

SLDL5500 Series

FlexScan Guided wave radar level meter



■ Working principle

The high-frequency microwave pulses emitted by FlexScan guided wave radar propagate along the detection component (steel cable or steel rod), and when encountering the measured medium, due to a sudden change in dielectric constant, they cause reflection, and a portion of the pulse energy is reflected back. The time interval between the emission pulse and the reflection pulse is proportional to the distance of the measured medium.

FlexScan includes SLDL5521 ordinary type, SLDL5522 anti-corrosion type, SLDL5523 coaxial type, SLDL5524 high-temperature type, SLDL5525 steam compensation type, and SLDL5526 dual cable type. Among them, the SLDL5525 series has steam compensation function, which can correct the impact of saturated steam on measurement, and is suitable for use in high-temperature and high-pressure measurement conditions such as steam drum high and low pressure heaters and condensers, 275bar @450 °C, 413bar@80 °C

■ Features

- SLDL5525 has steam compensation function and excellent temperature and pressure resistance performance (275bar@450 °C, 413bar@80 °C)
- SLD5523/5525 coaxial structure, measurement without blind spots
- FlexScan echo processing technology is adopted, and the measurement is not affected by foam, steam, powder and other external interference and hanging materials
- Measurement is not affected by changes in medium density, dielectric constant, pressure, temperature, or container shape
- Easy to debug, no need to load or empty the container, saving time
- Multi language support (including Chinese), with intuitive LCD display of echoes and false echoes, making it easy for maintenance personnel to analyze and debug
- Supports communication methods such as HART, Modbus, Profibus PA, Foundation Fieldbus, GPRS/CDMA remote, Bluetooth, etc

