

## SL950023

### Flow sensors • Consumption measurement for compressed air

Sensor flow, air, calorimetric, 139x80x135mm, G2", 12-36V DC, M12 plug connector 5-pin, plastic PC, pressure resistance 16bar, with display, parameterization, Ethernet



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

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)	No
Measuring accuracy	± 1.5 % of measuring range ± 0.3 % of measuring range end

**Mechanical features**

Type of process connection	G2 inch
Design	Cuboid, compact
Width	135 mm
Pressure resistance	16 bar
Height	139.1 mm
Length	80 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 - 19916,67 l/min
Measuring range flow velocity	,18 - 185 m/s
Ambient temperature	-20 - 70 °C

**Other features**

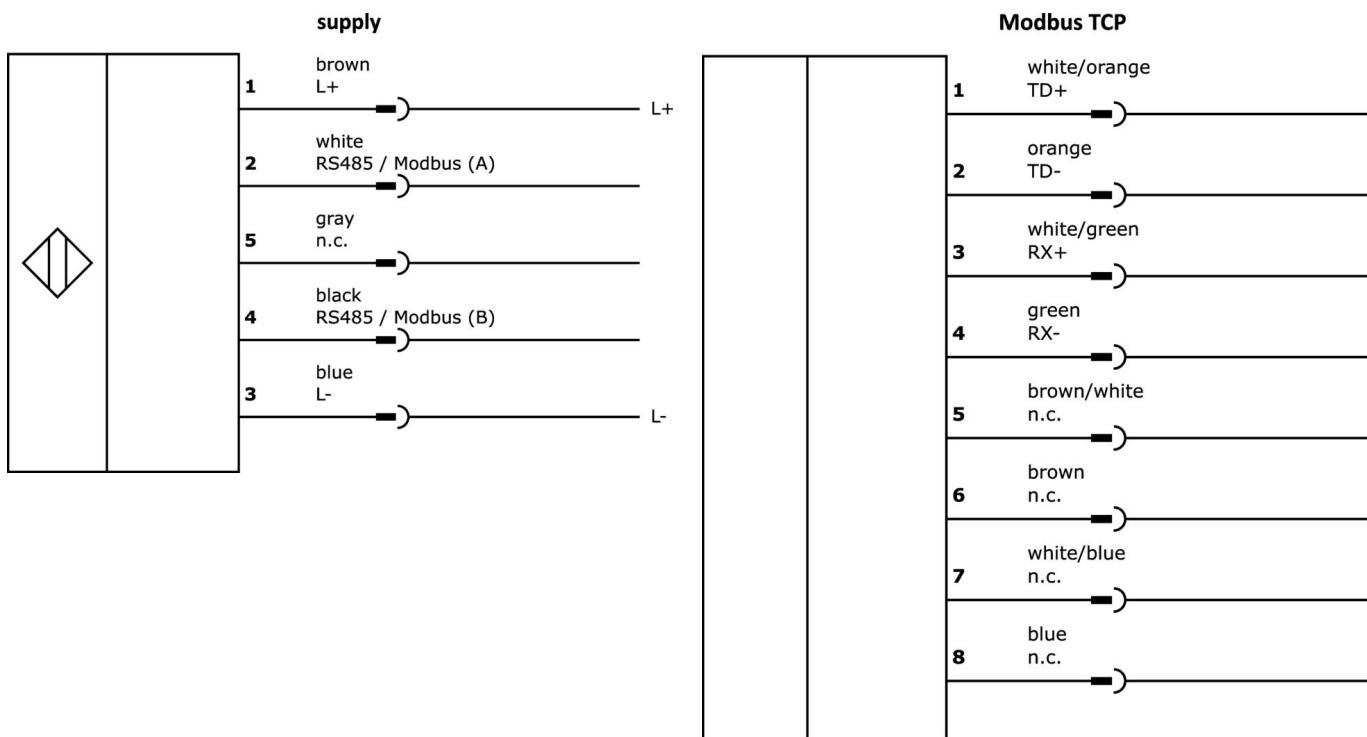
