

# P-500

## Pressure Transducer metri-pack (Packard)

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



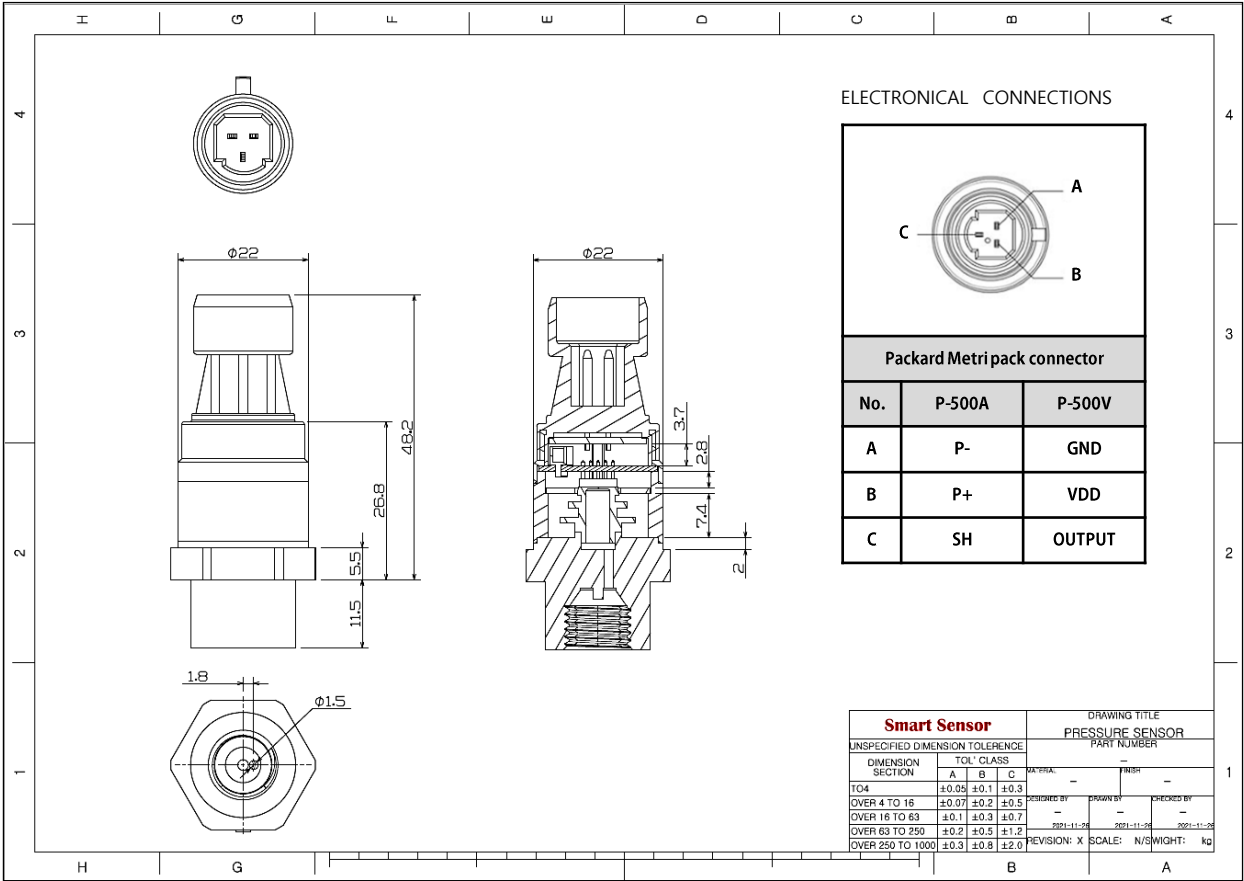
P-500 Long term minimization of these errors is maintained after millions of full scale overpressure cycles, making electronic set point virtually drift-free. Use the sensing element or silicon MEMS strain gage elements glass bonded to stainless steel diaphragm and its mounting provides excellent resistance 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.

### TYPICAL APPLICATIONS

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

| General SPEC                   |                                                                               |                               |
|--------------------------------|-------------------------------------------------------------------------------|-------------------------------|
| Characteristic                 | P-500A                                                                        | P-500V                        |
| Output                         | 4~20mA                                                                        | 0.5~4.5V and other on request |
| Power Supply                   | 8~30VDC                                                                       | 5VDC and other on request     |
| Electric connection            | metri-pack (Packard)                                                          |                               |
| Pressure Range                 | -1 to 15...35 [bar G] ※Other on request                                       |                               |
| Operating Temp. Range          | -40 to 125°C                                                                  |                               |
| Compensated Temp. Range        | -20 to 80°C                                                                   |                               |
| Accuracy                       | ≤ ±0.5%F.S [Typical/25°C ]                                                    |                               |
| 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             | 7/16-20"20UNF(SAE1/ 4)                                                        |                               |
| 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.                                                          |                               |
| Responsetime 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          | 5,000,000/cycle                                                               |                               |
| Circuit protection             | Reverse polarity protected. (Power supply +/-)                                |                               |
| Shock proof                    | 1000m/s <sup>2</sup> (6ms or less, X, Y, Z 3times for each at constant temp.) |                               |
| Vibration proof                | 200m/s <sup>2</sup> (10~2000Hz, X:4h, Y:2h, Z:2h at constant temp.)           |                               |
| Weight                         | 63g                                                                           |                               |

Dimensions (mm)



How to order

P - 500

|                        |       |       |   |
|------------------------|-------|-------|---|
| 1) Output signal       |       |       |   |
| 4~20mA                 | A     |       |   |
| 0.5~4.5V (ratiometric) | V     |       |   |
| Other on request       | Z     |       |   |
| 2) Supply Voltage      |       |       |   |
| 8~30 VDC               | ----- | 8     |   |
| 5 VDC                  | ----- | 5     |   |
| ※Other on request      | ----- | Z     |   |
| 3) Pressure range      |       |       |   |
| -1 to 15...35 [bar G]  | ----- | ----- | 1 |
| ※Other on request      | ----- | ----- | Z |