O28 - Temperature Compensation

Optional temperature sensor to compensate the pressure due to the thermal energy of the piece under test

Application

- Measurement of the temperature of the test piece pointed by the sensor
- Measurement of the ambient temperature at which the workpiece is tested
- Compensation of the pressure generated by the temperature of the workpiece being tested on the final pressure measurement
- Allows you to set a high threshold and a low threshold of temperature above which triggers an alarm signal

Models

The optional temperature sensor is available for the following models:

- T8960
- T8970
- T8990
- T8997
- T8090
- T8060
- T8999

Interfacing

The external temperature sensor is connected to the COM2 serial port of the instrument. The connection completely occupies the port and it is not possible to use double cables to connect, for example, printers or barcode readers.

Both the ambient temperature and the temperature pointed by the sensor are read cyclically with a frequency of one second.

Technical characteristics

- One of the smallest existing infrared sensors with an optical resolution of 22:1
- Precise temperature measurement without direct contact with the test price
- Measurement of the ambient temperature at which the part is being tested
- Robust and usable without a cooling system up to 180°C ambient temperature (ambient temperature -20°C ... 180°C)
- Uses an RS232 interface to connect to the instrument
- Can be used for metal and non-metallic surfaces
- Can operate with relative humidity ranging from 10 to 95% (non-condensing)
- Weight: 40 g the sensor head, 420 g the sensor body (the electronics)
- Can withstand 3 G of vibration (11-200 Hz) per axis
- Can withstand a shock of 50 G (11ms) per axis
- The head withstands a pressure of 8 bar

Technology

The sensor measures the temperature of the workpiece being tested by detecting the infrared energy emitted by the surface being tested. The ambient temperature is calculated from the metal surface temperature of the sensor head.

Technical code

Within the technical code the range defining the optional temperature compensation is located in position 28.

T8990-065000-530000010000000100000010000000000010010000000

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