

Temperature Sensors for IV Fluids

Precise In Line Fluid Temperature Measurement

In many instances, it is critical to measure and control the temperature of intravenous fluids (IVs) as they are introduced to the patient. Patients in critical condition can suffer from fluid-induced hypothermia shock. Also, procedures such as thermodilution catheterization call for introducing IVs at a specified temperature.

The GE Sensing & Inspection Technologies A954 fluid temperature sensor can be placed in-line with an IV delivery system to provide accurate temperature measurements as fluids are delivered to the patient. A tiny NTC chip thermistor is assembled into a standard Luer "T" fitting. The sensor is in a small eyelet that protrudes directly into the fluid path. Once connected with any standard Luer fluid connection, it provides accurate real-time data.



Features and Benefits

- Reliable performance
- Fast response
- Designed for sterilization
- Temperature accuracies: to $\pm 0.25^{\circ}\text{C}$
- Interchangeable for single use
- Several connector options available
- Standard Luer fluid connection

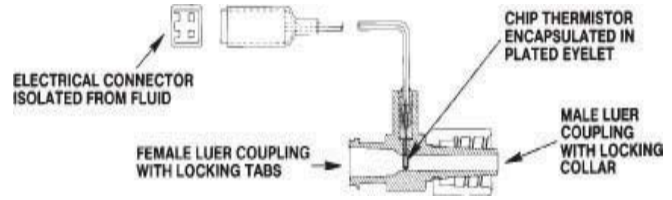
Typical Applications

- Patient care
- Fluid warmers
- EMS remote emergency care
- Dialysis and other fluid delivery applications



Technical Specifications

R-T	87 Kohms @ 25°C. (Other curves optional)
Standard Luer fluid connections	
Temperature range	0°C to 50°C (Others available.)
R-T curves	
Accuracy and interchangeability	±0.25°C
Response times	0.2 seconds, water.
Can be sterilized	



Resistance vs. Temperature Characteristics

°C	Resistance in Ohms	°C	Resistance in Ohms	°C	Resistance in Ohms	°C	Resistance in Ohms
0.00	256949.0	12.50	146790.8	25.00	87057.0	37.50	53434.9
0.50	251068.1	13.00	143654.8	25.50	85319.2	38.00	52437.1
1.00	245337.6	13.50	140594.2	26.00	83620.7	38.50	51460.5
1.50	239753.5	14.00	137606.9	26.50	81960.4	39.00	50504.5
2.00	234311.5	14.50	134691.2	27.00	80337.5	39.50	49568.8
2.50	229007.8	15.00	131844.9	27.50	78750.9	40.00	48652.9
3.00	223838.4	15.50	129066.5	28.00	77199.9	40.50	47756.2
3.50	218799.7	16.00	126353.9	28.50	75683.5	41.00	46878.4
4.00	213888.0	16.50	123705.7	29.00	74200.9	41.50	46018.9
4.50	209099.9	17.00	121119.9	29.50	72751.2	42.00	45177.5
5.00	204431.8	17.50	118595.2	30.00	71333.6	42.50	44353.6
5.50	199880.5	18.00	116129.8	30.50	69947.4	43.00	43546.8
6.00	195442.8	18.50	113722.2	31.00	68591.7	43.50	42756.8
6.50	191115.6	19.00	111370.8	31.50	67265.8	44.00	41983.1
7.00	186895.8	19.50	109074.4	32.00	65969.0	44.50	41225.5
7.50	182780.6	20.00	106831.4	32.50	64700.6	45.00	40483.4
8.00	178767.0	20.50	104640.5	33.00	63459.9	45.50	39756.6
8.50	174852.4	21.00	102500.3	33.50	62246.3	46.00	39044.7
9.00	171034.0	21.50	100409.5	34.00	61058.9	46.50	38347.4
9.50	167309.3	22.00	98366.9	34.50	59897.4	47.00	37664.3
10.00	163675.6	22.50	96371.3	35.00	58760.9	47.50	36995.1
10.50	160130.6	23.00	94421.5	35.50	57649.0	48.00	36339.5
11.00	156671.9	23.50	92516.2	36.00	56561.0	48.50	35697.2
11.50	153297.2	24.00	90654.5	36.50	55496.4	49.00	35067.8
12.00	150004.2	24.50	88835.1	37.00	54454.5	49.50	34451.2
						50.00	33847.0

