

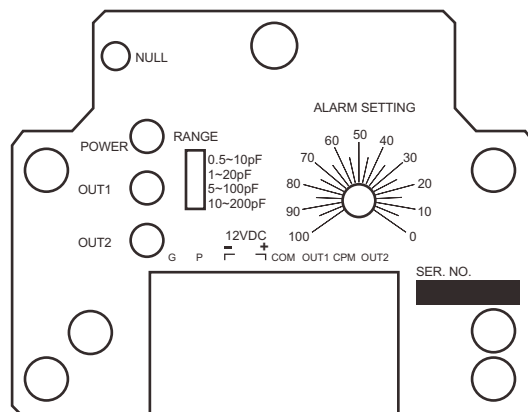
# SA140FDT0300-7 CAPACITANCE LEVEL SWITCH (REMOTE PROBE TYPE) OPERATION MANUAL

## Specification :

Item	Spec.	Remark
Enclosure Material	PC	
Power Supply	11~15Vdc	
Ambient Temperature	-20~55°C	
Operation Temperature	-20~80°C	
Sensitivity	Super High : 0.5~10pF STD : 1~20pF Low : 5~100pF Super Low : 10~200pF	Switch on/off
Alarm	0~100%	Resistance adjustable
Output Contact	MOSFET X 2 (3.5AA15%, 12VDC Sourcing )	
Power indicator	Green LED	
Alarm indicator	1 <sup>st</sup> Red LED(OUT1) 2 <sup>nd</sup> Yellow LED(OUT2)	

## Alarm and contact output:

Probing	Power supply (12V)	LED indicator	Delay time
Non-contact with substance	Output 1	12V	ON
	Output 2	12V	ON
Contact with substance	Output 1	0V	OFF
	Output 2	0V	OFF
Remove substance	Output 1	12V	ON
	Output 2	12V	ON

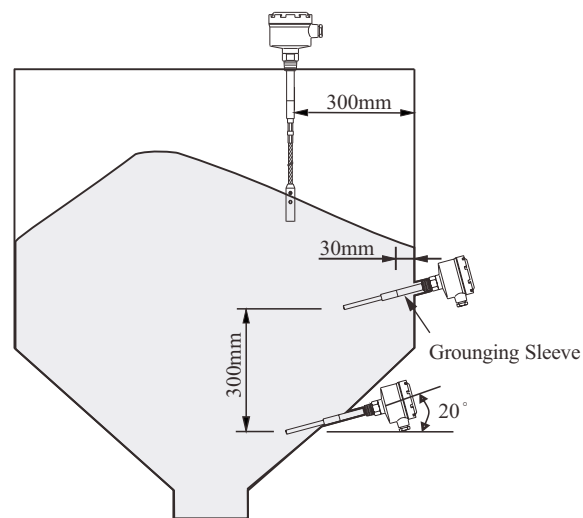


## Installation and set-up as following :

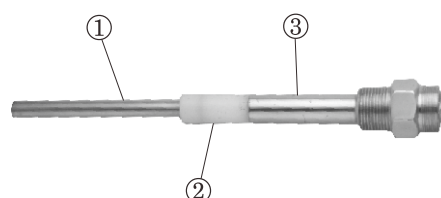
1. Ensure that power is 11-15Vdc and plug in.
2. Install Capacitance Level Switch on tank.
3. Make sure the bin is empty.
4. Press NULL for about 5 seconds, meanwhile the LED of OUT1 and OUT2 is flashing. After flashing, LED will be on meaning the calibration is completed.
5. Cover the probe with substance.
6. After probe being covered, proceed to step 7 if LED of OUT1 and OUT2 is off; otherwise proceed to step 8.
- 7.1 Twist the knob "ALARM SETTING" from 70(default) to 0. When the LED light is on, twisting half-circle counter-clockwise.
- 7.2 If LED is still off while twisting to 0, tune "RANGE" to larger scale and twist "ALARM SETTING" to 100. Repeat 7.1.
- 7.3 Tune "RANGE" to 10-200pF and twist "ALARM SETTING" to 0. If LED is still off, twist "ALARM SETTING" to 50.
8. Twist the knob "ALARM SETTING" from 70(default) to 100. When the LED light is off, keep twisting half-circle.
9. Keep testing if the probe is covered by substance. Set-up is completed once the switch functions normally.

## Installation

1. Distance between the two capacitance level switches should be at least 300mm. Distance between tank and capacitance level switch should be at least 300mm.
2.  $\phi 21$  grounding sleeve should protrude at least 30mm from tank.
3. The side-mounted capacitance level switch should be placed at angle of 20 degrees.
4. When used in outdoor, the conduit opening should face downward.



## Structural drawing



- ① Probe: SUS304 or SUS316
- ② Insulation: UPE or PTFE
- ③ Grounding Sleeve: SUS304 or SUS316

