

Model LV810

For Level Measurement



Features

- Measuring ranges from 0.5mH₂O to 200mH₂O
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Stainless steel construction
- Piezoresistive pressure sensor design
- LCD field display
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, RS485 or Hart protocol

Product Overview

LV810 is made from high-quality silicon piezoresistive sensor. The piezoresistive sensor is packaged in stainless steel housing. The LV810 is precision engineered to fit most level measurement. The water-proof cable connects with housing sealed, with vented tube putting in, the transmitter could be used in the water or liquid in a long time. Integrated construction and standard output signal could provide easy operation and good automatic control.

Applications

- Level measurement
- Hydraulic monitoring in rivers and sea
- Muddy liquid level measurement
- Water treatment
- Water diversion project

Standard Pressure Ranges

Nominal pressure	gauge	
0...1mH ₂ O	●	
0...2mH ₂ O	●	
0...5mH ₂ O	●	
0...10mH ₂ O	●	
0...15mH ₂ O	●	
0...20mH ₂ O	●	
0...50mH ₂ O	●	
0...80mH ₂ O	●	
0...100mH ₂ O	●	
0...150mH ₂ O	●	
0...200mH ₂ O	●	

Other pressure ranges available. Please consult the factory.

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-1, ..., 200	mH ₂ O	
Overpressure	1.5xFS	mH ₂ O	
Environmental			
Operating Temperature Range	-20 to +70	°C	-4°F to 158°F
Compensated Temperature Range	0 to +70	°C	32°F to 158°F
Storage Temperature Range	-40 to +125	°C	-40°F to 257°F
Vibration	10	g	20 to 2000Hz
Shock	100	g	10ms
Cycles	10x10 ⁶	cycles	
Electrical @25°C(77°F)			
Output Signal	4...20mA 0...5Vdc 1...5Vdc	RS485	Hart protocol
Power Supply(Vs)	12...36Vdc 12...36Vdc 12...36Vdc	15...36Vdc	15...36Vdc
Load Resistance	<(Vs-12)/0.02A (For current output), >10kΩ (For voltage output)		
Insulation Resistance	100MΩ@50Vdc		
Physical Specifications			
Media Compatibility	All media compatible with 316L stainless steel		
Housing	304 stainless steel		
Diaphragm	316L stainless steel		
Seal Ring	Viton or NBR		
Oil Filling	Silicone oil		
Protection	IP68		
Net Weight	Approx. 750g		

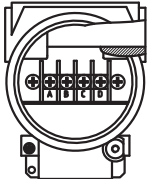
Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±0.75	±1.5	%FSO	3
Temp Coeff - Span		±0.75	±1.5	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

Notes

1. All values measured at 25°C(77°F)
 2. Including non-linearity, hysteresis and repeatability.
 3. 0°C to 70°C(32°F to 158°F) with reference to 25°C(77°F).
- The listed specifications and dimensions are subject to change without prior notice.

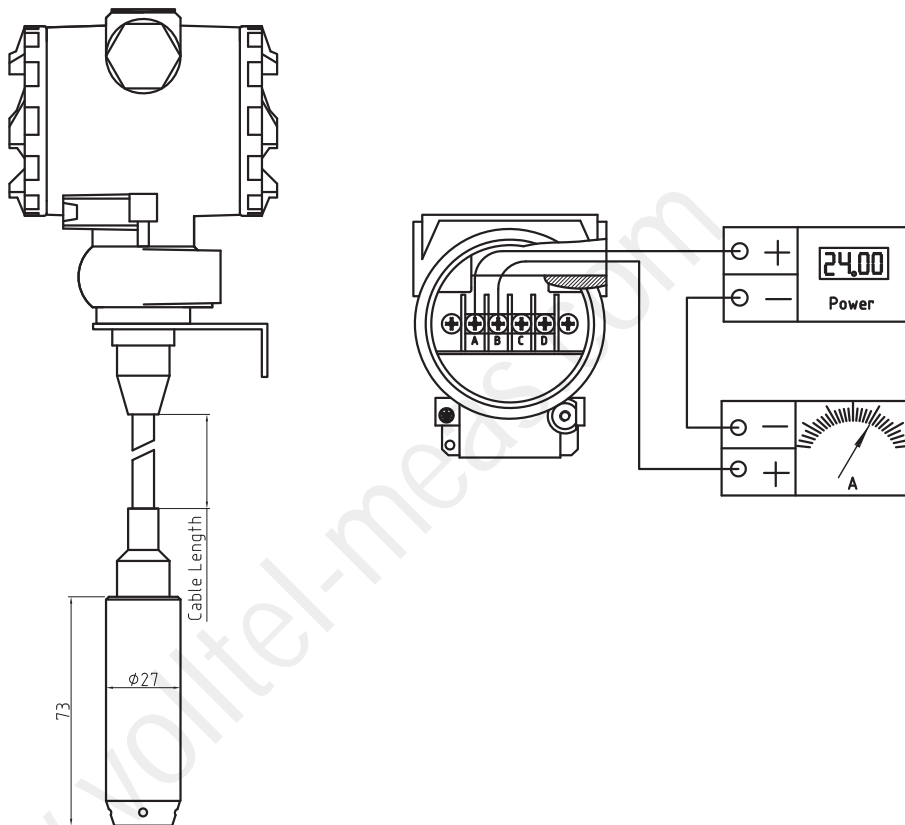
Connection Diagrams

Terminal



	2-wire(current)
Supply+	A
Signal+	B
-	-
-	-

Dimensions (in mm)



Ordering Information

Option1: Model						
LV810	Level Transmitter					
Option2: Pressure Ranges						
0001	1mH ₂ O	0100	100mH ₂ O			
0002	2mH ₂ O	0150	150mH ₂ O			
0005	5mH ₂ O	0200	200mH ₂ O			
0010	10mH ₂ O	Cxxx	Customized range			
0020	20mH ₂ O					
0050	50mH ₂ O					
0080	80mH ₂ O					
Option3: Cable length						
[x]m	x=cable length					
Option4: Output Signal						
42	4...20mA					
05	0...5Vdc					
15	1...5Vdc					
RS	RS485					
HR	HART protocol					
Option5: Accuracy						
02	0.25%FSO					
05	0.5%FSO					
05	Option5: Accuracy					
	M0	without display				
	M1	LCD display				
	M2	LED display				
LV810	0010	15	42	02	M1	Examples of Ordering Code: LV810-0010-15-42-02-M1