

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	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	A-coded
Short-circuit protection	Yes
No-load current	140 mA
Number of pins	5
Switching voltage	48 V
Reverse polarity protection	Yes
Measurement principle	calorimetric
Supported communication interface	RS485
Operating voltage (DC)	18 - 36 V
Measuring accuracy	± 1.5 % of measuring range ± 0.3 % of measuring range end

Mechanical features

Type of process connection	G1/2 inch
Design	Cuboid
Pressure resistance	50 bar
Probe length	220 mm
Medium temperature	-30 - 110 °C
Degree of protection (IP)	IP65
Housing material	Plastic PC
Sensing element material	Stainless steel 1.4301
with flow straightener	No
Measuring range flow velocity	0 - 50 m/s
Ambient temperature	-20 - 70 °C

Other features

Suitable for	Gases
Mains pressure	150 mbar
Reference medium / object	Natural gas
Version	Insertion sensor

Classification

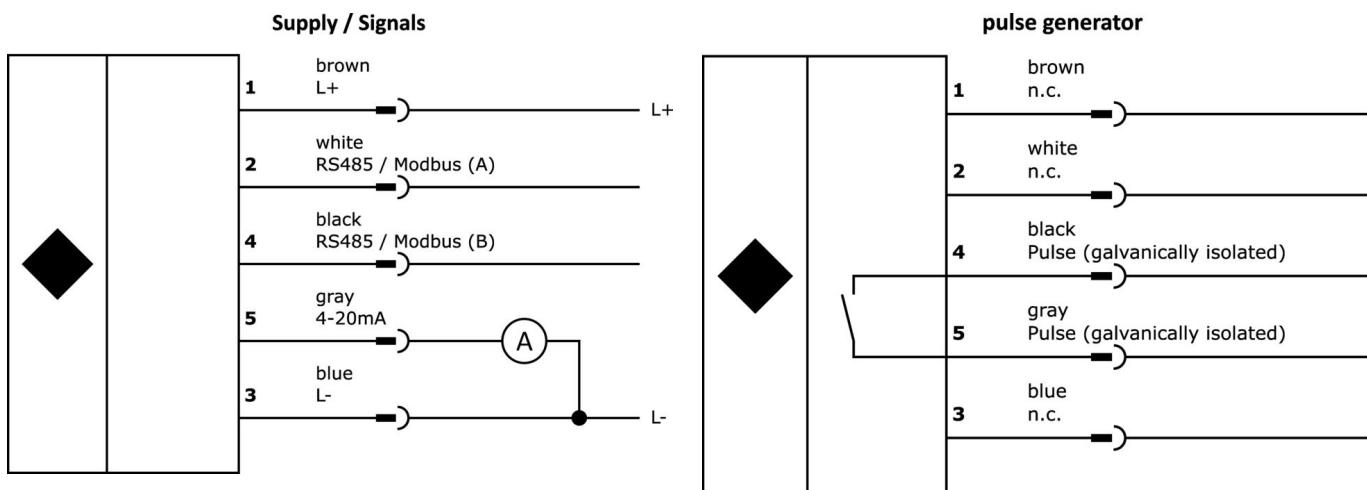
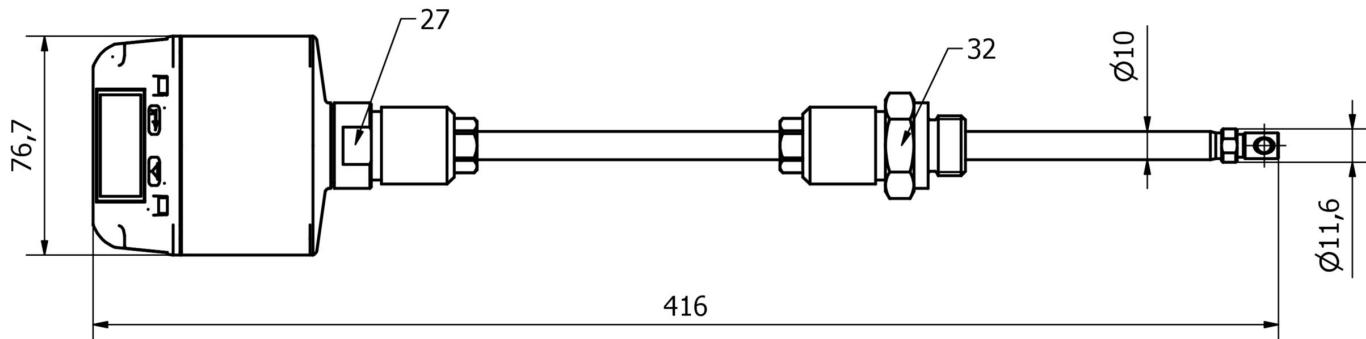
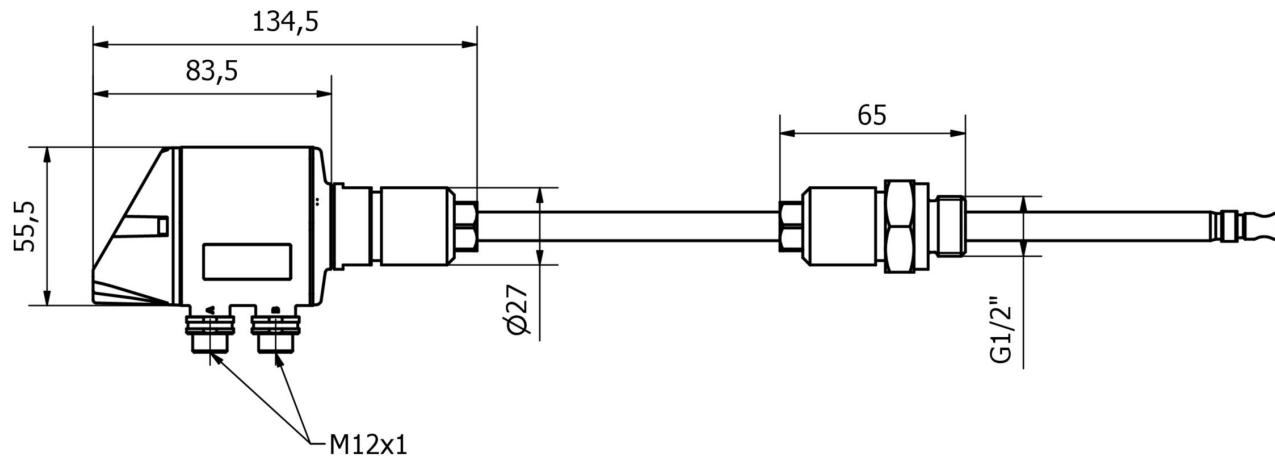
ETIM 8	EC002580 Flow monitoring device
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More

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
Reach-compliant	Yes
RoHS-compliant	Yes

Important notes

! For pressure > 10 bar - order high-pressure safety device additionally

Connection**Dimensional drawing**

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-...

AS000018

Accessories, high pressure safety
device for insertion sensor, sensor
length 220mm, max. 50bar

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