

# CONDIX4213

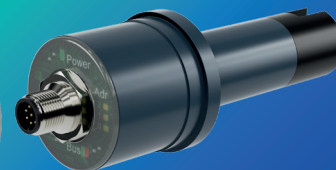
## DIGITAL CONDUCTIVITY- CONVERTER

### CHARACTERISTICS

The digital conductivity converter CONDIX4213 is used for the conductivity measurement of liquids. The integrated digital transmitter submits values and parameters to a master (e.g. PLC, SCADA).

Device parameters and input configuration are adjustable via the interface or SENSware configuration software. Application dependent six different types of temperature compensation are available. The 4-electrode measurement principle with a cell constant of  $0.5 \text{ 1/cm}$  is suitable for a range of applications up to  $500 \text{ mS/cm}$ .

Applications can be found in the water treatment of landfill seeping water, seawater or black water treatment on ships.



[www.senseca.com](http://www.senseca.com)



#### SMART TECHNOLOGY

- Supplies process values, identification data, diagnostic data
- RS485 interface with Modbus RTU-protocol



#### EASY TO SET UP & QUICK TO INSTALL

- Installation with PVC-U standard fittings



#### ACCURATE & RELIABLE

- Resistant against pollution
- Not influenced by polarisation effect or wire resistive



#### GREAT FLEXIBILITY

- 6 types of temperature compensation selectable

## Technical Data

### Power supply

Supply voltage	4.7..28 V DC, max. 60 mA
Conformity	CE

### Inputs

Cell constant	C = 0.5 1/cm (exact cell constant labelled on the type plate)
---------------	---

### Measuring range

Conductivity	0...500mS/cm
Temperature	-50...+200°C

### Basic accurac

Conductivity	1% of measured value (>2% of measured value for <20µS/cm)
Temperature	0.2 K

### Linearization errors

Temperature	0.1%
Operating temperature	0...+60 °C
Ambient/storage temperature	-10...+60°C

Condensation not allowed

Process connection PVC fitting with cap nut

Process pressure max. -1..16 bar

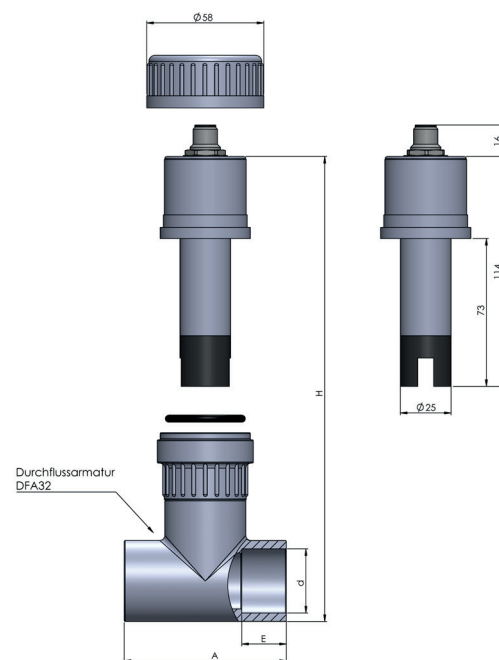
### Materials

Process material	PVC-U, casting resin, graphite (electrodes)
Viewing window	Acrylic glass (PMMA)

### Electrical connection

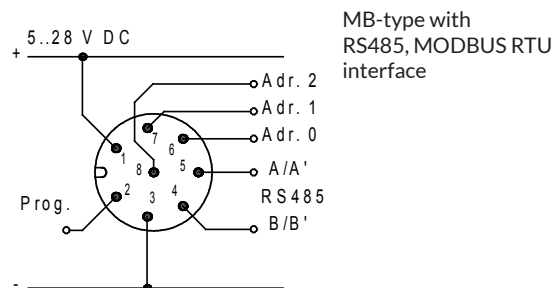
Design	8 pole round connector plug
Materials	brass nickel plated
Interface	RS485, Half-Duplex
Protokoll	MODBUS RTU
Baud rates	1200, 2400, 4800, 9600, 19200
Total weight	ca. 160 g
Protection class	IP67
Temperature comp. Selectable	<ul style="list-style-type: none"> <li>- without temperature compensation</li> <li>- linear temperature coefficient</li> <li>- compensation of natural waters</li> <li>- ASTM-D1125 ultra-pure water</li> <li>- NaCl diluted solution</li> <li>- ASTM-D5391 acidic pure water</li> <li>- ASTM-D5391 alkaline pure water</li> </ul>

## Dimensions



d	H	A	E
20	135	78	22
25	135	78	22
32	135	78	22
40	140	98	26
50	155	118	31
63	169	144	38

## Connection diagram



PIN	Signal	Cable color ACI113
1	+ Supply voltage	White
2	Programming PIN (normally not connected)	Brown
3	- Supply voltage, Ground (C / C')	Green
4	B / B' Bus	Yellow
5	A / A' Bus	Grey
6	Adr. 0	Pink
7	Adr. 1	Blue
8	Adr. 2	Red (shield)

The addressing of the CONDIX can be realized with a field attachable female connector (see accessories) or in a junction box.

## Ordering code

CONDIX

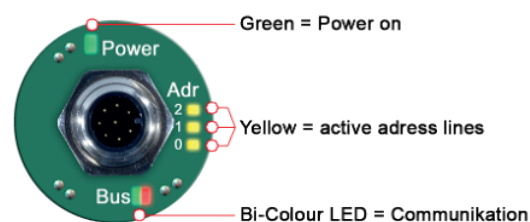
1.	2.	3.	4.	5.

1.	Model	
	4213	
2.	Cell constant	
	C0.5	
3.	Interface	
	MB	RS 485, MODBUS RTU
4.	Options	
	00	Without option
5.	Documentation	
	00 DE EN	Without Deutsch Englisch

## Accessories

Order No.	Type	Description
-	SENSware	Download: <a href="http://www.senseca.com">www.senseca.com</a>
475291	EYY220	Programming adapter
Diverse	DFA32	Flow fitting for CONDIX4213
476332	ACI113-00	Field attachable 8-pole female connector, Belden RKC8/9, Brass nickel plated
476331	ACI113-VA	Field attachable 8-pole female connector, Binder 713, stainless steel
476533	ACI113-002-1-00	-pole female connector M12 (Brass nickel plated) with shielded cable and wire-end ferrules: 2 m
476116	ACI113-005-1-00	8-pole female connector M12 (Brass nickel plated) with shielded cable and wire-end ferrules: 5 m
476117	ACI113-010-1-00	8-pole female connector M12 (Brass nickel plated) with shielded cable and wire-end ferrules: 10 m
476118	ACI113-025-1-00	8-pole female connector M12 (Brass nickel plated) with shielded cable and wire-end ferrules: 25 m

## Optical signaling



Top view CONDIX4213: Optical signalling for supply voltage, bus communication and addressing.