

# Conductive Sensors Level Probes Types CLH

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- Flexible conductive level probe
- 1 to 5 electrodes
- User defined electrode length
- Isolated or unisolated electrodes
- 1 1/2" pipe thread according to ISO 228/1-G1 1/2A



## Product Description

A compact and flexible level probe for measuring the level of conductive liquids, i.e. overflow, dry run protection or pump control. A total measurements system consist of a multiple probe-

head, 1-5 electrodes and a control unit. The electrode length can be freely defined by means of electrode extension units - with or without isolation.

## Ordering Key

**CLH 5**

Type \_\_\_\_\_  
Head mounting \_\_\_\_\_  
Number of electrodes \_\_\_\_\_

## Type Selection - Probe

Pipe thread	Housing Material	Ordering no. for 3 electrodes	Ordering no. for 5 electrodes
1 1/2"	PP	CLH3	CLH5

## Type Selection - Electrode

Type	Ordering no. 1000 mm Basic Thread in one end	Ordering no. 2000 mm Extended	Ordering no. Extension 1000 mm Thread in both ends
Electrode without isolation Electrode with isolation, Kynar (PVDF) Electrode with isolation, Polyolefine (FR)	CLE1 CLE1K CLE1P	CLE2 CLE2K CLE2P	CLE1X CLE1KX CLE1PX
<b>Description</b>	1000 mm Basic electrode for no further extension	1000 mm Basic electrode for extension 1000 mm extension electrode 1 extension joint 1 isolation tube (not CLE2)	1000 mm extension electrode 1 extension joint 1 isolation tube (not CLE1X)

## Specifications

<b>Probe Head</b>			
Material		PP (Polypropylen)	Diameter
No of electrodes	CLH3 CLH5	3 5	Isolation
Electrode connection		M4	CLE.K. CLE.P.
Tightening torque		2.7 Nm by hand -K & -P	Ø 4 mm Kynar (PVDF) Polyolefine (FR)
Cable connection		Screw terminals	
<b>Electrodes</b>			<b>Environment</b>
Material		Stainless steel AISI316/DIN1.4401	Overvoltage category
Length	CLE1 CLE2	1000 mm 2000 mm	Degree of protection
			Housing
			Electrode connections
			Pollution degree
			Operating temperature
			Storage temperature
			Pressure

## Specifications (cont.)

### Weight

Probe Head	260 g
Electrodes	107 g

### CE marking

IEC 529

## Mode of Operation

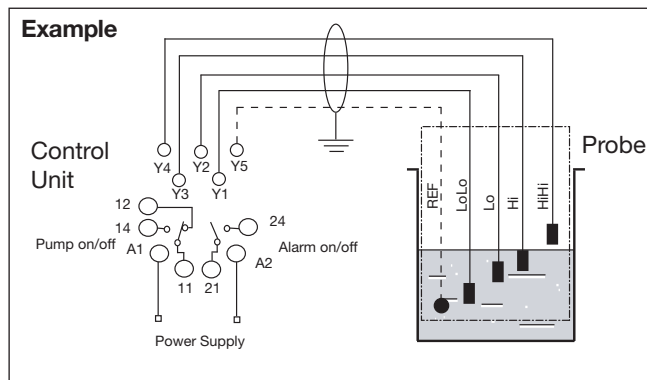
### Functionality - example

The diagram shows the level control system connected as max. and min control, i.e. registration of 2 levels + 2 alarm levels. The relays react to the low alternating current created when the electrodes is in contact with the liquid.

The reference (Ref) must be connected to the container or if the container are made of a nonconductive material, to an additional electrode. In the diagram this electrode is shown by the dotted line.

### Electrodes

Cut or extend the electrodes



to the desirable length. If using extended electrodes, place the enclosed isolation tube over the extension joint,

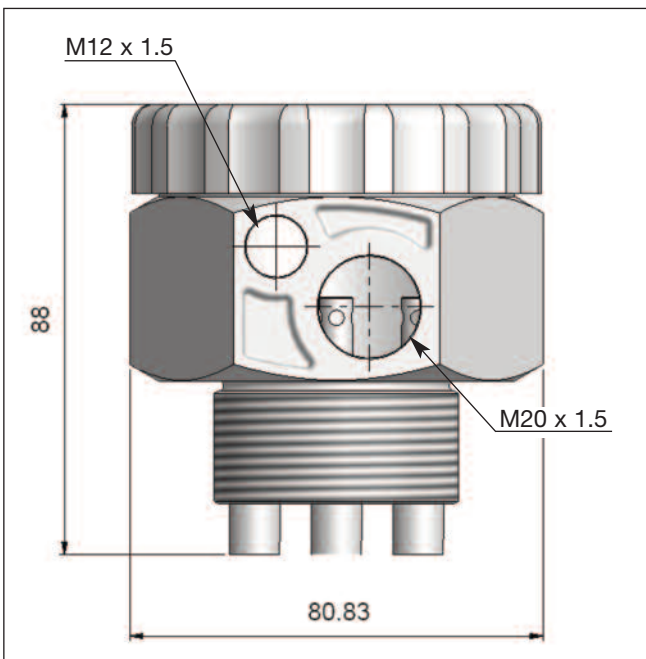
and heat it with a heat gun. Mount the electrodes in the probehead by means of the M4 screw inserts. Take care

not to damage the isolation material of the isolated electrodes.

### Connection cable

2, 3, 4 or 5 conductor PVC cable, normally screened. Cable length: max. 100 m. The resistance between the cores and the ground must be at last 200k. In normal cases it is recommended to use screened cable between probe and controller, e.g. where the cable is placed in parallel to the load cables (mains). The screen has to be connected to Y5 (reference).

## Dimensions



## Accessories

Extension joint Ø4  
60 mm Kynar for isolation  
60 mm Polyolefine for isolation  
M12 Cable Gland  
M20 Cable Gland

VD  
VDK  
VDP  
M12 Cable Gland  
M20 Cable Gland

## Delivery Contents

Probe Head  
M20 Cable Gland  
M12 Blind flange  
Installation Instruction