

PRESSURE TRANSDUCERS WITH AMP.

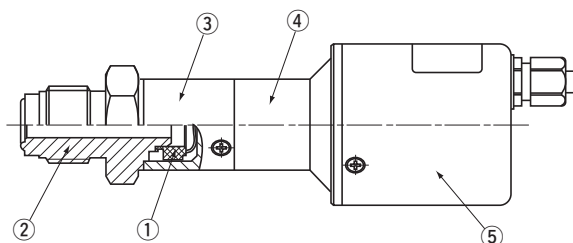
PA-930



FEATURES

- Suitable for high temperature media (150 °C)
- Compact and light weight due to original heat insulation technology
- High corrosion resistant SUS 316L port and nickel alloy sensor module

INTERNAL STRUCTURE (VC)



| Part name | Material |
|-----------------|---------------------------------|
| ① Sensor module | Nickel alloy |
| ② Pressure port | SUS316L |
| ③ Pipe | SUS304 |
| ④ Joint | PBT (Polybutyleneterephthalate) |
| ⑤ Cover | Aluminum |

MODEL NUMBER DESIGNATION

PA-930-102R-VC

Series name

Rated pressure range

102V : 0 ~ -100 kPa (Gauge-Vacuum)
 102G : 0 ~ 100 kPa (Gauge)
 102R : -100 ~ 100 kPa (Gauge-Compound)
 103G : 0 ~ 1000 kPa (Gauge)
 302R : -100 ~ 300 kPa (Gauge-Compound)

Pressure port

VC : 9/16-18UNF
 R2 : R1/4 (PT1/4)

LIST OF MODEL NUMBERS

| (kPa) Rated pressure range | Pressure port | |
|-------------------------------|----------------|----------------|
| | 9/16-18UNF | R1/4 (PT1/4) |
| 0 ~ -100 | PA-930-102V-VC | PA-930-102V-R2 |
| 0 ~ 100 | PA-930-102G-VC | PA-930-102G-R2 |
| -100 ~ 100 | PA-930-102R-VC | PA-930-102R-R2 |
| -100 ~ 300 | PA-930-302R-VC | PA-930-302R-R2 |
| 0 ~ 1000 | PA-930-103G-VC | PA-930-103G-R2 |

※ Verify the above model numbers when placing orders.

PA-930

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STANDARD SPECIFICATIONS

- Unless otherwise specified, the specs are defined at a pressure port temperature of 125 ± 5 °C and at an ambient temperature of 25 ± 5 °C and excitation voltage of 24 V DC.

| Item | | Model number | PA-930 | | | | |
|------------------------|-------------------------|---------------|---|----------|-------------|-------------|----------|
| | | | 102V | 102G | 102R | 302R | 103G |
| General specifications | Pressure reference | | Gauge | | | | |
| | Rated pressure range | kPa | 0 ~ - 100 | 0 ~ 100 | - 100 ~ 100 | - 100 ~ 300 | 0 ~ 1000 |
| | Maximum pressure | kPa | 200 | 200 | 200 | 600 | 1500 |
| | Break-down pressure | kPa | 300 | 300 | 300 | 900 | 1500 |
| | Pressure medium | | Corrosive gases/liquids compatible with SUS 316L and nickel alloy | | | | |
| | Operating / Compensated | °C | 0 ~ 50 (Circuit Board) 0 ~ 150 (Pressure port) / 100 ~ 150 (Pressure port) | | | | |
| | Operating humidity | %RH | 35 ~ 85 (No condensation) | | | | |
| | Storage temp. | °C | - 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum) | | | | |
| | Insulation resistance | MΩ minimum | 50 (125 V DC) | | | | |
| | Dielectric strength | | 125 V DC, 60 s (Leakage current 1 mA maximum) | | | | |
| | Pressure port | | 9/16-18UNF, R1/4 | | | | |
| | Net weight | g | Approx. 100 | | | | |
| Power | Supply voltage | V DC | 12 ~ 24 ± 10 % | | | | |
| | Ripple content | maximum | 10 % (P-P) | | | | |
| | Consumption current | maximum | 20 mA | | | | |
| Analog output | Output voltage | V DC | 1 ~ 5 | | | | |
| | Zero voltage | V ※ 1 | 1 ± 0.04 | 3 ± 0.04 | 2 ± 0.04 | 1 ± 0.04 | |
| | Span voltage | V ※ 1 | 4 ± 0.04 | | | | |
| | Output current | | 1 mA max. (Load resistance 5 kΩ min.) | | | | |
| | Linearity/Hysteresis | %F.S. | ± 0.5 | | | | |
| | Thermal error | ZERO | ± 0.10 %F.S./°C (100 to 150 °C, Reference temp. at 125 °C) | | | | |
| | | SPAN | ± 0.10 %F.S./°C (100 to 150 °C, Reference temp. at 125 °C) | | | | |
| Response | | Approx. 2 ms. | | | | | |

