SL90A471

Flow sensors ● Sensors for air

Sensor flow, air, calorimetric, G 1/2", connection to amplifier, M12 plug connector, stainl. steel, pressure resistance 30bar

including Sealing ring

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 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

Response/decay time	30000 ms
Type of switching function	externer Verstärker
Type of electrical connection	Connector M12
Readiness delay	90 ms
Measurement principle	calorimetric

Mechanical features

Type of process connection	G1/2 inch
Design	Cylinder, screw-thread
Pressure resistance	30 bar
Thread length	48 mm
Medium temperature	-20 - 80 °C
Degree of protection (IP)	IP67
Housing material	Stainless steel 1.4305
Sensing element material	Stainless steel 1.4305
Measuring range flow velocity	0,5 - 30 m/s
Ambient temperature	-20 - 80 °C
Measuring range Flow velocity in air	0,5 - 30 m/s

Other features

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

Classification

ETIM 8	EC002580 Flow monitoring device

More

IPF Product Group	300 flow sensors
packaging dimensions	105 x 43 x 43 mm
gross weight	140 g
Customs tariff number	90268020
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection

Connection to amplifier

1	brown 450 ohm	
2	white 1 kohm +/- 10%	
4	black 1 kohm +/- 10%	
3	blue	

Dimensional drawing

ipf electronic gmbh | Rosmarter Allee 14 ● 58762 Altena - Germany | Tel +49 2351 9365-0 ● info@ipf-electronic.com ● **www.ipf-electronic.com**

2
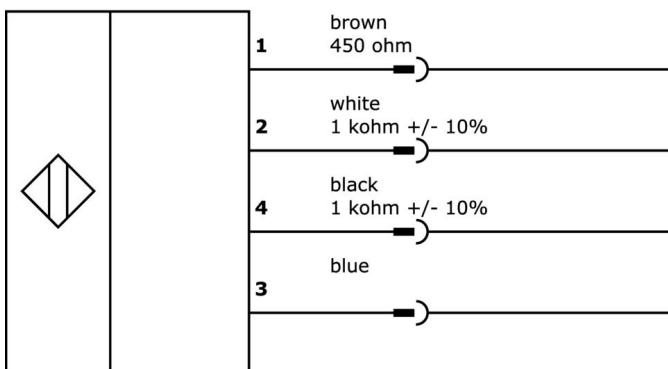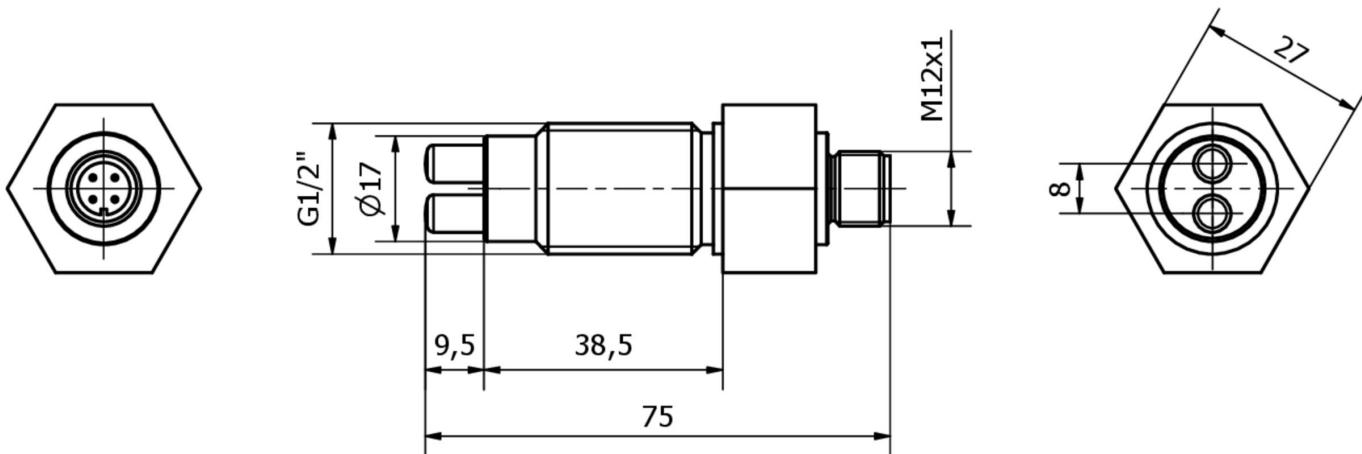
Extract accessories program

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-...

VK200021

Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200025

Connection cable, 2m, M12 Female (socket) 3pin Straight, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

SV550800

amplifier flow, 110x75x55mm, 24V DC, Change-over contact (NO/NC), Clamp, IP20, Plastic, With LED display

SV554800

amplifier flow, 110x75x55mm, Change-over contact (NO/NC), Clamp, IP20, Plastic, With LED display

VK000037

Adaption, M12 Female (socket) 3pin Straight, M8 Male (connector) 3pin Straight, 24V, -25-85°C, IP67, Oil and cooling lubricants, Welding area

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.