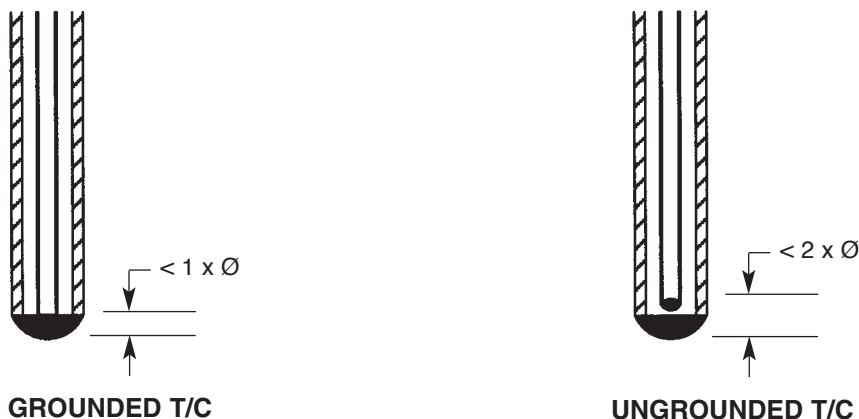


TIP SENSITIVITY

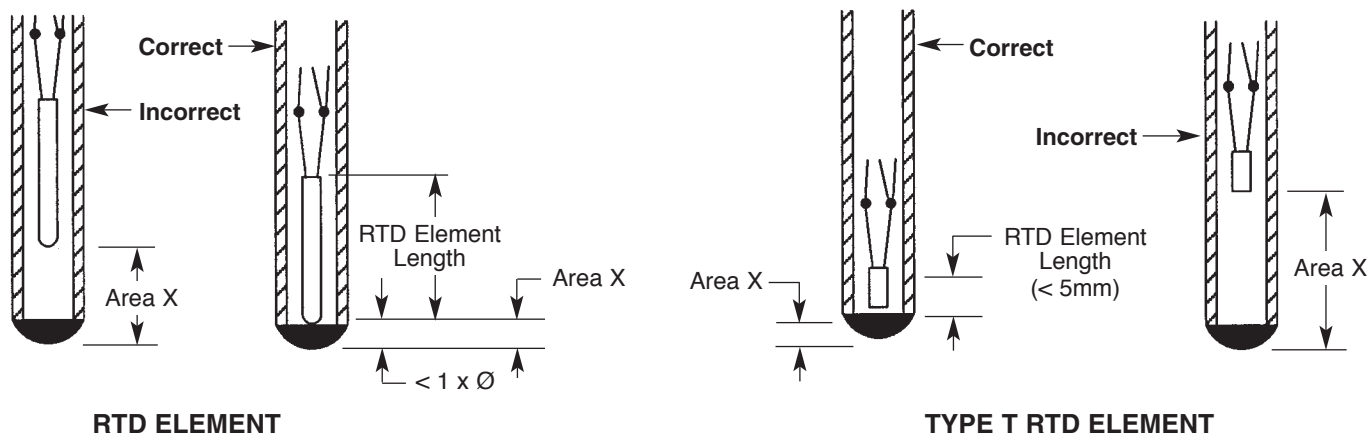
Tip sensitivity in the finished probe is usually not considered a serious factor in sensor specifications. However, JMS SE believes tip sensitivity is extremely critical if the customer is to receive the same results time after time. For instance, if the sensor was originally designed to minimize penetration into the process, a thin film sensor might have been used. If that sensor is later replaced with a standard 15mm long element, response time will change drastically, affecting the PID of a control situation and certainly the total temperature reading of the process would be upset.



AREA X (How far is the tip of the sensing element from the tip of the tube?)

In any sensor or probe the location of the element inside the tube is critical. Even if the sensor element was 2" away from the tip, that condition would go undetected using the ASTM tests. (18 x Ø for wire thermocouples) JMS tests for the element placement on our sensors in order to assure consistency of your measurements.

Area X = $< 1 \times \text{Ø}$.



RTD element length: E, P, S standard = 8mm - 15mm
 "T" thin film = 2mm - 5mm
 Others = 8mm - 50mm

Special designs can be used to obtain certain tip sensitivity. Ask your sales representative at JMS.