

CONDUCTIVITY LEVEL SWITCH

SIGMA's Conductivity Level Switches are simple, low cost and reliable instruments, for detection of conductive liquids. The Level Switch is available in single / multipoint level detection. A low alternating voltage is impressed between the active electrode(s) and the vessel wall / reference electrode. When the liquid comes in contact with the tip of the active electrode(s), an electrical path to ground is completed, closing the loop, resulting in flow of current. The current is transmitted to the control unit directly (in case of multiwire / integral design) or through a pre amplifier housed inside the probe head (in case of two wire design). The amplifier inside the control unit processes the signal and amplifies it to drive LED/ relay circuits.

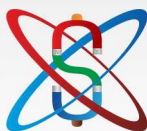
Sigma Advant-edge

- ✓ No Moving parts
- ✓ Power Supply Indication
- ✓ LED Indication / Relay Output for 4 different preset levels
- ✓ Selectable high / low level alarm
- ✓ Special probe design to tackle acids.
- ✓ Latching type relay design for direct auto pump operation
- ✓ Auto sensitivity to liquid conductivities > 25 μ S
- ✓ Option of stand alone system

Specifications

Enclosure	: Cast Aluminum, Weather proof IP 66 & Explosion Proof IIA IIB
Electrode Type	: Solid up to 4 m, suspended upto 10 m
Electrode MOC	: SS 304 / SS 316 / Hastelloy / Titanium Tips / specified.
Electrode insulation / Temperature	: PVC (70°C), PTFE (200°C)
Reference (R) / Control Electrode (C)	: 1 / 4 (or custom)
Minimum Conductivity	: 25 μ S
Power Supply	: 230 V AC / 110 V DC +/- 10 % , 50 HZ / 24 V DC
Output relay contact rating	: 5 A at 230 V AC
Process Connection	: CS / SS 304 / SS 316, 1 1/2" & above Flanged / Screwed to ANSI / specified.
Cable entry	: 1/2" NPT (F) or 3/4" ET / specified.
Mounting	: Vertical / Horizontal
Pressure	: 20 kg/cm ²
Service	: Water, Acids, Alkali
Note	: 1 1/2" is Flange is for up to 2 levels only.





Model Number Coding for Conductivity Level Switch

CLS	Mounting	Electrode	Electrode Material	Electrode Insulation	Control Electrode	Process Connection	Cable Entry	Electrode Size
Conductivity Level Switch	V - Vertical H - Horizontal	S - Solid H - Suspended	4-SS304 6-SS316 H-Haste Alloy T- Titanium S - Specified	P - PVC F - PTFE S - Others Specify	C1 - First C2 - Two C3 - Three C4 - Four S - Others Specify	F - Flanged S - Screwed	1- 1/2" NPT(F) 3 - 3/4" ET S - Others specify	Specify length of Reference & control electrode(s)

While ordering, specify Process Connection Material, size (Flange or Thread) and Flange rating

Model Decoding example: CLS - V - S - 4 - P - C2 - F - 1- R-1000 - C1-500- C2 - 350

Conductivity Level Switch, with

- Vertical Mounting option
- Solid Electrode
- SS304 Electrode
- Electrode Insulation: PVC
- Two Control Electrodes
- Process Connection, Flanged
- Cable Entry 1/2"NPT (F)
- Reference electrode length - 1000 mm
- 1st Control electrode length - 500 mm
- 2nd Control electrode length: 350 mm

Note

- Model Coding is categorized as per the specification of the product, for ease of selection and ordering.
- In case of choosing multiple specification under a specific category, mention the 2nd / 3rd code with a bracket, after the 1st code.
- In case of doubt, contact SIGMA for assistance in arriving at the model code / for specification.

Note

All the Conductivity Level Switches mentioned in this catalogue are our standard design. If the standard items do not meet your requirements, we can modify them to meet your specifications and would appreciate the opportunity of making suggestions to cover your application, based on engineering principles. SIGMA reserves the right to modify specification / design from time to time, which is deemed suitable for the product without prior intimation from time to time.