

Product innovation

Programmable flow sensor Series SNS 552



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

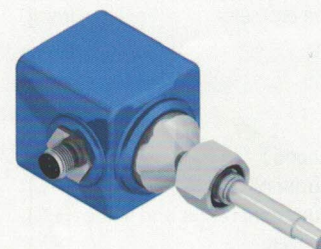
SNS 552 GAPL P11389 • M18 • 3 m/s

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.



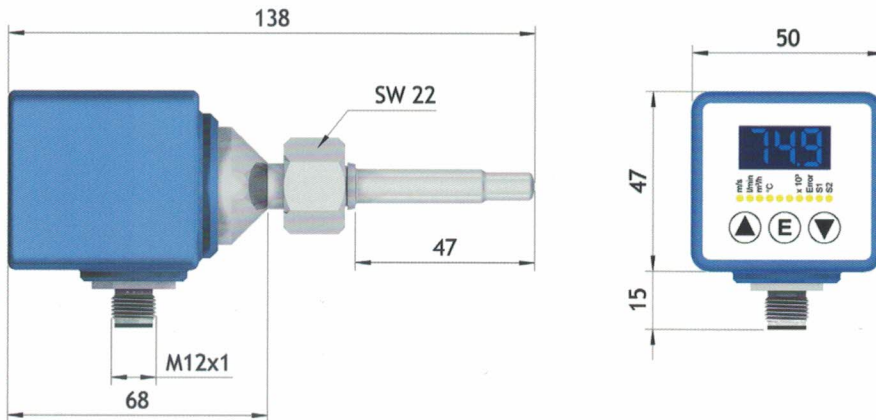
Installation

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