

-90 -80 -70 -60 -50 -40 -30 -20 -1

-10

Level Control SN-4



SN-4.doc | Status 2005 - 01 - 11



1 **General remarks**

The level control SN-4 is a fourfold conductive electrode control for SPS applications. The opposite pole for the for individual electrodes is at mass potential (ground). In this way it could be used as counter electrode in case of metallic reservoirs.

2 Principle of function

counter clockwise more sensitive (low conductance, high impedance)



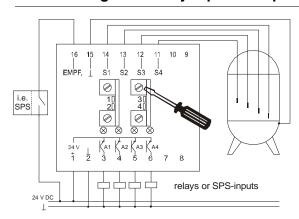
clockwise less sensitive (high conductance, low impedance)

The sensitivity is individually adjustable for each channel by potentiometer. Each channel can be released discretely by jumper for an external sensitivity changeover:

- jumper closed: sensitivity changeover is blocked;
- jumper opened: sensitivity changeover is released;

The channels selected for the sensitivity changeover (jumper opened) will be switched over jointly into the higher responsiveness by control input (terminal 16). The control voltage for the sensitivity changeover amounts to + 24 V.

3 Configuration of jumpers and potentiometers



For the outputs PNP-OPEN-COLLECTOR - transistors are used. They are protected against short circuiting by a common current source (maximum total output current: 150 mA).

To each output a light emitting diode is allocated, indicating the switching status (LED lights, if the output is active).

Cable capacitances of the probes' supply lines up to approx. 50 nF are electronically masked. If no critical installation circumstances are given, shielding of the lines is not necessary.

4 Technical data



Mounting and commissioning only by trained personnel. Electrical connection in accordance to VDE 0160.



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Operating voltage 24 V DC (20 ... 34 V)

Power consumption approx. 1 W (without external circuitry)

Probe inputs probe voltage < 20 V

maximum probe supply line > 50 m (dependent on mounting circumstances)

Responsiveness

200 ... 620 kOhm (activated by: SPS 24V / terminal 16)

Open-Collector, PNP / I total max = 150 mA short-circuit-proof Outputs

Ambient temperature -20 ... +55 °C

Housing W / H / D : 55 x 75 x 110 mm (35 mm standard bar)

4.1 Ordering information

Level Control SN-4 Part number: E1750 80