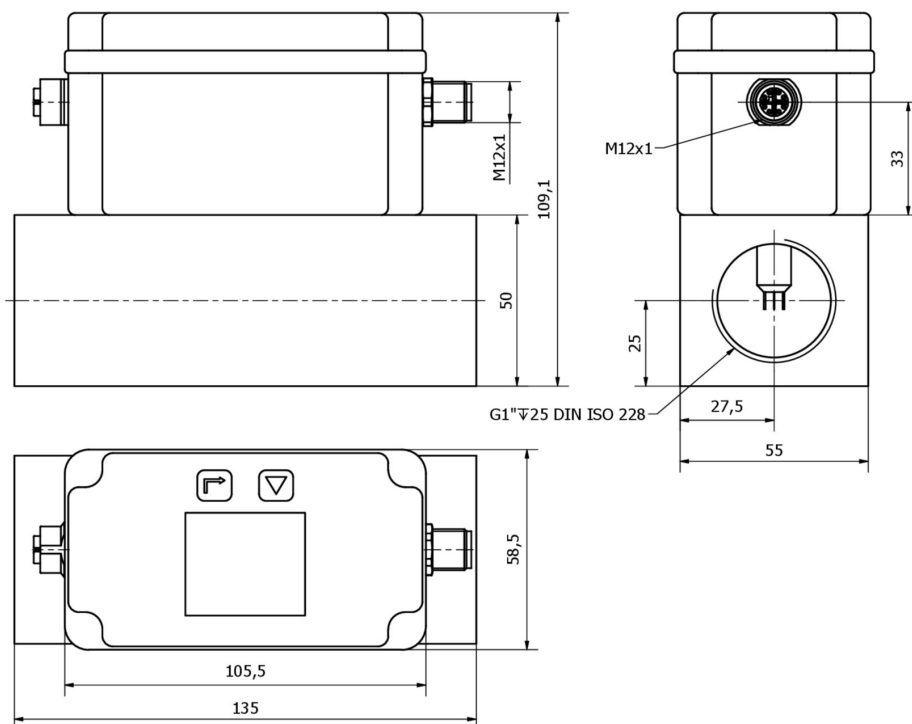
**More**

|                       |                                            |
|-----------------------|--------------------------------------------|
| IPF Product Group     | 725 compressed air and leakage measurement |
| packaging dimensions  |                                            |
| gross weight          |                                            |
| Customs tariff number | 90268020                                   |
| WEEE number           | 40951076                                   |
| Reach-compliant       | Yes                                        |
| RoHS-compliant        | Yes                                        |

## Connection



## Dimensional drawing



## Extract accessories program

### VK205621



Connection cable, 2m, M12  
Female (socket) 5pin Angular, Free  
conductor end, 5x0.34mm<sup>2</sup>, PUR  
(Polyurethane), Ø6mm, 60V, -25-  
90°C, IP67, Shielded, Suitable for  
trailing chain and torsion resistant,  
Oil and cooling lubricants, Welding  
area, Silicone-free

### VK205625



Connection cable, 2m, M12  
Female (socket) 5pin Straight, Free  
conductor end, 5x0.34mm<sup>2</sup>, PUR  
(Polyurethane), Ø6mm, 60V, -25-  
90°C, IP67, Shielded, Suitable for  
trailing chain and torsion resistant,  
Oil and cooling lubricants, Welding  
area, Silicone-free

### VK108F28



Data cable, Connection cable, 1m,  
M12 Male (connector) 8pin  
Straight, X-coding, RJ45 Male  
(connector) 8pin Straight, 8x0.  
14mm<sup>2</sup>, Category 5E, -40-75°C,  
TPU, Shielded

### VKB08F28



Data cable, Connection cable,  
20m, M12 Male (connector) 8pin  
Straight, X-coding, RJ45 Male  
(connector) 8pin Straight, 8x0.  
14mm<sup>2</sup>, Category 5E, -40-75°C,  
TPU, Shielded

### VK030F28



Connection cable, 0.3m, M12  
socket 5-pin straight, M12  
connector 5-pin straight, 5-core,  
PUR (polyurethane), suitable for  
trailing chain and torsion resistant,  
oils and cooling lubricants,  
welding area, silicone-free

### VK060F28



Connection cable, 0.6m, M12  
socket 5-pin straight, M12  
connector 5-pin straight, 5-core,  
PUR (polyurethane), suitable for  
trailing chain and torsion resistant,  
oils and cooling lubricants,  
welding area, silicone-free

### VK003021



Cable socket, Angular, Suitable for  
self-assembly, Screw connection,  
Ø3-6.5mm, 4A, 60V, -25-90°C,  
M12 Female (socket) 5pin, IP67,  
PBT

### VK003025



Cable socket, Straight, Suitable for  
self-assembly, Screw connection,  
Ø3-6.5mm, 4A, 60V, -25-90°C,  
M12 Female (socket) 5pin, IP67,  
PBT

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

## 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.

/ Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)