

SL910021

Flow sensors • Consumption measurement for compressed air

Sensor flow, air, calorimetric, 109x55x135mm, G3/4", 12-36V DC, 1x relay contact NO, 4-20mA, M12 plug connector 5-pin, plastic PC, pressure resistance 16bar, with display, parameterization



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.

Electrical features

| | |
|-------------------------------|---|
| Number of switching outputs | 1 |
| Display | TFT display |
| Type of switching function | Normally open contact (NO) |
| Type of analog output | 4 - 20mA |
| Type of electrical connection | Connector M12 |
| Type of switching output | Relay contact |
| Rated switching current | 150 mA |
| Setting procedure | Parameterization |
| Short-circuit protection | Yes |
| No-load current | 140 mA |
| Number of pins | 5 |
| Switching voltage | 48 V |
| Reverse polarity protection | Yes |
| Measurement principle | calorimetric |
| Operating voltage (DC) | 12 - 36 V |
| Measuring accuracy | ± 1.5 % of measuring range ± 0.3 % of measuring range end |

Mechanical features

| | |
|-------------------------------|-------------------|
| Type of process connection | G3/4 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 - 2916,67 l/min |
| Measuring range flow velocity | ,18 - 185 m/s |
| Ambient temperature | -20 - 70 °C |

Other features

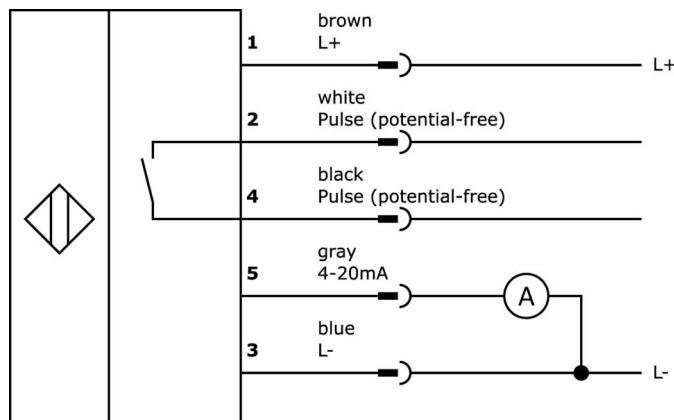
| | |
|---------------------------|-----------------------|
| Reference medium / object | Air |
| ardTE00_Anwendungen | Pneumatik-Anwendungen |

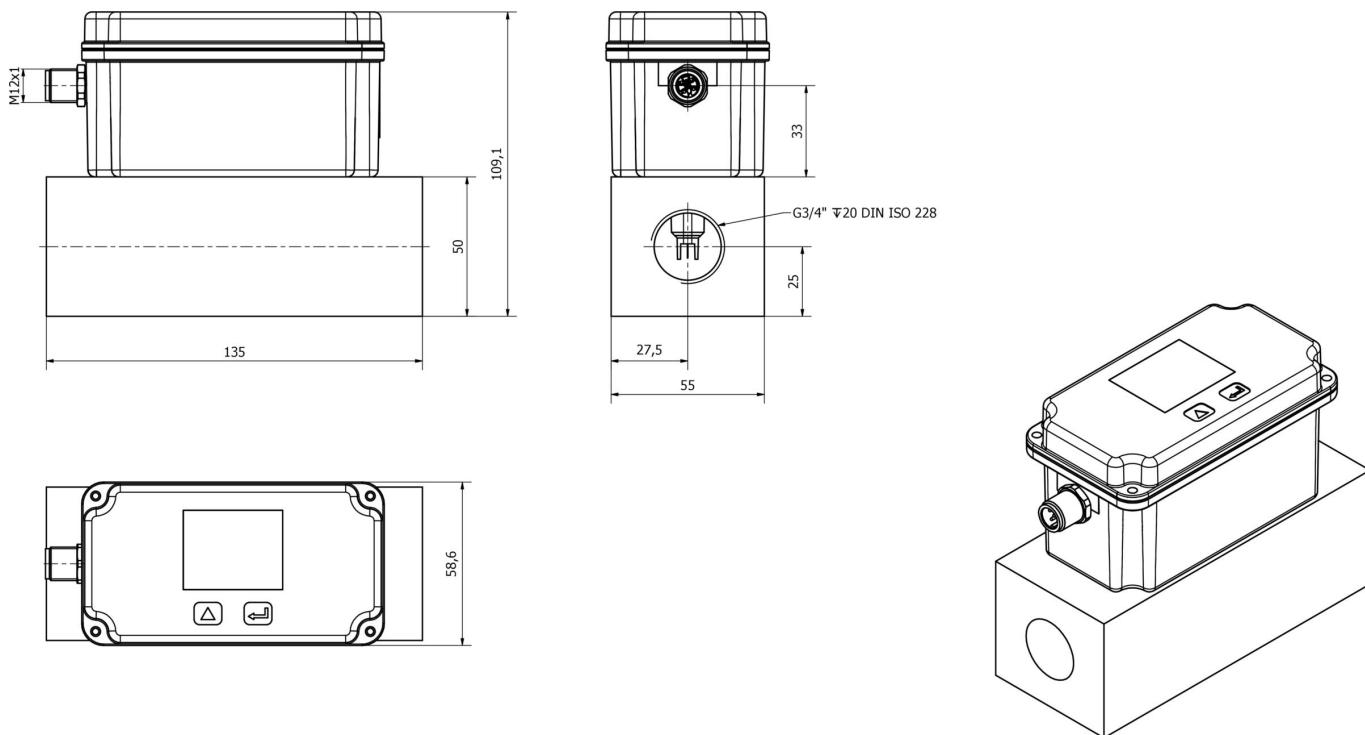
Classification

| | |
|--------|---------------------------------|
| 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****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

VK205621

Connection cable, 2m, M12
Female (socket) 5pin Angular, Free
conductor end, 5x0.34mm², 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, 5x0.34mm², PUR
(Polyurethane), Ø6mm, 60V, -25-
90°C, IP67, Shielded, Suitable for
trailing chain and torsion resistant,
Oil and cooling lubricants, Welding
area, Silicone-...

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.