WARNING! READ ▶️ BEFORE INSTALLATION

1. GENERAL:
A failure resulting in injury or damage may be caused by excessive overpressure, excessive vibration or pressure pulsation, excessive instrument temperature, corrosion of the pressure containing parts, or other misuse. Consult Ashcroft Inc., Stratford, Connecticut, USA before installing if there are any questions or concerns.

2. OVERPRESSURE:
Pressure spikes in excess of the rated overpressure capability of the transducer may cause irreversible electrical and/or mechanical damage to the pressure measuring and containing elements. Fluid hammer and surges can destroy any pressure transducer and must always be avoided. A pressure snubber should be installed to eliminate the damaging hammer effects. Fluid hammer occurs when a liquid flow is suddenly stopped, as with quick closing solenoid valves. Surges occur when flow suddenly begins, as when a pump is turned on at full power or a valve is quickly opened.

3. STATIC ELECTRICAL CHARGES:
Any electrical device may be susceptible to damage when exposed to static electrical charges. To avoid damage to the transducer observe the following:
- Ground the body of the transducer before making any electrical connections.
- When disconnecting, remove the ground LAST!

Note: The shield and drain wire in the cable (if supplied) is not connected to the transducer body, and is not a suitable ground.

Introduction
The ZL92 is a fluoropolymer pressure transducer designed for use in semiconductor processes that require PTFE/PFA wetted parts for improved chemical compatibility for use in corrosive gases and fluids. A secondary isolation diaphragm and vent design isolates the ceramic sensing element from corrosive gases and liquids.

ZL92 FLUOROPOLYMER PRESSURE TRANSDUCER INSTALLATION AND MAINTENANCE SHEET

FREEZING:
Prohibit freezing of media in pressure port. Unit should be drained (mount in vertical position with electrical termination upward) to prevent possible overpressure damage from frozen media.

Although the unit can withstand normal vibration without damage or significant output effects, it is always good practice to mount the transducer where there is minimum vibration.

Noise
For minimum noise susceptibility, avoid running the transducer's cable in a conduit that contains high current AC power cables. Where possible avoid running the cable near inductive equipment.

Shield Wiring - (Cable Termination Only)
Connect the braided shield to the guard terminal on the reading instrument (meter, etc.) if available or to ground or to the power supply negative terminal.

Calibration - Zero Output Adjustment

The ZL92 offers a zero point adjustment potentiometer. To access the zero potentiometer remove the black cap from the top of the ZL92. Turn the potentiometer using a standard screwdriver.

Instructions for calibration:
1. Power Unit
2. With no pressure applied to the sensor, verify output.
3. If output has shifted from its ideal value, (4mA for current output and 1.0 V for voltage output) turn potentiometer until the output has reached its ideal value.

Storage
The ZL92 should be stored in a dry, cool and dust free environment.

Maintenance
In general, a periodic inspection of the ZL92 should be performed at least twice a year or as needed. This inspection should include:
A. Visual inspection
B. Check of the pressure inlets for corrosion, clogging or leaking
C. Verify the output using calibrated gauges

The ZL92 is not field repairable and should be returned to Ashcroft for evaluation.

All sales subject to standard terms and conditions of sale. I&M011-10297_RevA_08-12-21
Wiring Diagrams

2 Wire System (Current Output)

[Diagram showing 2 wire system with connections labeled + Red, - White, 24 Vdc ±10%, and connections to a receiver for a dc ammeter.]

3 Wire System (Voltage Output)

[Diagram showing 3 wire system with connections labeled Power source (+) Red, Common Black, Output (+) White, 12 to 24 Vdc, and connections to a receiver for a dc voltmeter.]

ZL92 In-Line

[Diagram showing ZL92 In-Line connections with dimensions labeled.]

ZL92 Single Port

[Diagram showing ZL92 Single Port connections with dimensions labeled.]