LR725L
Ultrasonic Level Meter

Integrated type

Separated type

Features

- Automatic echo menu, convenient to query the cause of on-site failure
- Wide measuring range, 1m ~ 50m
- Separated type with wide voltage power supply: 90V ~ 250V AC
- Good anti-interference performance
- Work under strong steam environment
- Probe protection level up to IP68

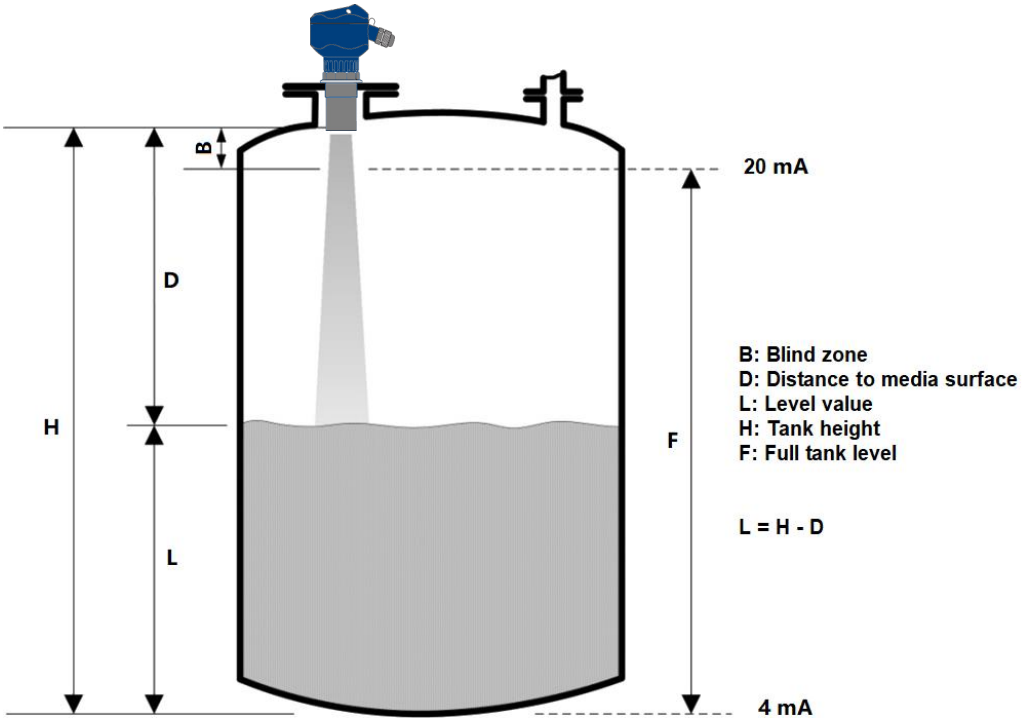
Introduction

LR725L Ultrasonic Level Meter (measuring material level and liquid level) is a non-contact, highly reliable, cost-effective, and easy-to-install and maintain level measuring instrument. It is a low-cost measuring equipment for measuring liquid, slurry, and solids on industrial sites and is widely used in water treatment, municipal administration, chemical industry, metallurgy, and machinery manufacturing industries.

Specification

- Level range: 5, 10, 15, 20, 30, 40, 50mH_2O
- Accuracy: ±0.5%FS~±1.0%FS
- Resolution: 3mm or ±0.1% (max. value is valid)
- Display: English LCD display
- Analog output: 4mA~20mA DC (510Ω load)
- Relay output: single channel is 2 groups; dual channel is 4 groups AC 250V/8A or DC 30V/5A state programmable (optional)
- Power supply: 220V AC (±15%, default)
  24V DC 120mA (optional)
  12V DC, 9V DC, battery powered (customized)
- Ambient temperature: display instrument -20℃ ~60℃ ,
  probe -20℃ ~80℃
- Communication interface: RS485 RS232 optional (manufacturer's protocol)
- Protection: Indicator IP65 (integrated type)
  Converter IP65, probe IP68 (separated type)
- Probe cable: up to 100m without electromagnetic interference, 10m as standard (separated type only)
- Probe installation: according to range and probe selection

Measuring Principle



As shown above, the spatial distance D of the measuring medium surface is proportional to the travelling time T of the sound wave:

D=V×T/2 (V is sound speed).

