

SLDL3500 Series

CapDetect RF Admittance Switch/Plugged Switch



■ Working principle

CapDetect RF admittance switch measures the admittance value between the centered pole and the installation wall through the high-frequency signal to determine the measurement pole whether covered by material. CapDetect adopts three-terminal technology and five-layer central structure to counteract effects by the cable temperature, installed capacitors, and hanging materials.

CapDetect contains SLDL3510 ordinary type, SLDL3520 free adjustment type, SLDL3530 flat-plate type.

■ Product features

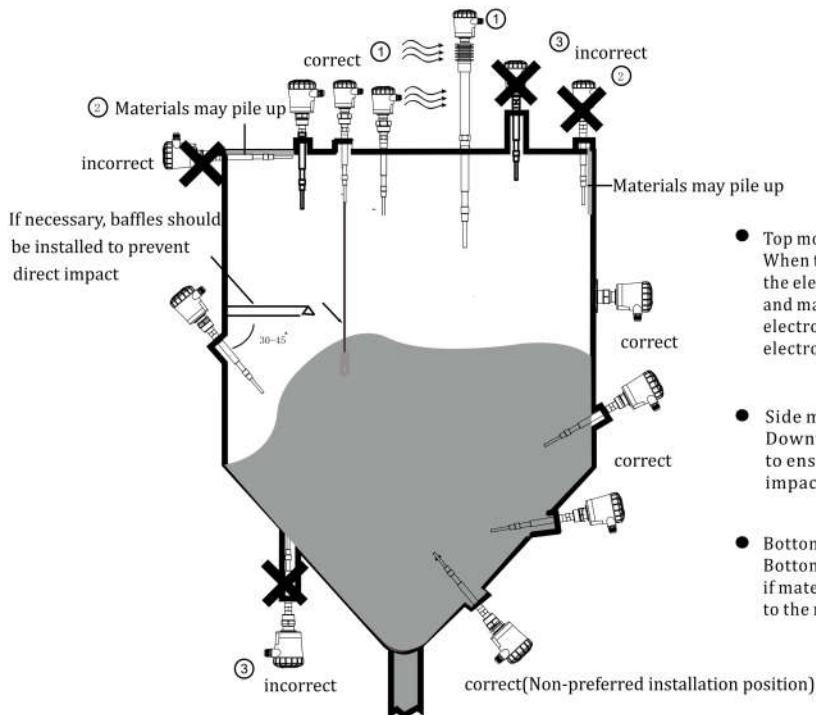
- SLDL3510 with self-learning function, can intelligently identify environmental changes and make variable matching adjustments.
- SLDL3520 completely free of adjustment, ready to use.
- SLDL3530 flat-plate type, wall mounting to effectively prevent mechanical damage.
- CapDetect technology, effectively prevent the influence of hanging material and installed capacitors.
- 21~35VDC, 30~265VAC power supply design, applicable to various power supply environments.
- High versatility, can be used to measure a variety of conductive, non-conductive medium, liquid, viscous material, particles, powder and fly ash.
- Temperature resistance up to 815°C, applicable to all kinds of poor conditions.
- Choices for output: relay output (DPDT / SPDT) contactless switch, transistor output, two-wire output (8mA/20mA), Namur output, etc.
- Built-in 1000V spark protection, surge suppression, antistatic 4kv/8kv.

■ Technical parameters



Model	SLDL3510 ordinary type	SLDL3520 high-temperature type	SLDL3530 flat-plate type
Measuring range	pole-type 0.2~6m cable type 0.2~100m	pole-type 0.2~6m cable type 0.2~100m	205mmX205mm
Process temperature	-50℃~200℃	-183℃~815℃	-50℃~200℃
Process pressure	-1~64bar	-1~100bar	-1~64bar
Insulating material	PPS/PEER/PTFE	ceramics	UR
Electrical interface	Double M20x1.5 (optional 3/4"NPT)	Double M20x1.5 (optional 3/4"NPT)	Double M20x1.5 (optional 3/4"NPT)
Connection method	G3/4", G1", G1/2", flange	G1 1/4", G1 1/2", flange	BSPT thread, flange
Protection grade	IP67	IP67	IP67
Communication output	DPDT relay and alarm light output, contactless switch, transistor output, 8mA/20mA two-wire system, Namur output		
Typical applications	Liquid: conducting liquid or insulating liquid (including liquefied gas) Slurry: conducting slurry and insulating liquid Particle: food, plastic sheet, coal, etc. Interface: two liquid interfaces with different dielectric constants Powder: plastic powder, cement, fly ash, etc.		

■ Installation diagram



- **Top mounting**
When top mounting, make sure there is enough distance between the electrode and the container wall. Avoid forming closed space and material accumulation for a long time. When using a cable electrode, ensure that there is a sufficient distance between the electrode and the container wall to avoid material accumulation.
- **Side mounting**
Downward 30-45 degree side mounting, use protective plate to ensure that the probe is not affected by material slipping impact.
- **Bottom mounting**
Bottom mounting is not recommended. Use side mounting only if material does not accumulate. If a low install is required, refer to the right figure for correct installation.