

HuaTian

HPT-8

Instruction:

HPT-8 differential pressure transmitters adopt piezoresistive isolated membrane silicon oil-filled as sensing element, the measured pressure on both ends of the transmitter, utilizes the semiconductor silicon piezoresistive effect to fulfill the differential pressure transformed into electrical signal. After strict testing and aging screening on components, semi-manufactured products and end products, the performance is ensured to be stable and reliable.

Features:

- Micro pressure of 100Pa can be measured
- Small volume, easy to install
- Output signal optional
- Pressure connection optional
- Measure for differential and micro pressure

Applications:

- Wind pressure and wind speed purification
- Clean room project
- Power plant
- Gas
- Mine ventilation



Specifications(Refer to 25°C)

| | | | |
|---|---------------------------------------|----------------------------|----------------------------|
| Sensor Type | Differential sensor | Environment Temp. (°C) | -20~85°C |
| Wetted parts | Cast aluminum | Operate Temp (°C) | -20-85°C |
| Housing | Cast aluminum | Shock | 100g, 11msec |
| Pressure Range | 0~100pa...0.1Mpa | Zero error (%FS) | ±0.5% |
| Media | Be compatible with 316 | Full range error (%FS) | ±0.5% |
| Voltage(V) | 12~36V DC(Standard : 24V) | Thermal Zero drift (%FS) * | ±1.0% |
| Connector Outlet | IP65 | Thermal Span drift (%FS) * | ±1.0% |
| Pressure port | 1) Tower structure and hose | Input Voltage / Output | See below code description |
| | 2) Customized | Response | 1KHz |
| Accuracy (Combined Non-linearity, Hysteresis and Non-repeatability) %FS | 0.5%(Typical) | Insulation | Min1MΩ @250VDC&25°C |
| | | Weight | 160g Max. |
| Life | >10 ⁷ Full Range Pressure | Noise | < 2m VRMS |
| Over pressure | 3X Full Range | Pressure reference | Differential |
| Burst pressure | 4X Full Range or 20kpsi which is less | | |
| Long term stability | ±0.10%FS(annual) | | |

