Conductivity type level switch, 130IC

The Conductivity type level switch, series 130IC is integrated along with controller. The device is most suitable for a variety of applications, in non fuming conductive liquids like water, water bound solutions as well as corrosive liquids like acids and alkalies etc. With a wide choice of electrode / probe and the controller options. The level switch electronic insert (Electronics) for various applications is housed on top of electrode assembly. In case of metallic tanks, a common electrode is not required, only the numbers of sensing electrodes required. In case of non-metallic tanks, a common electrode is required in addition to required numbers of sensing electrodes.

FEATURES:

- ☐ Compact size due to integral design.
- ☐ Uses field proven level control technique.
- ☐ Wide range of electrodes to suit various Applications.
- ☐ No calibration required.
- ☐ Field settable fail-safe features.
- ☐ Simple to install.
- ☐ Choice for control action fail safe Versions (Fail safe High/Fail safe Low)

SPECIFICATIONS:

Switch Unit:

☐Enclosure	: Cast Al, Polyurethane painted weatherproof to IP-67. Integral hence mounted on the top of the probe.
☐Location	: Suitable for installation in Safe area.
☐Indication	: Bi-colour LED's. Power ON-Green. Alarm-Red.
☐Fail safe features	: DIP switch settable Fail Safe High (FSH) / Fail safe Low (FSL) * Note: A1-FSH, A2-FSL
☐Relay contacts	: 2 C/O per set point 5A @230VAC / 28VDC (Resi.).
☐Environmental conditions	: Temperature - 0^0C - 50^0C Relative humidity - 0-90% (Noncondensing).
☐Terminals	: Suitable for 2.5 mm^2 size Conductor (max).
☐Operating voltage	: 230VAC/115VAC, 50Hz.
☐Power Consumption	: < 5 VA.
☐Sensing voltage	: Vmax < 6 VAC. 50Hz @ Imax < 100mA.
☐Cable entries	: ½"NPT(F) or 3/4"UNF/ET (F) (4 Nos.)
☐Weight	: 2 kgs for switch unit

Electrode:

☐ Electrode	: Rigid / Flexible electrodes.
☐ Electrode Material	: SS 316
☐ Insulation Types	: PVDF coating for Rigid electrode, Polyolefin (POF) sheathing for Rigid electrode, PTFE wrapped for Flexible electrode
☐ Mounting	: Vertical / Horizontal.
☐ Process connection	: ½"BSP (min) for single electrode : 2 ½"Flanged (min) for more than one electrode.
☐ Material	: Carbon steel / Stainless steel.
☐ Minimum length	: 100mm for for Rigid electrode. 500mm for Flexible electrode.
☐ Maximum Length	: 3,000mm for for Rigid electrode. 30,000mm for Flexible electrode. (Refer Note 3)

ORDERING CODE

130 IC
Integral Controller

L1= mm
L2= mm
L3= mm

Supply Voltage:
1 - 115 VAC
2 - 230 VAC

Function:
1 - 1 Set Point
2 - 2 Set Points

Cable Entry:
1 - ½" NPT (F)
2 - 3/4" UNF (F)

Electrode no. For IC:
02 - Ø 6 Single Rigid POF Sheathed.
07 - Triple Rigid POF Sheathed.
18 - Ø 6 Single Rigid PVDF Sheathed.
04 - Triple Rigid PVDF Sheathed.
08 - Ø 1.6 Single Flexible PTFE Wrapped.
01 - Triple Flexible PTFE Wrapped.
20 - Triple Rigid PVDF Coated with Hastelloy "C" Tip.

