

Pressure Calibrator PC-507-IS - Intrinsically Safe

- ✓ The PC-507-IS is a pressure gauge for usage in hazardous areas. It is Intrinsically Safe. Certified for Group IIC, Zone 0 / Ex ia IIC T4 Ga (hydrogen and acetylene group).
- ✓ Up to four pressure sensors.
- ✓ Ranges from 250 mmH₂0 to 10,000 psi gage or absolute pressure, including vacuum and differential between any pair of sensors.
- ✓ Accuracy of 0.025 % of full scale reading.
- Measures pressure, mA and volts and generates mA and volts. Provides a 24 Vdc power supply for 2-wire transmitters, and contact input for pressure switch verification.
- ✓ Includes input for optional temperature probe.
- Real-time data acquisition capability when connected to a computer.

The Pressure Calibrator PC-507 now has version approved for use in hazardours areas. The PC-507-IS is intrinsically safe.

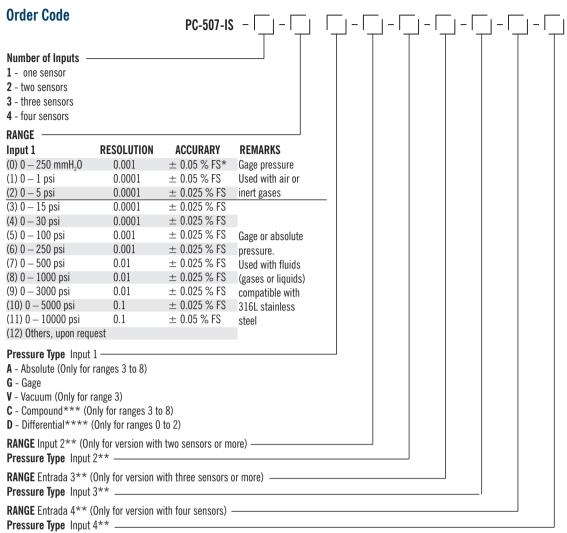
Can be operated in Group IIC Zone 0 which is the most demanding about the need for protection against electric sparks, it is the group of hydrogen and acetylene. Layout of the front membrane is notably different from the PC-507, in order to characterize unequivocally the Intrinsically Safe version.

Communication with computer is established via RS-232/485 serial communication port. When used together with ISOPLAN® calibration software, it takes advantage of the documenting calibration concept which automatizes the calibration process, allowing data storage and sharing between calibrator and computer, improving efficiency in handling information, preparing report, issuing certificates, storage and registration of process instruments and sensors for an overall coverage of the quality procedure requirements, specially those related to ISO 9000.









(*) FS = Full Scale (**) Same code as Input 1 (***) From -15 psi to the full scale of range (****) The differential capsule occupies two pressure taps

Code Example:

PC-507-4-2-G-3-V-5-G-8-A

Defines a four sensors calibrator, which input 1 range from 0 to 5 psi (gage pressure), input 2 from 0 to 15 psi (vacuum), input 3 from 0 to 100 psi (gage pressure) and input 4 from 0 to 1,000 psi (absolute pressure). Input 1 used with air or inert gases and inputs 2, 3 and 4 are used with fluids compatible with 316 L stainless steel. 316 L.

Technical Specifications

Specifications - Inputs

| Inputs Ranges | | Resolution | Accuracy | Remarks |
|---------------|--------------|------------|--------------|-------------------------|
| volt | 0 to 11 V | 0.0001 V | ± 0.02 % FS* | $R_{input} > 1 M\Omega$ |
| | 11 to 45 V | 0.0001 V | ± 0.02 % FS | • |
| mA | 0 to 24.5 mA | 0.0001 mA | ± 0.02 % FS | $R_{input} < 65 \Omega$ |

(*) FS = Full Scale

Specifications - Outputs

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|-------------------|---------------------------------|-------------------|----------------------|-------------------------------------|--|
| Outputs Ranges | | Resolution | Accuracy | Remarks | |
| volt | 0 to 11 V | 0.0001 V | ± 0.02 % FS* | $R_{output} < 0.3 \Omega$ | |
| mA | 0 to 22 mA | 0.0001 mA | \pm 0.02 % FS | $R_{maximo} = 450 \Omega$ | |
| 2-wire transmiter | 4 to 22 mA | 0.0001 mA | ± 0.02 % FS | $V_{\text{maximum}} = 30 \text{ V}$ | |
| (XTR) | | | | | |
| Pt-100 | -200 to 850 °C / -328 to 562 °F | 0.01 °C / 0.01 °F | + 0.1 °C. / + 0.2 °F | IEC_60751 | |

(*) FS = Full Scale

Accuracy values are valid within one year and temperature range from 20 to 26 °C. Outside these limits add 0.005 % FS / °C, taking 23 °C as the reference temperature.

Engineering Units: psi, atm, kgf/cm², inmH₂0, mH₂0, cmH₂0, mmH₂0, inHg, cmHg, mmHg, bar, mbar, Pa, kPa and torr.

Pneumatic Connection: 1/4" NPTF (1/8" NPTF only for the range 0 - 10,000 psi). **Overpressure:** up to twice the value of full scale pressure (to sensors up to 5,000 psi). **Operating Ambient:** 0 to 50 °C ambient temperature and 90 % maximum relative humidity

Serial Communication: Modbus® Protocol RTU (RS232/RS-485).

Dimensions (HxWxD): 115 mm x 144 mm x 72 mm. **Weight:** 1.5 kg approx.

 $\textbf{Warranty:}\ 1\ \text{year, except for rechargeable battery}.$

Optional Accessories:

1/5 DIN-R Probe - Order Code: 04.06.0001-00; 1/5 DIN-A Probe - Order Code: 04.06.0007-00; 1/5 DIN-A-L Probe - Order Code: 04.06.0002-00;

Included items: Carrying case, test leads, manual, halding device for PC-507 and battery charger. Communication Interface - Order Code: 06.02.0001-00.