

# SIER ELECTRONICS CO., LTD

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## SPT91L L-Air Differential Pressure Transmitter

### Features

- Full aluminum construction, compact size, easy installation
- Low pressure  $\pm 1$ mbar range available
- Temperature compensated and aged, stable performance
- LCD display optional



### Introduction

SPT91L uses high performance lower differential pressure sensor as sensing element. Digital PCB makes temperature compensation, non-linearity correction possible. This product can be used for differential pressure measurement of air conditioning, machine, environmental protection equipment, building air supply system, etc.

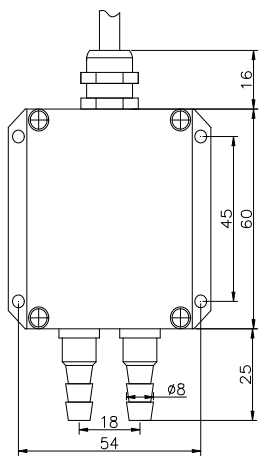
### Specification

|                     | Min.                              | Typ. | Max. | Unit     |
|---------------------|-----------------------------------|------|------|----------|
| Accuracy            |                                   | 0.5  | 1%   | %FS      |
|                     |                                   | 0.5  | 1%   |          |
| Stability           | 0.5                               |      |      | %FS/year |
| Operation temp.     | -20～80                            |      |      | ℃        |
| Storage temp.       | -40～120                           |      |      |          |
| Power supply        | 2-wire 12～32VDC                   |      |      |          |
| Range               | -1…0～0.001…1bar                   |      |      |          |
| Output signal       | 2-wire 4～20mADC/ RS485            |      |      |          |
| Electric connection | cable                             |      |      |          |
| Insulation resistor | 100MΩ, 50VDC                      |      |      |          |
| Shock effect        | ≤1% at 3gRMS, 30～2000Hz           |      |      |          |
| Impact              | ≤1% at 100g, 10ms                 |      |      |          |
| Lifetime            | 1×10 <sup>8</sup> pressure cycles |      |      |          |
| Media               | Air/Gas which is not corrosive    |      |      |          |
| Power supply        | 2-wire 12～32VDC                   |      |      |          |

### Construction Material

|               |                  |
|---------------|------------------|
| Housing       | Aluminum         |
| Pressure port | 2x $\phi$ 8 tube |

Outline Construction (Unit: mm)



\*\*Longer tube is higher pressure side

Electric Connection

| Wire color | 2-wire | 3-wire |
|------------|--------|--------|
| Red        | (+V)   | (+V)   |
| Green      | (+OUT) | (+OUT) |
| Black      | Null   | (GND)  |

Order Guide

|        |              |                                         |                     |                                       |  |
|--------|--------------|-----------------------------------------|---------------------|---------------------------------------|--|
| SPT9L  |              | L-Air Differential Pressure Transmitter |                     |                                       |  |
|        |              | Range                                   |                     | -1...0~0.001...1bar                   |  |
|        |              | 0~Xbar                                  |                     | All standard pressure units available |  |
|        |              | Code                                    | Output signal       |                                       |  |
|        |              | E                                       | 4~20mADC            |                                       |  |
|        |              | J                                       | 0~5VDC              |                                       |  |
|        |              | V1                                      | 0.5~4.5V(5V supply) |                                       |  |
|        |              | V                                       | 0~10VDC             |                                       |  |
|        |              | R4                                      | 4~20mA+RS485        |                                       |  |
|        |              |                                         | Code                | Displayer                             |  |
|        |              |                                         | LCD                 | With LCD displayer                    |  |
| SPT91L | [0~0.001]bar | E                                       | LCD                 | the whole spec                        |  |

If you have any special requirement, please feel free to contact our company. We can do customized design.