SM890020

Flow sensors ● Water consumption measurement

Flow sensor, water, magnetic-inductive, 72x68x68mm, G 1/4", 19-30V DC, push/pull programmable/configurable, 0/2-10V / 0/4-20mA, M12-connector 4pole, stainless steel 1.4404, pressure resistance 16bar, 0,01-1l/min

If an electrically conductive liquid moves across a magnetic field, a voltage is generated vertically to this magnetic field which is dependent on the flow velocity. This voltage is measured by electrodes located in the wall of the measuring tube. Micro-controllers evaluate this voltage, calculate the flow rate and show it on the display. An analog signal and a transistor switching output are available for further processing.

Electrical features

Response time, flow t90 (alarm/pulse/frequency output)	0.1s
Response time, flow t90 (analog output)	1s
Response time, temperature t90 (signal output)	20s
Number of switching outputs	2
Display	TFT-Display | LED-Anzeige
Type of switching function	Programmable/configurable
Type of analog output	0 - 10V | 0 - 20mA | 4 - 20mA | 2 - 10V
Type of electrical connection	Plug-in connection M12
Type of switching output	Push-pull
Type of temperature sensor	PT1000
Rated switching current	200mA
Operating voltage (DC)	19 - 30V
Setting procedure	Parametrierung
Short-circuit protection	Yes
No-load current	200mA
Measuring accuracy of temperature	<±2°C (flow > 0.2m/S)
Measuring principle of flow	Magnetic-inductive
Minimum conductivity	20µS/cm
Number of pins	4
Relative repeat accuracy	0.2%
Reverse polarity protection	Yes

Mechanical features

Type of process connection	G1/4 inch
Outlet section	2 x nominal diameter
Design	Cuboid
Width	72mm
Pressure resistance	16bar
Inlet section	3 x nominal diameter
Height	68mm
Length	68mm
Maximum viscosity	70mm²/s
Medium temperature	-20 - 70°C

Other features

Suitable media	Conductive liquids
Measuring accuracy	≤± (0.8% from measured value + 0.5% from end of measuring range)
Reference medium / object	Water

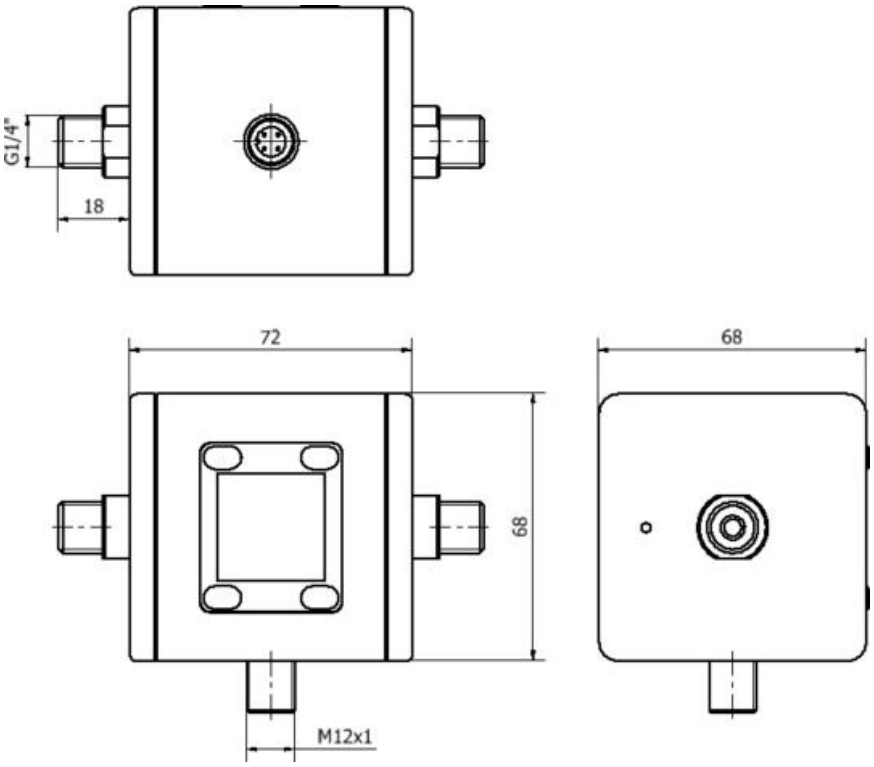
Classification

ETIM 8	EC002580 Flow monitoring device
eClass 7.0	27371815
eClass 7.1	27371815
eClass 8.0	27371815
eClass 9.0	27371815
eClass 9.1	27371815

