

SL90E307

Flow sensors • Consumption measurement for compressed air

Sensor flow, air, calorimetric, 176x70x300mm, R 1/2", 12-36V DC, 1x NO, 4-20mA, 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 sensor is heated by a few degrees Celsius from the inside compared to the flow medium into which it protrudes. 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 state for each medium can be derived from the temperature difference obtained. Applications for these sensors include compressed air consumption measuring devices.

Electrical features

Number of switching outputs	1
Number of switching points	2
Display	LED display
Type of switching function	Normally open contact (NO)
Type of analog output	4 - 20mA
Type of electrical connection	Connector M12
Type of interface connection	Plug-in connection M12
Rated switching current	150 mA
Setting procedure	Parameterization
Coding of interface connection	X-coded
Short-circuit protection	Yes
No-load current	120 mA
Number of pins	5
Switching voltage	48 V
Reverse polarity protection	Yes
Measurement principle	calorimetric
Number of pins of interface connection	8
Supported communication interface	Ethernet
Operating voltage (DC)	12 - 36 V

Mechanical features

Type of process connection	R1/2 inch
Design	Cuboid, integrated measuring section
Width	300 mm
Pressure resistance	16 bar
Height	176.4 mm
Length	70 mm
Medium temperature	-30 - 80 °C
Degree of protection (IP)	IP65
Housing material	Plastic PC
Sensing element material	Stainless steel 1.4301
Measuring range flow volume	3,33 - 1500 l/min
Measuring range flow velocity	0,27 - 123 m/s
Ambient temperature	-20 - 70 °C

