

PZ-200



■ FEATURES

- The compact design saves the space
- By VR, any pressure unit can be set to full scale
- With pressure switch function (4 points setting)
- Meets DIN sizes (72 × 72 mm)
- Input signal: 1 ~ 5 V or 4 ~ 20 mA

■ COMPATIBILITY WITH SENSORS

PZ-200 shall be used with Copal's pressure transducers with Amp. and other sensors whose output signals are DC1~5 V or 4~20 mA.

■ MODEL NUMBER DESIGNATION

P Z - 2 0 0

Series name

PZ-200

PRESSURE INDICATORS

STANDARD SPECIFICATIONS

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C and excitation voltage of 12 V DC.

| Item | | Model number | PZ-200 | |
|------------------------|---------------------------|---|---|----------------------|
| General specifications | Operating temp. range | °C | 0 ~ 50 | |
| | Compensated temp. range | °C | 0 ~ 50 | |
| | Operating humidity | %RH | 35 ~ 85 (No condensation) | |
| | Storage temp. | °C | - 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum) | |
| | Net weight | g | Approx. 150 | |
| | Power | | Power : 12 ~ 24 V DC \pm 10 % Consumption current : 0 mA maximum | |
| Input | Input signal | | 1 ~ 5 V/4 ~ 20 mA (Internal switch provided) | |
| | Input impedance | k Ω | 120 (1 ~ 5 V Input setting) | |
| | Internal resistance | Ω | 51 (4 ~ 20 mA Input setting) | |
| | Maximum input voltage | V | 30 | |
| | Maximum input current | mA | 70 | |
| Display | No. of digits | | 3 1/2 | |
| | Display element | | LCD | |
| | Rated display range | | 0 ~ 1000 | |
| | Display cycle | | Approx. 4 times/s | |
| | Display accuracy | | \pm 0.1 % Reading \pm 2 counts (After calibration) | |
| | Thermal error | Zero point indication | | \pm 3 counts/10 °C |
| | | Full scale indication | | \pm 3 counts/10 °C |
| | Resolution | | 1 count | |
| | Zero point variable range | | \pm 200 counts | |
| | Full scale variable range | | \pm 200 ~ 1000 counts | |
| | Decimal point location | | 10 ² 、10 ¹ 、10 ⁰ (Selected by a panel switch) | |
| | Polarity change | | Negative “-” indication (actuated by panel switch) | |
| Over-range indication | | “ 1 * * * ” when the number exceeds \pm 1999 (* : OFF) | | |
| Switch | Pressure setting range | | 0 ~ 1000 | |
| | Number of setting points | | ① (LL)、② (L)、③ (H)、④ (HH) 4-point output | |
| | Switching capacity | | 30 V DC、100 mA (NPN open collector) | |
| | Residual voltage | | 1.2 V DC (at 100 mA of inflow current) | |
| | Output status | | 3 modes (Refer to pressure switch output function) | |
| | Setting method | | By setting VR | |
| | Response | | Approx. 100 ms | |
| Analog output | | | Current output: 4 ~ 20 mA, Accuracy: \pm 0.5 %F.S. (at 25 ± 5 °C), Load: 250 Ω maximum | |

