

## SY920023

### Flow sensors • Consumption measurement for various gases

Sensor flow, nitrogen, calorimetric, 109x55x135mm, G1", 12-36V DC, M12 connector 5pin, plastic PC, pressure resistance 16bar, With display, parameterization, Ethernet



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 setting in the sensor is measured and compared with the medium temperature, which is also measured. From the temperature difference obtained, the flow condition can be derived for each medium. Applications for these sensors include measuring compressed air consumption.

#### Electrical features

Display	TFT display
Type of electrical connection	Connector M12
Type of interface connection	Plug-in connection M12
Setting procedure	Parameterization
Coding of interface connection	X-coded
Short-circuit protection	Yes
No-load current	140 mA
Number of pins	5
Reverse polarity protection	Yes
Measurement principle	calorimetric
Number of pins of interface connection	8
Supported communication interface	Ethernet
Operating voltage (DC)	12 - 36 V
Optional: PoE (Power over Ethernet)	No
Measuring accuracy	± 1.5 % of measuring range ± 0.3 % of measuring range end

**Mechanical features**

Type of process connection	G1 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 - 4500 l/min
Measuring range flow velocity	,18 - 185 m/s
Ambient temperature	-20 - 70 °C

**Other features**

Reference medium / object	Nitrogen
ardTE00_Anwendungen	Pneumatik-Anwendungen

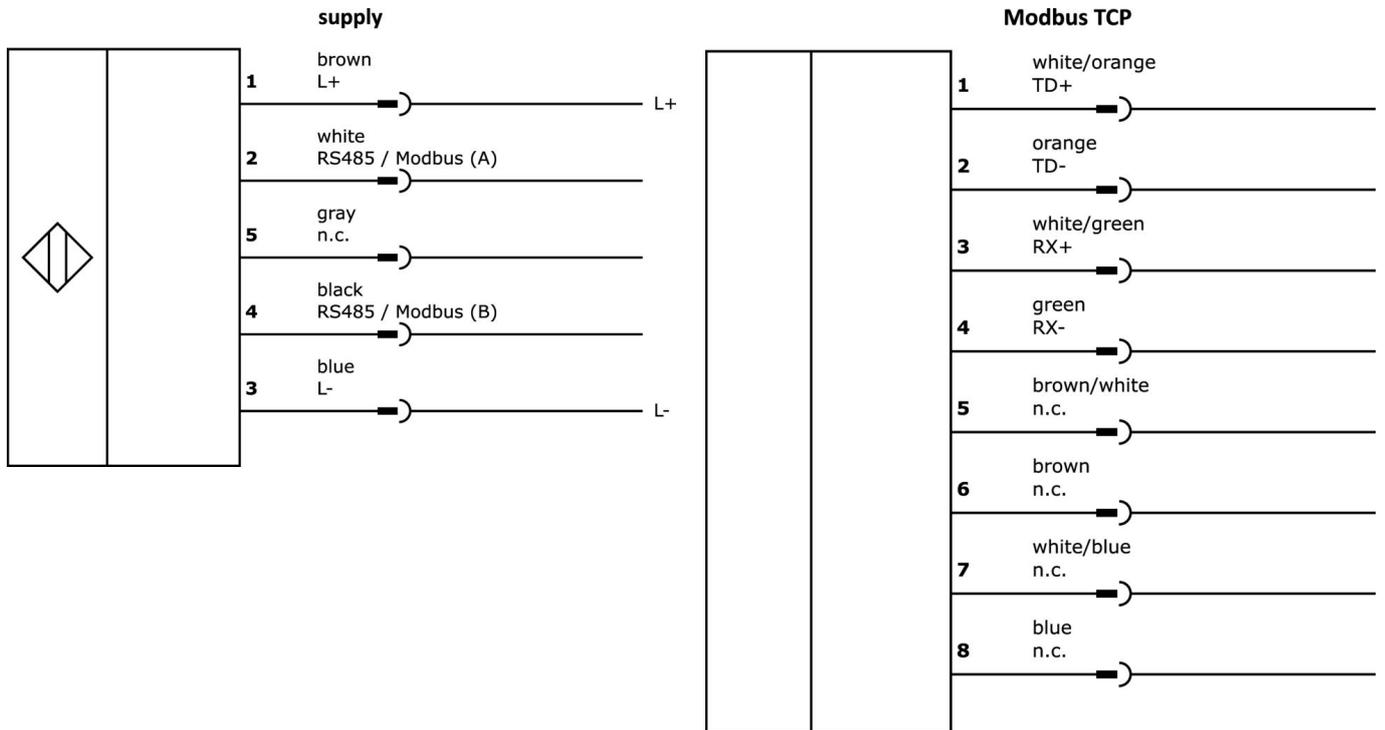
**Classification**

ETIM 8	EC002580 Flow monitoring device
--------	---------------------------------