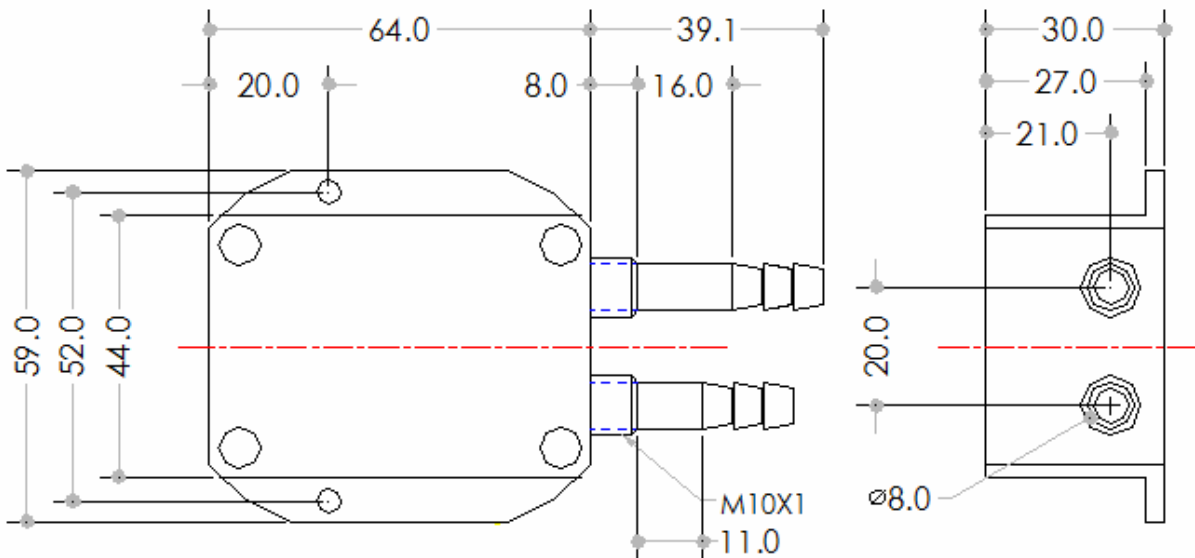
■ Thermal drift refer to 25°C output

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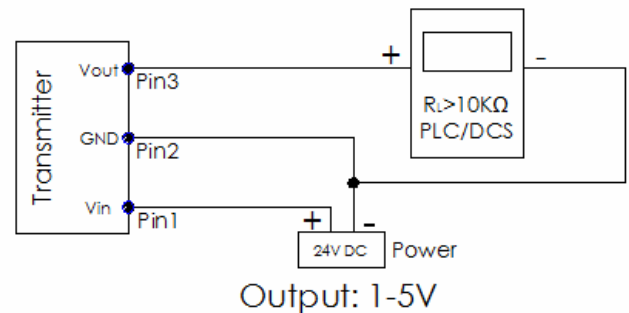
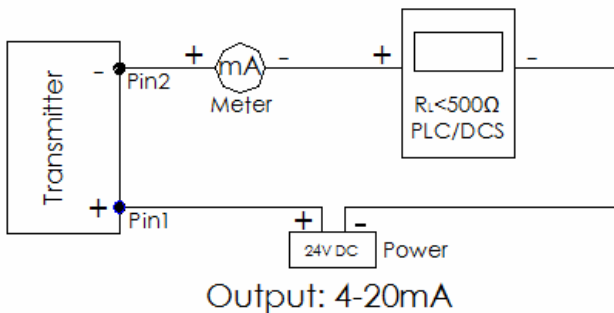
HPT-8

| HPT-8 pressure transducer model code | | | | | | | |
|--------------------------------------|-----------------------------------|---------------|------------------|----------------|--------------------------|--------------|--------------------|
| Model | Description | | | | | | |
| HPT-8 | Differential pressure transmitter | | | | | | |
| | Range/Code | Pressure unit | | | | | |
| | 0-X P | Pa | | | | | |
| | 0-X K | Kpa | | | | | |
| | | Code | Output Signal | | | | |
| | | E | 4-20mA two -wire | | | | |
| | | F | 1-5V | | | | |
| | | J | 0-5V | | | | |
| | | Q | 0-10V | | | | |
| | | Z | others | | | | |
| | | | Code | Accuracy (%FS) | | | |
| | | | J3 | 0.5 | | | |
| | | | J4 | 1.0 | | | |
| | | | | Code | Pressure port | | |
| | | | | C1 | Tower structure and hose | | |
| | | | | X | Customized | | |
| | | | | | Code | I/O Outlet | |
| | | | | | B3 | Direct cable | |
| | | | | | X | Customized | |
| | | | | | | Code | Pressure reference |
| | | | | | | D | Differential |
| Example: | | | | | | | |
| HPT-8 | 10B | E | J3 | C3 | X | G | |
| HPT-8 | 10Bar | 4-20mA | 0.5% | G1/2 | Customized | Gauge | |
| Model Choose:HPT-8-10B-EJ2C3XG | | | | | | | |

Outline Construction (Unit:mm)



Electric Circuit:



| Pin | 2-Wire (Current) |
|-----|------------------|
| 1 | Vsupply+ (Vs+) |
| 2 | Vsupply- (Vs-) |
| 3 | NC |

| Pin | 3-Wire (Voltage) |
|-----|------------------|
| 1 | Vsupply+ (Vs+) |
| 2 | Voutput+ (Vo+) |
| 3 | GND |

Pressure Port Dimension:

| Code | Pressure port | "L" (mm) |
|------|---------------|----------|
| C1 | M20*1.5 | 16 |
| C2 | M14*1.5 | 14 |
| C3 | G1/2 | 16 |
| C4 | G3/8 | |
| C5 | G1/4 | 12 |
| C6 | 1/2NPT | |
| C7 | 1/4NPT | 13.8 |
| C8 | ZG1/4 | 13.8 |