

# PRODUCT OVERVIEW

# LEVEL MEASUREMENT

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MAC Sensor Co., LTD.



#### LC08 Series Capacitance Level Sensors

(Truck, Bus... Fuel Tank/Water tank /Underground tank...)

#### **Characters:**

- ☆ Accuracy: ≤±0.5%F.S.
- $\cancel{\sim}$  High stability and reliability
- $\stackrel{\scriptstyle \wedge}{
  m ${\rm $\%$}$}$  Precise linear and temperature compensation
- $\cancel{2}$  Support local ZERO and SPAN calibration
- Adjustable damp output time
- ☆Strong interference resistance
- ☆Strong shock resistance
- $\stackrel{\scriptstyle <}{\sim}$  Surge, over-current and polarity resistant design
- Applicable for various liquids

#### Applications:

- ★ DieselTankLevel Measurement
- ★ Liquid level measurement
- ★Gasoline level measurement
- ★Underground fuel tank level measurement
- ★Industry Process Level Measurement
- ★Auto, Truck fuel tank level measurement
- ★ Rooter, railway engine, tanker oil and fuel level measurement
- ★Sealed tank liquid level measurement
- ★ And so on

#### I. Profiles:

LC08 capacitance liquid-level sensor is the customized sensor meter for precise measuring of the liquid level of automobile oil tanks, sealed tankers, trucks fuel tank, locomotives tanks and oil depots, etc.

The whole sensor is free of any mobile or elastic part and is featured with the good impact resistance, convenient installation, high reliability, high precision, and stable performance. It can not only be installed on various occasions requiring precise level measuring of gasoline, diesel, water and hydraulic oil, etc, but also be Application for measuring of various non-conductive liquids..

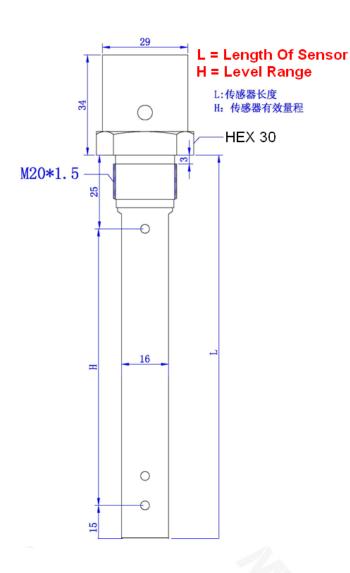
In addition, it can be used for conductive medium measuring on occasions with quite poor conditions, quite serious electromagnetic interference, or dramatic stirring. Sensor support client's local calibration zero and span, so that sensor

can use very easy for different mediums and with a very high precision reading data.

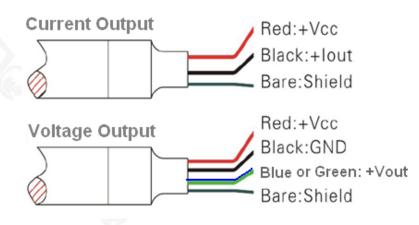
# II. Specifications:

Model: Parameter:	LC08 Series				
Pressure Range:	0-100 mm optional				
Probe Diameter:	Ф8 mm				
Overload:	Standard atmosphere pressure or -1 Bar $\sim$	40 Bar avaliable			
Accuracy: (Linearity; Hysteresis; Repeatability) Resolution:	$\leq \pm 1.0\%$ F.STypical $\leq \pm 0.5\%$ F.S; Optional 0.01 mm				
Blind Zone:	15 mm				
Stability:		2%F.S/3years			
Working Temp:	-30~85 $^{\circ}$ standard type,-40 $^{\circ}$ C~125 $^{\circ}$ are customized.				
Storage Temp:	-50℃~125℃				
Medium compatible:	Various media compatible with the 304 sta	ainless steel			
Electronic Wire:	3 Wires	4-5 Wires			
Output:	0-5V/0.5-4.5V	RS485			
Power Supply:	6~9 V dc (max 12V dc)	5 V dc			
Zero Temperature Drift	0.005%/20℃				
Temperature output:	Suitable for CAN communication				
Electronic connection:	Fixed cable by stainless steel cap and Explore Proof and water proof IP67				
Process connect port:	M10*1.0 (by customized)				
Response time:	First time starting time $pprox$ 2s; working status $\leq$ 200ms				
Medium compatible:	Diesel, gasoline, water and others fuel or liquid is customized				
Certificate approve:	CE Certificate and Exia II CT6 and Exd II CT5				
EMC Standard:	electromagnetic radiation: EN50081-1/-2 electromagnetic susceptibility: EN50082-2				
Remarks:	Special applications request by customized	the second se			

### **III. Dimension and D**



# **IV. Electronic Connections:**





4-20mA	А	+Vcc	Red
2-wire	С	C +lout B	
0.5-4.5 VDC	А	+Vcc	Red
0-5 VDC	С	GND	Black
3-wire	D	+Vout	Green

(\* Digital Signal Electronic Wires Connections Following Operate Manuals.)

# V. Part NumberCode Table For Level Range:

000	0-100mm	008	0-900mm
001	0-200mm	009	0-1000mm
002	0-300mm	010	0-1100mm
003	0-400mm	011	0-1200mm
004	0-500mm	012	0-1300mm
005	0-600m	013	0-1400mm
006	0-700mm	014	0-1500mm
007	0-800mm	015	Customized

## **VI.** Order Information

P/N Selection	LC08 (Model)	3	1	007	3	0	D	G
Output	3=0.5-4.5V 4=0-5 5=RS485	5V						
Process connetion	1=M10*1.0	8						
Pressure Measurment	See last pages Pressure Range Code Table and select your requested range code adhere here.							
Measurding Medium	1= water 2=Gasonlie 3=Diesel 4=Others liquid by							
Accuracy	0=1.0%F.S. 1=0.5%F.S.							
Probe Diameter	D=8mm							
Pressure type	G=Gage S=Sealed	d A=Absolu	te					