

LD300 differential pressure transmitter

Description

LD300 differential transmitter adopts high accurate and stable sensitive elements from overseas. It is packaged in aluminum alloy housing with stress isolation technique. The sensing chips were made of silicon diaphragm with diffused silicon resistance bridge and resistance-adjustable ceramic base. Signals were amplified into 4-20mADC(or 1-5VDC) standard signals after accurate temperature compensation. They can be connected with DDZ-III, DDZS series gauge and industrial computers or distribution systems to fulfill auto measurement and control. They can be widely used in petroleum、chemistry、metallurgy、electricity and other industrial areas or lab, and in warming、air-conditioning、building automation to measure and control differential pressure、wind passage pressure and air flow.

Characteristics

- Measurement range: 0.2kPa~1MPa
- Accurate temperature compensation
- Various optional pressure ports, or on user's request
- Ingeniously structured, easy to mount
- Long-term stability: 0.1%FS
- Specially treated circuit, 100% waterproof and damp-proof
- Complete circuit function

Applications

- Warming、air conditioning
- Environment protection instruments
- Medical instruments
- Process control
- Factory automation
- Air flow measurement
- Wind passage pressure measurement
- Leak detection



Parameters

- Range: 0~0.2kPa—0~1.5kPa (tiny differential)
0~1.5kPa—0~1MPa (differential)
- Pressure Port: diameter 6 or 8, or quick coupling
- Max Pressure: 140kPa or 1.5 times rated pressure, whichever is bigger (2.5kPa for tiny differential pressure series)
- Static pressure: 3 50kPa (tiny differential pressure 35kPa)+rated pressure
- Media: non-corrosiveness gas
- Operating temperature: -40~85℃
- Compensation temperature: 0~70℃(or on request)
- Storage temperature: -55~125℃
- Non-linearity: $\leq 0.1 \sim 0.2\%$ FS
- Repeatability, hysteresis: $\leq 0.5\%$ FS
- Zero temperature coefficient: $\leq 1 \sim 2 \times 10^{-4}/^{\circ}\text{C} \cdot \text{FS}$
- Humidity temperature coefficient: $\leq 1 \sim 2 \times 10^{-4}/^{\circ}\text{C} \cdot \text{FS}$
- Output: sensor: mV signal
transducer : 4 ~ 20mADC 2-wire standard signal (0~10mADC、1~5VDC、0~5VDC available)
- Supply voltage: 24VDC (12 ~ 36VDC), 12VDC(max 18VDC)for mV output
- Electrical connection: connector or shielded cable
- Electromagnetic compatibility/radio frequency interference: 10V/m
- Anti-lighting
- Protection against voltage inversion: 45VDC
- Housing material: aluminum alloy
- Weight: $\leq 0.35\text{Kg}$

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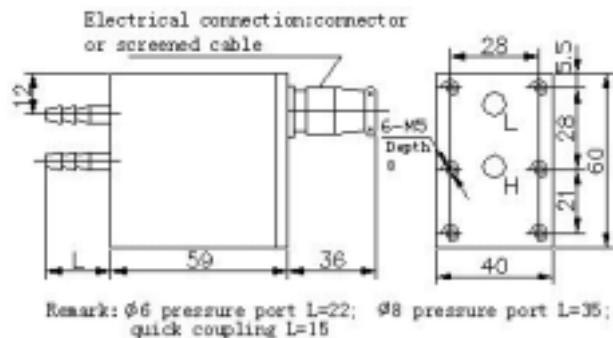
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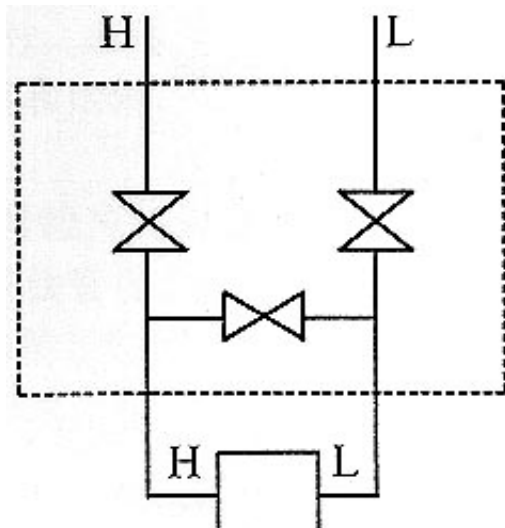
Operating principles

LD300 differential (tiny differential) transmitters adopt advanced diffused silicon sensors from U.S.A. They are produced with technical sealing and accurate twice temperature compensation. On this basis, the transmitter produces 4~20mADC 2-wire standard signals through linear compensation, signal amplification, voltage and current transformation.

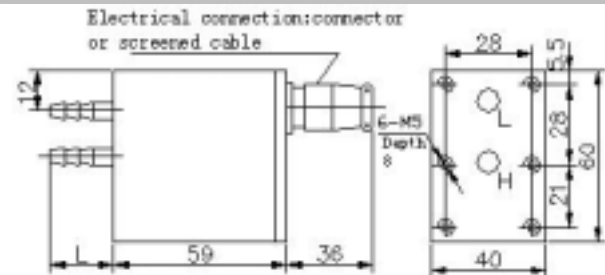


Mounting

1. There are six screw holes at the leading side, use four of them to fix the transmitter.
2. Then lead the high/low pressure media to the corresponding side of the balancing valve with a plastic tube. Connect the balancing valve with the corresponding pressure port. Thus the transmitter can be prevented from being damaged by overpressure at one side.
3. Horizontal mounting is recommended, other ways may affect the zero output.

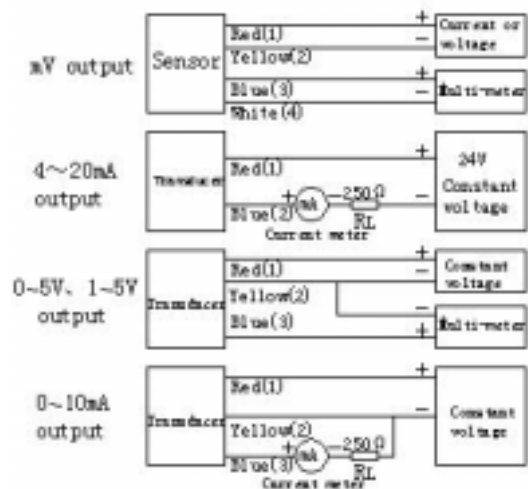


Dimensions



Remark: Ø6 pressure port L=22; Ø8 pressure port L=35; quick coupling L=15

Connection:



LD300 differential pressure transmitter

Item	Description	
LD300	Differential pressure transmitter	
	Code	Accuracy
	A	0.1%FS
	B	0.2%FS
	Code	Output
	0	mV
	1	4~20mADC
	2	On request
	Code	Pressure port
	1	Ø6
	2	Ø8
	3	Quick coupling
	4	On request
	Code	Cable
	N	0.5m cable
	Y	With connector
	Code	Range
	□□□	On request

LD300 A 1 2 Y - 1.5kPa

Namely: LD300 tiny differential pressure transducer, 4~20mADC output, & Ø8 pressure port, with male connector, range 1.5kPa.

Remark: For items which are for user's selection, please define them when setting an order.