PZ-200

PRESSURE INDICATORS

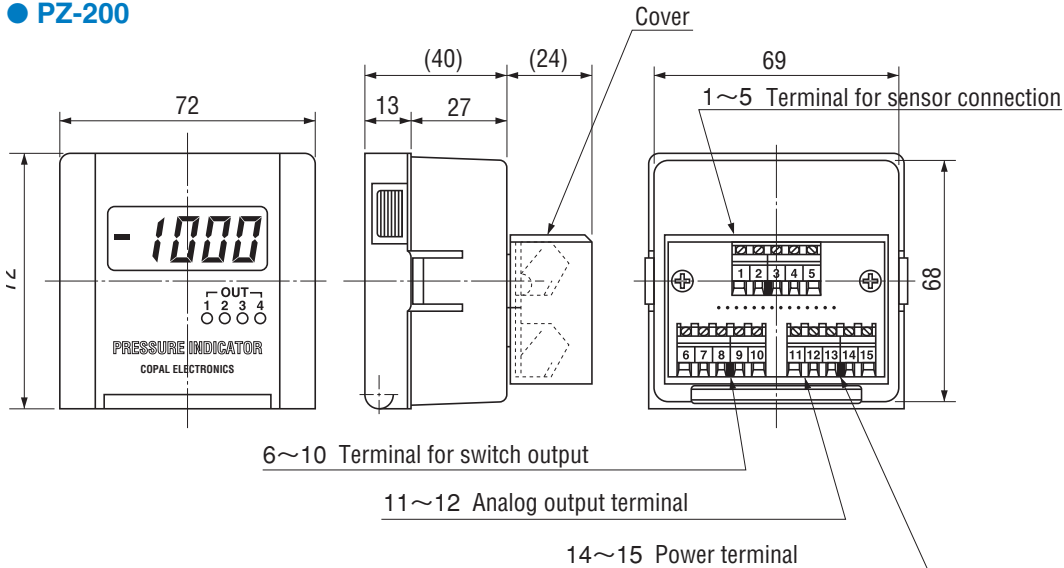
ENVIRONMENTAL CHARACTERISTICS

| Test item | Test conditions | Permissible change |
|---------------------|--|--|
| Vibration | Amplitude 1.5 mm P-P, 10 ~ 55 Hz, 3 directions for 2 hours each (packed) | Pressure indication, switch setting and analog output variation: $\pm 1\%$ F.S., maximum each. |
| Shock | 98.1 m/s ² , 3 directions for 3 times each (packed) | |
| Moisture resistance | 40 °C, 90 ~ 95 %RH, 240 hrs. | |

OUTLINE DIMENSION

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

PZ-200

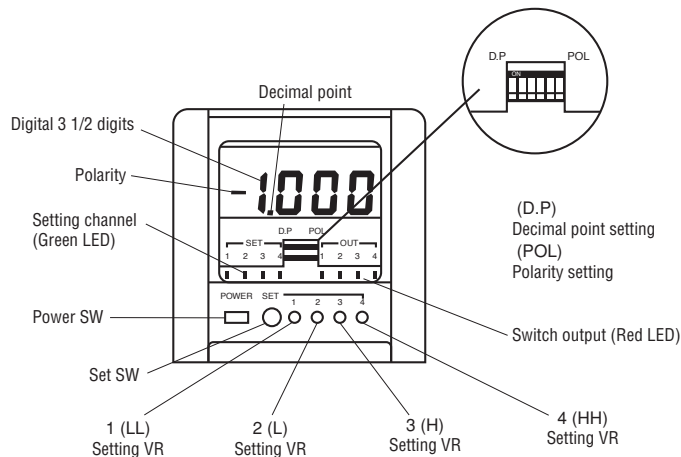


| No. | Connection |
|-----|-----------------------------|
| 1 | Sensor signal IN (1 ~5 V) |
| 2 | Sensor signal IN (4 ~20 mA) |
| 3 | Sensor power out (+) |
| 4 | Sensor power out (Common) |
| 5 | Common |
| 6 | LL OUT |
| 7 | L OUT |
| 8 | H OUT |
| 9 | HH OUT |
| 10 | Switch out (Common) |
| 11 | Analog output (4 ~ 20 mA) |
| 12 | Analog output (Common) |
| 13 | Common |
| 14 | Power IN (+) (DC12 ~ 24 V) |
| 15 | Power IN (Common) |

※ Please refer to the page of PG-200 series for panel cut dimension.

