

P-900C

Pressure Transducer

M12 Cable Type

- Provides a high level output
- Superior Long term Stability
- Temperature Compensated
- Linear Amplified Output
- Excellent Repeatability & Hysteresis

P-900C is long term minimization of these errors is maintained after millions of full scale overpressure cycles, making electronic set point virtually drift-free. Use the sensing element or silicon MEMS strain gage elements glass bonded to stainless steel diaphragm and its mounting provides excellent resistance to most liquids and chemicals. Ruggedness and reliability are also enhanced by a stainless steel housing to resist corrosion pressure sealing for media compatibility is provided by selection of Non-welding Sealing type. metal sensing element contains and integral, reliable, solid state, custom ASIC. This circuit is digital interface can be used for a simple PC-controlled calibration procedure, in order to program a set of calibration coefficients into an on-chip EEPROM and without the cost overhead.



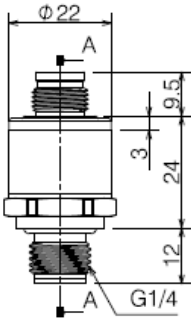
P-900C series

TYPICAL APPLICATIONS

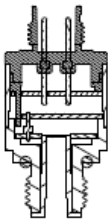
- ✓ Process control
- ✓ Pneumatic and hydraulic controls
- ✓ Pump and compressors
- ✓ Agricultural technology
- ✓ Environmental control systems

| General SPEC | | | |
|--------------------------------|---|------------------------|------------|
| Characteristic | P-900C(A) | P-900C(V) | P-900C(HV) |
| Output | 4~20mA | 0.5~4.5V / 0~5V / 1~5V | 0~10V |
| Power Supply | 8~30VDC | 12~36VDC | |
| Electric connection | M12 Cable type | | |
| Pressure Range | 0~10...50 [bar G] and Option. | | |
| Operating Temp. Range | -40 to 125℃ | | |
| Compensated Temp. Range | -20 to 80℃ | | |
| Accuracy | ≤±0.5%F.S [Typical/25℃] | | |
| Total Error band | ±1.5 %F.S [Typical] / ±2.0 %F.S [MAX] | | |
| Hysteresis and repeatability | ±0.1 %F.S [Typical] / ±0.15 %F.S [MAX] | | |
| Process connection | G1/4" and Option. | | |
| Wetted Port material | STS630 | | |
| Body material | STS316 / STS303 | | |
| Electric connection material | PA66 + GF30 gold plated Pin | | |
| Enclosure | IP67 | | |
| Over Pressure / Burst Pressure | 2 x F.S. / 10 x F.S. | | |
| Response time 10~90% | ≤2ms | | |
| Withstand voltage | 500V AC (1minutes between case and all terminals tied) | | |
| Insulation resistance | Greater than 100MΩ (20V DC between case and all terminals tied) | | |
| Mechanical life cycle | 1,000,000/cycle | | |
| Circuit protection | Reverse polarity protected. (Power supply +/-) | | |
| Shock proof | 1000m/s² (6ms or less, X, Y, Z 3times for each at constant temp.) | | |
| Vibration proof | 200m/s² (10~2000Hz, X:4h, Y:2h, Z:2h at constant temp.) | | |

Dimensions (mm)



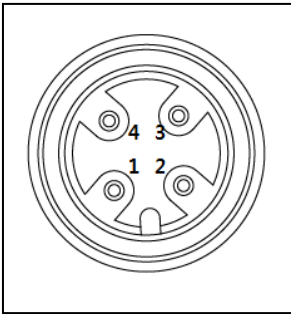
Section cut A-A (1:1)



| | | | | |
|---------------------------------|------------|-------------|----------------------------------|-------------|
| 4 | - | - | - | - |
| 3 | - | - | - | - |
| 2 | - | - | - | - |
| 1 | - | - | - | - |
| N.O | Q'TY | PART NUMBER | MATERIAL | REMARK |
| Smart Sensor | | | DRAWING TITLE Pressure Sensor | |
| UNSPECIFIED DIMENSION TOLERANCE | | | PART NUMBER P-900 G1/4 O-ring | |
| DIMENSION SECTION | TOL' CLASS | | | MATERIAL |
| | A | B | C | FINISH |
| TO4 | ±0.05 | ±0.1 | ±0.3 | - |
| OVER 4 TO 16 | ±0.07 | ±0.2 | ±0.5 | DESIGNED BY |
| OVER 16 TO 63 | ±0.1 | ±0.3 | ±0.7 | DRAWN BY |
| OVER 63 TO 250 | ±0.2 | ±0.5 | ±1.2 | CHECKED BY |
| OVER 250 TO 1000 | ±0.3 | ±0.8 | ±2.0 | REVISION:X |
| SCALE: N/S WIGHT: | | | | |

Description

ELECTRONICAL CONNECTIONS ;



| P-900C(A) | | | P-900C(V) (HV) | |
|-----------|-------------|------------|----------------|-------------|
| No. | Description | Wire color | No. | Description |
| 1 | POWER(+) | Red | 1 | VDC |
| 2 | N.C | - | 2 | OUT |
| 3 | POWER(-) | Black | 3 | GND |
| 4 | N.C | - | 4 | N.C |

How to order

| P - 900C | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------------------------------|---------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1) Output signal | | | | | |
| 4~20mA | A | | | | |
| 0~5V | V0 | | | | |
| 1~5V | V1 | | | | |
| 0.5~4.5V | V2 | | | | |
| 0~10V | HV | | | | |
| 2) Pressure range | | | | | |
| 0~10...50 [bar G] and request | ----- request | | | | |
| 3) Process connection | | | | | |
| G1/4" (PF1/4") | ----- G4 | | | | |
| Other on request | ----- request | | | | |
| 4) Seal material | | | | | |
| NBR | ----- N | | | | |
| Viton | ----- V | | | | |
| Other on request | ----- request | | | | |