MICRO CONTROL SYSTEMS

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The MCS-T300-L Specifications & Description

Physical Characteristics

Std. Temp. Range ..... -76º to 32º F
Std. Temp. Accuracy ..... ± .37º F
Resistance Range ..... 1,117k to 89.9k
Input Voltage ..... 5 Vdc
Output Resistance ..... 279.9k @-30º F
Overall Length ..... 1.75"
Diameter (outside) ..... 0.275"
Cable
Length ..... 20' (40' optional)
Wire ..... 3 cond. 20 awg stranded
Shield ..... foil shield w 25% overlap
Drain ..... stranded tinned copper drain
Part Number Description when ordering
xx ..... 20' or 40' wire length

Product Description

An extremely accurate thermistor packaged in a water tight thin walled nickel plated brass Deep Drawn Tube. The sensor is potted with a thermal transfer epoxy to guarantee durability and response. The accuracy of the sensor is ±0.37º F which allows the units to be interchanged in the field.

The unit is a double thermister providing a linear responce over the range. The unit input is 5.00 vdc. The voltage output over the range is 0.807V to 3.525V. At –22°F the voltage output is 2.171 vdc. The table below provides a cross reference between °F, ohms and Vdc

Product Specifications

(Partial temperature conversion chart)

Temp. (° F)	(ohms)	(Vdc)
-76	1116.995	0.807
-67	834.658	1.024
-58	642.896	1.252
-49	508.659	1.485
-40	411.250	1.716

Temp. (° F)	(ohms)	(Vdc)
-31	337.683	1.944
-22	279.874	2.171
-13	232.887	2.399
-4	193.780	2.629
5	160.821	2.860

Temp. (° F)	(ohms)	(Vdc)
14	132.963	3.089
23	109.499	3.312
32	89.871	3.525