



Model PSC813

Pressure Transducer for Heavy Industry and General Purpose Industrial Applications

Model PSC813 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 PSC813 offers stable operation when subjected to shock and vibration and has EMI and RFI immunity per CE requirements. Suitable for use in Off-road vehicles, injection molding machines, Hydraulic Pumps and controls, etc.

State of the art design machined from a solid piece of 17-4PH 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. All wetted parts are 17-4PH stainless steel.



- **Gauge Pressures**
- **ASIC Temperature Compensated**
- **Robust construction to stand high vibrations**
- **2 % Total Error Band**
- **Output Impedance:** <100 ohms
- **Wetted Parts:** 17-4PH SS
- **Process Fitting:** 1/4"-18 NPT
(see model type for others available)
- **Electrical Connection:** DIN43650 connector

Sample Applications:

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

PRESSURE SENSOR LIMITED

Block A, 19/F, Prince Industrial Building
106 King Fuk Street, San Po Kong, Kowloon
TEL: (852) 2322-8262 FAX: (852) 2352-3557

PRESSURE SENSOR LIMITED

21st Floor, Hua Feng International Commercial Building,
No.4018, Bao An Avenue, Bao An District, Shen Zhen, China
TEL: (86-755) 2699-9343 FAX: (86-755) 2699-9304



Pressure-Sensor.com

Precision Sensor Solutions from Pressure Sensor Limited

www.pressure-sensor.com

Address: 11751 Rock Landing Drive Suite H-7 Newport News, VA 23606 U.S.A.

Tel: (1) 757 240-5858

Fax: (1) 757 240-5860

Email: Tim.Worst@pressure-sensor.com

REV-02

Model PSC813

Pressure Transducer for Heavy Industry and General Purpose Industrial Applications

PSC813 Ordering Model NO.: PSC813-X-Y-Z

| X Output Type | Y Pressure Range | Z Port Type |
|------------------|---------------------|-----------------------|
| B = 0.5~4.5V | 3 = 100 psi | 1 = 1/8-27 NPT |
| C = 4~20mA | 4 = 250 psi | 2 = 1/4-18 NPT |
| | 5 = 500 psi | 3 = DIN3852-A-G1/4 |
| | 6 = 1000 psi | 4 = DIN3852-E-G1/4 |
| | 7 = 2500 psi | 5 = DIN3852-A-M10*1.0 |
| | 8 = 5000 psi | 6 = DIN3852-A-M12*1.5 |
| | 9 = 10000 psi | 7 = 7/16-20 UNF |

PSC813-B (0.5~4.5VDC output)

| Performance (specified @ 25°C) | |
|------------------------------------|-----------------|
| Accuracy(Best fit straight line) | +/- 0.25% FS |
| Supply Voltage, Polarity protected | 9 ~ 30VDC |
| Output | 0.5 ~ 4.5 VDC |
| Supply Current | < 8 mA |
| Error | +/- 2.0% FS TEB |
| Zero Offset | 0.5 VDC |
| Full Scale Output | 4.5 VDC |
| Compensated Temperature Range | -20 ~ 85 °C |
| Operating Temperature Range | -20 ~ 85 °C |
| Storage Temperature Range | -40~ 85 °C |
| Burst Pressure | 3 X Full Scale |
| Proof Pressure | 2 X Full Scale |

PSC813-C (4~20mA output)

| Performance (specified @ 25°C) | |
|------------------------------------|-----------------|
| Accuracy(Best fit straight line) | +/- 0.25% FS |
| Supply Voltage, Polarity protected | 9 ~ 30VDC |
| Output | 4 ~ 20 mA |
| Supply Current | >30 mA |
| Error | +/- 2.0% FS TEB |
| Zero Offset | 4 mA |
| Full Scale Output | 20 mA |
| Compensated Temperature Range | -20 ~ 85 °C |
| Operating Temperature Range | -20 ~ 85 °C |
| Storage Temperature Range | -40~ 85 °C |
| Burst Pressure | 3 X Full Scale |
| Proof Pressure | 2 X Full Scale |

PRESSURE SENSOR LIMITED

Block A, 19/F, Prince Industrial Building
106 King Fuk Street, San Po Kong, Kowloon
TEL: (852) 2322-8262 FAX: (852) 2352-3557

PRESSURE SENSOR LIMITED

21st Floor, Hua Feng International Commercial Building,
No.4018, Bao An Avenue, Bao An District, Shen Zhen, China
TEL: (86-755) 2699-9343 FAX: (86-755) 2699-9304



Model PSC813

Pressure Transducer for Heavy Industry and General Purpose Industrial Applications

| Reliability | |
|--------------------------|------------------------------------------------------------------------------------|
| Stability (typical) | <+/-0.25% full scale per year |
| Pressure Cycles | 10 million full scale cycles |
| Vibration | 20 to 2KHz, 50g, 11msec Half Sine Shock per MIL-STD-202F, Method 213B, Condition A |
| Shock | (11ms) ±20g, MIL-STD-810C, Procedure 514.2, Fig 514.2-2, Curve L |
| Environmental conditions | |
| | |

Structure reference (Unit: mm)