■ Technical Parameter

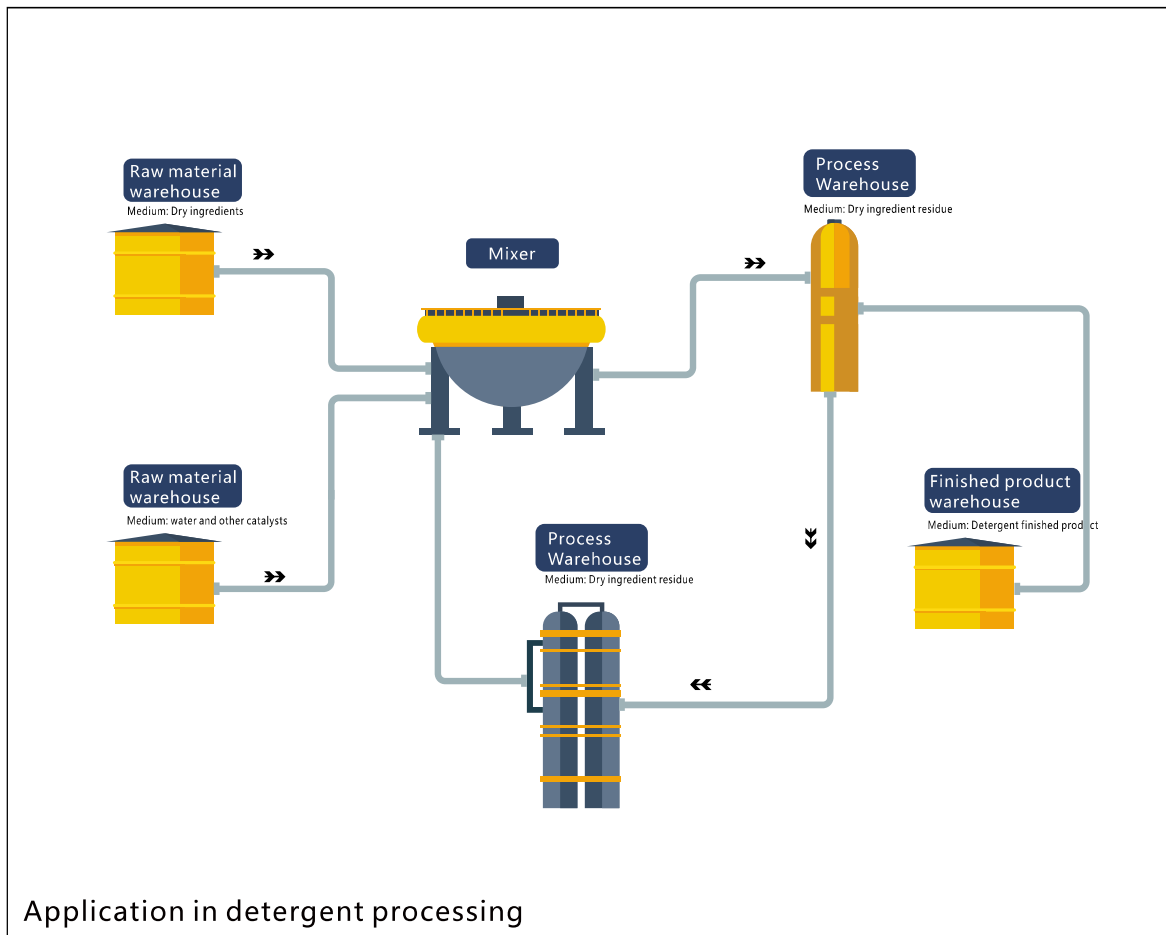


Model	SLDL5521	SLDL5522	SLDL5523
Application	Liquid and solid measurement, complex process conditions	Sterile containers and sanitary grade liquids for highly corrosive liquid media	Environments with complex conditions for medium processes with multiple vapors and small dielectric constants
Maximum range	Cable: 75m/rod: 6m	Cable: 75m/rod: 6m	6m
Process Connection	G1½A, G2A Flange	G1½A/G2A/1½NPT Flange	G1½A/G2A/1½NPT Flange
Detection component material	Stainless steel 304, 316L/PTFE	Stainless steel lined PTFE	Stainless steel 304, 316L/PTFE
Process temperature	(-40 ~ 150)°C	(-40 ~ 150)°C	(-40 ~ 150)°C
Measurement 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... 20 mA/HART two wire/four wire, Profibus PA, Foundation Fieldbus, Modbus protocol, 485 bus protocol, GPRS/CDMA remote, Bluetooth		



Model	SLDL5524	SLDL5525	SLDL5526	SLDL5527
Application	Liquid measurement, high-temperature and high-pressure working conditions, complex process conditions	Steam compensation function, ceramic material sealing can withstand higher temperatures and pressures	Measurement of small dielectric constant liquids and solids, complex process conditions	Liquid measurement, high-temperature and high-pressure working conditions, complex process conditions
Maximum range	Cable: 75m/rod: 6m	Cable: Rod: 6m/Coaxial: 6m	Cable: 75m/rod: 6m	Cable: 75m/rod: 6m
Process Connection	G1½A/G2A/1½NPT Flange	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	Stainless steel 304, 316L/ceramic
Process temperature	(-40 ~ 200)°C	(-200 ~ 450)°C	(-40 ~ 150)°C	(-40 ~ 200)°C
Measurement deviation	± 2mm (optional ± 0.5mm)	±1mm (optional±0.5mm)	±2mm (optional±0.5mm)	±2mm (optional±0.5mm)
Process pressure	(-0.1 ~ 4)MPa	(-0.1 ~ 41.3)MPa	(-0.1 ~ 4)MPa	(-0.1 ~ 4)MPa
Signal output	4... 20 mA/HART two wire/four wire, Profibus PA, Foundation Fieldbus, Modbus protocol, 485 bus protocol, GPRS/CDMA remote, Bluetooth			

■ Typical Applications



- Even if the medium and process conditions change, measurement can still be relied on.
- Adopting multi-channel echo tracking algorithm, it has the highest stability.
- Debugging, maintenance, and diagnosis are simple.
- Suitable for installation in narrow spaces.



On site of thermoelectric deaerator



Reverse osmosis water tank



Storage Tank