Product innovation

Programmable flow sensor
Series SNS 552

SNS 552 GAPL EE10417

Use IO-Link
Universal · Smart · Easy

Compact - Precise - Multifunctional

- Flow measurement of waterbased liquids
- Temperature measurement
- Pipe diameter adjustable
- Teach-in functions
- Manipulation detection

Application

The SNS 552 GAPL is a thermal flow sensor, for detection of the flow speed and the temperature of waterbased liquid medias in a pipeline. With the parameterizable inner diameter of the measuring pipe it calculates the current fluid consumption and displays it in the easy-to-read display in litres per minute or cubic metre per hour. For monitoring the flow condition the sensor has two independent switching outputs or an analog current output.

Functions (Selection)

- Displayed measurand and unit of measurement selectable
- Configurable outputs
- 180° flipping of display
- Status LEDs for units and switching outputs
- TAG ID
- IO-Link Device V1.1
- Teach-in functions executable with IO-Link commands
- Input for external control signal
- User groups configurable

Type

SNS 552 GAPL P11389 • M18 • 3 m/s

Accessories

Screw-in adapter, IOL-Master-Set V1.1

IO-Link

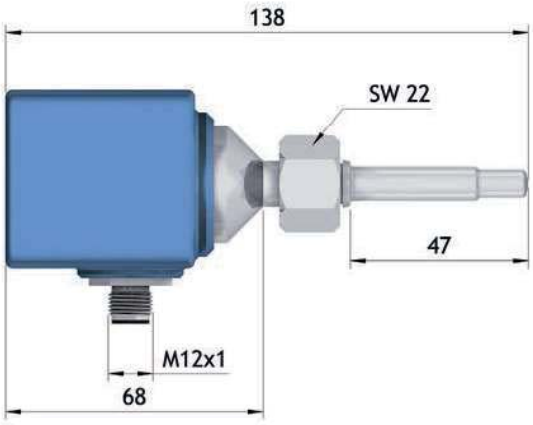
IO-Link is a point-to-point communication interface include enabling parametrization of sensors and actuators using a PC / Notebook and an interconnected master module.

Installation

The adapter is screwed into a T-piece or a welding sleeve. The SNS 552 is secured in this adapter using a union nut. The connection is reliably sealed up to 100 bar. Various designs of the screw-in adapter allow the universal use of the flow sensor. For best readability the display part of the housing is continuously rotatable up to 330° against the sensor part.

Operation and display

The sensor is parametrized using the front buttons or the IO-Link interface. The 3-digit display shows the measurement values which can be sent as process data to an PLC via the IO-Link connection.



Technical data

Detection range		
Flow water	**[m/s]**	**0.05...3.00**
	[l/min]	Depends on pipe diameter
	[m³/h]	Depends on pipe diameter
Temperature	[°C]	0.0...80.0
Internal pipe diameter	[mm]	15...200
ID-No.		P11389
Type		**SNS 552 GAPL**
Flow deviations [1]		
from measurement value	[±%]	8
from measurement range end value	[±%]	2
Reproduceability	[±%]	2
Temperature deviation	[±°C]	2
Output S1		PNP-NO/NC, NPN-NO/NC, IO-Link, pulse PNP-NO
Output S2		PNP-NO/NC, NPN-NO/NC, Analog 4...20 mA, input for external control signal
Supply voltage	[V]	18...30 DC
Current consumption max.	[mA]	≤120
Switching current	[mA]	≤150
Ambient temperature	[°C]	–10...+60
Medium temperature	[°C]	0...+80
Start-up time	[s]	10
Reaction time	[s]	<1
Compressive strength	[bar]	60
Sensor material		Stainless steel AISI 316 L
Housing material		PBT, stainless steel
Display flow		3-digits, 7-segment blue
Protection	[EN 60529]	IP 67
Connection		M12 connector
Programmable functions		Operating modes: Hysteresis function, window function, fault monitoring, pulse output, analog output Extended functions: Min/ Max/ average value memory, customized ID, display configuration, selectable units of measurement and pipe diameter, access restrictions
IO-Link		V1.1, COM2, 3.5 ms, SIO-Mode supported
Accessories		IOL-Master-Set V1.1, screw-in adapter

[1] under reference conditions