

LC140 – Sanitary Capacitive Level Meter

- ▶ Optional intrinsically safe model
- ▶ High pressure resistant
- ▶ High/low temperature resistant
- ▶ Applicable to various media
- ▶ Quick connecting, No moving parts
- ▶ For Food/pharmaceutical industry

LC140 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

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

Applications

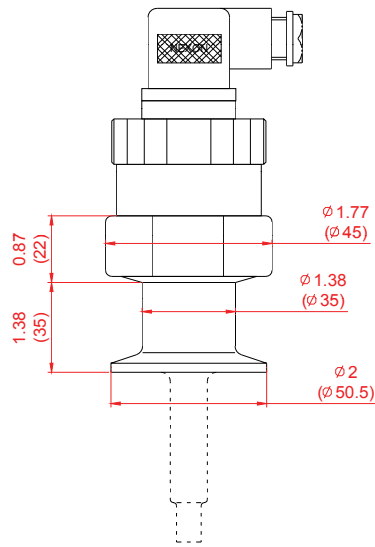
- ▶ Level measuring
- ▶ Material level measuring
- ▶ Petrochemical industry
- ▶ Energy industry
- ▶ **Water treatment**
- ▶ Hydraulic/lubrication system

Temperature and Pressure Resistance

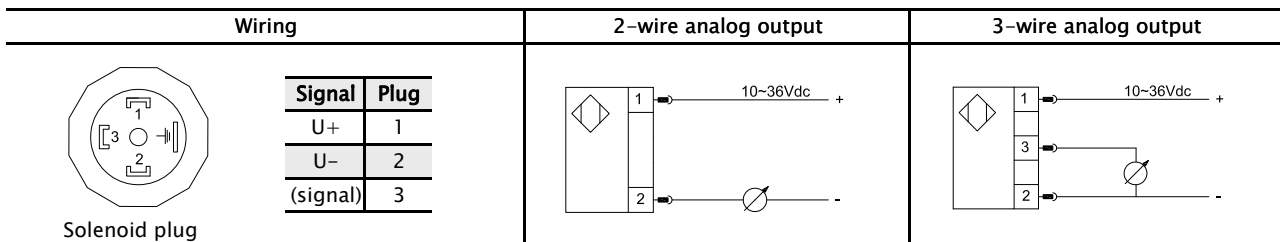
Model	Medium Temperature	Ambient Temperature	Temperature in Process Connection Place (Tp)	Max. operating pressure for Tp	
				30°C	85°C
LC140-1/-3	-40°C ... 300°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 85°C(Xi: 70°C)	7MPa	5MPa
LC140-2/-4	-40°C ... 200°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 85°C(Xi: 70°C)	4MPa	2MPa
LC140-5	-40°C ... 250°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 85°C(Xi: 70°C)	7MPa	5MPa
LC140-6	-40°C ... 130°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 85°C(Xi: 70°C)	1MPa	0.5MPa
LC140-7	-40°C ... 100°C	-40°C ... 85°C(Xi: 70°C)	-40°C ... 85°C(Xi: 70°C)	0.1MPa	0.1MPa

LEVEL

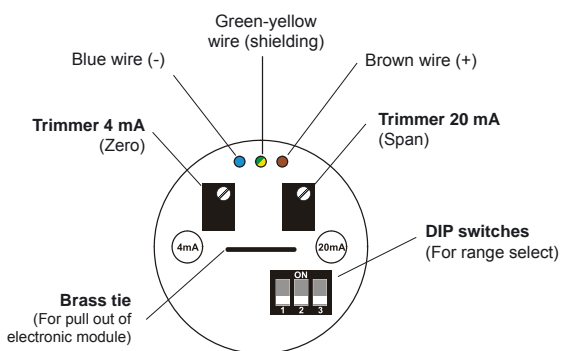
Dimensions in inches (mm)



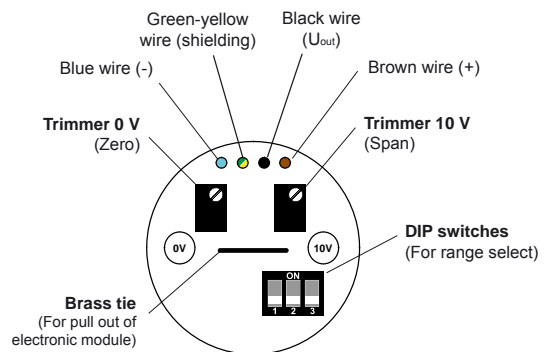
Wiring



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
140 :	Series# - sanitary
-1 :	Rod electrode - standard
-2 :	FEP coated rod electrode
-3 :	Rod electrode with reference tube
-4 :	FEP coated rod electrode with reference tube
-5 :	Rope electrode with weight - standard
-6 :	FEP coated rope electrode with weight
-7 :	Two rod electrodes
T :	1.5" Tri-clamp process connection
42 :	2-wire 4 ... 20mA current analog output
10 :	3-wire 0 ... 10mA voltage analog output

LC	140/	-1/	T	42	H	M1000/	304	N
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H :	Solenoid plug
MXXXX :	Rod/rope length(metric system) L=xxxx mm
IXXXX :	Rod/rope length(english system) L=xxxx inch
Note :	LC140-1 rod length ≤5m; LC140-2/-3/-4 rod length ≤3m; LC140-5/-6 rope length ≤20m; LC140-7 rod length ≤2m
Rod/rope material	
304 :	304 stainless steel
316L :	316L stainless steel
Z :	Zinc steel
N :	Non-explosion proof model
Xi :	Explosion proof model

Sepecial Order on Request

- ▶ Electrical / process connection