STM94442A configured for 4-20mA signal

Setting the sensor type to type 2 allows a 4-20mA sensor to be connected to the monitor.

Display characteristics

A 4-20mA sensor, when it is working correctly, will have an output of 4-20mA.

The LCD will display a range of 2-99%.

If the sensor output is 4mA the display will show 2%, not 0%.

If the sensor output is 20mA the display will show 99%, not 100%

If the sensor output is 19mA or less, the display will show 00%.

When the display shows 00%, it means that the sensor or field wiring is not working properly.

Analog outputs

The monitor has a built-in 0-5V analog output for each channel.

This output is directly proportional to the input mA over the range of 0-20mA.

Examples

Sensor input	Display reading	Analog output
0mA	00%	0.00V
3mA	00%	0.75V
4mA	2%	1.00V
10mA	37%	2.5V
12mA	50%	3.0V