

## SY87F001

### Flow sensors • Consumption measurement for various gases

Flow sensor , natural gas, calorimetric, G 1/2", 18-36V DC, 4-20mA, M12-connector 5pin, plastic PC, with display, parameterization, RS-485, 150mbar



The function of the flow sensor is based on the calorimetric principle. The sensor is heated by a few degrees Celsius from the inside in relation to the flow medium into which it projects. When the medium flows, the heat generated in the sensor is dissipated by the medium. The temperature that develops in the sensor is measured and compared with the temperature of the medium, which is also measured. From the temperature difference obtained, the flow condition can be derived for each medium. These sensors are used, among other things, as compressed air consumption meters.

#### Electrical features

Display	LED display
Type of analog output	4mA ... 20mA
Type of electrical connection	Plug-in connection M12
Type of interface connection	Plug-in connection M12
Rated switching current	150 mA
Operating voltage (DC)	18 - 36 V
Flow measurement	Yes
Setting procedure	Parameterization
Coding of interface connection	A-coded
Short-circuit protection	Yes
No-load current	140 mA
Measuring principle of flow	Calorimetric
Number of pins	5
Switching voltage	48 V
Transistor output	Yes
Supported communication interface	RS485
Reverse polarity protection	Yes

**Mechanical features**

Type of process connection	G1/2 inch
Design	Cuboid
Medium temperature	-30 - 110 °C
Measuring range flow velocity in air	0 - 50 m/s
Degree of protection (IP)	IP65
Temperature medium	-30 - 110 °C
Ambient temperature	-20 - 70 °C
Ambient temperature for evaluation electronics	-20 - 70 °C
Housing material	Plastic PC
Sensing element material	Stainless steel 1.4301

**Other features**

Version	Sensors/Einstichsensor
Suitable media	Gases
Suitable for liquids	No
Mains pressure	150 mbar
Reference medium	Natural gas
Consumption measurement	Yes

