

SY92F007

Flow sensors • Consumption measurement for various gases

Flow sensor, natural gas, calorimetric, 183x75x475 mm, R 1", 18–36 V DC, 4–20 mA, M12 connector, 5-pin, PC plastic, pressure resistance 16 bar, with display, parameterization, Ethernet, 180 mbar



The function of the flow sensor involves the calorimetric principle. The sensor is heated from the inside by a few degrees Celsius relative to the flowing medium into which it protrudes. When the medium flows, the heat generated in the sensor is dissipated through the medium. The temperature within the sensor is measured and compared with the medium temperature, which is also measured. The flow condition for each medium can be determined from the resulting temperature difference. The application of these sensors includes use as compressed air consumption meters.

Electrical features

Display	TFT display
Type of analog output	4 - 20mA
Type of electrical connection	Connector M12
Type of interface connection	Plug-in connection M12
Setting procedure	Parameterization
Coding of interface connection	X
Load resistance (current output)	500 kOhm
No-load current	120 mA
Measurement principle	calorimetric
Number of pins of interface connection	8
supported communication interface	ethernet
Operating voltage (DC)	18 - 36 V
Measuring accuracy	± 1.5 % of measuring range ± 0.3 % of measuring range end
Electrical connection	
Operating voltage	
protection functions	short circuit protection reverse polarity protection
Number of pins of the electrical connection	5
Electrical connection code	A

Mechanical features

Type of process connection	R1 inch
Design	Cuboid, integrated measuring section
Width	475 mm
Pressure resistance	16 bar
Height	182.6 mm
Length	75 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	0 - 1416 l/min
Measuring range flow velocity	0 - 92,7 m/s
Ambient temperature	-20 - 70 °C
dimensions	

Other features

Suitable for	Gases
Relative air humidity (non-condensing)	95 %
Mains pressure	20 mbar
Reference medium / object	Natural gas

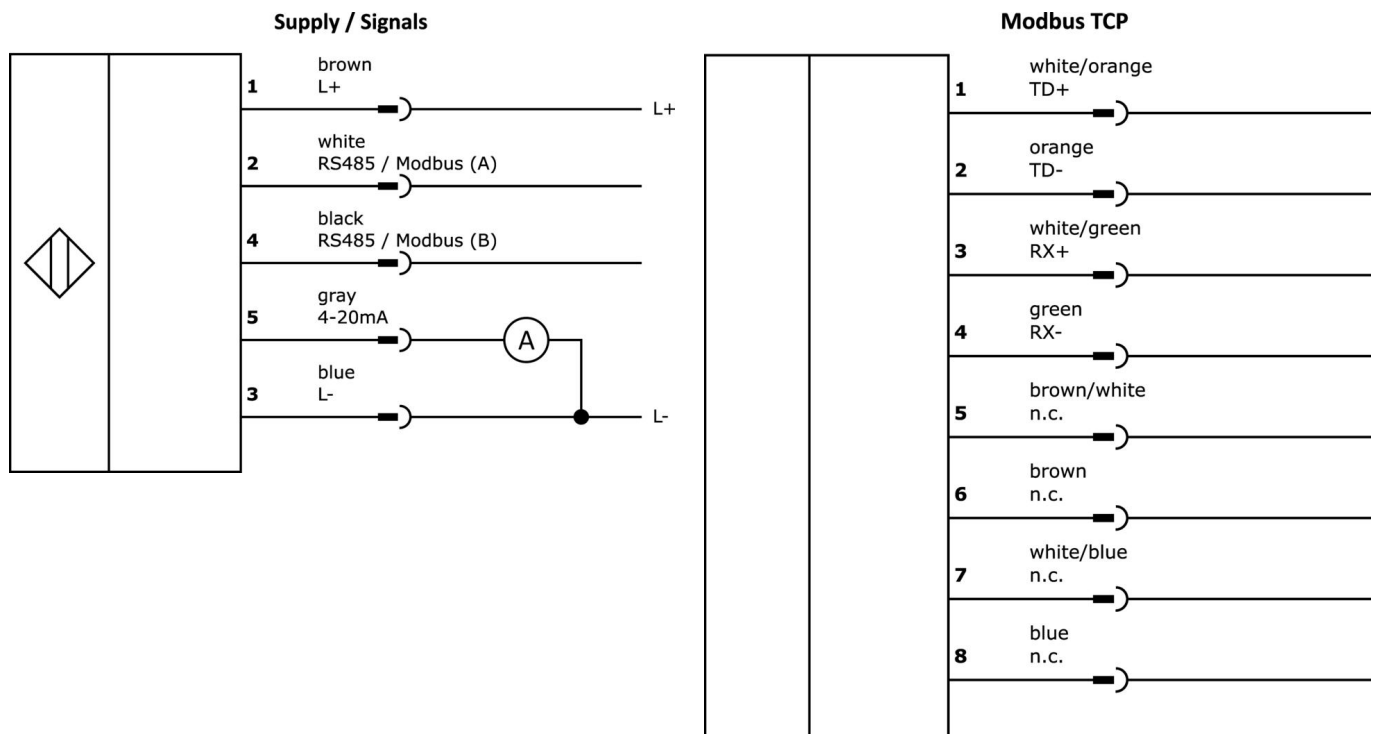
Classification

ETIM 8

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 socket 5-pin angular, free cable end, 5x0.34mm², PUR (polyurethane), Ø6mm, 60V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK205625

Connection cable, 2m, M12 socket 5-pin straight, free cable end, 5x0.34mm², PUR (polyurethane), Ø6mm, 60V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils 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

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 connector 8-pin straight, X-coding, RJ45 connector 8-pin 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

BY000002

IIoT Gateway, Master Module, 25x139x100 mm, RS485, OPC UA Server + Client, MQTT Broker Server + Client, Modbus TCP/IP Broker Client + Server, CAN, 6x DI/DO, 4x 0-10 V / 4-20 mA, USB, terminal blocks, 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

- / 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.
- / 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