

## SY900022

### Flow sensors • Consumption measurement for various gases

Sensor flow, nitrogen, calorimetric, 109x55x135mm, G 1/2", 12-36V DC, M12 plug connector 5-pin, plastic PC, pressure resistance 16bar, with display, parameterization, RS-485



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

Display	TFT display
Type of electrical connection	Connector M12
Setting procedure	Parameterization
Short-circuit protection	Yes
No-load current	140 mA
Number of pins	5
Reverse polarity protection	Yes
Measurement principle	calorimetric
Supported communication interface	RS485
Operating voltage (DC)	12 - 36 V
Measuring accuracy	± 1.5 % of measuring range ± 0.3 % of measuring range end
ardSOCA_ElektrischerAnschluss	
ardSOCA_Betriebsspannung	

**Mechanical features**

Type of process connection	G1/2 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 - 1500 l/min
Measuring range flow velocity	,18 - 185 m/s
Ambient temperature	-20 - 70 °C
ardSOCA_Abmessungen	

**Other features**

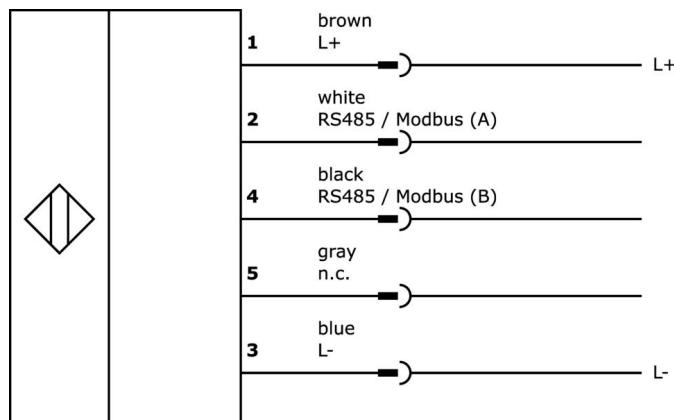
Reference medium / object	Nitrogen
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**Classification**

ETIM 8
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**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**

## 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

## 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

## BY000002



IIoT gateway, master module,  
25x139x110mm, RS485, CAN, 6x  
DI/DO, 4x 0-10V / 4-20mA, USB,  
terminal, IP20

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)