Material of Process connection:
1 - CS
2 - SS 304
3 - SS 316

Electrodes:
1 - One electrode
2 - Two electrode
3 - Three electrodes

Process Connection:
05 - ½" BSP
01 - 1" BSP
XX - Flanged

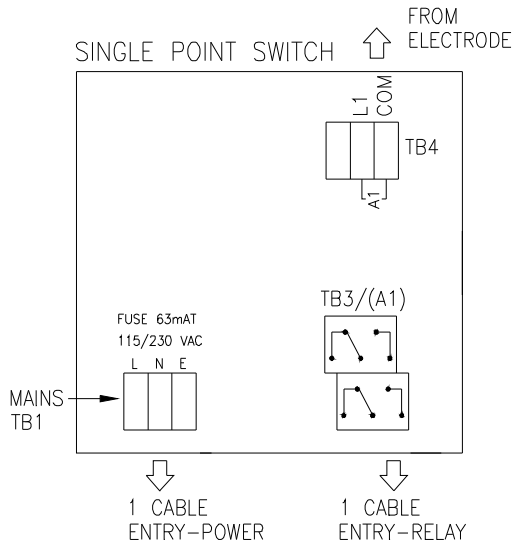
NOTES:

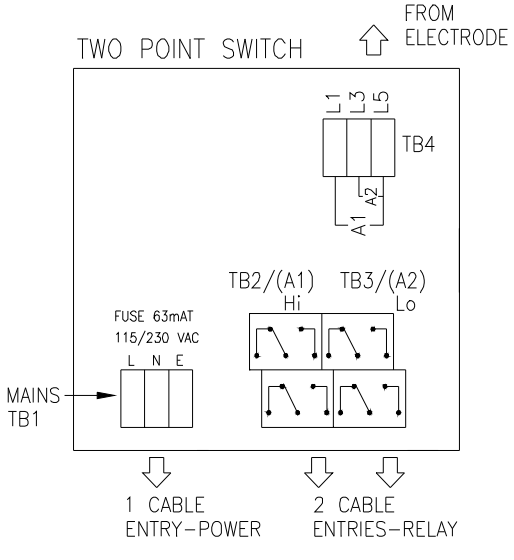
1. Control action (FSH / FSL) selection option is available for single point switch.
2. For two point switchA1 is fixed for Fail Safe High (FSH) action and A2 can be used for Fail Safe High or Fail Safe Low (FSH / FSL) with DIP switch setting.
3. Purchaser to provide perforated still well to avoid damages for flexible electrodes.

Flange Table:
Pressure Rating 150# (10 Kg/cm^2)

