Conductive Sensors Level Probes Types CLH





- 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-G11/2A

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Product Description

A compact and flexible level probe for measuring the level of conductive liquids, i.e overfill, dry run protection or pump control.

A total measurements system consist of a multiple probehead, 1-5 electrodes and a control unit.

The electrode length can be freely defined be means of electrode extention units with or without isolation.

Ordering Key

CLH 5

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

Туре	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	
Description	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

Probe Head Material No of electrodes	CLH3 CLH5	PP (Polypropylen) 3 5	Electrodes Material		Stainless steel AISI316/DIN1.440
Electrode connection	n	M4	Length	CLE1 CLE2	1000 mm 2000 mm
Tightening torque Cable connection Cable size		2.7 Nm by hand -K & -P Screw terminals Ø8 - Ø13 mm	Diameter Isolation	CLE.K. CLE.P.	Ø 4 mm Kynar (PVDF) Polyolefine (FR)



Specifications (cont.)

Environment

Overvoltage category
Degree of protection
Housing
Electrode connections
Pollution degree
Operating temperature
Storage temperature
Pressure

III (IEC 60664)

IP 65 IP 68 2(IEC 60664/60664A, 60947-1) -20° to +90°C (-4° to +194°F) -40° to +100°C (-40° to +212°F) 5 bar at 60°C

Weight

Probe Head Electrodes

CE marking

260 g 107 g

IEC 529

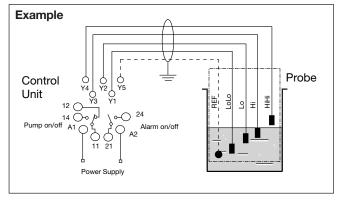
Mode of Operation

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

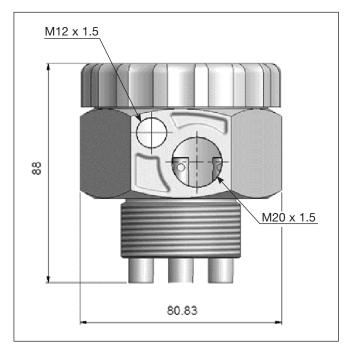


to the desirable length. If using extended electrodes, place the enclosed isolation tube over the extension joint, and heat it with a heat gun. Mount the electrodes in the probehead by means of the M4 screw inserts. Take care not to damage the isolation material of the isolated electrodes.

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

VDK VDP M12 Cable Gland M20 Cable Gland

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Delivery Contents

Probe Head M20 Cable Gland M12 Blind flange Installation Instruction