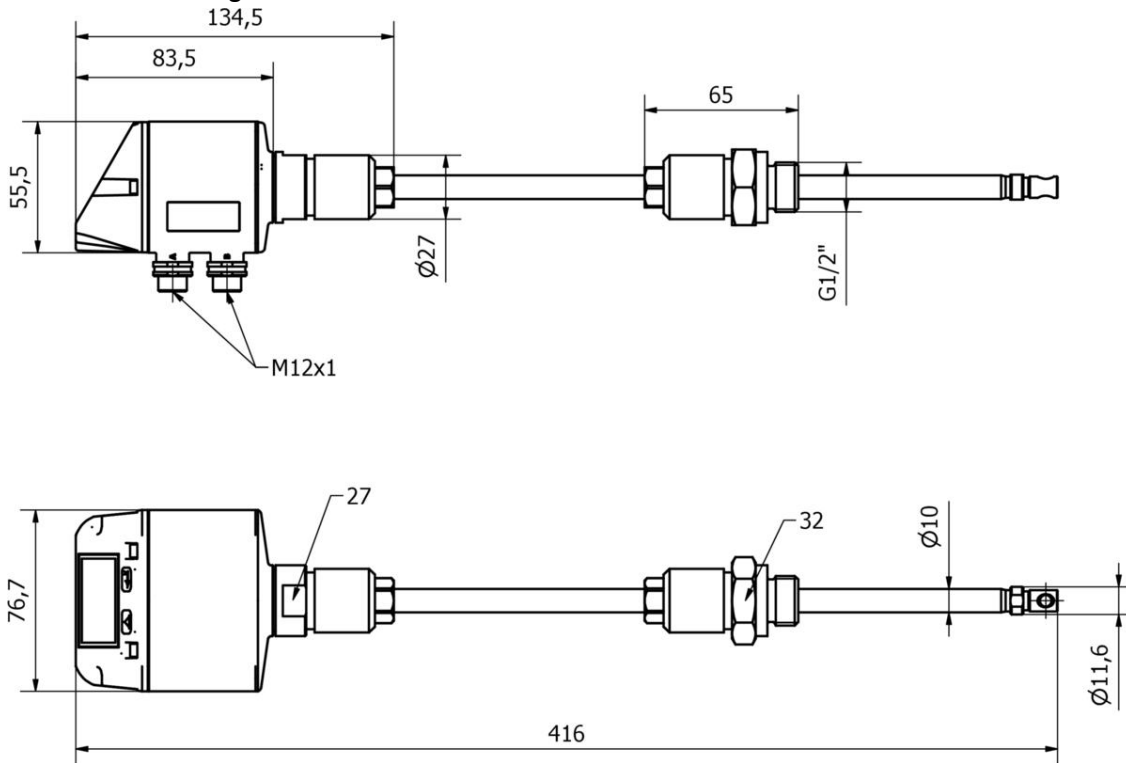
**Classification**

eClass 7.0	27371815
eClass 7.1	27371815
eClass 8.0	27371815
eClass 9.0	27371815
eClass 9.1	27371815
ETIM 8	EC002580 Durchflussüberwachungsgerät

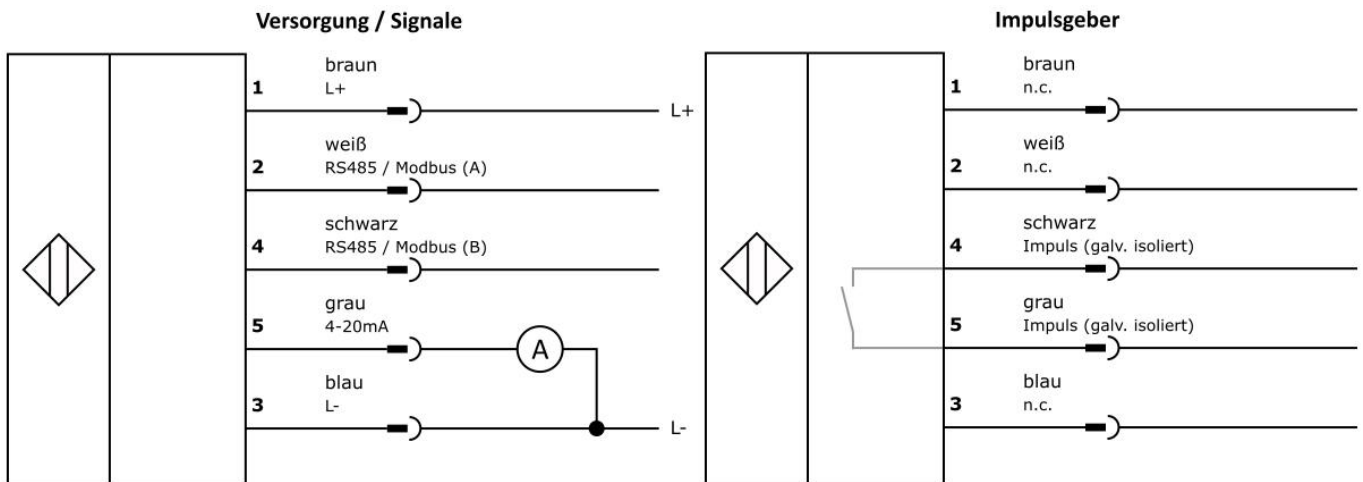
**More**

IPF Product Group	725 compressed air and leakage measurement
packaging dimensions	480 x 175 x 85 mm
gross weight	1122 g
Customs tariff number	90268020
WEEE number	40951076

**Dimensional drawing**



**Connection**



**Installation**



Mounting / installation may only be carried out by a qualified electrician!

**Disposal**



**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.

For suitable connection and mounting accessories, please refer to our website [www.ipf-electronic.com](http://www.ipf-electronic.com).