CAN *Newsletter Online*

CiA 404 SENSORS

With standardized CANopen process data

Buerkert introduced the 8312 pressure transmitter and the 8412 temperature sensor. Instead of analog outputs, the devices provide a CANopen interface.

The sensors digitize and linearize the measured value providing it on the CANopen interface (Source: Buerkert)

The 8312 measures relative or absolute (on request) pressures in liquid and gaseous media. Measuring ranges from 0 bar to 0,25 bar and up to 0 bar to 16 bar can be selected. The media temperature ranges from - 20 °C to + 85â€…°C for ceramic sensors and from - 40 °C to + 125â€…°C for metallic versions. The 8412 sensor measures the temperature of liquids and gases in the range from - 50 °C to + 150â€…°C. The measuring insert is equipped with a Pt1000 temperature sensor according to DIN EN 60751, Class A.

The sensors digitize the measured value and make it available on the CANopen interface for further processing. Access to the device status and settings is also done via CANopen. The CANopen interface of both sensors supports the base CANopen communication profile CiA 301 (version 4.02). The CiA 404 (version 1.2) CANopen device profile for measuring devices and closedâ€‘loop controllers is implemented as well. The available bit-rates (20 kBit/s to 1 Mbit/s) and the device's node-ID can be set via LSS (layer setting services, CiA 305) or SDO (service data object). The change of the bit-rate and the node-ID via SDO is not recommended by CAN in Automation (CiA). One TPDO (transmit data object) is supported. The parameters can be set via CANopen software tools or the Buerkert Communicator tool available on the manufacturer's website. Connection of the devices to the company's CAN-based Büs network is possible as well.