Other features

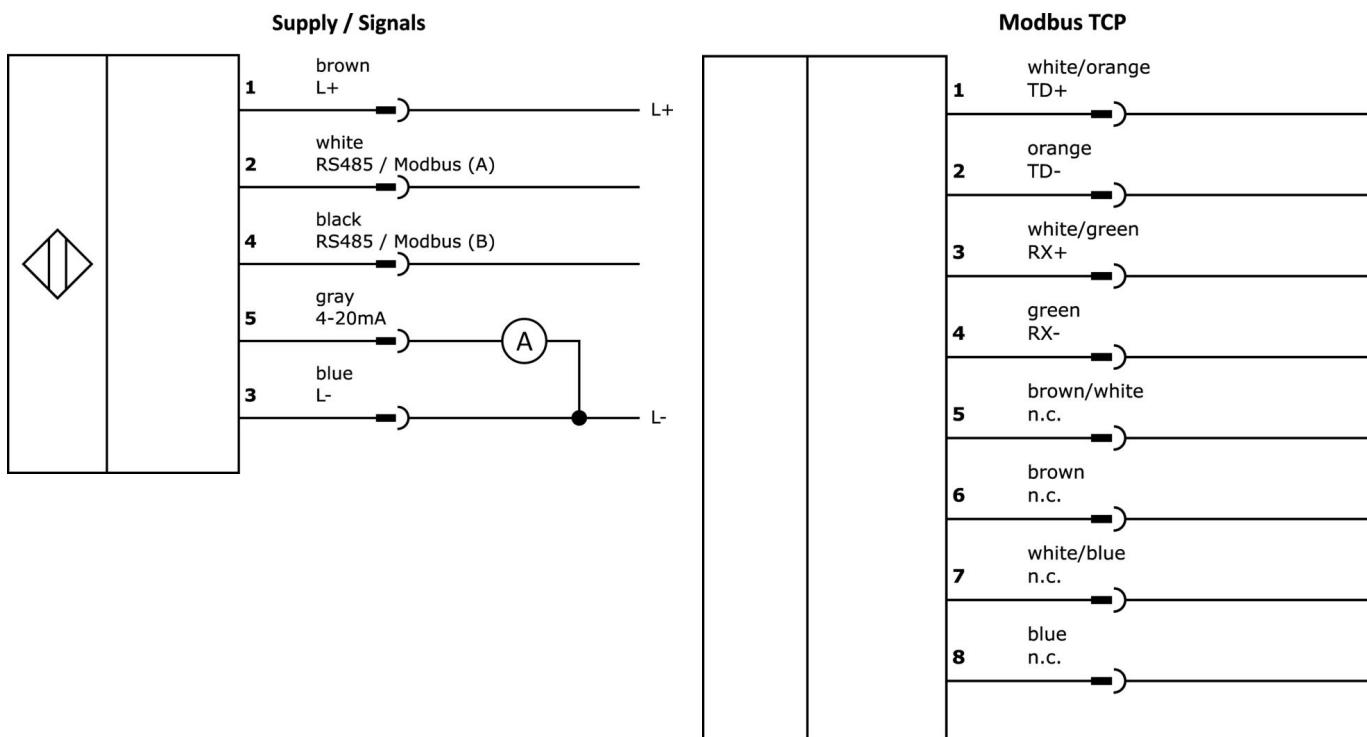
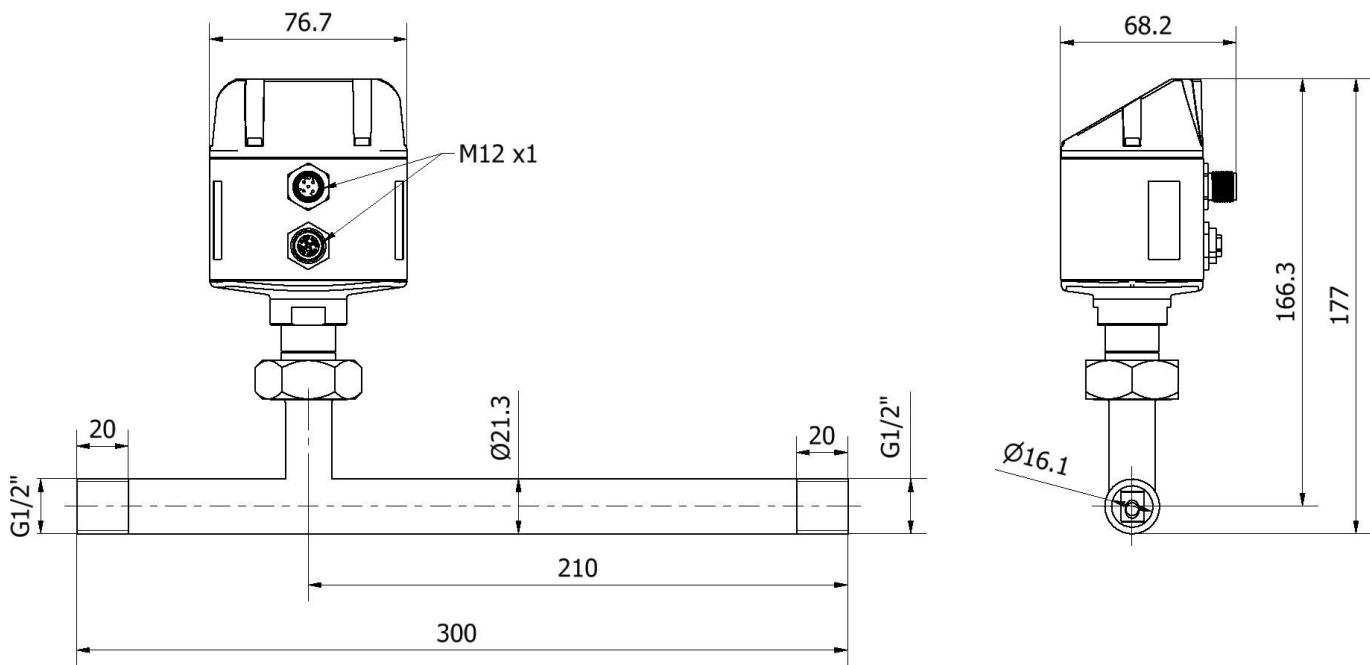
Suitable for	Gases
Reference medium / object	Air
ardTE00_Anwendungen	Pneumatik-Anwendungen

Classification

ETIM 8	EC002580 Flow monitoring device
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More

IPF Product Group	725 compressed air and leakage measurement
packaging dimensions	310 x 230 x 95 mm
gross weight	1056 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

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-...

VK108F28

Data cable, Connection cable, 1m,
M12 Male (connector) 8pin
Straight, X-coding, RJ45 Male
(connector) 8pin Straight, 8x0.
14mm², 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.
14mm², Category 5E, -40-75°C,
TPU, Shielded

AS000015

Screw plug, M32x1,5, Aluminum,
up to 16bar

AS000016

Screw plug, M32x1.5, stainless
steel

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