



... the level & gas people

ISO-9001 : 2008 CERTIFIED COMPANY

Effective : March. 2011

Supersedes : Dec 2009

CONDUCTIVITY LEVEL SWITCH (SERIES-2100)

SALIENT FEATURES

- No moving parts, free from maintenance.
- ECONOMICAL to install. No special cable required for signal transmission,
- Long cable connection permissible between probe and evaluation unit.
- AC on probes for prevention of electrolytic deterioration of electrodes.
- Low voltage on probe for operational safety.
- Variety of control functions and installation system available, beside single point switching.
- 2 point action for automatic pump control.
- 2 point independent switching.
- 3 point switching , two points with pump control logic and one independent point.
- 4 point switching having two -pump control logic.
- Variety of probes available for various process conditions.
- Multichannel - 4 point independent switching available for various process conditions.



TECHNICAL SPECIFICATIONS

SWITCHING UNIT :

Housing.....	Aluminum for back panel mounting/DIN Rail mounting
Cable entry.....	2 nos. ½"NPT
Ambient temperature.....	0°C to +60°C
Power consumption.....	1.9 VA
Mains Voltage.....	230/110 VAC (+/-15%) 50 Hz or 24 V dc
Output.....	1 set of potential free contacts rated at 10 amps, 250 V AC for non -inductive loads.
Safety operation.....	Field selected switch for Minimum or Maximum (FSL/FSH) switching points.
Switch status display.....	Green LED shows Normal, Red LED Shows alarm.
Response Time.....	0.5 Sec

PROBE

Housing.....	Cast Aluminum.
Mounting.....	Screwed - ½" BSP or Flanged
Sensor Rod.....	Stainless steel
Insulation.....	PTFE (standard) Others on request and as per application.
Operating Temp.....	200°C max in vessel
Voltage on the Probe.....	12 V AC max. (Across probe & tank wall)
Current.....	< 3 mA (between probe & tank wall through liquid)

MEASURING SYSTEM

A low AC voltage is applied between the probe electrode and the tank wall (or reference electrode in case of insulated tank). When the liquid comes in contact with the electrode tip, a conductive path is established between the sense electrode and the tank wall/ reference electrode. This current is sensed, amplified and operates a relay whose contact in turn can be used for annunciation/control.

USAGE

(1) Switching 'Off' pumps when tank is full, to avoid overflow. (2) For maintaining a constant level to avoid material wastage. (3) For switching OFF Pumps before running dry and indicating an empty tank to avoid wear and tear & production stoppage.

PRIMARY AREA OF APPLICATION

These level switches are used in processing plants for conductive liquids of conductivity not less than 25 micro siemens in Food, Power, Chemicals, Sugar, Detergents, Steel, Minerals, Textiles, etc.

CONDUCTIVITY LEVEL SWITCH ORDERING INFORMATION

2100-											
Please Specify											
No. OF PROBES.....											
PROBE MATERIAL											
Stainless steel..... A											
Others (Please Specify)											
PROBE LENGTH											
0.2 to 3M (ROD)..... 1											
3M to 20M (ROPE)..... 2											
SWITCH HOUSING											
Integral..... C											
Remote..... D											
MOUNTING											
NPT..... 3											
FLANGED..... 4											
Others (Please Specify)											
TEMP											
0°C TO 60°C..... E											
Others (Please Specify)											
PRESSURE (kg/cm ²)..... G											
SUPPLY VOLTAGE											
230V AC..... 6											
24Vdc..... 7											
PROTECTION											
WEATHER PROOF..... W											
EXPLOSION PROOF..... E											