Conductivity Sensors Type ICS PPSU

Inline **C**onductivity **S**ensor
ICS the new inline conductivity sensor from AVS Römer

ELSA Push-in Fittings · NSF COMPONENT

Inline conductivity sensor for conductivity measurement of liquid media.

The ceramic conductivity measuring cell in conjunction with the established ELSA push-in connectors made of PPSU finds its use primarily in the food industry.

Other features:
- minimal dead space
- optionally with temperature-compensated evaluation electronics
- materials and constructional design especially optimised for food applications

Variations / options:
- other material for seal
- available with Modbus on request
- available without electronics on request

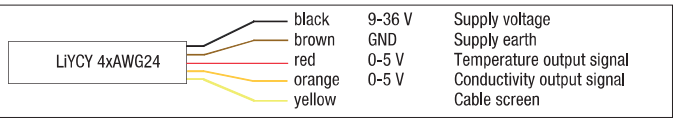
CHARACTERISTICS

GENERAL		
Constructional design	Ceramic conductivity measuring cell	
Product name	Conductivity Sensor	
Product type	ICS-2-958P3 / ICS-3-958P3	
Nominal diameter	DN 2,5 to DN 4	
Connection	ELSA push-in connectors for pipe/tube OD 4-6	
Ambient temperature	0 °C to +60 °C	
Medium temperature	0 ° C to +140 ° C, conductivity can only be measured up to +95 ° C.	
Body material	PPSU (KTW approved, NSF certified)	
Measuring cell material	Al_2O_3, Pt, glass	
O-ring material	FKM or EPDM	
Mounting method	using spring clip, internal width Ø 30-32 (not included in scope of supply)	
Mounting position	Air bubbles in the medium falsify the measurement result. Vertical flow is used to avoid air bubbles recommended from bottom to top	
Approval	NSF/ANSI 169	
PNEUMATIC - HYDRAULIC		
Nominal pressure	PN 16	
Pressure range	Technical vacuum up to maximum allowable operating pressure OP in accordance with the specification table	
Flow rate	Kv-value in accordance with the specification table	
Medium	Gases or liquids which do not corrode the materials specified	
ELECTRIC		
Supply voltage	9V to 36V DC	
Conductivity output signal	0 V to 5 V DC (linear over the entire measurement range)	
Temperature output signal	0 V to 5 V DC (linear over the entire measurement range)	
Electrical connection	4-pole screened cable 0.75 m (LiYCY 4xAWG24)	
Protection class	IP65	
MEASURING CELL	Conductivity	Temperature
Measuring range	0,2 bis 20 mS/cm at 0 to 95 °C	0 to 140 °C
without temperature compensation	Accuracy: ± 2 % F.S.; 0.2–5 mS/cm: ± 2.5 % R.E.; 5–15 mS/cm: ± 1.5 % R.E.; 15–20 mS/cm: ± 2 % R.E.	± 1 °C
with temperature compensation	Accuracy: ± 3 % F.S.; 0.2–5 mS/cm: ± 4 % R.E.; 5–20 mS/cm: ± 3 % R.E.	± 1 °C
Response time	<3 s, 90% of the signal swing is available at the output	< 1 s

Caution! PPSU should not be used in contact with aromatic hydrocarbons, oxidising acids, acetone, chlorinated hydrocarbons, ethers or ketones! Also, PPSU should not be placed directly in contact with anaerobic adhesives!

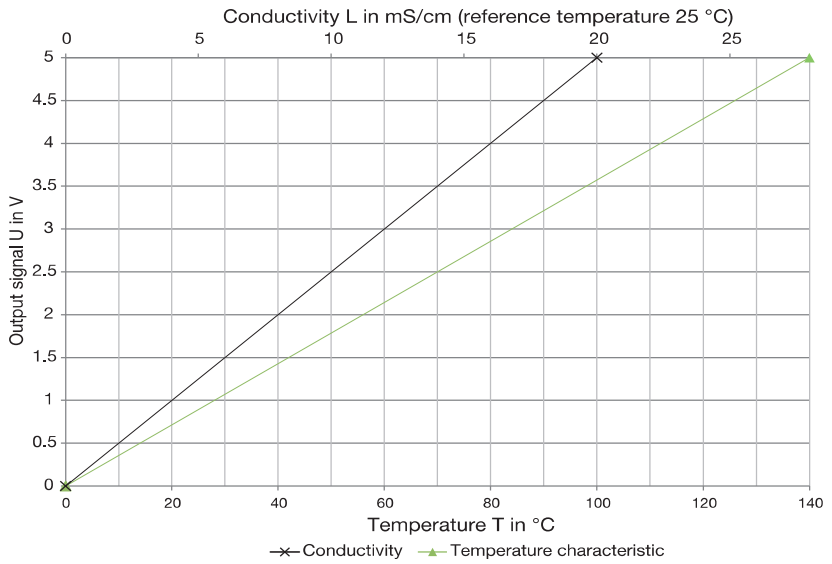
Conductivity Sensor - Type ICS PPSU

Price group **710** | PN 16 | Max. Allow. OP at ambient temp. T_{min} 0 °C, T_{max} +60 °C | NSF | Plastic PPSU



for tube OD	DN	Kv-value water [l/min]	Allow. OP [bar] at medium temp. 20 °C	100 °C	140 °C	Temperature-compensation	L	Seal material	Type	Order number
4	2.5	2.73	16	12	6	-	50.4	FKM	ICS-2-958P3-4FF-200-020-U05-51	390660
6	4	8.3	16	12	6	-	43.8	FKM	ICS-2-958P3-6FF-200-020-U05-51	390662
4	2.5	2.73	16	12	6	water	50.4	FKM	ICS-3-958P3-4FF-200-020-U05-51	390666
6	4	8.3	16	12	6	water	43.8	FKM	ICS-3-958P3-6FF-200-020-U05-51	390668

Characteristic Curve 0-20 mS/cm or 0-140 °C 0-5 V



Illustration