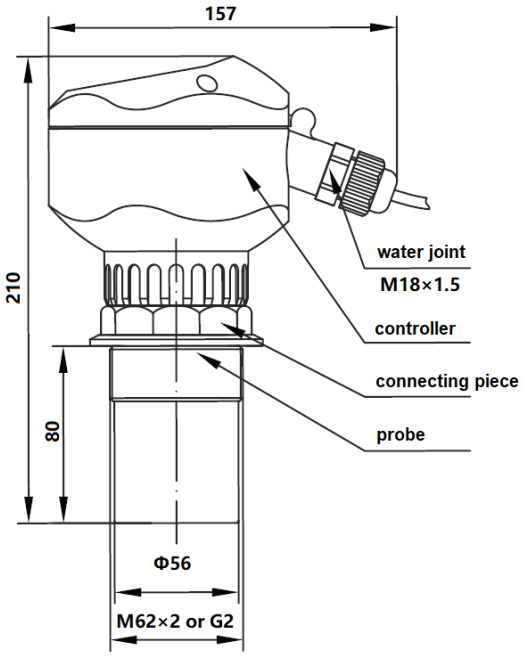
The distance E of the empty tank is known, the material level or liquid level L is:

L=H-D

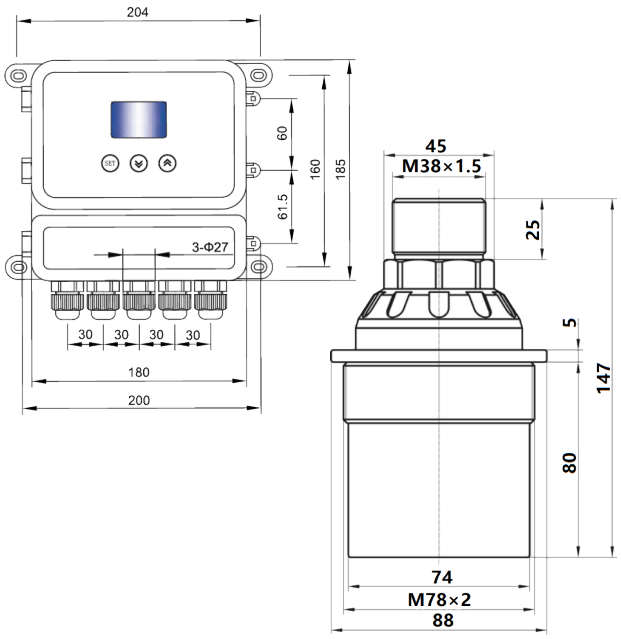
After setting the empty tank value, full tank value and other application parameters, the instrument electronic unit automatically converts the pulse travelling time T to the corresponding level value L and output the corresponding 4mA ~ 20mA DC signal.

Outline Construction (unit: mm)

Integrated type



Separated type



Order Guide

LR725L	Ultrasonic Level Meter

Code	Type
W	Integrated
F	Separated

Code	Type
YW	Ultrasonic liquid level meter
WW	Ultrasonic material level meter
CJ	Ultrasonic differential level meter

Code	Level range
--	2 numbers, eg: 05 is 5m, 30 is 30m.

Code	Probe material
A	ABS
E	PE
F	PTFE
V	PVDF
S	SS
T	Others

Code	Probe mounting dimension
A	M48×2mm
B	M60×2mm
C	M78×2mm
D	M108×2mm
E	M98×2mm
F	G1-1/2,Amajor diameter: Φ47.8mm
G	G2A,Amajor diameter: Φ59.6mm
H	1-1/2"NPT,Amajor diameter: Φ48.1mm
I	2"NPT,Amajor diameter: Φ60.1mm
T	Others

Code	Mounting methods
N	non flange mounting type
B	DN40 flange
C	DN50 flange
D	DN65 flange
E	DN80 flange
F	DN100 flange
G	DN125 flange
H	DN150 flange
I	DN200 flange

Code	Thread length of Extended probe
	Null, standard probe
---	3 numbers indicate thread length (probe length included), unit: mm, eg: 100, indicating thread length of extended probe is 100mm

Code	Power supply
DCSP	12V DC, 9V DC, battery supply
DC	24V DC (4-wire)
AC	220V AC (4-wire)
TC	24V DC (2-wire)

Code	Relay quantity
R0	no relay
R1	1
R2	2
R3	3
R4	4

Code	Output signal
MA	4mA ~ 20mA DC
C2	RS232
C4	RS485
C2MA	4mA ~ 20mA DC +RS232
C4MA	4mA ~ 20mA DC +RS485
HTMA	4mA ~ 20mA DC +HART
TS	Others

Code	Probe quantity
S1	1
S2	2
SN	N

Code	Electronic housing material
PL	ABS
Al	Aluminum casting
F4	Polytetrafluoroethylene
S4	SS304
S6	SS316

Code	Probe cable length
00	no cables (generally for integrated type)
---	3 numbers, eg: 010 indicates probe with 10m cables
200	200 max. cable length is 200m

LR725L	-W	-WW	-15	A	C	N	-	TC	R0	MA	S1	PL	00	The whole spec.