



Type SLI03-6-S

modular @ analyse

Intelligent Modular conductivity measuring unit

Advanced features

- ▶ Inductive Measuring system for conductivity measurement in processes
- ▶ New small compact construction
- ▶ Heavy duty in hygienic design
- ▶ Effective range free configurable, via display or software
- ▶ Housing made of high-grade steel 1.4305
- ▶ LCD display for conductivity, temperature and handling
- ▶ Extremely fast response times:
Temperature: $t_{90} < 9\text{sec.}$
Conductivity: $t_{90} < 1\text{sec.}$ (Damping=1)
- ▶ FDA, EHEDG-conformal

Technical features

- ▶ Analogue output for conductivity and temperature, each 4...20 mA
- ▶ 14 basic measuring ranges
- ▶ 4 measuring ranges switchable externally
- ▶ Intelligent temperature compensation
- ▶ Temperature application range:
Medium (steady): 0 °C up to 100 °C
Medium max. (1h) 0 °C up to 150 °C
- ▶ modular process connection system
- ▶ Installation in pipings from nominal size DN 50

Aufbau und Wirkungsweise

The SLI 03 is a extremely compact measuring system for inductive conductivity measurement.

By using a combination of high grade steel and peek, the sensor ist extremely robust!

It is available in the following mechanical versions:

- modular, hygienic prozess connection with polymer-free sealing system G1" "modular@process"



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Mittelstand

Example modular process connections



Look data sheet process connections

modular @ process

Favoured fields of application are e.g.:

- ▶ Food technologie
- ▶ Chemical + Pharmaceutical industrie
- ▶ Medical technology
- ▶ Enviromental technology
- Media + phase segregation, concentration adjustment
- Intensification of CIP-equipment
- Monitoring of the product quality
- Detection of produktion remnants in the cleaning return

ATTENTION!

At lower deviation of dew points water condensation is possible, that can destroy the sensor. At stress with change of temperatures, e. G. a cold water jet on the hot sensor, it can come to absorption of fluids in to the sensor. (Requirements cf. DIN EN 60068-2-14) At applications with dew point, temperature shock or thermal shock stresses we recommend a part or better to full grouting.

The tightness classification after IP68 does not mean that these parts are suitable! for applications with lower deviation of dew point or temperature shock. (DIN 60068-2-14)

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Elektrical Data

Supply Voltage	18...32 VDC
Domestic Electricity	Max. 100mA (pulsed);
Display	parameterization, display
User Interface	3 Keys
Feature	Parametrizable via PC-Software
Application	Low cost phase separation and simple analysis tasks
Accuracy	2% from final value
Temperature Coefficient	Adjustable for every measuring range: 0...10%/K
Measuring Range Temperature	-20 °C...150 °C
Connection Type	2x M12 plug
Outputs	2x 4-20mA
Connections internal	none
Process Connection	G 1"
Material	SensorDip Peek/1.4404(316L) Housing/ Pressure Connect. 1.4305
Approvals	EHEDG; 3A in progress
Protection Class	IP69K; IP68
Ambient Temperature	-20°C...60°C
Process Temperature	0°C ... 100°C; 150°C
Operating Pressure	16 bar
Meas.Range Conductivity	div. Meas.Ranges external switchable; 0...0.5mS/cm up to 0...999mS/cm

Specifications Conductivity

Accuracy	+/-2% accumulated val. +/- 20 µS/cm
Reproducibility	<1% of measured value
Long time stability	+/- 0,5% of accumulated value +/- 20µS/cm
Response time	t90 < 1 sec. (Damping=1)
Resolution of conductivity:	
<1 mS/cm	1µS/cm
1...10mS/cm	10µS/cm
10...100mS/cm	100µS/cm
100...999 mS/cm	1000µS/cm

Specifications Temperature

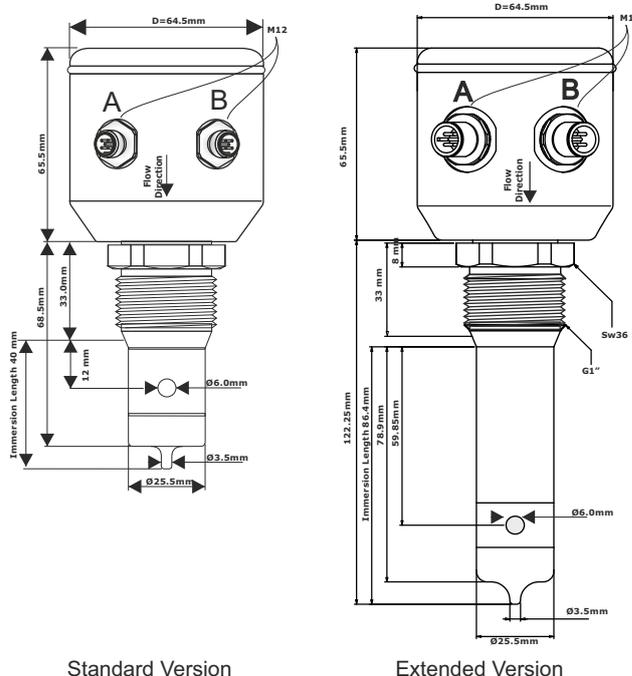
Resolution	0,1°C
Repeatability	0,2% of measured value
Response time	t90 < 9 sec.
4...20 mA Analogue Outputs:	
Temperature drift	<(100...150 ppm/°C)
Accuracy	0,1% of meas. value; +/- 10µA
Range 20...50°C	<+/-0,2°C
Range-20...150°C	<+/-1,5°C
Response time	t90 < 1 seconds
Burden max.	500 Ohm

Installation

The device may only be installed in our modular process connection system „modular@process.“

SLI03-	0	6	-		-	
High Grade Steel Connecting Head With connecting head and 2xM12 screw	0	6				
Version						
Standart				S		
Extra charge extended sensor version				V		
Parameter Module						
with integrated control + indicator display, inspection cover					-	
without integrated control + indicator display, closed cover					0	

Dimensional Drawing



Electrical Connection

Plug: 2 x M12 5-pole;
no screw terminal provided

Supply

A	1	18...32 VDC + (brown)
	2	TX (only contactable with Prog.-Adapter)
	3	GND - (supply) (blue)
	4	NC
	5	RX (only contactable with Prog.-Adapter)

In - Out

B	1	OUT / 4...20mA / conductivity (brown)
	2	OUT / 4...20mA / temperature (white)
	3	DIGI - In1 (blue)
	4	DIGI - In2 (black)
	5	GND (OUT / IN) (grey)

Accessories (optional)



PC USB Interface (SMW-PA-M12)



M12 cableadapter for connection to PC USB Interface (ST-M12-Y-AD)



Terminal Box KGS-...



Conductor loop set (FP-00357) for simulation of conductivity and test of the sensor

Stand 11/2020