Model PSC120
Semi Product of Pressure Transducer for Heavy Industry and General Purpose Industrial Applications

PRESSURE SENSOR LIMITED’s model PSC120 Pressure Transducer was developed for all types of industrial applications. The design is based on high temperature, inorganically bonded, media isolated, piezoresistive technology and offers reliable and accurate measurements under harsh environmental conditions. Robust construction of the PSC120 provides stable operation when subjected to shock and vibration. Suitable for use in OEM machinery, process control, automation, plastic and alloy injection molding machines, hydraulic pumps, etc.

State of the art design machined from a solid piece of 17-4PH or 316 SS provides a leak-proof, all metal sealed system. There are no O-rings, welds or organics exposed to the pressure media. Features digital compensation and temperature correction for high accuracy and stability. All wetted parts are 17-4PH or 316 SS.

- Gauge Pressures
- ASIC Temperature Compensated
- Robust construction to stand high vibrations
- Output Impedance:< 100 ohms
- 2 % Total Error Band
- Wetted Parts: 17-4PH
- Process Fitting: 1/4-18 NPT
- Heavy Industry

### Performance (specified @ 25 °C)

- Accuracy (best fit straight line): ± 0.5% FS
- Error: ± 2% FS TEB
- Zero/Spaan Offset Tolerance: ± 1.5% FS
- Stability (typical): ± 0.25% full scale per year
- Compensated Temperature Range: 20 ~ 85 °C
- Operating Temperature Range: -40 ~ 250 °C
- Burst Pressure: 2 X Full Scale
- Proof Pressure: 2 X Full Scale
- Pressure Cycles: 400 million full scale cycles
- Mechanical Vibration (only for thread port): 50g, 10 ~ 2000Hz, MIL-STD-810C, Method 514.2, Curve L
- Mechanical Shock (only for thread port): Half-Sine, Peak: 50g, 11ms, MIL-STD-202, Method 213B, Condition A

### Structure Reference (Unit: Inch [mm])

#### Electrical Data

- **PSC120-B** (Ratiometric)
  - Supply Voltage: 4.75 ~ 5.25VDC
  - Output: 0.5 ~ 4.5VDC
  - Zero Output: <3 mA
  - Full Scale Output: 4.5VDC

- **PSC120-C** (4-20mA)
  - Supply Voltage: 9 ~ 32VDC
  - Output: 0.5 ~ 4.5VDC
  - Supply Current: <30 mA
  - Full Scale Output: 4.5VDC

- **PSC120-D** (1.0~5.0VDC)
  - Supply Voltage: 9 ~ 32VDC
  - Output: 1.0 ~ 5.0VDC
  - Zero Output: 0.5 mA
  - Full Scale Output: 10 mA

- **PSC120-E** (0.5~4.5VDC)
  - Supply Voltage: 9 ~ 32VDC
  - Output: 0.5 ~ 4.5VDC
  - Zero Output: <3 mA
  - Full Scale Output: 4.5VDC

#### Model Ordering No.

- **Model** PSC120-X-Y-Z-X
- **Output Type** B = 0.5 ~ 4.5V
- **Pressure Range** (Ratiometric) C = 4 20MA
- **Port Type** D = 10 50psi
- **Special** X = Special

### Sample Applications:

- Process Automation & Control
- Plastic and Alloy injection machines
- Test and Measurement Equipment
- Factory Automation
- Energy Management

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  - Full Scale Output: 10 mA

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  - Output: 0.5 ~ 4.5VDC
  - Zero Output: <3 mA
  - Full Scale Output: 4.5VDC

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