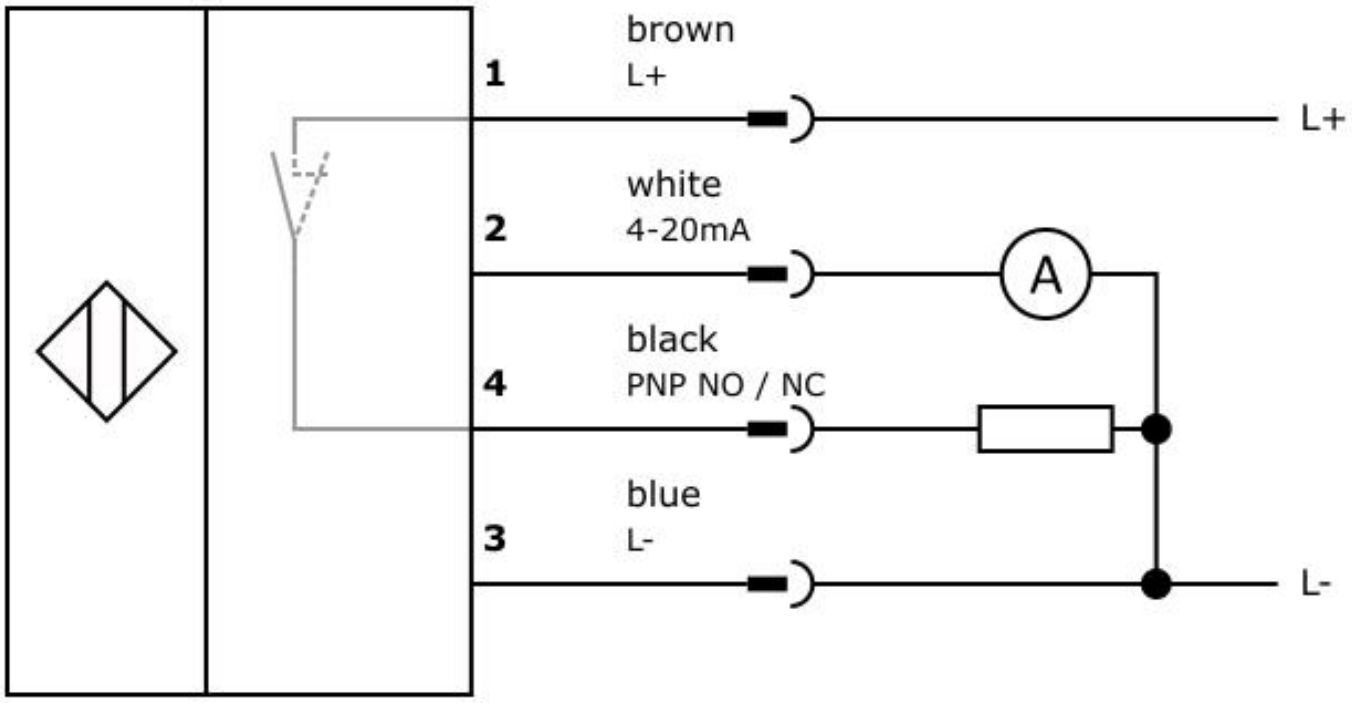
More

IPF Product Group	300 flow sensors
packaging dimensions	23 x 13.8 x 9.5 mm
gross weight	1194 g
Customs tariff number	90261021
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.