LUS | Ultrasonic level meter

General information

LUS Series Ultrasonic level measuring instrument, taking the advantages of various many level measuring instruments, is a universal one characterized by total digitalized and humanized design. It has perfect level monitoring, data transmission and man-machine communication.

It is featured by strong anti-interference performance; free setting of upper and lower limits and online output regulation, on-site indication, optional analog, switching value, and RS485 output and easy connection with main unit. The cover, made of waterproof engineering plastics, is small and firm with ABS probe. Therefore, it is applicable for various fields concerning level measuring and monitoring. According to the practical situation, it also can add other modules, such as RS 485, current output; it can be match with PLC better.

Work Mode

Measure liquid level

B（Installation Height）is the distance from bottom of container to sensor surface，A is the distance between sensor surface and liquid surface，D is the height of liquid，D= B（Installation Height）-A，display value is bottom of container to liquid surface（D）.
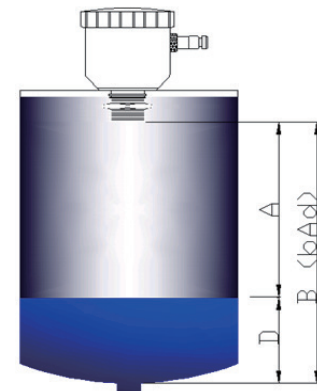
Measure air distance

Set BD =0，display value is distance from sensor surface to liquid surface（A）.

Environment and Filtering

This instrument default dynamic filtering, to avoid the filter interference of mixing, tank walls, and other fixed bars. But for totally enclosed small space or other easily formed secondary echo environment, it's not reliable. When the display value is about twice the actual value regularly, change "Environment"to"Closed"。
5.4 DC12V power is better. When it's from switch power, the DC negative must contact ground. Refer to the tags attached on the instrument for wiring. In order to keep it working reliable and display precise , please electrify ＞15 minutes before work. When operated outdoors, it should be placed under a sun screen to avoid direct under sunshine and rain. Lightning proof measures should also be taken out door.
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Characteristics

- ●DC12-24V wide work voltage
- ●Backup and recovery parameter set
- ●Free adjustment of the range of analog output
- ●Set a filter value to remove
- ●Custom serial port data format
- ●Optional increment/difference distance measurement to measure air space or liquid level
- ●1-15 transmitted pulse intensity depending on working conditions

More choices depend on your requirement, as bellowing:

- ●3 NPN output
- ●2 relay output
- ●Voltage output
- ●RS485output connect with PC
- ●Explosion-proof

Specifications	
Range	5、8、10、12、15、20、25、30m
Measure error	＜0.4-1.8m（different for range）
Display	0.3%F.S
Display resolution	OLED
Frequency	1mm
Power	20～350KHz
Power consumption	12-24VDC
Output (optional)	<1.5W
	4～20mA RL>600Ω（standard）
	1～5V\1～10V
	RS485
	2 NPN
	2 relays (AC: 5A 250V DC: 10A 24V)
Material	ABS
Dimension	Φ92mm×198mm×M60/79mm×300mm×DN80
Electrical interface	M20X1.5
Installation	M60X2 or ∅61MM/DN80 (Flange)
Operating surroundings	normal temperature, normal pressure
Protection degree	IP65(others optional)

		Code	Specifications
		LUS Series Ordeing Code	
		Code	Specifications
1.		LUS	**Series**
			LUS-A
			LUS-F/FP
2.			**Range**
		1	(0~2)m/G1-1/2
		2	(0~15)m/M60X2
		3	(20~50)m/flange
		4	Others
3.			**Transducer material / Process temperature / Protection level**
		A	PU/PC(-40~70)℃/IP66
		B	PTFE(-40~70)℃/IP67
		C	Others
4.			**Output Signal**
		B1	4~20mA
		B8	HART
		B9	Relay alarm
		C	Relay alarm
5.			**Case Material**
		AL	Aluminum
		PB	Plastic
		S6	316L
6.			**Options**
		V1	Power supply 24VDC
		V2	Power supply 220VAC
		D	Field display and programming
		I	Intrinsically safe Exia II BT6