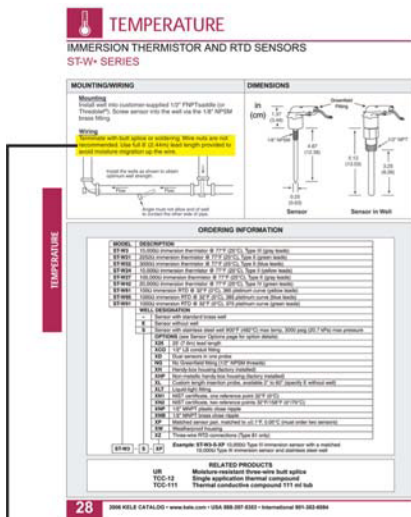


# Moisture Problems with Temp Sensors?

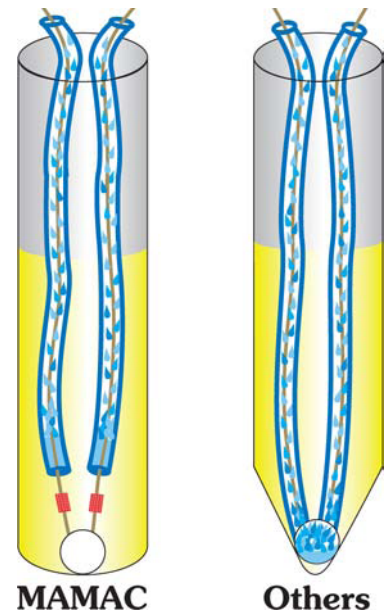


“Use full 8’ (2.44m) lead length provided to avoid **moisture migration** up the wire.”

Erratic readings, intermittent shorts, or premature failure are some of the problems caused by moisture migrating into the sensing element of temperature sensors. This problem becomes very prominent in hot and humid environments. Especially in applications where chilled water or discharge air temperatures are being measured and a high delta exists between the monitored temperature and the ambient environment.

**The Problem:** Microscopic gap exists between the conductors and wire insulation. Air enters this gap and moisture condenses due to temperature difference between the tip of the probe and the ambient. Capillary action migrates this moisture to the sensing element if a continuous path exists.

**MAMAC Solution:** Sensing element has bare conductors and is welded to the insulated lead wires. The bare conductors and the welds are encapsulated with epoxy. There is no continuous path from the ambient to the sensing element. Any moisture which condenses within the lead wire insulation is stopped by the epoxy encapsulation and cannot reach the sensing element.



You may cut our lead length as short as you desire.

**MAMAC 700 Series Temperature Sensors are *guaranteed for life* against moisture migration!**

**MAMAC SYSTEMS®**

8189 Century Boulevard • Minneapolis, MN 55317-8002 • USA  
 800-843-5116 • 952-556-4900 • Fax 952-556-4997  
 sales@mamacsys.com • www.mamacsys.com

4200 Waterside Centre  
 Solihull Parkway  
 Birmingham • West Midlands  
 B37 7YN • United Kingdom  
 01384-271113 • Fax 01384-271114

1 Fullerton Road #02-01  
 One Fullerton  
 Singapore • 049213  
 65-31581826 • Fax 65-31581826

4 Armiger Court, Unit 2  
 Adelaide • S.A.  
 5088 • Australia  
 08-8395-4333 • Fax 08-8395-4433

675 Cochrane Drive  
 East Tower • 6th Floor  
 Toronto • Ontario  
 L3R 0B8 • Canada  
 905-474-9215 • Fax 905-474-0876