



Grown...to meet challenges

30+ years in Process Control Instrumentation

## SLA..M/B - Admittance Level Switch

Version 2.1

Sapcon's Admittance Level Limit Switch utilizing specially designed Immuno Coat Probe offers a reliable solution to level detection problems which have been so far difficult to solve with Capacitance-type system utilizing conventional probes.

### Principle

The probe comprises of sense, shield and ground electrodes electrically isolated from the metallic tank by means of suitable insulators. The sense electrodes and the vessel wall serve as the two electrodes of an imperfect capacitor with the service material acting as the dielectric. A change in the level of material causes a change in admittance of this imperfect tank capacitor.

**Approvals** CE Marking, RoHS Compliance



### Features

- Power Supply: 24 V DC, 90-260 V AC
- High durability and system reliability
- Calibration possible from remote location
- Fail-Safe High/Low selection available as standard
- Ignores build-up of service material inside tank
- Suitable for very dusty environment
- High temperature durability (up to 1000°C)
- Immune to application material coating on the probe

### Applications

Level limit detection of fine, coarse, solids of low dielectric constant that have a tendency to stick, coat and develop static charge at high vessel temperatures, and in bulk material handling

- Powders, sand, sugar, pulverized coal, food grains
- Cement, stones, fly-ash, bed-ash, clinkers, great cooler
- Granular material & Dust
- Sticky and hygroscopic materials like slag, dust, etc.
- Bulk Material Handling

Note:

- We offer specially designed ceramic insulated rod / rope probe with cooling fins, suitable for very high operating temperatures, maximum upto 600°C and 1000°C.
- SLA..M/B is suitable for longer distances between probe and evaluation unit and for materials prone to absorbing moisture.

### Parts

The parts of SLA..M / B are explained in Figure 1. All dimensions are in millimeters.

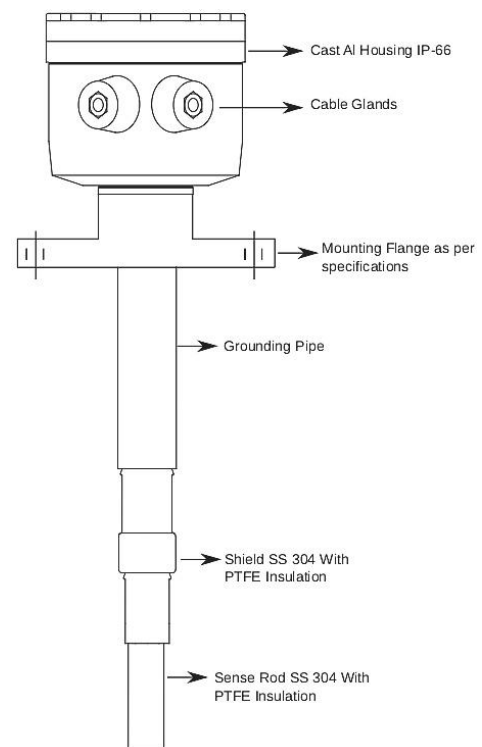


Figure 1: Parts of SLA..M / B

Manufacturing Level Instruments & Speed Monitoring Systems

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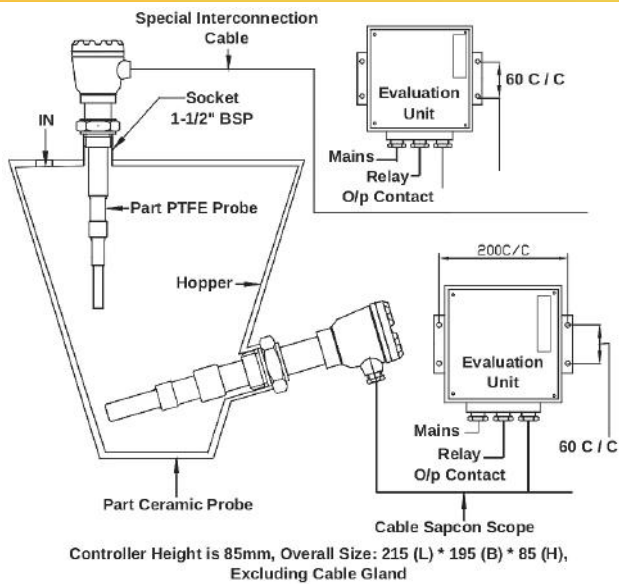


Figure 2: Mounting Arrangement for SLA..M / B

## Technical Specifications

### Evaluation Unit

<b>Housing:</b>	Cast Aluminium, weatherproof, back panel/wall mounting and Flameproof (Gas)
<b>Cable Entry:</b>	3 or 2Nos., 1/2" BSP / NPT cable gland
<b>Temperature:</b>	Ambient: -20°C to + 60°C
<b>Power Consumption:</b>	5 VA approximately
<b>Mains Voltage:</b>	90 to 265VAC & 24 V DC, 50Hz
<b>Relay Output:</b>	01 / 02 SPDT, rated on 6A 230 V AC
<b>Indication:</b>	Bi-color LED (Normal: Green, Alarm: Red)
<b>Indication:</b> (Sensitivity)	10 step LED dot display
<b>Response Time:</b>	0.2 seconds (typically)
<b>Switching Delay:</b>	Adjustable from 0.5 to 20
<b>Connection to Probe:</b>	Via co-axial screened cable (Sapcon scope)
<b>Switching Hysteresis:</b>	0.2 pf. typical
<b>Fail-safe:</b>	Field Selectable
<b>Minimum:</b>	Fail-safe Low
<b>Maximum:</b>	Fail-safe High
<b>Probe:</b>	Wide variety of probes with different mounting connections available to suit different applications

## Model Selection

### SLA..M/B DISC PROBE

#### ELECTRONICS

- 1- SINGLE RELAY
- 6- TWO RELAY WITH TIME DELAY

#### MODEL

- 22M- DOT DISPLAY SEPARATE
- 30M- DOT DISPLAY INTEGRAL ELECTRONICS
- 22B- BAR DISPLAY SEPARATE
- 30B- BAR DISPLAY INTEGRAL ELECTRONICS
- 30R- ROUND HOUSING

#### POWER SUPPLY

- A- 110V AC, 50Hz
- B- 230V AC, 50Hz
- D- 24 V DC
- U- UNIVERSAL POWER SUPPLY (90 - 260 VAC)

#### SERVICE TEMPERATURE

- S- STANDARD UPTO 80°C
- H1- HIGH TEMPERATURE 150°C TO 250°C
- H2- HIGH TEMPERATURE UPTO 500°C
- H3- HIGH TEMPERATURE UPTO 1000°C

#### PROBE TYPE

- ST- STANDARD      XS- EXTRA STURDY
- HD- HEAVY DUTY    SS- SUPER STRONG
- ES- EXTRA STRONG

#### SENSE / EXTENSION ELEMENT TYPE

- RP- PART INSULATED ROD PROBE
- RF- FULL INSULATED ROD PROBE
- FP- PART INSULATED FLEXIBLE ROPE PROBE

#### PROBE MOUNTING ARRANGEMENT

- T- THREADED
- F- FLANGED
- O- OTHER

#### PROBE INSULATION MATERIAL

- P- PTFE
- C- CERAMIC
- O- OTHER

#### WETTED PARTS

- MS- MS PLATED
- S4- SS 304
- S6- SS 316
- SL- SS 316 L

SLA	1	22M	U	H1	ST	RP	F	P	MS
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- Note-
- 30 M/B are available with probe
  - 22 M/B are RF transmission via special cable upto 15mm/ 50mm

## Connect to us

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