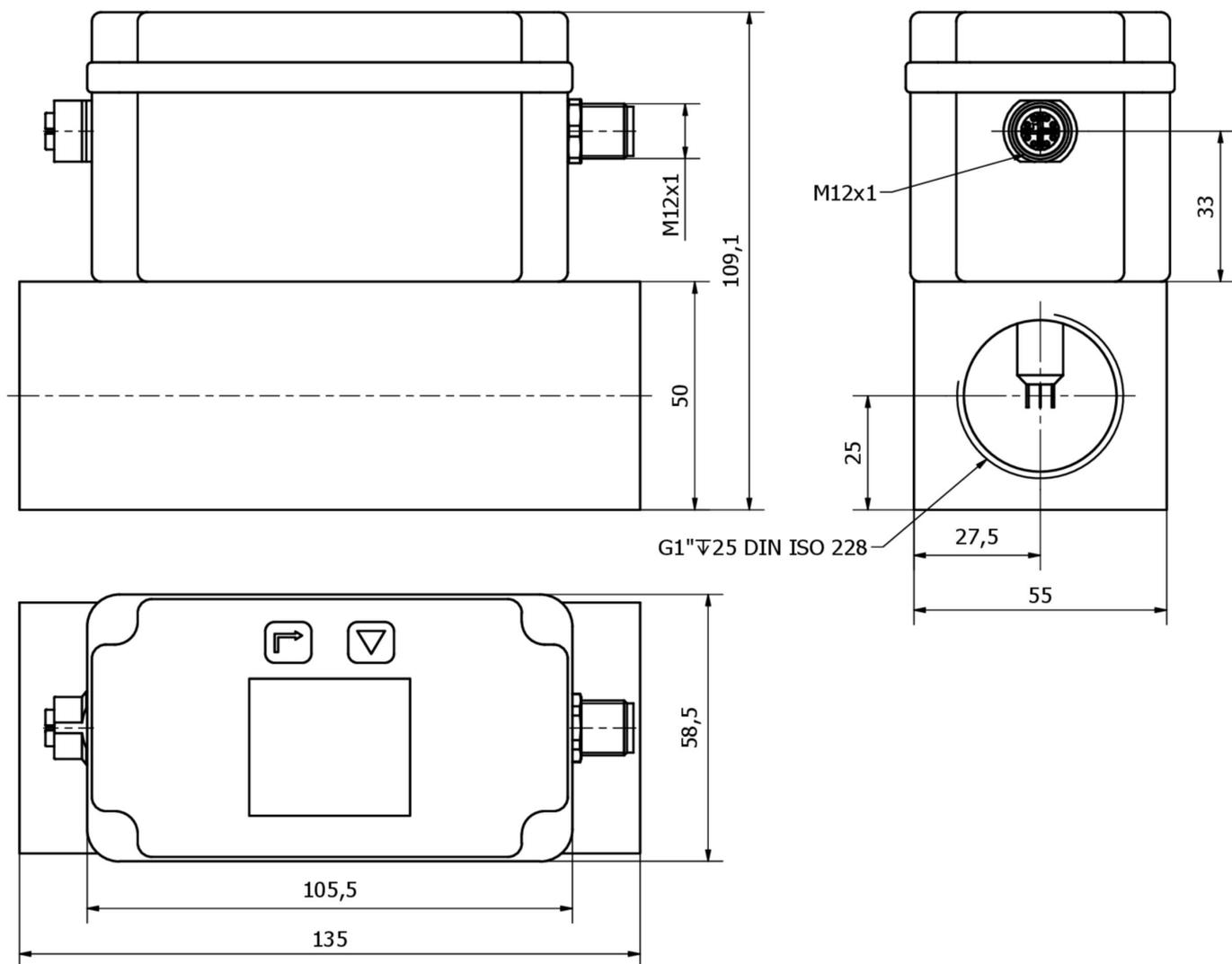
**More**

IPF Product Group	725 compressed air and leakage measurement
packaging dimensions	235 x 220 x 120 mm
gross weight	1344 g
Customs tariff number	90268020
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**VK108F28**



Data cable, Connection cable, 1m, M12 Male (connector) 8pin Straight, X-coding, RJ45 Male (connector) 8pin Straight, 8x0.14mm<sup>2</sup>, Category 5E, -40-75°C, TPU, Shielded

**VKB08F28**



Data cable, Connection cable, 20m, M12 Male (connector) 8pin Straight, X-coding, RJ45 Male (connector) 8pin Straight, 8x0.14mm<sup>2</sup>, Category 5E, -40-75°C, TPU, Shielded

**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

**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-...

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.