

# 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.

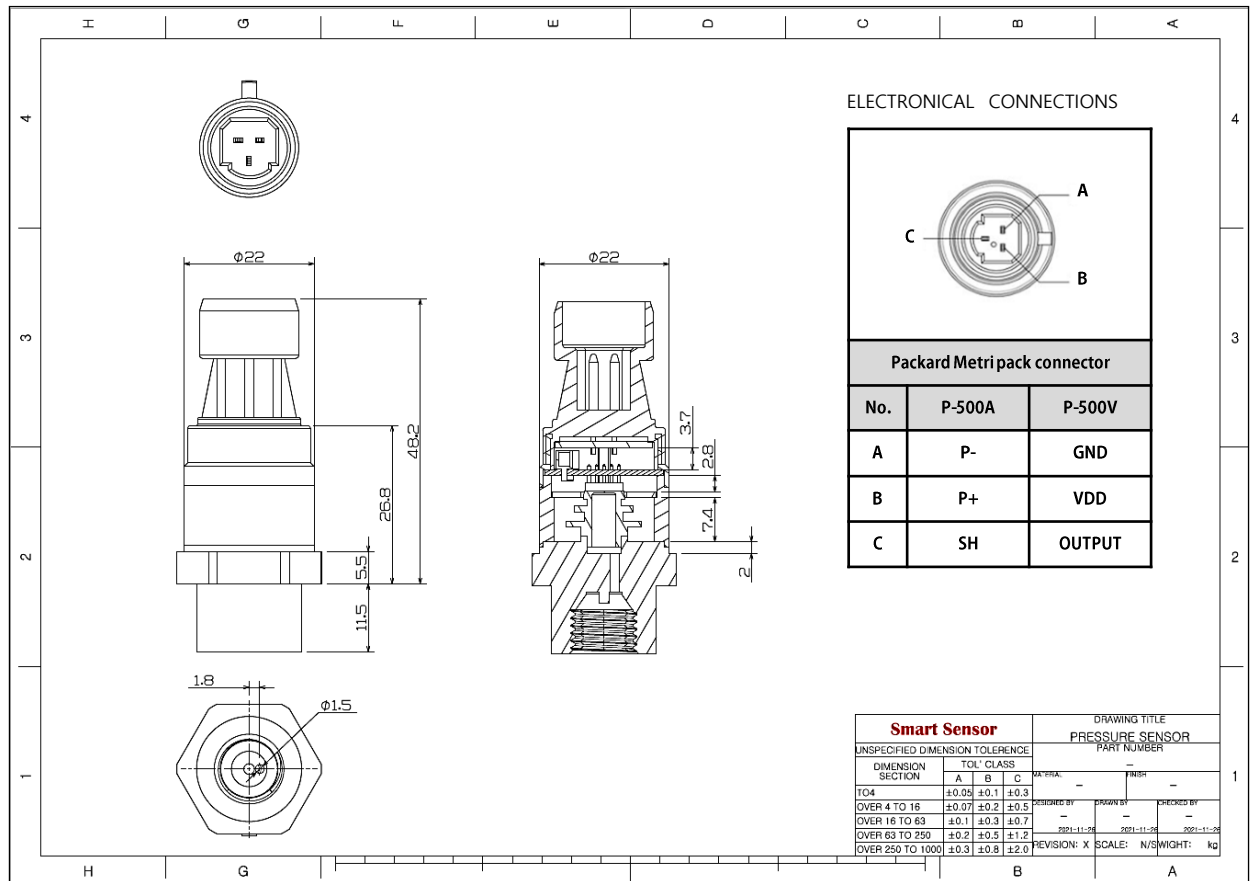


### TYPICAL APPLICATIONS

- ✓ 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**

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### 2) Supply Voltage

8~30 VDC      -----      **8**

5 VDC      -----      **5**

※Other on request      -----      **Z**

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### 3) Pressure range

-1 to 15...35 [bar G]      -----      -----      **1**

※Other on request      -----      -----      **Z**

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Z