

SLDL2100 Series

SonicScan Ultrasonic Level Meter



■ Working principle

The SonicScan ultrasonic level meter emits ultrasonic pulses, and the ultrasonic signal encounters the surface of the measured medium and is reflected back, and part of the transmitted echo is received by SonicScan and converted into an electrical signal. Ultrasonic pulses propagate at the speed of sound waves, and the required time interval from transmitting to receiving ultrasonic pulses is proportional to the distance from the transducer to the surface of the measured medium. The relationship between this distance value S and the time T of sound speed C transmission can be expressed by the formula: $S=C \times T/2$.

■ Features

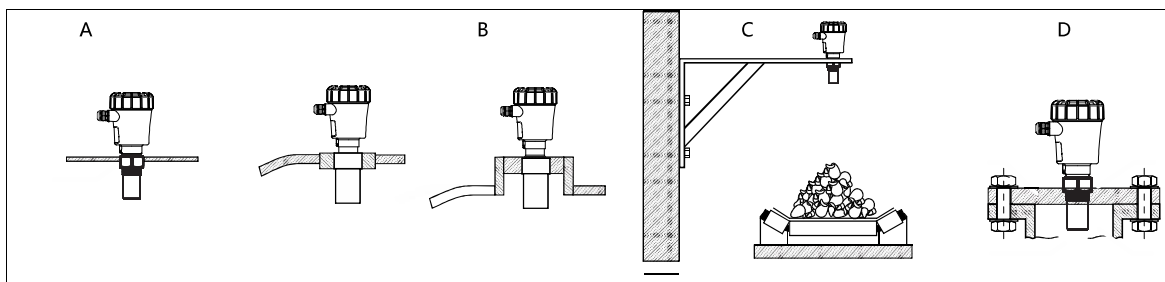
- SonicScan acoustic wave matching processing technology, higher signal reliability and more accurate measurement
- The working condition of the measurement process has little influence, no debugging, no calibration
- Built-in temperature sensor, intelligent compensation of measurement results
- One-key false echo learning, even if there are multiple interference echoes, it can also measure accurately
- Echo and false echo display function, which is convenient for debuggers to analyze on-site working conditions
- Multi-language support, support Chinese menu display
- Support external 4~20mA signal input to realize multi-sensor fusion
- Support GPS signal input, can transmit position and measurement results at the same time
- Support HART, Modbus, Profibus PA, Foundation Fieldbus, GPRS/CDMA remote, Bluetooth and other communication methods

■ Technical Parameters



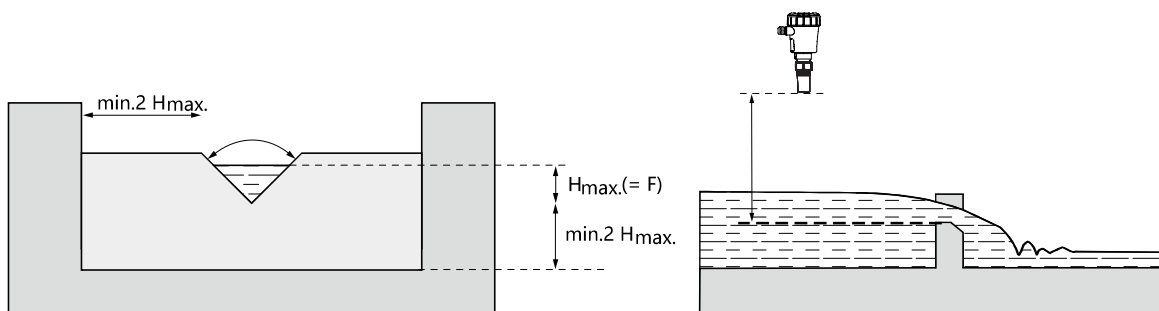
Model	SLDL2110	SLDL2120	SLDL2130
Application	Suitable for continuous measurement of liquid or solid level in storage containers or open pools, as well as liquid level measurement in various industrial fields, especially water treatment industry		
Process interface	G 1½A	G2A	G2A, flange or hanger
Transducer housing material	PU/PC/PTFE/PVDF	PU/PC/PTFE/PVDF	PU/PC/PVDF
Process temperature	-50...80 °C	-50...80 °C	-50...80 °C
Process pressure	(-0.02...0.1) MPa	(-0.02...0.1) MPa	(-0.02...0.1) MPa
Measuring range	0.25...5m	0.4...12m	0.5...35m
Transmit frequency	55KHz	43KHz	35KHz
Launch angle	5.5°	5.5°	3°
Signal output	4...20mA HART 2-wire/4-wire Profibus PA Foundation Fiedbus Modbusprotocol 485 bus GPRS/CDMA remote Bluetooth communication		
Certified	CE, EMC, CE safety, FCC part 15, Seal rating		

