

FlexScan Guided Wave Radar Level Meter (Drum level meter)



■ Working principle

The high-frequency microwave pulses emitted by FlexScan guided radar are propagated along the detection component (steel cable or steel bar). When they encounter the tested medium, some of its energy is reflected back due to the dielectric constant sudden change. The time interval between the transmitting pulse and the reflected pulse is proportional to the distance of the measured medium.

FlexScan contains SLDL5521 Normal type, SLDL5522 Anti-corrosive type, SLDL5523 Coaxial type, SLDL5524 High temperature type, SLDL5525 Steam compensation type, SLDL5526 double cable type. SLDL5525 has steam compensation function which can correct the influence of saturated vapor on measurement and applicable to high and low steam drums, condensers and other high temperature and high pressure measurement conditions.

■ Product Features

- SLDL5525 has steam compensation function which can correct the influence of saturated vapor on measurement.
- SLD5523/5525 coaxial structure, zero blind area measurement.
- Adopts FlexScan echo processing technology, the measurement is not affected by external disturbances and hanging materials such as foam, steam or powder.
- Measurement is not affected by medium density, dielectric constant, pressure, temperature and container shape.
- Easy debugging and saving time, no need to fill or empty the container.
- Multi-language support (including Chinese), echo, false echo visual display, easy to analyze and debug by maintenance personnel.
- Support Hart, Modbus, Profibus PA, Foundation Fieldbus, GPRS/CDMA remote, Bluetooth, etc.

■ 技术参数



Model	SLDL5521	SLDL5522	SLDL5523
Features	Measurement is not affected by steam adhesion, foam and condensates.	Full PTFE sealed antenna, strong corrosion resistance	Coaxial guided wave antenna, smaller blind area, stronger echo signal
Application	liquids and solids, complex process conditions	Strong corrosive liquid medium, aseptic containers, sanitary liquids	Multi-steam, small dielectric constant medium, complex process conditions
Maximum Range	Cable: 7.5 m Rod: 6 m	Cable: 7.5 m Rod: 6 m	6 m
Connection method	G1½Aa/G2A Flange	G1½A/G2A/1½NPT Flange	G1½A/G2A/1½NPT Flange
Detection component material	Stainless steel 304/316L/PTFE	Stainless Steel externally wrapped in PTFE	Stainless steel 304/316L/PTFE
Process temperature	(-40~150) °C	(-40~150) °C	(-40~150) °C
Measuring deviation	±2mm (optional ±0.5mm)	±2mm (optional ±0.5mm)	±1mm (optional ±0.5mm)
Process pressure	(-0.1~4) MPa	(-0.1~1.6) MPa	(-0.1~4) MPa
Signal output	4...20mA/HART two-wire/four-wire system, Profibus PA, Foundation Fieldbus, Modbus, 485 Modbus, GPRS/CDMA remote, Bluetooth		



Model	SLDL5524	SLDL5525	SLDL5526
Application	Liquid measurement/high temperature and high pressure conditions/complex process conditions	Steam compensation function/ceramic material sealing to have higher temperature resistance and higher pressure resistance	Measurements for small dielectric constant liquids and solids, complex process conditions
Maximum Range		Cables/Rods: 6 m Coaxial: 6 m	Cable: 7.5 m Rod: 6 m
Connection method	G1½A/G2A/1½NPT Flange	G1½A/G2A/1½NPT Flange	G1½A/G2A/1½NPT Flange
Detection component material	Stainless steel 304/316L/Ceramic	Stainless steel 304/316L/Ceramic	Stainless steel 304/316L/PTFE
Process temperature	(-40~200) °C	(-200~450) °C	(-40~150) °C
Accuracy	±2mm (optional ±0.5mm)	±1mm (optional ±0.5mm)	±2mm (optional ±0.5mm)
Process pressure	(-0.1~4) MPa	(-0.1~40) MPa	(-0.1~4) MPa
Signal output	4...20mA/HART two-wire/four-wire system, Profibus PA, Foundation Fieldbus, Modbus, 485 Modbus, GPRS/CDMA remote, Bluetooth		