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 parts, or other misuse. Consult Ashcroft Inc., Stratford, Connecticut, USA before installing if there are any questions or concerns.

2. OVERPRESSURE:
Excessive depths or pressure spikes greater than 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 transmitter and must always be avoided. Fluid hammer often occurs when a liquid flow is suddenly stopped. Surges occur when flow suddenly commences. These are particularly damaging to pressure transducers if the pipe is empty. To avoid damaging hammer or surge, fluid lines must remain full, pumps should increase or decrease power slowly and valves should be open or close slowly.

Possibility of damage due to impact is significant for the SL17. This event would most likely be caused during installation, either with contact from the service of the water or the bottom of the vessel. It is best to control the height, speed, and orientation of the sensor to minimize the impact as this can mimic a fluid surge event and mechanically damage the sensor.

Symptoms of hammer, surge or damage due to impact:
• Pressure transmitter exhibits an output at zero pressure (large zero offset)
• Pressure transmitter output remains constant regardless of pressure
• If severely damaged, transmitter will not transmit detectable output

3. FREEZING:
Prohibit the freezing of media in pressure port or surrounding the unit. This will cause the head pressure of the process not to be read and may cause irreparable damage to the sensor and/or transmitter assembly.

4. STATIC ELECTRICAL CHARGES:
Any electrical device may be susceptible to damage when exposed to static electrical charges. To avoid damage to the transmitter observe the following:
• Ground the body of the transmitter before making any electrical connections.
• When disconnecting, remove the ground last.
LIGHTNING PROTECTION

For best protection from lightning, the SL17 case should be grounded, either directly or through the green wire. In addition to traditional internal voltage clamps to protect the transmitter from surge (effect of indirect lightning strikes), the SL17 has additional internal surge protection. In the event of an extreme surge, the SL17 will open circuit the loop to protect itself and help protect the rest of the loop devices. If this happens, the loop current will fall below 1mA and stay latched “off” until reset. To reset simply cycle the loop power off/on.

FIELD ADJUSTMENTS

The SL17 transmitters are precisely calibrated over a temperature range at the factory to ensure long and stable performance. There are no field accessible adjustments on the SL17 transmitter.

ELECTRICAL INSTALLATION

All SL17 units utilize a 10-36Vdc power supply and output a 4-20mA analog signal. Please refer to the wiring diagram below for appropriate wiring protocol.

TERMINATION (DESIICCANT) BOX

The SL17 vent tube provides a potential for water ingress, if not installed correctly. The addition of the Ashcroft desiccant box can help prevent this phenomenon from occurring by reducing the humidity in the environment air before entering the transmitter vent tube. During operation, the filter will change from blue to pink and a replacement cartridge will be needed upon full color change. Please refer to below for dimensions and suggested installation specifications.