■ Installation diagram

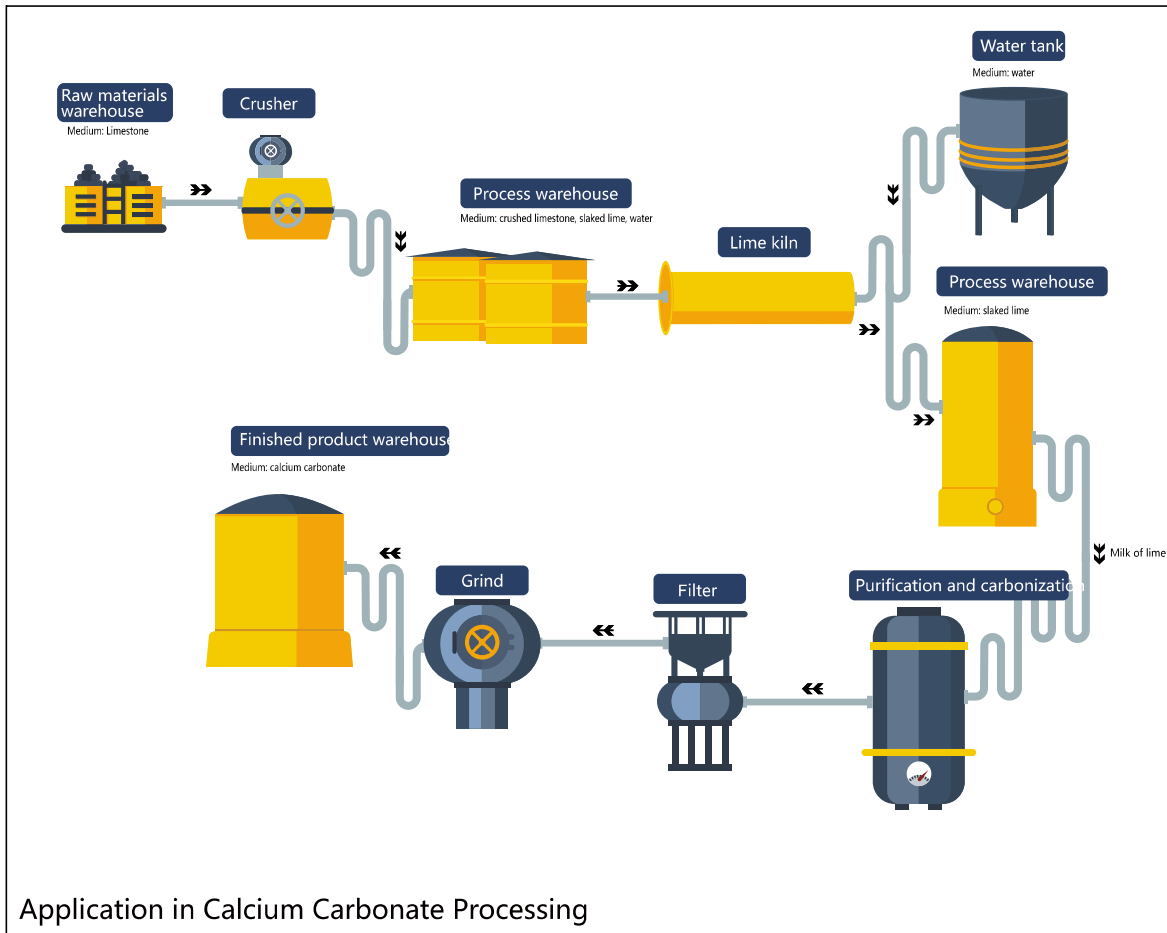


A. Countersunk nut installation B. Sleeve installation C. Bracket installation D. Suitable for flange installation

- triangular weir



■ Typical application



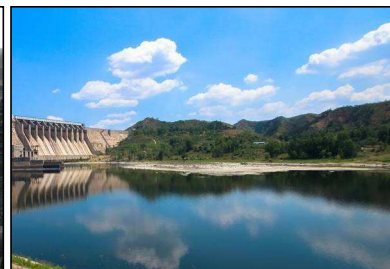
- The price is cheap and cost-effective.
- Automatic power adjustment, gain control, temperature compensation.
- Adopt new waveform calculation technology to improve the measurement accuracy of the instrument.
- It has the function of suppressing the interference echo to ensure the authenticity of the measurement data.
- The sensor is made of tetrafluoroethylene material, which can be used in various corrosive occasions.



Tank truck monitoring



Coal exploration



River monitoring