



Model PSC123 Semi Finished Pressure Transducer Front End for Heavy Industry and General Purpose Industrial Applications

PSC123 Pressure Transducer Front End was developed for all types of industrial applications. The design is based on high temperature, inorganically bonded, media isolated, piezoresistive technology that offers reliable and accurate measurements under harsh environmental conditions. The robust construction of PSC123 offers stable operation when subjected to shock and vibration. Suitable for use in transducers for Off-road vehicles, injection molding machines, Hydraulic Pumps and controls, etc.

State of the art design machined from a solid piece of stainless steel 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.

PSC123 offers the same EMI and RFI immunity as PSC122 but is an alternative for those applications requiring a lower profile.

- Gauge Pressures
- ASIC Temperature Compensated
- Robust construction to stand high vibrations
- Recommended load Resistance: >10,000 ohms
- 2 % Total Error Band
- Wetted Parts: 17-4PH SS (other material available)
- Process Fitting: see column Z

Sample Applications:

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



PSC123 Ordering Model NO.: PSC123-X-Y-Z-X			
X	Y	Z	X
Output Type	Pressure Range	Port Type	Special configuration
B = 0.5~4.5V (Ratiometric)	3 = 100 psi 4 = 250 psi	1 = 1/8-27 NPT 2 = 1/4-18 NPT	Consult factory
C = 4~20mA	5 = 500 psi	3 = DIN3852-A-G1/4	
D = 1.0~5.0V	6 = 1000 psi	4 = DIN3852-E-G1/4	
E = 0.5~4.5V	7 = 2500 psi	5 = DIN3852-A-M10*1.0	
X = Special	8 = 5000 psi 9 = 10000 psi X = Special	6 = DIN3852-A-M12*1.5 7 = 7/16-20 UNF X = Special	

Electrical data	PSC123-B (Ratiometric)	PSC123-C (4~20mA)	PSC123-D (1.0~5.0VDC)	PSC123-E (0.5~4.5VDC)
Supply Voltage	4.75 ~ 5.25VDC	9 ~ 32VDC	9 ~ 32VDC	9 ~ 32VDC
Output	0.5 ~ 4.5 VDC	4 ~ 20 mA	1.0~5.0 VDC	0.5 ~ 4.5 VDC
Supply Current	< 3 mA	<30 mA	< 3 mA	< 3 mA
Zero Output	0.5 VDC	4 mA	1.0 VDC	0.5 VDC
Full Scale Output	4.5 VDC	20 mA	5.0 VDC	4.5 VDC



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Performance (specified @ 25 °C)	
Accuracy(Best fit straight line)	± 0.5% BFSL
Error	± 2.0% FS TEB
Zero/Span Offset Tolerance	± 1.5%FS
Stability (typical)	<±0.25% full scale per year
Compensated Temperature Range	-20 ~ 85 °C
Operating Temperature Range	-40 ~ 100 °C
Storage Temperature Range	-40 ~ 100 °C
Burst Pressure	3 X Full Scale
Proof Pressure	2 X Full Scale
Pressure Cycles	4 million full scale cycles

Agency Approvals	
IEC61000-4-2	Electrostatic Discharge Immunity: 8kV Contact; 15kV Air; 3 Discharges; Class B. Unit survived
IEC61000-4-3	EM Field Immunity: 50V/m, 1MHz~80MHz; 100V/m, 80MHz~1GHz, 1.0% steps, 2s Dwell. Max recorded output error <±2.0% Span
IEC61000-4-4	Electrical Fast Transient Immunity: 1kV (Level 2), 120s, 5kHz Repetition Rate. Class B. Max recorded output error <±1.5%
IEC61000-4-5	Surge: 1kV (Level 2), L-L 1kV, L-E 2kV. Class B. Max recorded output error <±1.5% Span
IEC61000-4-6	Conducted Immunity: 10V/140dB, 150kHz~80MHz (Level 3). Class B. Max recorded output error <±2.0% Span
IEC61000-4-9	Pulsed Magnetic Field Immunity: 100A/m (Level 3). Class B. Max recorded output error <±1.5% Span

IEC55022 Emission: Class A, 40dB 30-220MHz, 47dB 230MHz-1GHz
All agency approvals are subject to variations in the type of housing use.
All these are referenced to cylindrical stainless steel housings.

Structure reference (Unit: Inch[mm])

