SENSORS FOR FOOD AND LIFE SCIENCE.

HYGIENIC BY DESIGN

ANDERSON-NEGELE

More process reliability in phase transition
Inline Conductivity Meter ILM-4

EXPERIENCE THE DIFFERENCE

EXTENDED WARRANTY

Experience our quality promise:
The ILM-4, now comes with an extended warranty of 5 years. The general terms and conditions apply. For further information see **www.anderson-negele.com**

WARRANTY **5** 5 YEARS

Benefits in production and CIP / SIP

ILM-4 with Flex-Hybrid Technology (IO-Link and 4...20 mA) enables an active, automated, and temperature compensated phase transition. This applies production processes and the CIP / SIP return of acid / caustic / water.

These fluids can be drained or returned to the recovery tanks in the highest possible grade thanks to the high precision of the inline conductivity measurement in real time. The multiple use of the cleaning media ensures maximum cost efficiency and environmental protection.

Benefits in cleaning chemicals' control

For an optimal and reproducible cleaning result, each detergent must be concentrated to the specified value by re-dosing with concentrate and freshwater. This is ensured by the highly accurate measurement of conductivity with the ILM-4.

Advantages of the ILM-4

· **Minimum response time (1.2 s)** for maximum efficiency
· Ready for IoT: **digital IO-Link** interface **and analog 4...20 mA** data transmission in parallel
· **Precise phase transition** of different media means **less product loss** and cost minimization
· **Optimum multiple use** of the cleaning chemicals due to correct return to the respective tanks
· **Minimization of cleaning time and water consumption:** inline conductivity analysis for active switching after reaching the desired value and not after a fixed time
· **Precise concentration control of the chemicals**
· **Reliable product monitoring / quality assurance**
· **Very favorable price-performance ratio**

IO-Link   4...20 mA

A3 74-   CERTIFIED cHcDG TYPE EL CLASS I

Remote version ILM-4R

Technical specifications at a glance

· **Extremely compact & robust** sensor

· **Flex-Hybrid technology** with **digital + analog** interface (**IO-Link + 4...20 mA**): from simple data transfer to intelligent communication

· **Fast sensor response time: approx. 1.2 s**

· **Modular design:** configurable from the **low-cost basic version** to the **high-end model**

· Wetted sensor head made of **100 % PEEK prevents thermal stress cracking**

· **Measuring range selectable:** 1...999 mS/cm

· **High reproducibility** ≤ 1 % of measured value

· Compensated detection **up to 266 °F (130 °C)**, CIP/SIP cleaning up to 302 °F (**150 °C) / 60 min**.

· **Remote version with Smart Replace Design:** Easy plug&play replacement of components

Modular Sensor platform with IO-Link and 4...20 mA

The **Flex-Hybrid Technology** with **IO-Link and 4...20 mA** combines the best of both worlds: Data from the sensor can be transmitted digitally, analogously or in parallel. The bidirectional communication enables status control and preventive maintenance at any time to avoid production downtimes. Installation and commissioning are time- and cost-saving thanks to plug-and-play technology, and sensor replacement is easier than ever before thanks to "Smart Replace Design" with automatic detection, configuration, and parameterization.

Order code

ILM-4	Inductive conductivity sensor
ILM-4R	Inductive conductivity sensor - remote version, remote cable must be ordered separately

Submersion length of toroid

L20	20 mm
L50	50 mm

Process connection (Ⓐ: 3-A conform, Ⓔ: EHEDG approval)

S01	CLEANadapt G1" hygienic Ⓐ Ⓔ
TC1	Tri-Clamp 1½" Ⓐ Ⓔ
TC2	Tri-Clamp 2" Ⓐ Ⓔ
T25	Tri-Clamp 2½" Ⓐ Ⓔ
TC3	Tri-Clamp 3" Ⓐ Ⓔ
V25	Varivent type F, DN 25 Ⓐ Ⓔ
V40	Varivent type N, DN 40/50 Ⓐ Ⓔ

Head orientation (not selectable for ILM-4R)

H	Horizontal head orientation
V	Vertical head orientation

Signal module

I42	IO-Link and 1x 4...20 mA conductivity
I62	IO-Link and 2x 4...20 mA conductivity/temperature selectable
I63	IO-Link and 2x 4...20 mA conductivity/temperature selectable, external range switching

Electrical connection

P	Cable gland M16x1.5
D	2x cable gland M16x1.5
M	1x M12 connector, 4 pin output/power supply
N	2x M12 connector, 4 pin output, 5 pin input/power supply
A	2x M12 connector, 4 pin output/power supply, 5 pin output/input
C	1x M12 connector, 5 pin analog output and IO-Link
R	2x M12 connector, 4 pin analog and switching output, 3 pin IO-Link and input

Interface/Display

X	Without
S	Simple User Interface with small display (not for ILM-4R)
L	Large User Interface with big display

Enclosure

X	Plastic cap without sight glass
P	Plastic cap with sight glass
M	Stainless steel cap without sight glass
W	Stainless steel cap with sight glass

Configuration

X	Default factory settings
S	Special customer settings

ILM-4 /	L20 /	S01 /	V /	I63 /	D /	S /	P /	X
ILM-4R /	L20 /	S01 /		I63 /	D /	L /	P /	X

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