

# Logix<sup>®</sup> Sensor Installation General Guidelines

Refer to both this document and the sensor-specific drawings before installing a sensor for a Logix<sup>®</sup> Control System.

## General Practices:

- Sensor electronics can be damaged by static discharge: ground yourself before handling a sensor.
- Consider accessibility and lighting factors to facilitate sensor maintenance and replacement.
- Avoid placing sensors above doorways.
- In choosing a mounting location minimize exposure to physical harm from forklifts, moving machinery, etc.
- Mount room air sensors on a wall or column 8-10ft from the ceiling.
- Whenever possible, locate the conduit entrance at the low side of the sensor enclosure. Install a drip loop in a damp environment. See FIGURE 1.

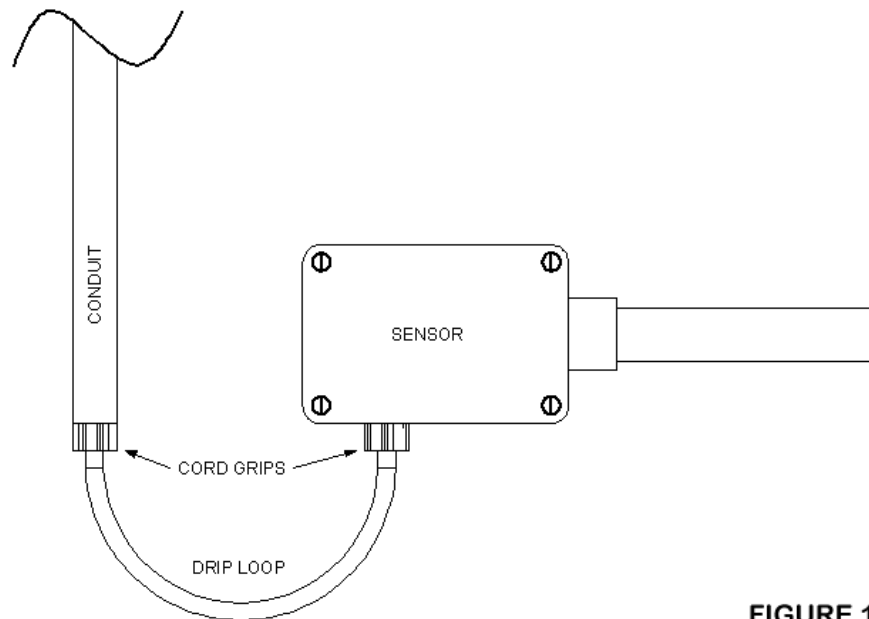
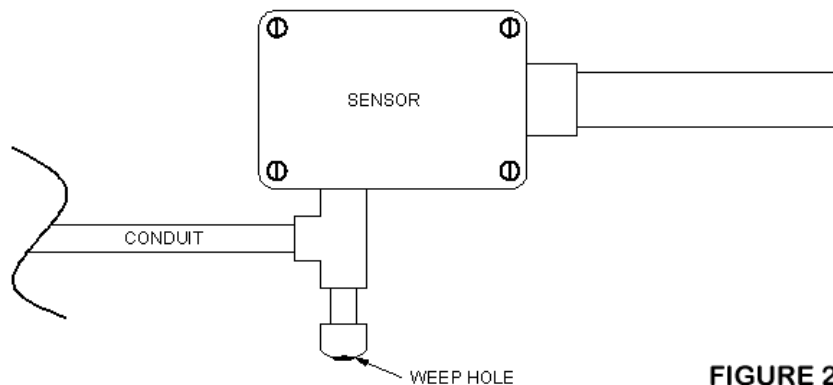


FIGURE 1

- Penetration of moisture into a sensor's enclosure is a common cause of sensor failure. Drill a small (1/16") weep hole in the lowest side of the enclosure (near the cord grip) if the sensor is exposed to continuous moisture and/or high humidity.

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- If mounting in wet locations or if conduit is required, it must be liquid tight, enter from the bottom, sealed with pipe thread sealant, and have a weep hole. See FIGURE 2.



**FIGURE 2**

- Avoid close proximity to line voltage wiring – this applies to both sensor placement and sensor cabling. Never run the Belden sensor cable in the same conduit as power wiring.
- Sensor wiring runs may extend up to 2000' from a Logix<sup>®</sup> Panel while floor temperature sensors are limited to 500'.
- Cable for analog sensors is shielded #24 AWG Belden #9501, 2 conductor cable run in separate conduit from power wiring. Wiring applications below  $-5^{\circ}$  F requires Belden #88761 shielded cable (or equal).
- The sensor cable ground shield should be grounded inside the Logix<sup>®</sup> Panel and left floating with heat shrink insulation at the sensor end.
- A maximum of 4 inches of signal wire should be left unshielded at each end of shielded cable.