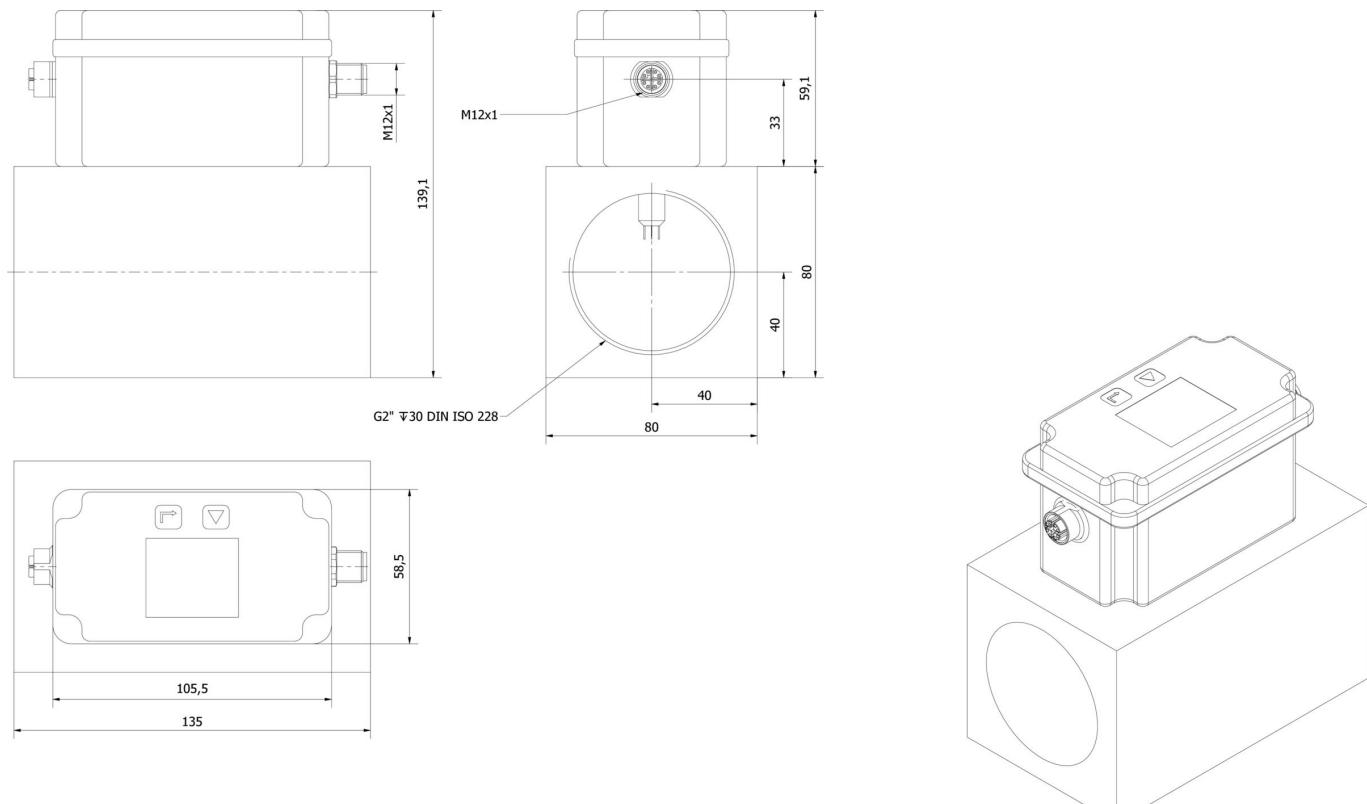
Reference medium / object	Air
ardTE00_Anwendungen	Pneumatik-Anwendungen

**Classification**

ETIM 8	EC002580 Flow monitoring device
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**More**

IPF Product Group	725 compressed air and leakage measurement
packaging dimensions	285 x 200 x 110 mm
gross weight	2034 g
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

**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

**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-...

**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**

- I** Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
- I** Never use these devices in applications where the safety of a person depends on their functionality.
- I** 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)