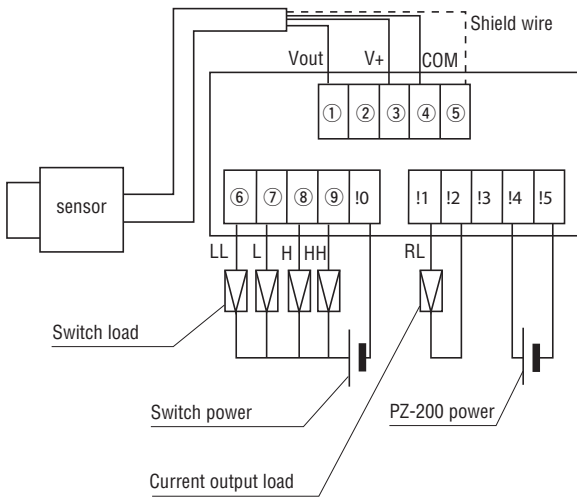
※ All the "Common" connections are made inside.

INSIDE OF A PANEL

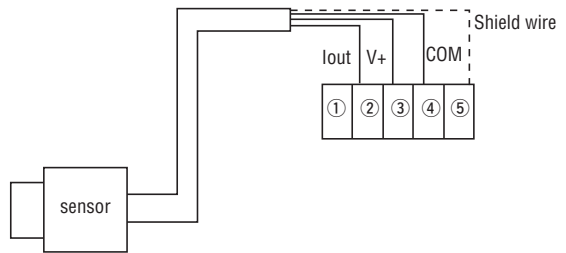


CONNECTION OF PRESSURE SENSOR

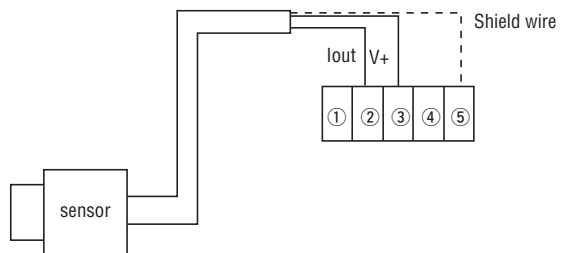
● Example 1 ~ 5 V output sensor (PA-800 etc.)



● Example 4 ~ 20 mA output sensor(3-wire type)



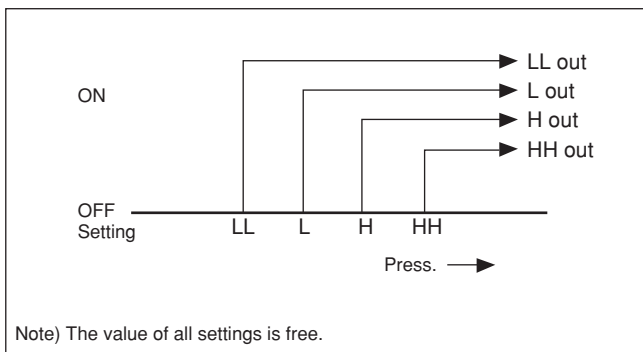
● Example 4 ~ 20 mA output sensor(2-wire type: PA-838 etc.)



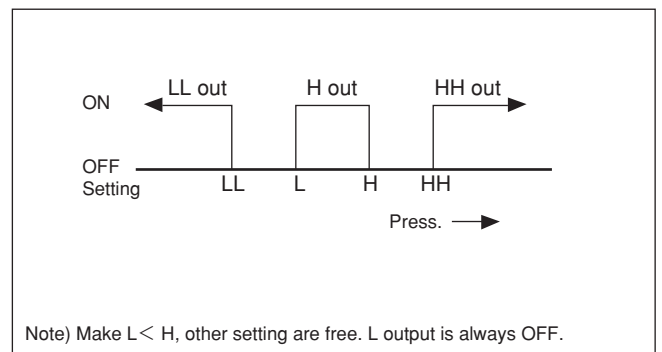
※ Shield should not be earthed when sensor is earthed.

SWITCH OUTPUT SCHEMATICS(PZ-200)

a) Upper limit mode



b) Window mode



c) Upper and lower limit mode

