

SA19 Multifunctional capacitance level switch

FEEDTEC
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DESCRIPTION

SA19 series capacitance level switch is available in either probe or cable type. SA190 probe type is made with PPS probe up to operating temperature 120°C. SA195 cable probe is made of SUS material coated with PVC. The operating temperature of the cable type is 70°C. Working principle of SA19 series is to detect the change of capacitance between silo wall and material. If the probe is covered or free of material, then the capacitance changes and the SA19 series switch and a signal is given.

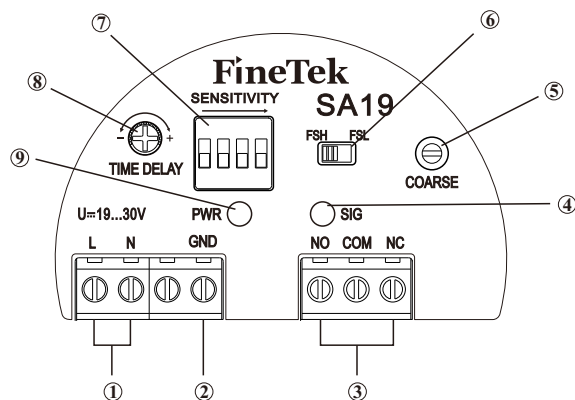
FEATURES

- Multifunctional terminal, compact size for limited space.
- 270° changeable installation angle of terminal to adjust for a suitable wiring direction.
- No machinery part with longer lifespan.
- 4 DIP switches with 10 levels of adjustable sensitivity.
- Time-Delay function.

SPECIFICATIONS

Supply voltage	19~30Vdc
Measurement range	Dielectric constant $\epsilon \geq 2.5$
Sensitivity	10 levels
Storage temperature	-40~85 °C
Ambient temperature	-40~85 °C
Operating temperature	SA190: -40~120 °C (PPS) SA195: -40~70 °C
Process pressure	SA190: 25 Bar SA195: 6 Bar
Output signal	SPDT Relay: 5A/250Vac 5A/28Vdc PNP transistor: 300mA
IP rating	IP 67 (Aluminum housing)
Wiring	$\phi 6 \sim 10 \text{mm}$

PANEL



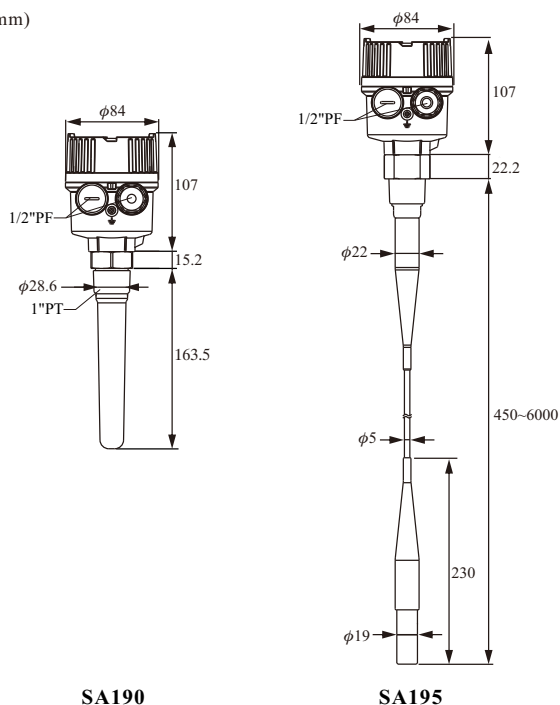
- ①: Power input
- ②: Grounding
- ③: Output
- ④: Alarm indicator
- ⑤: SIG adjust bottom
- ⑥: Fail-safe switch
- ⑦: Sensitivity
- ⑧: Time delay
- ⑨: Power indicator

APPLICATIONS

- Food industry
- Beverage industry
- Feed milling industry
- Cement industry
- Water/ Wastewater treatment
- Pharmaceutical
- Paper industry

DIMENSION

(Unit:mm)



SA190

SA195

FAIL-SAFE FUNCTION

Fail safe	Install	Output signal	LED	
			Red(SIG)	Green(PWR)
FSH		NO COM NC		
		NO COM NC		
FSL		NO COM NC		
		NO COM NC		
Power failure		NO COM NC		

: Lights : Lights off

ORDER INFORMATION

SA19 0 ☐ ☐ ☐ ☐ K

Model

Supply voltage

B: 19~30 Vdc
One Relay Output: 5A/250Vac, 5A/28Vdc
E: 19~30 Vdc
One PNP Output: 300mA

Approval

0: Non approval
1: Dust explosion proof(NEPSI)

Connection

DQ: 1" PT
DU: 1"NPF
SS: Special

SA19 5 ☐ ☐ ☐ ☐ ☐ ☐

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Connection

D---1" I---4"
E---1-1/2" J---5"
F---2" K---6"
G---2-1/2" S---Special
H---3"

Q---PT M---5Kg/cm² W---PN10
R---PF N---10Kg/cm² Y---PN25
U---NPT O---150Lbs X---PN16
T---BSP P---300Lbs Z---PN40
S---Special L---600Lbs

Probe material

4: SUS304
6: SUS316
L: SUS316L

Length

05: below 500mm 35: 3001~3500mm
10: 501~1500mm 40: 3501~4000mm
15: 1001~1500mm 45: 4001~4500mm
20: 1501~2000mm 50: 4501~5000mm
25: 2001~2500mm 55: 5001~5500mm
30: 2501~3000mm 60: 5501~6000mm

