

**LC150 – High Temperature Capacitive Level Meter**



- ▶ Optional intrinsically safe model
- ▶ High pressure resistant
- ▶ High/low temperature resistant
- ▶ Applicable to various media
- ▶ Quick connecting, no moving parts
- ▶ High temperature resistant(up to300°C)

LC150 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, powder or bulk-solid materials in tanks, vessels, etc.



**Specifications**

<b>Measuring Range (Rod length L)</b>	For details see Temperature and Pressure Resistance
<b>Applicable Medium</b>	Conductive liquids/non-conductive fluids/ powder/bulk-solid materials
<b>Current Consumption</b>	
Current/Voltage Output	Signal current/about 8mA
<b>Power Supply</b>	
Current/Voltage Output	9...36Vdc,9...30Vdc(explosion proof)/16...36Vdc
<b>Current Analog Output</b>	
Output/Load RA	2-wire 4...20mA/ Rmax=750Ω
<b>Voltage Analog Output</b>	
Output/Load RA	3-wire 0...10V / Rmin>1KΩ
<b>Sensitivity Ranges(PF)</b>	20; 30; 50; 100; 150; 300; 500; 1000
<b>Initial Capacity Regulation Ratio</b>	Min. 1: 2
<b>Linearity</b>	Max. 1%
<b>Temperature Error</b>	Max. 0.05%/K
<b>Voltage Error</b>	
Current/Voltage Output	Max. 0.3uA/V / Max. 0.1mV/V
<b>Material</b>	
Housing	304 stainless steel
Rod	For details see 'Model Number'
Coated	FEP
<b>Protection Class</b>	IP65/IP67
<b>Electrical Connection</b>	Solenoid plug
<b>Explosion Proof Parameters</b>	
Grade	Ex ia IIB T5
Temperature/Pressure Range	-20...60°C /0.08 ... 0.11MPa

**Applications**

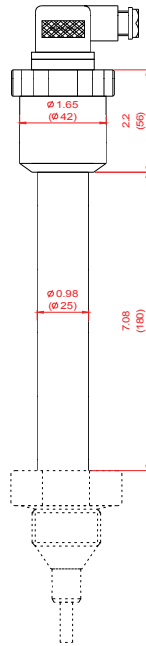
- ▶ Level measuring
- ▶ Material level measuring
- ▶ Petrochemical industry
- ▶ Energy industry
- ▶ Water treatment
- ▶ Hydraulic/lubrication system

**LEVEL**

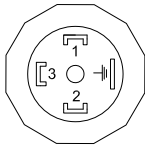
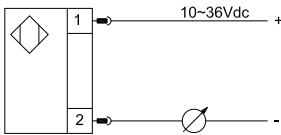
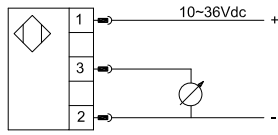
**Temperature and Pressure Resistance**

Model	Medium Temperature	Ambient Temperature	Temperature in Process Connection Place (Tp)	Max. operating pressure for Tp				
				30°C	85°C	130°C	160°C	200°C
LC150-1/-3	-40°C ... 300°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 200°C	7MPa	5MPa	3MPa	2MPa	1MPa
LC150-2/-4	-40°C ... 200°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 200°C	6MPa	4MPa	2MPa	1.5MPa	0.3MPa
LC150-5	-40°C ... 250°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 130°C	7MPa	5MPa	3MPa	-	-
LC150-6	-40°C ... 130°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 131°C	1MPa	0.5MPa	0.1MPa	-	-

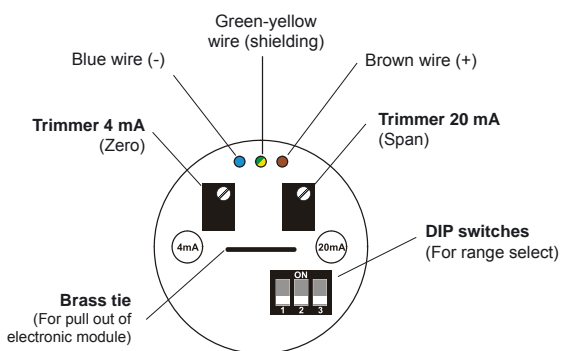
Dimensions in inches (mm)



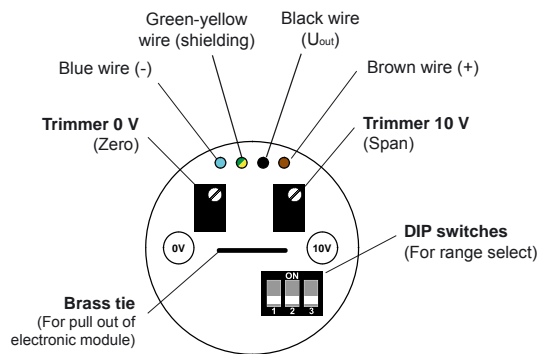
### Wiring

Wiring	2-wire analog output	3-wire analog output								
 <p>Solenoid plug</p> <table border="1"> <thead> <tr> <th>Signal</th> <th>Plug</th> </tr> </thead> <tbody> <tr> <td>U+</td> <td>1</td> </tr> <tr> <td>U-</td> <td>2</td> </tr> <tr> <td>(signal)</td> <td>3</td> </tr> </tbody> </table>	Signal	Plug	U+	1	U-	2	(signal)	3		
Signal	Plug									
U+	1									
U-	2									
(signal)	3									

### 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

<b>LC :</b>	Capacitive level meter
<b>150 :</b>	Series# - high temperature
<b>-1 :</b>	Rod electrode - standard
<b>-2 :</b>	FEP coated rod electrode
<b>-3 :</b>	Rod electrode with reference tube
<b>-4 :</b>	FEP coated rod electrode with reference tube
<b>-5 :</b>	Rope electrode with weight - standard
<b>-6 :</b>	FEP coated rope electrode with weight
<b>M36 :</b>	M36*2 male thread for process connection
<b>G1 :</b>	G1 male thread for process connection
<b>42 :</b>	2-wire 4 ... 20mA current analog output
<b>10 :</b>	3-wire 0 ... 10mA voltage analog output

<b>LC</b>	<b>150/</b>	<b>-1/</b>	<b>M36</b>	<b>42</b>	<b>H</b>	<b>M1000/</b>	<b>304</b>	<b>N</b>
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<b>H :</b>	Solenoid plug
<b>MXXXX :</b>	Rod/rope length(metric system) L=xxxx mm
<b>IXXXX :</b>	Rod/rope length(english system) L=xxxx inch
<b>Note :</b>	LC150-1 rod length ≤5m; LC150-2/-3/-4 rod length ≤3m; LC150-5/-6 rope length ≤20m
<b>Rod/rope material</b>	
<b>304 :</b>	304 stainless steel
<b>316L :</b>	316L stainless steel
<b>Z :</b>	Zinc steel
<b>N :</b>	Non-explosion proof model
<b>Xi :</b>	Explosion proof model

Sepecial Order on Request

- ▶ Electrical / process connection