※ 1 : Pressure port temperature : 125 °C
Ambient temperature : 25 °C

PA-930

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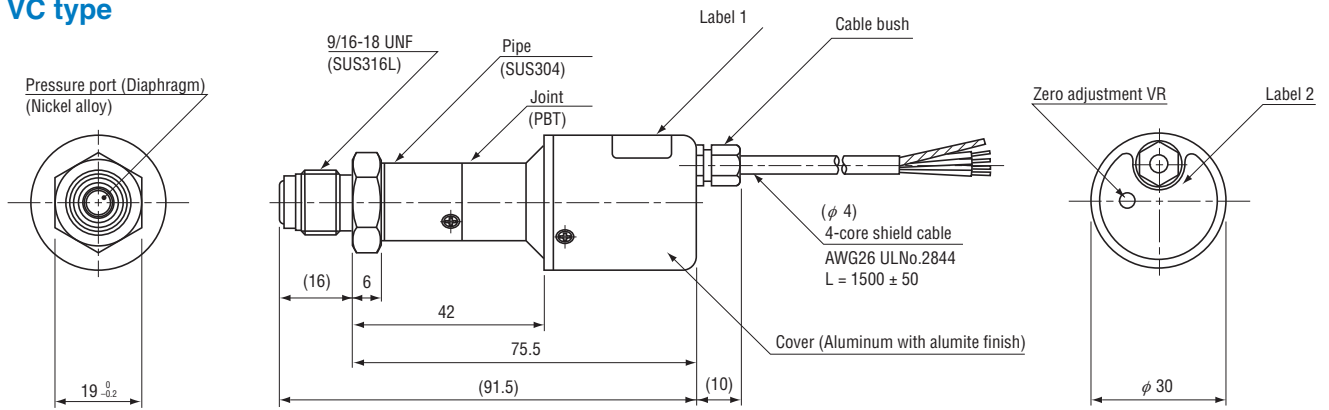
ENVIRONMENTAL CHARACTERISTICS

| Test item | Test conditions (At 25 ± 5 °C) | Permissible change |
|---------------------|---|---|
| Vibration | 10 ~ 500 Hz, 1.5 mm maximum/98.1 m/s ² , 3 directions for 2 hours each | Zero voltage, Span voltage: ± 1 %FS. maximum each |
| Shock | 490 m/s ² , 3 directions for 3 times each | |
| Pressure cycling | 0 ~ Rated pressure, 10 ⁶ cycles | |
| Moisture resistance | 40 °C, 90 ~ 95 %RH, 240 hrs. | |

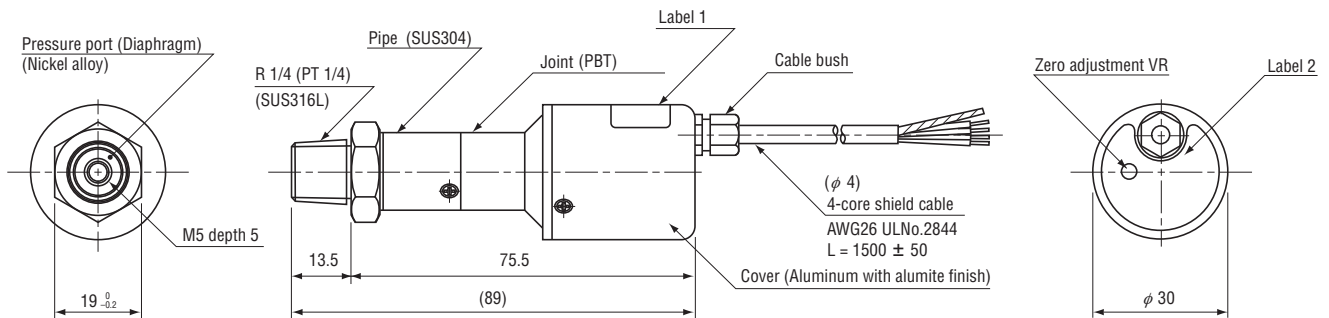
OUTLINE DIMENSIONS

Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)

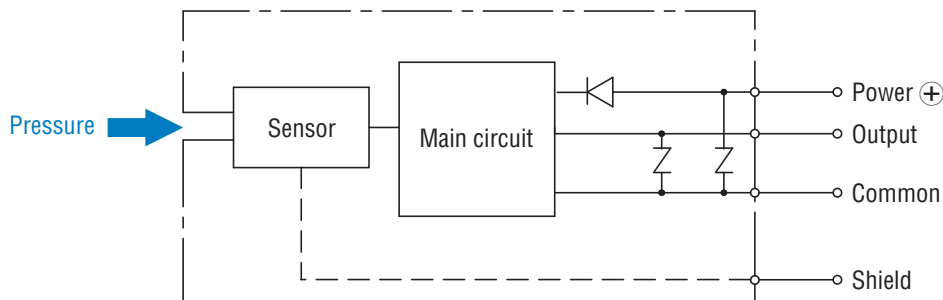
VC type



R1/4 (PT1/4) type



INTERNAL ELECTRICAL SCHEMATICS



| Wire color | Connection |
|------------|------------|
| Red | Power ⊕ |
| White | Output |
| Black | Common |
| Green | N.C. |
| Shield | Fitting |

Mouser Electronics

Authorized Distributor

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