

Model LV820

For Flange Mounting



Features

- Measuring ranges from 1mH₂O to 200mH₂O
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Stainless steel flange mounting
- Piezoresistive pressure sensor design
- LCD field display
- Variety of Pressure connections
- Output 4...20mA, 0...10V, RS485 or Hart protocol

Product Overview

LV820 is made from high-quality silicon piezoresistive sensor. The piezoresistive sensor is packaged in stainless steel housing. The process connection of LV820 transmitter is a flange, which allows LV820 to be able to measure viscous and corrosive pressure media, such as fluids or fluids with grains. Corrosive media can be measured by choosing the material of the process connection as Hastelloy-C or Monel.

The measuring pressure range of LV820 liquid level transmitters spans from 0~1mH₂O to 0~200mH₂O. These transmitters can be provided with output signal of 4~20mA (HART is optional). These transmitters are also equipped with a LCD display. The measuring accuracy of LV820 level transmitter is up to 0.25%FS.

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	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
Flange	304 stainless steel
Diaphragm	316L stainless steel
Seal Ring	Viton or NBR
Oil Filling	Silicone oil
Protection	IP65
Net Weight	Approx.2500g

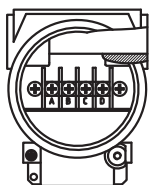
Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±0.75	±1.5	%FSO	3
Temp Coeff - Span		±0.75	±1.5	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

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.

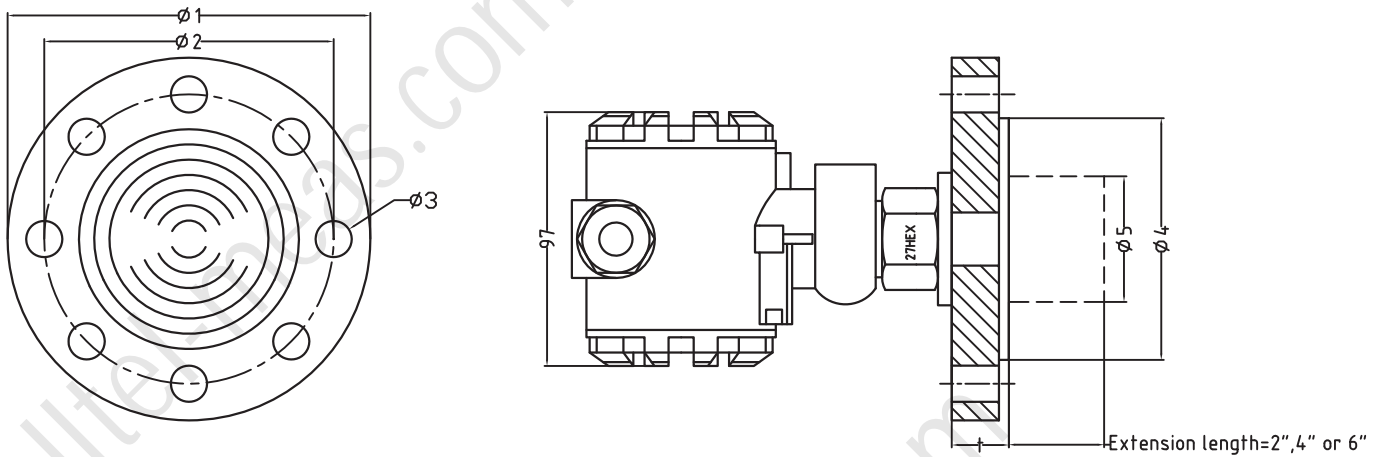
Connection Diagrams

Terminal



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

Dimensions (in mm)



size	Rating	Thickness †	External dia. $\phi 1$	Bolt holes			Level Diaphragm	
				Distributing circle dia. $\phi 2$	Aperture $\phi 3$	Number	sealing surface $\phi 4$	dia. of extension housing $\phi 5$
2"	150lb	30	152.5	120	19	4	92	NA
3"	150lb	30	190.5	152	19	4	127	66
4"	150lb	30	228.6	190	19	8	157	89
2"	300lb	33	165.0	127	19	8	92	NA
3"	300lb	35	209.0	168	22.2	8	127	66
4"	300lb	38	254.0	200	22.2	8	157	89

Ordering Information

Option1: Model	
LV820	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: Flange specification	
[x]	x=Flange specification
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
Lv820	0010 3" 150lb 42 02 M1 Examples of Ordering Code: LV810-0010-[3" 150lb]-42-02-M1

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.