	ANSI	BS	DIN	IS
2 1/2"	26	27	28	29
3"	31	32	33	34
4"	41	42	43	44
5"	51	52	53	54
6"	61	62	63	64

ELECTRICAL CONNECTION





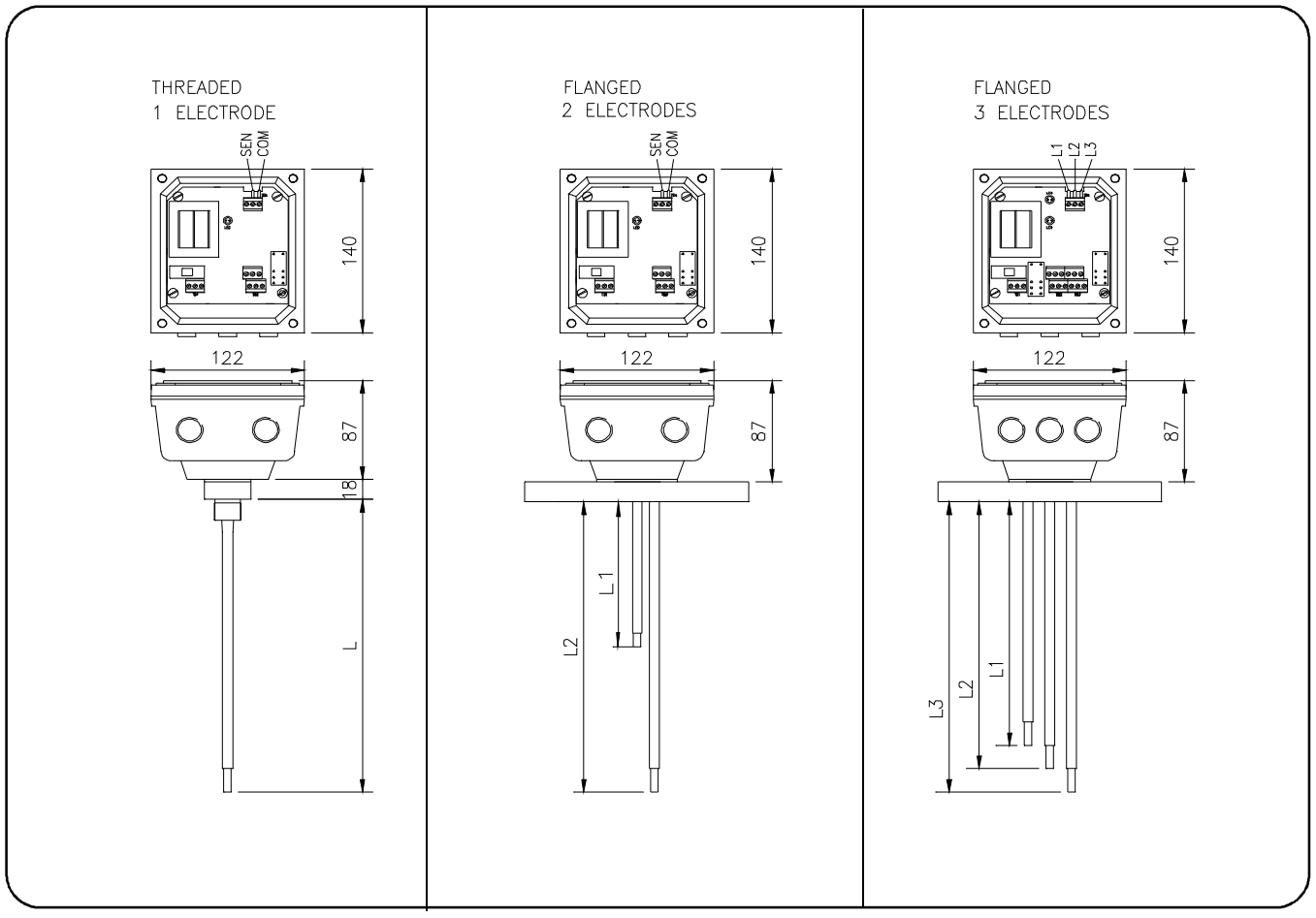
ELECTRODE SELECTION GUIDE

* Elect. Code	Description	Process Connection		MOC of Electrode		* Mount * V * H	No. Of Elect.	Length in Mm		Max.Operating Conditions		Service
		Thd.	Flange Size (mm)	Sensing Elect.	Insulation Type			Min.	Max.	* Temp °C	* Press Kg/cm²	
02	Rigid SS316 Electrode, Ø6,Polyolefin sheathed	½"	—	SS 316	POF	H V	1 1	100 100	1,000 1,000	60°C	10	Water, Effluents for metallic tanks.
07	Rigid Ss316 Electrode, Ø6,Polyolefin sheathed	—	2 ½"	SS 316	POF	V	Upto 3	100	3,000	60°C	ATM	Water, Effluents.
18	Rigid SS316 Electrode, Ø6,PVDF sheathed	½"	—	SS 316	PVDF	H V	1 1	100 100	1,000 3,000	80°C	10	Milk, Food products for metallic tanks
04	Rigid SS316 Electrode, Ø6,PVDF sheathed	—	2 ½"	SS 316	PVDF	V	Upto 3	100	3,000	80°C	ATM	Sump, Reservoirs.
08	Flexible SS316 Electrode, PTFE Wrapped	1"	—	SS 316	PTFE	V	1	500	3,0000	60°C	ATM	Sump, Reservoirs.
01	Flexible SS316 Electrode, PTFE Wrapped	—	2 ½"	SS 316	PTFE	V	Upto 3	500	3,0000	60°C	ATM	Sump, Reservoirs.
20	Rigid SS316 Electrode, Ø6, PVDF coated with "HASTELLOY 'C'" Tip	—	2 ½"	SS 316	PVDF	V	Upto 3	100	3,000	80°C	ATM	Acid, Alkalies

