

SY90E293

Flow sensors • Consumption measurement for various gases

sensor flow, Natural gas, Calorimetric, 176x75x300mm, R 1/2 inch, 12-36V DC, 1x Relay contact NO (NO), 4-20mA, Plug-in connection M12 5pin, Plastic PC, Pressure resistance 16bar, With display, Parameterization, RS-485



The function of the flow sensor is based on the calorimetric principle. The probe is heated up from the inside a few degrees Celsius in relation to the flow medium, in which it protrudes. When the medium flows, the heat generated in the probe is dissipated through the medium. The temperature within the sensor is measured and compared with the likewise measured medium temperature. From the obtained temperature difference the flow state of each medium can be derived. These sensors are applied in areas such as monitoring of cooling systems, ventilation systems, pump dry running by checking the presence of liquid or gas flows.

Electrical features

Number of switching outputs	1
Number of switching points	2
Display	LED display
Type of switching function	Normally open contact (NO)
Type of analog output	4mA ... 20mA
Type of electrical connection	Plug-in connection M12
Type of switching output	Relay contact
Rated switching current	150 mA
Operating voltage (DC)	12 - 36 V
Pressure resistance of measuring head	16 bar
Flow measurement	Yes
Setting procedure	Parameterization
Short-circuit protection	Yes
No-load current	120 mA
Measuring head integrated in device	Yes
Measuring principle of flow	Calorimetric
Number of pins	5
Switching voltage	48 V
Supported communication interface	RS485
Reverse polarity protection	Yes

Mechanical features

Type of process connection	R 1/2 inch
Design	Cuboid
Width	300 mm
Pressure resistance	16 bar
Height	176.4 mm
Length	75 mm
Medium temperature	-30 - 80 °C
Measuring range flow volume in air	0 - 833,33 l/min
Degree of protection (IP)	IP65
Temperature medium	-30 - 80 °C

Other features

Version	Sensors/integrierte Messstrecke
Suitable media	Gases
Suitable for liquids	No
Mains pressure	300 mbar
Reference medium	Natural gas
Consumption measurement	Yes

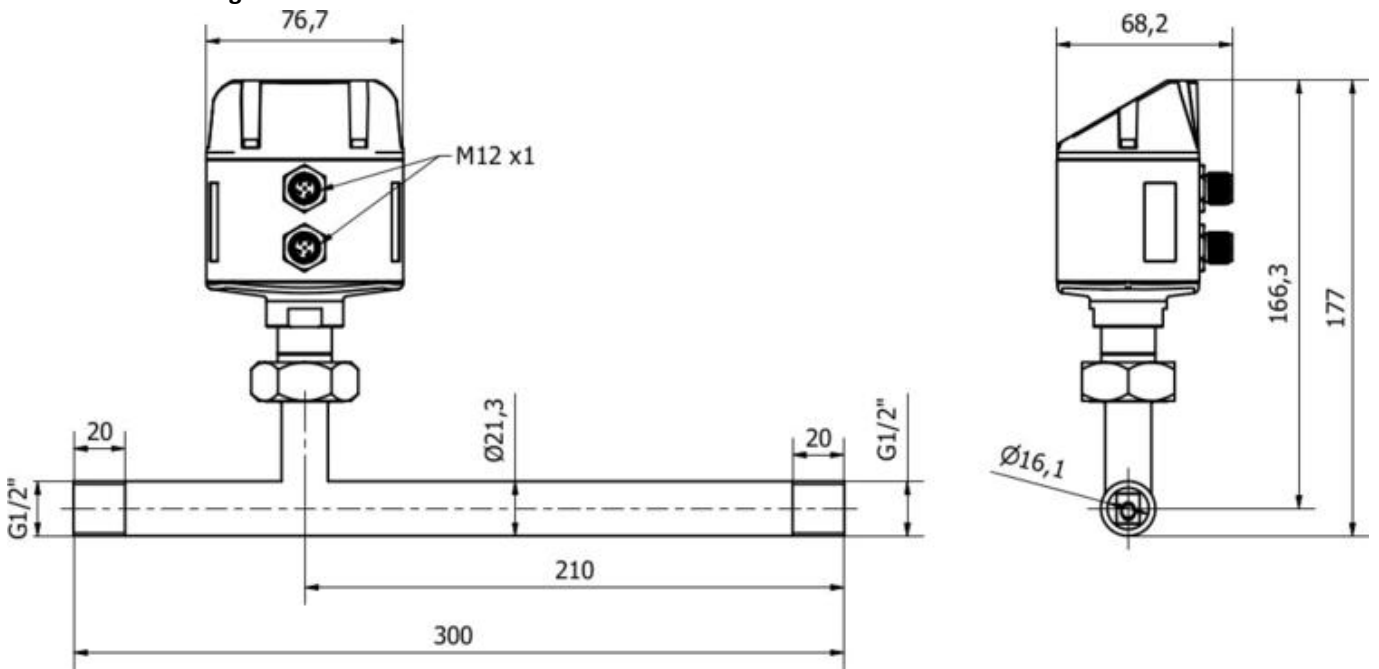
Classification

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

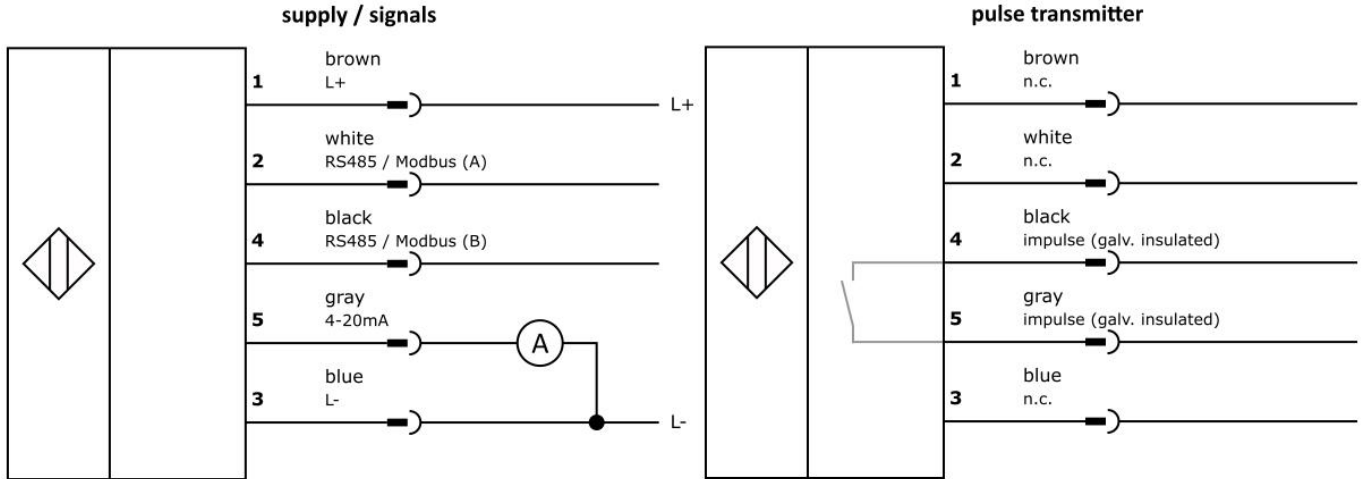
More

IPF Product Group	725 compressed air and leakage measurement
packaging dimensions	310 x 230 x 95 mm
gross weight	1056 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.