

LC120 – Capacitive Level Meter with Reference Tube



- ▶ Optional intrinsically safe model
- ▶ High pressure resistant
- ▶ High/low temperature resistant
- ▶ Applicable to various media
- ▶ No moving parts
- ▶ Not depend on the dimensions and shapes of a vessel



LC120 consists of electronic module and measuring electrode which is determined by type of medium and applications. It can be used to measure the limit level of the fluids or bulk-solid materials in tanks, vessels, etc.

Specifications

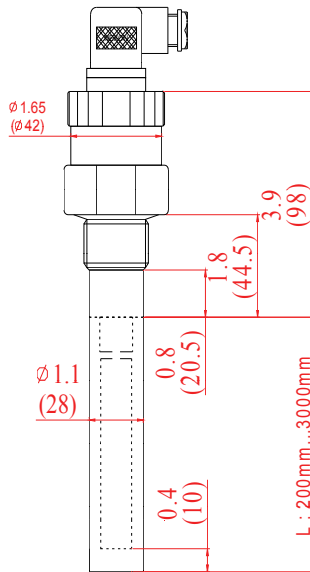
Measuring Range (Rod length L)	≤3m
Applicable Medium	
LC120-1	Non-conductive liquids
LC120-2	Conductive liquids, bulk-solid materials
Current Consumption	
Current Output	Signal current
Voltage Output	About 8mA
Power Supply	
Current/Voltage Output	9...36Vdc/16...36Vdc
Current Analog Output	
Output	2-wire 4...20mA
Load RA	R _{max} =750Ω
Voltage Analog Output	
Output	3-wire 0...10V
Load RA	R _{min} >1KΩ
Sensitivity Ranges(PF)	20; 30; 50; 100; 150; 300; 500; 1000
Initial Capacity Regulation Ratio	Min. 1: 2
Linearity	Max. 1%
Temperature Error	Max. 0.05%/K
Voltage Error	
Current Output	Max. 0.3uA/V
Voltage Output	Max. 0.1mV/V
Temperature	
Ambient	-40...85°C
Medium	-40...300°C (LC120-1) ; -40...200°C (LC120-2)
Material	
Housing/Rod	304 stainless steel
Coated	FEP (only for LC120-2)
Insulating Bushing	PTFE
Protection Class	IP65/IP67
Electrical Connection	Solenoid plug
Explosion Proof Parameters	
Grade	Ex ia IIB T5
Power Supply	9...30Vdc
Temperature Range	-20...60°C (0 zone)
Pressure Range	0.08 ... 0.11MPa (0 zone)

Applications

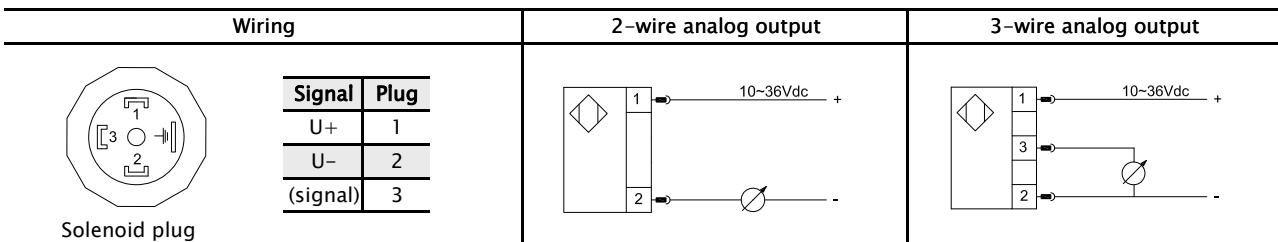
- ▶ Level measuring
- ▶ Material level measuring
- ▶ Petrochemical industry
- ▶ Energy industry
- ▶ Water treatment
- ▶ Hydraulic/lubrication system

LEVEL

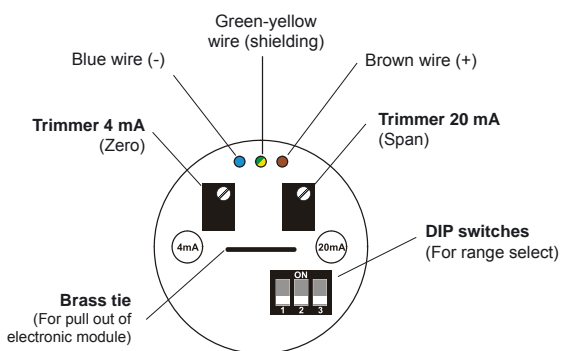
Dimensions in inches (mm)



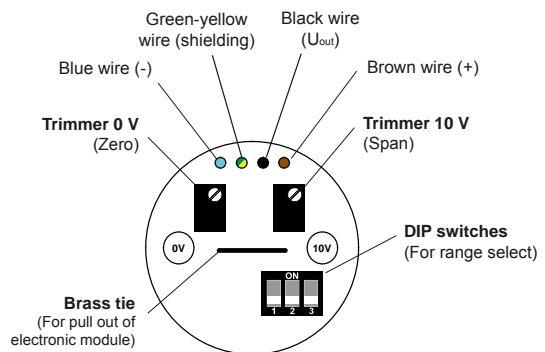
Wiring



Adjustment Elements



The top view on the internal electronic module for current output



The top view on the internal electronic module for voltage output

Order Code

LC :	Capacitive level meter
120 :	Series# - with reference tube
-1 :	Standard
-2 :	With coated rod
M36 :	M36*2 male thread for process connection
G1 :	G1 male thread for process connection
42 :	2-wire 4 ... 20mA current analog output
10 :	3-wire 0 ... 10mA voltage analog output

LC	120/	-1/	G1/	42	H	M1000	N
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H :	Solenoid plug
MXXXX :	Rod length(metric system) L=xxxx mm
IXXXX :	Rod length(english system) L=xxxx inch
N :	Non-explosion proof model
Xi :	Explosion proof model

Sepecial Order on Request

- ▶ Electrical / process connection