* Mount - Mounting, * V - Vertical Mounting, * H - Horizontal Mounting, * Temp - Temperature

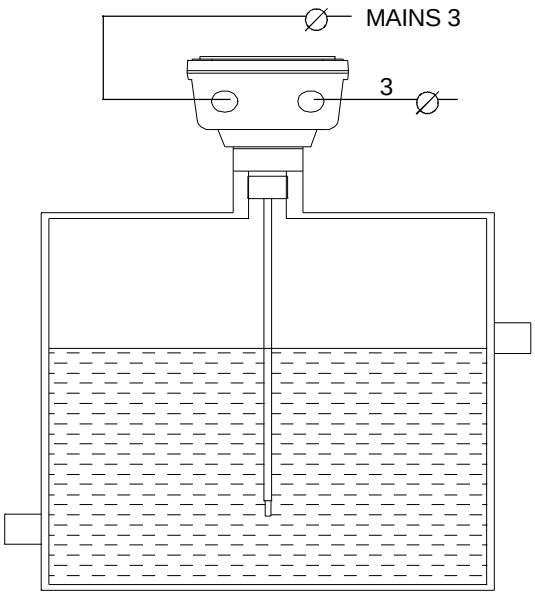
* Press - Pressure, * Thd - Threaded, * Elect. - Electrode

MECHANICAL DIMENSIONS IN mm

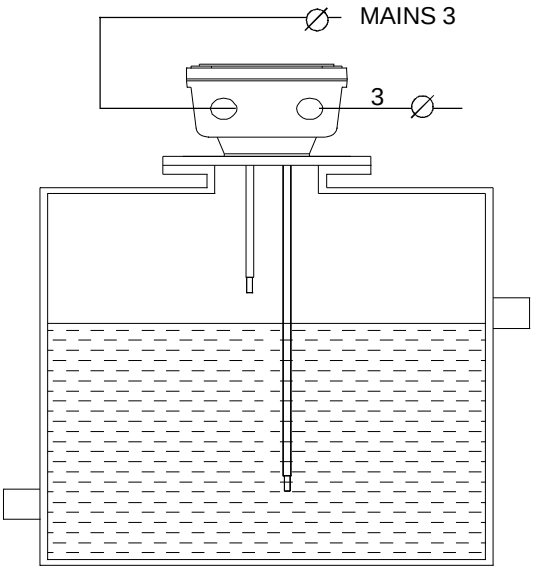


APPLICATIONS

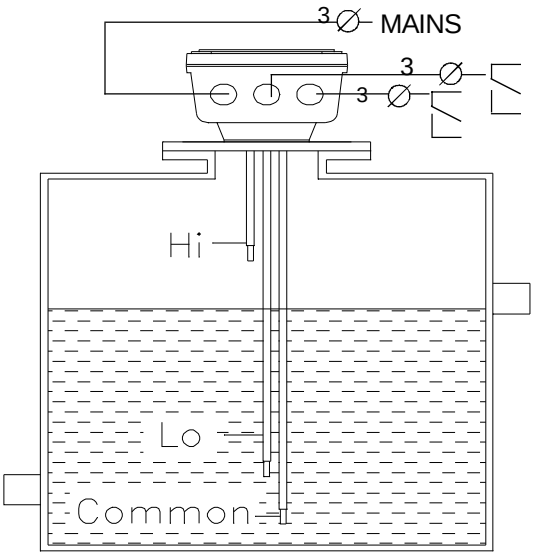
Single Point Switch (For Metallic Tank)



Single Point Switch (For Non-Metallic Tank)



Two Points Switch (For Non-Metallic Tank)



Your Application:

*** Continuous developments may necessitate changes without notice.

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